



# SHRP2 Solutions: C19 Expediting Project Delivery Session 2

Kate Kurgan, AASHTO  
Damaris Santiago, FHWA



U.S. Department of Transportation  
Federal Highway Administration

AMERICAN ASSOCIATION  
OF STATE HIGHWAY AND  
TRANSPORTATION OFFICIALS

**AASHTO**

# SHRP2 at a Glance

- **SHRP2 Solutions** – 63 products
- **Solution Development** – processes, software, testing procedures, and specifications
- **Field Testing** – refined in the field
- **Implementation** – More than 430 transportation projects; adopt as standard practice
- **SHRP2 Education Connection** – connecting next-generation professionals with next-generation innovations



# Focus Areas



**Safety:** fostering safer driving through analysis of driver, roadway, and vehicle factors in crashes, near crashes, and ordinary driving



**Reliability:** reducing congestion and creating more predictable travel times through better operations



**Capacity:** planning and designing a highway system that offers minimum disruption and meets the environmental and economic needs of the community



**Renewal:** rapid maintenance and repair of the deteriorating infrastructure using already-available resources, innovations, and technologies

# SHRP2 Implementation Assistance Program

- **Round 7:**
  - 13 products or bundles of products
  - 1 capacity; 3 reliability; 9 renewal products
- **42 recipients** just announced in June 2016
  - **37 state DOTs**
  - **4 MPOs**
  - **1 Federal Lands Highway**
- **79 projects** in **37 states**



# SHRP2 Implementation: Moving Us Forward

As of November 2015:



## Save lives, money, and time

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

TR0628161105WDC

# Expediting Project Delivery

- *Expediting Project Delivery* identifies 24 strategies for addressing or avoiding 16 common constraints in order to speed delivery of transportation projects.
- Strategies Grouped Under Six Objectives:
  - **Improve internal communication and coordination;**
  - **Streamline decision-making;**
  - **Improve resource agency involvement and collaboration;**
  - **Improve public involvement and support;**
  - **Demonstrate real commitment to the project; and**
  - **Coordinate work across phases of project delivery.**

# Expediting Project Delivery

Strategy	Stage of Project Planning or Delivery				
	Early Planning	Corridor Planning	NEPA	Design/ROW/ Permitting	Construction
1. Change-control practices			●	●	●
2. Consolidated decision council		○	●	●	
3. Context-sensitive design and solutions	○	○	●	●	○
4. Coordinated and responsive agency involvement	○	●	●	●	●
5. Dispute-resolution process		○	●	●	○
6. DOT-funded resource agency liaisons		○	●	●	
7. Early commitment of construction funding	●	●	●		
8. Expedited internal review and decision-making	●	●	●	●	
9. Facilitation to align expectations up front	○	●	●		
10. Highly responsive public engagement	●	●	●	●	○
11. Incentive payments to expedite relocations				●	
12. Media relations manager		●	●	●	○
13. Performance standards	○	●	●	●	
14. Planning and environmental linkages	●	●	●		
15. Planning-level environmental screening criteria	●	●			
16. Programmatic agreement for Section 106			●	●	
17. Programmatic or batched permitting			●	●	
18. Real-time collaborative interagency reviews	○	○	●	○	
19. Regional environmental analysis framework	○	●	●	●	
20. Risk management	●	●	●	●	●
21. Strategic oversight and readiness assessment	○	●	●		
22. Team co-location		○	●	●	
23. Tiered NEPA process	○	●	●		
24. Up-front environmental commitments		●	●	●	

# For More Information

## Kate Kurgan

Associate Program  
Manager, SHRP2  
Implementation, AASHTO  
[kkurgan@aathto.org](mailto:kkurgan@aathto.org)

## Damaris Santiago

Environmental Protection  
Specialist, FHWA  
[damaris.santiago@dot.gov](mailto:damaris.santiago@dot.gov)

## Additional Resources:

**GoSHRP2** [fhwa.dot.gov/GoSHRP2](http://fhwa.dot.gov/GoSHRP2)  
Website:

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**AASHTO SHRP2** <http://shrp2.transportation.org>  
Website:

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**GoSHRP2** [fhwa.dot.gov/goshrp2/contact](http://fhwa.dot.gov/goshrp2/contact)  
Alert Sign Up:

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**Email:** [GoSHRP2@dot.gov](mailto:GoSHRP2@dot.gov)

# Session 2 Presentations

- Massachusetts DOT – Jose Simo: MassDOT's Roads & Highways GIS system
- Arkansas State Highway and Transportation Department - Elisha Wright-Kehner: Development of an improved process for project delivery
- Florida DOT – Steve Braun: Implementing streamlining recommendations to improve project delivery process
- Panel: Question and Answers

# MaPPS Tool What is it?

MassDOT Project Planning System is a planning phase tool with environmental and safety screening function, to improve agency project coordination and expedite project delivery

## Every Day Counts 2

- Agency & Business Process Implementation Teams

## Strategic Highway Research Program 2

- Funding & FHWA Implementation Assistance

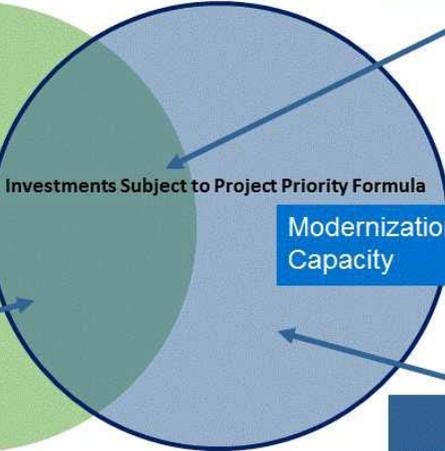


Re

Investments that are prioritized through rigorous asset management systems such as the bridge and pavement systems in the Highway Division, that do not make added improvements to the infrastructure will not be subject to the project priority formula.

A significant portion of MassDOT's projects that arise from asset management systems also modernize the existing system. These projects will be subject to the project priority formula.

Asset Management



Modernization and Capacity

Asset management activities that do not come out of a rigorous asset management system will be subject to the project priority formula, unless the current system is improved to meet this standard.

All projects that modernize the existing system or expand capacity will be subject to the project priority formula.

P

ourbaix  
B. Mullan  
Stephen Silveira

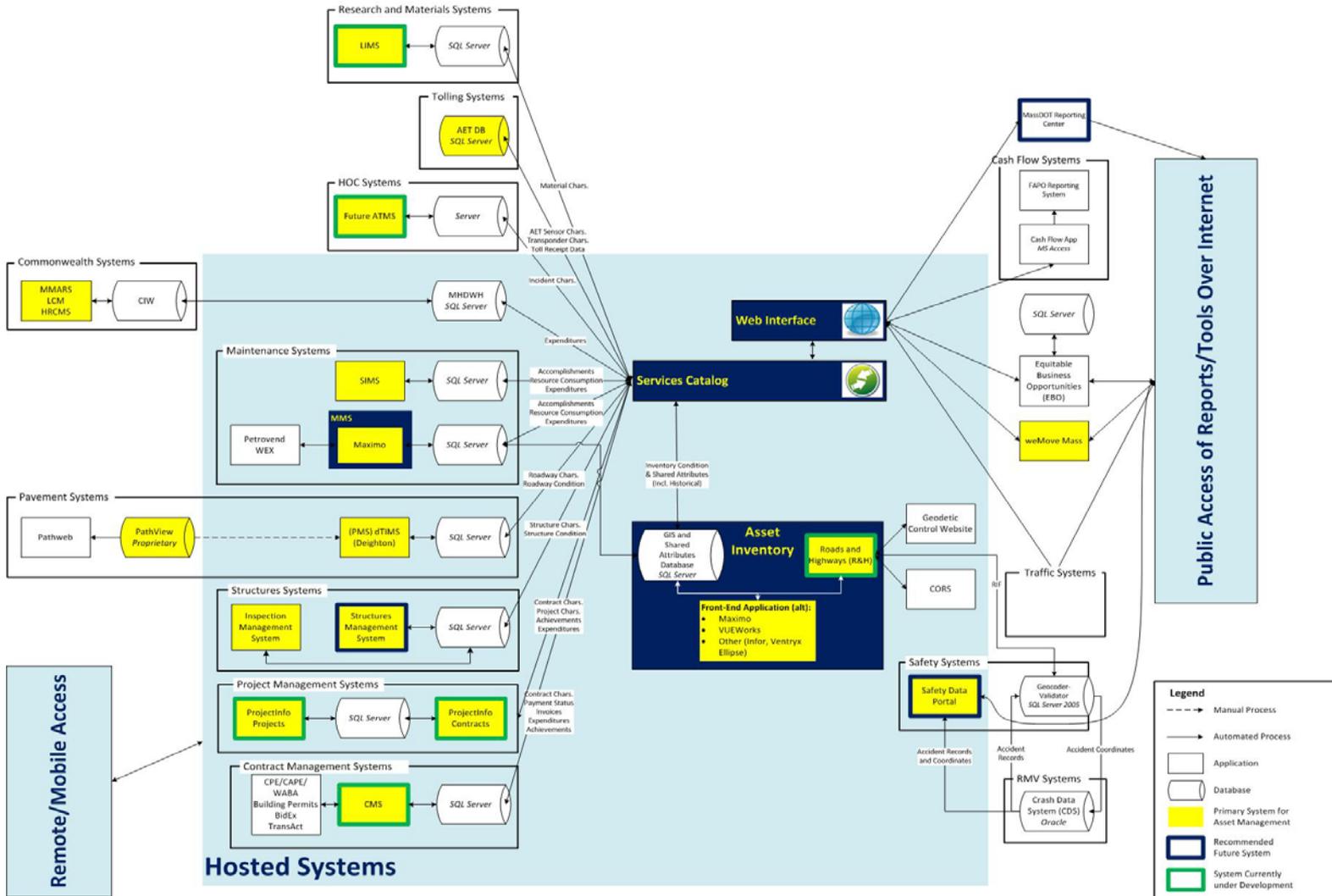
July 1, 2015

# Complex Processes





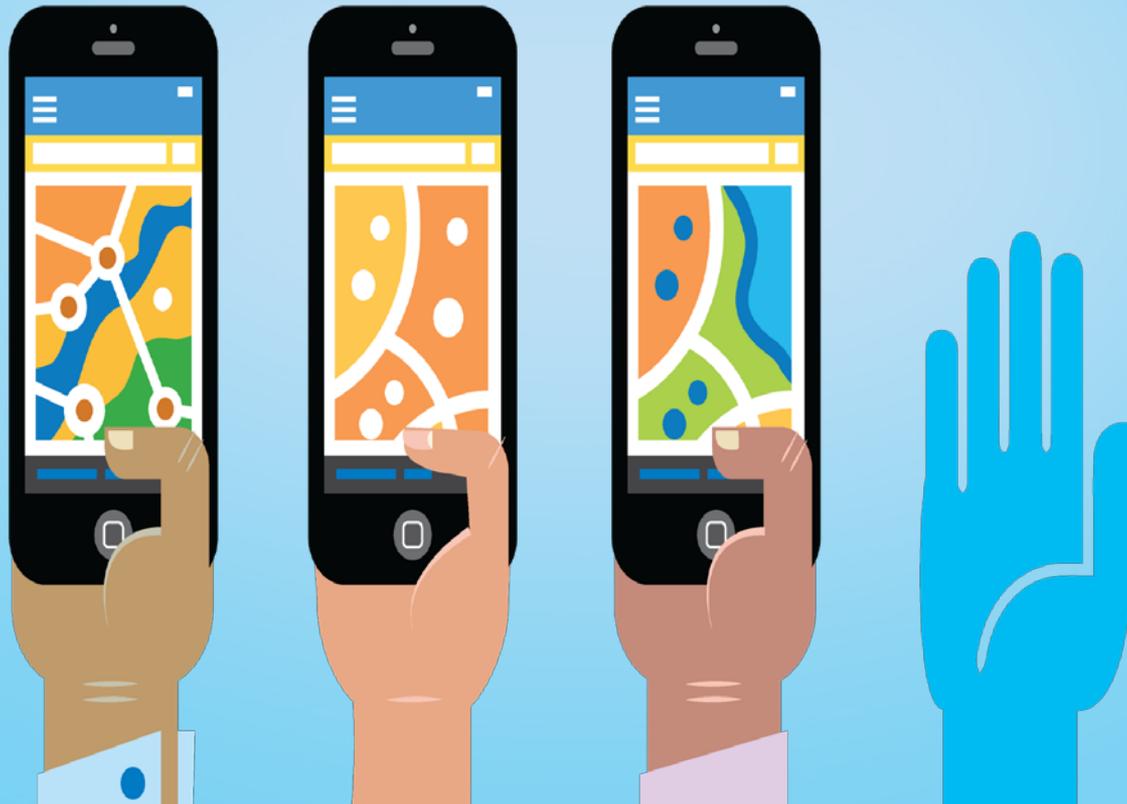
# Why a New Approach?





# Location Aware Apps

Tightly integrated and designed to work together



# Platform Architecture



**ArcGIS  
Online**



**REST  
Server**



**ArcGIS  
Server**



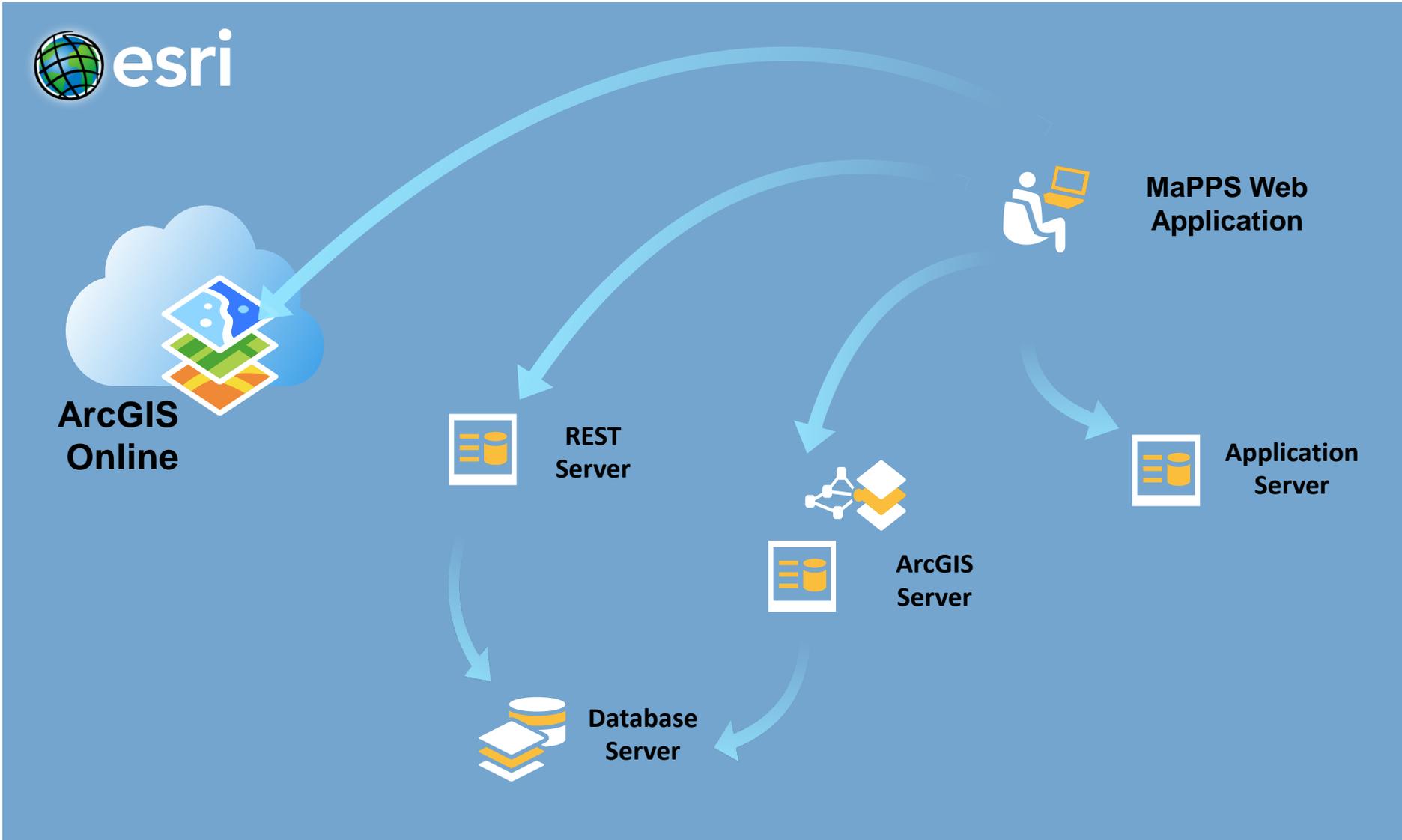
**Application  
Server**



**Database  
Server**

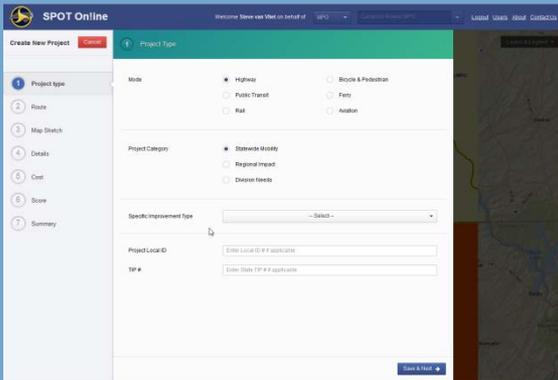


**MaPPS Web  
Application**



# Workflow Overview

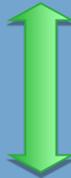
## Project Planning



Create & Map Project

## Spatial Analysis & Project Editing

Draft Project  
(private)



Automated  
Geoprocessing

Draft Project  
(public)



Review / Comment

## Project Export / Submittal



PNF



PIF

# Login Page

MassDOT Project Planning System (v1.13)

My Projects Clear Create Project

MassDOT Project Planning System

username ▲

password

Disclaimer:  
The MassDOT Project Planning System (MaPPS) is a Geographic Information System (GIS) and project development tool for online project planning, automated analysis, reporting and collaboration. The system is intended to provide a user friendly, web-based environment for populating ProjectNeed and Project Initiation Forms, mapping project limits, sharing project data internally within MassDOT and externally with resource agencies, and for planning-phase project commenting. MaPPS was developed in collaboration with the Federal Highway Administration through the Second Strategic Highway Research Program (SHRP2) product Expediting Project Delivery (C19) and the Every Day Counts 2 (EDC2) initiative called Geospatial Data Collaboration

About Us Sign in →

Edit Delete Export Reports Comments Changes

Move mouse to get coordinates

MaPPS | MassDOT

# MaPPS Main Screen

MassDOT Project Planning System

All Projects ▼ 📍 Create Project

Project Name | Date | Mode

No projects found.

Search: Esri World Goocoder

Esri HERE, DeLorme, FAO, USGS, NGA, EPA, NPS | MaPPS

Edit Delete Export Reports Comments Changes

# Project Description

MassDOT Project Planning System

Create Project Cancel

1 Project Type  
✓ Project Need & Initiation

2 Project Description

3 Sketching

4 GeoProcessing

5 Project Need Form (PNF)

6 Project Initiation Form (PIF)

7 Report

Project Name: Bridge Replacement:Route 38

Proponent: Tim Dexter

Title: Environmental Analyst

Municipality / Organization: MassDOT

Completed by: Tim Dexter

Title: Environmental Analyst

Phone: (657) 368-8794

Email: timothy.dexter@state.ma.us

Date: 3/6/2016 

Previous Save & Next

# Project Sketching

The screenshot displays the MassDOT Project Planning System interface. On the left, a vertical sidebar titled "Create Project" contains a list of steps: 1. Project Type, 2. Project Description, 3. Sketching (highlighted in blue), 4. GeoProcessing, 5. Project Need Form (PNF), 6. Project Initiation Form (PIF), and 7. Report. A red "Cancel" button is located at the top right of this sidebar. The main area is a map of Shawsheen street, Tewksbury, Ma, with a search bar at the top. A blue line on the map represents a project feature, with a dashed box around it indicating a selection or editing area. Below the map, there is a legend for "Project Lines" and "Project Polygons". At the bottom, there are "Previous" and "Save & Next" buttons, and a standard GIS toolbar.

# Geoprocessing: Running

The screenshot displays the 'MassDOT Project Planning System' interface. On the left, a vertical navigation pane shows a list of steps: 1. Project Type, 2. Project Description, 3. Sketching, 4. GeoProcessing (highlighted), 5. Project Need Form (PNF), 6. Project Initiation Form (PIF), and 7. Report. A 'Cancel' button is located at the top right of this pane. The main content area is titled '4 GeoProcessing' and features a 'Run GeoProcessing' button. Below the button, the system displays the execution status and a list of intersection checks. The status indicates the tool is running, with start and end times of Fri Mar 06 23:22:42 2015. The intersection checks include:

- Intersection found with Road Inventory...
- Intersection found with MassDOT Inventory of Flood Prone Areas...
- No Intersection found with Bridge Database...
- Intersection found with Road Inventory...
- No Intersection found with Top 200 Crash Intersection Layer...
- Intersection found with HSIP Clusters...
- No Intersection found with HSIP Pedestrians Crash Clusters...
- No Intersection found with HSIP Bicycle Crash Clusters...
- No Intersection found with Coldwater Fish Resources...
- No Intersection found with Massachusetts Coastal Zone...
- No Intersection found with NHESP Certified Vernal Pools...
- No Intersection found with NHESP Certified Vernal Pools...
- No Intersection found with MassDCP "Impaired Waters" - 2012 Integrated List of Waters (305(b)/303(d))...
- No Intersection found with NHESP 2008 Estimated Habitats of Rare Wildlife...
- No Intersection found with NHESP 2008 Priority Habitats of Rare Species...
- No Intersection found with BioMap2 Core Habitat...
- No Intersection found with Wild and Scenic River...
- No Intersection found with Environmental Justice Populations...
- No Intersection found with Estuarine and Marine Deepwater and Wetland Habitats...
- Intersection found with MassDOT Inventory of Flood Prone Areas...
- No Intersection found with Top 200 Crash Intersection Layer...
- Intersection found with HSIP Clusters...
- No Intersection found with HSIP Pedestrians Crash Clusters...
- No Intersection found with HSIP Bicycle Crash Clusters...
- No Intersection found with Coldwater Fish Resources...
- No Intersection found with Massachusetts Coastal Zone...
- No Intersection found with MassDCP "Impaired Waters" - 2012 Integrated List of Waters (305(b)/303(d))...
- No Intersection found with NHESP 2008 Estimated Habitats of Rare Wildlife...
- No Intersection found with NHESP 2008 Priority Habitats of Rare Species...
- No Intersection found with BioMap2 Core Habitat...
- No Intersection found with Wild and Scenic River...
- No Intersection found with Environmental Justice Populations...
- No Intersection found with Estuarine and Marine Deepwater and Wetland Habitats...
- Completed script Tool...

At the bottom of the interface, there are 'Previous' and 'Save & Next' buttons.

# Project Initiation Form (PIF)

MassDOT Project Planning System

Create Project Cancel

- Project Type
  - ✓ Project Need & Initiation
- Project Description
- Sketching
- GeoProcessing
- Project Need Form (PNF)
- Project Initiation Form (PIF)**
- Report

6 Project Initiation Form (PIF)

MASSDOT - HIGHWAY DIVISION

**Project Initiation Form**

**Part I - General Information**

Project Location: Main Street (SR 38)

**Project Need:** Briefly restate the primary project need or goal as developed in the Project Need Form (e.g. rehabilitate a roadway, improve safety at an intersection, reduce corridor congestion, improve pedestrian facilities, or provide bike accommodation).

Existing bridge is structurally deficient and needs superstructure and substructure replacement.

**Regional Benefit:** Describe any regional benefits that would be realized should the Project Need be met.

The bridge is an important connect on Main Street (SR 38), which is an important arterial providing a connection from I-495 south to Route 128 / I-95. Replacing the bridge is essential to maintaining this important corridor.

Previous Save & Next

# PIF Report

PIF Page 1:

MassDOT - Highway Division  
Project Initiation Form

Proponent: Tim Dexter Title: Environmental Analyst  
Municipality/Organization: MassDOT  
PIF completed by: Tim Dexter Title: Environmental Analyst  
Phone: (857) 368-8794 Email: timothy.dexter@state.ma.us  
Date: Fri Mar 06 2015 00:00:00 GMT-0800 (Pacific Standard Time)

Part I – General Information

Project Location: Main Street (SR 38) over Shawsheen River, Tewksbury, MA

**Project Need:** Briefly restate the primary project need or goal as developed in the Project Need Form (e.g. rehabilitate a roadway, improve safety at an intersection, reduce corridor congestion, improve pedestrian facilities, or provide bike accommodation).

**Existing bridge is structurally deficient and needs superstructure and substructure replacement.**

**Regional Benefit:** Describe any regional benefits that would be realized should the Project Need be met.

**The bridge is an important connect on Main Street (SR 38), which is an important arterial providing a connection from I-495 south to Route 128 / I-95. Replacing the bridge is essential to maintaining this important corridor.**

Part II – Project Costs and Responsibilities

**Estimated Costs:** Provide available cost estimates or estimated cost ranges in current-year

Estimated Construction Costs:	Estimated Other Costs:
Construction Items:	Planning/Design:
Contingencies (10%):	Right-of-way:
Other Constr. Costs (10%):	Environmental Mitigation:
<b>Total Construction Cost:</b>	<b>Total Other Costs:</b>

**Anticipated Funding Program:**

Indicate all potential sources of funding that may apply to the project

- |                              |                                |                               |
|------------------------------|--------------------------------|-------------------------------|
| <input type="checkbox"/> STP | <input type="checkbox"/> CMAQ  | <input type="checkbox"/> HSIP |
| <input type="checkbox"/> TAP | <input type="checkbox"/> NHPP  | <input type="checkbox"/> HPP  |
| <input type="checkbox"/> NFA | <input type="checkbox"/> Other |                               |



# Expediting Project Delivery (C19)

July 19, 2016

Elisha Wright-Kehner, P.E.



U.S. Department of Transportation  
Federal Highway Administration

AMERICAN ASSOCIATION  
OF STATE HIGHWAY AND  
TRANSPORTATION OFFICIALS

**AASHIO**



Bringing greater collaboration  
for better, faster decisions



**Capacity Focus Area –**  
Expediting Project Delivery

# Why Expediting Project Delivery (C19)?



## **Areas of interest to:**

- Improve Public Involvement and Support
- Improve Resource Agency Involvement and Collaboration
- Demonstrate Real Commitment to the Project
- Improve Internal Communication and Coordination
- Streamline Decision Making
- Integrate Across all Phases of Project Delivery

# History in Arkansas



- Award Date - October 17, 2013
- Awarded - \$50,000
- Assessment Workshop - \$20,000

# Expediting Project Delivery – Assessment Workshop



- Facilitated by FHWA on July 30-31, 2014
- 30 Attendees
- Topics
  - Overview of the Expediting Project Delivery and the Expediting Project Delivery Assessment Tool
  - Overview of “Current State” and “Desired State” of Project Development and Delivery Processes and Practices
  - Collaboration and Coordination Challenges and Opportunities
    - ✓ “What works well?”
    - ✓ “What needs work?”

# What works well at AHTD?

- Administration Open to Change
- Recent Organizational Changes
- Creation of Preliminary Engineering Squad
- Hiring Qualified Personnel
- Open Communication
- Improved Teamwork
- Good Relationship between AHTD and FHWA
- Public Engagement

# Challenges and Opportunities



- Project Development Process Documentation
  - Personnel changes and work load
  - Project Change Communication
- Early Project Decision Making:
  - Defining the Purpose and Need
  - Project Scoping
- Local Agencies Communication
  - Need for standardization and streamline process

# Action Plan



- Developed an Action Plan in August 2014 to facilitate the activities identified in the Workshop
- Five Steps of Implementation:
  - Refine Scoping Procedure
  - Enhancing Purpose and Need Statements
  - Improving Information and Data
  - Improving Internal and External Communication and Coordination
  - Evaluating Resource Allocation

# Action Steps - 1

## Refine Scoping

- A draft project initiation form
  - Developed in coordination with internal stakeholders.
  - Expected to be complete and approved in September 2016.
- A project planning study process has been developed.
  - This documented process will help ensure consistency, accuracy, and transparency of the decision making and scoping process.
  - Planning study procedure manual. Ongoing modifications and updates.
- A data-driven, performance-based approach to better identify system needs.
  - These documented processes are being refined and updated.
- A project prioritization system has recently been implemented to assist decision makers on which projects to prioritize.
  - The methods to quantify needs and outcomes will be refined.

# Action Steps - 1

## Refine Scoping – Project Development Form (*Draft*)

- Form Information - Five pages
  - Project Information
  - Partnering Information
  - Project Purpose and Need
  - Scope
  - Planning Considerations/Study Findings
  - Existing Project Information
  - Existing Bridge Information
  - Proposed Improvement
  - Access/Right-of-Way/Utility
  - Environmental
  - Cost and Funding
  - Project Responsibilities
  - Map of Area

# Action Steps - 2

## **Enhance Purpose and Need Statements**

- The project planning study procedure manual will be modified and updated as needed to ensure project P&N statements are tied to the performance-based planning process.
- A data-driven, performance-based approach is being implemented to better identify system needs.
- A project prioritization system has recently been implemented to assist decision makers on which projects to prioritize.
- We conducted a NEPA and Enhanced Purpose and Need Training. Provide guide to consultants and starting communications with locals earlier in process.

# Action Steps - 3

## Improve Information Exchange and Data Sharing

- Improve Communication/Coordination (Internal and External)
  - A comment documentation process has been recently created for planning studies.
  - This process will be modified to better document comment resolutions, thereby improving the transparency and documentation of the decision-making process.
- Improve Resource Allocation (Internal and Consultant Staff)
  - The Department's consultant selection process will be updated in the near future to allow for stream-lined process for non-engineering services.
  - Enterprise Data Committee to facilitate the incorporation of Department data.
  - Purchase of server to facilitate the enterprise warehouse.

## Action Steps - 4

# Facilitate Communication & Coordination Training

- Alternative Development, Purpose and Needs Statements – 40 Attendees
- Technical Writing – 50 Attendees
- Public Involvement – 18 Attendees
- NEPA and Enhanced Purpose and Need Training.

## Action Steps - 4

# Facilitate Communication & Coordination

- Development of a Local Public Agency Manual
  - Completing Date of 2016-2017
- Increased the tracking and disbursement of project related information after all supplemental staff meetings.
- Still in the process of creating a line of communication for tribes, local public officials, and affected landowners to use throughout the project development process.

## Action Steps - 5

# Evaluate resource allocation

- Utilize the Department's Achieving Career Excellence (ACE) to assist in training on all of these new processes and procedures.
- Still developing a plan on Managing Consultant Resources.

# Steps Forward



- Utilize the Project Initiation Form on a pilot project .
- Buy in from all participants.
- Develop training programs on the ACE platform.
- Update the process to allow for stream-lined process for non-engineering services.
- Create an on-line format for tribes, local public officials, and affected landowners to use throughout the project development process.
- Establish a rotational program to improve coordination between all Divisions.
- Develop and implement a plan on Managing Consultant Resources.

## Overall

- Assessment Workshop Successful
- Opportunities for Improvement Identified and started to implement these improvements
- **Increased Communications**
  - Internal
  - External

## Lessons Learned



- The constant turnover of employees makes it difficult to complete tasks that are handed off each time a person changes positions.
- Employee workloads also have a large impact on task completion.
- Rome wasn't built in a day.



# Expediting Project Delivery

Steven C. Braun, PE

Florida Department of Transportation

District 4 Planning & Environmental Engineer



U.S. Department of Transportation  
Federal Highway Administration

AMERICAN ASSOCIATION  
OF STATE HIGHWAY AND  
TRANSPORTATION OFFICIALS

**AASHIO**



# Outline



- I. Existing Streamlining Processes
- II. Value Engineering PD&E Process Review
- III. SHRP-2 Project Approach and Recommendations
- IV. Statewide Initiatives
- V. Project Examples

# Background

## Existing System

### Efficient Transportation Decision Making (ETDM)

- Established in 2006
  - MAP-21: “Environmental Streamlining”
- GIS Based Program
- Agency Coordination
  - Environmental Technical Advisory Team
- Screening Events
  - Planning
  - Programming

### *The Benefits*

- *Early coordination with local, state, and federal partners*
- *Identify potential impacts within/adjacent to corridor*
- *Receive public comments early in the process*
- *Screen alternatives*

## “Value Engineering” Process Review

- Evaluate processes rather than projects
- Multi-disciplined team structure
- “Think Tank” with buy-in from management
- Identify recommendations for implementation
- PD&E, R/W, Pond Siting,   
Elimination

### The Benefits

- *Process Improvements*
- *Inter-office & industry input/participation/buy-in*
- *Identify system constraints and develop working solutions*
- *PD&E Process Review: 16 recommendations*

# D4 VE Recommendations

## V.E. Recommendation No.5: Allow more preliminary engineering

### Goal

**Expedite  
PD&E and  
Design  
projects**

### Objectives

- **Conduct Pre-work activities in advance of the PD&E Study**
- **Advance Preliminary Design to overlap PD&E**
- **Continuity of PD&E and Design Project Manager**

# D4 VE Recommendations

## V.E. Recommendation No.7: Early identification and consideration of environmental risks

### Goal

**Minimize  
changes  
during the  
design phase**

### Objectives

- **Objective 1-** Early identification of risk (during early stages of PD&E).
- **Objective 2-** Identify and account for potential environmental impacts during the alternative selection process.
- **Objective 3 -** Standardize the environmental element of the alternative selection matrix
- **Objective 4 –** Quantify environmental impacts due to design changes.

## The motivation to apply for the SHRP-2 grant?

- Continued emphasis on accelerating Project Development & Environment (PD&E) project schedules
- Support advancement of projects in the work program
- Reduce the delay in identifying environmental issues
- Strong foundation of existing streamlining

# Our Approach

Awarded SHRP-2 Grant from FHWA



Determine Implementation Strategies for VE Recommendations

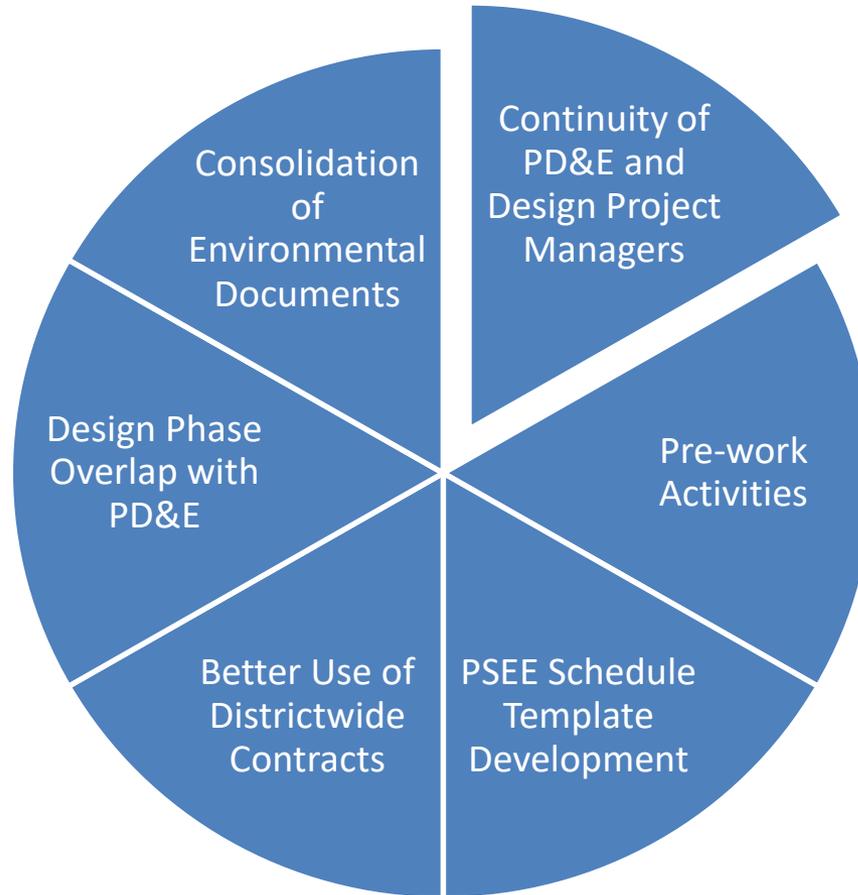


Focus on Constraints Identified by FHWA



Held Assessment Workshops (2)  
(Internal and Resource Agencies)

# SHRP-2 Transformation Strategies

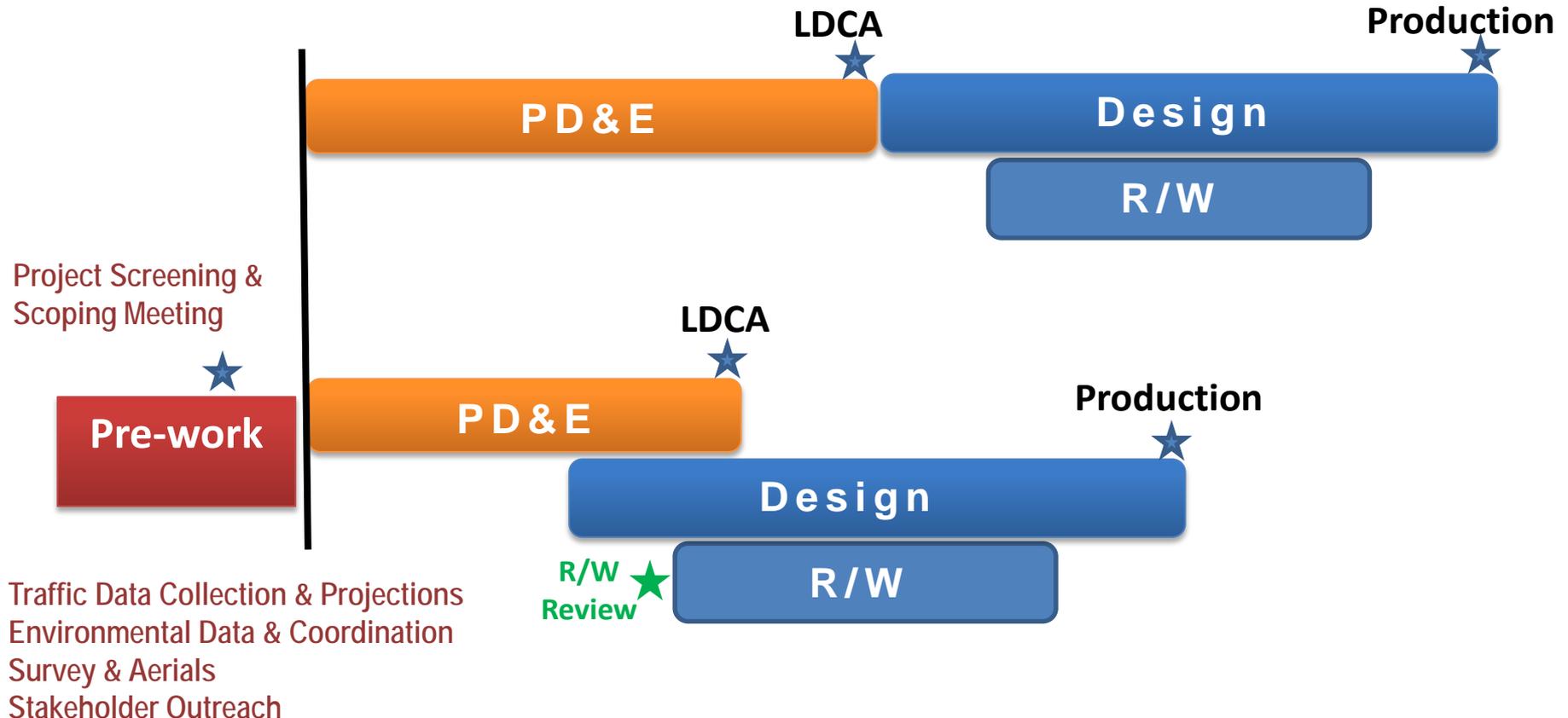


# Transformation Strategies

- Advancement of “Pre-work” (Survey, Traffic, Environmental)
  - Advance key activities
  - Scope Report & Scope Development Meeting
  - Improved Scope and Purpose & Need
- Streamlined schedule templates
- Developed “check-lists” for document reviews
- Consolidation of environmental documents
- Early identification of mitigation funding needs

# Transformation Strategies (Pre-work)

## More Efficient Work Processes



# Transformation Strategies

- **Project Continuity**
  - Continuity of Project Manager
  - Overlap PD&E and Design Schedules
  - Options for single consultant contract for PD&E and Design
- **Contributed to Statewide Initiatives**
  - State-wide Acceleration Transformation (SWAT)

# Statewide Initiatives

## State-wide Acceleration Transformation (SWAT)

- Formed Statewide & District SWAT Teams
- SWAT Planning Meeting
  - Scopes / Schedules / Strategies / Funding
- Standard practice of conducting “pre-work”
- Standard staff hour estimates
- Interagency Agreements
  - Interchange Access Process (FHWA)
  - NEPA Assignment (FHWA)
  - Historic Resources (SHPO)
  - ETDM Updated Agreement

# Statewide Initiatives

## SWAT Dashboard

- Statewide Schedule Milestones
- Executive Dashboard Tracking
- The dashboard is updated and reviewed regularly at Executive Meetings

**State Wide Acceleration and Transformation (SWAT) / Not Federal Eligible (NFE) Dashboard**

*Project schedule information is from a PSM export file dated 09/22/2015 12:42 am, not a live connection to the PSM database ([more info...](#))*

Track: Search for a Tracked Item

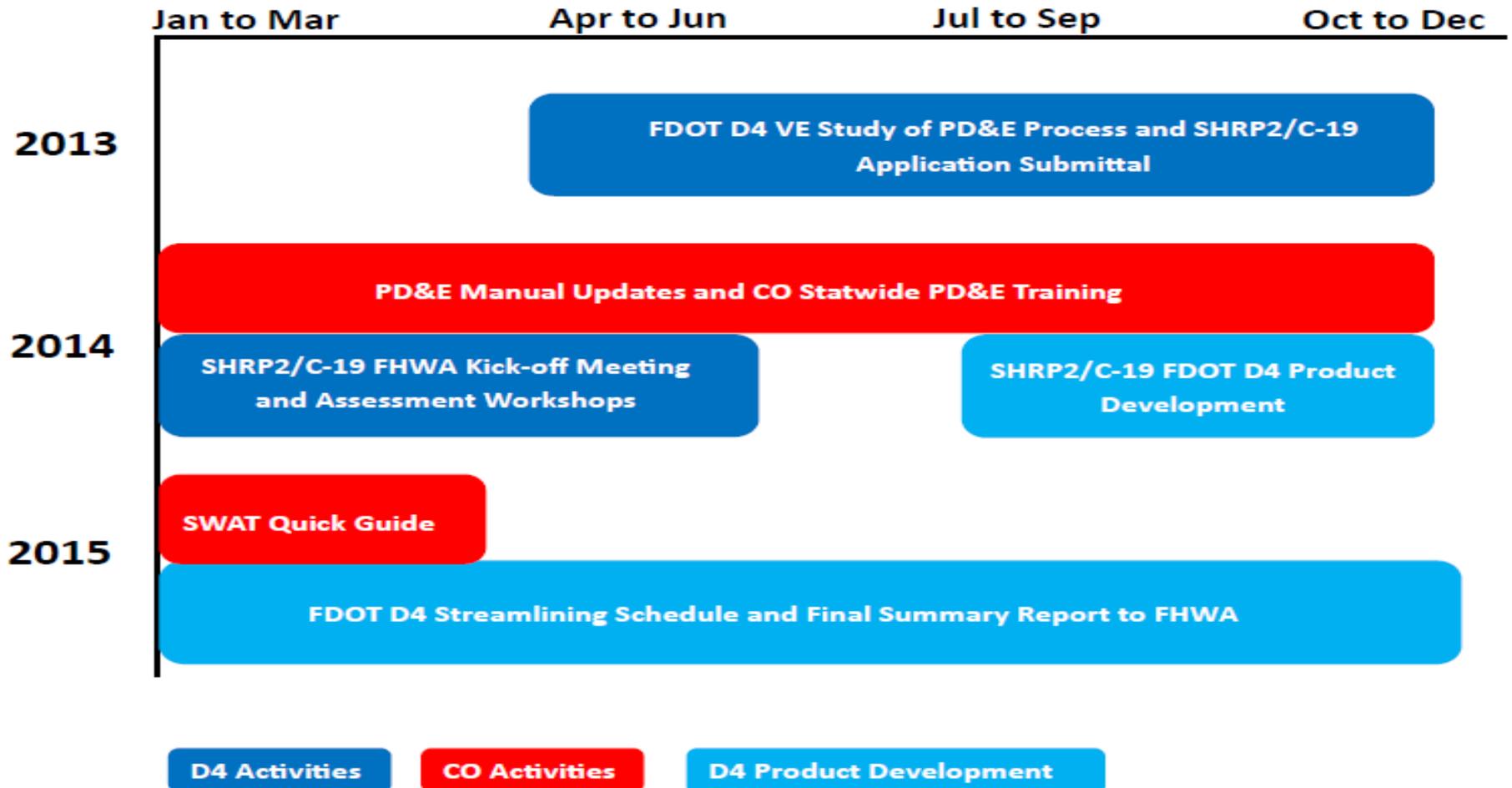
Highlight:  Highlight Changes Since

Layout:  Summary  Detailed  Executive

Status	Prioritized in Fiscal Year	District	Item / Segment	Item Description	Project Likely Requires New ROW	Estimated Federal COA	NEPA 30% / NEPA 60% / SEIR (months)	PD&E Advertisement (PSM 705)	SEIR Start (PSM 709)	Public Hearing (PSM 262)	SEIR APPROVED (PSM 734)	Exp
Current	14/15	1	435111-1	SR 951 FROM MANATEE RD TO N OF TOWER RD	Yes	Type II CE	36 / 61 / 40	05/27/2014	02/09/2015	06/14/2017	09/18/2017	01
Current		2	434559-1	SR 24 (ARCHER RD) FROM US 27A/BRONSON TO SW 75TH ST/TOWER RD	Yes	Type II CE	36 / 61 / 8	09/10/2015	09/11/2015	07/07/2017	02/29/2016	
Current	14/15	2	435821-1	SR 200 (US 301) AT CRAWFORD ROAD	Yes	Type II CE	36 / 61 / 14	01/05/2015	08/17/2015		02/26/2016	1f
Current	14/15	2	436558-1	STARKE RR OVERPASS FROM US 301 TO EAST OF CSX RR	Yes	EA	82 / 92 / 33	02/04/2014	08/09/2015	09/01/2016	11/01/2016	1f
Current	14/15	3	217910-2	SR 75 (US 231) FROM S OF SR 30A (US 98) 15TH STREET TO SR 20	Yes	Type II CE	36 / 61 / 29	05/19/2014	09/24/2014	06/13/2016	11/02/2016	
Current	14/15	4	436870-1	SR-714/SW MARTIN HWY FROM CITRUS BLVD. TO SW MARTIN DOWNS BLVD.	Yes	Type II CE	36 / 61 / PSM		09/26/2016	11/09/2017	01/17/2018	01
Current	14/15	5	433805-1	SR 501 FROM MICHIGAN AVENUE TO INDUSTRY ROAD	Yes	Type II CE	36 / 61 / 16	02/02/2015	03/13/2015	02/22/2016	04/29/2016	01
Current	14/15	6	433511-1	INE 203 ST & NE 215 ST INTERSECTION IMPROVMTS BTWN US-1 & W. DIXIE HWY	Yes	Type II CE	36 / 61 / 28	10/07/2013	02/04/2015	10/14/2015	12/15/2015	04
Current	14/15	6	433827-1	SR 90/SW 8 STREET AT SR 973/SW 87 AVENUE	Yes	EA	82 / 92 / PSM	07/07/2014	02/18/2015			
Current	15/16	7	257147-1	SR 688 (ULMERTON RD) FROM W OF 38TH ST NORTH TO W OF INTERSTATE 275	Yes	Type II CE	36 / 61 / PSM					11
Current	14/15	7	435750-1	SR 60 FROM VALRICO RD TO DOVER RD	Yes	Type II CE	36 / 61 / 41	12/02/2011	07/18/2014	11/08/2014	05/08/2015	01
Current	14/15	7	435750-2	SR 60 FROM DOVER RD TO SR 39	Yes	Type II CE	36 / 61 / 41	12/02/2011	07/18/2014	11/08/2014	05/08/2015	01
Current	14/15	7	435915-1	SR 52 EXTENSION FROM E OF MCKENDREE RD TO E OF US 301	Yes	EA	82 / 92 / 11	10/01/2014	12/04/2014	08/02/2015	08/28/2015	01
Current	14/15	Turnpike	435733-1	PD&E WIDEN SAWGRASS EXPY-S OF SUNRISE TO S OF US441 (MP .5 TO 18)	No	Type II CE	36 / 61 / 26	01/05/2015	08/01/2015	11/10/2016	03/13/2017	
Current	14/15	Turnpike	437153-1	PD&E WIDEN SAWGRASS S OF US 441 TO W OF POWERLINE (MP18-22)	Yes	Type II CE	36 / 61 / 30	08/31/2015	05/17/2016	10/13/2017	02/14/2018	

NOTES:

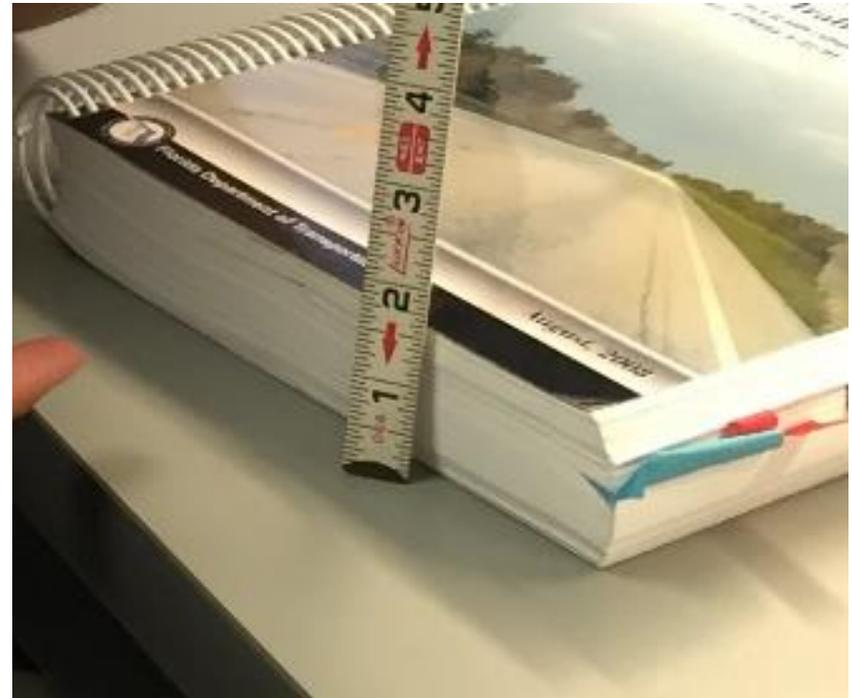
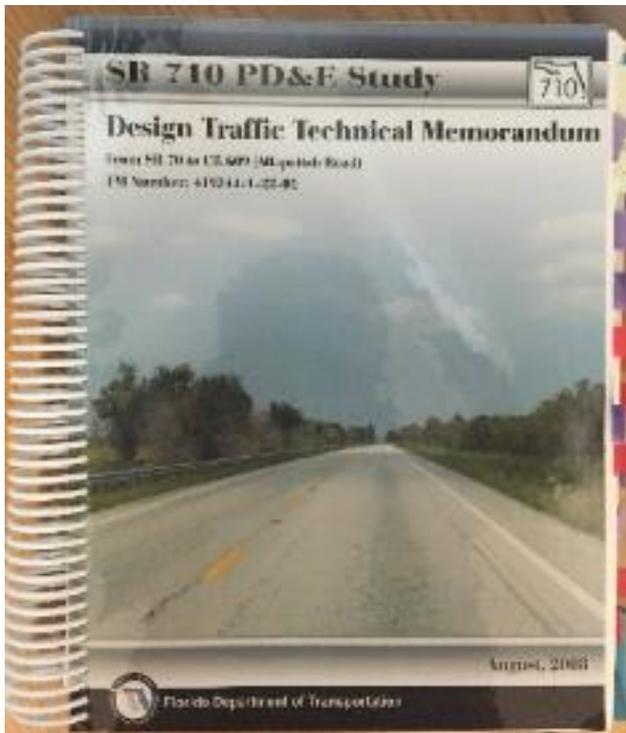
# FDOT Expedited Project Delivery Timeline



# SR 710: Project Traffic

## The Problem:

Lengthy PD&E duration led to needing to re-do traffic using updated model which caused project delays.



# Project Traffic

## The SR 710 Result:

A lot of time and effort

**WASTED**

## New SWAT Strategies:

- Model validation & traffic done in “pre-work”
- Remove traffic projections from the critical path
- Shortened PD&E schedule
- Eliminate re-work!

# US-1 Boca Raton: Public Involvement

## The Problem:

Lack of public consensus and political support led to the PD&E study resulting in a **No Build** as the selected alternative



*Photos from the US-1  
Public Hearing*

# Public Involvement

## US-1 in Boca Raton Result:

A lot of time and effort



## New SWAT Strategies:

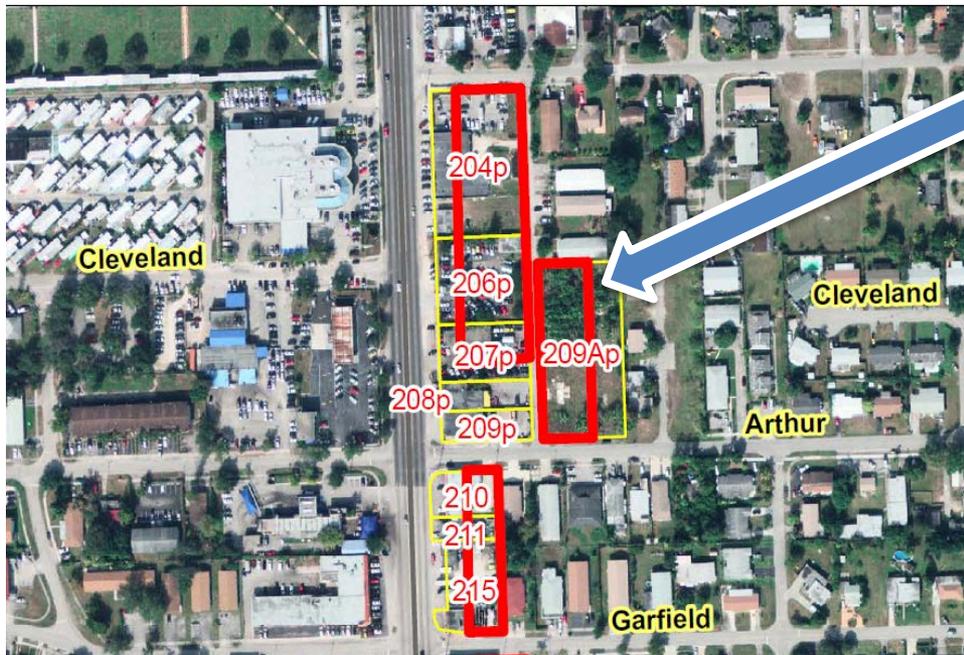
- SWAT Planning Meetings
- Earlier identification/escalation of issues
- Earlier public/stakeholder outreach
- “Consensus Building” by the MPO prior to prioritization of the PD&E study (SW 10<sup>th</sup> Street Example)

# SR-7 in Hollywood: Right-of-Way

## The Problem:

Pond sites were questioned by the public and design team began to consider sites outside the scope of the PD&E

### Option 1-B



**Parcels NOT included in original PD&E study!**

# Right of Way Decisions

## The SR 7 Result:

A lot of time and effort



## New SWAT Strategies:

- Single PM for both PD&E and Design
- Overlap Design with PD&E
- Shortened time until Design and RW acquisition
- Prepare projects for advanced Production and RW

# I-95 & Sunrise Blvd.: Historic Resources

## The Problem:

Gravesites from adjacent Woodlawn Cemetery encroach into the I-95 RW. Cemetery is eligible for National Register of Historic Places designation.



Gravesites within  
I-95 RW

# Historic Resources

Woodlawn Cemetery Result:  
A lot of time and effort wasted?

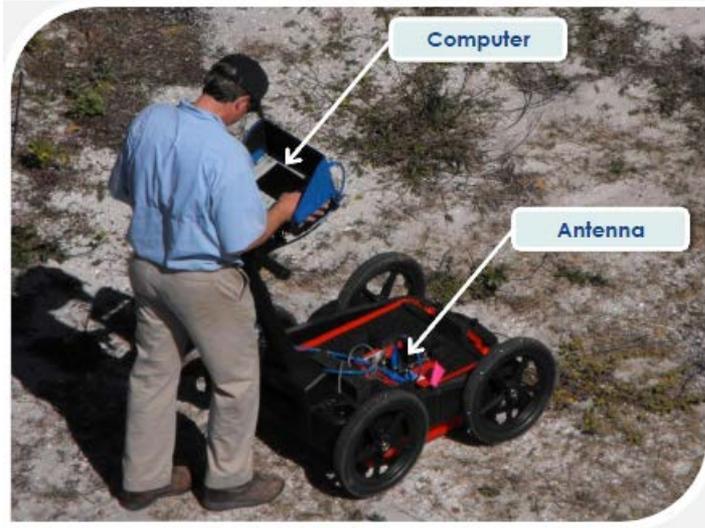
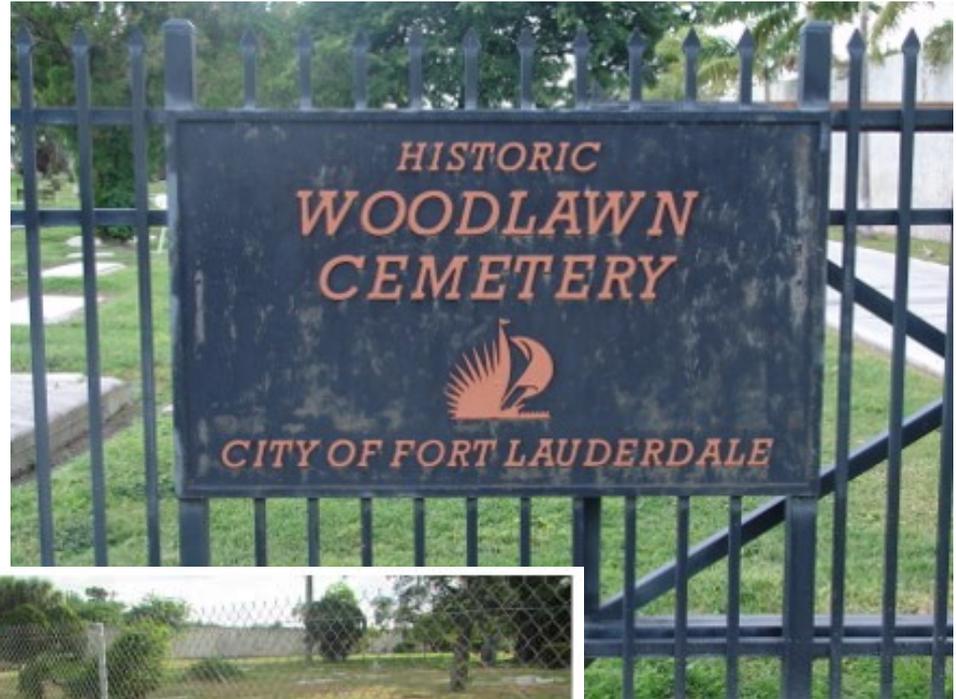
**No!!!**



## SWAT Strategies Employed:

- Funded a separate study in advance of the interchange PD&E study
- Earlier environmental analyses & coordination
- Earlier community outreach
- Established constraints for the interchange project, while addressing community's concerns

# Historic Resources



# Advanced Wetland Mitigation

## Developed a \$4 Million Invitation to Bid Contract Package

- 104 Mitigation Credits purchased for a variety of habitat types
- Credits serve both State and Federal Impacts
- **Credits are available for future projects**
- Time Savings during Environmental Permitting
- Cost Savings - \$5,870,686

# Advanced Wetland Mitigation





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Transportation**

**District 4 Planning & Environmental  
Engineer**

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# Panel: Questions and Answers



# Contact Information

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# 2017 Environmental Excellence Awards

## 2017 Categories

### Organization and Process Innovation

- Accelerating Project Delivery
- Collaboration and Partnership
- Educational and Training Programs
- Environmental Leadership
- Environmental Research
- Programmatic Agreements

### Natural Environment

- Air Quality and Greenhouse Gas Emissions
- Climate Change Adaptation and Resilience
- Ecosystems, Habitat, and Wildlife
- Environmental Leadership
- Roadside Resource Management and Maintenance
- Wetlands, Watersheds, and Water Quality

### Human Environment

- Community Considerations in Transportation Improvements
- Nonmotorized and Multimodal Transportation
- Demonstrated Advances in Nondiscrimination, Including Environmental Justice
- Cultural and Historic Resources
- Context Sensitive Solutions

APPLICATION PERIOD OPENS  
AUGUST 1<sup>st</sup>, 2016!

For general questions, please email:  
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Organization and Process Innovation  
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Natural Environment  
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Human Environment  
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# Session: Collaboration and Innovation for Project Delivery

Time: 3:15pm

Date: Tuesday, July 19, 2016





**Thank you!**