

ould encourage you to Watk

Community Impact Assessment

A Quick Reference for Transportation

U.S. Department of Transportation Federal Highway Administration

Community Impact Assessment

A Quick Reference for Transportation



U.S. Department of Transportation Federal Highway Administration

Purpose

This document is an updated version of the original *Community Impact Assessment: A Quick Reference for Transportation* guide published in 1996. While the foundation of the community impact assessment process presented in the original guide remains sound, much has changed in society over the past few decades. The intent of this update is to ensure that the latest document reflects current laws and regulations, incorporates technological advancements and expanded techniques available to transportation practitioners, including the use of online data sources and analytical tools, and addresses issues faced by transportation agencies today, such as accelerating project delivery and planning-environment linkages.

As with the original guide, the goals of this guide are to increase awareness of the potential effects of transportation actions on the human environment and to positively influence the timeliness and quality of transportation improvements. This update is further designed to help transportation practitioners understand that the community impact assessment process is a flexible approach that is scalable, from complex megaprojects down to small infrastructure renewal projects. It also emphasizes that community impact assessment should be applied throughout the transportation decision-making process, from planning through project development and implementation. With this update, practitioners are positioned to integrate tools and data to support community revitalization and mobility options.

Table of Contents

Section 1: Introduction	1
Section 2: Engaging the Public	13
Section 3: Developing a Community Vision and Goals	18
Section 4: Defining the Need and Action	21
Section 5: Identifying Community Characteristics	23
Section 6: Collecting Data	27
Section 7: Analyzing Community Impacts	31
Section 8: Selecting Analysis Tools	38
Section 9: Identifying Solutions	40
Section 10: Documenting Findings	44
Section 11: Implementation and Monitoring	47
Section 12: Resources	49

Introduction

Community Impact Assessment What is it?

Community impact assessment is an iterative process to evaluate the effects of a transportation action on a community and its quality of life. The assessment process is an integral part of transportation planning and project development that shapes the outcome of transportation decisions. It involves understanding the needs of communities and documenting the existing and anticipated social environment of a community with and without the proposed action. The information gleaned from this iterative process can inform decisions concerning transportation planning, project alternatives, design, and implementation. The assessment should include all items of importance to people, such as mobility, safety, employment effects, relocation, isolation, and other community issues.

Importance

Why assess community impacts?

Transportation investments have major influences on society, with significant economic and social consequences. However, these impacts have not always received the attention they deserve. The community impact assessment process alerts affected communities and residents, as well as transportation planners and decision makers, to the likely consequences of a transportation action. It ensures that human values and concerns receive proper attention during planning and project development. Specifically, community impact assessments are important for:

- Quality of Life: Transportation projects should foster, not diminish, the quality of life in communities. The assessment of community impacts supports sustainable, livable communities; promotes community values and thriving neighborhoods; and contributes to economic growth and general well-being.
- **Responsive Decision making:** The assessment of community impacts helps ensure that transportation policies and investments are in

line with the concerns and values of affected neighborhoods and communities. Understanding the relationship between transportation actions and community life leads to conflict minimization and the early resolution of potential problems. Community engagement can address issues associated with project financing options such as public private partnerships and tolling. Engagement of affected and interested parties as part of community impact assessment can lead to greater acceptance of projects by affected communities, while creating a sense of community ownership and enhancing agency credibility.

- **Reduce Project Delays:** Understanding community needs and concerns, documenting potential adverse impacts, and developing solutions helps to ensure that transportation projects and actions support desired community goals and can reduce project delays and the risk of litigation. Integrating community engagement throughout decision making helps to ensure that potential issues are identified and addressed early rather late in the process, avoiding the need to make costly changes or additional analysis.
- **Coordination:** Community impact assessment helps coordinate and integrate independent plans for land use, economics, and transportation to achieve common goals. This helps communities meet State and local regulations and policies, such as zoning ordinances, environmental quality regulations, growth management, economic development, and comprehensive planning.
- Nondiscrimination: Community impact assessment helps to achieve nondiscrimination in transportation programs, policies, and activities, as required by various Federal statutes, directives, and executive orders. It alerts decision makers to the effects on all segments of society and the potential for disproportionately high and adverse effects on disadvantaged population groups.

Legal Backing

What legal authorities support community impact assessment?

In addition to the practical reasons for community assessment, several Federal statutes, regulations, executive orders, and policies address impact analysis. Examples include:

• Title VI of the Civil Rights Act of 1964 and related statutes (42 USC 2000d et seq.)

- National Environmental Policy Act of 1969 (NEPA) (42 USC 4321-4335)
- Sections 174 and 176(c) and (d) of the Clean Air Act of 1970, as amended in 1977 and 1990 (42 U.S.C. 7504, 7506(c) and (d) and 40 CFR part 93)
- 23 USC 109(h), Federal-Aid Highway Act of 1970
- Uniform Relocation Assistance and Real Property Acquisition Policies Act (1970, referred to as the "Uniform Act,") as amended in 1987
- 23 CFR 771, Environmental Impact and Related Procedures (1987)
- Federal surface transportation authorization laws from the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) onward
- Executive Order 12898 on Environmental Justice for Low Income and Minority Populations (1994); U.S. Department of Transportation Order 5610.2(a), FHWA Order 6640.23A, and FTA Circular 4703.1 on Environmental Justice (updated 2012)
- Farmland Protection Policy Act (1981), as amended in 1994 (7 USC 4201-4209)
- Americans with Disabilities Act (1990) as amended in 2008 (42 USC 126)

23 USC 109(h)

23 USC 109(h) requires that U.S. DOT "assure that possible adverse economic, social, and environmental effects relating to any proposed project on any Federal-aid system have been fully considered in developing such project, and that the final decisions on the project are made in the best overall public interest, taking into consideration the need for fast, safe and efficient transportation, public services, and the costs of eliminating or minimizing such adverse effects and the following:

(1) air, noise, and water pollution;

(2) destruction or disruption of man-made and natural resources, aesthetic values, community cohesion and the availability of public facilities and services;

(3) adverse employment effects, and tax and property value losses;

(4) injurious displacement of people, businesses and farms; and

(5) disruption of desirable community and regional growth."

- · Section 504 of the Rehabilitation Act of 1973
- The Older Americans Act (1965), as amended (2016) (42 U.S.C. 6101)
- Executive Order 13166 on Improving Access to Services for Persons with Limited English Proficiency (2000)

Analysts should become familiar with these authorities. Furthermore, they should identify any State and local statutes, regulations, and policies that may apply to community impact assessment.

What is a community impact analyst?

A community impact analyst may not be a defined position. It may be a planner, engineer, public involvement specialist, environment specialist, or other professional who plays a key role in the process.

Community

How is community defined?

There are many definitions of community. An analyst should consider several definitions, generally based on a geographic or spatial component. The analyst should also ask members of the community how they define their own community. Understanding their rationale could provide the analyst with validation of the obvious, as well as unearthing the unexpected.

Community is defined in part by behavior patterns which individuals or groups of individuals hold in common. These behavior patterns are expressed through daily social interactions, the use of local facilities, participation in local organizations, and involvement in activities that satisfy the population's economic and social needs. A community is also defined by shared perceptions or attitudes, typically expressed through individuals' identification with, commitment to, and attitude toward a particular identifiable area. In addition, there are other concepts of community which are not based on spatial relationships. Communities may be based on a common characteristic or interest, such as religion, culture, ethnicity, income strata, or shared use of a transportation facility such as commuters using a particular route, bus or park-and-ride facility, which provides a psychological unity among members.

Role

How does community impact assessment fit into planning and project development?

Community impact assessment is integral to the entire transportation decisionmaking process, from planning to project development, and should inform decisions about construction and systems management and operations as well. For example, understanding community needs is a vital component of identifying project concepts during the transportation planning process. Moreover, the assessment of community impacts, along with other relevant environmental impact studies, helps shape project decisions and outcomes under NEPA.

Community impact assessment spans all phases of transportation decision making

Community Impact Assessment			
Transportation Planning	Project Development (including Environmental Review)	Implementation (Construction, Management & Operations)	

Within the **long-range planning** process, community impact assessment serves a number of key roles:

- Understanding communities helps in defining broad visions, goals, and needs, and in identifying project concepts that best meet those community needs.
- The assessment of potential community impacts at the policy level helps decision makers understand potential positive or negative impacts of proposed actions on communities to ensure fair and equitable treatment prior to project development. It also enables a broad view of the overall benefits and burdens of planned transportation actions on communities, including effects on low-income populations and minority populations.
- Beyond individual projects, long-range planning is often the phase of transportation decision making where policies, such as road pricing, complete streets, livable communities initiatives, and resiliency are explored, which can have important implications on communities and their quality of life.

Within the **project development process**, the assessment serves a number of key roles, including Planning and Environmental Linkages (PEL):

 The assessment provides critical information about community values for the formulation of project objectives and the development of alternatives. This activity should start at the beginning of a study process, with community goals and concerns serving as major input to a project's purpose and need statement. As project alternatives are developed and subsequently refined or eliminated, there should be continuous, informal communication between the project engineers, planners, and the community impact analyst so that options reflect community values to the extent possible.

- In the context sensitive evaluation and selection of a preferred alternative, information from the community impact assessment should be considered and integrated with related environmental studies in a collaborative interdisciplinary approach that involves all stakeholders. As decisions are made, the analyst should recommend techniques to deal with potential adverse impacts and assure that relevant changes within the community are brought to the team's attention.
- The assessment influences the NEPA "significant effects" determination on whether a Categorical Exclusion (CE), Environmental Assessment (EA), or Environmental Impact Statement (EIS) is appropriate. It provides needed information for the CE determination, EA, Finding of No Significant Impact (FONSI), draft EIS, final EIS, and Record of Decision (ROD), and may be summarized or fully incorporated into these documents.

Finally, community impact assessment plays a role in project implementation:

- The assessment should consider and address potential short-term construction impacts and on-going effects associated with system management and operations. For instance, in some regions, new transportation facilities are either tolled or include priced managed lanes, and it will be important to examine the impacts of operations policies such as pricing on communities.
- Commitments to mitigation made during project development should carry over to construction and operations.



FHWA's PlanWorks is a web resource that supports collaborative decision making in transportation planning and project development.

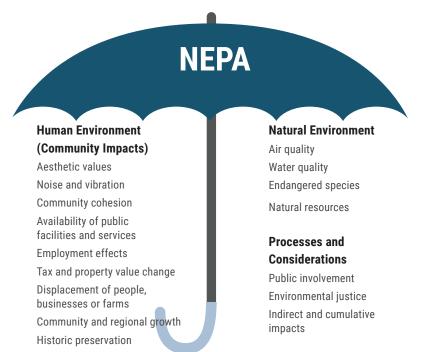
PlanWorks suggests when and how to engage cross-disciplinary partners and stakeholder groups and may be a useful resource for identifying how community issues can be brought into each phase of transportation decision making.

Environmental Review

How does community impact assessment relate to assessment of other environmental effects?

It is FHWA's policy that to the fullest extent possible, all environmental investigations, reviews, and consultations be coordinated as a single environmental review process, often referred to as "the NEPA process". Under this process all applicable environmental laws, executive orders, and regulations are considered – including those relating both to the human and natural environment -- and are addressed prior to the final project decision (see diagram). Public involvement and a systematic interdisciplinary approach are essential parts of the environmental review process for proposed actions.

Human and Natural Environment Issues are Addressed in the NEPA Process



Throughout project decision-making activities, the community impact analyst assures that consequences to the social fabric of an area are given consideration along with other potential environmental impacts. The analyst plays a vital role in the planning and project development team as a vigorous advocate for community values.

Title VI of the Civil Rights Act of 1964 and associated Federal regulations prohibit discrimination based upon race, color, and national origin for all entities receiving Federal financial assistance. Title VI applies to all operations of the organization.

In addition, Executive Order 12898 on Environmental Justice, and Executive Order 13166 on Limited English Proficiency apply to all Federal activities.

Appropriate implementation of Title VI, EO 12898 and EO 13166 will help ensure nondiscrimination during implementation of the NEPA process. This process includes fully identifying social, economic, and environmental effects, considering alternatives, coordinating with agencies, involving the public, and utilizing a systematic interdisciplinary approach. Addressing the issues coupled with full implementation of 23 USC 109(h) (e.g., community cohesion, availability of public facilities and services, adverse employment effects, etc.) will help prevent the potential for discrimination or disproportionately high and adverse impacts. Community impact assessment is key to this preventive approach.

The Assessment Process

What is the process?

The assessment of community impacts is an iterative process that rarely flows in a fixed, predictable series of steps. However, the analyst must be aware of the basic logic behind the process in performing an assessment. The assessment process diagram below depicts the fundamental tasks in the process, which are described further in associated sections of this guidebook. This diagram focuses on the project development (i.e., NEPA) phase but the overall components of the process apply as well in transportation planning, including metropolitan planning, nonmetropolitan and statewide planning, and corridor planning studies. It is critical, in fact, to recognize that effective community impact assessment actually begins in the long-range planning process and pre-NEPA studies where community goals and needs are identified and should be a driving force for identifying potential policy and project actions. The assessment process incorporates the following components:

- Engage the Public: Public engagement is central to the community impact assessment process and is an integral element of all steps in the process. Engage the public to identify community goals, define the project purpose and need, and develop project alternatives. In addition, reach out to the public to help define community characteristics, identify and evaluate impacts, and identify acceptable ways to address impacts. Note that identifying and conducting outreach to disadvantaged or underserved communities is a priority. This information will help shape policy documents and future projects (Section 2).
- **Develop Community Vision and Goals:** Begin in planning. Use the vision and goals that are defined in the long-range planning process as a basis for identifying and understanding community priorities. (Section 3).
- Define the Need and Action: Define the purpose and need for an action. In coordination with planners, engineers, and environmental specialists, develop various project alternatives that satisfy the project purpose and need, and identify areas of potential impact (Section 4).
- Identify Community Characteristics: Determine the characteristics of the affected area, such as neighborhood boundaries, locations of residences and businesses, demographic information, economic data, social history of communities, and land use plans (Section 5).

The documentation of community characteristics is supported by the information collected from a variety of data sources (Section 6).

• **Analyze Impacts:** Examine the impacts to the community of the proposed action versus no action. Identify and investigate the consequences of alternative options or actions (Section 7).

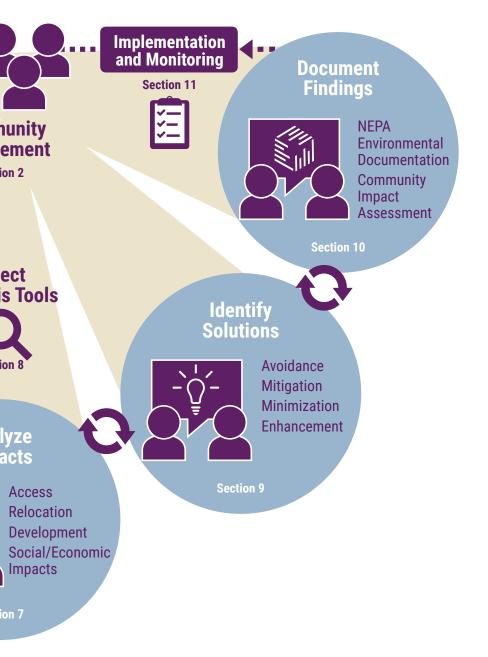
A number of analysis tools can be used to examine these relationships and estimate impacts (Section 8).

- **Identify Solutions:** Identify and recommend potential solutions to address adverse impacts. Techniques include avoidance, minimization, mitigation, and enhancement (Section 9).
- **Document Findings:** In addition to oral presentations, present the findings of the community impact assessment in written form for use by decision makers, to record findings, to disseminate to interested parties, and to support subsequent decisions. (Section 10).
- Implement and Monitor: Ensure that commitments are carried through to implementation. Monitor conditions to assess outcomes. (Section 11).

Community Impact A



Assessment Process



Iterative Process

Although the steps in the community impact assessment process are logically sequential, they overlap in practice. The assessment process is iterative in the sense that analysts must be prepared to revisit prior steps and be aware of future steps in conducting the assessment. In the early steps, when helping to frame the transportation action and identify community characteristics, analysts must think about the probable relationships between the action and the community so that relevant data are collected. Later, if new impacts are identified or decisions are made, the analyst must go back and gather additional information or data regarding populations affected.

Moreover, communities are dynamic and constantly changing. As options change, the analyst must make appropriate re-evaluations and adjustments in findings, particularly if there are substantial time lapses from planning through project development.

Scalable Process

There is not a one-size-fits-all approach to community impact assessment. The level of information, analysis, and engagement required for a community impact assessment will vary based on the scope of the proposed action and potential magnitude of impacts. For instance, a new highway project with potential for displacements, changes in access, and impacts on community resources will likely involve a significant community impact assessment effort. In contrast, a resurfacing project that is likely to have limited community impacts may have a more limited analysis. However, the basic principles and framework apply. It is also important to recognize that just because a project is small does not mean that there are no community impacts. For a particularly vulnerable population or community in a state of change, even a small project can have important effects depending on context.



Engaging the Public

Role of the Public

What part does the public play in community impact assessment?

Public engagement is a critical component throughout the community impact assessment process. It is not a stand-alone activity but should be fully integrated within planning and project development. Analysts should identify and work with the person responsible for public involvement so that community input is timely, coordinated, and customized to most effectively involve the public in decisions.

The public should provide information for, and assist in validating, each of the following activities:

- Development of a vision and goals for the transportation system and communities as part of the planning process.
- Development of a project's purpose-and-need statement and identification of alternatives.
- · Identification of community characteristics.
- Identification and investigation of transportation impacts to the community.
- Identification of avoidance, minimization, mitigation, and enhancement opportunities.

Public involvement results in better assessments and decisions that reflect community values. In addition, it enhances the credibility of the assessment process and its outcomes

Principles

What is meaningful public engagement?

The planning and project development process must provide for an open exchange of information and ideas among the public and the entire project-

development team. Too often in the past, public involvement was viewed as an event or opportunity for input, such as a public meeting, and not thought of as a continuing process to foster. Under this approach, participation may come too late after technical studies and views of agencies have moved toward preferred solutions.

For public engagement to be meaningful, it should recognize that:

- Potentially affected persons should be afforded an opportunity to participate in decisions that affect their environment, safety, and/or health.
- The concerns of participants involved *should be considered* in the decision-making process.
- The public's contribution can influence the agency's decision.
- The decision makers actively seek out and facilitate the engagement of those potentially affected, including low-income populations and minority populations and those who may have challenges providing input, such as persons with disabilities, those with limited English proficiency, and older adults.

Meaningful engagement involves providing opportunities for early and continuing communication between the community and key project staff.

Components of Effective Engagement

Public engagement involves a two-way communication between the agency and community, rather than a one-way sharing of information. As a result, effective engagement involves the following elements:

- **Reaching people:** Making the public aware of the potential action and the importance of their input.
- **Providing information:** Sharing information about identified needs, feasible alternatives, and results of analysis.
- **Gathering input:** Obtaining input from the community on their perspectives, needs, concerns, and ideas.

In addition, evaluating the performance of pubic engagement strategies and making adjustments, accordingly, is important.

Reaching People

What practices best encourage public participation and engagement?

Notification of activities is important because it lets the public know about proposed actions and that their input is valued. Project staff can facilitate public participation by adhering to the following guidelines:

- Provide clear information and timely public notice.
- Schedule public meetings or activities that are convenient to the public; such as immediately before or after the workday (which could be day or night for workers with nontraditional work schedules) at a site within the business district, or at a community center or school within a neighborhood.
- Ensure that public meeting sites are accessible for all citizens, regardless of ability.
- Reach out to the public rather than have them come to you.
- Contact key stakeholders and community leaders (formal and informal) who can help notify the public, taking special note to reach traditionally underserved populations.

Examples of ways to notify the public include:

- Make an announcement at the start of town meetings, religious services, and community center events.
- Place posters at local businesses and gathering places, such as hair salons, health clinics, and grocery stores.
- Distribute flyers at schools, at transit stops, and on windshields of cars at shopping centers and public parking facilities.
- Use virtual meetings, web-sites, web-advertising, and social media.
- · Use contact lists for e-mail and mailing distributions.
- Use community media, such as local newspapers, radio, local public-access television, and public-service announcements.
- Work with partner organizations, such as the parks department, libraries, and health agencies, as well as neighborhood groups.

Providing Information

What practices are effective in informing the public?

Information provided to the public should be designed to be effectively received and understood by the intended audience. It is important to recognize potential barriers such as low literacy and to avoid technical jargon. Examples of strategies to support effectively conveying information include:

- Use clear and simple language.
- Use visualization techniques, maps, photographs, 3D animation, infographics, or videos.
- Use interpreters and translated materials, and ensure that the right equipment, such as assistive devices, is available for persons who have hearing loss or are visually impaired.
- Identify staff and volunteers at public events who speak different languages.

Gathering Input

What practices are effective in gaining ideas and input from the public?

In addition to sharing information, it is important for the public to have accessible ways of providing input on their visions, needs, and concerns. Examples of strategies to support effectively conveying information include:

- · Conduct interviews and focus groups.
- Undertake an online or phone/mail survey to understand needs and preferences.
- Use social media to gather input.
- Play a public involvement game to educate and explore ideas.
- Use interactive polling and mapping.
- Apply scenario planning techniques.

Communication

What are keys to effective dialogue?

In order to facilitate effective communication, the community impact analyst and other members of the project-development team should remember the following keys to promote open dialogue:

- Provide a nonthreatening, open atmosphere.
- · Be responsive and honest.
- Be prepared. Know the project, its status, and key contacts. Having background information on the community is also important. Spend some time in the community observing and gathering input.
- Use nontechnical handouts, presentations, maps, videos, and other visuals that communicate information clearly.
- Use different tools and techniques to reach different audiences (for instance, recognize that social media may work for some populations but not others).
- Make special efforts to be sensitive to the cultures and etiquette of the affected populations. A local liaison can be helpful to facilitate communication and provide guidance on etiquette. Staff training in interpersonal skills may be beneficial. In non-English-speaking communities, consider multilingual presentations and handouts, as appropriate.
- Be polite and treat people fairly.

Recognize that informal public input and conversation is valuable

Good information about the public and needs can be provided in many different ways. It is not always in the form of formal comment letters or comments in public meetings.



Developing a Community Vision and Goals

Community Impact Assessment Begins in Planning

While this guide discusses community impact assessment largely in the context of project development, it is important to recognize that effective assessment begins in the long-range planning process before project decisions are made. Communities need to have their voices heard in planning, as the planning process is where broad visions and goals are identified, needs are identified, and project concepts are developed and prioritized for funding to move into project development.

Defining a Vision for the Future

Transportation agencies should engage communities—including those that are often difficult to reach or historically had limited involvement in public meetings—in order to understand their needs and to develop appropriate actions, such as projects, programs, or policies, to meet those needs. In this stage of decision making, questions include:

- · What do we want our State, region, or community to look like?
- · What are our priorities?

A vision for the future can form the basis for developing goals and measurable objectives that support planning and project development decisions.

Community Considerations in Performance-based Planning and Programming

Performance-based planning enables transportation agencies to define, measure, and manage system performance. While Federal regulation specifies national performance measures to be used by all State DOTs and MPOs, individual agencies can establish other performance measures that address goals that relate to community issues such as jobs-housing balance, transportation affordability, or access to transit, among others.

Ensuring Fairness in Investment Decision Making

As investment needs, projects concepts, and policies are identified in the planning process, transportation agencies should consider the distributional impacts of plans on communities, including potential for disproportionately high and adverse impacts on minority populations and low-income populations. This planning-level assessment also helps in considering impacts broadly, recognizing both historical context (e.g., potential recurring impacts) and anticipated future context (e.g., potential cumulative impacts of current and anticipated future actions).

If done effectively, the planning process identifies projects that are desired by communities, provide an equitable distribution of benefits, and may identify early actions to avoid adverse impacts.



Planning and Environment Linkages

Planning and Environment Linkages (PEL) represents a collaborative and integrated approach to transportation decision making that 1) considers environmental, community, and economic goals early in the transportation planning process, and 2) uses the information, analysis, and products developed during planning to inform the environmental review process. PEL could be applied to undertake a multimodal, systems-level, corridor, or subarea planning study.

Potential benefits of the PEL process include: improved sharing of information, elimination of duplicative efforts in planning and NEPA processes, improved communication and stronger relationships, early consultation and collaboration among stakeholders to identify potential impacts, accelerated project delivery, better environmental outcomes, timely permit decisions, and mutually beneficial outcomes.





Defining the Need and Action

Defining the Desired Transportation Action

What role does the community play in shaping a project concept?

Building on public engagement in transportation planning, the community impact analyst should take a prominent role in defining the transportation action and alternative options in the early phases of project development. Based on their understanding of local context, the analyst should take an active role in:

- · Providing input into a project's purpose and need
- · Developing project alternatives

Although transportation planners and engineers traditionally have led this process, the community impact analyst should fully participate along with designers and other environmental specialists. The analyst should contribute to developing project alternatives, suggesting new options based on preliminary indications of likely community issues and special areas to avoid. These alternatives come from a different perspective so they may be very different from those of transportation planners and engineers.

Additionally, it is important that a project study look at community visions, goals, and needs that were identified during long-range planning studies. For instance, gaps in access to quality health care or jobs may be an issue for certain communities, and are often a particularly acute issue in low-income and/or minority communities. Understanding the needs of communities identified from planning activities can help in defining the types of project needs and actions that should be taken to best meet these needs.

Study Area What is the scope of the geographic area to be examined?

Each technical analysis (i.e., air quality, traffic, noise, relocation, hazardous materials, cultural resources and ecology) may have its own individual study area. Community impact analysts should identify a geographic region that incorporates the communities expected to be affected by the project based on scoping, public involvement, and interagency coordination (e.g., engagement with transit service providers and health and human services agencies). These changes can be long-term such as those associated with new roadway infrastructure or operational policies such as application of road pricing; alternatively, they can be short-term such as the impacts associated with temporary rehabilitation of roadways and bridges.

The community impact study area typically includes communities within and immediately surrounding the project study area. In addition, the analyst should recognize that the project may have consequences to communities well beyond the immediate geographic area.





Identifying Community Characteristics

Community Characteristics

What do we mean by community characteristics?

Community characteristics include an array of information reflecting the history, present conditions, and anticipated future of an area and its population. The analyst will develop a community characteristics summary that provides an overview or series of snapshots of the area and is used as a basis for identifying potential impacts of a proposed transportation action. Identifying and understanding community characteristics is important to describe the "affected environment" in NEPA documentation.

Typically, the presentation includes the following:

A visual map or maps that depict physical characteristics, such as neighborhood boundaries, land uses, public facilities, and commercial centers.

Narrative text that describes community characteristics, such as population demographics, economic and social history of the communities, the importance of various facilities, and plans for the future. It may also include information about the community's past experience with the transportation agency or previous projects that have affected the community (such as indirect and cumulative impacts).

Tables or graphics that summarize important data or conclusions, such as population demographics or employment trends.

Community Identification

How do you identify communities?

Identifying communities involves a combination of both data analysis and public engagement. It is important to ask the public to help define their community as their definition could differ from published information or identify subcommunities within the greater community. The boundaries of a community can often be delineated by physical barriers, landuse patterns, political or area of responsibility jurisdictions (e.g., school districts and police precincts), selected demographic characteristics, and resident perceptions. A good starting place for defining communities for a transportation project or action is to consider neighborhoods, which are typically recognized by name and/or tradition by the public.

The analyst should be aware of other boundaries and consider impacts based on those boundaries (e.g., school districts and project impacts on student populations; and fire districts and project impacts on response times). It is important to recognize that an affected community may not be geographically located next to a project. For instance, a population group that relies on a facility or service for access (such as commuters who rely on a bus route that might be affected) or that utilize a community resource (such as members of a faith-based congregation) could be affected and should be considered within the affected community. Sub-communities should also be identified, as well as stratifications within a community, based on economic or demographic characteristics.

How to Develop a Community Characteristics Summary

- **1.** Define community boundaries, and neighborhood or subdivision boundaries.
- **2.** Locate the businesses, residences, and activity centers of potential impact, especially within neighborhoods along the roadway alternatives and near intersections.
- **3.** Determine demographic characteristics, economic base, location of community facilities, and other characteristics.
- **4.** Learn about a community within the study area by comparing local or area population demographics, land-use, and other characteristics with State or regional information.
- **5.** Continually refine the Community Characteristics Summary throughout the assessment process as impacts are identified and as situations change over time.

Community Characteristics

How do you identify community characteristics?

The following are examples of the types of data to collect and incorporate into a community characteristics summary.

Population and Demographic Characteristics

- · Trends in population growth and demographics
- · Ethnicity and race
- · Age and gender distributions
- Income levels
- · Educational attainment
- · Employment status/workforce population
- · Special population subgroups, such as disabled populations
- · Indian tribal governments, as appropriate

Economic and Social History/Characteristics

- · Community historical background and context
- · Community values and issues (e.g., security and solitude)
- Economic base and industry clusters (e.g., agriculture, manufacturing, and service)
- · Property values
- Tax base
- Other economic characteristics (e.g., port city, tourism base, and lumber town)

Physical Characteristics Relating to Community Activities

- · Community centers/activity centers
- Infrastructure (e.g., roads, transit, and water and sewage systems)
- Public services and facilities (e.g., schools, police, fire, libraries, and hospitals)
- · Cellular and wi-fi availability and coverage, computer ownership
- · Land-use plans and zoning
- · Special areas, historic districts, parklands, and cemeteries
- Businesses

- Housing (availability, age, and type)
- Planned and approved future development
- Community focal points or informal meeting places (e.g., places of worship, playgrounds, hair salons, and laundromats)

Travel Patterns

- Travel options available (e.g., bicycle lanes, sidewalks, transit)
- · Commute patterns, such as mode choices
- Vehicle ownership
- Other personal travel patterns and characteristics (e.g., traffic congestion, route choice, and safety and security concerns)
- Freight and goods movement patterns

In addition to existing conditions, it is important to explore changes in conditions, such as trends in housing costs, gentrification, and suburban poverty in order to understand issues facing a community and how a transportation action may either help address or exacerbate trends.

Initially, information collection involves gathering general information. As potential impacts are identified later in the process, analysts collect additional data on the community that is targeted to specific needs (e.g. the existence of homeless populations in the rights-of-way could lead to the identification of various social services to help at the appropriate time). The following section of this guidebook describes the process for collecting data and identifies some key information sources.





Collecting Data

Gathering Information

What should be considered when collecting data about a community?

There are a variety of online data sources and tools to help efficiently and effectively collect data about communities. In addition, in many cases, in-house staff have expertise; and various governmental and non-governmental planning agencies and councils of government have information that can easily be obtained. Another source may be other projects' files or earlier attempts at the current project, which may then be updated. If information is not available from traditional sources, analysts must be resourceful in seeking out alternative sources.

When collecting information, it is important to recognize when data were collected, the data sources used, and data reliability. Analysts should use the most up-to-date data available, understand the basic assumptions used in each compilation, and recognize the purposes for which data were originally collected.

Sources of Information

Where can data be found?

The following are examples of data sources and their typical uses. (Refer to Section 5 for the types of information typically included in the community characteristics summary.) Most primary sources of data can be accessed online, although it is important to recognize that talking to staff and community members is also an important source of information for historical information and context and in order to gather information on community values and perceptions. In addition to those listed below, other sources may be available, so analysts should not limit themselves to these items.

Public engagement can serve as a source of information to identify community values and needs, to explore the importance of community facilities and resources, to identify those facilities not previously noted, and to validate information collected from other sources.

What are some Data Sources?

Source	Primary Uses
U.S. Census - American Community Survey	Race and ethnicity, disability status, languages spoken at home, veteran status, educational attainment, employment and occupations, income and poverty status, commuting and place of work, housing characteristics
U.S. Environmental Protection Agency - EJScreen	Demographic indicators, environmental indicators, and overlays to identify vulnerable communities
U.S. Department of Education - National Center for Educational Statistics	Race and ethnicity of all students and number of students eligible for Free and Reduced Price Meals program
U.S. Department of Agriculture (USDA) - Food Desert Locator and location of businesses participating in SNAP (Food Stamps) program	Location of Food Desert Census Tracts and location of all businesses that accept electronic benefit transfers (EBT)
U.S. Department of Housing and Urban Development (HUD) - Affordable Apartment and Low Income Housing Credit Properties Search	Affordable apartments locator by city, county, and zip code; provides name of property type (elderly, family, and disabled) and locates Low Income Housing Credit Properties
U.S. Bureau of Labor Statistics	Employment and industry data
Metropolitan Planning Organizations (MPOs)	Economic base, land-use and zoning plans, and area planning history, anticipated future growth, existing traffic and congestion, access times, forecast future traffic and congestion, Transportation Improvement Program (TIP), Long Range Transportation Plan (LRTP), Public Participation Plan
State and local government planning and social service departments/agencies	Economic base, land-use and zoning plans, taxing districts, social and economic programs, and business and marketing information
Transit agencies	Existing and planned transit services, ridership

State employment agencies or labor	Employment trends, unemployment	
departments	Employment trends, unemployment rates, and economic base	
Local public agencies	Tax records, property values, building permit records	
State, local, and university libraries	General information, community historical background, economic base, and business and marketing information	
Local historical societies and State Historic Preservation Officer (SHPO)	Community historical background, and location of historic structures, landmarks, and districts	
Other relevant organizations, such as Chambers of Commerce, faith-based institutions, American Automobile Association (AAA), Meals-on-Wheels, social agencies, and other associations.Special populations and needs, businesses, community issues, etc.		
Center for Neighborhood Technology – Housing + Transportation Affordability Index	Combined housing and transportation costs	
AARP – Livability Index	Housing affordability, proximity to destinations, crime rates, vacancy rate, frequency of local transit service, walk trips, congestion, household transportation costs, obesity rates, access to exercise opportunities, income inequality, age diversity, education	
Real estate web sites and agencies, and interviews with realtors	Housing prices, trends in sales, age or characteristics of structures, and neighborhood composition	
Interviews and public involvement with businesses, community leaders, and residents	Community values and issues	
Field or windshield surveys and reviews	Locations and number of structures, and activity patterns	

Developing Part of a Community Characteristics Summary

After identifying community boundaries, the analyst often begins to summarize community characteristics by describing basic population and demographic characteristics. In order to gather this information, the analyst might:

- Consult MPO, city/county, or statewide planning data.
- Examine statistical data available from the U.S. Census Bureau, such as the American Community Survey.
- Update demographic statistics based on projected growth rates.
- Conduct a field survey to pinpoint specific neighborhoods, residential subdivisions, and properties, and to identify new residential developments.
- Consult with schools, social service agencies, or community
 organizations to obtain more specific local information, such as
 the number of school-age children in specific neighborhoods,
 households receiving public assistance, and residents with
 membership in religious institutions.

Early in the process, the analyst should collect general data that is necessary to describe the study area. As potential impacts to particular households or neighborhoods are identified, the analyst should collect specific, targeted data.



Analyzing Community Impacts

Guidelines

What should be considered when analyzing community impacts?

After the transportation alternatives and a preliminary summary of community characteristics have been defined, the analyst examines the relationship between the proposed transportation action and community life. This task involves both the identification and investigation of impacts. Analysts examine the anticipated future with the transportation action – and various alternatives – in comparison to the anticipated future without the transportation action (a no-build alternative or baseline).

When analyzing impacts, it is important to keep in mind the following guidelines:

- Be cognizant of both positive and negative impacts.
- Consider both temporary and long-term impacts as well as secondary and cumulative effects.
- Keep communities engaged and their goals in mind when identifying impacts.
- Recognize the public's perception of impacts. If the public identifies issues, then review and research these particular issues.
- Focus on the magnitude of an issue or controversy, as it determines the level of specificity the analyst must adopt.

Types of Impacts

What are some of the impacts to be assessed?

The following table includes examples of the types of impacts that might be identified and analyzed. The inquiries under the impact categories highlight some of the relevant questions to answer to understand how the proposed action

affects the community. This is an iterative process that should include and engage the public. Analysts will need to return to the community characteristics summary to obtain detailed information about the proposed project and to collect additional data about the community in order to answer the questions posed. The questions in this table should lead to others based on the specific circumstances of the project.

Impact Category					
Safety	Mobility and Access	Social and Psychological Aspects			
Pedestrian and Bicycle Safety Will the proposed action increase or decrease the likelihood of accidents for non-motorists? Crime Will the proposed action increase or decrease the likelihood of crime? Emergency Response Will there be changes in emergency response time (fire, police, and emergency medical)?	 Pedestrian and Bicycle Access How does the project affect non-motorist access to businesses, public services, schools, and other facilities? Does the project impede or enhance access between residences and community facilities and businesses? Does it shift traffic? Public Transportation How does the project affect access to public transportation? Vehicular Access How does the project affect short- and long- term vehicular access to businesses, public services, and other facilities? Does it affect parking availability? 	Changes in Population Will the proposed action cause redistribution of the population or an influx or loss of population? Community Cohesion and Interaction How will the project affect interaction among persons and groups? How will it change social relationships and patterns? Isolation Will certain people be separated or set apart from others? Social Values Will the project cause a change in social values? Cultural Changes Will the project cause a change in cultural identity? Quality of Life What is the perceived impact on quality of life?			

What questions help identify community impacts?

Economic Conditions	Physical Aspects	Visual Environment
Business and Employment Impacts Will the proposed action encourage businesses	Barrier Effect Is a wall or barrier effect created (such as from noise walls or fencing)?	Aesthetics Will the community's aesthetic character be changed?
to move to the area, relocate to other locations within the area, close, or move outside the area? What is the impact on both the region and individual communities?	Sounds Will noise or vibration increase? What will be the duration (short-term during construction or long-term)? Other Physical	Compatibility with Goals Is the design of the project compatible with community goals? Has aesthetics surfaced as a community concern?
Short-term Impacts How is the local economy affected by construction activities? Are there both positive (jobs generated) and negative (detours and loss of access) impacts?	Intrusions Will dust or odor increase? Will there be a shadowing effect on property?	
Business Visibility Will the proposed action alter business visibility to traffic-based businesses? How will visibility and access changes alter business activity?		
Tax Base What is the effect on the tax base (from taxable property removed from base, changes in property values, changes in business activity)?		
Property Values What is the likely effect on property values caused by relocations or change in land use? Is gentrification a potential issue (positive or negative)?		

Land Use	Provision of Public Services	Displacement
Land-Use Patterns Will there be loss of farmland? Does it open new areas for development? Will it induce changes in land use and density? What changes might be expected? Compatibility with Plans Is the project consistent with local land-use plans and zoning?	Use of Public Facilities Will the proposed action lead to or help alleviate overcrowding of public facilities (i.e., schools and recreation facilities)? Will it lead to or help alleviate underuse? How will it affect the ability to provide adequate services? Displacement of Public Facilities Will the project result in relocation or displacement of public facilities or community centers (e.g., places of worship)?	Effect on Neighborhoods What are the effects on the neighborhood from which people move and into which people are relocated? Residential Displacements How many residences will be displaced? What type(s) – multi-unit homes, single family, rural residential, others? Are there residents with special needs (disabled, minority, elderly residents)? Business and Farm Displacements How many businesses and farms will be displaced? What type(s)? Do they have unique characteristics, such as specialty products or a unique customer base? Relocation Sites Are there available sites to accommodate those displaced?

Public health is also an issue of increasing interest in community impact assessment. Public health encompasses a range of issues including safety (roadway fatalities and injuries, including non-motorized fatalities and injuries), opportunities for walking and bicycling, and access to health care and community services.

Environmental Justice and Limited English Proficiency

Crosscutting all these issues is the concern for nondiscrimination. Analysts should identify who benefits and who is adversely affected by the project, noting impacts on specific subgroups. The NEPA process and this guide should be used to address environmental justice and limited English proficiency issues and prevent the potential for discrimination and disproportionately high and adverse effects on specific populations.

It is important to recognize that some effects may be positive or negative for different population groups. Increases in property values that lead to gentrification is such an issue. These changes may be positive for some members of the community but also negative for lower-income populations who may no longer be able to afford to live in the community.

Title VI of the Civil Rights Act of 1964 assures that individuals are not excluded from participation in, denied the benefit of, or subjected to discrimination by a recipient of Federal Assistance on the basis of:

- Race
- Color
- National Origin

Additional statutes and regulations address non-discrimination on the basis of:

- Age
- Sex
- Disability

Executive Order 12898 on Environmental Justice directs that Federal programs, policies, and activities not have a disproportionately high and adverse human health or environmental effects on minority and low-income populations.

Executive Order 13166 on Limited English Proficiency directs Federal agencies to examine the services they provide, identify any need for services to those with limited English proficiency (LEP), and develop and implement a system to provide those services so LEP persons can have meaningful access to them.

Relationships Among Impacts

How do direct, indirect, and cumulative effects relate to each other?

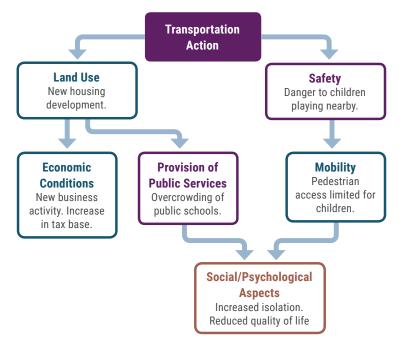
It is important for analysts to recognize the interconnections between community impacts. Analysts should not limit themselves to the previous list of questions. Instead, they should examine how differing impacts relate to each other, noting direct and indirect impacts as well as the cumulative or counterbalancing impacts of various effects.

- **Direct impacts** are those caused by a project that occur at the same time and place.
- Indirect impacts are those caused by direct impacts, and often occur later in time or further away in distance than direct project impacts.
- **Cumulative impacts** result from the incremental impacts of an action added to other past, present, or reasonably foreseeable future actions.

It is important to consider the history of the affected community in relationship to the current project as well as its potential contribution to cumulative effects based on previous projects or development plans. For instance, many lowincome communities and minority communities were adversely affected by transportation projects in the past, and a new project or rehabilitation of an existing transportation infrastructure could exacerbate past burdens, or offer an opportunity to help address a past impact.



Example Relationship of Impacts



A proposed project may result in changes in land use, such as an increase in housing development or commercial space in certain locations. As a result, enhanced business activity along the corridor may increase the local tax base and create jobs; however, population growth might put additional pressure on public services, leading to overcrowding at public facilities.

The project might create safety problems if children now must cross a wider highway to reach parks or schools, leading to increased reliance on school buses and private vehicles. Overcrowded schools and reduced mobility might create other social problems.

The following section of this guide describes some of the tools and approaches that may be used to analyze impacts.



Selecting Analysis Tools

Analytical Aspects

What dimensions should be analyzed?

When analyzing specific community impacts, the analyst should broadly examine:

- · Likelihood of impact
- · Scale, severity, and extent of impact
- · Duration of impact over time
- · Reversibility of impacts
- · Direct and indirect (secondary) impacts
- · Cumulative or counterbalancing impacts

Techniques

What are techniques that work?

There are a variety of techniques available to examine the effects of a project on a community. The following is a sample of relevant techniques or tools:

- Statistical Analysis: forecasting, trend line projections, and correlation
- Comparisons: case studies of similar transportation actions in other locations, using analogies, and examining similarities and differences over time or across areas
- **Visual Imaging:** computer simulations, development of physical models, 3D visualizations or fly-throughs
- **Mapping Overlays:** plotting various maps (physical characteristics, demographics, and project alternatives) using geographic information systems (GIS) and superimposing them to create a composite image
- **Modeling:** use tools including noise models, travel demand models, scenario planning models, and other technical tools to analyze impacts
- Expert Consultation: roundtables, discussions, and reports

- **Peer Review:** consultation with professionals within the transportation field
- · Brainstorming: generating ideas through quick-response reactions
- **Delphi Techniques:** structured form of reaching consensus among experts for problem solving
- Market Research: focus groups, targeted surveys, interviews, and questionnaires
- · Public Meetings: workshops and community advisory groups

Public Engagement can help the analyst identify potential impacts of concern to the community, and determine their severity, extent, and importance. Several of the above techniques involve public participation.

Sample Techniques to Determine the Extent of an Access Problem

If a potential barrier to access is identified, such as a barrier to pedestrian movement or bicycle access, the magnitude of the problem might be assessed through several techniques.

- Use GIS to examine maps of the proposed project, community facilities (e.g., schools), businesses, and the location of patrons. This approach will identify where the project might cut off a pedestrian/bicycle access route and helps determine the number of households where access is restricted.
- Use available data sources, such as the American Community Survey, or market research to identify how dependent the users are on current patterns of access (whether alternative services are accessible, whether individuals rely on walking/public transit, etc.).
- Perform comparisons with other areas that have experienced similar road development.
- Use public involvement to identify the degree of public concern and perceptions of barriers within the community.



Identifying Solutions

Addressing Impacts

How can adverse impacts be addressed?

When potential adverse impacts are identified, analysts should identify methods to address them. This step in the community impact assessment process involves problem-solving and generating solutions. There are four primary methods for dealing with impacts, which should be considered in order. The thought-process involves the following steps as seen in the box at right.

Project design options are typically based on an ideal engineering standard. When adverse community impacts are identified, analysts should:

 Work with the project development team to identify design or engineering options to deal with these impacts—starting with avoidance, and then moving on to minimization and mitigation techniques.

Avoidance

Alter the project so an impact does not occur.

Minimization

Modify the project to reduce the severity of an impact.

Mitigation

Undertake an action to alleviate or offset an impact or to replace an appropriated resource. This could involve repairing or restoring, reducing over time, or compensating for impact.

Enhancement

Add a desirable or attractive feature to the project to make it fit more harmoniously into the community. (Not designed to replace lost resources or alleviate impacts caused by the project.)

 Finally, consider enhancement opportunities which are a reasonable expenditure of public funds and help the project fit harmoniously into the community. Enhancements may be added to improve community acceptance or incorporated into a project as part of routine decision making to make it more compatible with and sensitive to community needs. Community impact analysts should recognize that an effort to address one impact may create other adverse impacts. They should consider the potential impacts of these measures on the community, making sure that approaches support the purpose and need of the project. Whatever approach is selected, it is important to monitor and follow through on commitments.



Commitments should be included in Categorical Exclusion (CE), Finding of No Significant Impact (FONSI), or Record of Decision (ROD) documents, as well as a draft and final EIS, as applicable.

Public Engagement is an important input to help identify acceptable solutions to address adverse impacts.

Potential Methods to Deal with a Barrier Effect

Examine what can be done to avoid creating the barrier. Can the alignment be changed to skirt the community rather than sever it?

If not, examine what can be done to minimize the barrier effect. Can a new connection, intersection, or crosswalk be developed to lessen barriers to interaction?

If not, examine what can be done to mitigate the impact. Can a pedestrian overpass be constructed? If access to a community center is impeded, can a new facility be constructed that is accessible?

For each of these steps, if an action is identified to address the barrier, examine what impact the action may have on the whole community. How would an overpass affect the safety and security of those using it? Select the mitigation measure that most adequately deals with concerns about crime; perhaps add lighting or design it with wide sight lines.

Examine opportunities for enhancement.

Examples

What are some examples of specific techniques to address impacts?

Avoidance

- · Change an alignment so that there are no displacements.
- Redesign a road segment as an underpass to avoid cutting off access to a community facility.

Minimization

- · Reroute or shift a highway segment to reduce displacements.
- · Limit interchanges to minimize incompatible land-use development.
- Phase the project to minimize impedance to business access during peak periods.
- Alter an alignment to increase the distance between the facility and residences to minimize noise impacts.

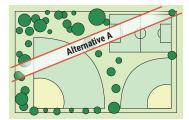
Mitigation

- Set aside land for a park or add to public recreation areas to replace lost facility.
- Erect sound barriers to mitigate noise to surrounding communities.
- Provide a bicycle/pedestrian overpass or underpass to provide access to public facilities.
- Provide compensation for properties acquired (a mandatory measure under the Uniform Act Amendments).

Enhancement

- Provide signage to recognize specific cultural or historic resources.
- · Plant trees and add park benches.
- · Develop bicycle trails or paths adjacent to roadways.
- Add public artwork or a facade to a transportation facility to match the aesthetic design goals of a community.

A visual example of this type of this step-wise approach is shown below for a project affecting a neighborhood park.



Alternative B

Alternative

Initial Concept with Community Impact

In this case, a new project (Alternative A) is anticipated to cut through a neighborhood recreational park.

Avoidance

In order to avoid the adverse impact, the project is realigned to avoid going through the park (Alternative B).



Roadway

Minimization

If avoidance is not possible, the project is realigned to minimize impact to the park (Alternative C).

Mitigation

In addition to minimizing the effect, the impact to the park could be mitigated by extending the park to replace some of the lost green space.



Enhancement

In addition to directly addressing the impacts of the project on the park, decorative street lighting, benches, and other features could be added to the roadway or nearby community to enhance the overall surroundings.



Documenting Findings

Application of Findings

How are the findings used?

The findings of a community impact assessment are valuable for decision making throughout the planning and project development process. Thus, the "findings" are not merely something produced at the end of the assessment. Findings occur throughout the assessment process, with initial information documented as part of the community characteristics summary and early public involvement; then new information is documented throughout project development. Information may change or get more specific as more detailed information is gathered and impact studies result in changes in the proposed project.

Because of the dynamic nature of communities and changing status of a project, the results of a community impact assessment should be reassessed, particularly if there are long time periods from the start of the process to the end. Once the number of project alternatives is narrowed, the community impact assessment details should be formally documented and the findings presented to the public.

Documentation of Findings

How are findings formally documented?

Documentation of findings should be continuous in order to inform all facets of decision making. The written findings are prepared for inclusion, or summarized and referenced, in the Environmental Assessment (EA) or Environmental Impact Statement (EIS). Documentation supporting a Categorical Exclusion (CE) also should demonstrate that community impact issues were considered and addressed as appropriate. This community impact material involves a factual presentation of information, including community concerns that inform purpose and need and alternatives identification, potential impacts for each alternative, and conclusions about methods to address adverse impacts as well as any proposed mitigation or enhancements.

In addition, a community impact technical report may be produced as a standalone document if the complexity of the project, State procedures, severity of the impacts, or quality of data justify a specialized technical report. Information from such a technical report can be summarized and the report referenced in the NEPA document. If scoping indicates that a community impact technical report is not needed, the analyst may move directly into preparing brief text sections on pertinent community topics to be inserted directly into the NEPA document.

Because the community impact technical report and NEPA documents are made available to the public, they should be clear and understandable. This information must be an integral part of the public engagement process.

Generating a Written Document When does writing begin?

Documentation begins early and takes place throughout the assessment process. Written findings should be recorded throughout project planning and development while the analyst develops and reevaluates the community characteristics summary, assesses and reassesses impacts, and identifies solutions for adverse impacts. Preparing an outline of the technical report or NEPA document sections will help facilitate the writing process and identify data needs during the assessment process.

The Technical Report

How should the community impact technical report be presented?

Since environmental documents are usually prepared to comply with NEPA, it is prudent to use a compatible format for the community impact technical report, as reflected in FHWA guidelines (TA 6640.8A). In addition, there may be State or local requirements.

Within an EIS, community impact assessment information would primarily appear in the following sections, but may appear elsewhere as well:

- Affected Environment (Community Characteristics Summary).
- Environmental Consequences and Mitigation.

In addition, other presentation guidelines include:

- Begin the report with an executive summary.
- Discuss only topics relevant to the project. However, all topics identified in 23 USC 109(h) should be addressed, lest it be assumed they were not examined.
- Include a summary of public involvement activities (number of meetings held, continuing efforts, substantive comments).
- Present findings in a clear, nontechnical manner, using graphics to aid understanding.
- Use an objective tone in the report. Be aware that it is a public document. Describe the community in a professional manner, avoiding the use of descriptions and terms that suggest a bias or might offend readers.
- Reach conclusions on each topic discussed. Document concerns, alternative strategies, and commitments.



Implementation and Monitoring

Beyond Project Development

What happens next?

The process of community impact assessment should not end at the completion of an environmental document. While the responsibility may transfer to another part of the agency, it is important to ensure that commitments made in project development carry over to project construction and operations.

Construction and Operations

What kinds of commitments might need to be addressed?

Issues commonly faced during construction include noise and access to businesses. The project environmental document may include commitments to a community to phase construction, to avoid construction during night hours, or avoid blocking certain access points to local businesses during construction, and these commitments must be carried out. For projects that involve road pricing or other operational strategies that might have important effects on certain groups, such as low-income populations, programs or strategies may be included to help address these issues. For instance, some areas have implemented programs to use toll revenues on an on-going basis to fund other multimodal improvements in the corridor or provide discounts for low-income residents.

Tracking Results

Why is it important to monitor outcomes?

Transportation agencies should assess impacts during construction and on-going operations, including monitoring the effects of mitigation efforts. Monitoring conditions is important to ensure that desired community outcomes are achieved, to assess any gaps, and to adjust if needed. This process enhances accountability and community trust.

Resources

People

Who can provide more information?

For additional information about the assessment of community impacts of proposed transportation projects, analysts are encouraged to seek out other internal and external specialists within their governmental unit. In addition, the Federal Highway Administration can provide guidance through the FHWA Division Office in each State, the District of Columbia, and Puerto Rico.

Publications

What are sources that provide more information?

A number of web sites and resource publications are available as references for community impact assessment, in addition to those listed in Section 1. These publications include, but are not limited to, the following:

U.S. Department of Transportation (U.S. DOT)

FHWA, Environmental Policy Statement, 1990 and 1994.

FHWA and FTA, Innovations in Public Involvement for Transportation Planning. 1994.

FHWA, "Nondiscrimination, Environmental Justice, and Community Impact Assessment in Planning and Project Development," memorandum to FHWA Field Offices. 1995.

FHWA, How to Engage Low-Literacy and Limited-English-Proficiency Populations in Transportation Decisionmaking. 2006.

FHWA and FTA, Livability in Transportation Guidebook. 2010.

FHWA and FTA, A Guide to Transportation Decision making. 2015.

FHWA and FTA, Public Involvement Techniques for Transportation Decisionmaking. 2015 Update.

FHWA, Environmental Justice Reference Guide. 2015.

FHWA, Developing and Advancing Effective Public Involvement and Environmental Justice Strategies for Rural and Small Communities. 2016.

FHWA, Framework for Better Integrating Health into Corridor Planning, 2016.

FHWA and FTA, The Transportation Planning Process Briefing Book: Key Issues for Transportation Decisionmakers, Officials, and Staff. 2017.

FHWA, Community Impact Assessment website.

FHWA, Environmental Review Toolkit.

FHWA, Planning and Environmental Linkages website.

FHWA, PlanWorks.

U.S. DOT and Centers for Disease Control, Transportation Health Tool.

Transportation Research Board

Transportation Research Record No. 1626, Planning and Administration, *Environmental and Social Effects of Transportation*. 1998.

National Cooperative Highway Research Program (NCHRP) Report 456, Guidebook for Assessing the Social and Economic Effects of Transportation Projects. 2001.

NCHRP Report 480, A Guide to Best Practices for Achieving Context Sensitive Solutions. 2002.

NCHRP Report 532, *Effective Methods for Environmental Justice Assessment*. 2003.

NCHRP Report (unnumbered), Recurring Community Impacts. 2008.

NCHRP Report 642, *Quantifying the Benefits of Context Sensitive Solutions*. 2009.

NCHRP Synthesis 373, Multi-Disciplinary Teams in Context-Sensitive Solutions: A Synthesis of Highway Practice. 2009.

NCHRP Report 710, *Practical Approaches for Involving Traditionally Underserved Populations in Transportation Decisionmaking*. 2012.

American Association of State Highway and Transportation Officials (AASHTO)

AASHTO, Practitioner's Handbook: Assessing Indirect Effects and Cumulative Impacts Under NEPA. 2016.

Cover photo credits Bike lane: Paul Krueger | CC BY 2.0 Highway park: Michigan Department of Transportation Street scene: © Fitzergald & Halliday, Inc.

Office of Planning, Environment, & Realty Federal Highway Administration 1200 New Jersey Ave, SE Washington, DC 20590 https://www.fhwa.dot.gov/hep/ What w