

# Practical Application Guides for SCE Evaluations

## PD&E Phase

December 31, 2015



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### How to Obtain Copies

You can electronically download copies of the guides from the FDOT Central Environmental Management Office website at <http://www.dot.state.fl.us/emo/pubs/sce/sce1.shtm>.

**PD&E PHASE  
PRACTICAL APPLICATION GUIDES FOR SCE EVALUATIONS**

**Table of Contents**

**Introduction..... 1**

**Step 1 - Review Project Information ..... 3**

    Task 1.1      Collect and Review Project Information ..... 3

    Task 1.2      Gather Community Information..... 4

    Task 1.3      Share Findings to Support the PD&E Public Involvement Program..... 5

    Task 1.4      Conduct Field Review..... 5

**Step 2 - Define Study Area ..... 5**

    Task 2.1      Review Field Notes and Project Information..... 6

    Task 2.2      Define SCE Study Area..... 6

**Step 3 – Prepare Community Information ..... 6**

    Task 3.1      Supplement the Community Information..... 6

    Task 3.2      Summarize Community Information ..... 8

**Step 4 - Evaluate Sociocultural Effects ..... 8**

    Task 4.1      Identify Community Resources and Level of Importance ..... 9

    Task 4.2      Perform Community Outreach ..... 9

    Task 4.3      Assess Potential Direct Effects ..... 10

    Task 4.4      Assess Potential Indirect Effects ..... 12

    Task 4.5      Assess Potential Cumulative Effects ..... 13

    Task 4.6      Assess Intensity of Impacts ..... 13

**Step 5 - Identify Solutions to Project Impacts ..... 15**

    Task 5.1      Review Previous Recommendations..... 15

    Task 5.2      Work with Communities to Evaluate/Devise Solutions ..... 15

    Task 5.3      Focus Outreach on Affected Populations and Neighborhoods ..... 15

    Task 5.4      Identify Solutions to Project Impacts ..... 15

**Step 6 - Document Findings ..... 16**

    Task 6.1      Update Project File ..... 16

    Task 6.2      Prepare Environmental Document ..... 16

## Introduction

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The *PD&E Phase Guide* of the *Practical Application Guides for SCE Evaluations* series describes the sociocultural effects (SCE) evaluation process for projects in the Project Development and Environment (PD&E) phase. The SCE evaluation process identifies and addresses the potential effects of transportation projects on communities and community resources. The process is collaborative, involving government agencies, the public, and other stakeholders, to ensure that community values and concerns receive adequate attention during project planning and development and that no groups or populations are disproportionately affected.

### LEARN MORE

Links to online SCE resources are provided throughout the guide.

### OBJECTIVES

In the PD&E phase, project detail is developed to the level necessary to accurately assess and address potential project effects on the natural, cultural, physical, and sociocultural environments and support project decisions. The PD&E study takes into account the community's need for safe and efficient transportation and the potential environmental impacts of a project. The SCE evaluation is the portion of the environmental study that considers potential effects, both positive and negative, on the sociocultural (or human) environment.

The SCE evaluation supports the development of an environmental document as prescribed by the project Class of Action. Projects for which SCE evaluations are prepared include those with minimal to no impact potential and those with greater impact potential. While SCE issues are considered, they are not usually evaluated in detail for projects with minimal or no impact.

#### ***Projects with Minimal or No Impact Potential***

- Classes of action include:
  - Type 1 Categorical Exclusion (CE) and Programmatic CE
  - Non-Major State Action (NMSA)
- Typically, do not qualify for ETDM screenings
- SCE evaluations typically focus on:
  - Local traffic patterns
  - Property access
  - Community cohesiveness
  - Compatibility with planned community growth or land use patterns
- SCE evaluations include sufficient detail to affirm the premise for the Class of Action

#### ***Projects with Greater Impact Potential***

- Classes of action include:
  - Type 2 CE
  - Environmental Assessment (EA)
  - Environmental Impact Statement (EIS)
  - State Environmental Impact Report (SEIR)
- SCE evaluations include detailed evaluation of issues of concern and methods to avoid, minimize, or mitigate potential project impacts
- Level of analysis and documentation will vary based on the project context and intensity of effects
- If previously screened as an ETDM project, the project SCE evaluation builds upon the previous evaluation to fill information gaps as needed to evaluate issues of concern and complete the appropriate environmental documentation

Further information on the Class of Action categories is provided in [Part 1, Chapter 2](#) (Environmental Class of Action Determination) and [Part 1, Chapter 10](#) (Non-Federal Projects) of the Florida Department of Transportation (FDOT) PD&E Manual.

In the PD&E phase, supplementary evaluation of sociocultural effects may be unnecessary if:

- SCE evaluation process steps for each SCE issue (identified later) were adequately completed and potential sociocultural effects were adequately considered and documented during a previous phase;
- Conditions in the project area have not changed appreciably since the prior SCE evaluation, and;
- A community concern is not identified during the PD&E phase.

An inadequately documented SCE issue must be evaluated in the PD&E phase, and each of the six SCE issues must be discussed in the environmental document to show when and how they were considered in project decision making. If no involvement for a particular issue is indicated, then a statement to that effect is included in the environmental document.

### APPLICATION

The SCE evaluation process is an important part of the PD&E study to comply with Council of Environmental Quality (CEQ) regulations [40 CFR §§ 1500-1508](#), which requires federal agencies to use all practicable means, consistent with the requirements of the National Environmental Policy Act (NEPA), to avoid or minimize any possible adverse effects of their actions upon the quality of the human environment. The level of assessment during the PD&E phase depends on the potential for significant impacts, as defined by [40 CFR §§ 1500-1508](#). It is the responsibility of the SCE analyst on the PD&E project team to determine what is reasonable in the given context. The SCE evaluation process is performed in accordance with a PD&E study schedule under the direction of a PD&E project manager.

### SOCIOCULTURAL EFFECTS ISSUES

The SCE evaluation process focuses on six SCE issues, including social, economic, land use changes, mobility, aesthetic effects, and relocation potential. The aesthetic effects issue considers potential noise-related effects on communities and community resources. This evaluation of noise is separate from that performed in the PD&E phase to identify noise impacts to the physical environment (i.e., noise sensitive sites).

Use the [Sociocultural Effects Considerations](#) to assist in the investigation of each SCE issue. These considerations incorporate federal and state guidelines, metropolitan planning factors, and standard data analyses to facilitate the following tasks:

- Identification and evaluation of potential community effects
- Identification of needed technical study
- Assessment of intensity of project impacts

### PROCESS STEPS

The major steps in the SCE evaluation process are listed below and detailed in the following sections:

- Step 1: Review Project Information
- Step 2: Define Study Area

### SCE ISSUES

- Social**
- Economic**
- Land Use Changes**
- Mobility**
- Aesthetic Effects**
- Relocation Potential**

- Step 3: Prepare Community Information
- Step 4: Evaluate Sociocultural Effects
- Step 5: Identify Solutions to Project Impacts
- Step 6: Document Findings

The level of effort for each step varies by project depending on the:

- Scale and complexity of the project
- Level of controversy involved
- Potential for significant impacts
- Degree and quality of information available from previous project phases (e.g., ETDM project screening including Preliminary Environmental Discussion or planning feasibility study)

An important consideration for each step in the SCE evaluation process is the potential for project effects on federally protected population groups defined in Title VI of the Civil Rights Act of 1964 and related nondiscrimination statutes. Thorough demographics for these populations, potential effects on them, both positive and negative, and possible solutions to effects must be adequately assessed during the PD&E phase. For guidance on this topic, refer to [Part 1, Chapter 11](#) of the FDOT PD&E Manual.

## Step 1 - Review Project Information

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### OVERVIEW

Information that you may already have from an earlier project phase or in preparation for the PD&E study can help you determine the level of analysis for the SCE evaluation. This information is supplemented and verified through community outreach, field review of the project area, and data obtained from other sources, as necessary.

### *Task 1.1 Collect and Review Project Information*

Establish a preliminary understanding of the project by reviewing current project information and information from previous phases (if applicable). Current information will include the project description and purpose and need, preliminary environmental discussion (PED), personal knowledge of the project area, and in some cases contextual information including GIS data analyses and maps from sources such as the Environmental Screening Tool (EST) or other GIS-based analysis tools. Information from previous project phases may also include agency and public commentary.

Use available project information to:

- Measure change in the project area since the prior project phase
- Determine the appropriate level of analysis for the SCE evaluation
- Define a preliminary study area for the SCE evaluation
- Identify need for additional/updated information and targeted community outreach to enhance understanding of the project area and potential sociocultural effects
- Recognize community issues/preferences identified in prior project phases so adequate attention can be devoted to these results during the PD&E phase
- Forward commitments identified in prior project phases to inform subsequent project phases

In determining the appropriate level of analysis and need for additional information for the SCE evaluation process, consider that more extensive analysis may be required if the project would:

- Require large amounts of right-of-way
- Displace a large number of people
- Disproportionately affect a population group that has been traditionally underrepresented
- Cause a substantial increase or decrease in traffic through an area
- Conflict with local government comprehensive plans
- Impact community facilities, such as schools, parks, or churches
- Impact historic districts or community landmarks
- Adversely affect aesthetic features, such as a canopy road or scenic vista
- Disrupt or divide a cohesive neighborhood

### ***ETDM Projects***

For projects that went through an ETDM screening, existing project information will be available on the EST. Refer to [Environmental Screening Tool Project Information](#) for instructions on locating this project information. For example, the project ETDM Screening Summary Report, which may include information on community issues/preferences and any previously identified project commitments, is stored in the EST. Also refer to [Defining Context - Useful Environmental Screening Tool Information](#) to find information to help you establish a contextual overview of the project area.

*Note:* Sometimes a project description is changed after the Programming screen but is not updated in the EST. Be sure to obtain the most current project information from the PD&E project manager.

### ***Non-ETDM Projects***

For projects that did not go through an earlier environmental screening, a planning phase feasibility study may be a source of existing project information. Some districts upload these studies to the EST to enable generation of the standard GIS analyses.

## ***Task 1.2 Gather Community Information***

Begin gathering community information describing the sociocultural context of the project area including community facilities/services, presence of population groups, and indications of community values, concerns, and preferences. Sources for this information may include:

- U.S. Census Bureau
- Environmental Screening Tool
- City/county/regional planners within government planning, transit, economic development, and other departments
- Community plans or studies and related public involvement (e.g., neighborhood plan, redevelopment plan, public infrastructure/service plan, and corridor study)
- County property appraiser (e.g., parcel data)
- State licensing agencies (e.g., social service agency and business data)
- Bureau of Economic and Business Research (BEER)
- Commercially available data sources (e.g., employment data)
- PD&E project manager/team

### ***Task 1.3 Share Findings to Support the PD&E Public Involvement Program***

Share your findings about population groups and potential meeting venues in the project area with the PD&E team public involvement coordinator to support the development of the PD&E Public Involvement Program (PIP). Part of the PIP's purpose is to verify community concerns and preferences for alternatives, so inform the public involvement coordinator of any special community outreach needs to support the SCE evaluation. If a project was evaluated during a previous phase, the project information may indicate a population group or neighborhood that should be a focus of the PIP. For example, an ETDM project Programming Screen Summary Report may recommend community outreach to a specific neighborhood organization during the PD&E phase. Close coordination between the PD&E team's SCE analyst and public involvement coordinator throughout the SCE evaluation process will help maximize effectiveness and minimize duplication of efforts in obtaining public input.

### ***Task 1.4 Conduct Field Review***

Visit the project area to get a first-hand look. The field review allows you to observe the physical conditions in the project area and how people use the project corridor or site. In preparation for the field review, coordinate with the Metropolitan Planning Organization (MPO)/Transportation Planning Organization (TPO), local government planners, and neighborhood groups to identify community/neighborhood boundaries (e.g., local government jurisdiction, delineated neighborhood, and residential subdivision), special districts (e.g., school, legislative, historic, redevelopment, and employment), and community focal points, history, and goals. When possible, include PD&E team members representing other disciplines and MPO/TPO/local government staff knowledgeable about the project area to participate in the field review.

During the field review, check the currency and accuracy of the information you already have to identify:

- Inconsistencies between the information and field conditions
- Additional community features or characteristics
- Additional information needed to support the SCE evaluation (e.g., physical indications of community values)

View aerial maps to detect community resources, physical features, land use, and other features in the project area. Photograph features in the project area that could be affected by the project including the existing transportation facility, roadway intersections, community resources, and human activity. Create a photo log as a supplement to the field review notes to enhance the information for the SCE evaluation and PD&E study documentation. Additional field review guidance is available in the [District 1 Field Data Collection Guide](#) and [District 7 Field Quick Reference Guide](#).

## **Step 2 - Define Study Area**

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### **OVERVIEW**

The study area for the SCE evaluation defines the geographic area encompassing all of the project alternatives and communities/community resources having the potential for project-related effects. If



developed in a previous phase, the study area is further refined in the PD&E phase to encompass only those project alternatives moving forward and potentially-affected communities/community resources.

### ***Task 2.1 Review Field Notes and Project Information***

Review the field notes and project information to familiarize yourself with the area encompassing the project alternatives and potentially affected communities/community resources. During the PD&E phase, the study area boundary will reflect the community context and potential sociocultural effects. Make refinements to the study area as needed to delineate a preliminary study area for the SCE evaluation. Make note of community datasets that need to be updated/supplemented to adequately assess project effects.

### ***Task 2.2 Define SCE Study Area***

The study area for the SCE evaluation may differ from the PD&E project area. The study area may extend well beyond the immediate project area depending on the nature of the project, affected communities, and SCE issue. The evaluation of relocation potential, for example, will likely require a finer level of analysis than the evaluation of land use effects. Consider that community cohesion could span a single neighborhood, multiple neighborhoods, or even a small town. An understanding of the characteristics of the community will assist in determining the extent of the study area.

Using maps depicting the conceptual layout of the project alternatives and information collected during Step 1, delineate the area encompassing the communities/community resources having potential for effects. Indicate physical barriers (e.g., highways, waterways, and open spaces), activity centers, special districts and designations, disparate average home values, neighborhood or block boundaries, selected demographic characteristics, and resident perceptions (if known). Other sources, including those listed below, may provide additional information for use in defining the study area:

- Newspaper and business journal archives
- Community organization websites
- FDOT staff (e.g., District government liaisons)

## **Step 3 – Prepare Community Information**

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### **OVERVIEW**

Community information for the SCE evaluation describes the history, present physical and sociocultural characteristics, and future trends in the study area for use in identifying and assessing sociocultural effects. The compiled information is organized, verified, and summarized for each SCE issue as it relates to specific communities and population segments in preparation for steps 3-6, including community outreach activities.

### ***Task 3.1 Supplement the Community Information***

In steps 1 and 2, you reviewed existing project information and field conditions, collected a portion of the community information needed for the SCE evaluation, and defined the study area. In this step, supplement the community information as needed to enable you to identify:

- Community/neighborhood boundaries
- Demographic characteristics of communities within the study area, including minority, limited English proficiency, elderly, or other population subgroups
- Community focal points including service areas and user groups
- Community value placed on community focal points and resources

The type and extent of community information needed for the SCE evaluation will depend on the potential for sociocultural effects. If the project was evaluated in a previous phase, focus on updating previously collected data and collecting more detailed data through field review. If a community narrative was prepared, it may provide insights on community values, concerns, and preferences. Building on previous evaluations to deepen your understanding of potential sociocultural effects in the PD&E phase is particularly important for EAs and EISs.

If community data from a previous phase is not available or significant time has elapsed or change has occurred within the project area, acquire the information needed to identify and evaluate potential sociocultural effects.

**COMMUNITY INFORMATION FOR SCE EVALUATION**

Again, the type and extent of community information collected will depend on the potential for project effects. Refer to [Data Sources for Sociocultural Effects Evaluations](#) for guidance on where to locate community data.

**Demographic Information**

Analyze the most recent data available from the U.S. Census Bureau to identify:

- Demographic characteristics of the county where the project is located and communities within the study area (Note: Initially look at a 1-mile buffer area for rural areas and a ¼-mile buffer area for urban areas)
- Percentage of each population group relative to the total population of the study area and the county/counties and municipality/municipalities where the project is located, as appropriate
- Population groups that have been traditionally underrepresented in the project development process based on race, color, national origin, age, gender, religion, economic status, and disability present within the study area
- Number of census blocks adjacent to the project with proportionately large populations of the above-described groups
- Any of the above-described population groups representing a small proportion of the census block group population but having a concentrated presence in a smaller geographical unit (i.e., census block)

**Community Focal Points**

The community information should include an inventory of the places that are important to the community, such as:

- |                        |                             |   |
|------------------------|-----------------------------|---|
| • Schools              | • Health care facilities    | • Major attractors/multi-use facilities |
| • Religious facilities | • Cultural facilities       | • Bridges                               |
| • Community centers    | • Civic centers             | • Cemeteries                            |
| • Parks                | • Social service facilities |   |



- Fire stations
- Law enforcement facilities
- Government buildings
- Intermodal facilities
- Business districts
- Theme parks
- Historic places
- Other significant quality of life features

**Community/Neighborhood Boundaries**

Community/neighborhood boundaries are geographic areas with similar characteristics (e.g., land use, property values, or demographic character) or divided from other areas by natural or constructed boundaries (e.g., waterbodies or major roads). Unofficial community/neighborhood boundaries, those delineated specifically for the SCE evaluation, should be verified through community outreach.

**Task 3.2 Summarize Community Information**

When all relevant and necessary community information for the evaluation is collected, summarize the information you have gathered in a spreadsheet or other informal report. Depending on the complexity of the project and potential for adverse impacts, the summary format may vary. For example, more complex projects such as EAs or EISs will usually include the following:

- Visual map or map series depicting physical characteristics, such as neighborhood boundaries, land uses, public facilities, and commercial/employment centers
- Narrative text describing community characteristics, such as population demographics, socioeconomic history and community values, valued resources, and plans for the future
- Tables, charts, and graphs summarizing important findings, such as the presence of population groups, employment, and trends

**Step 4 - Evaluate Sociocultural Effects**

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**OVERVIEW**

The inventory of community data and public commentary are examined relative to each SCE issue to evaluate potential project effects. Three general types of effects are evaluated as defined by CEQ regulations [40 CFR §§ 1500-1508](#):

- Direct effects are caused by the action and occur at the same time and place.
- Indirect (or secondary) effects are caused by the action and are later in time or farther removed in distance but still reasonably foreseeable.
- Cumulative effects result from the incremental effects of an action when added to other past, present, and reasonably foreseeable actions regardless of which agency or person undertakes the action.

The SCE evaluation also analyzes interrelationships among the SCE issues and how various considerations contribute to the avoidance, minimization, or mitigation of project impacts. This analysis becomes a part of the section of the environmental document that discusses potential effects of the project.

Project issues identified during previous project phases and review of current data and local knowledge are assessed relative to the reasonable project alternatives, including the no build alternative (refer to



[Part 2, Chapter 6](#) of the FDOT PD&E Manual for further guidance on procedures relative to project alternatives). The project Class of Action will determine the appropriate level of analysis and documentation for the SCE evaluation.

- **Type 2 Categorical Exclusion** – The evaluation must be in sufficient detail to demonstrate that no significant impacts are likely to occur as the result of the project. Consideration of multiple build alternatives during the screening process is typically not required for Type 2 CEs unless project impacts necessitate consideration of additional alternatives. Refer to [Part 1, Chapter 5](#) of the FDOT PD&E Manual for further guidance.
- **Environmental Assessments** – Requires a succinct analysis and evidence of resources or features which may be significantly impacted for use in determining whether an EIS or a Finding of No Significant Impact (FONSI) is prepared. Refer to [Part 1, Chapter 6](#) of the FDOT PD&E Manual for further guidance.
- **Environmental Impact Statement** – Consideration, analysis, and documentation of appropriate issues for reasonable build and no-build alternatives must be sufficiently detailed as required by the CEQ regulations. Refer to [Part 1, Chapter 8](#) and [Chapter 9](#) of the FDOT PD&E Manual for further guidance.
- **State Environmental Impact Reports** – Sufficient detail is required to describe project impacts, including the level of impact on the affected community. The range of alternatives evaluated, including the no-build alternative, is determined by the FDOT. Refer to [Part 1, Chapter 10](#) of the FDOT PD&E Manual for further guidance.

#### **Task 4.1 Identify Community Resources and Level of Importance**

Identify potentially affected community resources and the level of importance placed on those resources by the community. The [Sociocultural Effects Considerations](#) provide guidance on identifying community resources relative to the six SCE issues.

#### **Task 4.2 Perform Community Outreach**

In coordination with the PD&E team's public involvement coordinator, perform community outreach throughout the SCE evaluation process to provide opportunity for input on the project purpose and need, verify community data, and identify community concerns and preferences for project alternatives/features. The focus of PD&E phase community outreach is specific to community groups and neighborhoods with potential for project effects. Recommendations for targeted community outreach during the PD&E phase may have been documented in a previous project phase (e.g., planning feasibility study or ETDM project Programming Screen Summary Report). Also rely on community data and community input for indication of where to focus community outreach efforts throughout the PD&E study.

Coordinate with the public involvement coordinator to identify any special community outreach needs for the SCE evaluation that could be accommodated during PIP activities (e.g., outreach materials tailored to a limited English proficient population). Suggest refinements to the PIP to ensure adequate participation and consultation of affected community groups and neighborhoods.

More information on community outreach for PD&E projects is provided in [Part 1, Chapter 11](#) of the FDOT PD&E Manual (Public Involvement) and in the FDOT Public Involvement Handbook. The forthcoming *Community Outreach Guide* of the *Practical Application Guides for SCE Evaluations* highlights community outreach techniques appropriate for the PD&E phase.

### **Task 4.3 Assess Potential Direct Effects**

Assess the potential for both positive and negative direct effects on the community, as well as the greater local and regional areas. An example of a direct effect is increased customer exposure to a grocery store due to increased vehicle traffic on a widened road. The widened road might also make it more difficult for a local transportation-disadvantaged population to walk across the road to access the grocery store.

#### **CONSIDERATIONS**

Use information from any previous project phases, community data, community commentary, the [Sociocultural Effects Considerations](#), and the [Sociocultural Effects Evaluation Charts](#) to assist in identifying direct effects for each SCE issue. If an evaluation of direct effects was performed in a previous phase, verify those results and update as needed. If considerable time has passed since the prior evaluation, conditions have changed appreciably in the project area, or additional impacts are identified, additional study may be required in the PD&E phase. Affirm the results of the direct effects evaluation through community outreach. Refer to [Part 2, Chapter 9](#) of the FDOT PD&E Manual for further guidance.

#### **Social**

The primary objective of the evaluation of social issues is to determine the potential for effects on community groups and community resources.

Analyze the demographics of the study area and the potential for disproportionate impacts on populations addressed in Title VI of the Civil Rights Act of 1964 and related nondiscrimination statutes. Consider whether the project could influence a significant influx or departure of residents. Look for signs of community cohesion. Assess the quantity and quality of human interaction and potential for the project to create/eliminate barriers to interaction. Be alert to potential changes in the environment affecting the safety of pedestrians, bicyclists, and motorists, and delivery of emergency services. Consider whether the project complements or detracts from the community's goals or special designations (e.g., community redevelopment area). Investigate the community's history, community focal points, unique attributes, and quality of life features to help identify potential project effects. The Cultural Resource Assessment Survey Report is a good source for learning about the community's history.

Useful information for this evaluation includes census data, public commentary, field review notes, local planner interviews, established community/neighborhood boundaries, community plans, special designations, and datasets for emergency services, transportation facilities, and community focal points. Refer to the [Sociocultural Effects Evaluation Charts](#) for more guidance on evaluating this issue.

***Economic***

The primary objective of the evaluation of economic issues is to identify potential project effects on economic activity in the study area, local area, and region.

Note potential project effects on business and employment activity in the study area including industries with special needs (e.g., freight distributor) or significance (e.g., regional employer). Identify economic-oriented land uses/designations, economic development plans/goals, special designations (e.g., truck routes) and community development priorities in the study area. Consider potential impacts on property values and the local government tax base. Identify changes to routes, access, parking, or visibility that could benefit or impair businesses, employment centers, or community facilities. Note transportation modes serving special needs populations and identify potential effects on these populations, including any disproportionate economic effects.

Useful information for this assessment includes public commentary, field review notes, local planner interviews, community plans (e.g., local strategic economic development plan), datasets for existing/future land uses, special designations (e.g., community redevelopment area, enterprise zone, or brownfield), major employers, and freight-related features. Refer to the [Sociocultural Effects Evaluation Charts](#) for more guidance on evaluating this issue.

***Land Use Changes***

The primary objective of the evaluation of land use changes is to determine the project's consistency with the physical character of the area and applicable community plans.

Consider the project's compatibility with the community's land use vision and existing/planned land use patterns and urban form. Review the local government comprehensive plan(s) and any special area plans to assess the project's consistency with community goals. Evaluate the potential for changes in the acreage devoted to recreational/open space and rural lands. Assess the project's potential to facilitate or deter urban sprawl. Explore the potential for effects on unique community features (e.g., historic landmarks/structures, water features, parks, landscaping, and natural vegetation).

Useful information for this evaluation includes public commentary, field review notes, local planner interviews, community plans (e.g., local government comprehensive plan), planned and approved development information, datasets for existing/future land uses and special designations (e.g., overlays, brownfields, and historic districts). Refer to the [Sociocultural Effects Evaluation Charts](#) for more guidance on evaluating this issue.

***Mobility***

The primary objective of the evaluation of mobility issues is to identify potential project effects on mobility and accessibility in the study area with emphasis on non-driving population groups (i.e., elderly, young, disabled, and low-income individuals).

Identify existing and planned transportation modes (e.g., pedestrian, bicycle, transit, and vehicle) and services (e.g., public bus routes, school bus routes, and transportation disadvantaged services) and examine the project's relationship to those modes and potential for effects. If a transportation-disadvantaged population is present in the study area, consider potential effects on the transportation system serving this population. Examine the travel behavior of residents, workers, shoppers, and others

in the study area, and evaluate how the project could impede or enhance mobility and access. If changes to existing traffic patterns, circulation, or access are envisioned, consider who might benefit or suffer as a result. Identify potential effects on public parking. Determine if the project is consistent with local and regional transportation plans.

Useful information for this evaluation includes public commentary, field review notes, local planner interviews, census data, transportation plans, community plans, and datasets for mobility features and community focal points. Refer to the [Sociocultural Effects Evaluation Charts](#) for more guidance on evaluating this issue.

### ***Aesthetic Effects***

The primary objective of the evaluation of aesthetic effects is to determine the project's compatibility with the community's aesthetic values relative to noise, vibration, and physical appearance.

Examine the type and intensity of project impacts on noise sensitive sites (e.g., residential areas, hotels, nursing homes, and parks); vibration sensitive sites (e.g., residential uses, eye clinics, dentist offices, and hospitals); special viewsheds and vistas; community focal points; historic structures, districts, and landmarks; and community character (e.g., existing and planned streetscaping, highway beautification, and development patterns).

Useful information for this evaluation includes public commentary, field review notes, local planner interviews, community plans, special designations, and datasets for historical/archeological sites, healthcare facilities, and points of interest. Refer to the [Sociocultural Effects Evaluation Charts](#) for more guidance on evaluating this issue.

### ***Relocation Potential***

The primary objective of the evaluation of relocation potential is to identify residences, businesses, and institutional or community facilities that may require relocation to accommodate the project. Some facilities such as hospitals, sports arena, and those involving industrial activities can be difficult to relocate.

Estimate the number of parcels located in the project right-of-way that are occupied by residential, non-residential, institutional, and other community facility uses.

Useful information for this evaluation includes public commentary, field review notes, right-of-way maps, property appraiser parcel information, Conceptual Stage Relocation Plan, and datasets for existing land use, points of interest, and historical structures/archaeological sites. Refer to the [Sociocultural Effects Evaluation Charts](#) for more guidance on evaluating this issue.

## ***Task 4.4 Assess Potential Indirect Effects***

Assess the potential for both positive and negative project-related indirect effects on the community, greater local area, and region. Indirect effects are caused by other actions that have an established relationship or connection to the project. These related actions would not or could not occur without the original project. For example, the displacement of an anchor tenant in a business complex as a result of a new road alignment could cause other tenants in unaffected buildings to relocate.

### CONSIDERATIONS

Use information from any previous project phases, community data, community commentary, and the [Sociocultural Effects Considerations](#) to assist in identify indirect effects. Methods for analyzing indirect effects include quantitative methods, such as travel demand models and integrated land use and transportation models and qualitative methods, such as scenario writing, Delphi Technique, and expert panels. Affirm the results of the indirect effects evaluation through community outreach. Refer to [AASHTO Center for Environmental Excellence](#) for further guidance on determining the potential for and magnitude of indirect effects and [Part 2, Chapter 9](#) of the FDOT PD&E Manual.

### *Task 4.5 Assess Potential Cumulative Effects*

Assess the potential for project-related cumulative effects. Cumulative effects can result from individually minor but collectively significant actions taking place over time. If need for a cumulative effects evaluation (CEE) is indicated, it is important to document the consideration of cumulative effects and the rationale for determining the level of analysis. The Class of Action will help determine the level of consideration and documentation:

- **Type 2 Categorical Exclusion** – Use the information in Section 3.2, [FDOT Cumulative Effects Evaluation Handbook](#) and knowledge of the project context to consider cumulative effects and to decide whether additional analysis is needed.
- **Environmental Assessment** – The CEE must address those resources or features that have the likelihood to be significantly impacted (see the definition of “Significant” provided in Section 2.7, [FDOT Cumulative Effects Evaluation Handbook](#)). The CEE should be concise, providing sufficient information for determining whether to prepare an EIS or FONSI.
- **Environmental Impact Statement** – Because actions requiring an EIS will have significant environmental impacts, a CEE is required for resources determined to be important based on coordination and context. The CEE should describe the context and intensity of the impacts.
- **State Environmental Impact Report** – A CEE is a federal requirement that is not typically required for a state project. However, if a federal action (such as a permit) or federal funding will be required in a later project phase, or if federal agency approval will be required, then a CEE may be needed to prevent future delays in the project schedule. In these cases, early coordination with the federal agency is recommended to determine the appropriate scope and approach for the CEE.

Refer to the [FDOT Cumulative Effects Evaluation Handbook](#) for more detailed information on performing and documenting a CEE.

### *Task 4.6 Assess Intensity of Impacts*

Assess the significance and intensity of identified community impacts for the environmental consequences section of the environmental document as required by CEQ ([40 CFR §§ 1502](#)). Intensity refers to the severity of impacts as defined by CEQ ([40 CFR §§ 1508.27\(b\)](#)).

### CONSIDERATIONS

Consider the indicators for determining the level of analysis for the SCE evaluation listed in Task 1.1 when assessing the intensity of project impacts. Determining the intensity of an impact also requires an



understanding of the impact in relation to the broader context. The following considerations are useful for this purpose:

#### ***Nature of the Impact***

Consider the likelihood that the impact will occur, the overall number and demographic character of people that stand to be affected, the pervasiveness of the impact, and the duration of the impact (e.g., short-term impacts to business access during project construction).

#### ***Sensitivity to the Impact and Magnitude***

Consider local sensitivity to the impact and whether it is perceived as significant or has been a source of previous concern and the magnitude of the impact in relation to baseline conditions.

#### ***Potential for Mitigation***

When exploring opportunities for mitigation of a project impact, consider whether the impact is reversible and how long it would take to reverse, the economic costs and finances needed to mitigate the impact, and the state or institutional capacity to implement the mitigation.

Rely on prior public commentary and community outreach in the PD&E phase to help gauge the magnitude or controversy of an issue. Be aware that perceptions can vary among communities, neighborhoods, and stakeholder groups due to differing degrees of sensitivity toward an issue or impact. An effect perceived by one community as significantly adverse might be widely tolerated or desirable to another.

### **DOCUMENTATION**

The description of the intensity of impacts will depend on the in the type of environmental document being prepared.

- ***Type 2 Categorical Exclusion*** – Evidence should demonstrate that there are no significant impacts (as defined by CEQ regulations). If a significant impact is found, consult with the lead agency immediately to re-address the Class of Action. Refer to [Part 1, Chapter 5](#) of the FDOT PD&E Manual.
- ***Environmental Assessment*** – Provide sufficient information to make a decision about whether or not there are significant impacts. If there are no significant impacts, a FONSI will be completed. If there are significant impacts that will not be mitigated below the level of significance as part of the original proposal, an EIS will be required. Note: This determination should be made in coordination with the lead federal agency. Refer to [Part 1, Chapter 6](#) of the FDOT PD&E Manual.
- ***Environmental Impact Statement*** – The Environmental Consequences section of the EIS does not need to use the word “significant” but does need to provide information about the context and intensity of impacts. Provide sufficient information to compare the merits of each alternative. Refer to [Part 1, Chapter 8](#) and [Chapter 9](#) of the FDOT PD&E Manual.
- ***State Environmental Impact Report*** – [Part 1, Chapter 10](#) of the FDOT PD&E Manual provides definitions of impact classifications to assist in determining the magnitude of project impacts. The level of detail required to define and evaluate the impacts is at the discretion of the analyst.

## Step 5 - Identify Solutions to Project Impacts

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### OVERVIEW

One of the functions of the PD&E phase SCE evaluation is to recommend methods to avoid, minimize, or mitigate potential project impacts or enhance the project's fit in the community. Recommendations to address potential project impacts may be carried forward from previous project phases or may originate during the PD&E phase.

### *Task 5.1 Review Previous Recommendations*

Review any recommendations made during a previous project phase to address project impacts or enhance the project. Evaluate whether the recommendations are still acceptable in light of any changes the community may have experienced since the previous project phase. This information will be the starting point for further discussion with the community about the continued acceptability/viability of solutions or enhancements.

### *Task 5.2 Work with Communities to Evaluate/Devise Solutions*

Work with community stakeholders to evaluate previously recommended and/or devise current solutions to project impacts. This can happen through targeted group meetings with project stakeholders, homeowners' associations, affected businesses, etc. The range of solutions to address adverse project impacts fall into the following four categories:

- **Avoidance** – Alterations to the project so that an adverse effect does not occur (e.g., minor alignment shifts or reduced cross-sections to avoid a community resource)
- **Minimization** – Modifications to the project to reduce the severity of the effect (e.g., timing construction to coincide with the tourism off-season)
- **Mitigation** – Actions to alleviate or offset an effect or replace a protected resource (e.g., replacement of impacted property or facilities)
- **Enhancement** – Additional desirable or attractive features added to the project to make it fit more harmoniously into the community (e.g., special landscaping to complement the existing or planned community aesthetic)

Consider avoidance solutions first, moving sequentially to other approaches if initial solutions appear unviable (e.g., creates other impacts or is inconsistent with the project purpose and need, community preferences, or FDOT standards and requirements). Refer to [Resolving Issues](#) for further guidance.

### *Task 5.3 Focus Outreach on Affected Populations and Neighborhoods*

Obtain public input on potential project solutions through community outreach. Focus outreach on populations and neighborhoods that may be potentially affected by the project.

### *Task 5.4 Identify Solutions to Project Impacts*

Work with the PD&E project manager and team to identify solutions to project impacts, incorporating community values and preferences as appropriate and feasible.

## Step 6 - Document Findings

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### PURPOSE

In the PD&E phase, the SCE evaluation findings, recommendations and supporting information are used to update the project file and prepare appropriate sections of the environmental document. Information from the Conceptual Stage Relocation Plan, which supports the evaluation of potential relocation effects, is also used to prepare the environmental document.

All documentation for PD&E projects must comply with Florida's [Plain Language Initiative, Executive Order 07-01](#), including all public communications and reports. The Executive Order emphasizes presentation of only necessary information in a logical sequence, using short sentences and an active voice. For more information, refer to [Part 1, Chapter 11](#) of the FDOT PD&E Manual.

### *Task 6.1 Update Project File*

Update the project file with information demonstrating the SCE issues were given full consideration and support project decisions. Appropriate information for the project file includes:

- All information compiled and assessments performed for the SCE evaluation (e.g., demographic data, maps, analyses—including the Conceptual Stage Relocation Plan—and public comments)
- Community outreach materials (e.g., contact lists, description of activities, project information handouts, and correspondence)

Information in the project file provides justification for project recommendations, demonstrates that public input was solicited and considered in project decisions, and provides guidance for subsequent project phases and future projects. Should there be a challenge of the lead federal agency's Record of Decision, the project file provides a starting point for preparing the Administrative Record.

### *Task 6.2 Prepare Environmental Document*

Keep a written record of all findings, beginning with the potential sociocultural effects suggested by the compiled community information and proceeding to more detailed analysis as alternatives are refined and evaluated. Prepare an executive summary of key findings, including public concerns, conclusions of various analyses, strategies for addressing impacts, and any commitments made to the public.

Summarize the findings and recommendations of the SCE evaluation in the appropriate sections of the project environmental document or a separate SCE Technical Memorandum. Documentation of the SCE evaluation in the Environmental Document varies by Class of Action and complexity of the project. However, all Environmental Documents include a summary of the SCE evaluation regardless of Class of Action. If a separate SCE Technical Memorandum is prepared, summarize the findings in the Environmental Document. These memorandums may be used at any time, and are recommended when there are substantial concerns about community effects. See Figure 9.2 in [Part 2, Chapter 9](#) of the FDOT PD&E Manual for a recommended outline.

Results of the SCE evaluation are documented in the environmental document as described on pages 17 and 18:

- **Type 1 and Programmatic Categorical Exclusions and Non-Major State Actions**

Minimal documentation on sociocultural effects is required for Type 1 and Programmatic Categorical Exclusions and Non-Major State Actions. The SCE evaluation results are recorded by checking Yes or No next to items 1, 7, and 8 on the Type 1 and Programmatic Categorical Exclusion Checklist found in [Part 1, Chapter 2](#), of the FDOT PD&E Manual. For Non-Major State Actions, the SCE evaluation results are recorded by checking Yes or No next to the second, eighth, eleventh, and thirteenth rows on the Non-Major State Actions Checklist found in [Part 1, Chapter 10](#), of the FDOT PD&E Manual.

- **Type 2 Categorical Exclusions**

*Impact Evaluation* – To document sociocultural effects on the Type 2 Categorical Exclusion Determination Form, place an "X" in the appropriate column indicating the level of impact in the Impact Evaluation section. If an SCE issue is not in any way involved with the project, mark the column indicating "NOINV." If an issue exists but there is little or no impact, mark the column indicating "NONE." If a perceived impact ranges in level of magnitude from minor to substantial, mark the column "MIN" and provide documentation. If a perceived impact is significant, mark the column "SIGN" and provide documentation.

Provide documentation in the Basis for Decision column and supplement with attachments as necessary to substantiate the impact determination. Summarize any required minimization and mitigation actions or features that were developed in response to community. Include summaries and analyses of community outreach and public involvement activities that supported the SCE evaluation. Describe any ideas implemented in the preferred alternative that addressed community concerns.

*Commitments and Recommendations* – Summarize commitments to address sociocultural effects or controversies for the selected alternative during design and/or construction in the Commitments and Recommendations section of the Type 2 CE Determination Form. *Note:* This summary should exactly match the related content in the PER.

For additional guidance on documenting Type 2 Categorical Exclusions, including the PER, refer to [Part 1, Chapter 4](#) and [Part 1, Chapter 5](#) of the FDOT PD&E Manual.

- **Environmental Assessments**

*Impacts* – Summarize the results of the SCE evaluation in items 1-6 of the Social and Economic Impacts sub-section, and item 5 of the Physical sub-section. The summary should be commensurate in scope with the impact analysis findings and should provide sufficient information to briefly describe the communities and community resources that have the likelihood to be significantly impacted by the project; descriptions of foreseeable impacts to the six SCE issues; and recommended avoidance, mitigation, minimization, or enhancement actions.

*Comments and Coordination* – Includes a summary of community outreach activities used in the SCE evaluation. Documentation of this section will be in accordance with the public involvement requirements found in [Part 1, Chapter 11](#), Public Involvement of the FDOT PD&E Manual.

*Commitments and Recommendations* – Provide any commitments to address sociocultural effects or controversies for the selected alternative during design and/or construction in the *Commitments*

and Recommendations section. *Note:* This summary should match exactly the related content in the PER.

- **Environmental Impact Statements**

*Affected Environment* – Using the compiled community information for the project, provide a concise summary of the existing sociocultural environment for each of the six SCE issues. Include information demonstrating that special populations have received full consideration.

*Environmental Consequences* – Summarize the potential adverse community impacts for each alternative and strategies for resolving adverse impacts in the *Social and Economic Impacts* subsection of the Environmental Consequences section. A separate section addressing environmental justice is recommended for projects where this may be an issue.

*Comments and Coordination* – Indicate project features developed in conjunction with community outreach and coordination with government agencies, private groups, and the public.

*Commitments and Recommendations* – Summarize commitments to address sociocultural effects or controversies for the selected alternative during design and/or construction in Commitments and Recommendations section. *Note:* This summary should exactly reflect the related content in the PER.

*Note:* EISs addressing a significant SCE issue typically include a separate SCE Technical Memorandum.

- **State Environmental Impact Reports**

*Impact Evaluation* – Include the SCE evaluation results in this section of the SEIR by placing an "X" in the appropriate column indicating the level of impact. Most of the SCE evaluation issues are documented in section A. Social Impacts. If an SCE issue is not in any way involved with the project, mark the column indicating "NOINV". If an issue exists but there is little or no impact, mark the column indicating "NONE". If a perceived impact ranges in level of magnitude from minor to substantial, mark the column "MIN" and provide documentation. If a perceived impact is significant, mark the column "SIGN" and provide documentation. Provide documentation in the Basis for Decision column and supplement with attachments as necessary to substantiate the impact determination.

*Commitments and Recommendations* - Discuss all project commitments in coordination with the community in this section of the SEIR.

*Note:* For those projects in which the District determines will have a significant environmental impact, the District may opt to prepare the SEIR similar in scope and format to an EIS. In these cases, the SCE evaluation findings are documented as outlined above for an EIS.

Refer to [Part 2, Chapter 9](#) of the FDOT PD&E Manual for further instructions on preparing the environmental document, required standard statements, and the optional SCE Technical Memorandum.

*Note:* If the project was screened through the ETDM process, upload the approved environmental document in the EST so it is included as part of the project record.

### CONCEPTUAL STAGE RELOCATION PLAN

Reference in the environmental document that a Conceptual Stage Relocation Plan was prepared for the project and include sufficient detail from the Conceptual Stage Relocation Plan to adequately address the relocation effects anticipated in the area. The Conceptual Stage Relocation Plan contains detailed data on relocations, replacement property, and relocation assistance prompted by a transportation action. The District Right-of-Way Office prepares the Conceptual Stage Relocation Plan to comply with FHWA Technical Advisory [T6640.8A](#) and subsection 9.1.3 of [Section 9.1](#) (Relocation Assistance Program) of the FDOT Right of Way Manual. The District Right of Way Office submits the completed Conceptual Stage Relocation Plan to District Environmental Management staff to inform the SCE evaluation relative to relocation effects. Data from the Conceptual Stage Relocation Plan must be incorporated into the Environmental Document (Type 2 CE, EA, EIS, or SEIR). A Conceptual Stage Relocation Plan is also required for Type 1 or Programmatic CE determinations involving relocations. The Conceptual Stage Relocation Plan becomes a part of the project file and is generally not published with the environmental document because of the sensitive information it contains.

Requirements for the Conceptual Stage Relocation Plan are further discussed in [Part 2, Chapter 9](#) of the FDOT PD&E Manual.