PART 2, CHAPTER 4

PROJECT DESCRIPTION AND PURPOSE AND NEED

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PROJECT DESCRIPTION AND PURPOSE AND NEED

4.1 OVERVIEW

This chapter provides guidance on developing and documenting the project description and purpose and need for the project prior to and during the Project Development and Environment (PD&E) phase. The project description briefly describes the existing facility or existing conditions, project limits, project location, and the proposed improvements so that the Lead Federal Agency, resource agencies, and the public can understand the effects of the project on the environment. The purpose and need for a project is a basis for the development of the range of reasonable alternatives required in an Environmental Impact Statement (EIS), or identification of the build alternative(s) for other classes of action. Moreover, the purpose and need for the project assists the Lead Federal Agency in evaluating project alternatives and selecting a preferred alternative (see <u>Part 2</u>, <u>Chapter 6</u>, <u>Engineering Analysis</u>).

The purpose and need in an Environmental Document are where the planning process and the PD&E process [*National Environmental Policy Act (NEPA)* for federal projects] most clearly intersect. The development of the purpose and need begins early in the planning process and evolves into the final purpose and need in the PD&E Study. Florida Department of Transportation (FDOT) and planning agencies [e.g., Metropolitan Planning Organizations (MPO), Transportation Planning Organizations (TPO), and local agencies identify transportation needs during the development of their respective transportation plans based on planning data.

In accordance with the **Section 139 of Title 23 of the United States Code (U.S.C)**, as early as practicable during the environmental review process the Lead Federal Agency will provide opportunities for resource agencies and the public to provide input on purpose and need and. FDOT uses the its Efficient Transportation Decision Making (ETDM) process to help meet this requirement and refine the purpose and need for projects that are screened through the Environmental Screening Tool (EST).

The purpose and need discussion in the Environmental Document provides details about the objectives of the proposed action, such as achieving transportation-related needs identified in an MPO plan. If proposed alternatives do not fully address the stated purpose and need, then they can be eliminated from further consideration with documentation, coordination and approval from the Lead Federal Agency.

Further guidance regarding the development of the purpose and need can be found in *FHWA Technical Advisory T6640.8A (FHWA, 1987)*, and *FHWA Environmental Review Toolkit*.

4.2 PROCEDURE

4.2.1 Defining the Project

Prior to the PD&E Study, a description of the project is developed through the planning process and documented during the ETDM process. The project description used in the PD&E Study should be similar to the one used in the ETDM process. When developing a transportation project, the project termini are determined for the scope of both transportation improvements and environmental analysis.

Districts should be cautious when segmenting projects because segmentation problems can inappropriately address environmental issues and/or project needs.

4.2.1.1 Development of Project Description

The project description must be clearly written to allow a person without prior knowledge of the project to understand what the project is. The project description must include the following information:

- 1. A brief description of the existing facility;
- 2. The limits of the proposed project (such as its length and logical termini);
- 3. The names of the City and County where the project is located; and
- 4. A brief description of the proposed improvements (such as mode, typical section features, facility type, multi-modal features, and any major structures).

A project location map must be included to illustrate the project limits. The map should display any landmarks mentioned in describing the proposed project or action (i.e., cities, towns, rivers, airports). The EST can be used to generate this map for screened projects. A typical section diagram should also be referenced to illustrate the proposed improvements.

An example of a project description is provided below:

This project involves a 3.1 mile segment of SR-XX extending north from SR-YY to SR-ZZ (Figure 1) located in City X, County Y. The highway is to be improved from an existing, rural two (2) lane facility to a rural four (4) lane, divided facility with provisions for future expansion to an ultimate six (6) lane divided facility with a curbed median. Bridge structures are not located on this segment of SR-XX; however, bridge widening or replacement is anticipated for side street connections to SR-XX, SR-YY, and SR-ZZ over the Any Drainage District Canal.

4.2.1.1.1 Logical Termini

The establishment of a project's logical termini is an important aspect of the proposed project and serves to define the study area. The identification of logical termini should be completed during the planning process and finalized through the ETDM screening. For federal projects, the determination of logical termini is coordinated with the Lead Federal Agency during the Programming Screen when the purpose and need is accepted.

Logical termini are defined as the rational beginning and end points for a transportation project and serve as the basis for the area of potential effect for environmental issues/resources to be evaluated during the PD&E Study. They are often located at major traffic generators, such as an intersecting roadways. In most cases traffic generators determine the size and type of facility being proposed. The environmental study area generally covers a broader geographic area than the limits of the transportation improvements and the scope of environmental analysis relates to the potential project impacts. Pursuant to **23 CFR § 771.111(f)**, alternatives developed for EISs and EAs shall:

- 1. Connect logical termini and be of sufficient length to address environmental matters on a broad scope.
- Have independent utility or independent significance, i.e., be usable and be a reasonable expenditure even if no additional transportation improvements in the area are made.
- 3. Not restrict consideration of alternatives for other reasonably foreseeable transportation improvements.

When describing the logical termini, it is common to describe the termini points broadly, such as "the intersection at SR-XX." However, the limits of analysis for the proposed project may extend past the logical termini. For example in a four-lane widening project where the facility transitions back to two lanes beyond the logical termini, the area of transition should be included in the analysis. Examples of termini that may not be considered logical without further discussion are county lines, rivers, and city limits.

The logical termini presented in an Environmental Document should be consistent with the "project limits" identified in the adopted cost feasible Long Range Transportation Plan (LRTP) of the respective MPO/TPO or other planning documents in a non-MPO area. The logical termini for a project in a "Non-attainment" or "Maintenance" area for air quality need to be consistent with the project limits established by the MPO/TPO. Any inconsistencies need to be resolved in coordination with FDOT, the MPO/TPO, and FHWA.

4.2.1.1.2 Documentation

The location of the project description in the Environmental Document depends on the Class of Action (COA):

 Type 2 Categorical Exclusion (CE) - Project description information is included in Section 2, Project Purpose and Need of the <u>Type 2 Categorical Exclusion</u> <u>Determination Form, Form No. 650-050-11</u> (Part 1, Chapter 5, Type 2 Categorical Exclusion).

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- 2. **Environmental Assessment (EA)** Project description information is included in a section titled "Project Description and Purpose and Need."
- 3. **EIS** Project description information is included in a section titled "Alternatives including the Proposed Action".
- 4. State Environmental Impact Report (SEIR) Project description information is included in Section A.2, "Project Description" of the FDOT Project Evaluation Form (Part 1, Chapter 10, State, Local, or Privately Funded Project Delivery).

4.2.2 Purpose and Need

The purpose and need for a project provides the basis for developing, considering, evaluating, and elimination alternatives. The purpose and need shapes the alternatives that are considered reasonable or feasible consistent with environmental review requirements.

The purpose and need should be clearly written in plain language, succinct and well defined to set the framework for the development and evaluation of alternatives. The purpose and need should briefly describe the project context including actions taken to date, other agencies and governmental units involved, actions pending, and schedules.

Transportation objectives developed during the transportation planning process and identified in a statewide or metropolitan transportation plan can be the primary source of a project's purpose and need. The transportation planning process enables state and local governments and metropolitan planning organizations, with the involvement of stakeholders and the public, to establish a vision for a region's future transportation system, define a region's transportation goals and objectives for realizing that vision, decide which needs to address, and determine the timeframe for addressing these needs. Out of the process emerge proposed projects intended to meet the needs and achieve the objectives of the plan.

The initial purpose and need developed during the Planning phase may change during the PD&E Study if new information or needs are discovered from project review or input from the public and resource agencies. There should be no substantial changes in the purpose and need after acceptance unless coordinated with the Lead Federal Agency. If the purpose and need changes substantially during the PD&E Study, the Lead Federal Agency must be made aware of and agree to the proposed changes and how those changes could impact the evaluation of alternatives.

4.2.2.1 Development of Purpose and Need

Transportation planning data developed for MPO/TPO LRTPs are the primary source of information used to establish the purpose and need. These data are obtained from corridor plans, subarea plans, regional models and other sources that help identify corridors and facilities where transportation improvements are needed. These data are also summarized in the Strategic Intermodal System (SIS) plan, MPO/TPO Transportation Improvement Program (TIP), and the State Transportation Improvement Program (STIP). District staff preparing the purpose and need during ETDM screening should coordinate with planning staff to obtain relevant data that support the purpose need for the project. Consistent with the conditions set forth in 23 CFR Part 450 and 23 USC §168 planning products can be adopted or incorporated by reference into NEPA.

4.2.2.1.1 Purpose

The purpose identifies the primary goals of the project and guides the range of alternatives that will be developed and considered in response to the established need. The purpose should be broad enough to encompass a reasonable range of alternatives, but not so broad that it encompasses every possible alternative. Conversely, the purpose should not be so narrow as to preclude a range of alternatives that could reasonably meet the defined objectives or restrict decision-makers' flexibility in resolving conflicting interests.

An alternative that does not achieve the primary purpose of the project would be eliminated as unreasonable or not feasible. Secondary purposes do not, by themselves, provide a basis for eliminating alternatives from further study, but could be considered in the selection of a preferred alternative.

4.2.2.1.2 Need

The need for the project arises from deficiencies, issues, and/or concerns that currently exist or are expected to occur within the project area. The need serves as the foundation for the proposed project and provides the principal information upon which the "no-build" alternative discussion is based. It establishes the rationale for pursuing the action and is generally reflected in local, state or MPO/TPO transportation plans. The need should consist of a factual, objective description of the specific transportation problem supported by data and analysis. Detailed analysis supporting the need should be referenced in the purpose and need discussion.

The following list may assist project sponsors in the discussion of the need for the proposed action. This list is not all-inclusive. **With exception of the project status, the remaining elements are not applicable in every situation**.

1. Project Status - Discuss the planning status of a project documenting the progression of the project towards implementation. Due to the time elapsed between a document signed for public availability and the final Environmental Document, the status will likely require updating. Planning consistency is necessary to receive FHWA approval. For the specific funding scenarios to obtain approval of the Environmental Document, refer to the Guidance for Meeting Planning Requirements for NEPA Approval prior to submitting the Environmental Document. See Part 1, Chapter 4, Project Development Process for more information on documenting planning consistency at the conclusion of PD&E.

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Briefly discuss actions taken to date, coordination with other agencies and governmental units involved, actions pending, and schedules. Using the information contained in the planning consistency form (*Part 1, Chapter 4, Project Development Process*), present the project implementation information in a clear and concise manner. Summarize information contained in the planning documents including: project scope, project phases, cost, general funding sources, project description, and logical termini. Describe project implementation and document the status of the planning requirements as follows:

MPO Areas:

- a. Identify which MPO the project is located in. The information provided in the Environmental Document must reference the MPO's current LRTP and TIP. Also, since the TIP must be consistent with the STIP, the current STIP should be used.
- b. Project limits: Confirm that the project description in the LRTP and Environmental Document are similar. Explain any differences, such as the NEPA project is a shorter section than what is described in the LRTP or that the Environmental Document includes more than one LRTP project. If the LRTP shows that the project will be implemented in segments, then the segments must be described. Also confirm that the STIP/TIP and Environmental document descriptions are similar, describing any differences.
- c. Project Funding: Provide a narrative referencing the Cost Feasible LRTP, STIP and TIP that describes all projects phases [PD&E, Design, Right of Way (ROW), and Construction], when those phases are anticipated, which phases are funded, and which type of funds are proposed to be used (e.g., state, local, federal, private or toll). If any phase is not funded, the estimated implementation dates should be provided, which can typically be found in the LRTP Needs Plan. The estimated total project cost and construction completion must also be included. Since these are estimates round numbers may be used.

Non-MPO Areas:

a. In a non-MPO area, the information provided must reference the most current STIP. Acknowledge consistency with the Florida Transportation Plan. Other long range planning documents, such as SIS Cost Feasible Plan (CFP), Local Government Comprehensive Plan or other publicly adopted plans may be used to support the project's planned implementation.

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- b. Project limits: Confirm that the project description in the STIP or other long range document and Environmental Document are similar. Explain any differences, such as the *NEPA* project is a shorter section than what is described or that the Environmental Document includes more than one project.
- c. Project Funding: Provide a narrative referencing the STIP or other transportation plan that describes all projects phases (PD&E, Design, ROW, and Construction), when those phases are anticipated, which phases are funded, and which type of funds are proposed to be used (e.g., state, local, federal, private or toll). If any phase is not funded, the estimated implementation dates should be provided. The estimated total project cost and construction completion must also be included.

In either case, if the project is going to be developed in segments for design and construction, then these segments should be discussed in the Environmental Document and clearly shown on the project location map. This discussion should include the approximate implementation timeframes and estimated costs.

The planning consistency form and pages from the current LRTP (or other long range planning documents for non-MPO areas), TIP, and STIP are submitted to FHWA concurrent with the Environmental Document submittal (<u>Part 1, Chapter 4, Project Development Process</u>).

Include a summary table that clearly highlights the information described in the narrative, as shown below. If the project will be implemented in segments, the table should reflect the segments. Footnotes can be used to provide additional clarification or explanation, as appropriate.

Phase	Time Frame	Estimated Cost	Funding Source
PD&E	Current	\$XX M	Local/federal/ state/private/ toll
Design	20XX - 20XX	\$XX M	Local/federal/ state/private/ toll

ROW	20XX- 20XX	\$XX M	Local/federal/ state/private/ toll
Construction	20XX - 20XX	\$XX M	Local/federal/ state/private/ toll
	Total	\$XX M	

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When a draft CE, EA or Draft Environmental Impact Statement (DEIS) is released for public availability and there are inconsistencies between the Environmental Document and the planning documents, the Environmental Document should describe the differences and the steps needed to achieve consistency and a timeframe when this will occur. After the public hearing, planning consistency must be achieved prior to signing the CE, Finding of No Significant Impact (FONSI), or Final Environmental Impact Statement/Record of Decision (FEIS/ROD). Please refer to the *Guidance for Meeting Planning Requirements for NEPA Approval* for additional information regarding planning consistency.

2. **System Linkage** - Is the proposed project a local, regional, or intraregional "connecting link?"

Discuss how the proposed project fits into the existing and future local, regional and state transportation system (network) and contributes to the movement of people, goods, and services. Include a description of how the proposed action contributes to the multi-modal transportation network.

3. Capacity - Is the capacity of the existing facility inadequate to serve the traffic? Projected traffic? What capacity is needed? What is the LOS for existing and proposed facilities?

Discuss the capacity of the existing facility, its existing and anticipated LOS, and any operational deficiencies of the facility.

4. Transportation Demand - Will the project accommodate the forecasted transportation demand as shown in the adopted state and local transportation plans? Will the project meet future transportation demands based on projected population, employment growth, an increase in freight movement, or other demands on the transportation system?

Discuss the project relationship to any statewide transportation plan or adopted urban transportation plan.

5. **Legislation** - Is there a federal, state, or local governmental mandate for the action? Document the need to respond to federal, state, or local government requirements.

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6. Social Demands or Economic Development - What projected economic development/land use changes indicate the need to modify the transportation network or system?

Describe how the action will foster new employment, benefit schools, land use plans, recreation facilities. Discuss types of social and economic traffic generators, both existing and planned, which exert travel demands on the facility. For example, include businesses, neighborhoods, recreational facilities, shopping centers, new developments, and any other traffic generators which could increase travel demands on the proposed facility.

7. **Modal Interrelationships** - How will the proposed project interface with and serve to complement other modes of transportation such as airports, freight facilities, rail and port facilities, mass transit services?

Identify the need to address other modes of transportation (e.g., airports, rail and port facilities, mass transit services, bicycle accommodations, ridesharing, special use lanes) associated with the project and discuss how the proposed action will complement other modes.

8. **Safety** - Is the proposed project necessary to correct an existing or potential safety hazard? Is the existing crash rate higher than the statewide average for similar facilities? How will the proposed project improve it?

Discuss crashes which have occurred in the study area that may indicate a need for improvement. The discussion may include crash types, frequency, percentage increase or decrease over a period of time, and the rate of crashes when compared with the statewide average for similar facilities. Identify existing high-hazard sections of the facility. Discuss any traffic or transportation safety issues which are or could become a problem (e.g., hazardous material transportation).

9. **Roadway Deficiencies** - Is the proposed project necessary to correct existing roadway deficiencies? How will the proposed project address the deficiencies? Is there a deficient or substandard bridge?

The need and rationale behind reconstructing or replacing a roadway or existing bridge **must** be provided. Provide a detailed description of the existing structure(s) and their deficiencies. Deficiencies may include substandard geometrics, load limits on structures, inadequate typical sections, poor pavement condition, inadequate drainage, and inadequate SIS roadway design standards. For bridges,

the deficiencies identified may be the result of structural and functional ratings, horizontal and vertical clearances, state of repair, weight restrictions or limitations.

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4.2.2.2 Purpose and Need during the ETDM Screening

The purpose and need should evolve over time and become more detailed as the project advances through the Planning phase, ETDM process, and into the PD&E phase. A project's purpose is usually first identified in the transportation plan(s), e.g., MPO LRTPs, the SIS plan and the TIP/STIP. While the purpose of a project does not change substantially over time, it can change as the project advances and more information becomes available.

The Lead Federal Agency must provide opportunities for participating agencies and the public to provide input on the purpose and need. Prior to engaging in the environmental review process, this obligation may be satisfied if agencies and the public are involved in the development of the project purpose and need during the transportation planning process. Nonetheless, FDOT accomplishes this goal through the ETDM process for all projects that are screened. The ETDM process has two screening events: the Planning and Programming Screens. See the <u>ETDM Manual, Topic No. 650-000-002</u> for more information on project screening.

The following briefly describes the purpose and need during the screening events:

- Planning Screen The Planning Screen may be the first opportunity agencies and other interested parties have to provide input on a project's purpose and need. It is important to coordinate with the District Planning Office to obtain the project purpose as identified in the MPO/TPO LRTP and SIS Plan.
- 2. Programming Screen The Programming Screen is intended to occur prior to a project's inclusion in the FDOT Work Program or TIP/STIP, and/or prior to the PD&E phase. This screening helps focus the scope of the PD&E Study and can provide the required scoping information for an EIS. The information for the purpose and need should be coordinated with the District Planning Office to ensure consistency. If the project was screened previously, then the purpose and need from the screening should be refined to reflect the information presented in the *Planning Screen Summary Report* with updated information, as appropriate. If any new information is available it should also be provided.

4.2.2.3 Purpose and Need during PD&E

The purpose and need information from the **Programming Screen Summary Report** is used to prepare the purpose and need for the Environmental Document. According to **40 CFR § 1502.13**, "the statement shall briefly specify the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action." Review the most up to date transportation plans and verify whether information supporting the purpose and need is still valid, gather new data to fill any information gaps,

and refine the purpose and need if necessary. FHWA must be consulted if the project description or the purpose and need for a project change substantially during the PD&E Study.

The purpose and need for PD&E:

- 1. Should be a statement of the transportation problem (not a statement of a solution such as specific project alternatives);
- Should be based on articulated planning factors and developed through a planning process pursuant to applicable federal law;
- Should be specific enough so that the range of alternatives developed will offer real potential for solutions to the transportation problem;
- 4. Must not be so narrow in definition or so specific as to pre-determine a solution; and
- 5. May reflect other priorities and limitations in the area, such as environmental resources, growth management, land use planning, and economic development.
- 6. Should not list specific design criteria or standards to be met by the project.

4.2.2.3.1 Documentation

The location of the purpose and need in the Environmental Document differs depending on the COA:

- Type 2 CE Purpose and need information is included in the Project Purpose and Need (Section 2) of the <u>Type 2 Categorical Exclusion Determination Form,</u> Form No. 650-050-011 (Part 1, Chapter 5, Type 2 Categorical Exclusion).
- 2. **EA** Purpose and need information is included in a section titled "Project Description and Purpose and Need".
- EIS Purpose and need information is included in the "Purpose and Need for Action" section.
- 4. **SEIR** Purpose and Need information is included in Section A.2, "Project Description" of the *FDOT Project Evaluation Form* (*Part 1, Chapter 10, State, Local, or Privately Funded Project Delivery*).

4.3 REFERENCES

23 United States Code (U.S.C.) § 134

- American Association of State Highway and Transportation Offices. Practitioner's Handbook: Defining the Purpose and Need and Determining the Range of Alternatives for Transportation Projects. August, 2007
- Council on Environmental Quality, Executive Office of the President, 1978. Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act. Reprint 43 FR 55978-56007, 40 CFR Parts 1500-1508
- Florida Highway Administration (FHWA) Environmental Review Toolkit: Development of Logical Project Termini and Elements of Purpose and Need. http://www.environment.fhwa.dot.gov/index.asp
- FHWA memorandum "Guidance on Purpose and Need", to FHWA Division Administrators and FTA Regional Administrators, July 23, 2003
- Florida Department of Transportation (FDOT), Efficient Transportation Decision Making (ETDM) Manual, Topic No. 650-000-002 www.dot.state.fl.us/emo/
- Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), Section 6002
- Section 339.177, Florida Statutes (F.S.)

Transportation Research Board. Highway Capacity Manual. HCM2000

U.S. Department of Transportation (USDOT), Federal Highway Administration, October 30, 1987. Guidance for Preparing and Processing Environmental and Section 4(f) Documents, FHWA Technical Advisory T6640.8A

4.4 HISTORY

1/28/2003, 12/03/2012 update combined two previous chapters: Part 2, Chapter 4, Project Description 12/6/2007 and Part 2, Chapter 5, Purpose of and Need for Action, 4/22/2014