

CHAPTER 2 : THE ASSESSMENT PROCESS

INTRODUCTION

Community impact assessment is a fluid and iterative process that occurs throughout the life of a transportation project – from planning through construction and monitoring. The basic steps of the process are listed below. Public involvement is an integral part of each of these steps.

Step 1: Determine the nature of the project and define the study area.

Step 2: Develop a community profile to gain a thorough understanding of the study area, including any issues surrounding the project. This information provides a baseline for analysis and is used to understand what would happen in the community with and without the project.

Step 3: Analyze each project alternative and identify any potential impacts and the magnitude of those potential impacts.

Step 4: Identify potential solutions to adverse impacts.

Step 5: Document the findings of the assessment process, including any commitments made.

Depending upon the length of the project development process, it may be necessary to reassess earlier findings to assure that the assessment is accurate or to repeat the steps to address new impacts that are identified later in the process. To streamline the process, strive to anticipate future needs and collect relevant data on all potential impacts early in the process.

The level of effort involved in each step is a function of the size and complexity of the project, the level of controversy involved, and the potential for significant community impacts. If a project requires preparation of an environmental impact statement, it will also require a more detailed community impact assessment. The findings would be incorporated into the environmental impact statement, a separate technical report, or both. For smaller or less controversial projects, the results might simply be documented in the project files and summarized for use in the next phase of production. It will basically be up to the analyst to determine

Community Impact Assessment

Define Project and Study Area



Develop Community Profile



Analyze Impacts



Identify Solutions



Document Findings

Avoid
Mitigate
Minimize
Enhance



Use Public Involvement

Community impact assessment is an iterative process that occurs throughout the life of a transportation project – from planning through construction and monitoring.

what is reasonable in the given context. If an issue surfaces that is of considerable concern to an affected community, it should be assessed regardless of the nature of the project. This will assure that it is adequately addressed and does not stop the project later in production. Below is a brief description of each component or step of the community impact assessment process.

GENERAL ASSESSMENT PROCESS

Use Public Involvement

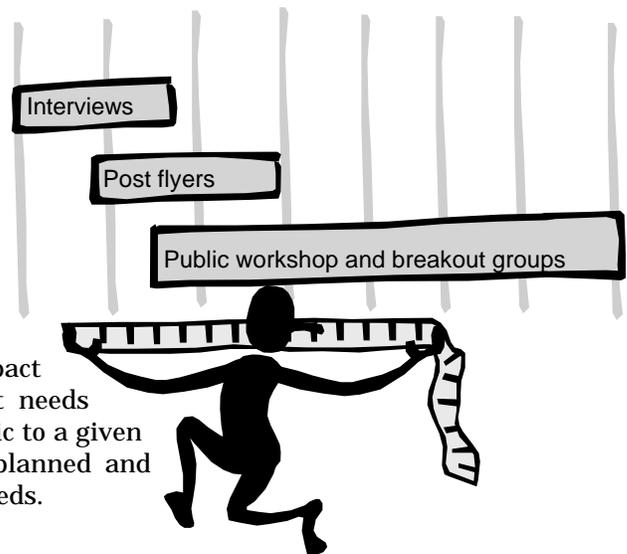
Community impact assessment cannot be accomplished without the use of public involvement. Public involvement is essential for the following community impact assessment activities:

- Developing project alternatives;
- Preparing the community profile;
- Identifying and evaluating social and economic impacts; and
- Identifying ways to avoid or reduce adverse impacts.¹

Consider the level of public involvement that is planned for the project being assessed. Planned public involvement activities may be minimal or extensive, depending upon the nature and complexity of the project. Resurfacing projects, for example, may focus on public outreach before and during the construction period. A major widening project will require a variety of public involvement activities throughout the life of the project.

The Florida Department of Transportation offers training on public involvement. For further information contact the Office of Policy Planning at (850) 488-8006.

Coordinate closely with those responsible for public involvement on the project. Identify planned public involvement activities that can feed into the community profile and other steps of the impact assessment process. Additional public involvement may be needed for assessing specific community issues. It may be necessary to somewhat expand or refine the public involvement plan for the program to better accomplish community impact assessment. Other public involvement needs for the impact assessment may be specific to a given issue or potential impact and can be planned and carried out as project development proceeds.



¹ FHWA, Community Impact Assessment: A Quick Reference for Transportation, September 1996, p. 4.

Also evaluate the public involvement plan for the project and consider whether the activities are adequate for obtaining an understanding of community impacts. For example, are stakeholder interviews planned? Will the public be involved in developing a purpose and need statement for the project? If not, determine how to incorporate these activities into the public involvement program. What groups do you need to reach and how can you best solicit their involvement?

Recognize that public involvement programs need to be flexible and responsive to adequately address community impacts. As project development proceeds, additional meetings or other public involvement activities may be needed to obtain more specialized information.

Describe Project and Study Area

Get ready for the assessment by preparing detailed descriptions of each project alternative and mapping the physical location of each alternative on a base map of the study area. This information will provide the framework for assessing community impacts. As project development proceeds, more information will be available and can be incorporated into the consideration of potential impacts. Information to collect will include:

- Where is the project located?
- What is the conceptual design?
- How much land is required?
- What is the anticipated time frame for completion?
- What are the decision-making milestones or deadlines?

This information can be obtained from project reports and will be used to identify the primary and secondary study areas, the typical impacts relating to that project or design, the potential duration of impacts, and so on. The *primary study area* or affected community is typically the area immediately surrounding project alternatives. Study area or community and neighborhood boundaries can often be delineated by physical barriers (highways, waterways, open spaces, etc.), activity centers, disparate average home values, block boundaries, selected demographic characteristics (ethnic groups), and through resident perceptions. Local planning agencies can also help define spatial boundaries, as can available maps of the community. Community and neighborhood boundaries can also be identified using public reports and/or through consultation with planning agencies and community representatives.

The *secondary study area* may extend far beyond the project area, depending upon the nature of affected communities or the specific subject of analysis. As the assessment proceeds, it may become clear that some impacts affect a much broader “community” than is reflected in the study area. The study area or affected community may also vary depending upon the subject of analysis or the characteristics of an area.

What is a Community?

A “community” may be defined by geographic boundaries of a region, a municipality, or a neighborhood, as well as specific social characteristics that members have in common, such as religious, political, or ethnic affiliation.

Evaluation of relocation impacts, for example, will require a finer level of analysis than evaluation of potential growth inducement. Consideration of community cohesion may cover an entire small town, or it may focus on a specific neighborhood within a larger municipality. An understanding of the characteristics of that community will assist in determining the extent of the study area. This understanding can only be obtained through communication with the affected parties.

Develop A Community Profile

A community profile is a summary of the social and economic characteristics of the affected area. The purpose of the profile is to gain an understanding of the community where the project is proposed and issues that will need to be taken into account in order to gain community acceptance. It is both a “character sketch” of the community, and a geographic inventory of notable features that could be impacted. For the purposes of NEPA, the community profile is the description of the “affected environment.”

A variety of information sources can be consulted to develop the profile. These may include both secondary sources, such as newspapers, minutes of public hearings, community or facility plans, and primary sources, such as public meetings, interviews, or fieldwork. A detailed description on how to conduct a community profile is provided in Chapter 4.

Analyze Impacts

Analyzing project impacts involves uncovering potential community impacts, collecting information on the nature of those impacts, and determining the relative intensity of those impacts. *This analysis needs to occur for each major project alternative, including the “No-Build” scenario.* Establishing the consequences of doing nothing helps to clarify what impacts can be attributed to the project and the relative magnitude of those impacts, in relation to the potential benefits. In addition, conducting this analysis for each alternative provides a meaningful basis for comparing alternatives and selecting a final alternative.

Community impact analysis addresses three general categories of impacts:

1. *Direct impacts* of the project, such as destruction of structural or environmental features in the right-of-way and relocation of residents or businesses.
2. *Indirect impacts* of the project, which extend beyond the physical location, such as induced growth or real estate speculation. Indirect impacts can be short or long term and may also extend far beyond the project right-of-way.
3. *Cumulative impacts* of the project, such as those that result when a project is considered in light of other past, present, or planned future actions that taken individually have different implications than when considered together.

Potential impacts can be explored in a variety of ways, through evaluation of secondary data, basic problem solving, discussions with knowledgeable persons, and public involvement. An effective community impact assessment requires a solid understanding of the community, direct observation of the affected area, and

some research and evaluation of data. It does not, however, require or necessarily benefit from sophisticated models or many hours of technical analysis.

Determining the Appropriate Level of Assessment

Common sense and logic should guide the determination of what level of assessment is needed, how best to approach that task, and what degree of mitigation is appropriate. The level of assessment and documentation that is reasonable for a project will vary depending upon the size and complexity of the project, the level of controversy involved, and the potential for significant community impacts. Scenarios that may trigger the need for a more extensive community impact analysis could include recent major shifts in the demographics of a region or the introduction of a new community planning initiative (e.g. sustainable development, community redevelopment areas, or Main Street program). An overview of such “triggers” appears in Table 2-1.

The courts have also established guidelines for use in determining whether an impact warrants further exploration. Legal principles call for analysis of only those impacts that are “reasonably foreseeable.” This has been defined as impacts that are both (1) probable, and (2) significant. These guidelines from the environmental assessment case law, include:²

1. With what confidence can you say that the impact is likely to occur?
2. Is there sufficient knowledge about the impact to make its consideration useful?
3. Is there a need to know about the impact, due to controversy or other reasons?

Table 2-1: Scenarios That May Trigger A More Extensive Community Impact Assessment

Transportation projects that:

- Require large amounts of right-of-way or would displace a large number of people,
- Could cause a substantial increase in traffic in an area,
- Conflict with local comprehensive plans,
- Impact community facilities, such as schools, parks, or churches,
- Impact historic districts or community landmarks,
- Adversely affect aesthetic features, e.g. canopy roads or scenic landscapes, or
- Disrupt or divide an established or cohesive neighborhood.

² L. Berger & Associates, *NCHRP Report 403: Guidance for Estimating the Indirect Effects of Proposed Transportation Projects*, National Academy Press: Washington D.C., 1998, p. 60, citing *Gloucester County Concerned Citizens v. Goldschmidt*, 533 F. Supp. (DNJ 1982).

Determining the Magnitude of an Impact

After potential impacts have been identified, the next step is to assess their relative magnitude. The scenarios described in Table 2-1 are indicators that a transportation project may have significant adverse community impacts. However, determining the magnitude of an

The magnitude of a potential community impact is based upon the nature of the impact, its relative severity, and the potential for mitigation.

impact also requires an understanding of the impact in relation to the broader context. The screening criteria provided in Table 2-2 are useful in this regard. Ask yourself: What is the nature of the impact? Would it occur without the project? What is the degree of "local sensitivity" toward the impact? To what extent does the community perceive the impact as a threat to its cultural, social, or economic well-being? Does this perception vary by stakeholder groups? What is the potential for mitigation? The answers to these questions will help clarify the relative magnitude of each impact and will aid in developing appropriate solutions.

Table 2-2: Screening Criteria for Assessing Impact Magnitude

I. Nature of the Impact

- | | |
|--------------------|---|
| A. Probability | Likelihood the impact will occur as a result of the project. |
| B. People affected | Overall number and by demographic group. |
| C. Pervasiveness | How widespread is the impact? |
| D. Duration | Is the impact expected to be short term, long term, or permanent? |

II. Severity

- | | |
|----------------------|---|
| A. Local sensitivity | Are people aware of the impact? Is the impact perceived as significant? Has it been a source of previous concern? Are organized interest groups likely to mobilize? |
| B. Magnitude | How serious is the impact in relation to baseline conditions? Could a rapid rate of change exceed local capacity? Is this an unacceptable change? |

III. Potential for Mitigation

- | | |
|---------------------------|---|
| A. Reversibility | Is the impact reversible? If so, how long will it take to reverse? |
| B. Economic costs | What is the cost and how soon will finances be needed to address the impact? |
| C. Institutional capacity | Can the state or local government address the impact or will other assistance or involvement be required? |

Source: Canter, *Environmental Impact Assessment*, New York: McGraw-Hill, Inc., 1996, p. 517.

Complicating the determination is the fact that “magnitude” is a relative concept. The relative magnitude of social and economic impacts can vary across communities, neighborhoods, and stakeholder groups. This variation is due to differing degrees of sensitivity toward a particular issue or impact. An impact that is perceived by one community as significantly adverse might be widely tolerated or even desirable to another. For example, one locality may desire an intensification of commercial development while the neighboring locality may be actively opposed to commercial development. Such variation can make determining the magnitude of an impact both challenging and unpredictable. Yet weighing the magnitude of impacts helps demonstrate agency responsiveness and leads to projects that are a better fit with the communities they serve.

Identify Solutions

Some adverse impacts can be avoided through attention to community issues in the development and selection of project alternatives. However, other impacts will need to be addressed after an alternative has been selected. Transportation agencies can employ a range of specific methods to reduce the adverse impacts of the selected alternative. Solutions to adverse impacts fall into the following four categories:³

Avoid – Alter the project so the impact does not occur.

Minimize – Modify the project to reduce the severity of an impact.

Mitigate – Alleviate or offset an impact or replace an appropriated resource.

Enhance – Add a desirable or attractive feature to the project to make it fit more harmoniously into the community.

Some localized impacts simply cannot be avoided or mitigated due to cost, the importance of the facility to regional mobility, or for other factors. For this reason, difficult decisions will have to be made. Table 2-3 provides a general overview of key measures for addressing project impacts. Other suggestions and techniques are provided in Part 3 of the handbook.

³ FHWA, Community Impact Assessment: A Quick Reference for Transportation, September 1996, p. 30.

Table 2-3: Measures For Addressing Project Impacts

Design Measures	Replacement/Restoration	Planning Assistance
Shift horizontal alignment	Provide replacement access or local street extensions	Provide community participation programs
Elevate or depress facility	Provide replacement land or facilities	Provide relocation assistance and payment programs
Reduce/increase traffic lanes or ROW width	Eliminate incompatible structures or land uses	Identify development or redevelopment opportunities
Provide utility or service corridors	Construct noise or visual buffers	Identify replacement sites and facilities
Provide landscaping or tree replacement	Return lands taken during construction to original state	Identify strategies to manage corridor development
Limit or provide access	Provide for recreational use of stormwater retention areas	Identify municipal costs and revenues from improvement
Provide interchanges/eliminate at-grade crossings	Payment for uneconomic remnants of property	Provide planning funds or technical assistance
Provide pedestrian crossings; apply traffic calming where appropriate.	Payment or acquisition of entire properties	Provide for advance or hardship acquisition
Provide wider walkways or improved bikeways	Compensation for property value losses	Coordinate planning with government entities
Provide for joint development	Provide replacement parking	Coordinate with utility companies
Provide signing or lighting		
Provide scenic turnouts or rest areas		
Provide special amenities for historic districts or tourist destinations		

Outlining Potential Solutions

The following worksheet is provided as a guide to assist in developing an action plan for addressing adverse impacts of a transportation project.

Worksheet: Outlining Potential Solutions

Directions: *Complete the following worksheet for each project impact. Also indicate the lead agency to undertake the specified action, if other than FDOT.*

Impact No 1: _____

A. Identify ways the project could be altered to avoid the impact.

1. _____

2. _____

B. Identify ways the project could be modified to reduce the severity of the impact.

1. _____

2. _____

C. Identify actions that could be taken to offset the impact or replace an appropriated resource.

1. _____

2. _____

D. Identify ways the project could be enhanced to address the impact.

1. _____

2. _____

E. If the adverse impact cannot readily be resolved, indicate why.

1. _____

2. _____

Document Findings

Findings of the community impact assessment will need to be summarized and included in the NEPA document. General guidelines for documenting findings are provided below:

1. Keep a written record of all findings, beginning with potential impacts suggested by the community profile and proceeding to more detailed analysis as alternatives are refined and evaluated. All assessment activities and information collected should be maintained in the project file for the life of the project.
2. Summarize all public involvement activities, as well as public concerns and comments.
3. 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. Briefly summarize relevant findings for various sections of the project environmental document.
4. Use clear, non-technical language and graphics to help explain assessment results. Present the material objectively and avoid “hot button” terms or words that may indicate a bias.

The degree of documentation of community impacts is also related to the project category. Each federally assisted project must be categorized to determine what level of NEPA documentation is required (see Table 2-4). Information on the project and all potential impacts, including socio-economic impacts, will need to be collected and reviewed to determine the appropriate category for each project and the appropriate level of detail required in documenting various social and economic impacts.

Table 2-4 – Project Categories for NEPA Documentation

Categorical Exclusion Type I - minimal socio-economic documentation is required.

Categorical Exclusion Type II – more extensive socio-economic documentation is required in the project report; this may include technical reports.

Environmental Assessment - more extensive socio-economic documentation is required; this may include technical reports.

Environmental Impact Statement - extensive socio-economic documentation is required; this usually includes technical reports.

Projects categorized as requiring an Environmental Assessment or Environmental Impact Statement will require more extensive assessment and documentation of findings, and may involve the preparation of a separate community impact technical report. The project scoping process can be used to determine whether a separate technical report is needed. For Type II Categorical Exclusions, social and economic impacts may be only briefly

documented, as provided in the FDOT Project Development & Environment (PD&E) Manual. Further guidance for determining the project category and appropriate level of documentation is contained in Chapter 3 of the PD&E Manual.

Below is a sample format for a community impact assessment technical report. This is only an example, as different topics may need to be addressed for an understanding of community impacts in a particular area.

Sample Technical Report Format

Executive Summary

I. Introduction

A. Project Summary

- Project Purpose and Need
- Conceptual Alternatives

II. Baseline Conditions

A. Social Characteristics

- Demographic Profile & Special Populations
- Community Issues and Attitudes
- Community Cohesion Mobility
- Safety

B. Economic Characteristics

- Labor Force Characteristics
- Major Employers and Industries

C. Land Use and Growth Trends

- Existing and Planned Land Use
- Existing Zoning
- Growth Trends and Issues (past and present)

D. Notable Features in Study Area

- Aesthetic Character
- Historic Resources

III. Estimated Impacts

A. Relocation and Displacement

B. Social Impacts

C. Economic Impacts

D. Land Use Impacts

E. Aesthetic Impacts

F. Civil Rights Impacts

IV. Conclusions and Recommendations

A. Recommendations for Addressing Impacts

B. Project Commitments

C. Agency Roles

Appendices

MONITORING

Monitoring is strongly recommended in any impact assessment program both to document actual or unforeseen impacts, and to provide useful feedback for similar projects in the future. Monitoring helps to build understanding of actual impacts for particularly controversial issues – the economic impacts of medians, for example. Monitoring is also a way to identify and address any unforeseen adverse impacts of a transportation project on safety, operations, or the community. In this sense, monitoring can be added to the list of mitigation strategies as a commitment by the transportation agency that any significant unforeseen impacts will be addressed and resolved.

Suggestions for incorporating monitoring into agency activities, include the following:

- Integrate monitoring of similar or nearby past projects into future project development and environment (PD&E) studies,
- Develop a monitoring program and data base,
- Conduct special studies to monitor the impacts of selected projects after construction, and
- Coordinate with the public information office to assure that the appropriate Department representatives are notified of public comments regarding the project after construction.

Informal monitoring is already underway to address public concerns over the economic and operational impacts of median projects. For example, FDOT has explored these concerns by conducting opinion surveys following median reconstruction projects. Surveys to date indicate that the majority of businesses have perceived no adverse impact on sales, and the various user groups (truckers, commuters, and property owners) tend to rate these projects favorably in terms of safety and operations. Such surveys are useful in addressing public concerns regarding the impacts of median projects.

Quick response to ameliorating unforeseen impacts helps to build community confidence in the agency and in the quality of transportation projects. For example, if a median project results in unexpected adverse impacts on traffic operations, then quickly reevaluate the project and consider revising the roadway design or partnering with local agencies on solutions. Options may include bulb-outs to accommodate U-turns or connecting local streets at strategic locations.