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Chapter 1 - Introduction

1.1 Purpose

The Planning phase of project development involves integration and collaboration between statewide and metropolitan transportation planning processes and any project planning decisions, activities, or studies conducted to support future project development. The project planning process begins when transportation agencies identify needs or potential projects that could meet those needs.

The Florida Department of Transportation (FDOT) Project Planning Manual (the Manual) promotes efficiency and consistency for the project development of transportation projects across the state by establishing clear guidance for the project planning phase. Its purpose is to provide an overview of the requirements that must be followed during project planning activities to ensure planning products and decisions can be used as a basis for subsequent project phases, including Project Development and Environment (PD&E) and Design, thereby streamlining overall project delivery. The Manual builds on regulatory requirements and outlines FDOT policies, key principles, best practices, and targeted outcomes for planning products and decisions.

This Manual serves as a reference for all transportation professionals involved in the project planning process. The Manual is organized as follows:

- **Chapter 1** – Describes the purpose of this manual and gives an overview of project planning.
- **Chapter 2** – Discusses the project planning process and considerations for determining if a project planning study is needed.
- **Chapter 3** – Details how to define the transportation problem and develop the project purpose and need.
- **Chapter 4** – Details how to develop and evaluate potential improvements.
- **Chapter 5** – Describes the documentation to include in project planning studies and linking the project planning study recommendations to the project programming process.

1.1.1 Applicability

The Manual is primarily intended for projects referred to as “qualifying projects” in **FDOT’s Efficient Transportation Decision Making (ETDM) Manual Chapter 2** and **FDOT PD&E Manual Part 1, Chapter 2** that require ETDM screening and may advance to a PD&E Study. Qualifying projects include select roadway projects, such as new or expanded highways, interchanges, and bridges, that add capacity or provide new access, and major public transportation projects. However, it is important to note that this guidance is primarily intended for roadway and bridge projects and may not be directly applicable to transit, rail, airport, seaport, and spaceport projects. These project types follow separate environmental review processes and involve different lead agencies, regulatory requirements, and review frameworks.

FDOT's Transit Corridor and Project Evaluation Guidance provides information on the planning process for transit projects. This Manual is intended to complement project planning practices developed by FDOT Districts and preserve each District's independent decision-making flexibility.

While "qualifying projects" are the focus, the Manual is built on planning best practices and therefore, the guidance within it is beneficial for all types of planning studies and planning-level analyses. This includes activities such as existing conditions analyses, safety audits, needs assessments, and any planning activities that may inform or support projects not requiring a PD&E Study. Applying the principles and best practices outlined in this Manual to these early or supporting analyses can help improve consistency, documentation quality, and subsequently the ability to efficiently carry the project through the project development phases to implementation.

1.1.2 Relationship to Other Policies

A key goal of the Manual is to support **FDOT's Project Development Policy (Document No.: 000-525-055)**, which establishes that:

- FDOT will program and fund preliminary engineering, PD&E, and Design phases of transportation projects with the requirement that project funding is available and programmed for construction within eight years from the start of the PD&E phase.
- PD&E studies for new alignment projects and capacity improvement projects must be completed to the maximum extent possible within 18 months after the date of commencement (**Section 334.63, Florida Statutes [F.S.]** [*Project Concept Studies and Project Development and Environment Studies*]).

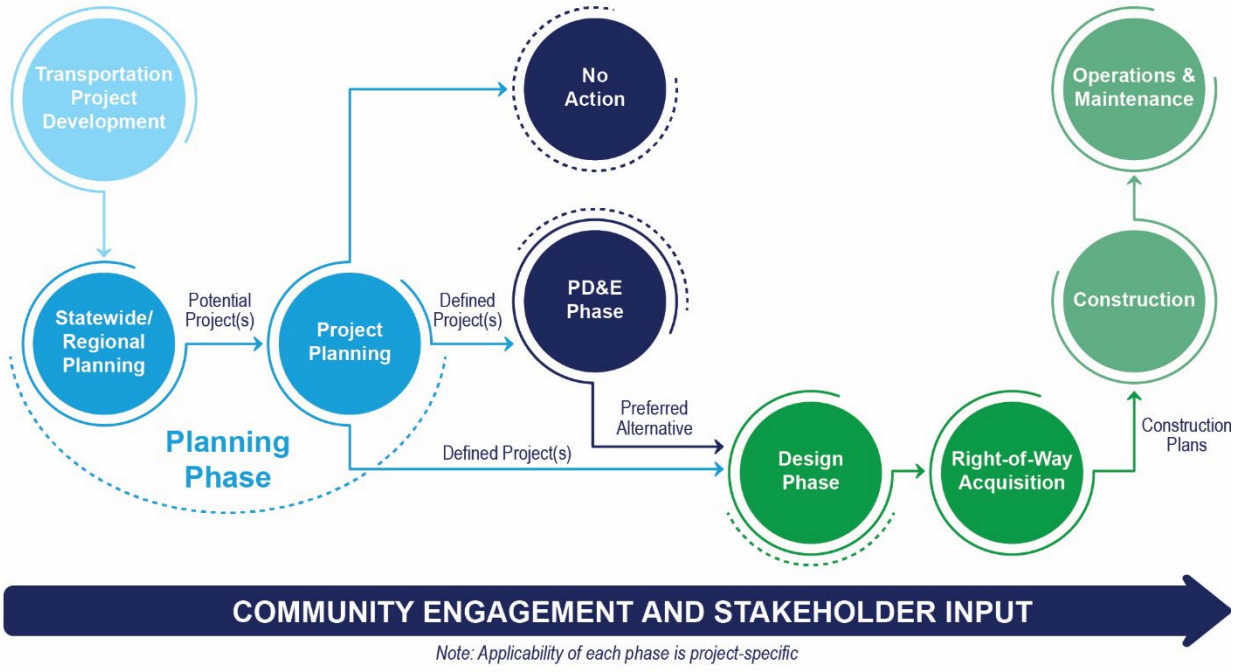
The Manual also reinforces Federal and State Planning and Environment Linkages (PEL) guidance which promotes stronger connections between the planning phase and subsequent National Environmental Protection Act (NEPA) environmental reviews. Both the Manual and PEL guidance serve to streamline project delivery, improve decision-making, and reduce duplication of effort by carrying forward relevant planning information into the environmental review process where appropriate.

1.2 Florida Department of Transportation (FDOT) Project Development Life Cycle

The FDOT project development process is a structured, multi-phase approach used by FDOT and its partners to identify transportation needs and advance projects from initial concepts to construction. As shown in ***Figure 1.2.1***, the process moves sequentially through Planning, PD&E, Design, Right of Way, Construction, and Operations and Maintenance, with decisions at each phase informing how the project advances.

This process may vary depending on the scale and complexity of a project. Each phase may not be required for all project types, or the phases may be overlapped or streamlined based on the nature of the project. Minor projects, such as resurfacing, safety improvements, or operational enhancements, may advance quickly because they involve limited environmental impacts, minimal design complexity, and no right of way acquisition. In contrast, larger or more complex projects, such as new roadway corridors, major widenings, or interchange reconstructions, typically require more extensive planning studies, consideration of multiple alternatives, and development of PD&E studies to comply with the NEPA when applicable.

Figure 1.2.1 Project Development Process



Note: Applicability of each phase is project-specific

1.2.1 Planning Phase

The Planning phase identifies and prioritizes transportation needs based on existing and future conditions and establishes the policy framework for investment decisions. This phase integrates statewide, regional, and metropolitan planning efforts to define problems, set goals, and identify potential projects. Once a project has been identified and prioritized, project planning activities help refine the project's purpose and need, consider preliminary alternatives, and position projects for advancement to subsequent phases of project development.

1.2.1.1 Statewide and Regional Planning

Project planning activities are often initiated after a potential project has been identified as part of statewide and regional transportation planning efforts. In urban areas with populations of 50,000 or more, metropolitan planning organizations (MPOs) develop Long-Range Transportation Plans (LRTPs) that identify regional transportation needs and project priorities to address those needs. FDOT collaborates with MPOs to fund their highest-priority projects through inclusion in the Statewide Transportation Improvement Program (STIP). In non-metropolitan areas outside MPOs, FDOT works directly with local governments to understand and document their transportation needs.

FDOT also uses various statewide transportation planning efforts to identify long-range transportation needs and near-term prioritized projects that may require further evaluation through project planning. FDOT documents statewide long-range transportation planning efforts in the Florida Transportation Plan (FTP), the state's single overarching plan guiding Florida's future transportation vision, goals, and objectives. FDOT also develops statewide plans for various modes, such as seaports, public transportation, aviation, and rail.

1.2.1.2 Project Planning

Project planning serves as the connection between an identified transportation problem and project implementation by building on the priorities established by statewide, metropolitan, and other planning processes. However, while many projects originate from MPOs, local governments, or statewide plans, others may be advanced by FDOT based on observed safety needs or traffic operations studies. In all cases, project planning seeks to move specific projects toward delivery by translating broad transportation goals into a project-specific framework that sets the stage for subsequent phases of project development.

Project planning studies are initiated to better define and create a stronger linkage to the components of future phases, including the PD&E phase. Project planning activities may involve refining the project's purpose and need, analyzing community and environmental data, developing and evaluating preliminary alternatives and associated cost estimates, and conducting outreach and engagement with affected communities, key stakeholders, and partner agencies. To streamline future project development, project

planning may also include technical studies that assess high-level feasibility, define project scope and priorities, and reduce risks in later phases. By evaluating transportation corridors, facilities, and services within their physical, environmental, and community contexts, project planning efforts help produce a defined transportation project with sufficient clarity to advance into the PD&E phase. More information on project planning studies and activities can be found in **Section 2.2: Types of Project Planning Activities**.

Although this Manual is focused on the FDOT project development process, it can also be used by partner agencies, such as MPOs, city and county governments, expressway authorities, and other entities, to conduct project planning activities that align with FDOT's project development framework. The guidance in this Manual can assist partner agencies in structuring their own planning studies to better define purpose and need, evaluate preliminary alternatives, consider environmental and community context, and document decisions in a manner that facilitates coordination with FDOT and smooth transition into later project development phases. By promoting a shared understanding of expectations, terminology, and level of detail, this Manual helps improve consistency and alignment between locally led planning efforts and FDOT led project development.

1.2.2 Project Development and Environment (PD&E) Phase

The PD&E phase evaluates project alternatives for potential community and environmental impacts to comply with federal and state requirements, including NEPA. During this phase, FDOT refines the project's purpose and need, develops and evaluates alternatives, conducts technical and environmental studies, and engages agencies and the public to identify a preferred alternative. Cost estimates are also updated and refined based on the preferred alternative. The PD&E phase concludes with environmental approval which documents the selected alternative and establishes the project's location, conceptual design, and commitments for future phases.

NEPA requires federal agencies to assess the environmental impacts of qualifying projects, including highway construction. For more information, refer to **1.4.3 National Environmental Policy Act (NEPA) Framework**.

1.2.3 Design Phase

The Design phase translates the approved project alternative into detailed engineering plans, specifications, and cost estimates needed for construction. This phase includes finalizing roadway geometry, drainage, structures, utilities, and other design elements, as well as obtaining required permits and coordinating with right of way acquisition where necessary. For certain types of projects, environmental review may be conducted concurrently with design, allowing projects to move more efficiently toward construction.

1.2.4 Right of Way Phase

The Right of Way phase involves acquiring property interests necessary to construct the project, including full or partial property acquisitions, easements, or relocations. This phase follows established federal and state procedures to ensure fair compensation and to protect property owner rights. Right of Way phase activities may occur concurrently with the Design phase and are not required for projects that can be constructed entirely within existing public right of way.

1.2.5 Construction Phase

The Construction phase is when the transportation improvement is built in accordance with approved plans and specifications. FDOT oversees construction activities to ensure compliance with design standards, environmental commitments, and contract requirements while minimizing impacts to the traveling public. Upon completion, the project transitions to ongoing operations and maintenance, completing the project development process.

1.2.6 Operations and Maintenance Phase

The Operations and Maintenance phase begins once a project is constructed and continues throughout the life of the facility. During this phase, FDOT and/or partner agencies are responsible for operating, monitoring, and maintaining transportation infrastructure to ensure safety, mobility, and asset preservation. Activities include, but are not limited to, routine maintenance of pavement, signage, striping, roadway markings, sidewalks, shared-use paths, and roadsides; inspection and maintenance of bridges, culverts, and other structures; and emergency response during storm events and traffic incidents.

1.3 Benefits of Conducting Project Planning Studies

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1.4 Relevant Regulations and Policies

Several federal and state regulations, Florida statutes, and FDOT policies provide the framework for project planning studies. These are supported by additional federal and state guidance that outlines key considerations and recommended approaches for efficient transportation planning. This section summarizes the primary regulations, policies, and procedures that should guide the development of project planning studies. Integrating this framework early in the project planning process will provide a strong foundation to support future project development.

1.4.1 Planning and Environment Linkages (PEL) Guidance

PEL, in the transportation planning context, is the Federal Highway Administration (FHWA)/Federal Transit Administration (FTA) term for a decision-making approach that allows information, analyses, and, where appropriate, decisions developed during transportation planning to be adopted in subsequent project-level environmental reviews (such as NEPA documents). FHWA describes PEL as a collaborative and integrated approach to transportation decision-making that:

1. considers environmental, community, and economic goals early in the planning process, and
2. uses the information, analysis, and products developed during planning to inform and streamline future environmental studies.

Integrating a PEL approach can improve project development efficiency and accelerate project delivery. FHWA encourages states to use PEL as a flexible and adaptable tool to enhance their existing transportation planning process. In support of this approach, FDOT's Office of Environmental Management (OEM) has developed supplementary PEL guidance for project-level planning studies, titled *Best Practices Guidance for Linking Planning and Environmental Review.*

Several of the following regulations and policies support this PEL approach and encourage streamlined transportation decision-making between planning and PD&E.

1.4.2 Transportation Planning Regulations

23 USC 134 (*Metropolitan Transportation Planning*) and **23 USC 135** (*Statewide and Nonmetropolitan Transportation Planning*) are the core federal statutes that govern the transportation planning process. FHWA/FTA's PEL guidance is designed to work within the metropolitan and statewide planning processes established by **23 USC 134** and **23 USC 135**, respectively. These two statutory provisions, as implemented through FHWA/FTA joint planning regulations in **23 CFR Part 450** (*Planning Assistance and Standards*), encourage early consideration of environmental factors in the project planning process, including consulting with local, state, and federal environmental resource agencies, considering potential environmental mitigation activities, and providing the public early opportunities for involvement and input.

1.4.3 National Environmental Policy Act (NEPA) Framework

NEPA, codified in **42 USC 4321 et. seq.** (*National Environmental Policy*), established a national environmental policy and provided a framework for environmental planning. NEPA is the foundational federal environmental law that requires federal agencies to consider, disclose, and document the environmental impacts of their proposed actions and the reasonable alternatives before decisions are made. NEPA statutory requirements, included in **42 USC 4332**, direct federal agencies to integrate environmental considerations into planning and decision-making.

FDOT's process for complying with NEPA is outlined in the **FDOT PD&E Manual**. Incorporating PEL in project planning informs and streamlines the NEPA process. Conducting planning-level environmental reviews of social, cultural, natural, and physical environmental impacts during project planning (as further detailed in the **ETDM Manual** and in **Chapter 4: Developing and Evaluating Potential Improvements** (pending)), improves the efficiency of developing subsequent PD&E documents and is intended to reduce or eliminate duplication of work between the planning and NEPA processes. Per FHWA guidance, PEL informs the NEPA process by documenting transportation planning decisions and analyses, such as purpose and need, identification of preliminary alternatives, and elimination of unreasonable alternatives.

This streamlining approach aligns with **FDOT's Project Development Policy (Document No.: 000-525-055)** as described in **Section 1.1.2 Relationship to Other Policies** and further discussed in **Section 2.3: Incorporating Planning into PD&E**, which addresses efficiency in project development and using planning to inform the PD&E phase.

1.4.4 Federal Statutes Implementing Planning and Environment Linkages (PEL)

Several federal statutes further emphasize the integration of transportation planning and NEPA processes. There are three key federal statutes that support implementing PEL in the planning stage. The primary statutory authority supporting PEL for highways is **23 USC 168** (*Integration of Planning and Environmental Review).* It allows certain planning-level analyses and decisions to be adopted or incorporated by reference into NEPA documents without being reconsidered in detail, unless significant new information becomes available or circumstances surrounding the issue have changed substantially.

The other two statutes are **23 USC 139** *(Efficient Environmental Reviews for Project Decision-Making and One Federal Decision),* and **23 USC 169** *(Development of Programmatic Mitigation Plans).* Section 139 encourages early environmental coordination, concurrent reviews, and issue resolution, and provides the framework for coordinated NEPA reviews of major transportation projects. Section 169 supports planning-level identification of environmental impacts and mitigation strategies that can later be integrated into NEPA documents, consistent with PEL approaches.

These statutes, along with the planning and NEPA implementing regulations in **23 CFR Part 450** and **23 CFR Part 771** (*Environmental Impact and Related Procedures*) (described in **Section 1.4.3 National**

Environmental Policy Act (NEPA) Framework), support early, coordinated environmental review; the initiation of programmatic mitigation planning during the planning stage; and the tiering and adoption of environmental mitigation strategies by reference in later project phases. Together, they provide a mechanism for formally recognizing early decisions and milestones during the planning stage.

1.4.5 United States Department of Transportation (USDOT) Regulations

1.4.5.1 Federal Highway Administration (FHWA) Regulations

Two key regulations are integral for how NEPA is applied and how planning information can be used in the NEPA process.

23 CFR Part 771 is the primary FHWA/FTA regulation implementing NEPA and related environmental laws. It establishes how these agencies carry out environmental review and includes provisions for using planning studies and preliminary activities to support and inform the NEPA process.

23 CFR Part 450 implements the metropolitan and statewide planning requirements in **23 USC 134-135** and **49 USC 5303–5304** (*Metropolitan and Statewide Transportation Planning*) provides a framework for the use of planning products in NEPA, consistent with **23 USC 168,** by requiring consultation with state and local resource agencies (e.g., wetlands, wildlife and habitat, and historic preservation) and by encouraging environmental data collection and the development of early mitigation strategies during the planning process.

FHWA also issues agency-specific orders and guidance that supplement these regulations and provide additional direction on how to integrate planning and environmental review.

1.4.5.2 Federal Transit Administration (FTA) Requirements

Federal transit planning statutes in **49 USC 5303–5304** function in parallel with **23 USC 134-135**, providing a coordinated planning framework that emphasizes similar environmental and land use considerations. FHWA and FTA often implement PEL through joint planning and NEPA regulations, allowing planning products from states, MPOs, or local jurisdictions to be incorporated into NEPA documents when they meet the applicable regulatory requirements.

1.4.6 Integration of Florida Law with Planning and Environment Linkages (PEL)

In Florida, the planning phase is also governed by **state comprehensive planning laws** and **special provisions for Areas of Critical State Concern (ACSCs)**.

Chapter 163, F.S. (*Required and Optional Elements of Comprehensive Plans*) sets the framework for state and local comprehensive planning. It establishes standards for local comprehensive plans and land development regulations. Per **Section 163.3177, F.S.**, each local comprehensive plan must include

required elements (such as transportation, future land use, and conservation), set **meaningful and predictable standards** for land use and development, and provide clear guidance for land development regulations and development decisions. The comprehensive plan's functional elements must be consistent and support orderly, balanced growth.

During the planning phase, agencies and MPOs/TPOs should ensure that **PEL studies are based on, and consistent with,** the local comprehensive plans adopted under **Chapter 163, F.S.**, including future land use maps and policies, land use assumptions, growth projections, and environmental protection policies. PEL documentation should indicate how the project's transportation strategies support or implement the comprehensive plan's land use and resource protection goals, and how this information is used to develop the purpose and need, alternatives, and environmental impact analyses.

Regarding ACSC (such as the Florida Keys and certain coastal or other environmentally sensitive or historically/archaeologically significant regions), **Chapter 380, F.S.** (*Land and Water Managemen*t) requires close coordination with the **state land planning agency.** Under **Section 380.05, F.S.,** local governments must submit existing comprehensive plans and land development regulations for designated ACSCs, or prepare new or modified plans, that reflect the **principles guiding development** in those areas.

Any PEL study conducted within one of these ACSCs must align with the state-approved local plans and the principles guiding development in the area. Any potential impacts to environmental resources (e.g., coastal resources, wetlands, wildlife, etc.) and community resilience must be carefully evaluated, and special consideration given to hazard mitigation and resource protection during the planning phase.

1.4.7 Related Environmental Laws to be Addressed via Planning and Environment Linkages (PEL)

PEL does not refer to a specific project type, but rather to an **approach** for using the transportation planning process to inform NEPA and numerous **substantive environmental statutes** that apply to transportation projects. The **FDOT PD&E Manual** provides a compilation of environmental procedures and processes for evaluating cultural, natural, social, and physical resources in accordance with these laws. The **ETDM Manual** also documents the ETDM process for early identification of potential environmental issues and linkages between the transportation planning process and PD&E, including a summary of environmental considerations evaluated during the ETDM Planning or Programming Screen. The following table lists key environmental laws that are typically addressed, in part, through PEL coordination.

Because project planning studies that incorporate PEL do not need to be at the same level of detail as the subsequent NEPA analysis (discussed in **Chapter 2: Project Planning Process**), PEL studies are not intended to fully satisfy the requirements of these laws. Rather, PEL studies conducted during project

planning provide a pathway to satisfy the requirements of these laws more efficiently by starting early decision-making analyses and coordination.

Table 1.1 Environmental Laws Typically Addressed Through PEL Coordination

Resource Areas and Title/Citation of Resources	Notes on PEL Applicability
Protected Species and Habitat: **Endangered Species Act (ESA)** 16 USC 1531–1544	◆ Identify threatened and endangered species that may inhabit or migrate through project corridor, designated critical habitat, wildlife habitat for listed species, and describe the potential involvement ◆ PEL can involve planning-level avoidance/minimization alternatives ◆ Early consultation with U.S. Fish & Wildlife Service/National Marine Fisheries Service (NMFS)
Wetlands and Surface Waters: **Clean Water Act (CWA)** 33 USC 1344 et seq.	◆ Evaluate potential involvement with wetlands and surface water resources ◆ PEL can identify likely wetland/stream impacts early that would require a future permit under the CWA, Section 404 of the CWA and/or Section 10 of the Rivers and Harbors Act and conceptual mitigation ◆ Early coordination with U.S. Army Corps of Engineers, NMFS, Florida Department of Environmental Protection (FDEP) and the Water Management Districts (WMDs), as applicable
Historic and Archaeological Sites: Section 106 of the National Historic Preservation Act, as amended, 36 CFR 800, and Chapter 267, F.S.	◆ Identification and evaluation of cultural resources including historic districts, historic sites, historic structures, and potential archaeological involvement ◆ PEL can help identify preservation priorities, and avoidance or minimization options
Section 4(f) of the USDOT Act of 1966, as amended: 49 USC 303 and 23 USC 138	◆ Identify publicly owned parks and recreation areas, wildlife or waterfowl refuges, and National Register of Historic Places (NRHP)-eligible cultural resources potentially protected by Section 4(f) ◆ PEL can identify potential Section 4(f) resources, involvement, and avoidance alternatives

1.4.8 Key Federal and State Requirements

The tables below summarize additional key federal and state laws, regulations, and statutes related to project planning.

Table 1.2 Federal Requirements

Regulation/Policy Guidance	Title	Description
Title VI, 42 U.S.C. § 2000d et. seq.	Civil Rights Act of 1964	Prohibits discrimination on the basis of race, color, or national origin in any program or activity that receives federal funds or other federal financial assistance.
23 CFR Part 771	Environmental Impact and Related Procedures	Prescribes the policies and procedures of FHWA and the FTA for implementing NEPA.
23 USC 109(h)	Highways – Economic, Social, and Environmental Effects	Possible adverse economic, social, and environmental effects related to a proposed project on any federal-aid system must be fully considered, and final decisions on the project must be made in the best overall public interest.
23 USC 139	Efficient Environmental Reviews for Project Decision-Making	The environmental review process for transportation projects involving an Environmental Impact Statement (EIS).
23 USC 327	Surface Transportation Project Delivery	Based on the Memorandum of Understanding (MOU), executed on December 14, 2016 and renewed on May 26, 2022 (which will have to be revised prior to the end of calendar year 2026, within the 10-year renew date), FDOT has assumed FHWA's responsibilities under NEPA for highway projects on the State Highway System (SHS) and Local Agency Program (LAP) projects off the SHS. This is known as "NEPA Assignment."

Table 1.3 State of Florida Requirements

Regulation/Policy Guidance	Title	Description
Section 337.273, F.S.	Transportation Corridors	Transportation corridors are to be addressed up front in long-range planning, not solely at project development and/or design. Environmental, community, and land use considerations that are built into comprehensive plans are part of the transportation decision-making process.
Section 339.64, F.S.	Strategic Intermodal System (SIS) Plan	Establishes a statewide network of high-priority transportation facilities to direct planning, funding, and coordination of highways, transit, rail, ports, and airports to support economic competitiveness, mobility, and efficient movement of people and freight.
Section 335.065, F.S.	Bicycle and Pedestrian Ways on State Roads	Requires the FDOT and local governments to establish bicycle and pedestrian paths in conjunction with the construction or reconstruction of roadways, where feasible, to promote safe, integrated, and efficient non-motorized transportation facilities throughout Florida. Bicycle and pedestrian ways must be integrated into transportation plans.
Section 339.155, F.S.	Transportation Planning	Establishes Florida's statewide transportation planning process. It requires FDOT to develop the FTP in coordination with MPOs and local governments, support regional and local planning efforts, and provide meaningful opportunities for public participation in transportation decision-making and major project development.
Section 339.175, F.S.	Metropolitan Planning Organizations	Establishes and governs MPOs in urbanized areas. It specifies their composition, powers, and duties for regional transportation planning, requiring coordinated, multimodal plans and programs that guide transportation investments and ensures consistency with state and local goals and federal planning requirements.