## **Project Development Process**

# PD&E, Design and Construction



FDOT

ŧ

	Planning	PD&E	Design	Construction
	<ul> <li>Existing Conditions</li> <li>Needs Assessment</li> <li>Planning Studies</li> <li>Travel Demand</li> <li>LRTP<sup>1</sup>, CFP<sup>2</sup>, TIP<sup>3</sup>, STIP<sup>4</sup></li> <li>Purpose and Need</li> <li>Work Program Development</li> </ul>	<ul> <li>Purpose and Need</li> <li>Alternatives Analysis</li> <li>Environmental Studies</li> <li>Technical Reports</li> <li>Env. Doc. Approval</li> <li>Planning Consistency</li> <li>Preliminary Engineering</li> </ul>	<ul> <li>Detailed Design</li> <li>Utilities</li> <li>Construction Plans</li> <li>Specifications</li> <li>Cost Estimates</li> <li>Right of Way</li> <li>Permits</li> <li>Env. Re-evaluation</li> </ul>	<ul> <li>Build and Deliver</li> <li>Env. Re-evaluation</li> <li>Commitment</li> <li>Compliance</li> </ul>
<ul> <li>Acronyms</li> <li>ETDM Screenings</li> <li>Long Range Transportation Plan</li> <li>Cost Feasible Plan</li> <li>Transportation Improvement Program</li> <li>State Transportation Improvement Program</li> </ul>		Scope Design	Scope Adve Award C	rtise/ Contract

2					
	Planning	PD&E	Design	Construction	
Tra 2. Cos 3. Trai	<ul> <li>Existing Conditions</li> <li>Needs Assessment</li> <li>Planning Studies</li> <li>Travel Demand</li> <li>LRTP<sup>1</sup>, CFP<sup>2</sup>, TIP<sup>3</sup>, STIP<sup>4</sup></li> <li>Purpose and Need</li> <li>Work Program Development</li> <li>ETDM Screenings</li> <li>Manage</li> <li>Manage<td><ul> <li>Purpose and Need</li> <li>Alternatives Analysis</li> <li>Environmental Studies</li> <li>Technical Reports</li> <li>Env. Doc. Approval</li> <li>Planning Consistency</li> <li>Preliminary Engineering</li> </ul></td><td>Env. Re-evaluation  Scope Adve</td><td><ul> <li>Build and Deliver</li> <li>Env. Re-evaluation</li> <li>Commitment</li> <li>Compliance</li> </ul></td></li></ul>	<ul> <li>Purpose and Need</li> <li>Alternatives Analysis</li> <li>Environmental Studies</li> <li>Technical Reports</li> <li>Env. Doc. Approval</li> <li>Planning Consistency</li> <li>Preliminary Engineering</li> </ul>	Env. Re-evaluation  Scope Adve	<ul> <li>Build and Deliver</li> <li>Env. Re-evaluation</li> <li>Commitment</li> <li>Compliance</li> </ul>	
	te Transportation provement Program				

## **PD&E Development Process**

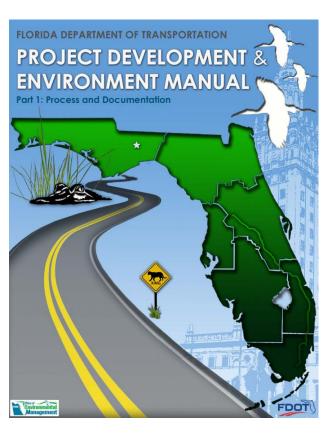
#### **Efficient Transportation Decision Making (ETDM)**

- Purpose and Need
- Advanced Notification
- Elimination of Alternatives
- Class of Action Scope of PD&E Study

### **Project Development & Environment (PD&E) Processes:**

- Develop Alternatives
- Environmental Studies (species, wetlands, socio-cultural)
- Technical Studies (traffic, pond siting, noise, contamination)
- Public Involvement
- Selection of Preferred Alternative
- Environmental Documents/Preliminary Engineering Plans
- Location and Design Concept Acceptance (LDCA)





## **PD&E Development Process**

#### **Classes of Action – Federal Projects**

#### **Class I: Environmental Impact Statement (EIS) – 5 years**

- Projects anticipated to have significant impacts
- Draft EIS, Final EIS, Record of Decision
- Final EIS and ROD should be combined

#### Class II: Categorical Exclusions (CE) – 1.5 to 2 years

- Projects without significant impacts, excluded from requirement to prepare EA or EIS
- Type 1: Fits within a low-impact threshold checklist of project types
- Type 2: Non-significant impacts that need further explanation

#### Class III: Environmental Assessment (EA) – 3 to 4 years

- Projects where significance of impacts is unknown
- Results in either a Finding of No Significant Impact (FONSI) or EIS



- Clean Air Act
- Clean Water Act
- Environmental Justice
   Executive Order
- Noise ordinances
- U.S. Department of Transportation Act of 1966; Section 4(f)
- Section 106 of the National Historic Preservation Act
- Contaminated materials and substances
- Endangered Species Act
- Coastal Zone Management Act

- Migratory Bird Treaty Act
- Protection of Wetlands Executive Order
- Patuxent Research Refuge Executive Order
- Floodplain Management Executive Order
- Federal Flood Risk Management Executive Order
- Limited English Proficiency Executive Order
- Military Construction and Appropriations Act
- State Environmental Laws
- Local Environmental Laws



### **PD&E Development Process**

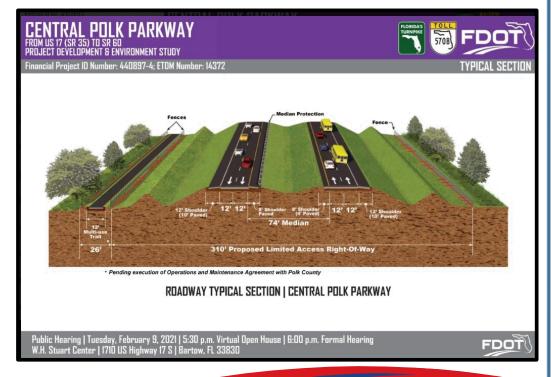
#### **Classes of Action – State Projects**

#### State Environmental Impact Statement (SEIR) – 1.5 to 5 years

- Projects anticipated to have significant impacts, or
- Projects where significance of impacts is unknown, or
- Projects with non-significant impacts that need further explanation
- All Result in a SEIR with varying levels of documentation

#### **Non-Major State Action (NMSA)**

 Fits within a low-impact threshold checklist of project types





### **PD&E Development Process - Products**

- Project Traffic Analysis Report
- Typical Section Package
- Intersection Control Evaluation (if Applicable)
- Public Involvement
- Conceptual Plans
- Bridge Replacement Report
- Natural Resource Evaluation
- Section 4(f) Evaluation Report
- Sociocultural Effects (SCE) Evaluation
- Conceptual Stage Relocation Plan
- Noise Study Report
- Air Quality Technical Memorandum
- Water Quality Impact Evaluation Checklist
- Location Hydraulics Report



- Contamination Screening Evaluation Report
- Cultural Resource Assessment Survey
- Preliminary Plans with ROW
- Comments and Coordination Report
- Utility Assessment Technical Memorandum
- Conceptual Transportation Management Plan
- Draft Bridge Hydraulic Report
- Preliminary Scour Analysis
- Value Engineering Study Report
- Design Exceptions/Variation Package
- Project Commitment Record
- Environmental Documents (Type 2 CE, EA, EIS)
- Preliminary Engineering Report



CULTURAL RESOURCE

MANAGEMENT HANDBOOK



Planning	PD&E	Design	Construction
<ul> <li>Existing Conditions</li> <li>Needs Assessment</li> <li>Planning Studies</li> <li>Travel Demand</li> <li>LRTP<sup>1</sup>, CFP<sup>2</sup>, TIP<sup>3</sup>, STIP<sup>4</sup></li> <li>Purpose and Need</li> <li>Work Program Development</li> </ul>	<ul> <li>Purpose and Need</li> <li>Alternatives Analysis</li> <li>Environmental Studies</li> <li>Technical Reports</li> <li>Env. Doc. Approval</li> <li>Planning Consistency</li> <li>Preliminary Engineering</li> </ul>	<ul> <li>Detailed Design</li> <li>Utilities</li> <li>Construction Plans</li> <li>Specifications</li> <li>Cost Estimates</li> <li>Right of Way</li> <li>Permits</li> <li>Env. Re-evaluation</li> </ul>	<ul> <li>Build and Deliver</li> <li>Env. Re-evaluation</li> <li>Commitment</li> <li>Compliance</li> </ul>
• ETDM Screenings Acronyms 1. Long Range Transportation Plan 2. Cost Feasible Plan 3. Transportation Improvement Program 4. State Transportation Improvement Program	Scope Design		ertise/ Contract

<u>A</u>

2.

4

## **Design Development Process**

### **Key Processes:**

- Initial Engineering
  - Phase 1 Phase 2 Plans Submittals



- Plans & Maps developed to initiate ROW acquisition process
- Final Engineering
  - Phase 3 Phase 4 Plans Submittals
  - Plans & Specs developed into Construction Contract Documents

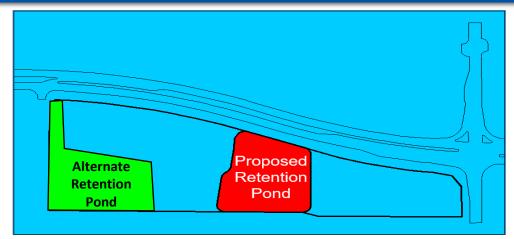




# **Right of Way Acquisition Process**

### **Key Processes:**

- Appraisal value established
- Negotiation good faith offer



- Relocation/replacement options determined and offered
- Eminent Domain court action to acquire title
- Order of Taking (OT) clear title passed to DOT
- Property Management clear ROW

Once OT has occurred, the project is ready to go to construction



# **Right of Way Acquisition Process**

### **Right of Way**

•Appraisal

•Negotiation/Closing

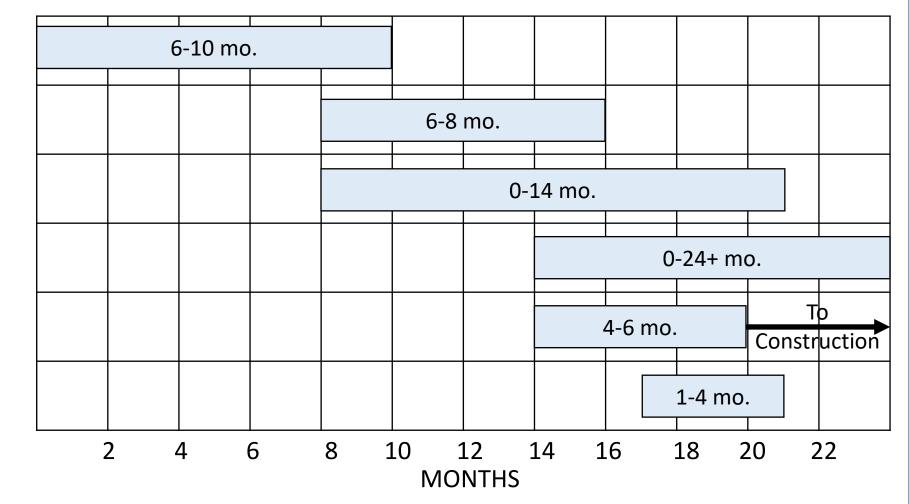
Relocation

•Eminent Domain

•Order of Taking (Title)

•Property Management





Planning	PD&E	Design	Construction	
<ul> <li>Existing Condition</li> <li>Needs Assessment</li> <li>Planning Studien</li> <li>Travel Demand</li> <li>LRTP<sup>1</sup>, CFP<sup>2</sup>, TIP<sup>3</sup></li> <li>Purpose and Neither</li> <li>Work Program Development</li> </ul>	ent s Alternatives Analys • Environmental Stu • Technical Reports • Env. Doc. Approval • Planning Consister • Preliminary Engine	<ul> <li>sis</li> <li>Outilities</li> <li>Outilities</li> <li>Construction Plans</li> <li>Specifications</li> <li>Cost Estimates</li> <li>Note and the set of Way</li> </ul>	<ul> <li>Build and Deliver</li> <li>Env. Re-evaluation</li> <li>Commitment</li> <li>Compliance</li> </ul>	
<ul> <li>ETDM Screenings</li> <li>Long Range Transportation Plan</li> <li>Cost Feasible Plan</li> <li>Transportation Improvement Program</li> <li>State Transportation Improvement Program</li> </ul>				

#### Source: Project Development and Environment Manual

### **Design-Build Development Process**

**Key FDOT Processes before Design-Build:** 

- Preliminary Design Complete (FDOT)
- Right of Way Acquisition (FDOT)

**Key Design-Build Processes:** 

- Request for Proposal (RFP)
- D-B Firm Selection
- Final Design & Construction



### Design-Build vs. Design-Bid-Build

