



# Expediting Project Delivery Webinar – Implementing Streamlining Measures

December 11, 2017

Kate Kurgan, AASHTO David Williams, FHWA Peggy Laurenz & Dave Huft, South Dakota DO Georgi Celusnek, Florida DOT



AMERICAN ASSOCIATION of State Highway and Transportation Officials



# SHRP2 & Its Focus Areas



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



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



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



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

# **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:
  - 1. Improve internal communication and coordination;
  - 2. Streamline decision-making;
  - 3. Improve resource agency involvement and collaboration;
  - 4. Improve public involvement and support;
  - 5. Demonstrate real commitment to the project; and
  - 6. Coordinate work across phases of project delivery.



# **Expediting Project Delivery**

	Stage of Project Planning or Delivery					
Strategy	Early Planning	Corridor Planning	NEPA	Design/ROW/ Permitting	Construction	
I. Change-control practices		0	•	•	•	
2. Consolidated decision council		0	•	•		
8. Context-sensitive design and solutions	0	0	•	•	0	
I. Coordinated and responsive agency nvolvement	0	•	•	•	•	
5. Dispute-resolution process		0	•	•	0	
5. DOT-funded resource agency liaisons		0	•	•		
7. Early commitment of construction funding	•	•	•			
3. Expedited internal review and decision-	•	•	•	•		
naking						
D. Facilitation to align expectations up front	0	٠	•			
0. Highly responsive public engagement	•	•	•	•	0	
1. Incentive payments to expedite relocations				•		
2. Media relations manager		•	•	•	0	
3. Performance standards	0	•	•	•		
4. Planning and environmental linkages	•	•	•			
5. Planning-level environmental screening	•	•				
criteria						
6. Programmatic agreement for Section 106			•	•		
7. Programmatic or batched permitting			•	•		
8. Real-time collaborative interagency reviews	0	0	•	0		
9. Regional environmental analysis framework	0	•	•	•		
20. Risk management	•	•	•	•	•	
21. Strategic oversight and readiness	0	•	•			
assessment						
22. Team co-location		0	•	•		
23. Tiered NEPA process	0	•	•			

SHRP2 SOLUTIONS | 4

# Implementation Award Recipients

- Arizona Department of Transportation (ADOT)
- Arkansas State Highway and Transportation Department (AHTD)
- Association of Monterey Bay Area Governments (AMBAG)
- California Department of Transportation (Caltrans)
- Florida Department of Transportation (FDOT)
- Idaho Transportation Department (ITD)
- Maricopa Association of Governments (MAG)
- Massachusetts Department of Transportation (MassDOT)
- Nebraska Department of Roads (NDOR)
- South Carolina Department of Transportation (SCDOT)
- South Dakota Department of Transportation (SDDOT)
- Vermont Agency of Transportation (VTrans)



# SHRP2 on the Web

#### GoSHRP2 <u>www.fhwa.dot.gov/GoSHRP2</u>

Apply for Implementation assistance

Learn how practitioners are using SHRP2 products

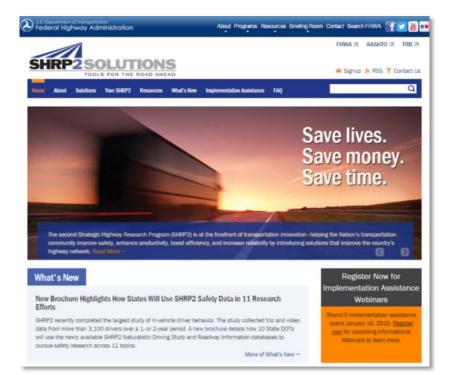
 SHRP2 @AASHTO <u>http://SHRP2.transportation.org</u>

Implementation information for

**AASHTO** members

 SHRP2 @TRB <u>www.TRB.org/SHRP2</u>

**Research information** 



#### FHWA R10 & C19 Websites

https://www.fhwa.dot.gov/GoSHRP2/Soluti ons/Renewal/R10

 <u>https://www.environment.fhwa.dot.gov/st</u> <u>rmlng/shrp2-c19/default.asp</u>



# **AASHTO & FHWA Contacts**

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C19: Expediting Project Delivery

# **Implementing Streamlining Measures**

Peggy Laurenz & Dave Huft South Dakota Department of Transportation December 11, 2017







# **C19 Assessment Workshop**

#### **Participants**

- SDDOT
- FHWA SD Division
- FHWA Resource Center
- USDOT Volpe

#### "<u>Constraints</u>"

- Conflicting Resource Values
- Inability to Maintain Agreement
- Insufficient Public Engagement
- Lack of Dedicated Staff
- Large/Complex Projects



# **Strengths & Opportunities**

#### **Strengths**

- Empowered workforce
- Management systems
- Scoping process
- Public engagement
- Open, iterative STIP process
- Commitment to process improvement
- Strategic planning

#### Challenges & Opportunities

- Public communication
- ITS process integration
- Environmental commitment tracking
- Project scheduling
- Staff size
- Staff turnover
- Local gov't coordination
- Risk identification in scoping



# **Five Actions**

#### SHRP2 C19

- Enhance public interaction
- Increase schedule accountability and allocate internal resources

#### <u>Other</u>

- Coordinate with External Partners
  - Railroads (R16)
  - Utilities (R15B)
- Build Internal & External Capacity
  - Training
  - Mentoring
  - Onboarding
- Improve Scoping



### Public Engagement: Public Meetings

#### **Strategies**

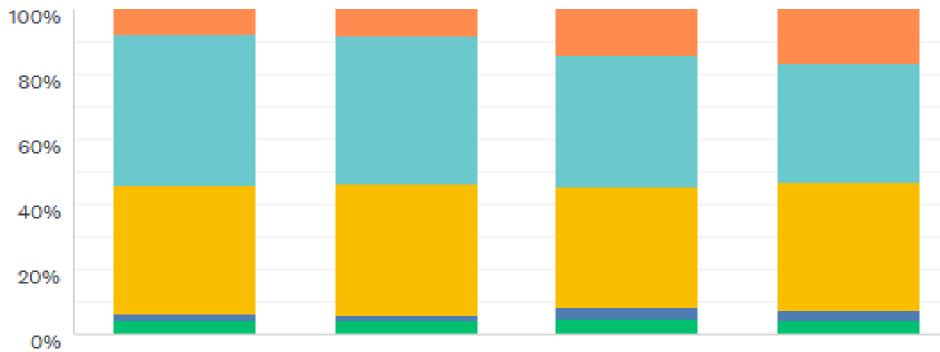
- Public meeting workflow
- Stronger advertising
- Personal outreach
- Better preparation
- Public meeting survey

#### Survey Topics

- Date & Location
- How aware of meeting?
- Reason for interest
- Meeting quality
  - Purpose clearly explained
  - Information clarity
  - Free to comment
  - Questions answered
- How to improve?



# **Sample Survey Results**

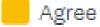


The purpose of the meeting was clearly explained

Strongly Disagree Does not apply Information was presented clearly at the meeting

Disagree

I felt free to comment and ask questions during the meeting Questions were answered clearly and completely



Strongly Agree



# Public Engagement: Landowner Communication Survey

- Location & Project
- Pre-construction communication
  - Nature of work
  - Adequately informed
  - Opportunity to ask questions, express concerns
- Communication during construction

- SDDOT staff contact
  - Accessible
  - Timely
  - Accurate
  - Courteous
- Public meetings
- Preferred communication
- Did well / Do better
- Overall satisfaction



 SDDOT created a "Project Delivery Office" to place emphasis on timely project delivery

 Mission: Ensure all pre-construction projects are delivered to Bid Letting on the schedule intended so we can meet STIP dates



- What we know, what we need, what we do....
- First Steps: Self Evaluation
  - understand our processes
  - understand our priorities
  - identify our strengths
  - acknowledge our challenges
  - evaluate our scheduling tool
- Determine a direction Make a plan



# Accurate & Reliable Schedules

- Become proficient with our scheduling software
  - Schedulers attended software training
- Involve subject matter experts
  - Involve those who are Doing the work
- Retool all of our base network schedules

- Convert active projects from old schedules to improved networks and redefine schedules for each project
  - No more guessing
  - Up-to-date, accurate schedules



# **Realign Focus: Ready Date Concept**

- Ready Date: completed plan package due in Bid Letting
- New schedules focus on day-to-day work and accomplishing specific activities on time
- The new end goal: Ready Date
  - on the shelf early
  - optimal letting window
  - bid letting flexibility
  - STIP agility
  - meet STIP funding and timing goals



# Long Term Planning to Achieve Short Term Goals



- meeting a Project Ready Date and anticipated STIP year takes organization and focus
- We Created
  - a number of tools ensure each project schedule was getting individual attention at regular intervals
- We Can Now
  - address project and schedule issues early
  - make conscious decisions about the future of the project
  - make conscious decisions about the STIP



# **Tools for Success**

- Resource Planning and Allocation
  - Manpower availability
- Schedule Review Points
  - Individual attention and project updates
- Project Risk Status
  - Status alert system Red/Yellow/Green

- Team Meetings
  - The right people in the room for the best decision
- Strategic Milestones
  - Measure: knowledge is power
- Project Delivery Work
   Group
  - "Think Tank"







- Strong focus on communication
- Continue to learn and use the software to our advantage
- Implement more defined project controls
- Clarify roles and responsibilities
- Project management training
- Provide more management reports and data.
- Make conscious and informed decisions.

Possibilities are many. Every step forward or new concept opens the door to more ideas and concepts.





C19: Expediting Project Delivery

# Streamlining Project Delivery getting to construction sooner

December 2017

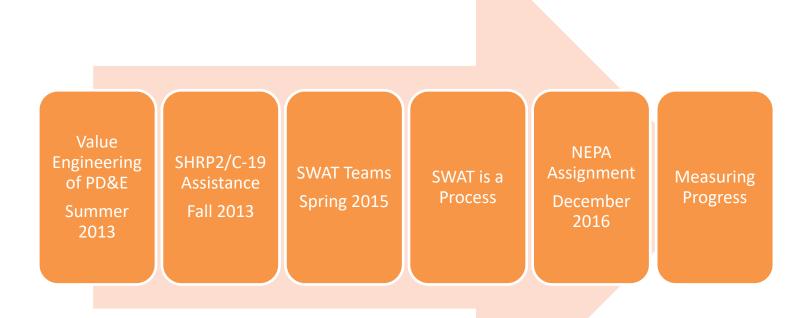
Georgi Celusnek, Florida DOT







### How We Got Here





# **Recommendations and Implementation**

- 1. Maximize number of Projects Using State Funds Only
- 2. Overlap the PD&E and Design Phases
- 3. More Contractual Options for PD&E and Final Design
- 4. Designate a Single Project Manager for Both PD&E and Final Design Phases
- 5. Perform Pre-Work In Advance of PD&E Study Commencement
- 6. Streamline the PD&E and Design Schedule Templates
- 7. Perform a Value Engineering Study on the Right of Way Acquisition Process
- 8. Hold Pre-Scoping Meeting Workshops for PD&E Projects
- 9. Create a PD&E QA/QC Checklist for Final Documents
- 10. Standardize Format for PD&E Project Progress Reports
- 11. Hold In-Person Regional Training Conferences for FDOT Staff and Consultants
- 12. Improve the Public Involvement Program (PIP) Template
- 13. Simplify and Combine PD&E Documents
- 14. Create PD&E Staffing Hour Guideline Spreadsheet and Estimation Form



1. Maximize number of Projects Using State Funds Only

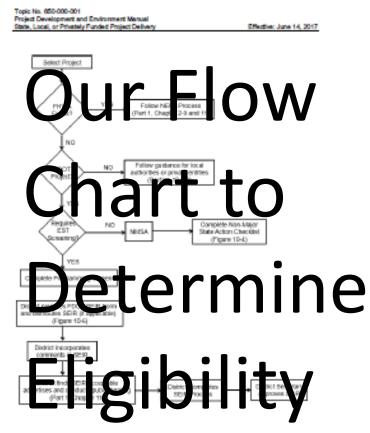
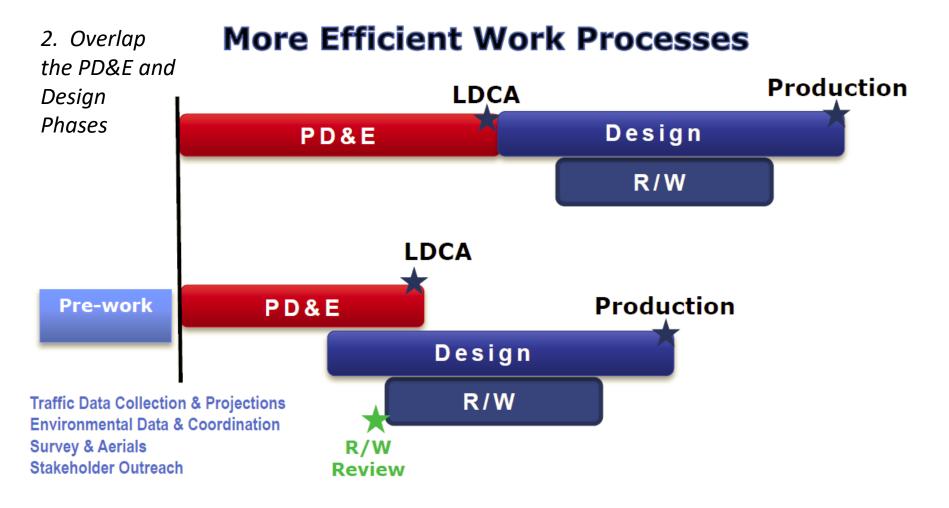


Figure 10-1 FDOT State, Local, or Privately Funded Project Delivery Process

State, Local, or Privately Funded Project Delivery

10-20









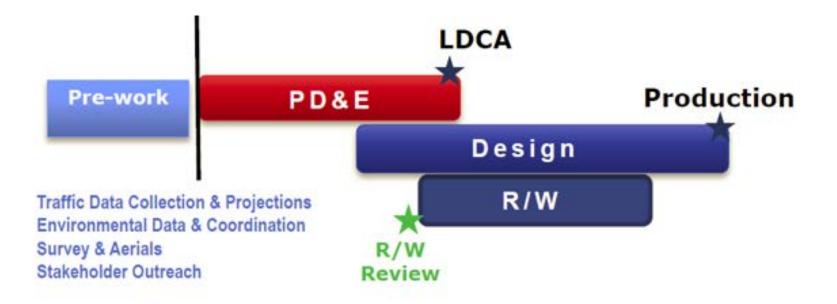


4. Designate a Single Project Manager for Both PD&E and Final Design Phases



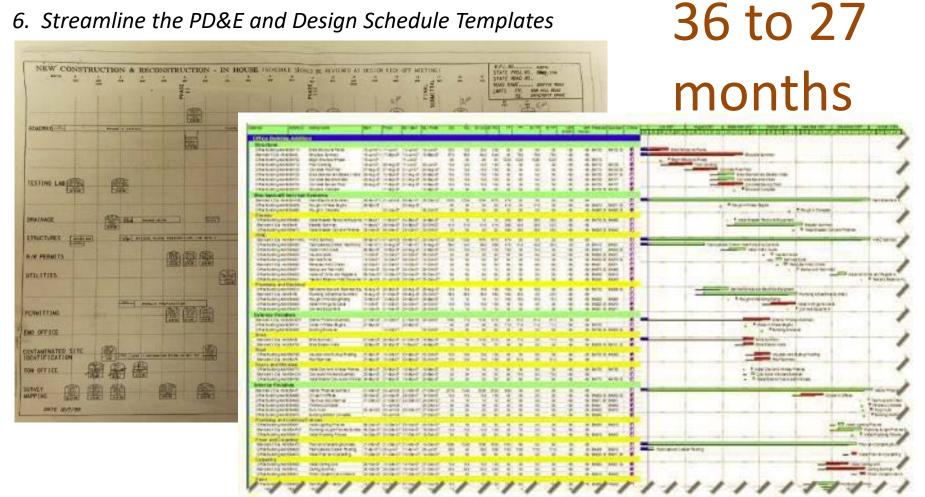


5. Perform Pre-Work In Advance of PD&E Study Commencement

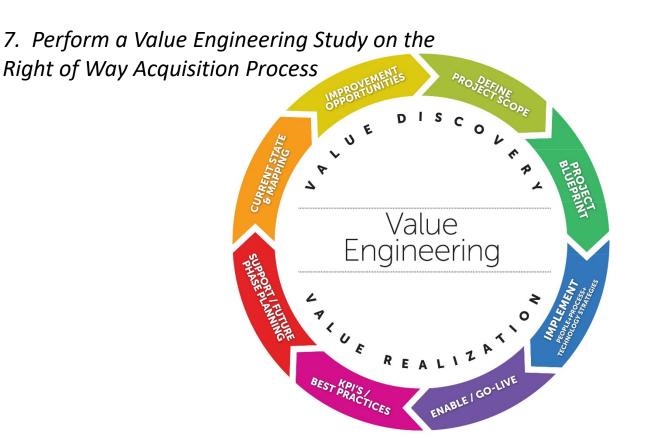




#### 6. Streamline the PD&E and Design Schedule Templates









#### 8. Hold Pre-Scoping Meeting Workshops for **PD&E** Projects

#### Implementing PDE VE Rec. #1 - Scope Development Workshop

Sample E-Mail #2 - Request for information from the support offices representatives

Subject: Project Development and Environment (PD&E) Project Number- Project Name/ Request for information

#### Dear Project Team Members;

As you are aware, you have been identified to represent your office in an effort to help me to develop a comprehensive scope of services and staffhours estimate for the subject project. This project is scheduled for advertisement on \_\_\_\_\_ with the scope and hours due to the Professional Services Unit on

To start, I would like to ask you to look at the list below and provide me with the information listed under your office This is not all inclusive and you may modify it based on available and pertinent information. Please provide this information within 30 days of the receipt of this email. Here is the list:

#### Office of Design

- Drainage: history of minor/major flooding, permits, recent improvement
   Structures: condition of structures (bridges, mast arms, box culverts, high mast lights, etc.), history of repairs
- > Utilities: list of companies, agreements, history of major issues Survey and Mapping: existing right-of-way, easements, restrictions and easement conditions

Planning and Environmental Management Office -

- SIS/Concept Development: previous and current improvement plans, type of corridor
- Transit: Planned improvement, hubs,
- Transportation and Environmental Analysis: traffic data, transfer history, cultural/historic sites, 4f, wetlands, previous commitments, wildlife locations, ETDM screening major issues, current/future traffic models, DRIs, LOS, contamination locations, noise/air issues

Right-of-Way Office - surplus properties, joint use lands

Office of Modal Development -

- Strategic Development: issues related to complete street, park and ride, LRTP/TIP/STIP
- Plans/Programs: recent regional planning initiatives, DRIs
   Rait/Aviation Programs: rail and airport in the vicinity and their issues

Program Management Office -

- Work Program: funding requirements/restrictions. WP instructions. adjacent projects Program Administration: JPA/LAP agreements

Traffic Operations -

- Access Management: access class and special access consideration
- Safety: current safety conditions, current safety studies, current safety reviews, major safety concerns
   TSM&O: current and future plans, ATMS, TSP, and other plans, funding allocations
- > ITS: current and future plans, funding allocations





Final Document Submittal Checklist - Project Development and Environment (PD&E) Study News decirate effect/M or Concient for the portpole result of document. Provide an operandol / results your fill admittal provide CDE

FME:	DESCRIPTION / LIMITS (MP):	
	CITYTOWNVELAGE	
ROADWAY D:	COUNTY:	
PPDR:	ETDMR	
FDOT PM:	CONSULTANT COMPANY NAME OR INHOUSE SECTION #	
FDOT PM CONTACT:	CONSULTANT COMPANY CONTACT #	
CD CREATION DATE:	ENGINEER OF RECORD NAME (EOR):	

DRM FT	CLASS OF ACTION / SUBMITTAL TYPE
	State Environmental Impact Report (SEIR)
	Categorical Exclusion (CE) Type 2
	Environmental Assessment (EA)
	Einstronmental lingact fibriervent (EIE)
	Dreft Environmental impact Statement (DEIS)
	Final Environmental Impact Statement (FEIS)
	Record of Decision (ROD)

1	DIMIT	PROJECT DEVELOPMENT - ENGINEERING	POP NAMING CONVENTION GUIDELINES	COMMENTS
		Access Management Report / Conceptual Access Management Plan	Finit(Trumbers)_Accessibilit_year/month	
		Attematives Evaluation Report	Frith(Trumbers)_AtEvaluation_year/month	
		Bridge Analysis Report	Fm#(Trumbers)_BridgeAnalysis_year/month	
		Bridge Hydraulic Report	Fm#(Trumbers)_Bit/geillydraulic_yeartmonth	
		Conceptual Access Management Plan	Find(Inumbers)_Accessiblet_year/month	
		Context Sensitive Solutions / Plan	Frid(Trunken)_CSS_yearmonth	
		Contidor Report	Finit(7numbers)_ContidorRep_year/month	
		Design Traffic Technical Memorandum (Model and Report)	Frat(7numbers)_DesignTraffic_year/tronth	
		Drainage/Pond Siting Report	Find(7numbers)_DrainagePondS_year/month	
		Geotechnical Report	Finit(7numbers)_Geolech_year/month	
		Interchange Justification Report (UR)	Find(Tournbern)_UR_year/month	
		Interchange Modification Report (IMR)	Find(/numbers)_IMR_year/month	
		Lighting Justification Report	Finit(Touribers)_Lighting.lost_year/month	
		Location Hydraulics Report	First(/humbers)_LocHydraulics_year/honth	
		Long Range Estimates (LRE)	Fmf(7numbers)_LRE_year/month	
		Operational Analysis Report / Technical Memorandum	Fm#(7numbers)_OperationAnalysis_year/month	
		Parking Study	Frat//numbers)_Parking_year/month	

#### 9. Create a PD&E QA/QC Checklist for Final Documents





#### 10. Standardize Format for PD&E Project Progress Reports

#### Monthly Managers' and Involce Progress Report

Monthly Managers' and Involce Progress Report

Monthly Managers' and Invoice Progress Report No. \_

Project ID:

Project Name:

FDOT Project Manager:

Contract Number:

Consulting Firm:

Consultant Project Manger:

PROJECT DESCRIPTION:

	Date:	Reporting Period
otions and issues: (Addre m Name) Performed the Followin m Name) Performed the Followin m Name) Performed the Followin	:	statement of actions)
65: (Keeps a log o	all critical project issues. Updated ea	ch month)

ITEM 33 Intelligent Transporation Systems Analysis	s
ITEM 34 Intelligent Transportation Systems Plans	
ITEM-35 Geotechnical	
1	
Scope and/or Milestone/Fee Changes	(Used to track Schedule Change Request, maintain running log)

#### Project Manager Meetings Attended

(Date)		(Meeting name)				
(Date)		(Meeting name)				
E	udget Control		•			
Design Budget:						
'	Negotiated Amount	\$	Primary Contractor Contract \$ + Sub Contractor Contract \$			
•	Optional Services	\$	The set-aside \$ for pre-established optional services.			
•	Total Original Contract	\$	Sum of Negotiated and optional services amounts.			
•	LOA for Ops Svcs. #1	\$	Description			
•	Total LOA's for Ops Svcs.	\$	Total \$ of all amendments issued			
•	Total SA's, Amendments, LOA's for Ops. Svcs.	\$	Total Supplements, Amendments and LOA's for Optional Services issued to date			
Total Contract Amount		\$	Contract amount + Issued_Optional Services + SA's, Amendments			
•	Total Contract Amount	ş	Original Contract \$ + Optional Services + Total SA's, Amendments \$			
	Optional Services Budget:					
	Optional Services	5	This set-aside \$ for pre-established optional services			
	<ul> <li>LOA for Ops Svcs. #1</li> </ul>	\$	LOA#1 Description			
Π	<ul> <li>Total Ops Svcs. to Date</li> </ul>	\$	Total Optional Services Issued to date			

Page 1



11. Hold In-Person Regional Training Conferences for FDOT Staff and Consultants





Florida Department of Transportation Project Name Here District Four	Florida Department of Transportation Project Name Here District Four
PUBLIC INVOLVEMENT PROGRAM	Project Development and Environment (PD&E) Study Project Name and Limits Public involvement Program
Project Name:	Project Contact Information For additional information regarding this project contact:
County/State: Financial Project Number: Federal Ald Project Number: ETDM Number:	[FDOT PROJECT MANAGER]         [CONSULTANT PROJECT MANAGER]           Project Manager         Project Manager           Florids Oppertment of Transportation         [COMPANY]           District Four         ADDRESS           Fort Laudendale, FL 33300         PHONE NUMBER           PHONE NUMBER         EMAIL
in accordance with Part 1, Chapter 11 of the Project Development and Environment (PD&E) Manual, this Public Involvement Program is submitted to the District Planning and Environmental Management (PL&EM) Office for review and approval.	IL PROJECT BACKGROUND     PROJECT BACKGROUND, DESCRIPTION OF PROJECT AREA, AND     EDISTING ROADWAY CONDITIONS     IIL PROJECT OBJECTIVE AND NEED     PROJECT OBJECTIVE AND NEED     PROJECT OBJECTIVE AND NEED     PROJECT OBJECTIVE AND NEED     SOUDDELTARE SERVICE A SHEEP DESCRIPTION OF PROJECT NEEDS. REFER TO THE ETOM     EST SOUDDELTURAL EFFECTS EVALUATION FOR COMMUNITY NEEDS
Submitted by: Project Manager (Company Name) Date:	Example: The Florida Department of Transportation (FDOT) proposes to study the widening and rehabilitation of the corridar. The 143 FDBE Study will determine how many general purpose lanes, interchange overpass and ramp widening/reconfiguration, and incidental features are required to accommodate estiming and future traffic needs and improve safety by alleviating estiming readway and capacity deficiencies along the project corridor. It will also determine the additional capacity needed to improve emergency access and enhance humanne evacuation along the project corridor. The project development analysis includes all
Approved by: Gesper Jorge Padron FDDT District Four Public Involvement Coordinator	structures, ramps, molifiles, cross road and interchange improvements required to add through lanes to I-95 and to insure adequate future project safety, capacity and compliance with all Federal and State laws.
FDOT	<ul> <li>a. Capacity         The Greater Treasure Coast Regional Planning Model shows that by 2030, the Average         Annual Daily Treffic (AADT) from Becker Road to Gatlin Budeward will be approximately         98,500 and from Gatlin Blod to SR-70 will be between 130,500 and 342,000. These traffic         volumes greatly exceed the existing solvane capacity along the I-95,511 9 project         carridor. The projected lavel of Service (ICG) is antiticipated to be LOS &amp; which exceeds         the FDOT required LOS C standards for this urban SIS facility.     </li> <li>IDENTIFICATION OF AGENCIES AND AFFECTED PUBLIC</li> </ul>
	FDOT

12. Improve the Public Involvement Program (PIP) Template



13. Simplify and Combine PD&E Documents



#### 14. Create PD&E Staffing Hour Guideline Spreadsheet and Estimation Form

**PD&E Staff Hour Estimation (SHE) Guidelines** - (*Updated March 2017*) This Excel file was updated to match the revised Standard Scope of Services tasks and activities (Right click on file and save file). This document provides detailed information, breaking down the tasks and activities that can appear in a scope document, along with recommended staff hour ranges to do the work.

**PD&E Staff Hour Estimation Forms** - (*Updated March 2017*) This Excel file contains forms that are used to record the estimated hours for each task or activity listed in the project specific Scope of Services (Right click on file and save file). These forms were revised to match the updated SHE Guidelines. Use these forms to estimate and negotiate staff hours for a PD&E study.

				Basis for Staff Hour Range							
Task No.	Task	Staff Units Hour Range	Staff Hour Estimation Guidance	Field Time and Meeting Time are included in "Field Reviews" & "Meetings and Presentations" tasks respectively. Hours associated with managing and supervising staff are included in each back							
					Low-Range	Mid-Range	High-Range				
4.8.2	Safety Analysis										
	Historical Crash Analysis •	LS	24 to 80	This task includes the tabulation of crash data, the determination of high accident sections, and the safety analysis of the existing facility and alternatives. The criteria for estimating the hours	Project includes few intersections, or is a short (1 to 2 miles)	Project includes major intersections improvements, or a	urbanized area is 5 or more miles (60 to 80 hrs)				
	HSM Safety Analysis"	LS	48 to 200	This task includes assessment of historical crashes on the project, assessment of crash countermeasures based on Crash Modification Factors and development of conclusions and recommendations, and assessment of safety performance of the corridor using predictive analysis.	Project includes few intersections, is a short (1 to 2 miles) project or project located in rural area (48 to 80 hrs)	Historical Crash Analysis, Crash Modification Factors and Project includes major intersections improvements, short interstate project. (80 to 120 hrs)	Historical Crash Analysis and Safety Performance Predictive Analysis Project, or project is an urban or urbanized areas (120 to 200 hrs)				
4.8.3	Documentation of Safety Analysis*	LS	24 to 120	This task includes documenting findings from conducting a safety analysis. Hours are reduced if documentation is included in the PTAR	Project includes few intersections, is a short (1 to 2 miles) project or project located in rural area (24 hrs)	Project includes major intersections improvements, or a corridor 2 to 5 miles long in urban area. (24 to 72 hrs)	Project is on urban or urbanized area is 5 or more miles (72 to 120 hrs)				











## **Questions?**





Please remember to type in your questions to the question prompt.

Thank you for participating!



### **Presenter Contacts**

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