Chapter 2 Assessing Community Impacts

2.1 Introduction

Community impact analysis is an iterative process that informs planning, project development, and decision making throughout the life of a transportation project. Public involvement is integral to the community impact assessment process. For the community impact assessment to play a meaningful role in the public involvement process and the development of context sensitive solutions (CSS) and vice versa, public involvement should be initiated at the earliest opportunity in the planning process.

The community impact assessment process is similar to the process for analyzing impacts under NEPA and CEQA and should follow these basic steps.

1. Develop an understanding of the nature of the transportation plan or project, and identify communities that could potentially be affected by the project.

2. Create a profile of the community or communities that may be affected by the project to establish the baseline conditions in the community.

3. Analyze the potential impacts that each project alternative would have on the community.

4. Identify opportunities to avoid, minimize, and /or mitigate any adverse effects of the action.

5. Prepare a report documenting the results of the assessment, including public involvement activities and any commitments made.

It is possible to integrate context sensitive solutions at each of these steps. Early public involvement can shape the overall direction of the project and project objectives by helping to identify community values and resolve community concerns before project design reaches a point where it becomes difficult to make adjustments. Even with early public involvement, as project development proceeds new impacts may be identified and it may be necessary to reassess earlier findings. For the community impact analysis to be an effective tool in developing context sensitive solutions, adequate time must be allowed well in advance of ED preparation for public involvement activities and preparation of the community impact assessment report.

2.2 The Assessment Process

The process of assessing community impacts involves seven general steps—all of which are described in detail in this section.

1. Determine your approach and the methods you will use.

2. Involve the public throughout the process.

3. Describe the project, define your study area, and map the project alternatives onto the study area.

4. Create a profile of the social and economic characteristics of the communities that may be affected by the project.

5. Analyze the impacts of the project on the communities that may be affected.

6. Identify solutions to the project impacts, including avoidance, minimization, and/or mitigation.

7. Document the findings of the assessment in a technical report or specific ED sections.

2.2.1 Methods

The methods presented in this volume of the Caltrans Environmental Handbook series represent basic approaches to evaluating community impacts. Any number of methods may be available for evaluating a specific impact ranging from simple methods that produce a rough estimate to more complex methods which yield detailed and precise data. The analyst preparing the community impact assessment; however, must choose methods that are appropriate for the level of detail and accuracy that are needed for the analysis. The selection of study methods should take into account the following criteria:

- Relevancy
- Accuracy and completeness
- Acceptability and credibility
- Flexibility
- Data Requirements
- Cost

While the methods presented herein are all considered acceptable, few are identified as being "recommended" over the others. Transportation projects and the communities they affect are unique, and it is important to select analysis methods that are appropriate for each set of circumstances.

Community impact analysis, by its nature, relies more on informed but subjective judgment and experience than on rigid quantitative analytical methods. Indeed, quantitative methods or standards for determining significance in the area of community impact assessment are largely absent. Moreover, some models may be extremely complicated for non-specialists to understand and, as a result, are not always as well received by the public as planners might hope. This is not to say, however, that quantitative methods have no place in community impact analysis (for example, they are used heavily in forecasting growth).

In cases in which the issues are complex, the methodology and assumptions used to prepare the analysis should be discussed with the District Environmental Office Chief and the general ED writer (unless the document writer is also preparing the community impact assessment).

FHWA's Office of Planning, Environment, and Realty has requested that the statistics (as well as other assumptions about the community) used in the community impact assessment document be

subjected to what is termed "validation." In other words, people at the local level should determine whether the information is reasonable if there is any possibility that it will not be readily accepted. This involves more than just "circulating" the draft document—the analyst needs to go directly to informed community sources and discuss the data and conclusions with them, and, if necessary, field verify the data. This feedback loop is especially important with the increased emphasis on social equity concerns within the transportation planning processes.

2.2.2 Role of Public Involvement

Public involvement is required under SAFETEA-LU, NEPA, CEQA, and ADA, and is not intended to be a separate task relating primarily to the community impact assessment process. Rather, public involvement should be fully integrated within all stages of planning and project development.

However, public involvement is also an essential part of the community impact assessment process. Public involvement should occur at the beginning of the assessment process (i.e., during the collection of data on the community), throughout the assessment itself (i.e., ongoing public involvement opportunities), and upon completion of the assessment (i.e., follow-up analysis). The public should be actively involved in developing the public involvement procedures themselves so that public input extends beyond commenting on drafts of EDs. The public can provide the following kinds of important information for the project.

- Input on
  - developing a purpose and need statement,
  - developing and identifying project alternatives, and
  - preparing the community profile for the community impact assessment.
- Identification of
  - possible conflicts and controversy associated with the project,
  - social and economic impacts and their evaluation, and
  - ways to avoid, minimize, and/or mitigate adverse impacts or enhance the community.

Depending on the magnitude and extent of controversy associated with a major project, Caltrans or the local transportation planning organization may have already initiated a public involvement program. Environmental planners should coordinate closely with those responsible for public involvement on the project so that community input is timely, coordinated, and integrated into the community impact analysis as well as other environmental studies.

Planners should be sensitive in planning public involvement activities, which can feed into the community profile and other steps of the community impact analysis. Public hearings and open meetings are a prime source of information on issues of concern to many in the community, but others, including those who are traditionally under-served by transportation such as minority and low-income populations, may not be interested in attending such meetings and may be skeptical about whether they can truly influence the outcome of a transportation decision. While obtaining meaningful dialogue and input from the community may require a considerable effort, FHWA/FTA, Caltrans, and California's Metropolitan Planning Organizations (MPOs) and

Regional Transportation Planning Agencies (RTPAs) are committed to treating communities as important partners in the transportation planning process. It is crucial that transportation agencies at all levels employ a variety of techniques that maximize effectiveness and which emphasize early and continuous involvement. An organized and well-planned outreach program is essential for successful community input.

The public can have a real effect on transportation decisions. Examples of project changes resulting from feedback from the public range from alignment choices and changes in the width of a transportation facility, to modifications of planned landscaping and structure design, as well as providing access for student school routes and scheduling construction work around peak shopping seasons, among many others. The U.S. DOT's publication, Public Involvement Techniques for Transportation Decision-Making, provides a comprehensive set of guidelines for planning and implementing an effective public participation program. Chapter 22 of the Caltrans Project Development Procedures Manual and the Caltrans Environmental Handbook Series Volume 1, Chapter 3 provide additional information on the community involvement process.

Ideally, the collection of data for the community impact assessment, the ongoing public involvement process, and the follow-up analysis by the planner should anticipate most, if not all, of the pertinent community issues before the draft ED is completed and circulated for public review and comment.

2.2.3 Describe the Project and Study Area

A basic first step in the community impact analysis is to obtain a detailed description of the proposed project and alternatives and create a base map showing the location of each alternative. The preliminary description of the project should include the project purpose and need; project location; project characteristics, including the conceptual design of the project; anticipated right-of-way requirements; and the schedule, including major decision making milestones and project construction phasing. This information can be obtained from preliminary project reports, the project team and/or the project engineer. It will be used to identify items such as the primary and secondary study areas, the typical impacts relating to that project, and the potential duration of impacts.

The next step is to delineate the affected socioeconomic environment. Note that in preparing an ED, the area boundaries are likely to be drawn differently for different resources such as community impact assessment, historic and archaeological resources, hazardous materials, and noise. Additionally, the boundaries of study areas of different impact topics within a community impact assessment may differ. For example, the study area for growth inducement effects or cumulative effects may be much larger (such as a regional study area) than the study area for other types of impacts that are more direct or neighborhood-based in nature.

Delineating the study area can be done by drawing a boundary line on an aerial photograph or detailed map that depicts the land, buildings, and other features that may be subject to project effects. A rigorous neighborhood boundary determination is not really necessary at this stage. The aerial photo or map should be considered a working document with the boundary lines subject to revision as more is learned about the project and area. The use of geographic information systems (GIS) technology is an ideal means of delineation because changes to project maps are easily made and can also be documented.

The affected environment/setting sections for the social and economic environment should include information for the project area, study area, and the larger region in which the project is proposed. Within the document, the term *project area* should be used to denote the area that would be directly and physically affected during the construction period of the project. The *study area* should describe the surrounding community that is generally associated with the project area within which community impacts could occur. Depending on the size of the study area that is considered appropriate for the project, the *larger regional component* of the study area may include city, county, and/or state demographics. Comparing study area data to regional data often helps the reader gain perspective by identifying similarities, differences, and relationships between the areas.

Choosing the appropriate project, study, and regional areas will depend on the type of project being analyzed and where it is located. As a general rule, the region is defined as the jurisdiction that is larger than and includes the study area. To illustrate, if the project is exclusively located within the confines of an incorporated city, the city would be the study area and the county would represent the regional area (although local circumstances may dictate some deviations from this standard practice). The two areas also can be segregated by designating an area of primary impact and an area of secondary or indirect impact. After an area has been delineated for study, an initial windshield survey of the area can be made to gain a preliminary impression of its character and needs, likely impacts, and potentially affected interests. Sometimes exceptional regional qualities and focal points outside the strict study area may be relevant for discussions of growth and otherquality-of-life issues.

2.2.4 Develop a Community Profile

The community profile provides a summary of the social and economic characteristics of the communities that may be affected by the project. The community profile should describe the character of the community with respect to geography, demographics, institutions, neighborhood groups and organizations, businesses, access and circulation, and public services and facilities. The profile will help the analyst understand the community where the project will be located and the issues that will need to be taken into account in order to address community concerns. When developing the community profile, the analyst should be sure to gather the data necessary to support the environmental justice analysis, which is covered in Chapter 8 of this volume.

To the extent feasible, the topics described in the community profile should be presented in the same order as they appear in the impact analysis section of the environmental document (ED). The information from this section of the community impact assessment should be used, as appropriate, in the "Affected Environment" portion of the ED. Section 2.2.7 below provides a sample outline of the community impact assessment and shows a possible order for presenting topics, so that they can be easily incorporated into the ED.

A detailed description of how to prepare a community profile, including primary and secondary data sources, is provided in Chapter 3 of this volume.

2.2.5 Analyze Impacts

The analysis of project impacts requires the careful consideration of how the proposed project will affect the community. Engaging the community in the development of the purpose and need

statement and development of alternatives will often provide insight into the issues associated with the project and the relative importance of those issues to the community.

The impact analysis needs to include all project alternatives, including the No-Build alternative. The impact analysis should address both direct and indirect impacts as well as the project's contribution to cumulative impacts. The CEQ NEPA regulations provide the following definitions of effects as they relate to NEPA analysis (40 CFR §§ 1508.7 and 1508.8, also see Caltrans Guidance for Preparers of Cumulative Impact Analyses).

- Direct effects are caused by the action and occur at the same time and place.
- Indirect effects are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth-related effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.
- Cumulative impacts are the impacts on the environment which result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

Prioritize the Level of Analysis of Impacts

There are few clear standards, formulas, or criteria for identifying potential impacts or for measuring their significance. The significance of a potential impact must be determined through careful judgment on a case-by-case basis. Much of the information on communities and neighborhoods is considered "soft data," information that describes or characterizes people's perceptions, feelings, and attitudes. Soft data typically makes the wide acceptance of an analysis more difficult. The credibility of social and economic analysis can be improved, however, through clear, objective, and concise explanations of methodology, data sources, and objectives.

Not all community impacts associated with a proposed project have the same priority for depth of analysis. The more important impact should receive a higher priority for analysis than one that the community is less concerned about. The FHWA Technical Advisory T 6640.8A, which provides guidance for preparing EDs, states that "Data analyses should be commensurate with the importance of the impact." For instance, a project-related impact that seriously affects large segments of the population for a long time period is by its nature always more important than one that is not serious, affects few people, and lasts for only a short duration. With respect to social and economic or community impact assessment, more effort, budget, and staff time should be dedicated to analyzing the major impacts of the project rather than the minor short-term project effects.

Determine the Magnitude of Impacts

CEQA vs. NEPA

CEQA requires that each "significant [adverse] impact" be identified in an ED; NEPA does not. References to "significant impact" may be made in the ED to fulfill this CEQA requirement, pursuant to California law. Under NEPA, no such determination needs to be made for each

environmental effect. The requirement to prepare an EIS is determined by the lead agency's assessment that overall the project would have a "significant effect" on the environment. Generally, for CEQA and joint NEPA/CEQA documents the findings of significance are reserved for the ED and are not included as part of the community impact assessment.

Under NEPA, significance is a function of both the context and intensity of the impact. *Context* refers to the setting in which the impact occurs (society as a whole, the affected region, or the local area). *Intensity* refers to the severity of the impact and is a function of type, quality, and sensitivity of the resource involved; the location of the proposed project; and the duration of the effect.

Magnitude vs. Significance

The magnitude of an impact differs from significance in that the magnitude expresses the extent of effects and the importance of a particular impact to a community. As noted above, significance is not addressed in technical studies and does not need to be determined in community impact assessments, but magnitude does.

The magnitude of a potential impact must be determined through careful judgment on a case-by-case basis. As stated above, much of the information on communities and neighborhoods is considered "soft data," involving people's perceptions, feelings, and attitudes, and therefore more difficult for the public to accept. Clear and concise explanations of methodology, data sources, and objectives improve credibility of the analysis. Some predictive tools do exist, but most, created in the 1970s, are now seldom used because of their high cost, questionable validity, and the frequent controversy that surrounds the conclusions that are drawn from such methodologies. Determining the magnitude of impacts is therefore ultimately a matter of judgment. For the purposes of CEQA, an environmental issue is likely to be relevant if it concerns the effects identified below, excerpted from Appendix G to the CEQA *Guidelines*. Other criteria for evaluating an impact include uniqueness, controversy, legal standards, benefits and detriments, uncertainty and risk, setting precedent, indirect and cumulative effects, and public health and safety.

Socioeconomic Effects Under CEQA

Culled from Appendix G to the CEQA Guidelines as being considered socioeconomic in nature are any effects that would:

- Disrupt or divide the physical arrangement of an established community
- Conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect
- Conflict with any applicable habitat conservation plan or natural community conservation plan
- Convert prime agricultural land to nonagricultural use or impair the agricultural productivity of prime agricultural land
- Conflict with existing zoning for agricultural use, or a Williamson Act contract
- Require new facilities to provide acceptable levels of public services, the construction of which would cause significant environmental impacts
- Interfere with emergency response plans or emergency evacuation plans.
- Result in inadequate emergency services
- Result in inadequate parking capacity
- Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system

2.2.6 Identify Solutions

The process of scoping and selecting alternatives is intended to engage the public in the development of approaches to minimize the adverse effects of a project. For NEPA when adverse effects must be addressed, the following sequential approach to finding a solution is recommended (40 CFR 1508.20).

- Avoid the impact altogether by not taking a certain action or parts of an action.
- Minimize impacts by limiting the degree or magnitude of the action and its implementation.
- Rectify the impact by repairing, rehabilitating, or restoring the affected environment.
- Reduce or eliminate the impact over time by preservation and maintenance operations during the life of the action.
- Compensate for the impact by replacing or providing substitute resources or environments.

The development of mitigation strategies for addressing project impacts should begin early in the project development process and should be a key focus of the public participation plan. In cases where the adverse effects of a project cannot be avoided, it may be possible to compensate the affected community by providing enhancements that improve the livability of the community. Several case studies of successful community impact mitigation strategies are available for review on the FHWA-sponsored CIA website (University of South Florida and FHWA 2000).

2.2.7 Outline and Write the Technical Report

Preparing an outline of the community impact assessment or specific ED sections will help to ensure thoroughness, make the writing process more efficient, and identify data needs prior to the actual or formal analysis. As discussed in Chapter 1, one of the results of the public involvement and scoping process should be the determination (if not previously determined) of whether to prepare a separate community impact assessment (versus preparing sections directly for inclusion in the ED).

Topics analyzed in the community impact assessment or appropriate ED sections are determined based on expected impacts and issues. Extraneous topics should not be discussed in the section (or at least minimized) if irrelevant to the project. For example, topics such as ethnic composition or the age of the population need not be discussed at length if the project is not likely to have an impact on these groups, and if Caltrans, the public, or local decision makers have not identified such topics as project issues.

The organization of the ED, including the land use, social, and economic sections, is governed by whether the document is solely a CEQA or a combined NEPA/CEQA document. Traditionally, Caltrans EDsfollowed the NEPA format because federal funding or federal permits are involved. However, as the local county tax measures and other alternative transportation funding programs have expanded in recent years, CEQA-only documents have become more common. The topic sequence in the ED should follow the appropriate Caltrans annotated outline.

As a general principle, the organization of the "Affected Environment" or "Setting" section of the community impact assessment should parallel that of its "Environmental Consequences" or "Impacts" section. That is, the sequence of topics should be same in both sections of the community impact assessment.

Sample Outline

There is no single correct way to prepare a community impact assessment, but some ways are better than others. An example of a table of contents for a Caltrans community impact assessment for a major project is outlined below for the purpose of illustrating a good approach for an. The generic study outline chosen for the example shows a full range of issues; the report prepared by the analyst should reflect the nature of the specific project and may not cover all the same issues.

I. INTRODUCTION
   - A. Executive Summary
   - B. Background
   - C. Project Summary Description
     1. Purpose and Need
     2. Alternatives
   - D. Summary of Public Involvement Activities

II. AFFECTED ENVIRONMENT
   - A. Land Use
     1. Existing Land Use Patterns
     2. Development Trends
     3. Adopted Plans and Programs
     4. Parks and Recreational Facilities
     5. Farmlands/Timberlands

B. Community Characteristics

1. Demographic Profile

2. Community Cohesion

3. Community Facilities (schools, health care, libraries, alternative transportation, etc.)

4. Community Issues and Attitudes

C. Utilities and Emergency Services

1. Police and Fire Protection and Emergency Medical Services

2. Utilities and Communications Providers

D. Economic Conditions

1. Regional Economy

2. Employment and Income

3. Study Area Business Activity

III. IMPACTS

A. Land Use

1. Consistency and Compatibility with Existing and Planned Land Uses

2. Consistency with State, Regional, and Local Plans and Programs

3. Parks and Recreational Facilities

4. Farmland/Timberland

5. Growth Inducement

B. Community Impacts

1. Community Character and Cohesion

2. Community Facilities

3. Relocations

4. Environmental Justice

C. Utilities and Emergency Services

1. Police, Fire Protection, and Emergency Medical Services

2. Utilities and Communication Providers

D. Economic Impacts

1. Business Impacts

2. Employment Impacts

3. Tax Revenue Effects

IV. MITIGATION

V. APPENDICIES

A. AD 1006 Form (*If completed)*

B. Relocation Impact Report (*If relocations are anticipated)*

C. Caltrans Relocation Assistance (*If relocations are anticipated)*

D. References Used and Contacts

E. List of Preparers

Considerations for Content

As is true of all technical reports, the composition of a community impact assessment report should be concise and carefully organized. Tables and charts should be prepared when needed to enhance the presentation and highlight information. Many readers of EDs are visually oriented while others will rely more heavily upon the narrative text. Written text should accompany each table or chart to assist the reader in understanding the table or graphic. The original source of data for the compilation of charts and tables should be clearly identified.

The analyst preparing the community impact assessment should keep in mind that the audience is the general public. Thus, the document should be written so that it can be understood by persons with various levels of education. When difficult terms or concepts cannot be easily explained in the body of the text or replaced by another word, use footnotes or include a glossary to explain the meaning of these terms or phrases in common language.

In addition to documenting the findings of the community impact assessment, the report should include a summary of all public involvement activities for the project, a summary of public concerns and comments, and a record of any commitments made to the p7ublic. It is Caltrans policy to maintain an Environmental Commitments Record (ECR) for each project. The purpose of the ECR is to ensure that Caltrans meets its environmental commitments by recording the commitments made, specifying how each commitment will be met, and documenting the completion of each commitment.

2.3 Mitigation Monitoring

While monitoring is ultimately a component of the final EDprepared for the project, the community impact assessment can help to define what the mitigation and monitoring measures will be. For example, the community impact assessment could recommend the level of success for a specific mitigation measure or suggest a specific measure such as the creation of a nuisance hotline during construction.

According to CEQA Guidelines Sections 15091(d) and 15097, a program for reporting or monitoring should be established for mitigation measures that are adopted or made conditions of project approval. The monitoring program is implemented to ensure that the mitigation measures and project revisions identified in the EDare implemented. In addition to ensuring timely implementation of mitigation measures, monitoring serves to identify the need for enforcement action before irreversible environmental damage occurs, and to provide feedback to agency staff and decision makers about the effectiveness of their actions and present learning opportunities for improving mitigation measures on future projects.

Having a monitoring or reporting program in place is useful in addressing public concerns regarding the enforcement of mitigation. Accountability and a quick response mechanism to lessen impacts help to build community confidence in the agency and in the quality of transportation projects.

2.4 Additional Resources

- Caltrans. *CEQA Guidelines for Cumulative and Indirect Impacts*. 2005. Accessed January 2011. Available at: http://www.caltrans.ca.gov/ser/cumulative_guidance/downloads/CEQA_Guidelines_for_Cumulative_and_Indirect_Impacts.pdf.

- Caltrans. "Environmental Commitments Record Memorandum." Dated June 10, 2005. Accessed January 2011. Available at: http://www.dot.ca.gov/ser/downloads/memos/DDDs_const_design_env_proj_mgmt.pdf.

- Council on Environmental Quality. *Considering Cumulative Effects Under the National Environmental Policy Act*. 1997. Accessed January 2011. Available at: http://ceq.hss.doe.gov/nepa/ccenepa/ccenepa.htm.

- FHWA. *Secondary and Cumulative Impact Assessment in the Highway Project Development Process*. 1992. Accessed January 2011. Available at: http://www.environment.fhwa.dot.gov/projdev/tdm2_c_imp.asp.

- FHWA. *Community Impact Assessment: A Quick Reference for Transportation*. 1996. Accessed January 2011. Available at: http://www.ciatrans.net/CIA_Quick_Reference/Purpose.html.

- FHWA. *Environmental Guidebook*. Accessed January 2011. Available at: http://www.environment.fhwa.dot.gov/guidebook/index.asp.

- FHWA. "Questions and Answers Regarding the Consideration of Indirect and Cumulative Impacts in the NEPA Process." Accessed January 2011. Available at: http://www.environment.fhwa.dot.gov/projdev/qaimpact.asp.

- University of South Florida and FHWA. "Community Impact Mitigation: Case Studies." 2000. Accessed January 2011. Available: http://www.ciatrans.net/Community_Impact_Mitigation/CIM_Introduction.html.

- USDOT. Public Involvement Techniques for Transportation Decision-Making. 1996. Accessed January 2011. Available at: http://www.fhwa.dot.gov/REPORTS/PITTD/cover.htm.