# PART 1, CHAPTER 4

## PROJECT DEVELOPMENT PROCESS

### TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1 OVERVIEW</td>
<td>4-1</td>
</tr>
<tr>
<td>4.1.1 Definitions</td>
<td>4-3</td>
</tr>
<tr>
<td>4.2 PROCEDURE</td>
<td>4-6</td>
</tr>
<tr>
<td>4.2.1 Planning Process</td>
<td>4-6</td>
</tr>
<tr>
<td>4.2.2 Linking Planning and Environmental Review</td>
<td>4-7</td>
</tr>
<tr>
<td>4.2.3 ETDM Screening</td>
<td>4-10</td>
</tr>
<tr>
<td>4.2.4 Alternative Corridor Evaluation</td>
<td>4-12</td>
</tr>
<tr>
<td>4.2.4.1 Define the Initial Corridors</td>
<td>4-13</td>
</tr>
<tr>
<td>4.2.4.2 Decision to Advance Project</td>
<td>4-14</td>
</tr>
<tr>
<td>4.2.4.3 Develop Methodology Memorandum</td>
<td>4-14</td>
</tr>
<tr>
<td>4.2.4.4 Refine Corridors</td>
<td>4-16</td>
</tr>
<tr>
<td>4.2.4.5 Prepare Alternative Corridor Evaluation Report</td>
<td>4-16</td>
</tr>
<tr>
<td>4.2.5 Environmental Review for Early Acquisition Projects</td>
<td>4-17</td>
</tr>
<tr>
<td>4.2.5.1 State Funded Early Acquisition of Real Property Interests</td>
<td>4-18</td>
</tr>
<tr>
<td>4.2.5.2 Federally Funded Early Acquisition of Real Property Interests</td>
<td>4-18</td>
</tr>
<tr>
<td>4.2.5.3 Documentation of Early Acquisition Projects</td>
<td>4-19</td>
</tr>
<tr>
<td>4.2.6 Approval of Interchange Access Requests</td>
<td>4-19</td>
</tr>
<tr>
<td>4.2.7 Scoping a PD&amp;E Study</td>
<td>4-20</td>
</tr>
<tr>
<td>Section</td>
<td>Page</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>4.2.7.1 SWAT Process</td>
<td>4-21</td>
</tr>
<tr>
<td>4.2.7.1.1 SWAT Planning Meeting</td>
<td>4-21</td>
</tr>
<tr>
<td>4.2.7.1.2 SWAT Strategy Meeting</td>
<td>4-22</td>
</tr>
<tr>
<td>4.2.7.1.3 Activities that May Advance Prior to PD&amp;E</td>
<td>4-23</td>
</tr>
<tr>
<td>4.2.7.1.4 SWAT Kickoff Meeting</td>
<td>4-24</td>
</tr>
<tr>
<td>4.2.7.1.5 Project Schedule</td>
<td>4-25</td>
</tr>
<tr>
<td>4.2.7.2 Level of Design Detail</td>
<td>4-26</td>
</tr>
<tr>
<td>4.2.7.2.1 Permissible Project Related Activities During NEPA</td>
<td>4-26</td>
</tr>
<tr>
<td>4.2.7.2.2 Overlapping PD&amp;E and Design Phases</td>
<td>4-27</td>
</tr>
<tr>
<td>4.2.7.3 Scope of Services</td>
<td>4-28</td>
</tr>
<tr>
<td>4.2.7.4 Alternative Project Delivery Methods</td>
<td>4-28</td>
</tr>
<tr>
<td>4.2.7.5 Project Management Plan and Financial Plan</td>
<td>4-29</td>
</tr>
<tr>
<td>4.2.7.6 Quality Control</td>
<td>4-30</td>
</tr>
<tr>
<td>4.2.7.7 Risk Management</td>
<td>4-30</td>
</tr>
<tr>
<td>4.2.8 PD&amp;E Phase</td>
<td>4-31</td>
</tr>
<tr>
<td>4.2.8.1 Environmental Documents</td>
<td>4-32</td>
</tr>
<tr>
<td>4.2.8.2 Environmental Technical Studies</td>
<td>4-33</td>
</tr>
<tr>
<td>4.2.8.3 Project Reports and Documentation</td>
<td>4-34</td>
</tr>
<tr>
<td>4.2.9 Design and Construction</td>
<td>4-36</td>
</tr>
<tr>
<td>4.2.10 Interagency Coordination and Public Involvement</td>
<td>4-37</td>
</tr>
<tr>
<td>4.3 EMERGENCY RELIEF</td>
<td>4-38</td>
</tr>
<tr>
<td>4.4 REFERENCES</td>
<td>4-39</td>
</tr>
<tr>
<td>4.5 FORMS</td>
<td>4-42</td>
</tr>
<tr>
<td>4.6 HISTORY</td>
<td>4-42</td>
</tr>
</tbody>
</table>
LIST OF TABLES

Table 4-1 PD&E Project Schedule and Management (PSM) Codes...........................4-25

LIST OF FIGURES

Figure 4-1 Project Development Process......................................................................4-3
Figure 4-2 Approval to Advance Preliminary Design Activities ...................................4-43
Figure 4-3 Dual Procurement Options.........................................................................4-44
Figure 4-4 Project Management Structures.................................................................4-45
Figure 4-5 Final Approval of Interchange Access Requests and the PD&E Study ......4-46
Figure 4-6 Planning Requirements for Environmental Document Approvals ..............4-47
Figure 4-7 Planning Requirements for Environmental Document Approvals with Segmented Implementation.................................................................4-48
PART 1, CHAPTER 4  
PROJECT DEVELOPMENT PROCESS  

4.1 OVERVIEW  

Pursuant to 23 United States Code (U.S.C.) § 327 and the implementing Memorandum of Understanding (MOU) executed on December 14, 2016, the Florida Department of Transportation (FDOT) has assumed and Federal Highway Administration (FHWA) has assigned its responsibilities under the National Environmental Policy Act (NEPA) for highway projects on the State Highway System (SHS) and Local Agency Program (LAP) projects off the SHS (NEPA Assignment). In general, FDOT’s assumption includes all highway projects in Florida which source of federal funding comes from FHWA or which constitute a federal action through FHWA. NEPA Assignment includes responsibility for environmental review, interagency consultation and other activities pertaining to the review or approval of NEPA actions. Consistent with law and the MOU, FDOT will be the Lead Federal Agency for highway projects with approval authority resting in the Office of Environmental Management (OEM).

This chapter provides an overview of the project development and delivery process for transportation projects prepared by FDOT. This chapter is not applicable to Federal Transit Administration (FTA) led or Federal Railroad Administration (FRA) led projects. See Part 1, Chapter 14, Transit Project Delivery for guidance on how to develop FTA led projects. The project development process for LAP projects should follow the procedure outlined in the Local Agency Program Manual, Topic No. 525-010-300. Environmental review for LAP projects requires preparation of a NEPA document and FDOT oversight by the Districts and OEM as appropriate.

The project development and delivery process begin with planning studies and end with a constructed project. The FDOT project development and delivery process is a comprehensive process involving Planning, Project Development and Environment (PD&E), Design, Right of Way (ROW), and Construction phases. It is important to understand the sequence and interrelation between these phases to successfully deliver a project. PD&E is the FDOT process for evaluating potential environmental impacts from transportation projects and complying with the NEPA and applicable laws and regulations for federal projects and other regulations for state-funded projects. Environmental review continues through Design and Construction through Re-evaluations and permitting. FDOT projects that are Type 1 Categorical Exclusions (Type 1 CEs) or Non-Major State Actions (NMSAs) do not have a PD&E phase. Environmental evaluations for Type 1 CEs and NMSAs are performed and approved by the District Environmental Office during the Design phase.

Communication among various offices involved in the project development and delivery process and transition of the project from one phase to another is critical to a project’s success. Project Managers are responsible for establishing and maintaining communication and coordination throughout the project development and delivery
process. **Figure 4–1** shows the project development and delivery process, along with the building blocks of each phase and how the phases connect with the PD&E process. To deliver transportation projects, FDOT uses a variety of project delivery methods, which range from the traditional Design-Bid-Build to alternative contracting methods such as Design-Build and Public Private Partnership (P3) Concessionaire Agreements. The choice of delivery method depends on a variety of factors such as project context, status, schedule, risk factors, funding availability, level of complexity, and other project-specific factors.

A project begins with the identification of transportation needs or deficiencies through a planning process that prioritizes short and long-range transportation improvements. For qualifying projects, FDOT uses the Efficient Transportation Decision Making (ETDM) Environmental Screening Tool (EST) to gather project information and coordinate with resource and regulatory agencies, public and other project stakeholders about the project’s potential effect on the social, cultural, natural, and physical resources. This information is used to develop the scope of services for a feasibility study or PD&E Study. During the PD&E phase, FDOT performs alternatives analyses, conducts environmental and engineering studies, and prepares various technical studies and reports necessary to obtain the project’s Location and Design Concept Acceptance (LDCA). The PD&E phase identifies and addresses environmental issues, if any, on a project. Information obtained during PD&E phase is used to develop the scope of work for the Design phase. The scope of the Design phase also depends on the delivery method chosen for the project. The Design phase includes preparation of final construction plans, specifications and final estimates. However, the Design phase does not include final construction plans for projects that use alternative contracting methods. Typically, acquisition of ROW occurs concurrent with, or just after the Design phase before the project moves into construction.

The project development process described in this chapter supports the FDOT Statewide Acceleration Transformation (SWAT) process. The initial evaluation of all projects uses the SWAT process so that appropriate state and federal funding decisions are made. SWAT streamlines project development by following a structured process to develop project scopes and schedules; reducing duplicative work; performing initial data collection and analysis ahead of the PD&E Study, as applicable; and performing design activities concurrent with PD&E when possible.

The Districts have flexibilities to adapt the SWAT process within their existing project selection and programming processes. The SWAT process applies to both state and federal PD&E studies.
4.1.1 Definitions

**Administrative Record** – Project documents that are submitted by the Lead Agency to the court for a **NEPA** project involving litigation. The Administrative Record is prepared using the StateWide Environmental Project Tracker (SWEPT).

**Build Alternatives** – Project alternatives that require reconstruction or widening of existing facilities or building a new facility in a new location consistent with the project’s purpose and need.

**Cost Feasible Plan (CFP)** – A plan that consists of projects in a long range transportation plan that have been identified as being able to be funded within the 20-year planning horizon.

**Federal Nexus** – A term used when a project involves federal funding, federal permit, use of federal lands, or a federal program.
Final Design – Any design activities following preliminary design and expressly lead to the preparation of final construction plans, detailed specifications, final quantities as defined by 23 Code of Federal Regulations (CFR) § 636.103.

Lead Agency – The agency that oversees the preparation of, and approves an Environmental Document.

Long Range Transportation Plan (LRTP) – A 20-year transportation plan that identifies current and future transportation needs based on population and employment growth, travel demand, and other considerations for a region.

Major Project – A project with a total estimated cost of $500 million or more that is receiving (federal) financial assistance as defined by 23 U.S.C. § 106. At its discretion, FHWA can designate a project with a total cost of less than $500 million as a major project in situations where the projects require a substantial portion of the State Transportation Agency program resources, have a high level of public or congressional interest, are unusually complex, have extraordinary implications for the national transportation system, or are likely to exceed $500 million in total cost. This is not related to the environmental impacts of a project.

Metropolitan Planning Organization (MPO) – A policy board of an organization created and designated to carry out the metropolitan transportation planning process. MPOs are required to represent localities in all urbanized areas of populations over 50,000, as determined by the U.S. Census. Also referred to as Transportation Planning Organization (TPO).

NEPA Process – A process followed by the project sponsors and Lead Agencies to comply with the procedures and achieve the goals of the NEPA. The NEPA process, PD&E, and the federal process are used interchangeably throughout this Chapter.

No-Action or No-Build Alternative – A project alternative that consists of the existing facility and any minor improvements already programmed that are not specifically tied to the proposed project. This alternative serves as the baseline for comparison against the various build alternatives.

Planning and Environment Linkages (PEL) – A collaborative and integrated approach to transportation decision-making that 1) considers environmental, community, and economic goals early in the transportation planning process, and 2) uses the information, analysis, and products developed during planning to inform the environmental review process.

Planning Product – A decision, analysis, study, or other documented information that is the result of an evaluation or decision making process carried out by a metropolitan planning organization or a State, as appropriate, during metropolitan or statewide transportation planning under 23 U.S.C. § 134, 135, or 168 respectively.
**Preliminary Design** – Activities that define the general project location and design concept. These include, but are not limited to, preliminary engineering and other activities and analysis, such as environmental assessments, topographic surveys, metes and bounds surveys, geotechnical investigations, hydrologic analysis, utility investigation/coordination, traffic studies, financial plans, revenue estimates, hazardous materials assessments, general estimates of the types and quantities of materials, and other work needed to establish parameters for the final design as defined by 23 CFR § 636.103 and FHWA Order 6640.1A Policy on Permissible Project Related Activities During the NEPA Process.

**Project File** – A file that documents the decision-making process and technical support during the PD&E Study and serves as the basis for the Administrative Record. The Project File is organized in SWEPT.

**Project Scoping** – A project development activity that involves determining and documenting project goals and objectives, tasks, responsibilities, deliverables, schedule, cost and delivery method.

**Rail System Plan (RSP)** – A plan that establishes a vision for passengers and freight rail transportation systems. It identifies inventory of needs, establishes priorities for investments and sets forth future action steps necessary to implement the plan.

**Reasonable Alternatives** (Only applies to Environmental Impact Statements) – Alternatives meeting the purpose and need which are practical or feasible from a technical and economic standpoint.

**Scope of Services** – An attachment to the contractual agreement between FDOT and the procured consultant that outlines project tasks to be performed by the consultant. Development of a scope of services requires input and coordination with several offices within the District. FDOT has developed Standard Scopes of Services for procuring PD&E studies and Design services, and guidelines for estimating and negotiating staff hours.

**State Funds Only (SFO) project** – A project that will be funded by state funds only. If it is determined that the project will be state funded only, then this must be maintained throughout all the work program phases, and the District must use the SFO item group identifier in the work program.

**State Highway System (SHS)** – means as defined in Section 334.03(24), Florida Statutes (F.S.).

**State Transportation Improvement Program (STIP)** – a federally mandated document prepared by FDOT which must include a listing of projects planned with federal participation in the next four fiscal years.

**State Process** – FDOT process for environmental evaluation of projects that do not have a federal nexus or do not involve an Interstate Highway, FRA facility or FTA facility.
Strategic Intermodal System (SIS) Plan – A plan that sets policies to guide decisions about which facilities are designated as part of the SIS (a high-priority network of transportation facilities critical to Florida’s economic competitiveness and quality of life), where future SIS investments should occur, and how to set priorities among these investments based on funding.

Transit Development Plan (TDP) – A 10-year transit plan which is prepared by a transit agency to present the agency’s planning, development and operation of public transit facilities (service or infrastructure). TDPs are required for grant program recipients of Public Transit Block Grant Program Section 341.052, F.S.

Transportation Improvement Program (TIP) – Is the staged multiyear program of transportation improvement projects developed by a Metropolitan Planning Organization consistent with the LRTP.

4.2 PROCEDURE

4.2.1 Planning Process

The project planning process begins when MPOs, FDOT, and other authorities identify transportation needs and projects that would meet those needs. The following planning products assist in documenting transportation needs: Long Range Transportation Plan (LRTP), Cost Feasible Plans (CFP), Strategic Intermodal System (SIS) Plans, Transit Development Plans (TDPs), Local Government Comprehensive Plans (LGCP), Municipal or Citywide Transportation Master Plans, and corridor planning studies. At the MPO level, project needs are matched and prioritized to available funding for projects in the MPO/TPO LRTPs. At the state level, FDOT develops CFPs for the SHS and Florida Rail System Plan (RSP). Priority projects are selected annually from CFPs and are presented to the Florida Legislature as a Tentative Work Program. Projects included in the Work Program and approved by the legislature may wait for funding for up to five years before significant work can proceed.

FDOT coordinates with the various MPOs/TPOs and local stakeholders throughout the state to develop a vision for the State’s transportation system. This includes the establishment of goals, objectives and policies to sustain and support the growth of the State’s population and economy. Additionally, FDOT provides guidance and technical assistance for transit providers for their TDPs.

During the Planning phase, the purpose and need for the project is established based on identified transportation problems, or deficiencies. Transportation, land use, safety, public and agency involvement, and other planning data are primary sources of information used to establish or define the purpose and need for the project and range of alternatives to analyze.

Technical studies for a project can be performed within the Planning phase to define or refine project parameters; establish the purpose and need for the project; determine funding needs; identify alternatives, including alternative mode(s); and define the concept
and scope for transportation improvements, including general location of the proposed improvement. These technical studies inform the development of the scope of work for PD&E studies. Alternatives development may begin during the Planning phase. Project alternatives developed (including those eliminated from further consideration) during the Planning phase may be incorporated directly or by reference into the Environmental Document provided certain conditions are met (see Section 4.2.2).

4.2.2 Linking Planning and Environmental Review

Linking Planning and NEPA, also known as Planning and Environmental Linkages (PEL), provides a connection between planning-level and environmental review decisions. Planning decisions and the environmental review process should be integrated to eliminate duplication of analysis effort and minimize delays in project delivery. The benefit of linking planning decisions and the PD&E Study is the ability to reuse data gathered, methodology developed, results obtained, and decisions made during the Planning phase to streamline the project delivery. Other benefits include the ability to identify environmental issues before developing the scope of the PD&E Study and focus the analyses and technical studies conducted during the PD&E Study to issues that have potential to impact the project’s delivery and recommendations.

Pursuant to 23 U.S.C. § 168, 23 CFR § 450.212 and 23 CFR § 450.318, results or decisions from a system-level corridor or subarea planning study may be used in the NEPA analysis if they meet certain conditions. Appendix A of 23 CFR Part 450 - Linking the Transportation Planning and NEPA Processes details how to adopt or incorporate by reference information from transportation planning into NEPA documents and/or environmental review process under existing laws. Appendix A of 23 CFR Part 450 is intended to be non-binding and voluntary.

The following decisions from a planning product for a transportation project, codified in 23 U.S.C. § 168(c)(1), may be adopted or incorporated by reference into the NEPA process:

1. Whether tolling, private financial assistance, or other special financial measures are necessary to implement the project;

2. A decision with respect to general travel corridor or modal choice, including a decision to implement corridor or subarea study recommendations to advance different modal solutions as separate projects with independent utility;

3. The purpose and need for the proposed action;

4. Preliminary screening of alternatives and elimination of unreasonable alternatives;

5. A basic description of the environmental setting;

6. A decision with respect to methodologies for analysis; and/or,
7. An identification of programmatic level mitigation for potential impacts of a project, including a programmatic mitigation plan developed in accordance with 23 U.S.C. § 169, that the relevant agency determines are more effectively addressed on a national or regional scale, including:

   a. Measures to avoid, minimize, and mitigate impacts at a national or regional scale of proposed transportation investments on environmental resources, including regional ecosystem and water resources; and

   b. Potential mitigation activities, locations, and investments.

The following planning analyses from a planning product for a transportation project, codified in 23 U.S.C. § 168(c)(2), may be adopted or incorporated by reference into the NEPA process:

1. Travel demands;
2. Regional development and growth;
3. Local land use, growth management, and development;
4. Population and employment;
5. Natural and built environmental conditions;
6. Environmental resources and environmentally sensitive areas;
7. Potential environmental effects, including the identification of resources of concern and potential direct, indirect, and cumulative effects on those resources; and,
8. Mitigation needs for a proposed project, or for programmatic level mitigation, for potential effects that the Lead Agency determines are most effectively addressed at a regional or national program level.

The degree to which information, analyses, or decisions from the planning process can be adopted or incorporated by reference into the NEPA process depends upon how well the planning products meet standards applicable under the NEPA and associated implementing regulations (23 CFR Part 771 and 40 CFR §§ 1500-1508). The relevant agency in the environmental review process may adopt or incorporate by reference decisions from a planning product when the Lead Federal Agency determines that the conditions set forth in 23 U.S.C. § 168(d) and restated below are met:

1. The planning product was developed through a planning process conducted pursuant to applicable federal law.
2. The planning product was developed in consultation with appropriate federal and State resource agencies and Indian Tribes.
3. The planning process included broad multidisciplinary consideration of systems-level or corridor-wide transportation needs and potential effects, including effects on the human and natural environment.

4. The planning process included public notice that the planning products produced in the planning process may be adopted during a subsequent environmental review process in accordance with this section.

5. During the environmental review process, the relevant agency has:
   a. Made the planning documents available for public review and comment by members of the general public and federal, state, local, and tribal governments that may have an interest in the proposed project;
   b. Provided notice of the intention of the relevant agency to adopt or incorporate by reference the planning product; and,
   c. Considered any resulting comments.

6. There is no significant new information or new circumstance that has a reasonable likelihood of affecting the continued validity or appropriateness of the planning product.

7. The planning product has a rational basis and is based on reliable and reasonably current data and reasonable and scientifically acceptable methodologies.

8. The planning product is documented in sufficient detail to support the decision or the results of the analysis and to meet requirements for use of the information in the environmental review process.

9. The planning product is appropriate for adoption or incorporation by reference and use in the environmental review process for the project and is incorporated in accordance with, and is sufficient to meet the requirements of, the NEPA and 40 CFR § 1502.21 [as in effect on the date of enactment of the Fixing America’s Surface Transportation (FAST) Act].

10. The planning product was approved within the 5-year period ending on the date on which the information is adopted or incorporated by reference.

Linking planning and NEPA does not mean the planning products should be prepared to a level comparable to a NEPA analysis. Pursuant to 23 U.S.C § 134(o), 23 U.S.C. § 135(j) and 49 U.S.C. § 5305(h), transportation plans and programs are exempted from NEPA review. Environmental evaluations that are conducted during the Planning phase are not required to address all regulatory requirements that should be addressed by the NEPA analysis. To ensure that the public is provided an opportunity for input and proper disclosure that FDOT may adopt a planning product, the following public notice must be inserted in the planning products that are to be adopted in a subsequent environmental review process:
The Florida Department of Transportation may adopt this planning product into the environmental review process, pursuant to Title 23 U.S.C. § 168 (d) or the state project development process.

If the planning product being adopted into the NEPA analysis is older than 5 years (from the date the product was approved), the information used to prepare the planning product must be reviewed to check whether conditions or planning context have changed since its approval. If the conditions or planning context have not changed, the PD&E Study may use the information from the planning product and explain why that information is valid to the NEPA decision-making process. OEM must be consulted when making this decision.

### 4.2.3 ETDM Screening

The purpose of the ETDM process is to provide early identification of potential environmental considerations in transportation planning to streamline project delivery. This process supports FDOT’s environmental policy to “protect and preserve the quality of life, and the natural, physical, social and cultural resources of the state, while expeditiously developing safe, cost effective, and efficient transportation systems” ([Environmental Policy, Topic No. 000-625-001](#)). The ETDM process provides agencies and other stakeholders the opportunity for early input on proposed transportation projects. The objectives of the ETDM process are:

1. Early identification of potential issues for project scope development;
2. Early consideration of environmental issues in the planning process;
3. Full and early public and Environmental Technical Advisory Team (ETAT) member participation;
4. Linkage between Planning and PD&E (including NEPA); and,
5. Incorporation of appropriate issue resolution mechanisms during the planning process.

These objectives are accomplished through stakeholder involvement, early consideration of environmental effects, integrating processes which were previously conducted sequentially, using interactive techniques.

The ETDM process facilitates early interaction among transportation planners; federal, state, and local agencies; Native American Tribes; and affected communities. Through this process, FDOT provides the opportunity for early stakeholder input on qualifying transportation projects, which helps support planning decisions and develop the PD&E project scope with a clearer understanding of the environmental setting and potential concerns. The types of transportation projects that qualify for screening are listed in the ETDM Manual, Topic No. 650-000-002.

Intergovernmental coordination is accomplished through an ETAT member assigned to each of the seven FDOT Districts and Florida’s Turnpike Enterprise. The ETAT includes representatives from MPOs/TPOs, federal and state agencies, and participating Native
American Tribes. Agency agreements between the FDOT and other state and federal agencies document the interagency understandings and agency-specific requirements for participating as an ETAT member in the ETDM process.

ETAT members use the Environmental Screening Tool (EST) to review project information, identify potential project effects, and submit comments to FDOT. This web-based Geographic Information system (GIS) database and mapping tool provides access to project information and data about natural, physical, cultural, and community resources in the project area. The comments and other information are made available to the public on the ETDM public access site. See ETDM Manual, Topic No. 650-000-002 for more information about the EST.

Ideally, the ETDM process consists of the Planning Screen and the Programming Screen. The Planning Screen should occur when considering projects for inclusion or prioritization within a CFP. The Programming Screen should occur to support development of the FDOT’s Five Year Work Program. The Programming Screen also should inform development of a scope of services for the PD&E Study. The results of the screening events link the Planning phase and the PD&E phase. Each screening event centers on a project review and includes project preparation activities and follow-up tasks occurring before and after the review.

The ETDM Coordinator for the project sponsor (i.e., FDOT District, Florida’s Turnpike Enterprise, or MPO/TPO) uses the EST to notify the ETAT when a project is ready for review. At the same time, the information is published on the ETDM public access site. During the review period, FDOT affords an opportunity for ETAT members and the public to provide input about potential project effects. The project sponsor also begins to identify potential effects on surrounding communities. They seek to receive information on community preferences and concerns, as well as identify potential controversies related to the project. ETAT members perform multidisciplinary reviews specific to their area of expertise within their jurisdictions (e.g., wetlands, land use). These reviews help to:

1. Evaluate the feasibility of a proposed project.
2. Allow for early identification of potential avoidance, minimization, and mitigation opportunities.
3. Identify environmental issues that need focused attention during the PD&E phase.
4. Create documentation and analyses in the PD&E phase. The ETDM process meets the requirements set forth in 23 U.S.C. § 168(d), for the adoption of planning products into the PD&E phase.

The Programming Screen provides opportunities for ETAT members and the public to review and comment on qualifying priority projects being considered for inclusion in the TIP, Five Year Work Program or being advanced to the PD&E phase. ETAT members’ comments assist with project scoping; and identification of opportunities for avoidance, minimization, and mitigation of potential project impacts. The Programming Screen Summary Report summarizes recommendations and results from the ETAT reviews. FDOT uses the report to advance or focus analyses and studies conducted prior to the PD&E phase (as appropriate), develop the scope of services for the PD&E Study, and
assist in determining the appropriate Class of Action (COA) for the project.

The ETDM Programming Screen Summary Report also contains screening documentation of project alternatives developed as part of the Planning Screen.

Within the ETDM process, Environmental Scoping Process [as required by 40 CFR § 1501.7, for Environmental Impact Statements (EISs) only] begins with ETAT reviews during the EST screening events. This process continues throughout the Planning phase and early stages in the preparation of an EIS. Details on the Environmental Scoping Process is in Part 1, Chapter 8, Draft Environmental Impact Statement and the process to conduct a Scoping meeting is in Part 1, Chapter 11, Public Involvement.

4.2.4 Alternative Corridor Evaluation

FDOT uses the Alternative Corridor Evaluation (ACE) process to identify, evaluate, and eliminate alternatives on qualifying projects prior to the PD&E phase. The decisions made in an ACE can be used to refine the purpose and need for a project; determine the project area; define general travel modes or corridors (including logical termini); describe general environmental setting for a project; identify preliminary environmental impacts and environmental mitigation; develop and evaluate a range of alternatives to be refined in detail during the PD&E Study; and document elimination of unreasonable alternatives. The ACE process links planning and NEPA. However, adoption and use of ACE decisions in the NEPA process is subject to a determination by OEM.

The ACE is typically performed as part of the ETDM screening efforts that precede the PD&E phase. Alternatives should support the purpose and need for a project in accordance with all applicable laws and regulations, through the balancing of engineering, environmental, and economic aspects while considering comments received through the Programming Screen.

The Districts should use the ACE process to support potential EIS and certain Environmental Assessment (EA) projects. The ACE process may also be used to eliminate corridors that are part of the State Environmental Impact Report (SEIR) when new alignments are under consideration. Projects that qualify for the ACE process include:

1. New alignments – new roadways; new roadway connections or extensions;
2. Major realignments;
3. Major bypasses – truck bypasses, city/town bypasses; and,
4. Other alignments based on consultation with OEM.

Additionally, new alignments or major realignments for freight corridors (that are not bypasses), and bicycle or trail corridors may be evaluated using the ACE process.

The FDOT process for early planning and evaluation of transit projects in Florida is
documented in the *Transit Concept and Alternatives Review (TCAR) Guidance*. The TCAR process is a uniform approach for advancing transit projects by linking early planning work to the PD&E and FTA Project Development processes. See *Part 1, Chapter 14, Transit Project Delivery*, for PD&E guidance on corridor analysis for transit projects.

The ACE process identifies and evaluates corridor alternatives using the *Methodology Memorandum (MM)* agreed upon by the project stakeholders (local, state, tribal and federal agencies). The results of the ACE are documented in the *Alternative Corridor Evaluation Report (ACER)*. The ACER may be used in the NEPA process to support a decision to eliminate corridors from further study that are not feasible or do not meet the purpose and need for the project. Resource agency coordination in the ACE process is accomplished through the ETDM screening process. The ETDM screening facilitates demonstration and documentation that alternatives considered during the ACE process received support from regulatory and resource agencies and affected stakeholders (see *ETDM Manual, Topic No. 650-000-002*). Public input regarding development of the ACE is received using public meetings and outreach.

The level of detail in the analysis of an ACE is higher than that used to prepare a typical planning product, but less than that of a PD&E Study. The ACER must establish and document criteria and the public involvement process used to evaluate and eliminate alternatives that are not feasible or do not meet the purpose and need for the project. Such documentation is essential to ensure results are incorporated into the NEPA process. The cover of the ACER must include the public notice stated in *Section 4.2.2*.

The ACE process varies depending on whether it is started in the Planning Screen or Programming Screen. *Chapter 3* and *Chapter 4* of the *ETDM Manual, Topic No. 650-000-002* explain how to conduct an ACE during the Planning Screen and Programming Screen, respectively. The following sections summarize the basic steps of the ACE process.

### 4.2.4.1 Define the Initial Corridors

Based on initial data collection effort, the District identifies and defines a reasonable range of initial alternatives (including alternative modes) that would address the project’s purpose and need. The District also considers corridor alternatives from previously completed planning activities that may guide the ACE process. The previously completed planning activities may include planning-level corridor/subarea/feasibility studies, multimodal corridor plans, vision plans, or master plans that might inform the ACE process. If no corridor alternatives were previously developed, the District should identify initial corridors within the study area. The initial corridors can range from swaths to broad corridors to narrower alignments. The naming of each corridor or alternative should remain consistent throughout the ACE and be carried through the PD&E phase.

When evaluating major urban corridors, the District must consider the need for public transportation systems, facilities and services, and alternative corridors that will address multimodal transportation needs consistent with *Major Urban Corridor Studies Policy*. 
4.2.4.2 Decision to Advance Project

The District considers the involvement and potential impacts to environmental issues/resources and the presence of issues that may prevent development of the project to decide if the project should be advanced. In making decisions, the District may perform GIS analysis and field observations; and consider potential permitting and mitigation options, known environmental issues in the area, and early project stakeholders’ comments. Once the decision has been made to advance the project, the District defines the goals for the ACE process (e.g., performing an action plan corridor study or determining reasonable alternatives for the PD&E Study).

4.2.4.3 Develop Methodology Memorandum

The District develops an MM based on stakeholder comments and other information regarding the project environmental context. The MM is a technical memorandum which describes the goals of the ACE, identifies alternative corridors, and details the data and procedure the District will use to develop, evaluate, and screen alternative corridors. The MM also details the process, including public involvement, and criteria that form the basis for decision-making. The evaluation criteria may include purpose and need evaluation, engineering feasibility (i.e., traffic operational and safety performance measures, design components, urban design issues and opportunities, constructability, maintainability, utility conflicts), construction costs, avoidance of potential environmental impacts (social-economic, cultural, natural, and physical environmental resources), consistency with and/or impact on adopted plans, and other unique issues specific to the study area.

The MM includes the following:

1. Background
   a. Contact personnel
   b. Basic project information
      1. Previous planning studies or relevant information
2. Known project issues of concern
   c. Project description
   d. Purpose and need for the project

2. Goals and objectives of the ACE
   a. Provide the status in project delivery
   b. Define the goals and objectives of the study
   c. Identify the decision points/milestones

3. Methods to analyze the alternative corridors and make decisions
   a. Describe needs for alternative modes such as transit, freight, or pedestrian/bicycle facilities
   b. Describe alternative corridors
   c. Describe data needs
   d. Describe criteria to evaluate and screen alternative corridors
   e. Describe the data analysis tools [e.g., EST, Land Suitability Mapping (LSM), Quantum]

In the following situations, the MM may be reviewed by project stakeholders more than once:

1. There is a change in project termini (expanded);
2. There is a change in purpose and need for the project;
3. There is significant change in project concept(s) (e.g., alignment, typical section, interchange/intersection configuration);
4. There is significant change in alternative mode components such as pedestrian, bicycle, transit, freight facilities;
5. There is a change in supporting data that may affect the methodology and any resulting decisions made from it (e.g., population changes, economic changes, land use changes); and,
6. There are significant revisions (based on stakeholders input) to the methodology to analyze the alternative corridors and make decision.

During the ETDM screening, the ETAT reviews, comments, and agrees on the MM in the
EST. The OEM concurs with the **MM** after the ETAT comment period, through the EST. See *ETDM Manual, Topic No. 650-000-002* for procedures on how to develop a **MM** using the EST.

### 4.2.4.4 Refine Corridors

The District evaluates the corridors using initial data and the criteria established and agreed upon in the **MM**. In studying the alternatives and considering input from ETAT and other project stakeholders, the District may refine corridors, eliminate corridors, or develop additional corridors to avoid potential environmental effects. The refinement of corridors to avoid potential environmental effects also considers the corridor vision; purpose and need; public input, and both engineering and economic feasibility. Alternative corridors that do not meet the purpose and need are eliminated from further study through the ACE process and documented in an **ACER**. Alternative corridors that meet the purpose and need are developed to a conceptual planning level sufficient to evaluate their benefits and impacts relative to the purpose and need for the project. Preliminary design for alternative corridors that are recommended for further studies is done during the PD&E phase.

### 4.2.4.5 Prepare Alternative Corridor Evaluation Report

The **ACER** summarizes the alternative corridors analysis and documents the alternatives that are eliminated from further study or otherwise carried forward to the PD&E Study (pursuant to **23 U.S.C. § 168** and **Appendix A of 23 CFR Part 450**). The **ACER** documents the basis for eliminating alternatives. Documentation regarding the elimination of alternatives in the **ACER** must be included in the project file for the NEPA process. Therefore, it is critical to properly document the methodology, data, analysis, public and agency involvement, and resulting planning decisions in the **ACER** to ensure that these analyses meet requirements for use in the NEPA process. The **ACER** must document assumptions supporting planning analysis such as travel demand forecast year; forecast method and its rationale, and future year data. Additionally, the **ACER** should document policy assumptions related to land use, socio-economic factors, transportation costs, and the transportation network that were used to develop and evaluate alternatives. The **ACER** should document recent, current or near future planning studies or projects located in the vicinity and discuss their relationship with the ACE. The **ACER** should also document any unresolved project issues with the public, stakeholders or agencies and how they will be addressed in the subsequent phases of project development. An **ACER Template** is available on the **OEM website**.

When completed, the **ACER** is uploaded into the EST for comment. The ETAT members have 30 days to acknowledge their understanding of the **ACER** and submit comments in the EST. After ETAT review, the **ACER** is submitted to the OEM for concurrence.

The OEM considers the **ACER** for adoption and reviews the recommendations of the alternatives eliminated from further study or considered for additional study in the subsequent PD&E phase. The District will make a formal request for adoption through
either the EST or email. After OEM concurrence, the EDTM Coordinator publishes the *Planning (or Programming) Screen Summary Report* with the ACER.

The ACER should be included in the project file as part of the supporting documentation of a PD&E Study and should be summarized in the “Alternatives Development” section of an EA or EIS (see *Part 2, Chapter 3, Engineering Analysis*). The Alternatives Considered but Eliminated section of an EA or EIS should include documentation explaining why an eliminated alternative did not meet the purpose and need or was otherwise unreasonable or not feasible. The Alternatives Considered but Eliminated section should also include the coordination that assisted in making the determination with reference to the ACER.

4.2.5 Environmental Review for Early Acquisition Projects

Section 108 of Title 23 U.S.C. allows for federal aid participation in certain property rights acquisitions prior to completion of a NEPA decision on a transportation project. FDOT may undertake early acquisition projects before the completion of the environmental review process for the proposed transportation project for corridor preservation, access management, or other purposes. Pursuant to 23 U.S.C. 108 and 23 CFR 710.501, FDOT may:

- Fund early acquisition project costs entirely with State funds with no Title 23 participation;
- Use State funds initially but seek Title 23 credit or reimbursement when the acquired property is incorporated into a transportation project eligible for federal surface transportation program funds; or
- Use the normal federal-aid project agreement and reimbursement process to fund an early acquisition project. (Note: any early acquisition of Section 4(f) property would disqualify the project from federal eligibility.)

The early acquisition of a real property interest must be carried out in compliance with all requirements applicable to the acquisition of real property interests for federally assisted transportation projects. For additional information review the early acquisition process described in Chapter 7.1, of the Right of Way Procedures Manual, Topic No. 575-000-000.

The early acquisition project can consist of the acquisition of a specific parcel(s), a portion of a transportation corridor, or an entire transportation corridor. In pursuing early acquisition of real property interests, the selection of preferred alternatives cannot be impacted. Additionally, once the real property interests have been acquired no activities related to demolition, site preparation, or construction of the related transportation project that is not necessary to protect public health or safety can occur until NEPA is completed on that project.
Since the acquisition of real property interests cannot impact future decisions regarding the selection of alternatives of the future transportation project, the District should consider areas for acquisition that are in common to all the proposed alternatives of the future transportation project. Regardless of the funding that will ultimately be used, the area of acquisition will have to be evaluated through the environmental review process, which will have to be completed prior to the acquisition. For additional information, see Section 4.2.5.3.

4.2.5.1 State Funded Early Acquisition of Real Property Interests

As stated in 23 U.S.C. 108(c)(1), a state may carry out, at the expense of the state, acquisitions of interests in real property before completion of the NEPA review process without affecting subsequent approvals required for the transportation project by the state or any federal agency. Although the acquisition of the real property interest can occur prior to the NEPA decision on the transportation project, it cannot influence the selection of the preferred alternative.

FDOT must meet NEPA requirements and terms and conditions described in 23 U.S.C. 108(c)(2) and 23 CFR 710.501 to maintain eligibility for federal aid reimbursement. The request for federal reimbursement of early acquisition costs to the Federal-Aid Office may be approved by FHWA if the acquisition is consistent with the terms and conditions per 23 U.S.C. 108(c)(3) and 23 CFR 710.501(d). For additional information, see Section 7.1.4, Early Acquisition of the Right of Way Procedures Manual, Topic No. 575-000-000.

4.2.5.2 Federally Funded Early Acquisition of Real Property Interests

FHWA may authorize the use of federal funds by the FDOT for the acquisition of a real property interest per 23 U.S.C. 108(d) and 23 CFR 710.501(e). When planning to perform early acquisition of real property interests with federal funds, FDOT must document that:

1. The FDOT has the authority to acquire the real property interest under state law; and,
2. The acquisition of the real property interest
   a. is for a transportation purpose;
   b. will not cause any significant adverse environmental impact;
   c. will not limit the choice of reasonable alternatives for the project or otherwise influence decisions on any approvals required for the project;
   d. does not prevent OEM from making an impartial decision to accept an alternative that is being considered in the environmental review process;
   e. is consistent with the state transportation planning process under 23 U.S.C. § 135;
   f. complies with other applicable federal laws and regulations;
g. will be acquired through negotiation, without the threat of condemnation; and,

h. will not result in a reduction or elimination of benefits or assistance to a displaced person required to move by the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (42 U.S.C. 4601 et seq.) and Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d et seq.).

3. The early acquisition project is included as a project in an applicable transportation improvement program under 23 U.S.C. 134 and 135 and 49 U.S.C. 5303 and 5304.

4. The environmental review process for the early acquisition project is complete and the project is treated as having an independent utility pursuant to 23 U.S.C. 108(d)(4)(B).

4.2.5.3 Documentation of Early Acquisition Projects

Typically, the environmental review for an early acquisition projects can be accomplished by completing a Type 1 Categorical Exclusion Checklist. This activity meets the criteria of 23 CFR 771.117(d)(12). See Part 1, Chapter 2, Class of Action Determination for Federal Projects, for more details. Coordination with OEM is needed before District approval of a Type 1 CE to verify that the acquisition project:

- Will not limit the choice of reasonable alternatives for the project or otherwise influence the decision on any approval required for the transportation project, and

- Does not prevent OEM from making an impartial decision as to whether to accept an alternative that is being considered in the environmental review process for the transportation project.

4.2.6 Approval of Interchange Access Requests

The approval of an Interchange Access Request (IAR) on Interstate highways is a two-part process. The first part is the determination of safety, operational and engineering (SO&E) acceptability of the request by satisfying and documenting the requirements of the FHWA’s Policy on Access to the Interstate System and FDOT’s Procedure No. 525-030-160, New or Modified Interchanges. The first part (SO&E acceptability) may precede or occur concurrently with the PD&E Study. The second part is the approval of the NEPA document (completion of the PD&E Study or Type 1 CE). The affirmative determination constitutes the final approval of IAR by FHWA and cannot precede the completion of the NEPA document. The IAR process is discussed in detail in the Interchange Access Request User’s Guide. IAR documentation is included in SWEPT.

The 2017 FHWA’s Policy on Access to the Interstate System focuses on the technical feasibility of access request proposals in support of the FHWA’s determination of SO&E acceptability. To streamline project reviews, the 2017 Policy requires environmental impacts evaluation, and planning considerations of IAR proposals be addressed through
the NEPA review process. FDOT addresses and documents environmental impacts evaluation and planning considerations in the PD&E Study.

FDOT will request final approval (affirmative determination) of an IAR from FHWA only after LDCA (or completion of the Type 1 CE) for the access proposal is granted by OEM, and verification that the NEPA and SO&E concepts are the same (see Figure 4-5).

4.2.7 Scoping a PD&E Study

The project scoping process in this chapter builds on the SWAT process. Project scoping is a project development activity that identifies and considers various project related issues which may affect cost and schedule; determines work activities to be performed for the project; and develops or refines key project parameters and requirements sufficient to define the project. The project scoping process outlined in this chapter is applicable to both state and federally funded projects.

The project scoping process discussed in this section is not the Environmental Scoping Process required by 23 CFR Part 771 for preparation of an EIS. For the Environmental Scoping Process, see Part 1, Chapter 8, Draft Environmental Impact Statement.

Project scoping of a PD&E Study starts towards the end of the planning process as the project transitions to the PD&E phase. Project scoping helps to focus specific project activities toward addressing issues that may have a potential to impact the project delivery. Project scoping also helps to identify actions needed during the PD&E phase to avoid, minimize or mitigate project’s potential impacts. Additionally, project scoping provides the foundation to begin a PD&E Study. Scoping requires coordination of project stakeholders within and outside the District to realize best options to deliver the project.

The PD&E scope of services documents the project parameters and the level of engineering and environmental analyses required to develop a project solution that will meet the purpose and need. The level of engineering and environmental analyses is commensurate with the project type and its context, and the significance of potential project impacts. A well-prepared PD&E scope produces a foundation upon which the project development occurs. Additionally, a well-prepared scope sets expectation for project management and performance, supports development of a realistic project delivery schedule, and provides a basis for managing project change and risk.

The PD&E Project Manager is responsible for scoping the PD&E Study. The PD&E Project Manager should use the guidance in this section to identify work activities and deliverables, and then prepare the preliminary schedule to deliver the project. During project scoping, the Project Manager should work collaboratively with District staff from relevant functional offices, as applicable, to identify or verify project needs and potential issues that will be addressed by the PD&E Study. This can be accomplished through engagement with the District SWAT team. Early input from the various District offices and subject matter experts is essential to develop effective project scopes that focus on project issues.
4.2.7.1 SWAT Process

The SWAT process is a project management approach that streamlines FDOT’s project delivery process through early coordination and communication among the different functional offices within the District when identifying projects for funding and scoping in the planning process. All state and federally funded projects are recommended to be evaluated through the SWAT Process to determine project parameters for funding, scope of work, programming, and scheduling. The SWAT process promotes and enhances communication and collaboration within District offices when projects are evaluated for inclusion in the Tentative Work Program.

The Districts can adapt the SWAT process to their planning, programming, and project scoping processes. See the FDOT SWAT Training Workbook for more guidance.

Each District has an established SWAT team composed of cross-functional, multi-disciplinary staff experienced in project delivery. SWAT team members are experts who are involved at key milestones during project planning, prior to development of the PD&E Scope of Services to ensure that project decisions get broad input and early support. Members of the SWAT team typically include representatives from Work Program, Production/Scheduling, Intermodal Systems Development (ISD)/Planning, Design, ROW, Traffic Operations, and Environmental Management. Other staff from relevant District functional offices may be invited to participate in the SWAT team meetings. The SWAT team actively engages with the Project Manager, SIS Coordinator, MPO Liaisons, ETDM Coordinator and Environmental Office staff to evaluate the projects.

SWAT consists of planning, strategy, and kickoff team meetings. The purpose of these meetings is to plan and review the preliminary scope, schedule and funding of the projects. The SWAT team meetings should use the Statewide Acceleration Transformation Scoping Form and other SWAT guide materials, which are available from the OEM Website.

The Districts may combine the SWAT team meetings with other related meetings such as scope team meeting, priority projects programming meeting, or project planning meeting, that are used to evaluate candidate projects in the District.

4.2.7.1.1 SWAT Planning Meeting

Each District’s SWAT team should hold an annual planning meeting to review potential projects that will be included in the Tentative Work Program. The SWAT team should meet with District management prior to the planning meeting to obtain their input on projects being considered in the Tentative Work Program.

During the planning meeting, the SWAT team reviews and discusses each candidate project’s description and purpose and need, context classification, risk, and cost estimate. The outcome of the SWAT planning meeting is a list of funding recommendations for each candidate project; anticipated COA assigned to each project; and a list of projects to be screened through the ETDM process.
During the SWAT planning meeting, each project is recommended as either a state or federal project. When programmed, an SFO identifier is assigned to projects that are recommended to be only funded through state funds. To recommend whether to use federal funds on the project, the SWAT team considers factors such as environmental considerations, anticipated permits, **Work Program Instructions**, and expected time savings that will result by pursuing a state-funded project delivery process. Projects that must follow the federal process or must stay federalized are listed in **Work Program Instructions, Part III - Chapter 24, Project Development and Environment (PD&E)**.

During the SWAT planning meeting, the SWAT team should complete **Section A** of the **Statewide Acceleration Transformation Scoping Form** based on the District’s knowledge of project scope and potential project impacts. The District should complete **Section B** of the form during the SWAT Strategy Meeting. The results of the SWAT planning meeting should be used by Work Program staff when developing the **Tentative Work Program**.

### 4.2.7.1.2 SWAT Strategy Meeting

The SWAT team should hold a strategy meeting annually to discuss each PD&E project identified in the **Tentative Work Program** to strategically define (or refine) the scope of work, review funding, create a baseline schedule (which include pre-PD&E activities and project delivery milestones), and confirm the advertisement date and initial construction cost estimate are realistic.

Project evaluation during the SWAT strategy meeting should revisit **Section A** of the **Statewide Acceleration Transformation Scoping Form**, which was completed during the SWAT planning meeting. The SWAT strategy meeting should also complete **Section B** of the form, based on available project information at the time of the meeting. It is recommended that during the strategy meeting, the SWAT team:

- Evaluate project scope, cost estimate, and baseline schedule to determine if adequate time and funding are available to address the project objectives;
- Recommend planning activities (such as ETDM Programming Screening, ACE, corridor feasibility studies) that may be performed to support development of the project;
- Explore options for, and recommend project activities that may start ahead of the PD&E Study for each project;
- Explore opportunities to overlap PD&E and Design phases (when appropriate) by considering complexity in cost, design, schedule constraints, and potential environmental issues. Environmental complexity is estimated based on the likelihood of encountering substantial environmental issues on the project, and the design complexity is a function of how quickly a preferred alternative can be determined in the PD&E process.
• Create baseline project schedules that include project milestones such as scope development, project advertisement, PD&E phase contract execution, LDCA, and other project phases (Design, ROW, Construction) that will be programmed.

During the SWAT strategy meeting, the District SWAT team lead is responsible for gathering and disseminating available project data; identifying and inviting additional team members from other District functional offices; planning, leading and facilitating the meeting; communicating and coordinating with other District’s functional offices regarding potential project issues; documenting decisions made in the meeting; and transmitting the Statewide Acceleration Transformation Scoping Form to the Project Managers of upcoming PD&E projects.

4.2.7.1.3 Activities that May Advance Prior to PD&E

As part of the SWAT process, the Districts should explore options to collect data and conduct technical studies and surveys ahead of the PD&E Study. Ideally, these activities should start before the SWAT kickoff meeting to assist in clarifying the project scope of work. Project activities that may be advanced ahead of the PD&E Study can be accomplished using District staff, districtwide or continuing services consultant contracts, Phase 12 (Planning) funds, or phase 22 (PD&E phase) funds. Phase 22 funds can be used for PD&E activities prior to initiation of the PD&E Study, as per the Work Program Instructions.

Examples of project activities that may start ahead of a PD&E Study include:

1. Design survey;
2. Traffic data collection and traffic forecast;
3. Preliminary geotechnical investigation;
4. Existing condition analysis;
5. Public Involvement Plan, including public outreach;
6. Long lead species surveys, if the time of year is right such that doing the species survey earlier prevents delays during PD&E or otherwise helps to clarify or remove the risk of species impact avoidance measures;
7. Cultural resources assessment survey;
8. Contamination screening; and,
9. Other technical studies or coordination as project characteristics allow.
4.2.7.1.4 SWAT Kickoff Meeting

Each project that has a PD&E phase should hold a SWAT kickoff meeting at least one year before the start of the PD&E Study. Districts have a flexibility of adapting or combining the SWAT kickoff meeting with existing District's scope team meetings (inter-disciplinary team meetings).

The purpose of the kickoff meeting is to evaluate the preliminary project scope by:

- Understanding the project objectives and purpose and need;
- Discussing, confirming or refining the project limits;
- Reviewing context classification;
- Reviewing and verifying the status of project planning activities (e.g., COA determination, ETDM Programming Screen, ACE, or corridor feasibility study) that are performed to support the PD&E Study;
- Recommending project activities that may start ahead of the PD&E Study;
- Reviewing and discussing environmental issues and special designs or standards that may affect the project delivery schedule;
- Determining how the Design phase can be advanced concurrent with PD&E, if appropriate—the decision to perform the PD&E Study concurrent with Design is made in the SWAT strategy meeting;
- Discussing and recommending the delivery method for the project—Design-Bid-Build, Design Build or other innovative delivery methods;
- Evaluating identified potential risks (including threats and opportunities) and developing a risk mitigation plan;
- Discussing schedule effects of any adjacent on-going (or planned) projects and required coordination;
- Reviewing initial (stage I) project’s scope of services;
- Preparing for field review and scheduling additional project scope meetings; and
- Discussing and refining the initial project schedule to ensure appropriate critical tasks (with planned durations) for the project development are included.

The SWAT kickoff meeting typically includes members of the SWAT team, PD&E Project Manager, Design Project Manager, subject matter experts, and staff from Environmental Management, Environmental Permitting, Design, Program Management, and Planning offices. Staff from the Professional Services Unit and Work Program should also attend the SWAT kickoff meeting, as contracting and funding issues may be discussed. The PD&E Project Manager’s role in the kickoff meeting is to plan, lead and facilitate the meeting; gather technical information necessary to scope the project; identify the subject matter experts that should attend the meeting; and monitor completion of pre-PD&E tasks in the schedule and update members of the team members accordingly, as the project
progresses through the consultant acquisition process. The role of subject matter experts in the SWAT kickoff meeting is to provide technical and analytical inputs within their areas of technical expertise.

Project scope evaluation by the SWAT team starts by revisiting the Statewide Acceleration Transformation Scoping Form prepared during the SWAT planning and strategy meetings. The project scope evaluation further uses the Programming Screen Summary Report, and SWAT tools and templates to finalize the initial (stage I) scope of services. See FDOT SWAT Training Workbook for available tools.

### 4.2.7.1.5 Project Schedule

To streamline development of PD&E schedules, FDOT has developed project schedule templates for PD&E studies (by COA) to support sequencing, implementation and execution of the Work Breakdown Structure (WBS) or task list. The project schedule templates provide consistent activity names at the deliverable level. The templates can be customized to meet the complexity and context of the project. The WBS provides an activity/task coding structure that is used in the Production Schedule and Management (PSM) system. It also identifies the project milestones, activities and activity durations to successfully deliver the project. Table 4–1 lists some of PD&E activities that can be tracked in the project schedule. Approved Environmental PSM codes can be downloaded from the OEM website.

<table>
<thead>
<tr>
<th>PSM Code</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>703</td>
<td>PD&amp;E Scope and Schedule Completion</td>
</tr>
<tr>
<td>705</td>
<td>PD&amp;E Advertisement</td>
</tr>
<tr>
<td>707</td>
<td>EA Start</td>
</tr>
<tr>
<td>708</td>
<td>Notice of Intent (NOI), EIS Start</td>
</tr>
<tr>
<td>709</td>
<td>SEIR Start</td>
</tr>
<tr>
<td>710</td>
<td>Planning Consistency Completion</td>
</tr>
<tr>
<td>711</td>
<td>Alternatives Workshop</td>
</tr>
</tbody>
</table>

Entering the PD&E phase is defined as work occurring on the project after the official start date of the PD&E Study represented by PSM codes (Type 2 CE Start = 706, EA Start = 707, NOI-EIS Start =708, or SEIR Start = 709). The start of the PD&E phase date is the date the project team begins PD&E Study activities, thus signaling the beginning of NEPA coordination and analysis for federal projects, and the beginning of coordination and analysis to support development of a SEIR for state-funded projects. For an EIS, Notice of Intent (NOI) serves as the official start date. For an EA, the Notice to Proceed date for PD&E Study consultant services is the EA start date.

The responsibility for developing the schedule typically lies with the Project Manager. The PD&E Project Manager should work with the District Program Management Office to
create a detailed schedule that uses PSM codes. As referenced in Section 4.2.7.1.2, the Project Manager should develop a project schedule, using information discussed in the SWAT kickoff meeting, and convey the project schedule to the District Program Management Office Scheduler. The Scheduler should enter identified schedule milestones in the PSM with corresponding codes prior to advertisement for consultant acquisition. Importantly, the Project Manager and Scheduler should ensure the project schedule has realistic timeframes and project work activities proceed in a logical order. The project schedule should include time required for document reviews by the District, OEM and Cooperating Agencies, as appropriate. If the consultant is under contract for the project, the Project Manager should also communicate the expectation of the project schedule to ensure the consultant meets the schedule demands. See the FDOT Project Management Handbook for more scheduling guidelines and recommended practices for both FDOT and consultant project managers.

4.2.7.2 Level of Design Detail

Engineering activities for a PD&E Study are performed to a level of detail to analyze and compare the effects of the project alternatives on the social, natural, cultural, and physical environment. The level of design detail required for a PD&E Study should be sufficient to establish preliminary geometry (i.e., typical section, preliminary horizontal and vertical alignments, and ROW needs) for the preferred alternative. Depending on the context and schedule of the project being studied under the NEPA process, PD&E Study and Design phase can begin concurrently provided that the preliminary design activities comply with 23 CFR Part 771 and 40 CFR §§ 1500-1508. Essentially, the preliminary design activities must not limit the choice of reasonable alternatives [40 CFR §1506.1(a) and (b)]. Projects that follow the state process have more flexibility in advancing Design phase activities concurrent with the PD&E phase (see Part 1, Chapter 10, State, Local, or Privately Funded Project Delivery).

4.2.7.2.1 Permissible Project Related Activities During NEPA

FHWA Order 6640.1A, Policy on Permissible Project Related Activities during the NEPA Process, clarifies the level of design detail allowed in PD&E studies. To comply with and utilize the flexibility provided in the FHWA directive during PD&E, the Districts may perform preliminary design activities prior to a NEPA decision regardless of the project delivery method that is used. However, final design activities may not be advanced until a NEPA decision has been issued [23 CFR § 771.113(a)]. Preliminary design activities to be completed by FDOT in the PD&E process are listed as “preliminary” (or “P”) in the FDOT Design Manual (FDM), Part 3, Chapter 301, Topic No. 625-000-002. Most items are in the preliminary status through Phase II Plans (60%) of the Design Phase. Design items that are not listed in the Sequence of Plans Preparation chapter, but are identified in Appendix A of the FHWA Order 6640.1A, such as noise wall justification, can be advanced to preliminary design levels. Preliminary design is further discussed in FDM, Part 1, Chapter 110, Topic No. 625-000-002.

Other activities necessary to establish the final design parameters for a project (as defined at 23 CFR § 636.103) may proceed as preliminary design so long as those
activities do not materially affect the objective consideration of alternatives in the NEPA process or have an adverse environmental impact. The form in Figure 4–2 should be completed and signed by both the District and OEM to authorize activities permitted to advance as preliminary design that are not listed in the definition of preliminary design or Appendix A of FHWA Order 6640.1A. Preliminary engineering activities are defined in 23 U.S.C. § 101(a)(4)(A) and are referenced in Guidance on Preliminary Engineering Authorizations in FMIS. The activities are eligible for Federal-Aid reimbursement once they are approved by FHWA.

4.2.7.2.2 Overlapping PD&E and Design Phases

Preliminary design activities for a project can commence during the PD&E process by overlapping PD&E and Design phases or procuring the two phases concurrently. This is one of the outcome of the SWAT process. However, the Project Manager should be familiar with and consider the risks associated with overlapping preliminary design activities with PD&E. First, there is always the possibility that the No-Action (No-Build) Alternative could be chosen as the preferred alternative. Second, preliminary design activities must be equally performed for all Build Alternatives. These risks include performing additional engineering analysis that would not be needed for alternatives which do not move forward. Third, the District should refrain from performing any preliminary design activity that will materially affect the objective consideration of alternatives or cause an adverse environmental impact. See Section 4.2.7.2.1 for the level of preliminary design detail allowed in PD&E studies. To mitigate the risk, only PD&E studies for some Type 2 CEAs may be procured concurrently with the Design phase. Type 2 CEAs with complex scopes that may require evaluation of multiple alternatives should not be procured concurrently the Design phase.

There are three options for dual procurement of PD&E and Design phases that the District may consider. These options are:

1. One contract for both PD&E and Design funded together;
2. One contract for PD&E with an option for Design; and,
3. Two overlapping contracts procured simultaneously or separately.

Dual procurement options are shown in Figure 4–3. Project management structures for these options are shown in Figure 4–4. The Project Manager should work closely with the SWAT team, District Environmental Office, District Design Office and District Professional Services Unit when deciding the appropriate dual procurement option such that the consultant procurement process is vetted for issues that may prevent the project from moving forward.

Final design activities for federal projects should proceed beyond Phase II Plans only after OEM approval of the Environmental Document. Contract agreement, scope of services and schedules for projects with overlapping PD&E and Design phases should include this requirement. There is no limitation to the level of design plans which may be completed concurrently with a SEIR. However, the SWAT team and Project Manager
must be mindful of alternatives analysis considerations and other risks associated with advancing final design activities with a SEIR particularly if a federal permit is involved.

4.2.7.3 Scope of Services

The Project Manager reviews the Programming Screen Summary Report before advancing the project to PD&E. The report helps the Project Manager to become familiar with the existing environmental setting and helps with the understanding of the environmental or social resources that may be impacted by the project. By reviewing the Programming Screen Summary Report, the Project Manager will also understand project needs and objectives as well as the level of analysis and documentation required to accomplish the project objectives. The Project Manager gathers other technical information needed to scope the project in addition to the Programming Screen Summary Report. This may include field visits and results of technical studies that were conducted prior to project scoping.

When technical studies and surveys were completed prior to PD&E, the Project Manager must review the reports and adjust the scope of work by eliminating the activities or tasks that were previously completed and are still current or valid. Additionally, the Project Manager should explore opportunities to adopt or incorporate by reference planning analyses (such as interchange access request studies, traffic models, corridor studies, multimodal corridor studies, transit alternatives analysis, bicycle plans, feasibility studies, freight corridor studies) for the PD&E Study. See Section 4.2.2 for guidance on how to use planning products in the PD&E Study.

The Project Manager consults with the District Environmental Office staff for input regarding project activities and/or impacts. The Project Manager must work in concert with an interdisciplinary project team, largely composed of members from the District SWAT team, (from Planning, Environmental Management, Design, ROW, Construction) to complete the PD&E Study scope of services. The team uses the recommendations from the District SWAT kickoff meeting and any new information to complete the scope of services for the PD&E Study. The Project Manager must use the PD&E Study Standard Scope of Services development tool to prepare the scope of services for the project. The Project Manager must have a SWEPT account to access the scope of services development tool.

Environmental resources determined to be absent in the project (or no involvement) through the ETDM screening, SWAT kickoff meeting, and/or field observations should not be included in the scope of services. The scope of services must require the consultant performing the PD&E Study to review the ETDM screening documentation for resources determined to be absent before including a statement to that effect in the Environmental Document.

4.2.7.4 Alternative Project Delivery Methods

The procurement process for alternative project delivery methods such as Design-Build and contract administration processes follow standard FDOT practices as specified in the
**Design-Build Procurement and Administration, Procedure No. 625-020-010.** Districts are responsible for conducting the design-build procurement and contract administration processes for projects within their jurisdictions. The Project Finance Office in the Office of Comptroller provides support, coordination, and oversight for P3 projects that involve Design-Build-Finance or Design-Build-Finance-Operate-Maintain. Florida’s Turnpike Enterprise is responsible for conducting traffic and revenue studies for District projects that involve tolling.

For Design-Build projects and other projects that follow the alternative delivery methods, FDOT ensures that the requirements set by **23 CFR Part 636** are met, which include those imposed to protect the objectivity and integrity of the NEPA process. The **Design-Build Procurement and Administration, Procedure No. 625-020-010** provides flexibility by allowing projects to be advertised and selected while the NEPA process is being concluded. This means the Design-Build firm may proceed with certain preliminary engineering activities while the NEPA process is being concluded. The procedure recognizes the requirement for obtaining NEPA approval before the District can issue the notice to commence construction, pursuant to **23 CFR § 771.113**. Additionally, the procedure requires a Design-Build contract to have a termination clause if the No-Build Alternative is selected when the preliminary design phases are authorized in the Design-Build contract prior to completion of the NEPA document. Pursuant to **23 CFR § 636.109(b)(6)**, the Design-Build firm must not prepare the NEPA document or have decision-making responsibility with respect to the NEPA process but can assist in preparation of information to support NEPA activities under the supervision of the District Environmental Office.

### 4.2.7.5 Project Management Plan and Financial Plan

A successful project has objectives that are fulfilled and delivered within the planned budget and schedule, and meets or exceeds FDOT quality metrics. Each project must have a Project Management Plan (PMP), also called the Project Work Plan. The purpose of the PMP is to promote the efficient, organized, and timely completion of the work product according to schedule, budget, and contract requirements. The PMP details the project scope; defines the project delivery; and establishes project schedule, budget, resource allocation, communication plan, and the management methods used by the project team to deliver the project. Depending on the context and complexity of the project, the PMP may include a project Risk Management Plan, Change Management Plan, and Transition/Closure Plan. Part 1, Chapter 3, Project Work Plan of FDOT’s Project Management Handbook provides additional information about the development of PMPs.

Pursuant to **23 U.S.C. § 106(h)**, Major Projects are required to have an FHWA approved PMP and an annual Financial Plan, including a phasing plan when applicable. The PMP for Major Projects must document procedures and processes that are in effect to provide timely information to the project decision makers to effectively manage the scope, costs, schedules, risk, and quality of the project deliverables. The PMP also includes the role of the agency leadership and management team in the delivery of the project. The PMP is prepared in accordance with FHWA Project Management Plan Guidance for Major
Projects. The Project Manager should work with the District Production Office to prepare the draft PMP prior to submitting to FHWA.

It is generally recommended that a draft PMP be submitted to FHWA Florida Division Office at least 60 days prior to OEM approval of NEPA document for Major Projects. The FHWA Florida Division Office will coordinate with the FHWA Major Projects Team in the Office of Infrastructure to review all project management plans and any subsequent updates that require FHWA review or approval.

The Financial Plan for a Major Project is coordinated by the Project Finance Office in the Office of Comptroller and must be based on detailed estimates of project costs and the programmed funding for the project. The Initial Financial Plan and subsequent annual updates are prepared in accordance with FHWA guidance. The Financial Plans include an assessment of the appropriateness of the project delivery method. Visit the Project Finance Office SharePoint site on Major Project Financial Plans for more information.

4.2.7.6 Quality Control

The Project Manager is responsible for the quality and technical accuracy required for the Environmental Document and supporting technical studies. To reach quality objectives, each project must establish and follow Quality Assurance (QA) and Quality Control (QC) protocols. The Project Manager must make a conscious effort to maximize quality for every project.

All work associated with a PD&E Study must adhere to a project specific QC Plan which will ensure that project deliverables conform to applicable laws, regulations and FDOT procedures. The QC Plan must address the internal QC process performed by the PD&E Study team. The Plan must ensure that quality is achieved through checking, reviewing, and oversight of work activities and deliverables by objective and qualified individuals who were not directly responsible for performing the initial work. The QC Plan must also include processes and procedures for QA measures to evaluate and document compliance of the QC process. OEM has prepared a QC Plan template and associated checklists for PD&E studies. The template can be downloaded from the OEM website. Part 1, Chapter 16, Quality Assurance and Quality Control of FDOT’s Project Management Handbook provides additional information for the development of QC Plans.

4.2.7.7 Risk Management

Project risk management is the systematic process of identifying, analyzing, planning for, responding to, and monitoring project risk. It involves processes, tools, and techniques that help the Project Manager minimize the probability and consequences of adverse events by developing and following a risk management plan, which should identify the risks that need to be managed (the highest priority risks and possibly some or all intermediate priority risks) and the selected risk response strategy for each. The risk management plan should address technical, external (i.e., funding and political risks),
environmental, and organizational resources that may prevent the project from achieving its objectives.

Risk management is most effective when performed early in the life of a project and assessed continuously throughout the project. ETDM screening events (Section 4.2.3) and SWAT kickoff meetings (Section 4.2.7.1) are examples of project activities that are used to manage risk for PD&E projects.

When a formal risk analysis is performed for the project, its outcome is documented in a risk register. The risk register is a document that identifies and quantifies risks and is tracked and passed from one phase of the project development process to another. Risk analysis can be qualitative or quantitative depending on the complexity of the project and information that is known at the time of analysis. In many situations, risk analysis performed during PD&E is qualitative where risk trigger features are identified and their impact to the scope, schedule, budget, or quality are analyzed and prioritized for further action.

Since risk management and analysis is an on-going process throughout the life of the project, Project Managers must continuously monitor and control, and identify and analyze new risks for their projects. This can be achieved by adding project risk to the agenda of project meetings. Part 1, Chapter 19, Risk Management of FDOT’s Project Management Handbook provides additional information for identifying and managing project risks.

4.2.8 PD&E Phase

The PD&E phase builds on the outcome of the ETDM screening, SWAT team meetings, prior planning products and ACE, as applicable, to further refine the project’s purpose and need. The PD&E phase may also identify project alternatives that satisfy the purpose and need for the project. Alternatives may include alignments, alternative modes, and typical sections that avoid or minimize environmental impacts. See Part 1, Chapter 14, Transit Project Delivery and Part 2, Chapter 3, Engineering Analysis for more information on alternatives analysis. Environmental analyses performed during PD&E evaluate the project’s effect on social, cultural, natural, and physical resources. During the environmental analysis, potential mitigation options may be developed based on unavoidable impacts. See Part 2, Chapter 4 through Chapter 21, for procedures on how to perform environmental resource analyses.

Throughout the PD&E process, interagency coordination is conducted to identify project impacts, permitting requirements, project commitments, and funding sources. Commitments identified during the PD&E process can include requirements for future coordination, avoidance and minimization and/or mitigation for unavoidable impacts to resources. These commitments are documented in the Environmental Document and advanced, tracked, and implemented in later phases of the project per Procedure No. 650-000-003, Project Commitment Tracking. See Part 2, Chapter 22, Commitments for more information on commitments during the PD&E phase.
4.2.8.1 Environmental Documents

The COA for federal projects may have been determined during ETDM; however, a COA determination is not mandatory prior to advancing a project to PD&E phase. If the COA is known, the project may proceed as a CE, EA, or EIS. If the project is state-funded, it may proceed as a SEIR.

Processing

Projects requiring a federal action or that use federal-aid funds must meet planning consistency requirements outlined in 23 CFR Part 450 prior to being submitted to OEM for LDCA. The planning consistency documentation for EAs and EISs submitted to OEM for approval must include the appropriate planning consistency form (Figure 4–6 and Figure 4–7) with attached LRTP, Transportation Improvement Program (TIP), and current State Transportation Improvement Program (STIP) pages. The Planning Requirements for Environmental Document Approvals with Segmented Implementation, Form No. 650-050-42 (Figure 4–7) is to be completed for projects with segmented (phased) implementation. For information on documenting planning consistency in the Environmental Document and links to planning consistent spreadsheets, see Part 2, Chapter 1, Project Description and Purpose and Need and FDOT/FHWA Consistency Guidance, respectively.

Type 2 Categorical Exclusions

Type 2 CEs are projects with no known significant impacts, but which may require more detailed analysis of relevant issues and public involvement than Type 1 CEs. These projects go through a PD&E phase before advancing into the Design phase. The document of record for LDCA is the signed Type 2 Categorical Exclusion Determination Form. The Type 2 Categorical Exclusion Determination Form is prepared using SWEPT. The technical reports or documents prepared to support Type 2 CE projects must be uploaded into the project file in SWEPT and appropriately summarized or referenced in the Type 2 Categorical Exclusion Determination Form. The processing and documentation of Type 2 CEs is discussed in Part 1, Chapter 5, Type 2 Categorical Exclusion.

Environmental Assessments

An EA is prepared for actions in which the significance of the environmental impact is unknown. Depending on the significance of the impacts, an EA may result in a Finding of No Significant Impact (FONSI) where the analysis of the technical studies indicates that no significant environmental impact will result from the proposed project or an EIS if the analysis indicates significant environmental impacts will result. In either case, these projects will require environmental technical studies to comply with NEPA, address agency comments, or investigate potential impacts as necessary. The processing, review,
and approval of an EA and a FONSI are discussed in Part 1, Chapter 6, Environmental Assessment and Part 1, Chapter 7, Finding of No Significant Impact.

Environmental Impact Statements

All projects that are determined to have a significant environmental impact require an EIS and should address environmental issues identified during the Programming Screen and PD&E phase. An EIS receives LDCA once the Record of Decision (ROD) is approved by OEM. The processing, review, and approval of the DEIS and FEIS are described in Part 1, Chapter 8, Draft Environmental Impact Statement and Part 1, Chapter 9, Final Environmental Impact Statement.

State Funded Projects

Transportation projects qualifying for EST screening, without federal involvement require a SEIR. When a Local Agency or other entity is the lead agency, a Project Environmental Impact Report (PEIR) should be prepared. PEIRs are used by non-FDOT entities when state funds are used or the project lies on a SIS, SHS facility, or a project advanced through other unique funding mechanisms such as a State Infrastructure Bank (SIB) loan. The processing, review, and approval of non-federal projects are described in Part 1, Chapter 10, State, Local, or Privately Funded Project Delivery.

4.2.8.2 Environmental Technical Studies

Environmental technical studies are performed and their results documented according to the appropriate Chapters in Part 2 of the PD&E Manual. Reports documenting these studies (Section 4.2.8.3) are prepared in response to the relevant environmental issues/resources.

Below is a list of environmental technical studies that may be performed during PD&E. This list is not all inclusive.

1. Water Quality Impact Evaluation;
2. Natural Resources Evaluation;
3. Noise Study;
4. Air Quality;
5. Contamination Screening Evaluation/ Level I Contamination Assessment;
6. Conceptual Stage Relocation;
7. Section 4(f) Evaluation;
8. Cultural Resource Assessment Survey;
9. Sociocultural Effects Evaluation; and,


### 4.2.8.3 Project Reports and Documentation

Documentation for a PD&E Study typically includes the Environmental Document, technical reports, data, memoranda, maps, meeting summaries, comment/response matrices. The PD&E Project Manager is responsible for collecting, maintaining, and filing documentation for a PD&E Study in the project file. SWEPT maintains the official project file for PD&E Studies. The project file provides the supporting rationale and technical support behind the PD&E Study’s decision-making process. The Project Manager should begin compiling the project file at the start of the PD&E Study, continue to add documents throughout the study, and complete the file when a final decision is made. Complete and accurate documentation of the project file is needed to ensure decisions made during PD&E are passed to the next phase of the project development process. Additionally, a complete project file is essential to preparing and compiling a complete administrative record for the project.

All project documents will be filed/stored in accordance with *Records Management, Procedure No. 050-020-025* utilizing the process outlined in *Part 1, Chapter 15, Project File and Records Management*.

Below is a list of reports and design information the Project Manager should maintain in the project file if completed in the PD&E phase. Additional environmental and technical reports (including planning products), which are the basis of PD&E decisions, must also be kept in the project file.

1. Approved Environmental Document (Type 2 CE, EA with FONSI, DEIS, FEIS/ROD, FEIS, ROD, or SEIR)

2. **Project Traffic Analysis Report**

3. **Travel Analysis Report** (if applicable)

4. **Typical Section Package**

5. **Intersection Control Evaluation (ICE) Forms** (if applicable)

6. **Public Involvement Plan (PIP)**

7. Major Intersection and Interchange Concepts (if applicable)

8. Transportation Improvement Concepts (if applicable)


10. **Bridge Replacement Report** (if applicable)
11. **Natural Resources Evaluation** (wetlands, protected species and habitat, Essential Fish Habitat)

12. **Cultural Resource Assessment Survey**

13. **Section 4(f) Evaluation Report** (if applicable)

14. **Sociocultural Effects (SCE) Evaluation Technical Memorandum**

15. **Conceptual Stage Relocation Plan** (if applicable)

16. **Noise Study Report**

17. **Air Quality Technical Memorandum**

18. **Contamination Screening Evaluation Report** or **Level 1 Contamination Assessment Report**

19. **Water Quality Impact Evaluation Checklist**

20. **Location Hydraulics Report (LHR)**

21. **Planning Consistency Form** (except for Type 2 CEs where it is included in the form)

22. Preliminary stormwater design (including any drainage reports, preliminary drainage design, and/or **Pond Siting Report**)

23. Preliminary plans for preferred alternative with ROW dimensions

24. **Comments and Coordination Report**

25. **Utility Assessment Technical Memorandum**

26. Conceptual Transportation Management Plan (TMP)

27. Preliminary bridge analysis with supporting location and design recommendations for each viable structure alternative (if applicable).

28. **Draft Bridge Hydraulic Report** for the preferred alternative (if applicable)

29. **Preliminary Scour Analysis** (if applicable)

30. **DEP Form 62-257.900(1)-Notice of Asbestos Renovation or Demolition** (if completed during PD&E) (if applicable)

31. **Value Engineering Study Report** (if applicable)
32. Interchange Access Request Report (if applicable) and associated documents 
   (Methodology Letter of Understanding and FHWA’s SO&E Affirmative 
   Determination Letter)

33. System Engineering Management Plan (if applicable)

34. Design Exceptions/Variation Package (if applicable)

35. Project Commitment Record (PCR)

36. Risk Management Plan (if applicable)

37. Project Management Plan (if applicable)

38. Project Financial Plan (if applicable)

4.2.9 Design and Construction

The purpose of the Design phase is to prepare the detailed engineering design, contract 
plans, specifications, and estimates for the project. FDOT’s design process follows the 
design criteria and procedures established in the FDM, Part 2, Topic No. 625-000-002 
and the requirements for preparation and assembly of contract plans established in FDM, 
Part 3, Topic No. 625-000-002.

The review of design and construction plans for design-bid-build projects (conventional 
projects) follows a standard four-phase submittal approach to facilitate review of the 
projects. The four submittal phases are Phase I, Phase II, Phase III, and Phase IV. 
Projects that are Type 1 CE or NMSA, typically have two phase reviews. The appropriate 
number of submittal phases for Type 1 CE and NMSA projects is determined when 
developing the scope of services. Design-Build projects have three standard submittal 
phases, namely Technical Proposal, 90% Component Plans and Final Component Plans. 
FDM, Part 3, Chapter 301, Topic No. 625-000-002 identifies phase submittal 
requirements for both conventional and non-conventional projects.

Phase I plans submittal allows for the establishment and review of preliminary geometry 
and grades, drainage design, traffic control, and ROW. Certain projects have a mandatory 
Value Engineering (VE) requirement that must be performed during the PD&E phase prior 
to the public hearing. If a mandatory VE study was not performed during PD&E, one 
should be conducted during the development of Phase I plans. See Procedure No 625- 
030-002, Value Engineering Program for further details on VE requirements.

Phase II plans submittal includes the proposed plan and profile with complete drainage 
design. Preliminary design of the plans themselves is complete at the completion of 
Phase II. Typically, with completion of Phase II plans, sufficient information exists for 
permit application submittal and ROW acquisition to start. Throughout the remainder of 
the design process continued agency coordination should take place to address 
permitting requirements, address additional avoidance and minimization measures that 
can be taken, and develop mitigation plans.
Phase III plans submittal includes completion of all plan sheets and quantity calculations. Phase IV is the final submittal of the project contract plans where specifications are complete and all corrections noted in the Phase III plans are complete.

During the Design phase, new or updated surveys may be needed to confirm impacts. Additionally, mitigation requirements may be reconciled with actual impacts based on the final design features of the project. Prior to authorization to advertise the project for construction, the project must undergo a re-evaluation to ensure that there are no conditions in place that would alter the original approval of the decision and commitments made during the PD&E Study. Any change in design, environment, or laws which may have occurred since the approval of the final Environmental Document or any previous reevaluations are addressed. Part 1, Chapter 13, Re-evaluations explains the required re-evaluation process.

4.2.10 Interagency Coordination and Public Involvement

Public involvement, which provides opportunity for input from interested and affected members of the public, local governments, and environmental, regulatory, and resource agencies, is required by both federal and state laws, as well as FDOT procedure (see Public Involvement Opportunities, Topic No. 000-525-050). Public involvement is required in all phases of a transportation project. The public involvement effort should be scaled to match the magnitude or complexity of the project and should consider the potential for controversy, project issues or challenges, ROW acquisition, relocations, and access modifications. See Public Involvement Handbook for guidance on developing and implementing effective public involvement for transportation projects.

During the ETDM Planning and Programming screens, regulatory and resource agencies and interested project stakeholders review and comment on a project’s potential effects on the natural and human environment. MPOs can input public comments from LRTP outreach activities into the EST during the ETDM Planning or Programming Screen. PD&E Project Managers use information from the EDTM Planning or Programming Screen Summary Report to plan and implement public involvement activities during the PD&E phase.

Public involvement during the PD&E phase begins the preparation of a PIP. The purpose of a PIP is to identify the potentially affected people in a community, identify special community needs to support the SCE evaluation and define the outreach methods and schedule to involve and gain their input. Depending on the COA for the project, different public involvement actions are used to meet federal and state requirements. See Part 1, Chapter 11, Public Involvement and Part 2, Chapter 4, Sociocultural Effects Evaluation for more information.

Public involvement activities during the Design phase typically begin by preparing a Community Awareness Plan (CAP) and may involve activities such as public information meetings or a design public hearing. See FDM, Part 2, Section 201, Topic No. 625-000-002 for more information. For projects that have completed a PD&E phase, the Design
phase public involvement is built upon the public involvement activities conducted during the PD&E phase.

Public involvement during construction involves responding to public requests for information regarding construction activities and informing the public about construction activities such as lane closures, median changes, business access impacts, work hours, work zones, detours, temporary access, and grand openings. Through public involvement, FDOT provides up-to-date information and solicits public concerns related to the project.

4.3 EMERGENCY RELIEF

When the President of the United States signs an emergency declaration, the cost of debris removal from federal aid roads will be reimbursable from the Federal Emergency Management Agency (FEMA), not FHWA. All other damages are eligible for reimbursement from FHWA. Federal aid roads in Florida are all roadways except those classified as local roads or rural minor collectors.

Each damage site with an estimated cost of repair exceeding $5,000 will be eligible for FHWA reimbursement under the Emergency Relief Program. Each damage location will require documentation on **FHWA Form 1547, Detailed Damage Inspection Report (DDIR)**. Pictures of the damage should be included to support the DDIR description and estimated cost of repair.

There are two types of repairs under the Emergency Relief Program, emergency repairs and permanent repairs. Emergency repairs are those performed to restore essential traffic, to minimize the extent of damage, or to protect the remaining facilities. Repairs that go beyond these three objectives are permanent repairs.

Emergency repairs are eligible for 100 percent federal share if they are made during or right after a disaster (within 180 days). The 180-day period for 100 percent eligibility of emergency repairs may be extended if a District cannot access a site to evaluate damages and the cost of repair. FDOT will request, and the FHWA Division Office will approve and document, extensions on a case-by-case basis for specific locations that cannot be accessed. Emergency repairs do not need an approved federal authorization in place prior to the work being done. The federal authorization can be processed after the repair work is completed.

Emergency repair projects under the Emergency Relief Program must comply with NEPA requirements. Environmental review process for emergency repair projects can be conducted during or after the project is completed (only if the emergency repair is within the existing ROW). Typically, Type 1 CE documentation for emergency repairs is completed pursuant to **Title 23 U.S.C. § 125**. Emergency repair projects to permanently restore the existing facility in-kind at the existing location also qualify and Type 1 CE documents. However, if impacts to protected or otherwise sensitive resources are anticipated, advance coordination with the appropriate resource agencies should be performed to ensure those impacts are adequately addressed.
Permanent repairs must have an approved federal authorization in place before any repair work is done to maintain eligibility for emergency relief federal funding. Permanent repairs are treated just like any ordinary federally funded highway or bridge project. All permanent repair projects shall comply with the environmental clearance requirements prior to FHWA initial authorization. The District Federal Aid Coordinator should be contacted for additional information on the prerequisites needed to obtain an approved federal authorization.

A copy of all DDIRs should be provided to the District Federal Aid Coordinator as soon as possible, even if they haven’t yet been signed by an FHWA engineer. Eventually DDIRs with all necessary signatures will be needed, but it is essential for the District Federal Aid Coordinator to obtain the initial unsigned copies as soon as possible to perform a preliminary assessment of the damage statewide. Additional information on the Emergency Relief Program, including FHWA’s Emergency Relief Manual, can be found at FHWA’s Emergency Relief Program website.

In cases where emergency actions may affect federally listed species and/or critical habitats, emergency consultation with the U.S. Fish and Wildlife Service or National Marine Fisheries Service is required by Section 7 of the Endangered Species Act, as amended (50 CFR § 402.05). See Part 2, Chapter 16, Protected Species and Habitat for guidance on emergency consultation. Emergency consultation procedures allow federal agencies to incorporate endangered species concerns into their response actions—they are not intended to interfere with emergency response efforts.

See Part 2, Chapter 8, Archaeological and Historical Resources for guidelines on complying with Section 106, Chapter 267, F.S., and Section 4(f) where emergency action may affect historic and Section 4(f) resources.

4.4 REFERENCES

AASHTO Practitioner’s Handbook 10: Using the Transportation Planning Process to Support the NEPA Process


FDOT. Complete Streets. Topic No. 000-625-017. http://fdotwp1.dot.state.fl.us/ProceduresInformationManagementSystemInternet/FormsAndProcedures/ViewDocument?topicNum=000-625-017


FDOT. Florida’s Strategic Intermodal Systems (SIS) Plan.  
http://www.dot.state.fl.us/planning/sis/


FDOT. Major Urban Corridor Studies. Policy No. 000-725-010.  
http://fdotwp1.dot.state.fl.us/ProceduresInformationManagementSystemInternet/FormsAndProcedures/ViewDocument?topicNum=000-725-010

https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/traffic/trafficservices/studies/mice/fdot-ice-manual_final_110117665d969768f01f404db4e7a175a3b83f7f.pdf?sfvrsn=c89d75a_0

FDOT. New or Modified Interchanges, Topic No. 525-030-160.  
https://fdotwp1.dot.state.fl.us/ProceduresInformationManagementSystemInternet/FormsAndProcedures/ViewDocument?topicNum=525-030-160

FDOT. Project Management Handbook.  
http://www.dot.state.fl.us/projectmanagementoffice/PMHandbook/pmhandbookindex.shtm

FDOT. Records Management, Procedure No. 050-020-025.  
http://fdotwp1.dot.state.fl.us/ProceduresInformationManagementSystemInternet/FormsAndProcedures/ViewDocument?topicNum=050-020-025

https://www.fdot.gov/rightofway/ProceduresManual.shtm

http://fdotwp1.dot.state.fl.us/ProceduresInformationManagementSystemInternet/FormsAndProcedures/ViewDocument?topicNum=625-030-002

FDOT. Work Program Instructions.  
https://www.fdot.gov/workprogram/development/wp-instructions.shtm

FDOT. 2018. FDOT SWAT Training Workbook.  

https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/content/planning/systems/programs/sm/intjus/pdfs/fdot_iaurg_january_2018.pdf?sfvrsn=3136d1b_0

FHWA. 1987. Guidance for Preparing and Processing Environmental and Section 4(f) Documents. FHWA Technical Advisory T6640.8A

FHWA. 2011. Guidance on Using Corridor and Subarea Planning to Inform NEPA


FHWA. 2015. Guidance on Preliminary Engineering Authorizations in FMIS.  
http://www.fhwa.dot.gov/federalaid/150311.cfm

https://www.fhwa.dot.gov/majorprojects/pmp/guidance17.cfm

FHWA. Detailed Damage Inspection Report, Form 1547

FHWA. Emergency Relief Program website:  
https://www.fhwa.dot.gov/programadmin/erelief.cfm


FHWA. ORDER Classification Code 6640.1A. Policy on Permissible Project Related Activities during the NEPA Process, October 1, 2010

Fixing America’s Surface Transportation (FAST) Act. 2015


Moving Ahead for Progress in the 21st Century (MAP-21), 2012

Rule Chapter 14, Florida Administrative Code, Department of Transportation
Section 335.065, F.S. Bicycle and pedestrian ways along state roads and transportation facilities.


Title 23 CFR § 636.103

Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (42 U.S.C. 4601 et seq.)

4.5 FORMS

Planning Requirements for Environmental Document Approvals, Form No. 650-050-41

Planning Requirements for Environmental Document Approvals with Segmented Implementation, Form No. 650-050-42

4.6 HISTORY

## Approval to Advance Preliminary Design Activities

<table>
<thead>
<tr>
<th>Date:</th>
<th>Document Type: EIS/EA/Type 2 CE</th>
<th>Status: Draft/Final</th>
</tr>
</thead>
</table>

**Project Title:** (PD&E Project Title)  
**FM #:** (PD&E FM)  
**Project Limits:** (NEPA Logical Termin/ETDM Study Limits)  
**ETDM #:**  
**FAPN #:** Attachment

1) Provide a brief description of the project purpose

2) Briefly describe alternative being advanced  
(Physical characteristics; proposed alignment, right-of-way, and typical section)

3) Has alternative been presented to public  
**yes/no**

4) Identify what advanced design is requested and reasons for developing the preferred alternative to a higher level of detail.

5) Summarize commitments that affect the findings and/or design, if any  
*Project Commitment Record*

6) Is Planning Consistency Form complete?  
**yes/no**

7) Indicate if additional design is necessary to make or support findings or permitting as appropriate. (Including but not limited to the examples below)
   a) Section 106  
   b) Section 4(f)  
   c) USFWS  
   d) NMFS  
   e) Concurrent 404b(1)  
   f) Concurrent state ERP  
   g) Concurrent USCG Bridge Permit  
   **Undertaking these activities prior to a NEPA decision is at the risk of the District. OEM will not be committed to approving the Environmental Document.**

Print Name:  
**Project Development Manager/ Environmental Manager**  
Signature:  
Email:  
Date:  
Phone #:  

Project is approved for preliminary engineering:  
**Additional information required:**  
**Explain:**

OEM Signature:  
Date:

---

**Figure 4-2 Approval to Advance Preliminary Design Activities**
Dual Procurement Options under SWAT Process:

1. One contract for both PD&E and design, funded together
   - One firm
   - Team of firms
   - One firm with subcontractors

2. One contract for PD&E with option for design

3. Two contracts for PD&E and design
   - Let simultaneously (at once)
   - Let separately but overlapping

Figure 4-3 Dual Procurement Options
The FDOT PM Structure should match the Consultant Structure, which is one consultant for PD&E and one consultant for Design. A shared PM Structure or a Single PM is most efficient for project development in PD&E and Design.

Figure 4-4 Project Management Structures
Figure 4-5 Final Approval of Interchange Access Requests and the PD&E Study

- District evaluates and documents social, economic and environmental impacts evaluation and planning considerations
- OEM approves the NEPA document per 23 U.S.C. § 327 and the implementing MOU signed by FHWA and FDOT on 12/14/16

**Interchange Access Request Process**

- District prepares interchange access request
- FDOT Chief Engineer approves (and FHWA concurs), or FHWA approves safety, operational and engineering determination per the programmatic agreement signed by FHWA and FDOT.

**Request for FHWA Final Approval**

Steps taken by District and Central Office after the NEPA Document is approved, to request FHWA final approval of the interchange access request through a letter.

1. DIRC Notifies SIRC
2. SIRC verifies NEPA is complete and that concept in NEPA and IAR are the same
3. SMA submits a request for Final Approval

Affirmative Determination by FHWA (Final IAR Approval)**

**Notes:**

- Determination of safety, operation and engineering acceptability of the interchange access request may precede the PD&E study, or occur concurrent with the PD&E Study.
- **FHWA approves the access request by signing the letter of request from FDOT.**
### Planning Requirements for Environmental Document Approvals

<table>
<thead>
<tr>
<th>Document Information:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Date:</td>
<td>(Current Date)</td>
</tr>
<tr>
<td>FM #:</td>
<td>(PD&amp;E FM#)</td>
</tr>
<tr>
<td>Project Name:</td>
<td>PD&amp;E Project Title</td>
</tr>
<tr>
<td>ETDM #:</td>
<td></td>
</tr>
<tr>
<td>Are the limits consistent with the plans?</td>
<td>Y/N (Limits presented for approval should be consistent with LRTP, TIP, STIP, if no explain)</td>
</tr>
<tr>
<td>Identify MPO(s) (if applicable):</td>
<td>(Provide MPO(s) Name)</td>
</tr>
<tr>
<td>Currently Adopted CFP-LRTP</td>
<td>COMMENTS</td>
</tr>
<tr>
<td>Y/N</td>
<td>[If N, then provide detail on how implementation and fiscal constraint will be achieved]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PHASE</th>
<th>Currently Approved TIP</th>
<th>Currently Approved STIP TIP/STIP ($</th>
<th>TIP/STIP FY</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE (Final Design)</td>
<td>Y/N</td>
<td>Y/N</td>
<td>$</td>
<td></td>
</tr>
<tr>
<td>R/W</td>
<td>Y/N</td>
<td>Y/N</td>
<td>$</td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td>Y/N</td>
<td>Y/N</td>
<td>$</td>
<td></td>
</tr>
</tbody>
</table>

| Project Segmented: | N |
| FDOT Preparer’s Name: | | Date: | | Phone #: | |
| Preparer’s Signature: | | Email: | |

*Attach: LRTP, TIP, STIP pages

---

**Figure 4-6 Planning Requirements for Environmental Document Approvals**
# Planning Requirements for Environmental Document Approvals with Segmented Implementation

<table>
<thead>
<tr>
<th>PHASE</th>
<th>Currently Approved TIP</th>
<th>Currently Approved STIP</th>
<th>TIP/STIP $</th>
<th>TIP/STIP FY</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE (Final Design)</td>
<td>Y/N</td>
<td>Y/N</td>
<td>$</td>
<td>FY</td>
</tr>
<tr>
<td>R/W</td>
<td>Y/N</td>
<td>Y/N</td>
<td>$</td>
<td>FY</td>
</tr>
<tr>
<td>Construction</td>
<td>Y/N</td>
<td>Y/N</td>
<td>$</td>
<td>FY</td>
</tr>
</tbody>
</table>

*Attach LRTP, TIP, STIP pages*