PART 1, CHAPTER 4

PROJECT DEVELOPMENT PROCESS

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PART 1, CHAPTER 4

PROJECT DEVELOPMENT PROCESS

4.1 OVERVIEW

This chapter provides an overview of the project development process for transportation projects prepared by Florida Department of Transportation (FDOT). This chapter focuses primarily on projects with a Project Development and Environment (PD&E) phase.

4.1.1 Project Development Process

It is important to understand the sequence and interrelation between Planning, PD&E, Design, Right of Way (ROW), and Construction phases in the project development process to successfully deliver a project.

During the PD&E process, projects are evaluated for potential environmental impacts, to ensure compliance with applicable federal and state laws and regulations. For FDOT Federal Projects this process is followed to comply with the ***National Environmental Policy Act (NEPA)***, state laws and regulations, and the environmental review process required by ***23 United States Code (U.S.C.) § 139***. FDOT State Projects require similar environmental review for preparation of a State Environmental Impact Report (SEIR) (see ***Part 1, Chapter 10, State, Local, or Privately Funded Project Delivery***). Environmental review continues, through project Re-evaluation and permitting, during the Design and Construction phases.

Type 1 Categorical Exclusions (CEs) or Non-Major State Actions (NMSAs) (and occasional Type 2 CEs) do not have a PD&E phase. Environmental evaluations for Type 1 CEs and NMSAs are prepared and approved by the District Environmental Office during the Design phase. See ***Part 1, Chapter 5, Categorical Exclusion*** and ***Part 1, Chapter 10, State, Local, or Privately Funded Project Delivery*** for more information.

Communication among the various offices involved in the project development and delivery process and coordination between project phases is critical to a project's success. Project Managers are responsible for establishing and maintaining communication and coordination throughout the different phases. ***Figure 4–1*** shows the typical project development 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

projects that qualify, see the ***Efficient Transportation Decision Making (ETDM) Manual, Topic No. 650-000-002***. FDOT uses the ETDM Environmental Screening Tool (EST) to gather project information and coordinate with resource agencies, public, and other project stakeholders about the project's potential effect on social, cultural, natural, and physical resources. This information is used to develop the scope of services for a planning 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) for ***NEPA*** documents or approval by the Lead Agency. Information obtained during the 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, permitting, 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 concurrently with the Design phase before the project moves into the Construction phase.

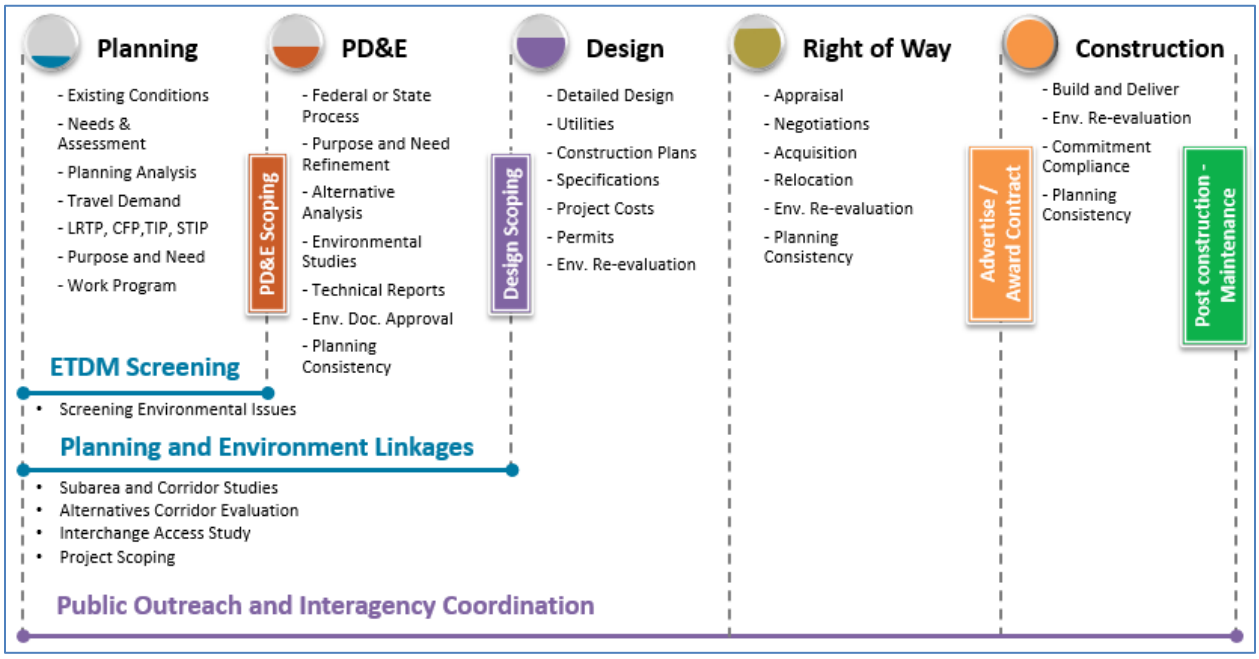

Figure 4-1 Project Development Process

4.1.2 Definitions

Administrative Record – The set of documents that the decision-maker considered in making the final decision that are submitted by the Lead Agency to the court for a ***NEPA*** project involving litigation. The Administrative Record is prepared using the project file in StateWide Environmental Project Tracker (SWEPT).

Build Alternative – A proposed alternative that involves constructing or implementing a project to address the project's purpose and need.

Cost Feasible Plan (CFP) – A plan that consists of projects identified in a long-range transportation plan that are capable of being funded within the 20-year planning horizon.

FDOT Federal Project- A Federal Project with FDOT as the Lead Agency due to ***NEPA*** Assignment. These projects involve FHWA funds and/or affect the interstate during any phase of project development or implementation.

FDOT State Project- A project advanced through the FDOT Work Program using only state funding and/or does not affect the interstate during any phase of project development or implementation.

Final Design – Any design activities following preliminary design and expressly leading to the preparation of final construction plans, detailed specifications for the performance of construction work 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.

Location and Design Concept Acceptance (LDCA)- The approval of the preferred alternative by the Lead Agency.

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, Federal Highway Administration (FHWA) can designate a project with a total cost of less than $500 million as a major project in situations where the project requires a substantial portion of the State Transportation Agency program resources, has a high level of public or congressional interest, is unusually complex, or has extraordinary implications for the national transportation system. 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 with populations over 50,000, as determined by the U.S. Census Bureau. Such boards may also be referred to as Transportation Planning Organizations (TPOs).

NEPA Process – The process for Federal Projects to comply with the procedures and achieve the goals of ***NEPA***.

No-Action (No-Build) Alternative - The option in which the proposed project activity would not take place. The no-action (no-build) alternative provides the baseline for establishing impacts of the build alternatives. The terms no-action and no-build are used interchangeably.

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 PD&E 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 an MPO or a State, as appropriate, during metropolitan or statewide transportation planning under ***23 U.S.C. § 134, § 135***, or ***§ 168*** respectively.

Preferred Alternative - The alternative identified in the Environmental Document that will be advanced to the Design phase.

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. Prior to completion of the ***NEPA*** process, any such preliminary engineering and other activities and analyses must not materially affect the objective consideration of alternatives in the ***NEPA*** process as defined by ***23 CFR § 636.103*** and ***FHWA Order 6640.1A Policy on Permissible Project Related Activities During the NEPA Process***.

Project Development and Environment (PD&E) Phase or PD&E Process- The phase of the project development process that supports the Class of Action Determination. Entering the PD&E phase does not start the PD&E Study. The terms PD&E phase and PD&E process are used interchangeably.

PD&E Activities- Activities included in the ***Work Program Instructions, Part III, Chapter 23.A.*** that support ETDM, the PD&E phase, and ultimately the PD&E Study.

Project Development and Environment (PD&E) Study- The FDOT process of preparing an Environmental Document, including a Type 2 CE, Environmental Assessment (EA), Environmental Impact Statement (EIS), or SEIR once the ***Class of Action Form*** is approved. Type 1 CEs and NMSAs are not PD&E studies, as they do not have a PD&E phase and are prepared during the Design phase.

Project Development Process – A comprehensive process involving multiple project phases including Planning, PD&E, Design, Right of Way (ROW), and Construction.

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

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

to meet project goals and objectives. Project scoping is used to build the PD&E scope of services and starts towards the end of the planning process as the project transitions to the PD&E phase.

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

Reasonable Alternatives [Term used in the EIS only] – A reasonable range of alternatives that are technically and economically feasible and meet the purpose and need for the proposed action.

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 District offices. FDOT has developed Standard Scopes of Services for procuring PD&E phase and Design services, and guidelines for estimating and negotiating staff hours.

State Funds Only (SFO) project – A project that is funded by state funds only. If it is determined that the project will be SFO, then this funding method 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) – The interstate system and all other roads within the state which were under the jurisdiction of the state on June 10, 1995, and roads constructed by an agency of the state for the SHS, plus roads transferred to the state's jurisdiction after that date by mutual consent with another governmental entity, but not including roads so transferred from the state's jurisdiction. These facilities are facilities to which access is regulated. See ***Subsection 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.

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 under ***Section 341.052, F.S***.

Transportation Improvement Program (TIP) – The staged multiyear program of transportation improvement projects developed by an MPO consistent with the LRTP.

4.2 PROCEDURE

4.2.1 Planning Process

The project planning process begins when Metropolitan Planning Organizations (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/Transportation Planning Organizations (TPOs) LRTPs. At the state level, FDOT develops CFPs for the State Highway System (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***.

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.

During the Planning phase, the purpose and need for the project is established based on identified transportation problems, or deficiencies. Travel demand, 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 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 the PD&E phase. Alternatives development typically begins 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 Environment Linkages (PEL), provides a connection between planning-level and environmental review decisions. Planning decisions and the ***NEPA*** process should be integrated to eliminate duplication of analysis and minimize delays in project delivery. The benefit of linking planning decisions and the PD&E phase 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 phase and focus the analyses and technical

studies conducted during the PD&E phase on those issues with potential to impact the project's delivery and recommendations. See the ***Linking Planning and Environmental Review Guidebook***.

Pursuant to ***23 U.S.C. § 168***, ***23 Code of Federal Regulations (CFR) § 450.212***, ***23 CFR § 450.318***, and ***23 U.S.C. § 139(f)(4)(E)***, 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 under existing laws. ***Appendix A*** of ***23 CFR Part 450*** is intended to be non-binding and voluntary. ***23 U.S.C. § 139(f)(4)(E)*** allows elimination of alternatives from detailed evaluation in an Environmental Impact Statement (EIS) for alternatives evaluated during planning.

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 ***NEPA*** and the associated implementing regulations (***23 CFR Part 771*** and ***23 U.S.C. Part 139***). The relevant agency in the ***NEPA*** 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 ***NEPA***.

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.

In accordance with ***23 U.S.C. § 139(f)(4)(E)(ii)***, the Lead Agency may eliminate from detailed consideration an alternative proposed in an EIS if:

- The alternative was considered in a metropolitan planning process or a state environmental review process by a MPO or a state or local transportation agency, as applicable;

- The Lead Agency provided guidance to the MPO or state or local transportation agency, as applicable, regarding analysis of alternatives in the metropolitan planning process or state environmental review process, including guidance on the requirements of ***NEPA*** and any other federal law necessary for approval of the project;

- The applicable metropolitan planning process or state environmental review process included an opportunity for public review and comment;

- The applicable MPO or state or local transportation agency rejected the alternative after considering public comments;

- Office of Environmental Management (OEM) independently reviewed the alternative evaluation approved by the applicable MPO or state or local transportation agency; and

- OEM determined, in consultation with federal Participating or Cooperating Agencies, that the alternative to be eliminated from consideration is not necessary

for compliance with ***NEPA***; or with the concurrence of federal agencies with jurisdiction over a permit or approval required for a project, that the alternative to be eliminated from consideration is not necessary for any permit or approval under any other federal law.

Linking planning and ***NEPA*** does not necessitate that planning products be prepared to a level comparable to a ***NEPA*** analysis. Pursuant to ***23 U.S.C § 134(q)***, ***23 U.S.C. § 135(k)*** and ***49 U.S.C. § 5303(q)***, and ***49 U.S.C. § 5304(j)***, transportation plans and programs are actions which are subject to public comment but exempt from ***NEPA*** review. Because individual projects will be subject to a more comprehensive review, analysis of transportation plans or programs is not required to consider all regulatory or procedural requirements that should be addressed by the ***NEPA*** analysis. To ensure the public is provided an opportunity for input, proper disclosure that FDOT may adopt a planning product must be made. The following notice must be inserted on the cover page of 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 five years (from the date the product was approved), the information used to prepare the planning product must be reviewed to determine 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*** process. OEM must be consulted when making this decision.

Planning studies adopted for consideration in the ***NEPA*** process should be uploaded in the StateWide Environmental Project Tracker (SWEPT). The ***Preliminary Engineering Report (PER)*** should include a summary of the alternatives considered in the planning study and the reason for eliminating them or carrying them forward for further consideration in the PD&E Study (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 (see ***Part 2, Chapter 3A, Alternatives Analysis***).

4.2.3 Interagency Coordination and Public Involvement

Public involvement, which provides opportunity for input from interested and affected members of the public, local governments, and environmental resource agencies, is required by both federal and state laws, as well as FDOT procedure (see ***Community Engagement, Policy 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 project issues

or challenges, ROW acquisition, relocations, and access modifications. See the ***Public Involvement Handbook*** for guidance on developing and implementing effective public involvement for transportation projects.

During the ETDM Planning and Programming screens, resource agencies interested project stakeholders, and the public 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 with the preparation of a ***Public Involvement Plan (PIP)*** to identify the potentially affected people in a community, identify special community needs to support the Community Impact Assessment (CIA), and define the outreach methods and schedule to involve and gain community input. Depending on the Environmental Document prepared 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, Community Impact Assessment*** 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 1, Chapter 104, Public Involvement*** 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 input related to the project.

4.2.4 Efficient Transportation Decision Making 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. Early considerations of the project's purpose and need.

4. Early considerations of alternatives to be eliminated;

5. Full and early public and Environmental Technical Advisory Team (ETAT) member participation;

6. Linkage between Planning and PD&E (including ***NEPA***); and,

7. 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, and using interactive techniques.

The ETDM process facilitates early interaction among transportation planners; federal, state, and local agencies; Federally Recognized Native American Tribes (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 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 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 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 the ***ETDM Manual, Topic No. 650-000-002*** for more information about the EST.

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, or when seeking ETAT and public input on a planning study. 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 phase. 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 and seeks 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 Transportation Improvement Program (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 phase, and assist in determining the appropriate Class of Action (COA) for the project.

Within the ETDM process, the Environmental Scoping Process [as required by ***23 CFR § 771.123(b)(1)***, for 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***.

4.2.5 Environmental Review for Early Acquisition Projects

Section 108 of Title 23 U.S.C. provides that, subject to the terms and conditions set forth therein, acquisition of ROW acquired in advance of any federal approval or authorization, including ***NEPA*** approval, may receive federal aid participation. Early acquisition of property interests for transportation projects may be for purposes such as corridor preservation and access management.

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 require coordination with OEM to confirm 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***.

An 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 the ***NEPA*** process 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 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*** process without affecting subsequent approvals required for the transportation project by the state or any federal agency. Although early acquisition can occur prior to the ***NEPA*** decision on the transportation project, these property interests cannot influence the selection of the preferred alternative.

FDOT must comply with ***NEPA*** procedures, and the 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*** in 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 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 for the request met by satisfying and documenting the requirements of ***23 CFR Part 624, Interstate System Access***, FDOT's ***Procedure No. 525-030-160, New or Modified Interchanges***, and the ***Programmatic Agreement Between the FHWA Florida Division and the FDOT Regarding the Review and Approval of Specific Types of Changes in Interstate-System Access***.

The first part (SO&E acceptability) may precede or occur concurrently with the PD&E phase. The SO&E acceptability must be approved prior to LDCA. 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 an IAR by FHWA and cannot proceed until 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.

23 CFR Part 624, Interstate System Access focuses on the technical feasibility of access request proposals to support the FHWA's determination of SO&E acceptability. To streamline project reviews, ***23 CFR Part 624*** requires environmental impacts evaluation and planning considerations of IAR proposals be addressed through the ***NEPA*** process. FDOT addresses and documents environmental impacts evaluation and planning considerations in the PD&E Study.

The FDOT State Interchange Review Coordinator requests final approval of an IAR by submitting a letter to FHWA notifying that the SO&E and LDCA (or completion of the Type 1 CE) are complete. The letter also confirms that the preferred alternative concept is the same in the SO&E and the ***NEPA*** documents

An IAR reevaluation is performed to document compliance with state and federal requirements due to a change in the approved IAR design concept, change in traffic

condition or failure of an IAR to progress to construction within three years of approval (See the ***FDOT Interchange Access Request User's Guide***). If a re-evaluation of the IAR is required, it should be completed and documented before the approval of the Re-evaluation of a ***NEPA*** document.

4.2.7 PD&E Phase Scoping

The process for scoping a PD&E phase builds on the information obtained from the ETDM screening and planning product. 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 process for scoping the PD&E phase, outlined in this chapter, is applicable to FDOT Federal Projects and FDOT State Projects.

The project scoping 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***.

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, the significance of potential project impacts, and the timing and future phases of the project. A well-prepared PD&E scope produces a foundation upon which the project development occurs. Additionally, a well-prepared scope sets expectations 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 phase. 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 in accordance with the ***Project Development Policy, Topic No. 000-525-055***. During project scoping the Project Manager should work collaboratively with District staff from relevant functional offices to identify or verify project needs and potential issues that will be addressed by the PD&E Study. Early input from the various District offices and subject matter experts is essential to develop effective project scopes that focus on project issues. The PD&E scope of services is prepared using SWEPT.

4.2.7.1 Early Internal Coordination

To ensure that project decisions get broad input and early support, communication and collaboration within District offices is beneficial when projects are evaluated for inclusion in the ***Tentative Work Program***, prior to development of the PD&E Scope of Services. It is recommended that the Project Manager coordinate with staff from:

- Work Program

- Production/Scheduling
- Intermodal Systems Development (ISD)/Planning
- Safety
- Design
- Structures
- ROW
- Traffic Operations
- Maintenance
- Environmental Management
- Environmental Permitting
- Program Management
- Professional Services Unit
- Other offices as needed

This should include the SIS Coordinator, MPO Liaisons, subject matter experts, and ETDM Coordinator.

Before the start of the PD&E phase, Districts should consider holding inter-disciplinary team meetings to evaluate the preliminary project scope by:

- Understanding the project objectives and purpose and need
- Discussing, confirming or refining the project limits
- Discussing the anticipated Class of Action (COA)/Environmental Document type
- Reviewing context classification
- Evaluating a cost estimate and baseline schedule to determine if adequate time and funding are available to address the project objectives
- Reviewing and verifying the status of project planning activities (e.g., ETDM planning and programming screens or planning product) that are performed to support the PD&E phase
- 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
- 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
- Discussing and refining the initial project schedule to ensure appropriate critical tasks (with planned durations) for the project development are included

An State Funds Only (SFO) identifier is assigned to projects that are recommended to use only state funds.

4.2.7.2 Start Ahead of a PD&E Study

The District should explore options to collect data and conduct technical studies and surveys ahead of the PD&E Study to assist in determining the COA. Advancing project activities 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. ***PIP***, including public outreach;
6. Cultural Resources Assessment Survey;
7. Contamination screening; and,
8. Other technical studies or coordination as project characteristics allow.

4.2.7.3 Project Schedule

To streamline development of PD&E schedules, FDOT has developed project schedule templates for the PD&E phase (by anticipated Environmental Document type) to support sequencing, implementation and execution of the Work Breakdown Structure 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

Work Breakdown Structure 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 according to the ***Project Development Policy, Topic No. 000-525-055***. Environmental PSM codes can be downloaded from FDOT's ***PD&E Manual Website*** under PSM Codes and Schedule Templates. Entering the PD&E phase supports the PD&E Study and COA determination. For a Type 2 CE, EA, or SEIR the official start date is the date the ***Class of Action Form*** is approved. For an EIS, the ***Notice of Intent (NOI)*** serves as the official 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. The Project Manager should develop a project schedule 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 and comment resolution by the District, OEM and Cooperating Agencies, as appropriate. When a 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. Scheduling guidance and recommended practices for both FDOT and consultant project managers can be found at FDOT's ***Project Management Resource Page***.

4.2.7.4 Level of Engineering Detail

The level of engineering detail should be contingent upon the future phases of the project and is determined based on early internal coordination as discussed in ***Section 4.2.7.1***. At a minimum, engineering activities for a PD&E Study are performed to a level of detail necessary to analyze and compare the effects of the project alternatives on the social, natural, cultural, and physical environment. The level of engineering 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 an FDOT Federal Project, the PD&E phase and Design phase can begin concurrently provided that the preliminary design activities comply with ***23 CFR Part 771***. Essentially, if the project is anticipated to be an EIS, the preliminary engineering activities must not limit the choice of reasonable alternatives. FDOT State Projects 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***).

4.2.7.4.1 Permissible Project Related Activities for FDOT Federal Projects

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 for FDOT

Federal Projects. To comply with and utilize the flexibility provided in the FHWA directive, the Districts may perform preliminary design activities prior to a ***NEPA*** decision regardless of the project delivery method 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 9, Chapter 901, Sequence of Plans Preparation, 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, Initial Engineering Design Process***. The District must coordinate with OEM to determine whether advancing preliminary design activities (that are not listed in the definition of preliminary design or ***Appendix A of FHWA Order 6640.1A***), is appropriate. Concurrence from OEM must be obtained in writing. In accordance with the ***Guidance on Preliminary Engineering Authorizations in Fiscal Management Information System (FMIS)***, the activities are eligible for Federal-Aid reimbursement once they are approved by FHWA, but until a project is authorized in the FMIS and federal funds obligated, there is no guarantee of federal funding for any pre-authorization preliminary work.

For Design-Build Projects, other activities necessary to establish the final design parameters, (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.

4.2.7.4.2 Overlapping PD&E and Design Phases

The Project Manager should consider the benefits and risks associated with overlapping preliminary design activities with PD&E. First, there is always the possibility 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 4.2.7.4.1*** for the level of preliminary design detail allowed in PD&E studies. To mitigate the risk, some select PD&E studies may be procured concurrently with the Design phase. Projects with complex scopes that may require evaluation of multiple alternatives should not be procured concurrently with the Design phase.

There are three contracting 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.

The Project Manager should work closely with the 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 FDOT 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 Project Manager should be mindful of alternatives analysis considerations and other risks associated with advancing final design activities with a SEIR.

4.2.7.5 Scope of Services

The Project Manager reviews the ***Programming Screen Summary Report*** before advancing the project to the PD&E phase. The report helps the Project Manager to become familiar with the existing environmental setting and helps with the understanding of the environmental topics/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 phase, the Project Manager should 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 process.

The Project Manager consults with the District Environmental Office staff for input regarding project activities and/or impacts. The Project Manager works with an interdisciplinary project team, composed of members from Planning, Environmental Management, Design, ROW, and Construction offices to complete the PD&E phase scope of services. The Project Manager can use the ***PD&E Phase Standard Scope of Services*** development tool. For overlapping PD&E and Design, the ***Combined PD&E Study and Design Standard Scope of Services*** can be used 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.

4.2.7.6 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. This procedure recognizes the requirement for obtaining ***NEPA*** approval pursuant to ***23 CFR § 771.113***, before a District can issue the notice to commence construction. 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.

4.2.7.7 Project Management Plan and Financial Plan for Major Projects

Pursuant to ***23 U.S.C. § 106(h)***, Major Projects, estimated at $500 million or more, are required to have an FHWA approved Project Management Plan (PMP) and an annual Financial Plan, including a phasing plan when applicable. The PMP for Major Projects must document procedures and processes in effect to provide timely information to the project decision makers to successfully manage the scope, costs, schedules, and quality of and the federal requirements applicable to the project. 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.

Projects that are determined to be a major project should have a ***Cost and Schedule Risk Assessment (CSRA)*** and a ***Project Management Plan*** drafted prior to the PD&E phase. See the ***FHWA Project Management Plan Guidance for Major Projects*** for direction.

The Financial Plan for a Major Project is coordinated by the Project Finance Office in the Office of Comptroller and should 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.

4.2.7.8 Quality Control

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

All work associated with a PD&E Study should adhere to a project specific QC Plan to ensure project deliverables conform to applicable laws, regulations, and FDOT procedures. The QC Plan should address the internal QC process performed by the PD&E Study team. The Plan should ensure 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 should 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 QA/QC checklists for PD&E studies and Re-evaluations. The template and the QA/QC checklists can be downloaded from FDOT's ***Documents & Resources Website***. Additional information on the development of QC plans can be found on FDOT's ***Project Management Resource Page***.

4.2.7.9 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 reaching its objectives.

A ***CSRA*** is required if the total project costs exceed $100 million. For projects with costs of $100-500 million, coordination with the District Consultant Project Management Engineer is needed. If total project costs exceed $500 million, then coordination with the FDOT Central Office and FHWA is required. Risk management is most effective when performed early in the project and assessed continuously throughout the project. ETDM screening events (***Section 4.2.3***) and early internal coordination 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 the PD&E phase 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 should 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. Additional information for identifying and managing project risks can be found in FDOT's ***Project Management Resource Page***.

4.2.8 PD&E Phase

The PD&E phase builds on the outcome of the ETDM screening, early internal coordination, and prior planning products, 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 2, Chapter 3, Engineering Analysis*** and ***Part 2, Chapter 3A, Alternatives Analysis*** for more information on alternatives analysis. Environmental analyses performed for the PD&E Study evaluate the project's effect on social, cultural, natural, and physical topics/resources. During the environmental analysis, potential mitigation options may be developed based on unavoidable impacts. See ***Part 2 of this Manual***, for procedures on how to perform and document analyses for environmental topics/resources. Technical reports documenting the results of this analysis are discussed in ***Section 4.2.8.2***. For an interactive document to aid in the navigation of the PD&E process, see the ***PD&E Roadmap***.

For FDOT Federal Projects, each Environmental Document and technical report should include the ***NEPA*** Assignment Standard Statement on the cover page:

> *The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by the Florida Department of Transportation (FDOT) pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding dated May 26, 2022, and executed by the Federal Highway Administration and FDOT*.

The cover page of technical reports is prepared using either ***Technical Report Cover Sheet, Form No. 650-050-38b*** for technical reports requiring an engineer signature and seal (e.g., ***PER, Typical Section Package***), or ***Technical Report Cover Sheet, Form No. 650-050-38a*** for those that do not [e.g., ***Cultural Resource Assessment Survey (CRAS) Report, Natural Resources Evaluation (NRE)***].

Throughout the PD&E process, interagency coordination is conducted to consider project impacts, permitting requirements, project commitments, and funding sources. Commitments established as a result of the PD&E Study and/or agency coordination/consultation must be documented as described in ***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 FDOT Federal Projects is typically determined once sufficient analysis has occurred before the public hearing (if applicable) (see ***Part 1, Chapter 2, Class of Action Determination for Federal Projects***). FDOT Federal Projects may proceed as a CE, EA, or EIS. If the project is an FDOT State Project, it may proceed as a SEIR.

Standard statements may be used to document coordination and findings in the Environmental Document. These standard statements have been developed to document compliance with ***NEPA***, FHWA policy, ***23 CFR Part 771***, and other federal laws and requirements. Standard statements are in italics for easy reference and are found in applicable chapters in ***Part 2 of this Manual***.

FDOT Federal Projects should meet planning consistency requirements outlined in ***23 CFR Part 450*** prior to OEM approval for LDCA. Environmental Documents submitted to OEM for approval must include the appropriate planning consistency documentation. See ***Part 2, Chapter 1, Project Description, Purpose and Need, and Planning Consistency*** for guidance on meeting planning consistency requirements.

Type 2 Categorical Exclusions

Type 2 CEs are projects without significant impacts, but which may require more detailed analysis of relevant issues and public involvement than Type 1 CEs. These projects typically go through a PD&E phase before advancing into the Design phase. 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 SWEPT project file and appropriately summarized or referenced in the Type 2 CE. The processing and documentation of Type 2 CEs is discussed in ***Part 1, Chapter 5, Categorical Exclusion***. The document of record for LDCA is the signed ***Type 2 Categorical Exclusion Determination Form***.

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. A Draft Environmental Impact Statement (DEIS) is required 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 with 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 is described in ***Part 1, Chapter 8, Draft Environmental Impact Statement*** and the FEIS and FEIS/ROD in ***Part 1, Chapter 9, Final Environmental Impact Statement***.

State, Local, or Privately Funded Projects

FDOT State Projects that qualify for EST screening require a SEIR, which could have comparable levels of impact and analysis equivalent to a federal Type 2 CE, EA, or EIS. For Local Agency or Private Entity Managed Projects, a Project Environmental Impact Report (PEIR) may be prepared. PEIRs are typically used by non-FDOT entities when state funds are used or a project advanced through other unique funding mechanisms. The processing, review, and approval of FDOT State Projects and Local Agency or Private Entity Managed Projects are described in ***Part 1, Chapter 10, State, Local, or Privately Funded Project Delivery***.

4.2.8.2 Project Reports and Documentation

Documentation for a PD&E Study includes the Environmental Document, technical reports, as well as other data, memoranda, maps, meeting summaries, comment/response matrices and other materials developed to support the study. The PD&E Project Manager is responsible for collecting, maintaining, and filing documentation for a PD&E Study in the SWEPT project file. SWEPT maintains the official project file for PD&E studies. It is recommended that documents be placed within the applicable folder in SWEPT according to FDOT's ***SWEPT Project File Organization Guide*** on FDOT's ***PD&E Manual Website*** and SWEPT. The project file provides the technical documentation supporting the PD&E Study's decision-making process. The Project Manager should begin compiling the project file at the start of the PD&E phase, continue to add documents throughout the phase, 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 the PD&E phase are available for the next phase of the project development process. Additionally, a complete project file is essential to preparing and compiling an adequate Administrative Record for the project when required.

All project documents are 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***. See

Table 4-1 for 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.

4.2.9 Design Phase

The purpose of the Design phase is to prepare the detailed engineering design, ROW limits, contract plans, specifications, and estimates for the project. FDOT's design process follows the design criteria and procedures established in the ***FDM, Part 2*** and the requirements for preparation and assembly of contract plans established in ***FDM, Part 9***.

The review of design and construction plans for Design-Bid-Build projects (conventional projects) typically 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. Some projects that are Type 1 CE or NMSA can have two phase reviews. The appropriate number of submittal phases for 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. The Technical Proposal is submitted to FDOT during the procurement of the contract. The 90% and Final submittal phases occur after the award. The 60% submittal phase is required for complex or Category 2 structures (structure with greater design difficulty and complexity) ***(FDM, Part 1, Chapter 121, Bridge Project Development)***. ***FDM, Part 9, Chapter 901, Sequence of Plans Preparation*** 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. All projects with an estimated total cost of $50 million or more, or $40 million for a bridge project, must have a Value Engineering (VE) study performed during the development of the project and prior to the final design. A VE study may occur after the alternative analysis is complete. If the VE is performed during the PD&E phase, it must be completed prior to the public hearing so the public can be aware of the related enhancements. 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 phase 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 previous plan submittals are addressed.

During the Design phase, new or updated surveys may be needed to confirm impacts. Additionally, mitigation requirements should be reconciled with actual impacts based on the final design features of the project. Changes in design, environment, or laws which may have occurred since the approval of the final Environmental Document or any previous Re-evaluations are addressed. ***Part 1, Chapter 13, Re-evaluations*** explains the Re-evaluation process.

4.3 EMERGENCY RELIEF

The FHWA Emergency Relief Program and the Federal Emergency Relief Program's (FEMA's) Emergency Management Assistance Program are activated when a Governor's Proclamation of a State of Emergency or a Presidential Declaration of a State Emergency is issued. They provide federal assistance for debris removal and the repair of disaster-damaged federal-aid highways and bridges. There are two types of repairs under the FHWA 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.

For information on the eligible activities and the preparation of documents necessary for reimbursement, see ***FDOT Environmental Review Guidance for Emergency Relief Projects***.

4.4 REFERENCES

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

FDOT, Efficient Transportation Decision Making Manual, Topic No. 650-000-002.https://www.fdot.gov/environment/oem-divisions/qa-qc/etdm-manual

FDOT, Environmental Review Guidance for Emergency Relief Projects. https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/environment/pubs/2025-fdot-environmental-emergency-guidance_final.pdf?sfvrsn=6847e36c_1

FDOT, FDOT Design Manual, Topic No. 625-000-002. https://www.fdot.gov/roadway/fdm/2023-FDM

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

FDOT, Interchange Access Request User's Guide. https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/planning/systems/systems-management/document-repository/iar/fdot-iaurg_final9f627242-aad3-4beb-861c-2ab1cdcd2352.pdf?sfvrsn=49d1416c_1

FDOT, Manual on Intersection Control Evaluation, Topic No. 750-010-003. https://pdl.fdot.gov/

FDOT, New or Modified Interchanges, Topic No. 525-030-160. https://pdl.fdot.gov/

FDOT, Project Development Policy, Topic No. 000-525-055. https://pdl.fdot.gov/api/procedures/downloadProcedure/000-525-055

FDOT, PD&E Roadmap. https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/environment/pubs/pdeman/pde_roadmap_interactive_final20250506.pdf?sfvrsn=b91af4f_1

FDOT, Project Management Resource Page. https://www.fdot.gov/designsupport/pm/resourcepage

FDOT, Public Involvement Handbook. https://www.fdot.gov/planning/policy/community-engagement/resource-guide.shtm

FDOT, Records Management, Procedure No. 050-020-025. https://pdl.fdot.gov/

FDOT, Right of Way Procedures Manual, Topic No. 575-000-000. https://www.fdot.gov/rightofway/ProceduresManual.shtm

FDOT, SWEPT Project File Organization Guide. https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Ffdotwww.blob.core.windows.net%2Fsitefinity%2Fdocs%2Fdefault-source%2Fenvironment%2Fpubs%2Fswept-file-quick-guidance.xlsx%3Fsfvrsn%3D39a0be74_6&wdOrigin=BROWSELINK

FDOT, Value Engineering Program. Topic No. 625-030-002. https://pdl.fdot.gov/

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

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

FHWA, 2017. Project Management Plan Guidance for Major Projects. https://www.fhwa.dot.gov/majorprojects/pmp/guidance17.cfm

FHWA, Linking the Transportation Planning and National Environmental Policy Act(NEPA) Processes. http://www.fhwa.dot.gov/hep/plannepa050222.pdf

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

National Environmental Policy Act of 1969 (NEPA) as amended (42 U.S.C. § 4321 et seq.). https://www.govinfo.gov/content/pkg/COMPS-10352/pdf/COMPS-10352.pdf

Programmatic Agreement Between the FHWA Florida Division and the FDOT Regarding the Review and Approval of Specific Types of Changes in Interstate-System Access, April 2, 2025. 2025-fhwa-fdot-interstate-programmatic-agreement_executed.pdf

Title 23 CFR Part 624, Interstate System Access. https://www.fhwa.dot.gov/programadmin/fraccess.cfm

Title 23 CFR § 636, Design-Build Contracting. https://www.ecfr.gov/current/title-23/chapter-I/subchapter-G/part-636

Title 23 CFR § 771, Environmental Impact and Related Procedures. https://www.ecfr.gov/current/title-23/chapter-I/subchapter-H/part-771

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

4.5 FORMS

Technical Report Cover Sheet, Form No. 650-050-38a

Technical Report Cover Sheet Requiring PE Signature, Form No. 650-050-38b

FDOT forms are found in the Procedural Document Library

Table 4-1 Reports and Design Information Maintained in Project File if Completed in the PD&E Phase

Documentation	If Applicable
Scope of Services	
Draft Environmental Document (Type 2 CE, EA, DEIS, SEIR)	
Approved Final Environmental Document (Type 2 CE, EA with FONSI, FEIS/ROD, FEIS, ROD, or SEIR)	
Summary of Public Involvement (SPI)	✓
Public Involvement Plan (PIP) (for Type 2 CEs without a PD&E phase, include ***CAP*** instead of ***PIP***)	
Navigation Impact Report	✓
United States Coast Guard (USCG) Bridge Project Questionnaire	✓
Project Traffic Analysis Report (PTAR)	✓
Bridge Development Report (BDR)	✓
Bridge Replacement Report (BRR)	✓
Bridge Hydraulic Report (BHR) for the preferred alternative	✓
Bridge analysis with supporting location and design recommendations for each viable structure alternative	✓
Preliminary scour analysis	✓
Conceptual Transportation Management Plan (TMP)	✓
Design Exceptions/Variation package	✓
Financial Plan	✓
Geotechnical report (PE signature required)	
Interchange Access Request (IAR) and associated documents (***Methodology Letter of Understanding*** and FHWA's SO&E Affirmative Determination Letter)	✓
Intersection Control Evaluation (ICE) Forms	✓
Location Hydraulics Report (LHR)	✓
Preliminary Engineering Report (PER) (PE signature required)	✓
Preliminary plans for preferred alternative with ROW dimensions	

Table 4-1 Reports and Design Information Maintained in the Project File if Completed in the PD&E Phase (Page 2 of 2)

Documentation	If Applicable
Preliminary stormwater design (including any drainage reports, preliminary drainage design, ***Pond Siting Report (PSR)***, ***Stormwater Management Alternatives Report (SMARt)***, and/or ***Conceptual Drainage Design Report***	✓
Preliminary System Engineering Management Plan (PSEMP)	✓
Project Management Plan	✓
Risk Management Plan	✓
Typical Section Package (PE signature required)	
Value Engineering Study Report (PE signature required)	✓
CIA Technical Memorandum	✓
Conceptual Stage Relocation Plan (CSRP)	✓
Farmland Conversion Impact Rating Form	✓
Section 4(f) Evaluation	✓
Cultural Resource Assessment Survey (CRAS) Report	
Case Study Report	✓
Natural Resources Evaluation (NRE) (wetlands, protected species and habitat, Essential Fish Habitat) or technical memo	
Sea Level Impact Projection (SLIP) Study	✓
Sea Level Rise Analysis	✓
Noise Study Report (NSR)	✓
Air Quality Technical Memorandum	✓
Contamination Screening Evaluation Report (CSER) or Contamination Screening Technical Memorandum	
Utility Assessment Package	✓

Note: Additional environmental and technical reports (including planning products), which are the basis of PD&E Study decisions, must also be kept in the project file.