SOCIOECONOMIC GUIDANCE MANUAL

A Practitioner's Guide

September 2010

Prepared for
New Jersey Department of Transportation

Prepared by
Management Interventions, Inc.
In Association with
The Louis Berger Group

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1.0 Introduction

1.1 Overview

The Socioeconomic Guidance Manual presents an approach for identifying and addressing the effects of transportation actions on social and economic considerations as required under the National Environmental Policy Act (NEPA) and the Federal Highway Administration (FHWA) Environmental Review Requirements. The Guidance Manual provides an overview of relevant laws, policies and methods for assessing socioeconomic impacts – impacts to community and quality of life – as well as guidance for scoping and defining the appropriate level of effort for the processing of various environmental documents.

The approach described in this manual is consistent with federal initiatives to recognize the interrelationships between transportation, infrastructure, land use and community needs. For example, the *FHWA Livability Initiative* connects "the quality and location of transportation facilities to broader opportunities such as access to good jobs, affordable housing, quality schools, and safe streets."[1] The HUD-DOT-EPA Interagency Partnership for Sustainable Communities lists as one of its core Livability Principles: "Value communities and neighborhoods. Enhance the unique characteristics of all communities by investing in healthy, safe, and walkable neighborhoods."[2]

Federal law requires the consideration of social, economic and environmental impacts of transportation projects using federal funds. The Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) have developed several technical assistance products for transportation agencies and practitioners that make clear that the desired outcome of compliance with federal law, regulations and

[1] Federal Highway Administration, Livability Initiative. Retrieved August 6, 2010 from http://www.fhwa.dot.gov/livability/.
[2] U. S. Environmental Protection Agency, HUD-DOT-EPA Interagency Partnership for Sustainable Communities. Retrieved August 6, 2010 from http://www.epa.gov/smartgrowth/partnership/#livabilityprinciples.

guidance is the selection and design of projects that fit harmoniously within communities without sacrificing mobility and safety.

The New Jersey Department of Transportation (NJDOT) has established this Guidance Manual in full recognition of the essential importance of this desired outcome as part of its mission. The Manual sets forward a single unified process – an "umbrella approach" – for addressing the comprehensive range of socioeconomic topics under NEPA that both adheres to the nondiscrimination principles of Title VI and Environmental Justice and embraces the goals, methods and processes, and critical lessons of Community Impact Assessment and Context Sensitive Solutions.

Tailoring Effort to the Project

The approach described in this Guidance Manual should be used by practitioners to identify and appropriately consider potential project-induced socioeconomic impacts in affected communities.

The level of screening and public involvement necessary to identify potential project-induced impacts and the extent to which these impacts may result will vary by project type and scale. Practitioners need to use their own judgment as well as consult with Division managers to determine the level of screening and analysis required for each project.

In-house research on community characteristics coupled with field verification and project scope will assist in the determination of the level of effort necessary to adequately identify potential project-induced socioeconomic impacts. The use of the Field Visit Checklist and/or Socioeconomic Screening Form will contribute to this determination during the Concept Development phase of the Project Delivery Process.

The "umbrella approach" that is outlined in this manual is both analytically *comprehensive* and *inclusive* in its methods and processes for assessing issues of importance to people and communities. Information gathered through this process is integral to transportation decision-making during the development, refinement and selection of project alternatives. From a policy perspective, the methods and processes for assessing the social and economic impacts of transportation projects under NEPA are carried out through this "umbrella" process.

This manual is organized into eight chapters which review NJDOT's philosophy and the umbrella approach relating to NEPA environmental review mandates and other laws, regulations, and guidance, and directs the practitioner tasked with understanding socioeconomic considerations through the project development process. Chapters are devoted to the preparation of a community profile, impact assessment topics for socioeconomic effects evaluation, impact evaluation issues, issues resolution, and the public involvement process. Case studies are presented in Chapter 8 to highlight effective tools and techniques that have been used by NJDOT staff. These case studies identify potential approaches to project development that may be worthy of consideration for future projects under the right conditions.

1.2 NJDOT Philosophy

It is NJDOT policy to conceive, scope, design and build projects that incorporate design standards, safety measures, environmental stewardship, aesthetics and community sensitive planning and design. After more than a half-century of transportation planning and policy-making geared largely towards facilitating the safe and efficient movement of automobile traffic, a broader approach is gaining momentum in New Jersey and across the country. Instead of relying on centralized, standardized solutions, NJDOT often seeks to create customized solutions for individual places, depending on the project's context and the objectives sought.

When social, economic, and environmental effects are considered fully along with technical issues in the development of transportation projects, decisions can be made that serve the public interest. Attention should be given to such considerations as:

- Need for safe and efficient transportation;
- Attainment of community goals and objectives;
- Needs of low mobility and disadvantaged groups;
- Costs of eliminating or minimizing adverse effects on natural resources, environmental values, public services, aesthetic values, and community and individual integrity;
- Planning based on realistic financial estimates; and
- The cost, ease, and safety of maintaining whatever is built.

NJDOT is committed to a collaborative, interdisciplinary approach that involves all stakeholders in the development of a transportation project that fits the physical setting and preserves and enhances scenic, aesthetic, historical, community and environmental resources, while maintaining or improving safety, mobility and infrastructure conditions.

Early and continuous involvement of community stakeholders in the planning and design process results in a transportation project that reflects the values and goals of the people who live, work and travel within the project area. This collaborative process yields creative, safe and efficient transportation solutions. Techniques of the process include flexible design, community participation to build consensus, negotiation and conflict resolution. This process promotes an on-going public partnership to ensure that sub-regional and regional transportation benefits are considered within the context of communities directly impacted by the project.

1.3 The NJDOT Umbrella Approach to Socioeconomic Effects Evaluation

The following discussion provides an overview of the legal and regulatory framework driving the umbrella approach and methods that can be employed to ensure compliance with these regulations.

1.3.1 Legal Mandates, Socioeconomics and FHWA Guidance

NJDOT is responsible for compliance with federal regulations that require federally funded highway projects to address economic, social, and environmental impacts. The following summary includes the various laws, regulations, and guidance documents that represent the underpinnings of socioeconomic assessment. All analysis and documentation included as part of the environmental processing is done to fulfill the various requirements of these policies and acts.

The *National Environmental Policy Act of 1969 (NEPA)* requires an agency using federal funds to conduct a review of the social, economic and environmental impacts that a proposed action would have on the environment. NEPA makes clear the need to analyze these impacts, and promotes the use of the social sciences to assess the effects on the human environment. NEPA was reinforced by the *Federal Aid Highway Act of 1970 (23 USC 109(h))*, which defines specific adverse economic, social, and environmental impacts to communities, that must be considered when developing a project on any Federal-aid system. The act calls for final decisions to be made "in the best overall public interest" balancing the need for fast, safe and efficient transportation, public services, and the costs of "eliminating or minimizing such effects as: air, noise and water pollution; destruction or disruption of man-made and natural resources, aesthetic values, community cohesion, and the availability of public facilities and services; adverse employment effects, and tax and property value losses; injurious displacement of people, businesses, and farms; and disruption of desirable community and regional growth."

Signed on March 5, 1970, *Executive Order 11514*, requires federal agencies to monitor, evaluate, and control activities to protect and enhance the environment, and to develop procedures to provide information to the public concerning Federal plans and programs with environmental impact. The Order includes a provision for public hearings, requires that the public be apprised of alternative courses of action, and affords interested parties the opportunity to comment on proposed actions.

Other regulations, guidance and initiatives have since been developed, as part of the NEPA process, to further emphasize the importance of identifying and addressing potential impacts on the human environment that may result from transportation projects. The Council on Environmental Quality (CEQ) issued *Regulations for Implementing the Procedural Provisions of NEPA (40 CFR 1500-1508)*. The regulations require Federal agencies to use all practicable means, consistent with NEPA, to avoid and minimize any possible adverse effects of their actions upon the quality of the human environment, and also establish the environmental documentation process. In 1987, the Federal Highway Administration issued *Environmental Impact and Related Procedures (23 CFR 771)*, which detailed policies and procedures for implementing NEPA and the CEQ regulations including the need for early and continuing opportunities for the public to be involved in the identification of social, economic and environmental impacts during project development. The FHWA also issued its *Guidance for Preparing and Processing Environmental and Section 4(f) Documents (TA6640.8A)*, which emphasized early and continuing coordination with agencies and the public and the exchange of information throughout the environmental review process.

Signed on September 11, 1989, *New Jersey Executive Order 215* requires State departments, agencies and authorities to prepare and submit to the New Jersey Department of Environmental Protection (NJDEP) an environmental assessment (EA) or environmental impact statement (EIS) in support of major construction projects in order to reduce or eliminate potential adverse environmental impacts of projects initiated or funded by the State.

In 1997, the U.S. Department of Transportation issued its *Order to Address Environmental Justice in Minority Populations and Low-Income Populations (DOT Order)*. The *DOT Order* addressed the requirements of EO 12898 and set forth DOT's policy to promote the principles of environmental justice in all programs, policies and activities under its jurisdiction. Since the *DOT Order* was issued, the FHWA and the FTA have been working with their State and local transportation partners to make sure that the principles of environmental justice are integrated into every aspect of their mission. These efforts include *Implementing Title VI Requirements in Metropolitan and Statewide Planning,* a memorandum issued in 1999 which addresses the integration of environmental justice efforts in the planning phase of project development.

The passage in 1992 of the *Intermodal Surface Transportation Efficiency Act (ISTEA) (P. L. 102-240)*, a highway funding bill, and the 1998 national conference entitled *Thinking Beyond the Pavement National Workshop on Integrating Highway Development with Communities and the Environment While Maintaining Safety and Performance*, laid the groundwork for experimentation with the principles of Context Sensitive Design (CSD) or more commonly referred to a Context Sensitive Solutions (CSS). The legislation and the conference emphasized the importance of local involvement in transportation decision-making and good design that is sensitive to the surrounding environment.

The 1995 FHWA document *CIA: A Quick Reference for Transportation* was introduced "to increase awareness of the effects of transportation actions on the human environment and emphasize that community impacts deserve serious attention in project planning and development-attention comparable to that given the natural environment … and to provide some tips for facilitating public involvement in the

decisionmaking process." Following publication of this guidance document, five states and one federal highway design agency worked to integrate the principles of CSD/CSS into their project design processes. Over the next five years, the states developed training sessions, teaching guides, and manuals related to specific problems. During this period, the FHWA promoted the use of American Association of State Highway and Transportation Officials (AASHTO) standards to lend flexibility to highway design. This guidance can be found in the 1997 FHWA document, *Flexibility in Highway Design* (Figure 1-1).

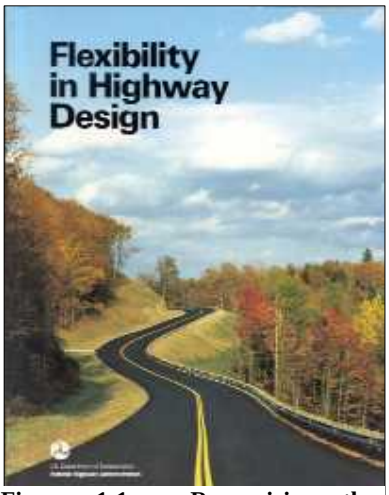


Figure 1-1 - Recognizing the consequences of past siting decisions, the FHWA has prepared key guidance documents that emphasize the benefits of greater flexibility in highway design.

The 1998 *Transportation Equity Act of the 21st Century (TEA 21) PL 105-178*, repeated the call to balance protection of the natural and human environments and the financial commitment to transportation improvements. The establishment of Environmental Stewardship and Streamlining as one of the FHWA's three "Vital Few Goals" grew out of this legislation. Objective #1 of this goal calls for "Integrated approaches to multimodal planning, the environmental process and project development at a systems level; and/or Context Sensitive Solutions (CSS) at a project level."

Signed into law in 2005, the *Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)* guaranteed funding for highways, highway safety, and public transportation. This legislation, *Section 109(c)(2) US Code, Title 23* was amended in 2005 by Section 6008 to include material that supports CSS procedures in project planning and implementation. This material originated in the *Thinking Beyond the Pavement* conference mentioned above. These efforts invite collaborative decision-making and stakeholder engagement to include affected communities and to find a balance between meeting transportation needs and protecting and enhancing the physical and human environments likely to be affected by proposed transportation decisions.

1.3.2 Title VI, Environmental Justice, Limited-English Proficiency, and Americans with Disabilities Act

Today, effective transportation decision-making requires understanding and addressing the unique needs of many different socioeconomic groups. The involvement of people potentially affected by transportation projects including low-income, minority, and linguistically isolated populations, and those protected under the Americans with Disability Act offers many benefits and does not impede the accomplishments of other DOT priorities such as safety and mobility. Recognition of community needs and values allows NJDOT to provide needed transportation facilities and services that are welcomed by communities.

As a partner with the FHWA and a recipient of Federal funds, NJDOT is required to ensure non-discrimination in all its programs and activities. The NJDOT Division of Civil Rights and Affirmative Action (CR/AA) is responsible for overseeing and ensuring nondiscrimination in the implementation of all NJDOT's activities. In addition to overseeing NJDOT's mandated nondiscrimination programs, FHWA allocates supportive services funds to NJDOT to complement the overall mission of Civil Rights/Affirmative Action (CR/AA) and to enhance program effectiveness. The following provides a brief overview of the regulatory framework protecting the abovementioned populations.

Title VI of the Civil Rights Act of 1964

Title VI of the Civil Rights Act of 1964 outlawed discrimination in the conduct of all federal activities. It states:

> *"No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance."*

Pursuant to Title VI of the Civil Rights Act of 1964 and other legal mandates such as the Restoration Act of 1987 and other nondiscrimination authorities, it is the policy of the FHWA that discrimination on the ground of race, color, national origin, disability/handicap, sex, age, or income status shall not occur in connection with programs or activities receiving financial assistance from the FHWA.

The focus of Title VI is on both intentional discrimination and disparate impact discrimination. The FHWA ensures compliance with Title VI in all of its programs and activities whether or not those programs and activities are FHWA funded. Efforts to prevent discrimination include a program's impact upon access, benefits, participation, treatment, services, contracting opportunities, training opportunities, investigation of complaints, allocation of funds, project prioritization and the functions of planning, project development, design, right-of-way acquisition, construction, and research.

As an agency in receipt of federal funds, NJDOT is committed to preventing the intentional or unintentional discrimination in all of its programs and activities. NJDOT, and therefore practitioners acting on behalf of NJDOT, should make every attempt to consider the needs of populations protected under Title VI in all stages of transportation decision-making so that adverse environmental effects do not occur. The Title VI/Environmental Justice office within the Division of Civil Rights and Affirmative Action at NJDOT monitors the effects of agency-sponsored projects on protected populations and is accessible to all NJDOT staff should they have questions or concerns related to a specific project or general requirements of the law.

Environmental Justice

In 1994, *Executive Order 12898, Federal Actions to Address Environmental Justice (EJ) in Minority Populations and Low-Income Populations*, directed every Federal agency to "make environmental justice part of its mission by identifying and addressing the effects of all programs, policies and activities on minority populations and low-income populations." The Executive Order (EO) reinforced what had been law for more than three decades — Title VI of the Civil Rights Act of 1964. The EO essentially reminded all government agencies receiving Federal funding that they are required to address discrimination as well as the consequences of all of their decisions or actions that might result in disproportionately high and adverse environmental and health impacts on minority and low-income communities.

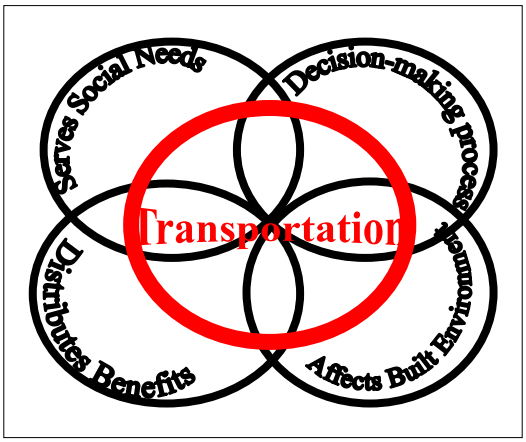


Figure 1-2 - The DOT Order on Environmental Justice emphasizes the importance of examining all transportation decision-making processes and their consequences upon low-income and minority populations. The FHWA's website on Environmental Justice is a valuable resource for technical assistance.

In 1997, the U.S. Department of Transportation issued its *Order to Address Environmental Justice in Minority Populations and Low-Income Populations (DOT Order)*. The *DOT Order* addressed the requirements of EO 12898 and set forth DOT's policy to promote the principles of environmental justice in all programs, policies and activities under its jurisdiction. Since the *DOT Order* was issued, the FHWA and the Federal Transit Administration (FTA) have been working with their State and local transportation partners to make sure that the principles of environmental justice are integrated into every aspect of their mission. These efforts include *Implementing Title VI Requirements in Metropolitan and Statewide Planning,* a memorandum issued in 1999 which addresses the integration of environmental justice efforts in the planning phase of project development. The essence of effective environmental justice practice is summarized in three fundamental principles:

- » Avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations;
- » Ensure the full and fair participation by all potentially affected communities in the transportation decision-making process; and
- » Prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

As a recipient of federal funds, NJDOT has developed a strategy for achieving environmental justice that prevents disproportionately high and adverse human health or environmental effects, including social and economic effects on minority and low-income populations. The strategy is an interdisciplinary effort to

address the interests and concerns of low-income and minority populations in transportation planning and project development that parallels the intent of the EO.

Limited English Proficiency

In 2000, *Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency (LEP)*, required recipients of federal financial assistance to develop and implement guidance on how they will provide meaningful access to LEP persons in order to comply with the regulations se forth in Title VI of the Civil Rights Act of 1964. Many individual federal programs, states, and localities, including NJDOT, have adopted their own provisions requiring language services for LEP individuals.

NJDOT has a responsibility to ensure that all persons, including those with a limited ability to read, write, speak or understand English are provided equal access to its available services and information. Under its LEP programs, NJDOT strives to provide all persons with meaningful access to agency services, information and activities. Failure to do so is considered discrimination under Title VI of the Civil Rights Act of 1964.

In 2007, in order to establish agency-wide protocols for the inclusion of persons with LEP in NJDOT programs and activities, the NJDOT Title VI Bureau developed its own LEP guidelines to ensure meaningful access to agency programs and services for persons with LEP. All NJDOT divisions can use the LEP Guidelines and/or call upon agency staff who may speak the language of an affected community to assist persons whose primary language is not English, who may have difficulty with reading, speaking or understanding English.

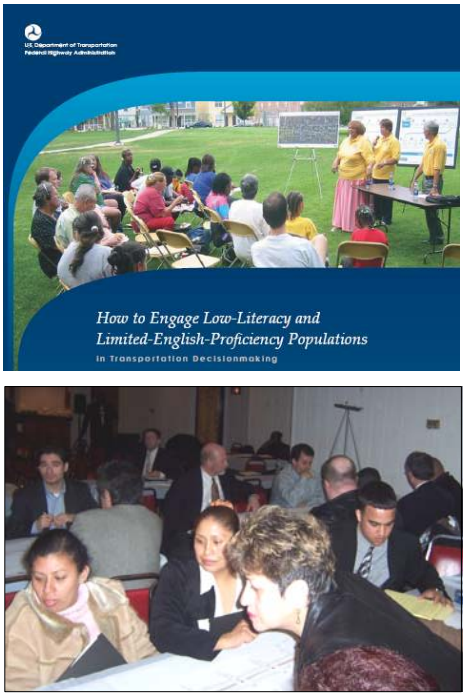


Figure 1-3 - FHWA has emphasized the importance of developing appropriate strategies, including the use of interpreters, to ensure that Limited English Proficiency and Low-Literacy Populations have access to decision-making processes.

Americans with Disabilities Act

Reaffirming and extending Title VI of the Civil Rights Act of 1964, the *Americans with Disabilities Act of 1990 (ADA)* prohibits discrimination on the basis of disability. The U.S. Department of Justice (DoJ) regulations, which are applicable to public facilities, describe the obligations of State and local governments for existing facilities and program operations. The DoJ has established ADA Standards for Accessible Design that must be followed during the construction of new or alteration of existing facilities, including those projects undertaken by NJDOT.

In 1999, the USDOT issued an Accessibility Policy Statement pledging a fully accessible multimodal transportation system. Accessibility of Federally-assisted programs is governed by USDOT regulations and the FHWA has specific ADA policies for statewide and metropolitan planning as well as for the NEPA process. These regulations require application of ADA requirements to Federal-aid projects, including Transportation Enhancement Activities. Technical reports on accessible design for pedestrian and bicycle facilities are available through FHWA division offices. The agency also provides guidance for designing sidewalks, street crossings, intersections and other pedestrian facilities entitled *Designing Sidewalks and Trails for Access*, which is accessible from the FHWA website. In the construction of new, and alteration of existing facilities, NJDOT is required by law to design projects that are ADA-compliant, where feasible.

1.3.3 Community Impact Assessment

Under the larger socioeconomics umbrella, Community Impact Assessment (CIA) is a process used to evaluate the effects of transportation projects on a community and the quality of life currently enjoyed by those in the community. It is a process used in the various stages of decision-making, particularly project planning and development, and can help NJDOT design projects that fit more harmoniously into communities. It has been used by the FHWA as the "umbrella" or centerpiece by which to address the full range of concerns related to the assessment of socioeconomic impacts under NEPA, Title VI of the Civil Rights Act of 1964 and Environmental Justice, and Context Sensitive Solutions. It is a process that is *comprehensive* and *inclusive* in its assessment of issues of importance to people and communities.

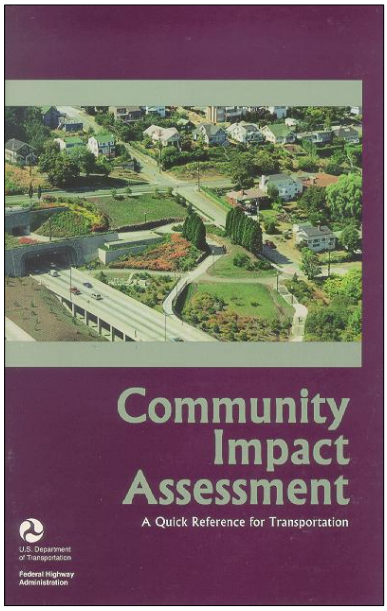


Figure 1-4 - FHWA prepared the CIA Quick Reference Guide to increase awareness of the effects of transportation actions on the human environment and emphasize that community impacts deserve serious attention in project planning and development.

From a policy perspective, the methods and processes for assessing the social and economic impacts of transportation projects under NEPA are carried out through the CIA process. Information gathered during the CIA process is integral to transportation decision-making during the development, refinement and selection of project alternatives. Extensive documentation and information about the current and anticipated social and economic climate – both with and without the proposed project – of the affected community(s) collected during the CIA process can help inform decisions made throughout the project life cycle. The assessment should consider all items of importance to people and allow for community concerns such as mobility, safety, employment effects, relocation, isolation, among other concerns, to be properly identified. Additional information on the CIA process can be found in the FHWA publication, *Community Impact Assessment: A Quick Reference for Transportation.*

1.3.4 Context Sensitive Solutions

Context Sensitive Solutions (CSS) is a collaborative and interdisciplinary approach for involving all stakeholders to develop a transportation facility that fits its physical setting and preserves and enhances scenic, aesthetic, historic, community and environmental resources, while maintaining or improving safety, mobility, and infrastructure conditions. CSS considers the total context within which a transportation improvement project will exist, dealing with "context" both as a constraint and an opportunity. Better understanding of a context can help a project be in harmony with the community and preserve resources that otherwise might be lost or harmed. A thorough understanding of the issues facing any context – whether a small main town street or an urban road – will also help frame the role that a transportation project can play in enhancing that place.

> "CSS is not a philosophy to be selectively applied to certain categories of projects, but an approach to transportation planning, design, construction and maintenance that is scalable to use on every transportation project".
>
> *Performance Measures for CSS – A Guidebook for State DOTs, NCHRP Web-Only Document 69 (20-24(30))*

The underlying principle of CSS – advocating continuous stakeholder collaboration – is ingrained in NJDOT's

Project Delivery Process from Concept Development through Construction. This approach is an integral component to successful project delivery. It ensures that the continuous consideration of stakeholders, as well as the physical and human environments, is balanced with the transportation context in developing solutions to transportation needs. By utilizing this approach, projects are designed to meet transportation objectives and fit more harmoniously into communities. More importantly, they can be delivered in a timely manner within established budgets negating the need to refine various elements of projects as they continue through the delivery process.

Many transportation agencies, including NJDOT, view their mission as responsibility for building safe, efficient, and effective transportation systems. These agencies recognize that under NEPA and environmental permitting regulations they must consider socioeconomic conditions and potential project-induced impacts as part of their decision-making process. The integration of the CSS approach into agency procedures and policies ensures that transportation, community, and environmental goals receive equal consideration during the decision-making process. Ultimately, it means that it is possible that transportation goals and traditional engineering approaches may not be the primary driver for all of the final project decisions.[3] The implementation of a CSS approach to navigating the project development process will ensure the best possible outcome to the environmental review process.

In December 2009, NJDOT issued a policy "to create and implement a Complete Streets Policy in New Jersey through the planning, design, construction, maintenance and operation of new and retrofit transportation facilities within public rights of way that are federally or state funded, including projects processed or administered through the Department's Capital Program."[4] A Complete Street is defined as a means to provide safe access for all users by designing and operating a comprehensive, integrated, connected multi-modal network of transportation options. The policy states the need for designs to comply with Title VI/Environmental Justice legislation and to take into consideration the community context. In March 2010, a new USDOT policy endorsed Complete Streets and called for full consideration of pedestrians and bicyclists in transportation planning.

NJDOT is encouraging regional and local jurisdictions who apply for funding through Local Aid programs to adopt similar policies. The benefits of Complete Streets are:

- Complete Streets improve safety for pedestrians, bicyclists, children, older citizens, non-drivers and the mobility challenged as well as those that cannot afford a car or choose to live car free.
- Provide connections to bicycling and walking trip generators such as employment, education, residential, recreation, retail centers and public facilities.
- Promote healthy lifestyles.
- Create more livable communities.
- Reduce traffic congestion and reliance on carbon fuels thereby reducing greenhouse gas emissions.
- Complete Streets make fiscal sense by incorporating sidewalks, bike lanes, safe crossings and transit amenities into the initial design of a project, thus sparing the expense of retrofits later.

[3] D'Ignazio, Janet. Agency Challenges to Integrating Context Sensitive Solutions, Match 2006. Retrieved September 22, 2009 from FHWA and CSS website from http://www.fhwa.dot.gov/context/index.cfm.
[4] Complete Streets, Inc. Department of Transportation Policy. Retrieved June 5, 2010 from http://www.completestreets.org/webdocs/policy/cs-nj-dotpolicy.pdf.

1.3.5 Public Involvement

Public Involvement is an essential element of the above processes used to assess the impact of transportation projects on the socioeconomic context of the affected community. A Public Involvement Action Plan (PIAP) is designed for each transportation project, with the complexity of the plan varying with the complexity of the project. The PIAP guides public involvement activities to provide outreach to affected communities and opportunities for collaboration with those communities throughout the transportation decision-making process, from problem screening through construction. The Public Involvement process is described in detail in Chapter 7.0.

Figure 1-5 - Public meetings introduce project plans to community stakeholders.

1.4 Summary of Benefits

Adoption of the procedures included under the socioeconomic umbrella yields several benefits for the affected community, for the transportation agency, and for the transportation process. Consideration of the socioeconomic context in the early stages of project planning leads to better community support, compliance with environmental regulations, efficiencies in the transportation process, and improved quality of life for communities affected by transportation projects. The techniques associated with CSS and CIA, as well as the public involvement process include the early identification of significant community, socioeconomic, and environmental issues through efforts to define the context of a proposed project.

The affected community will experience improved quality of life if the transportation project results in improved mobility and safety. A design alternative chosen by consensus reached between the transportation agency and community stakeholders may also address other socioeconomic and environmental issues. Examples of potential benefits may include minimized disruption through detours or traffic delays during construction, improved pedestrian ways and lighting, or rerouting of traffic to avoid a critical neighborhood resource. These issues are revealed through the public involvement process which includes input from traditionally underrepresented populations.

The identification of minority, low-income, and other special needs populations and the commitment to public involvement ensures that adverse impacts do not fall disproportionately upon these groups and the benefits of funding and decision-making are distributed among all populations. When these processes are executed as an integral part of the project delivery process, compliance with federal regulations is ensured.

The process promotes the coordination of transportation policies and investments with local goals and plans concerning land use, economic development, capital improvements, environmental preservation, and other planning efforts to ensure consistency with a community's vision of itself. This approach will result in increased local support for the project.

The CSS Product: Qualities of Excellence in Transportation Design

The "Qualities that Characterize Excellence in Transportation Design" – that is, of the physical end product of the CSS process are:

- The project satisfies the purpose and needs as agreed to by a full range of stakeholders. This agreement is forged in the earliest phase of the project and amended as warranted as the project develops.
- The project is a safe facility for both the user and the community.
- The project is in harmony with the community, and it preserves environmental, scenic, aesthetic, historic, and natural resource values of the area (i.e., exhibits context sensitive design).
- The project exceeds the expectations of both designers and stakeholders and achieves a level of excellence in people's minds.
- The project involves efficient and effective use of the resources (time, budget, community of all involved parties.
- The project is designed and built with minimal disruption to the community.
- The project is seen as having added lasting value to the community.

The CSS Process: Characteristics of the Process that Yield Excellence

The "Characteristics of the Process that will Yield Excellence in Transportation Design" are:

- Communication with all stakeholders is open, honest, early, and continuous.
- A multidisciplinary team is established early, with disciplines based on the needs of the specific project, and with the inclusion of the public.
- A full range of stakeholders is involved with transportation officials in the scoping phase. The purposes of the project are clearly defined, and the consensus on the scope if forged before proceeding.
- The highway development process is tailored to meet the circumstances. This process should examine multiple alternatives that will result in a consensus of approach methods.
- A commitment to the process from top agency officials and local leaders is secured.
- The public involvement process, which includes informal meetings, is tailored to the project.
- The landscape, the community, and the valued resources are understood before engineering design is started. A full range of tools for communication about project alternatives is used (e.g., visualization).

Thinking Beyond the Pavement: A National Workshop on Integrating Highway Development with Communities and the Environment, Maryland, May 1998

Active public engagement in the transportation process creates a sense of community ownership and a level of trust in the transportation project process. Early involvement yields dependable information about transportation needs, community values, and the suitability of the proposed project for an area. Involvement of the public in the definition of need, choice of a preferred alternative, and determination of mitigations or enhancements ensures that the project suits the community and fosters widespread support for the project and future transportation efforts. The documentation of project decisions and adherence to commitments throughout the project process contribute to this support.

Attention to the socioeconomic context can streamline the project process and result in increased efficiency. Early broad-based public involvement and consensus on purpose and need contributes to a predictable project delivery timeline. By analyzing the potential impacts to a community and early

identification of areas of controversy, local opposition, redesign and/or litigation may be avoided. The project development process may be shortened, thereby saving time and money.

This Chapter includes:

- Description of NJDOT's Project Delivery Process
- NJDOT's Project Delivery Process Chart
- Discussion of Levels of Documentation and Processing Requirements
  - Environmental Impact Statement
  - Categorical Exclusion
  - Environmental Assessment
- Relationship to Local Aid/ Federal Aid Programs

2.0 NJDOT's Project Delivery Process

The NJDOT Project Delivery Process (PDP) outlines current agency procedures for preparing construction contract documents for road and bridge projects for all project categories – Interstate, National Highway System (NHS) and non-NHS, New Construction, Reconstruction and Resurfacing, Rehabilitation and Restoration (3R) – as they move through the various stages of transportation decision-making. The PDP is designed to enable NJDOT staff, the general public, and others who may be involved in the environmental review and design processes to understand the agency's flow of work requirements at each stage in the decision-making process.

Each stage includes stakeholder involvement as a key element in the development of a successful project. Attention to the socioeconomic context, as well as the environmental and transportation contexts, results in a project that meets the needs of the affected community and the stated transportation objectives. The process incorporates efforts to reach consensus and steps to insure that commitments are honored through the life of the project.

An overview of NJDOT's project delivery process is discussed below and illustrated in Figure 2-1. The phases of NJDOT's project delivery process are:

- Problem Screening - This phase introduces the transportation problem and seeks to determine if the problem should be addressed through the Project Delivery Process. During this period of information-gathering, MPO approval and support with public involvement is sought. Implementation of the Public Involvement Action Plan (PIAP) begins in this stage.
- Concept Development - During this phase, the direction of the project is determined, resulting in a completed Purpose and Need Statement and the assignment of NEPA classification. Early public involvement helps to identify fatal flaws and to gain community acceptance for the project. Coordination with stakeholders provides opportunities for community input into the Purpose and Need Statement and the Preliminary Preferred Alternative.
- Preliminary Engineering - Coordination with stakeholders continues in an effort to gain community consensus as the process moves toward an approved environmental document and an approved project plan.
- Final Design - The PIAP will guide steps to engagement with affected communities to keep stakeholders informed of the final design and to maintain commitments agreed upon in prior phases. Information concerning ROW acquisition, if applicable, requires continuing information exchange with stakeholders.

- Construction - As the construction phase begins and moves toward the completed project, the public is kept informed of the construction schedule and potential impacts. The PIAP allows for public comments during the construction phase to maintain community support and respond to concerns regarding construction.

For additional information refer to the NJDOT website, the NJDOT Design Activity Manual, or speak with your Division Manager.

As a practitioner and steward of the environment, your judgment is essential to the successful implementation of each agency-sponsored project. Understanding the NJDOT project development process and environmental review process contributes to the overall success of the agency to implement projects that are not only safe and efficient but also fit harmoniously into communities, regardless of their scale or size. With a thorough understanding of these processes, there is also a greater potential to effectively streamline a project, as appropriate, to eliminate unnecessary steps or to act more proactively to address issues and find workable solutions without a significant change in the time or monetary requirements to implement a project.

2.1 Levels of Documentation and Processing Requirements

This section provides an overview of the types of environmental documents that are prepared either in-house or by consultants to assess potential project-induced impacts. The project type and the screening process will help determine the type of environmental documentation that will be required to execute the project.

2.1.1 Environmental Impact Statement

An Environmental Impact Statement (EIS) is a full disclosure document that details the process through which a project was conceived and includes an alternatives analysis, analysis of potential project-induced impacts on the environmental and human environments, and demonstrates compliance with other applicable laws (e.g., National Environmental Policy Act of 1969 (NEPA), 23 USC 109(h), Section 4(f)) and Executive Orders such as Executive Order 12898 on Environmental Justice and Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency.

Projects that meet these criteria include:

- A new controlled access freeway;
- A highway project of four or more lanes on a new location;
- New construction or extension of fixed rail transit facilities; and
- New construction or extension of a separate roadway for buses or high occupancy vehicles not located within an existing highway facility.

The purpose of an EIS is to determine if an action is likely to cause significant impacts to the environment and if those impacts can be avoided, minimized and/or mitigated. EISs prepared for NJDOT projects follow NEPA guidelines and FHWA regulations. Public involvement activities are expected to be conducted to adequately reach all potentially affected parties regardless of the diversity of the constituent

base and engage participants so that they may contribute in a meaningful way to the decision-making process.

The first step in the process is a publishing of the Notice of Intent (NOI) in the Federal Register by the FHWA, which signals the initiation of the process. Scoping – one of the earliest stages of the EIS process – is used to identify the range of alternatives and impacts and the significant issues to be addressed in the EIS. The draft EIS evaluates all reasonable alternatives to the action and discusses why other alternatives were eliminated. The draft EIS also summarizes the studies, reviews, consultations, and coordination required by environmental laws or Executive Orders. Once the draft EIS is circulated and comments are received and considered, a final EIS is prepared. The final EIS identifies the preferred alternative and evaluates all reasonable alternatives. It discusses the substantive comments received on the draft EIS and summarizes public involvement and describes the mitigation measures that are incorporated into the proposed action. The publishing of the Record of Decision (ROD) in the Federal Register concludes the EIS process.

2.1.2 Categorical Exclusion

Categorical Exclusion (CE) is a category of actions which do not individually or cumulatively have a significant effect on the human environment and, therefore, neither an environmental assessment (EA) nor an EIS is required. CEs are actions which meet the definition contained in 40 CFR 1508.4 and, based upon past experience with similar actions, do not involve significant environmental impacts. The majority of environmental documents prepared by NJDOT staff falls into this category. Criteria that must be met in order for a project to be classified as CE include:

- Does not induce significant impacts to planned growth or land use for the area;
- Does not require the relocation of significant numbers of people;
- Does not have a significant impact on any natural, cultural, recreational, historic or other resource; and
- Does not involve significant impacts on travel patterns.

An agreement between NJDOT and the NJ FHWA Division Office has been established that allows NJDOT to self-certify CEs if the project meets certain criteria. An overview of the two CE types is discussed below.

Figure 2-1
Last approved 10/23/2009/Last revised 02/02/2010

New Jersey Department of Transportation
Project Delivery Process

	Problem Screening	Concept Development	Preliminary Engineering	Final Design	Construction
Funding	Annual Transportation Capital Plan and STIP	Planning Funds	Preliminary Engineering Authorization	Final Design Authorization ROW / Utility Authorizations	Construction Authorization
Key Tasks	Conduct Tier 1 Screening Subject Matter Expert Review Check NJDOT Management Systems Prioritize Problem Statements Conduct Tier 2 Screening Conduct Bridge Deck Replacement Screening Conduct Pavement Resurfacing Screening Validate Problem Recommend Preliminary Project Scope CPC Approval and Assignment	Conduct Data Collection Evaluate Deficiencies and Identify Fatal Flaws Evaluate Planning Alternatives Coordinate with Stakeholders Complete Environmental Screening Assess Right of Way (ROW) and Access Impacts Determine Preliminary Preferred Alternative (PPA) Identify Substandard Design Elements Determine NEPA Classification Prepare Construction Cost Estimate Select Designer	Coordinate with Stakeholders Conduct Environmental Analysis for PPA Initiate Roadway Engineering Initiate Structural Engineering Initiate ROW and Access Initiate Utility Engineering Prepare Final Design and Construction Cost Estimates Manage Project Contracts	Manage Project Communications Complete Roadway Engineering Complete Structural Engineering Complete ROW and Access Complete Utility Engineering Complete Environmental Process Prepare Final Design Submission Certify Construction Contract Documents Manage Project Contracts	Advertise for Bids Award Project Conduct Construction Startup Conduct Mobilization Manage Construction Changes Conduct Construction Operations Complete Construction Close-Out Project
Public Involvement	Obtain MPO Approval and Public Input	Execute Public Involvement Action Plan	Execute Public Involvement Action Plan	Execute Public Involvement Action Plan	Keep Public Informed Maintain Community Support
Key Products	Problem Statement Validation Tier 1 Documentation Tier 2 Screening Report Bridge Deck Replacement Screening Report Pavement Resurfacing Screening Report Charter Proposed Project Assignment	Design Communications Report Concept Development Report: Purpose and Need Statement Preliminary Preferred Alternative National Environmental Policy Act (NEPA) Classification Preliminary Engineering Scope Statement	Design Communications Report Preliminary Engineering Report: Approved Environmental Document Approved Design Exception Report Cost Estimates (Final Design & Construction) Approved Project Plan Final Design Scope Statement	Design Communications Report Environmental Reevaluations and Permits Access Permits Acquisition of ROW Construction Contract Documents Supporting Agreements	Design Communications Report Completed Project As-Builts Close-Out Documentation
	Division of Capital Investment Strategies & Division of Project Development	Division of Project Development	Division of Project Development	Division of Project Management	Division of Project Management and Division of Construction Services and Materials or Operations

Last approved 10/23/2009 / Last revised 02/02/2010

Certified Categorical Exclusion (CCE)

A CCE is a NJDOT self-certified CE that does not need to be submitted to FHWA for authorization. Documentation and processing requirements for a CCE are detailed in the February 13, 2008 Programmatic Agreement between NJDOT and the NJ FHWA Division Office, which is an update from the November 22, 1997 Memorandum of Agreement (MOA) between the two agencies. There are 30 different types of projects that meet the Agreement terms to be classified as a CCE. A copy of the Agreement including the list of projects meeting these criteria can be found in Appendix D.

The CCE process is used for projects that do not cause significant social, economic, or environmental impacts and require nominal documentation. During the CE process, NJDOT conducts an interdisciplinary review of potential-project induced impacts and provides appropriate public involvement opportunities to determine if the project meets specified criteria. The resource areas that must be evaluated for potential impacts to determine if the project would be a CCE or would require a CE include:

- *Section 4(f) or 6(f).* The proposed project would not result in the use of any property or properties protected under Section 4(f) of the Department of Transportation Act, or Section 6(f) of the Land and Water Conservation Fund Act.
- *Historic Properties.* Consultation with FHWA and the New Jersey State Historic Preservation Officer (SHPO) has concluded that the proposed project would not result in an "Adverse Effect" upon any properties eligible for or listed in the National Register of Historic Places.
- *Wetlands.* The proposed project would not result in the placement of fill in 5 or more acres of freshwater wetlands or State open waters, or the placement of fill in tidal wetlands, or does not require a Nationwide 404 permit.
- *Endangered Species.* The proposed project would not affect species or critical habitat of species protected by the Endangered Species Act.
- *Sole Source Aquifer.* The proposed project is not located within a designated Sole Source Aquifer or does not require an EPA approval of groundwater assessment.
- *Noise.* The proposed project is not a Type 1 Action requiring a noise study in accordance with Section 772 of the Federal Act Policy Guide.
- *Air Quality.* The proposed project would not cause an exceedance of the National Ambient Air Quality Standards (NAAQS), or would not require a Congestion Management Study/Major Investment Study (CMS/MIS0.
- *Right of Way.* The proposed project would not require relocation of any residences or businesses, or would not involve a control of access change, or would not have a high risk of hazardous materials involvement.

CE documentation, similar to that found in Appendix G, is completed during this review. Technical assistance from the FHWA can be requested at any time and does not prohibit the designation of a project as certifiably excluded. No notification of the CCE classification is sent to FHWA, but project files are audited annually.

Categorical Exclusion (CE)

A CE follows a similar environmental documentation process as a CCE, but requires certification by the FHWA. The 2008 Programmatic Agreement stipulates that any proposed project that may have impacts to any of the resource areas mentioned above must result in a CE certified by the NJ FHWA Division Office and cannot be "self-certified" by NJDOT.

In addition to assessing for potential impacts to the resource areas above, there are four types of projects that must be certified by the NJ FHWA Division Office regardless of potential impacts, including:

- Modernization of a highway by reconstruction, adding shoulders, adding auxiliary lanes (e.g. parking, weaving, turning, climbing), or modifications which result in a redirection of existing movements at an interchange/intersection.
- Bridge rehabilitation, reconstruction or replacement or the construction of grade separation to replace existing at-grade railroad crossings.
- Transportation corridor fringe parking facilities.
- Construction of new truck weigh stations or rest areas.

The CE will also identify environmental opportunities depending on the project scope and its context as well as list any environmental commitments that have been made. Depending on the project, Public Information Centers (PIC) may be available to address and document environmental issues (see Chapter 7). Once the CE has been approved by FHWA, construction or maintenance activities can begin.

2.1.3 Environmental Assessment

When the significance of impacts of a transportation project proposal is uncertain, an environmental assessment (EA) can be prepared to assist in making this determination. If it is found that significant impacts will result, the preparation of an EIS would be warranted. An EA is intended to be a "concise public document" that briefly provides sufficient evidence and analysis for determining whether it is necessary to prepare an EIS or whether a Finding of No Significant Impact (FONSI) can be issued. NJDOT, as an agency in receipt of Federal funds, follows FHWA regulations for preparing and processing EAs.

An EA must include a brief discussion of the need for the project, an alternatives analysis, public involvement, and a listing of agencies and persons consulted during the assessment. Similar to other NEPA project categories (CE or EIS), an EA requires a multi-disciplinary analysis of potential environmental and socioeconomic impacts. Included in the assessment of potential project-induced impacts are cultural resources, section 4(f), ecology, socioeconomics, hazmat, noise, and air.

FHWA must review and approve an EA before it is made available to the public. It is NJDOT policy to distribute the EA, after FHWA approval, to members of the public and special interest groups with identified interest in the project, public officials, and federal, state, and local government agencies with jurisdiction and a Public Hearing is then held. Advanced notice of the public hearing is published and the event held in accordance with NJDOT's public involvement process. The public hearing process must consider the involvement of low-income and minority populations as protected under the Executive Order on Environmental Justice (see Chapter 7). If necessary, additional environmental, engineering or coordination activities are conducted after the comment period has ended and comments from the public

hearing are addressed. If the assessment indicates that no significant impacts are identified, NJDOT will submit the appropriate documents to the FHWA with a FONSI recommendation. If significant impacts are identified by NJDOT and FHWA, an EIS will need to be prepared.

2.2 Relationship to Local Aid/Federal Aid Programs

Federal and local aid programs are a way by which NJDOT can work with its Metropolitan Planning Organizations (MPOs) – the North Jersey Transportation Planning Authority (NJTPA), South Jersey Transportation Planning Organization (SJTPO), and the Delaware Valley Regional Planning Commission (DVRPC) – county and municipal governmental and non-profit organizations to improve the efficiency and effectiveness of the New Jersey's transportation system. NJDOT and/or the MPOs administer the Federal Aid Programs, which include: Local Scoping Program; Local Lead Program; Local Safety Program; High Priority Projects; Safe Routes to Schools; Transit Village; and the Transportation Enhancement Program. Projects that are eligible for local or federal aid are required to go through the same NEPA-guided environmental documentation process as NJDOT-sponsored projects. More information about the program can be found in the NJDOT Division of Local Aid & Economic Development Federal Aid Handbook.

This Chapter includes:

- Discussion of Steps to prepare a Community Profile
  - Defining the Study Area
  - Reviewing Social and Economic Characteristics
  - Inventorying Study Area Features
  - Identifying Community History, Issues and Attitudes
- Preparing Documentation for the Appropriate Level of Assessment
  - Field Visit Checklist (Appendix E)
  - Socioeconomic Screening Form (Appendix F)

3.0 Prepare Community Profile

A community profile will be prepared to assist the practitioner in assessing whether the subject project would disrupt community character, community cohesion, or the existing socioeconomic fabric of the affected community. The analysis involves several factors or types of considerations that assist in defining and shaping community and quality of life. A detailed discussion of socioeconomic and community effects considerations are described in Chapter 4.

The objective of the community profile is to identify, evaluate, and document the effects of a proposed project on the social and economic fabric of the affected community. The community profile should be used to gain an understanding of the community where a project is proposed to be sited and establishes the context for assessing potential project-induced impacts during the decision-making process.

Relationship to Environmental Documentation Processing Requirements

This chapter describes key topics as well as the primary and secondary data sources typically used to conduct an initial field investigation and prepare a community profile. Preparing a community profile is a necessary activity for all projects requiring environmental processing including categorical exclusions (CEs), environmental assessments (EAs) and environmental impact statements (EISs).

For those projects expected to be processed as CEs, research for preparing the community profile should be included along with other documentation requirements of NJDOT's Field Visit Checklist and Socioeconomics Screening Form to support the findings of the CE.

For projects requiring an EA or an EIS, the community profile will be used to establish the baseline or existing conditions of the "affected environment" before evaluating the socioeconomic effects of the action as part of impact assessment.

Developing a community profile involves identifying community issues and attitudes, inventorying notable features in the primary study area, and preparing a profile of the social and economic conditions and trends in the study areas that may have a bearing on the project. This work is typically initiated in the Concept Development Phase of the project delivery process. The community profile is the description of the "affected environment" as required under NEPA.

The first step in preparing the community profile typically involves the collection and analysis of socioeconomic-related data. Much of this information will come from the U.S. Census Bureau, the U.S. Department of Labor, the U.S. Department of Commerce as well as New Jersey's State Data Center. These data sources may be supplemented with more current data available at the county or municipal

levels. Data should be collected for a specified time series, where available, in order to allow for the consideration of changes over time in demographic or economic characteristics of the affected community or larger region. Some information may be available through other NJDOT offices (e.g. Right of Way (ROW) or Office of Bicycle & Pedestrian Programs and early coordination can avoid duplication of effort. A list of Data Resources can be found in Appendix H.

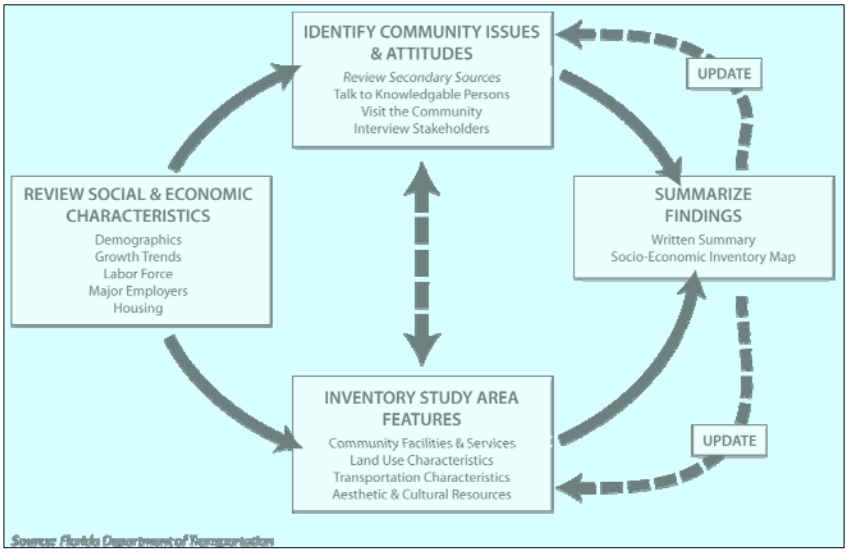


Figure 3-1 – More than a "desktop" exercise, developing a community profile involves identifying community issues and attitudes, inventorying notable features in the primary study area, and preparing a profile of the social and economic characteristics.

Thematic mapping, through the use of Geographic Information Systems (GIS) of demographic and economic characteristics as well as community facilities and services plays an important role in the understanding of how a proposed project may affect nearby communities. Various components of the community profile, such as land use, zoning, community facilities, among others, should be mapped during this stage. The text below will indicate where this should be performed.

These "desktop" efforts should be supplemented by discussions with locally elected officials, planning staff, local stakeholders and other groups such as non-profit organizations and religious institutions to better understand the social and economic fabric of the environment in which a project is proposed. These discussions can apprise the study team of emerging conditions or community concerns that may be difficult to discover through review of secondary data sets, including plans for development, highly valued local institutions or community resources, major individual establishments supporting local economic activity, or even the past history or treatment of the community by transportation and non-transportation agencies. These types of considerations enable the study team to better understand the community context and possible concerns surrounding the proposed project that may require further evaluation when assessing potential impacts.

A Field Visit Checklist has been developed (see Appendix E) to assist the practitioner to prepare and undertake an initial site visit investigation that is thorough in scope for addressing socioeconomic considerations. The initial site visit, which should include the completion of the Field Visit Checklist, is intended to stimulate careful investigation of the affected community and possible effects that may result from the proposed project.

The Checklist is designed to assist in determining the appropriate level of effort needed to identify potential socioeconomic effects, the type of environmental processing a project should receive, and public involvement activities that will be warranted for a project. The Field Visit Checklist may suffice as

supporting documentation for the preparation of a CE in the case of very small and non-controversial projects. Because of the critical role the Checklist plays in the project process, the Checklist should be completed for all projects, and all sections of the Checklist should be completed.

Depending on the project type and scale, the level of effort required to assess and document potential socioeconomic effects resulting from a proposed project will vary. For smaller and less controversial projects that are expected to be processed as categorical exclusions (CEs), the completion of NJDOT's Field Visit Checklist during the initial site visit may be sufficient to rule out potential project-induced socioeconomic effects and support the preparation of the CE document. Examples of projects that are likely to meet these criteria include those that are limited in scope, require little or no Right-of-way (ROW), and are eligible for Programmatic environmental approvals.

However, the Field Visit Checklist will not be sufficient for making a determination that rules out potential project-induced socioeconomic effects for other types of projects. A Socioeconomic Screening Form has been developed (see Appendix F) to address those projects that are larger in scale or where the characterization or extent of potential socioeconomic effects cannot be determined based upon the completion of Field Visit Checklist. In these cases, the practitioner should prepare a Socioeconomic Screening Form (see Appendix F) to assist in the characterization and determination of potential socioeconomic effects.

In contrast to the Field Visit Checklist which is a tool to assist the practitioner conducting a site visit, the Socioeconomic Screening Form provides a comprehensive list of considerations for inventorying and assessing socioeconomic issues and topics that are discussed in this chapter as well as Chapter 4.0. Once the Field Visit Checklist has been completed, it is recommended that you speak with your supervising manager to review your field visit observations and findings to determine whether a Socioeconomic Screening Form should be prepared and the appropriate timing of its preparation. Larger scale projects and projects that are not expected to be eligible for processing as categorical exclusion documents (CEs) are more likely to require the preparation of an EA or EIS which involves a more detailed assessment of the probable effects, including socioeconomic effects, of project alternatives.

Additional discussion on the Field Visit Checklist and the Socioeconomic Screening Form and their role in supporting appropriate levels of environmental documentation can be found in Section 3.5.

3.1 Define the Study Area

The first step in preparing the community profile is to define the study area. The study area can initially be defined as the geographic area that includes all communities with the potential to be directly affected by a proposed project. However, during the evaluation process, it may become evident that the socioeconomic effects of a transportation action extend beyond the initially defined study area at which time the study area should be adjusted accordingly. The size of the study area should be tailored to the nature and scope of the project and extent of its potential effects.

Defining the Study Area with Reference to Census Geographic Boundaries

Total population as well as racial and ethnic data may be collected from Summary File 1 (SF1) – data that was collected in the short-form census questionnaire distributed to all households. The smallest geographic area for which this data can be collected is the block level. A richer, more detailed portrait of an area's income, economic, journey-to-work patterns or housing conditions can be compiled from Summary File 3 (SF3) which has traditionally been drawn from a sampling of households – 1 out of 6 households -- at the time of the 2000 decennial census. The smallest level of aggregate data from this source is the block group level. A block group is the sum of a series of blocks.

In a typical study, the practitioner must first identify the block groups (census tracts or blocks) in the study area by mapping Census boundaries over the proposed project alignment and study area. Generally, those block groups (census tracts or blocks) with more than a minimal percentage of their area within the boundary of the selected study area should be included in the assessment.

The socioeconomic study area may be different than the study area of other resource areas such as air and noise. A detailed description of each of the project alternatives and preparation of maps showing the physical location of each alternative will help in the determination of the study area. This information will provide the framework for assessing socioeconomic impacts. The location of the project, conceptual design elements, anticipated land requirements, and estimated construction duration should also play a role in determining the study area.

3.1.1 Determining Primary and Secondary Impact Areas

Primary Study Area

The *primary study area* or affected community is typically the area immediately surrounding project alternatives. Those areas that would be directly affected by the proposed project should be included in the primary study area. Local planning agencies can also help define spatial boundaries, as can available maps of the community. Community and neighborhood boundaries can be identified using public reports and/or through consultation with planning agencies and community representatives. Study area or community and neighborhood boundaries are often defined by physical barriers (highways, waterways, open spaces, etc.), activity centers, block boundaries, select demographic characteristics (e.g., ethnic groups or home values), and through perceptions of the community.

Depending on the nature of the project, the primary study area could be as small as an area extending 250 feet on either side of the proposed project corridor or up to a ¼ or even a ½ mile from the project corridor. The study area may follow an irregular shape because of natural land barriers such as waterways or man-made barriers such as highways and other main vehicular arteries. For larger projects in which temporary and/or permanent community impacts may be significant, the primary study area may need to be extended further from the project corridor than originally anticipated to include all potentially affected communities.

Secondary Study Area

The *secondary study area* may extend far beyond the primary study area, depending on the nature of the affected communities or project type. Those areas that would be indirectly affected by the proposed project should be included in the secondary study area. There are a variety of indirect effects that should be considered in the determination of the secondary study area including, but not limited to: changes in access, both pedestrian and vehicular; potential to induce changes in land use such as residential development; and increases in daily vehicular movements along a particular thoroughfare; among others.

As the assessment proceeds, it may become clear that some impacts affect a much broader community than is reflected in the primary study area. Similar to the primary study area, the secondary study area should be adjusted as necessary to be inclusive of all communities that may be affected by the proposed project.

3.2 Review Social and Economic Characteristics

Demographic and economic trends and conditions regarding the study area provide valuable indicators of the context or socioeconomic environment within which a project's goals must be understood and impacts assessed. This section provides an overview for preparing an inventory and analysis of the social and economic characteristics of the affected environment. It outlines methods and techniques for identifying the presence of specific populations, growth patterns, and economic characteristics. Data sources used to compile this information will vary accordingly.

3.2.1 Population and Demographics

Demography is defined as the study of the characteristics of human populations, including size, growth, density, distribution, and vital statistics. Such information is primarily collected by local, state, and federal agencies such as the U.S. Census Bureau, or other government entities and commercial data providers. The collection of this information should be done in the earliest stages of the community profile. A GIS map should be prepared that shows the racial and ethnic distribution of those residing within the study area. This is helpful because it not only shows where certain populations live in relation to a proposed project but can also reveal where potential environmental justice issues may need to be considered.

Sources Available for Population and Demographic Information

- U.S. Census Bureau (American FactFinder website)
- Local School Boards / State Department of Education
- NJ Division of Local Governments and Services
- County and Local Planning Departments and MPOs
- Commercial Data Providers
- Social Services Agencies
- Community Contacts

Demographic data should be examined in designing public involvement and outreach activities that are responsive to the ethnic, age, educational attainment, and economic characteristics of the affected communities. Socioeconomic-related information should be used to identify spatial patterns and growth trends of specific subgroup(s) within a community (e.g., ethnic groups, elderly, etc.) with specific consideration given to situations that may warrant greater customization of outreach resources. Should the data and/or site visit(s) reveal a high concentration of "traditionally underserved" populations, additional outreach strategies may be needed to fully identify and consider the effects of the subject project (see Section 4.7).

Several topics that are generally considered in profiling demographic spatial patterns and trends are described below.

Size and Growth Trends. To better understand the dynamic of the community(s) in which a project is proposed to be sited, changes in population size and spatial growth patterns are important to understand. The collection of data for small geographic areas (i.e., block, block group, tract) over a specified time period can help identify where population growth has changed the most significantly or been most concentrated. Conversations with local planners and elected officials can assist in this effort.

Race and Ethnicity. Table 3-1 demonstrates how the racial and ethnic composition of the study area can be prepared, offering a comparative context with the municipality and county in which it is located. This comparative approach helps in determining if there are higher concentrations of minority groups within the study area than in the surrounding area – which could be an environmental justice concern. Preparing a racial and ethnic profile on the block level can also help identify parts of the study area that are growing (or decreasing) in population at a faster rate than other parts of the study area as well as the municipality or county as a whole.

Traditionally Underserved Populations
The traditionally underserved can be defined as those specifically identified in the Executive Order 12898 on Environmental Justice – that is, low-income populations and minority populations including Hispanics/ Latinos, African Americans/Blacks, Asian/Pacific Islanders, and Native Americans – as well as other populations recognized in Title VI and other Civil Rights legislation, Executive Orders and transportation legislation, including those with limited English proficiency such as the foreign-born, low literacy populations, seniors, disabled populations, and transit-dependent populations.

Thematic mapping of socioeconomic patterns using GIS tools (see Figure 3-2) are frequently prepared in tandem with a summary table (such as Table 3-1) to understand where race or ethnic populations may be more concentrated in relation to the proposed project. The map, which will identify the proposed project corridor or study area, should be presented using the geographic area (i.e., block, block group, tract) for which the data for the race and ethnic composition profile was collected. The percentage of minority residents in the county or larger region may be used as the "threshold" or benchmark when determining the presence of minority or low-income residents within the study area. As suggested, the application of thematic GIS maps to support consideration of the topic of "environmental justice" is increasingly common, but thematic mapping is also utilized to understand spatial patterns of commuter sheds, the locations of select affected populations (e.g., persons in poverty, transit dependent, elderly, "linguistically-isolated", etc.), and other socioeconomic considerations.

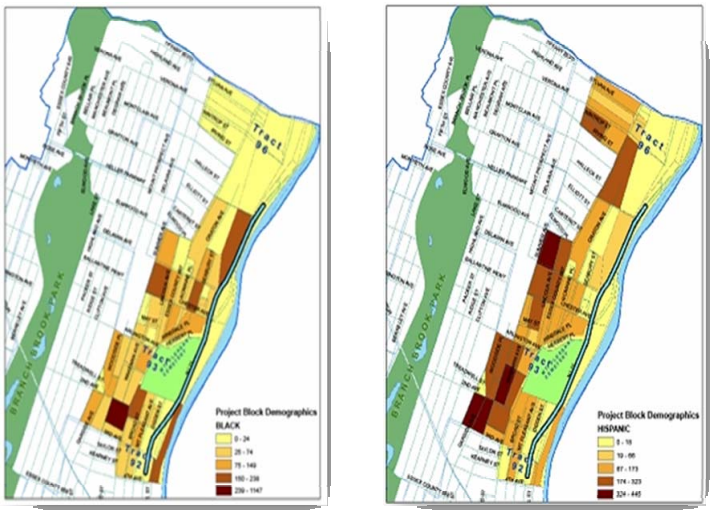


Figure 3-2 - Thematic maps were prepared to illustrate race and ethnic spatial patterns to support community impact assessment and public involvement for the Route 21 Project in the City of Newark.

Table 3-1
Racial and Ethnic Composition Example

	Study Area		Municipality		County	
Race	Number	Percent	Number	Percent	Number	Percent
White Alone	7,746	31.2	10,258	21.4	342,302	65.5
Non-Hispanic White	3,562	14.3	5,508	11.5	283,345	54.2
Hispanic-White	4,184	16.8	4,750	9.9	58,957	11.3
Non-White Alone	17,095	68.8	37,571	78.6	180,239	34.5
Black or African American Alone	10,730	43.2	29,550	61.8	108,593	20.8
American Indian and Alaska Native Alone	130	0.5	195	0.4	1,215	0.2
Asian Alone	298	1.2	447	0.9	19,993	3.8
Native Hawaiian and Other Pacific Islander	16	0.1	46	0.1	201	0.0
Other*	5,921	23.8	7,333	15.3	50,237	9.6
Total	24,841	100.0	47,829	100.0	522,541	100.0
Minority Population **	21,279	85.7	42,321	88.5	239,196	45.8
Hispanic Origin	10,219	41.1	12,033	25.2	103,011	19.7

Source: P1 and P8 Tables from the SF1 Data Tables, Bureau of Census, U.S. Census of Population and Housing, 2000.
Notes: The Study Area is an aggregate of blocks within the study area.
* The Other Category includes census categories 'some other race alone' and 'two or more races'.
** The total minority population includes all those who are Black, Hispanic Whites, American Indian and Alaskan Native, Asian, Native Hawaiian, Other Pacific Islander and Other categories.

Age Characteristics. The practitioner should prepare a table of the study area, comparing it to the municipality and county to reveal if the age composition of the study area is markedly different than the surrounding area. By speaking with county and local planners, the practitioner may also pinpoint areas that exhibit patterns that differ from the surrounding area and/or identify new or proposed developments that may have some bearing on the overall age composition of the study area. The presence of children under 18 years old may be greatest in areas where there are numerous schools and subsequently bus routes and paths used to walk to school, factors to keep in mind during the decision-making process. Additionally, those populations under 18 and over 65 tend to be more transit dependent than other age groups.

Transit Dependent (Zero-Car) Households. While not always the case and certainly depending on the environmental setting of a proposed project (i.e., urban, suburban, rural), transit dependent (or zero-car) households can be an indicator of poverty. For example, in urban areas where public transportation is in greater supply, both low-income and non-low-income residents may decide that they do not need a car to meet their daily needs. In more suburban and rural areas where public transportation tends to be less prevalent, residents may need a car to meet their daily needs yet rely on public transportation because they cannot afford a private vehicle. Public involvement activities should take place in locations that are accessible to all residents. The identification of areas with high concentrations of transit dependent households can help the practitioner select locations that are more appropriate for hosting public involvement activities.

Limited English Proficiency (LEP) / Linguistic Isolation. The identification of LEP and linguistically isolated people can reveal cultural differences that may need to be considered when planning outreach and public involvement activities. The use of U.S. Census data can help identify the presence of LEP populations (see Table 3-2). Data can be supplemented with information obtained by speaking with locally elected officials, municipal planners, local organizations and non-profit groups to help determine the extent of LEP and linguistically isolated persons in the study area. These discussions may include whether these organizations would be willing to host or assist in the planning of outreach and public involvement activities.

American Community Survey: Growing Potential for Application to Small-Area Socioeconomic Analyses

The American Community Survey (ACS), a product of the U.S. Census Bureau, provides current demographic, social, economic, and housing information about the Country's communities each year. Approximately three million households across the country participate in the ACS annually.

The ACS publishes single-year data for all areas with populations of 65,000 or more. Areas with populations less than 65,000 will require the use of multiyear estimates to reach an appropriate sample size for data publication. In 2008, the U.S. Census Bureau began releasing 3-year estimates for areas with populations greater than 20,000.

The first 5-year estimates for all census tracts and block groups will begin in 2010. The multiyear estimates will be updated annually, with data published for the largest areas in 1-, 3-, and 5-year formats, and for those meeting the 3-year threshold in both 3- and 5-year formats. *Even the smallest communities will be able to obtain ACS data based on 5-year estimates annually.*

Table 3-2
Limited-English Proficiency and Linguistically Isolated Households

Area	Non English-speaking, Linguistically Isolated Households		Persons that do not speak English at all or do not speak it well	
	Number	Percent	Number	Percent
Study Area				
Municipality				
County				

Source: P19 and P20 Tables from the SF3 Data Tables, Bureau of Census, U.S. Census of Population and Housing, 2000.
Notes: The Study Area is an aggregate of block groups within the study area.

Income & Poverty

Census and non-census data sources can be used to measure income and poverty levels in a region or community:

Census Data. Census data can be extremely useful as it provides median household income, percent of the population living below the poverty line, and labor force characteristics such as unemployment and percentage of the population in the workforce. This information is available on the block group level so it can portray a fairly accurate overview of an area particularly in the years immediately after the last Census.

Sources Available for Income and Poverty Information

- U.S. Census Bureau (American FactFinder website)
- New Jersey Department of Labor and Workforce Development
- Bureau of Labor Statistics
- Bureau of Economic Analysis
- Social Services Agencies
- National School Lunch Program, United States Department of Agriculture
- Private Commercial Data Suppliers

National School Lunch Program sponsored by the U.S. Department of Agriculture. For a child to qualify for a "free or reduced price" lunch, parents must complete an application and report income below an identified threshold level. Since the program is based on the academic school year information is relatively timely regarding households living near or below the poverty line. The poverty line is reset annually. The data is geographically specific and is available for individual schools as well as entire school districts.

National School Lunch Program

The National School Lunch Program (NSLP), a federal and state reimbursement program, was created in 1946 to provide eligible students with free or reduced price lunches. To receive a reduced price lunch, household income must be below 185 percent of the federal poverty level and to receive a free lunch, household income must fall below 130 percent of poverty. NSLP eligibility data by school and school district is updated yearly, providing a timely source of data after the census for measuring poverty trends across the region.

Other data sources provide information on household income and/or poverty including the Bureau of Economic Analysis, Regional Economic Information System, the Bureau of the Census, and commercial data providers. Data may be available for the county, the municipality as a whole or by zip code and can be used to provide a general overview of economic conditions in the study area. Some commercial data providers offer estimates of income at the block-group or census tract levels.

Speaking with people intimately familiar with the area, such as locally elected officials, municipal planners, social service agencies, and religious leaders is another means for developing a greater awareness of local economic conditions. For example, religious leaders are often confided in when an individual(s) faces economic hardships. They may be keenly aware of some of the challenges experienced by congregants and others in the community and may participate in meal provisions, arranging accommodations or connecting the needy to other social service programs in the community to aid homeless, the unemployed and others in poverty.

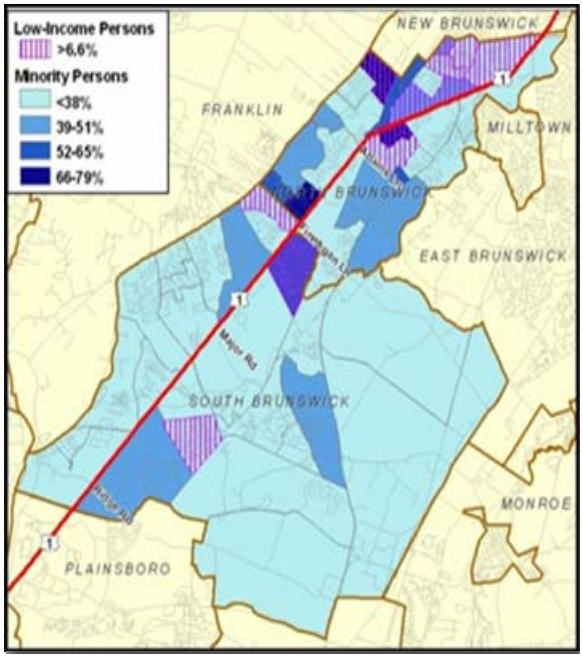


Figure 3-3 - Early mapping of low-income, minority, and "Limited English Proficiency" population can be an invaluable step in developing effective public involvement strategies. Ensuring the full and fair participation of all potentially affected communities in the transportation decision making process is a fundamental principle of Environmental Justice.

3.2.2 Housing Characteristics

Housing characteristics are an important indicator of the economic health of a community. They are also generally a sign of an individual household's annual income. Stark contrasts between home values in adjacent areas can act as a barrier between communities, each of which can have a separate yet distinct sense of cohesion. Housing characteristics, which can be compiled using the U.S. Census Bureau's SF3 tables and are available on the block group level, include:

» Age and Type of Structure

» Vacancy Rates

» Renter vs. Home Owner

Again, depending on the year, Census data may be somewhat outdated. Take a walk through the affected community observe housing conditions to see if new trends are present and the location of For Sale / For Rent signs. Speak with someone intimately familiar with the affected community (i.e., municipal planner, local historian, etc.) or have them present on the site visit to indicate where new residential development has replaced older deteriorating homes. Speak with the Historic Preservation Office within the New Jersey Department of Environmental Protection (NJDEP) to identify homes that are considered eligible or have been placed on either the New Jersey or National Register of Historic Places.

The issuance of building permits can also help in identifying housing characteristics. The New Jersey Department of Labor and Workforce Development (LWD) publishes a monthly report entitled *New Residential Privately Owned Housing Units Authorized to be Built*, which lists the number of building permits by building type (i.e., single family, two family, etc.) and estimated value for each. While the information is for the municipality as a whole and it cannot be assumed that all units for which a permit is authorized are actually constructed, the monthly availability of this information will assist in the understanding of current housing market trends in the study area.

Resources for Understanding the Housing Market in the Affected Community

- U.S. Census Bureau (American FactFinder website)
- For Sale / For Rent signs
- Local realtors - information on vacancy rates, inventory, and sales prices
- New Jersey Department of Labor – dwelling units authorized by building permits

3.2.3 Economic Characteristics

Understanding the economic characteristics of the affected community is essential when planning for transportation improvements. If properly conceived, transportation projects can enhance an area and be a catalyst in attracting desired economic development. In order to build transportation projects that fit more harmoniously into communities, in addition to understanding the existing social fabric, it is important to understand the economic base of the community in which a project is to be sited.

New Jersey is an economically diverse state with some municipalities and corridors serving as destinations for employment (e.g., Newark, Jersey City, Princeton area, Trenton) while others predominantly function as bedroom communities. The sources listed in the box to the right can assist you in identifying the major employers, industry types, and journey-to-work patterns in the affected community and surrounding area. It is important to understand where major employers are located because they generate daily traffic. Understanding where businesses are located in relation to a proposed project can be a factor in planning detour routes and construction activities.

When performing this part of the community profile remember the diverse nature of the New Jersey landscape. In some areas, farming and agriculture may be dominant economic contributors where in other parts of the state marinas and ports may play a significant role in the economic health of a community.

Sources Available for Identifying Major Employers and Economic Base Characteristics

- U.S. Census Bureau (American FactFinder website)
- New Jersey Department of Labor and Workforce Development
- U.S. Bureau of Labor Statistics
- U.S. Bureau of Economic Analysis
- Private commercial databases

Sources Available for Journey-to-Work Statistics

- MPO Travel Demand Model
- U.S. Census Bureau LED OnTheMap
- U.S. Census MCD/County-to-MCD/County Worker Flow Files

The LWD maintains establishment-based employment data for businesses "covered" by unemployment insurance – a very large majority of all private sector employers. The ES-202 microdata file can be usefully employed on a summary-level basis to profile regional, county or town patterns and trends in employment which is available on a relatively timely basis. While there are confidentiality provisions that must be honored, the ES-202 data set contains specific records of the employers address, industry type, and payroll and the data has also been used to support public purpose planning (e.g., transportation planning, social services and housing-related studies) with appropriate safeguards. For smaller projects with minimal disruptions, the use of such detailed data from this source is generally infeasible, but there are examples of larger projects where the data has proven highly useful.

3.3 Inventory Features of Study Area

3.3.1 Community Facilities and Services

Community facilities and services include those organizations, both public and private, which fulfill a social function or provide services to a community. Since individuals depend upon public facilities and services such as schools, hospitals, libraries, and recreational facilities, changes in access to these services, no matter how temporary, can seriously affect community members. The loss through relocation of an integral service or facility may lead to a decline in the quality of life currently enjoyed by the community. For example, the temporary or permanent loss of a community's only ambulance service or a delay in fire department response time due to a road closure can be of critical importance.

Elements of Community Profile: Community Facilities and Services

- Schools and Colleges
- Hospitals, Health Care, Nursing Homes
- Police, Fire, and Emergency Medical Services
- Libraries, Recreation and other Civic Institutions
- Religious Facilities such as retreat houses, seminaries
- Special areas, historic districts, parklands

Because of the varied nature of community facilities and services, there is no single entity or source from which all necessary information addressing government structure, public education, police and fire protection, emergency service routes, health care, etc. can be obtained. Therefore, information regarding staffing levels, clientele, jurisdictional boundaries, degrees of use, and location of facilities and services must be obtained either directly from agency representatives or from documents or websites published by each of these entities. For example, information regarding public education is best compiled by contacting the local school board or the New Jersey Department of Education. Table 3-3 identifies

community facilities and services that should be inventoried along with possible reference sources of information for preparing the inventory.

Table 3-3
Types of Community Facilities and Services and Information Sources

Community Facilities and Services	Source of Information
Educational Facilities and School Districts	New Jersey Department of Education, School Districts, local school board maps and reports
▪ Size, age, and condition of building	Local school board, reports, interviews, and field surveys
▪ Enrollment	New Jersey Department of Education, School Districts, and interviews
▪ Ancillary facilities information	Local school board, reports, and interviews
Religious Institutions	Newspaper or telephone listings, local planning maps, and field surveys
▪ Number of institutions by type (i.e., church, synagogue, mosque, etc.)	Newspaper or telephone listings and field surveys
▪ Size	Field surveys and interviews with representatives of the institution
▪ Membership and location	Interviews with representatives of the institution
▪ Dependency on ethnic membership	Interviews with representatives of the institution
Health Care Facilities	New Jersey Department of Health and Senior Services, County health departments, hospitals
▪ Hospitals, clinics, and other Facilities	Local planning maps, telephone listings, field surveys, and interviews
▪ General health/dental	Field surveys, telephone surveys, and interviews
Recreational Facilities	New Jersey Department of Environmental Protection, county and municipal park and recreation departments
▪ Amount of open space – active and passive	Local planning maps and reports, agency reports, NJDEO Green Acres Program, Section 4(f) and 6(f) reports, and interviews with local officials
▪ Number, location, and type	Local planning maps, field surveys, agency maps, reports, and interviews
Civic and Quasi-public Facilities	Local planning maps, field surveys, agency reports, and interviews
▪ Public buildings	Local planning maps, field surveys, agency reports, and interviews with local officials
▪ Agencies or centers	Local planning maps, field surveys, agency reports, and interviews with local officials
▪ Libraries	Library department records and interviews with library staff, local planning maps
Historical and Cultural Facilities	Local and state historic societies and commissions, National Historic Register, local planning surveys and maps, field surveys, and State Historic Preservation Office
Police and Fire Protection	Local and county planning maps, reports, field surveys, and interviews
▪ Location	Local and county planning maps, field surveys, and interviews
▪ Number of people working at location	Reports if available. Interviews with the Chief or other senior personnel of each facility.
▪ Emergency routes	Interviews with the Chief or other senior personnel of each facility.

Figure 3-4 - Photo logs and constraints mapping of notable features in the study area should include community facilities and services such as senior centers, schools, hospitals, libraries, childcare, and religious institutions, among other facilities.

3.3.2 Business Activity and Employment Centers

It is likely that the review of major employers, industry types, and journey-to-work patterns will have revealed business activity and employment centers (see Section 3.2.4). Business activity and employment centers can be high generators of both vehicular and non-vehicular movement, which is something that should be considered during the transportation decision-making process.

The practitioner can begin by preparing a base map showing the location of major employers in and within close proximity to the affected community. This can be supplemented with a review of municipal plans which may identify existing and proposed business activity centers; their location can also be added to the base map. This information may include central business districts (CBDs), business improvement districts (BIDs), commercial corridors, office parks and waterfront areas. This type of information can be useful for the practitioner while conducting a site visit. It may also prove useful in supporting discussions with local planners to discuss the existing business market place and the locations of anticipated new developments.

3.3.3 Land Use, Zoning and Growth Trends

New Jersey communities are expected to have developed and periodically update their master plan including their land use element in an effort to plan for growth and change. Planned growth can result in beneficial and efficient development, ensuring diversity and balanced economic sectors. Unplanned, undirected growth often causes transportation facility problems. Planning improvements in areas of rapid growth proves a difficult task and usually results in a less than optimal solution that generates more adverse effects (such as reduced property values and access problems). Growth, which is sometimes brought about by new or improved transportation facilities, can also place strains on local governments that are charged with providing services and creating adequate infrastructure.

Land use plans were developed mainly in the 1960s and 1970s under the mandate of federal funding procedures. Areas without land use plans did not qualify for special development grants, among other funding opportunities. The issue of land use regulation programs was also motivated by the effect on the environment of uncontrolled development and rapid growth. Planning boards are responsible for maintaining and implementing land use plans that promote balanced development. Traditionally, and in New Jersey, this is done at the local level under home rule policies which delegate the authority to plan and regulate development within their jurisdiction.

Land Use Classifications for Mapping

A conventional comprehensive plan may contain two land use maps: a current land use map of existing conditions and a future land use map, which shows anticipated or desired changes. The future land use map should be consistent with the zoning map.

There are numerous classifications of land use and associated color schemes for mapping, including:

- Low Density Residential (Yellow)
- High Density Residential (Brown)
- Commercial – Retail and Office Space (Red)
- Industrial (Purple)
- Open Space, Recreation and Natural Resources (Green)
- Public and Quasi-Public Institutions (Blue)
- Utilities (Gray)

The practitioner should consider taking a land use map on site visits to confirm or adjust, as necessary, land uses in the study area.

Land use planning in the 1960s and 1970s focused on the environment and externalities. In the 1980s and 1990s, planners addressed broader growth related questions, such as a lack of affordable housing, infrastructure deficits and the loss of community character. Today, the focus is often on increased housing needs and accessibility of transportation for all residents. In terms of transportation projects, it is important to remember that

planning at each level of government must comply with state goals and be compatible with local and regional land use plans. The induced effects of larger transportation improvements should coincide with the zoning and growth directions in regional plans.

As one of the smallest yet most densely populated states in the country, New Jersey has historically faced considerable development pressure and a variety of transportation challenges. Different departments within the state such as NJDOT in addition to the Office of Smart Growth – which coordinates planning efforts to protect the environment to guide future growth into compact, mixed-used development and redevelopment areas – work with agencies such as NJ TRANSIT, counties and municipalities to ensure that transportation enhancements are compatible with local and regional goals, cause minimal disruption to existing communities, and are generators of wanted economic activity. The relationship between land use and transportation is intricately related. Transportation projects must consider land use, both existing and future, in the decision-making process.

Existing and Planned Land Use. Prepare two land use maps: one of existing conditions and the other with anticipated future land use. Information on the future land use map will likely come from a review of municipal plans and conversations with municipal planners. The project limits should be shown on the maps to show how land uses may be affected by the proposed action.

Existing and Future Zoning. Prepare two zoning maps: one of existing zoning districts and the other of anticipated zoning changes. Zoning changes are made to allow new land uses to be introduced to an area, to allow for new industries to enter the marketplace, or promote land uses that are more compatible. As with the land use maps, the project limits should be shown on the maps to determine if the proposed project is compatible with land uses allowed in the affected zoning district or if a zoning change or variance would be required.

State, Regional, County and Local Plans. Conduct a review of the State Development and Redevelopment Plan as well as regional, county, and local plans to determine if the proposed project is consistent with area goals and objectives. It may also be appropriate to include a review of redevelopment plans in the municipality(s) located near the affected community.

Known Plans for Development. A review of county, municipal, redevelopment, and subdivision plans will indicate areas that have been slated for development. Some of this information may be confirmed during the site visit. The practitioner should plan to speak with local officials and/or municipal planners to get a better idea of which plans are moving forward and which ones have been terminated or altered. Development plans are critical to understand as they may be significant traffic generators in the future.

Growth Trends and Issues. The review of county and municipal plans will likely reveal growth trends and issues faced by the community. It is important to understand where growth has been most concentrated or decreased since it plays a critical factor in determining infrastructure needs, public services such as schools, and ultimately, traffic volumes. The review of planning documents in addition to speaking with municipal planners will reveal where the real issues and challenges may exist in planning for future growth. This process may include the need to secure funding for a Transit Village or the remediation of contaminated properties.

3.3.4 Farmlands

Farmland preservation is an important part of keeping New Jersey green and prosperous. Preserved farmland limits urban sprawl, protects soils, provides local communities and the entire state with an abundance of locally grown farm products and helps maintain the State's longstanding agricultural traditions that earned it the reputation as the Garden State.

Since farmlands play an integral part in many New Jersey communities, the socioeconomic assessment should identify the presence of preserved farmlands, either county or state, or land located within an Agricultural Development Area (ADA). Soils can be defined as prime, important, unique or of statewide or local importance. Each farm or soils meeting these criteria should be identified. All identified farmlands and soils that meet these criteria should be mapped to determine their proximity to a proposed project.

New Jersey State Regulations

Contact the appropriate County Planning or GIS division where the project is proposed to obtain the files necessary to map and identify the presence of preserved farmlands located within close proximity to the study area and area of direct impact. GIS files may not be available for all counties. There are two types of preserved farmland in New Jersey:

Agricultural Development Area (ADA) Lands. ADAs are those areas where the preferred land use has been identified by the respective county as agricultural. The Agriculture Retention and Development Act (N.J.S.A. 4:1c-11, et seq.) allows counties to create County Agricultural Development Boards (CADBs) to establish agriculture retention and development programs. Individual CADBs are responsible for designating ADAs and establishing the minimum standards for the inclusion of land in them.

Preserved Farmlands. The Farmland Preservation Program is administered by the State Agricultural Development Committee (SADC), which coordinates with CADBs, municipal governments, nonprofit organizations and landowners in the development of plans that best meet the needs of individual landowners. Farms or development easements that are acquired through the Farmland Preservation Program will forever be preserved for agricultural use. If the preserved land is sold, deed restrictions prohibiting non-agricultural development run with the land, so future owners of preserved farms also would be required to comply with the deed restrictions. SADC can provide valuable information on farmlands for the Community Profile.

Federal Regulations

If a proposed project is receiving federal funding, then the requirements of the Farmland Protection Policy Act (FPPA; P.L. 97-98, 7 U.S.C. 4201) must be addressed. The FPPA is based on soil type, rather than the actual use of the land. Data files for Prime and Unique Farmlands and Farmlands of Statewide or Local Importance can be downloaded from the Natural Resources Conservation Service GIS website or available from the appropriate County Planning or GIS division. Soils to be considered include:

Prime Farmlands. Prime Farmland is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber and oilseed crops and is also available for these

uses. They have the soil quality, growing season, and moisture supply needed to economically produce sustained high yields of crops when treated and managed according to acceptable farming methods.

Unique Farmlands. Unique farmlands are classified as land other than prime farmland that is used for the production and specific high-value food and crops such as citrus, tree nuts, olives, among others.

Statewide Importance. Farmlands of statewide importance include those soils in land capability Class II and III that do not quite meet the criteria to be classified as Prime Farmland. They are economically viable and produce high yields of crops when well managed.

Local Importance. This includes soils that are not classified as being prime or of statewide importance yet are used for the production of high value food, fiber, and horticultural crops.

3.3.5 Transportation Characteristics

This part of the inventory will require the review of municipal and county plans, correspondence with local and county planners, and a site visit. It should be relatively straightforward, generally allowing the practitioner to observe activities in the study area. First, prepare a map of the study area that includes designated bicycle lanes and/or paths and other transportation options such as NJ TRANSIT (rail and bus) and airports. If there are schools in the study area include them on the map since children often walk to school and are therefore generators of pedestrian activity. This information should be available from NJDOT, MPO, County or local resources but can also be downloaded off the internet or through request to county planning departments.

The practitioner should take a base map on a site visit and note where bicycle and pedestrian movements were observed. It may also be helpful to note where poor sidewalk conditions and/or dangerous street crossings were observed. Improvements to these features can be included in mitigation or enhancement efforts, if necessary (see Section 6.1).

Bicycle Activity, Plans and Routes. Since bicycle lanes are, in part, a function of NJDOT, it should be relatively easy to determine where bicycle lanes are proposed. However, it will also be helpful to speak with local and county planners as well as review municipal and county plans to identify new lanes that have only been considered at this point.

New Jersey is strongly advocating the conversion of old train tracks and the opening of waterfront areas for bicycle and pedestrian activity. These are generators of bicycle activity and should be reviewed to determine if they are located within close proximity to the study area. These include the East Coast Greenway, the Hackensack RiverWalk Plan/Hackensack River Greenway Plan, among others. This information may also be included in area plans and can be confirmed through conversations with planning staff.

While on your site visit, indicate areas where you saw bicycle activity, both designated and non-designated bicycle lanes. Try to keep a tally of the number of bicyclists you saw in a particular area.

Pedestrian Activity. On your map, mark areas where you saw increased pedestrian activity. This may include shopping areas, central business districts, and school zones. If the study area is in a school zone, note the area where the school zone begins and where crossing guards are stationed throughout the day. Also check with the New Jersey Safe Routes to School Coordinator to see if the school is designated as such. Also note areas where you see a higher than average number of persons protected under the ADA.

Transit Activity. Your map should include NJ TRANSIT rail stations as well as bus routes. While on your site visit, denote bus stops and areas where you observed increased ridership frequency. Station stops are generally indicators of pedestrian activity. For larger projects, it may be appropriate to get specific ridership numbers for these station areas. A request to NJ TRANSIT will need to be made for this information.

Other Transportation Plans. Your review should include other NJDOT-sponsored projects as well as projects sponsored by the MPOs and counties. Keep a list of where the project would be located, what the project entails, and when construction activities are expected to begin, if known. Depending on the size of the project, it may be appropriate to map these plans together to see how they cumulatively may affect the surrounding community.

3.3.6 Other Notable Features

Notable features are generally defined as those of particular importance or significance to a community. They are oftentimes revealed when speaking with locally elected officials, municipal planners, community groups and organizations, concerned citizens, among other stakeholders. A review of municipal plans is also likely to reveal features of particular community significance. Notable features may include:

- *Community Focal Points* are often informal meeting places such as playgrounds, places of workshop, hair salons, laundromats as well as community-gathering places such as senior and community centers.
- *Cultural Resources* such as old residential and commercial buildings, historic structures, heritage trails, and archaeological sites. A review of municipal plans and conversations with municipal planners and local stakeholders to determine if there may be cultural resources in the affected area. Even though a building may not be listed in the New Jersey Register or the National Register of Historic Places does not mean that it is not considered a valuable community attribute by those who appreciate its historical or cultural meaning. Depending on the size of the proposed project, those trained in cultural resources may contact the New Jersey State Historic Preservation Officer (SHPO) as part of their research to ascertain eligibility on the National or New Jersey register of historic places. Although the socioeconomic practitioner is not generally tasked with this coordination responsibility, the value for the subject resource as expressed by members of the community is a relevant consideration.
- *Viewsheds and Vistas* provide a place for residents, people from surrounding communities, and possibly tourists to enjoy leisure time. Some viewsheds and vistas may be well known far beyond the study area but some may be local treasures that greatly contribute to the quality of life enjoyed by area residents.
- *Community Aesthetics and Livability* can be perceived as threatened by a transportation project or a particular design alternative. Civic pride can be fortified by aesthetic or visual qualities which make a community unique or special to its residents and visitors. Inattention to aesthetics and

cultural resources during project development and design can adversely affect cherished community resources and greatly increases the likelihood of active opposition to a proposed project. When concern is expressed for the aesthetic character or livability of a community by members of a community, involvement processes that enable members of the community to explore solutions may be valuable strategy for overcoming opposition.

» *Water Bodies* such as streams and brooks located in the affected area could be a valued natural resource and community feature. The practitioner should be attentive to the location of these resources, if applicable. It may be appropriate to check the National Wildlife and Scenic Rivers database to identify any such resources that may be located within or near the affected community.

It is important to identify and document these notable features and resources since they could be an area of contention in the future if not properly considered in the decision-making process.

3.4 Identify Community History, Issues and Attitudes

When conducting a socioeconomic assessment and seeking to identify potential impacts to a community that may result from an agency-sponsored project, it is important to understand the history of the environment in which the project would be sited as well as ongoing issues and attitudes of those living and working in the community. This section describes an approach for developing a good understanding of community issues and attitudes.

3.4.1 Review Secondary Sources

Secondary source materials can provide a wealth of helpful information for better understanding issues of concern for the proposed project, provide information about community leaders or stakeholders to be interviewed, and can be helpful in developing relevant interview questions. Several types of secondary sources can be reviewed, including county or municipal master plans, redevelopment studies, policy studies, special plan reports, newspaper articles, editorials, minutes of public hearings, published local histories, other government reports, historic and current photographs, community or individual websites and blogs, and other relevant sources.

Comments delivered at public hearings and news clippings related to similar projects or about NJDOT can provide insight into the social characteristics and values of an area, as well as public attitudes. For example, is there a history of opposition to similar projects in the affected community? If so, who was involved and what were their reactions? How do the comments characterize NJDOT? If the potential project has already been made public, how did elected officials and community leaders feel about it – who supported it, who did not, and why?

3.4.2 Talk to Knowledgeable Persons

Before initiating stakeholder interviews and site visits, identify and speak with a few people that are knowledgeable about the community. Staff from the municipal planning office, county administrators, or the executive director of the MPO is a good place to start. Talk to these people over the phone or in person to get a perspective on active organizations in the area, issues of local or regional importance, where community cohesion is present, and other people who would be appropriate to interview. A scoping process, similar to the one conducted for projects requiring an EIS, is another method of gaining background information on key issues or interest groups.

Scoping is a process for narrowing down the key issues to be addressed when assessing social, economic, and environmental impacts – in essence a process for establishing the scope of the study. Stakeholder interviews can be conducted later to collect more specific information about the ideas and concerns of various groups, including individuals that may not be represented in the scoping process.

Table 3-4
Example of Methods for Identifying Community Issues

Method	Sources of Information
Telephone hot-line	Members of the community
Mail-out questionnaires	Members of the community
Published and unpublished historical materials (i.e., oral history)	Community archives Community historians
Community workshops, forums, and meetings	Members of the community
Interviews with stakeholders	Environmental organizations Business and trade organizations Civic/public interest groups Grassroots/community-based organizations Elected officials and agency representatives Homeowners and resident organizations State and local elected officials and agencies Religious groups and leaders Schools, colleges, and universities Medical community Legal aid providers Rural cooperatives Civil rights organizations Senior citizen groups Transit users
Newspaper articles	Local news media
Official transcripts of public hearings	County and local records

3.4.3 Visit the Community

Evaluations of socioeconomic conditions and potential impacts should be based in part on direct observation of community life. Visit the community and observe the affected area as a neutral observer. Findings from the desktop exercise of data and information collection may or may not be confirmed and/or previously unidentified socioeconomic characteristics or valuable community resources may be revealed. The site visit plays an essential role in the proper completion of the Field Visit Checklist and the Socioeconomic Screening Form. Two basic methods for gaining first-hand knowledge of the area are described below.

» *Participant Observation*. This is a method for obtaining first-hand knowledge of community life. Participant observation involves spending some time in the affected community, establishing a rapport with community members, and participating in community life so that people continue to conduct "business as usual" when you are around. Look for both physical and natural signs that may contribute to community cohesion such as physical barriers and areas where neighborhoods seem to change.

» *Field Surveys*. This involves visiting the affected community and observing existing patterns of activity and interaction. Field surveys include visual study of the community, along with written descriptions and notations regarding activity, services available, community infrastructure,

community layout, residential and commercial development patterns, and so on. The information gathered through field surveys acts as a supplement to activities performed during the desktop exercise and plays an integral role in the proper identification of socioeconomic conditions, potential issue areas, and may reveal previously unknown community resources, new developments, pedestrian and bicycle routes, among others. Notes and observations from the field survey should follow the format of the Socioeconomic Screening Form and be submitted along with the form to the appropriate Division Manager.

3.4.4 Interview Stakeholders

This process involves visiting and speaking with area stakeholders. A stakeholder, as the name suggests, is anyone with a "stake" in the project. This includes two general groups: those directly affected by the project, such as adjacent property owners or representatives of affected neighborhoods, and those indirectly affected or that have an interest in the project, such as local officials, other community leaders, or interest groups. Stakeholders can provide a wealth of information related to community issues, attitudes, and potential impacts of a project during the course of an interview. They can also pass important information on to others with similar interests. Practitioners may also want to encourage them to convey the project information in their next group meeting or by word of mouth.

Who Should be Interviewed?

Stakeholder interviews should be as inclusive as possible to gain a solid understanding of potential community issues and perceived impacts. In selecting the appropriate people to interview, begin with identified community leaders. A "community leader" is anyone who is knowledgeable about the community and local issues or objectives. Subjects may include Chamber of Commerce representatives, religious leaders, local elected officials, municipal planning directors or staff, leaders of social service agencies or non-profit organizations, leaders of area interest groups, school principals, school board members, community or neighborhood representatives, or other identified as holding special knowledge or interest in the community. If the presence of low-income and/or minority populations was identified during the demographic overview, make sure to involve representatives from these groups in the interview process.

Interview locally elected officials early in the process. Use the interview as an opportunity to brief them on the project and the process underway to address potential community impacts. There are numerous reasons why interviewing locally elected officials early in the process is important. First, these individuals can assist in identifying interview subjects and may be helpful in making introductions with others who should be interviewed or assist in collecting necessary data or other information. Second, these officials may be called upon to make difficult project decisions on behalf of the community, and should be made aware of the efforts being undertaken to avoid, minimize, or mitigate adverse community impacts.

How to Identify Interview Subjects

Community leaders and affected groups may be identified through site visits to the community, informal conversations with knowledgeable persons such as agency representatives, and minutes from community meetings. Some community leaders and affected groups may have been identified in the previous step. The pool of interviewees can be broadened by using a "snowball sampling" method in which respondents are asked to identify others who should be interviewed. If the initial list of potential subjects is too long, the number of potential interviewees can be narrowed down to those individuals who are named by more than one other person or that represent an interest group that has not previously been interviewed.

Low-income and minority group representatives may be identified through discussions with other involved persons as well as through local religious institutions, social welfare organizations, and neighborhood organizations. This is an essential step in ensuring the involvement of low-income and minority populations and understanding how a project may affect these populations. Inadequate programs for informing and involving low-income and minority populations in the decision-making process is a contributing cause of environmental justice impacts.

How to Conduct the Interview

Prior to scheduling interviews, it is helpful to develop an interview guide containing the general topics and questions that will be addressed in each interview. Sample questions are provided below. During the interview, the role of the interviewer is to listen more than to speak and learn more about the respondent's point of view, regardless of whether it agrees with the interviewer's or the agency's general perspective. The interviewer should avoid agreeing or disagreeing with statements that are made.

How to Conduct Stakeholder Interviews

Introduce the project and describe purpose and need. Explain that the interview is to inform them about the project and to identify potential impacts, concerns, or objectives related to the project.

Sample questions might include:

- Do you have any questions or concerns related to the project?
- Are you familiar with the concerns or expectations of other groups in the community regarding the project? How would you characterize those issues?
- What (if any) has your experience been with NJDOT? What (if an) has been your experience with public involvement activities on our past projects?
- What are the best ways to communicate with you and involve you or your organization in the decision-making process?
- Who else do you think we should talk to about this project?

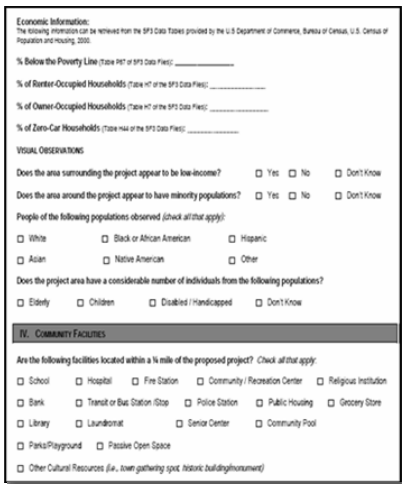
3.5 Prepare Documentation for Appropriate Level of Assessment

3.5.1 Prepare Categorical Exclusion Document

The Field Visit Checklist is a tool for practitioners responsible for the consideration of socioeconomic issues in the initial stages of project development. The Field Visit Checklist is designed to assist in determining the appropriate level of effort needed to identify potential socioeconomic effects, the type of environmental processing a project should receive, and public involvement activities that will be warranted for a project. The Field Visit Checklist may suffice as supporting documentation for the preparation of a CE in the case of very small and non-controversial projects. Projects that are likely to meet these criteria include those that are limited in scope, require little or no ROW, and are eligible for Programmatic environmental approvals. If the Field Visit Checklist indicates that no socioeconomic effects would result from a proposed project, then such documentation can be filed with the CE, either "self-certified" or FHWA-certified.

If the Field Visit Checklist does not rule out potential project-induced socioeconomic impacts, it may be necessary to complete the Socioeconomic Screening Form during subsequent stages of project development. In such circumstances, the Field Visit Checklist will provide supporting input for preparing

the Socioeconomic Screening Form which is designed to ensure a more comprehensive consideration of socioeconomic issues before completing CE documentation.



Economic Information:

The following information can be retrieved from the SF3 Data Tables provided by the U.S Department of Commerce, Bureau of Census, U.S. Census of Population and Housing, 2000.

% Below the Poverty Line (Table P87 of SF3 Data Files): _____

% of Renter-Occupied Households (Table H7 of the SF3 Data Files): _____

% of Owner-Occupied Households (Table H7 of the SF3 Data Files): _____

% of Zero-Car Households (Table H44 of the SF3 Data Files): _____

VISUAL OBSERVATIONS

Does the area surrounding the project appear to be low-income? ☐ Yes ☐ No ☐ Don't Know

Does the area around the project appear to have minority populations? ☐ Yes ☐ No ☐ Don't Know

People of the following populations observed *(check all that apply)*:

☐ White ☐ Black or African American ☐ Hispanic

☐ Asian ☐ Native American ☐ Other

Does the project area have a considerable number of individuals from the following populations?

☐ Elderly ☐ Children ☐ Disabled / Handicapped ☐ Don't Know

IV. COMMUNITY FACILITIES

Are the following facilities located within a ¼ mile of the proposed project? *Check all that apply:*

☐ School ☐ Hospital ☐ Fire Station ☐ Community / Recreation Center ☐ Religious Institution

☐ Bank ☐ Transit or Bus Station /Stop ☐ Police Station ☐ Public Housing ☐ Grocery Store

☐ Library ☐ Laundromat ☐ Senior Center ☐ Community Pool

☐ Parks/Playground ☐ Passive Open Space

☐ Other Cultural Resources *(i.e., town gathering spot, historic building/monument)*

Figure 3-5 - The Field Visit Checklist (Appendix E) should be used by the practitioner who is responsible for socioeconomic subject matter to prepare and undertake an initial field visit.

	Potential Community Impacts	TEMPORARY		PERMANENT	
N	**COMMUNITY COHESION** Is the project likely to alter the overall functioning of an identifiable district (e.g. interactions between persons and groups, isolation of persons or groups, change in social values, or change in the physical makeup of the community including residential displacements)?	☐ YES	☐ NO	☐ YES	☐ NO
O	**ADJACENT SOCIOECONOMIC RESOURCES** Are there any notable socioeconomic resources adjacent to the project area that may be impacted (e.g. churches, schools, employment centers, community facilities, historic districts or buildings, named neighborhoods, or other traffic/ pedestrian generators)?	☐ YES	☐ NO	☐ YES	☐ NO
P	**ECONOMIC AND BUSINESS RESOURCES** Are there any direct effects on area businesses or economic conditions likely to result from this project (e.g. displacements, business visibility)?	☐ YES	☐ NO	☐ YES	☐ NO
Q	**COMMUNITY SAFETY** Is the project likely to interact with any area crime issues (e.g. lighting, isolated areas, existing crime issues)?	☐ YES	☐ NO	☐ YES	☐ NO
R	**RECREATIONAL RESOURCES** Will the project affect recreational resources (e.g., parks, playgrounds, community gardens)? Will the project affect access to these resources?	☐ YES	☐ NO	☐ YES	☐ NO
	Will the project affect National Wildlife Refuges?	☐ YES	☐ NO	☐ YES	☐ NO
S	**VISUAL IMPACTS** Will the project have long term aesthetic effects (e.g. visual changes to the structure itself and/or on adjacent view-sheds)?	☐ YES	☐ NO	☐ YES	☐ NO
T	**MOBILITY AND ACCESS** Are there any mobility or access effects likely to be associated with this project (e.g. barrier effect, multi-modal accommodation, available detours, detour and likely user interaction, emergency response, non-motorist access to properties and facilities)?	☐ YES	☐ NO	☐ YES	☐ NO
U	**NON-MOTORIST SAFETY** Will the project affect safety of non-motorists?	☐ YES	☐ NO	☐ YES	☐ NO
V	**OTHER** Are there any other potential impacts associated with the project?	☐ YES	☐ NO	☐ YES	☐ NO

Figure 3-6 - A Socioeconomic Screening Form (Appendix F) provides a comprehensive list for assessing socioeconomic considerations. It should be used on projects where the characterization or extent of potential socioeconomic effects cannot be determined based upon the completion of the Field Visit Checklist. It provides documentation to support findings for categorical exclusions or a rationale for additional environmental processing (e.g., EA or EIS).

Materials gathered and documentation prepared as part of the preparation of the community profile should allow the practitioner to affirmatively or negatively check the boxes on the Socioeconomic Screening Form. These materials should be submitted along with the Socioeconomic Screening Form and other CE documentation for agency approval. If the screening reveals that socioeconomic issues may be affected by the proposed project, additional environmental review will likely be warranted. NEPA documentation requiring a more detailed analysis of potential project-induced impacts such as an EA may be required to rule out potential effects.

3.5.2 Prepare EA or EIS Document

Socioeconomic concerns stand alongside those of the natural and cultural environment as essential considerations in the project development decision- making process. They can influence the project's purpose and need, development of alternatives, how communities are likely to value local resources and/or perceive project-related effects, and which approaches for avoiding or mitigating effects may be welcome. Depending on the nature of the proposed project's potential effects or potential controversy, the preparation of an EA or EIS may be warranted regardless of what is discovered during the preparation of the initial community profile. However, findings from the community profile may also trigger the need to prepare an EA or EIS when only a CE had previously been anticipated. For projects that require the preparation of an EA or EIS, much of the information compiled during the community profile can be used to prepare an Existing Conditions section. Further discussion about socioeconomic effects evaluation is presented in Chapter 4.

This Chapter includes a discussion of the various methods and criteria that can be used when assessing Socioeconomic Effects. Resource topics covered in this chapter include:

- Social Impacts
- Economic Impacts
- Land Use Impacts
- Mobility, Access, Connectivity
- Quality of Life Issues
- Displacements and Relocation Impacts
- Title VI and Environmental Justice
- Farmland Impacts
- Indirect and Cumulative Impacts

4.0 Impact Assessment: Socioeconomic Effects Evaluation

Anticipating future conditions is a key component of the socioeconomic effects evaluation. The analysis must anticipate or "predict" a minimum of two scenarios, including the community without the proposed project and the community under one or more project alternatives. Socioeconomic impacts of the proposed project can then be interpreted as the difference between these two (or more) scenarios.

When identifying and analyzing impacts, the socioeconomics practitioner should be cognizant of both positive and negative effects, consider both temporary and permanent impacts, recognize the counterbalancing effects of various impacts, and keep community goals and vision in mind. Any time there is public perception of an impact, be sure to review and research the issues involved. There may be information available from the planning phase regarding potential impacts, which can provide a starting point for further evaluation.

The following chapter is designed to assist in the identification of potential project-induced impacts. Each section prompts a series of questions that should be answered when assessing socioeconomic effects and the extent of potential impacts. Reference to this chapter when completing the Socioeconomic Screening Form can help the practitioner make sure they have adequately addressed each potential impact item listed on the form. The table at the end of the Socioeconomic Screening Form Instructions identifies where in the chapter a discussion of each issue item can be found.

4.1 Social Impacts

Social impacts of a proposed project are those that disrupt the normal daily functions of a community or neighborhood. Typically, it is the broader region or jurisdiction that enjoys the social benefits of a transportation project while the social impacts are borne by the local community – particularly the neighborhoods immediately adjacent to a proposed project. Therefore, social impact assessment is often conducted at the neighborhood level.

State and federal transportation and environmental laws require that potential social impacts of transportation projects be identified and addressed. This section discusses methods and techniques for identifying social impacts that may result from NJDOT-sponsored projects.

4.1.1 Demographic Impacts

The siting or expansion of a transportation facility can result in *direct* displacements of persons, businesses and households. Right-of-Way studies should be used to identify the extent of potential direct displacements. Census data will help identify social characteristics of a relatively small geographic area yet the exact characteristics of affected households will not be known unless residential surveys are conducted and/or conversations held with property owners.

What Defines a "Neighborhood" or "Community"?

"Neighborhoods" are typically understood to include:
- An immediate residential locale – often a block;
- The relationship of area residents is based upon location (i.e., proximity) and
- Certain "neighborly" activities are characteristic to an area such as borrowing, doing favors, mutual aid, and sidewalk socializing.

"Communities" can be identified by considering several factors:
- Economic, social, political or governmental functions take place within an area;
- Self-contained area with well-defined geographic boundaries;
- Areas with distinctive character or areas that are homogeneous or stable;
- Self-sufficiency within the area, particularly with regard to public facilities and institutions;
- Psychological unity and place identification that is evident among residents.

While residential displacement surveys can provide additional detailed information on social characteristics and relocation needs of potentially displaced populations, conducting such surveys for the purposes of impact assessment are not routine and warrant coordination with right-of-way and are only authorized on a case-by-case basis. During the earlier stages of project development when communication with potentially displaced residents may not be appropriate, conversations with municipal officials and local planners may be able to shed light on the social characteristics of those living within close proximity to the proposed project corridor and those who may be directly affected by a proposed project. This may also help reveal if vulnerable populations would be disproportionately and adversely affected by a proposed project.

Indirect displacements by a proposed project can be brought on by changes in site accessibility and property values which impact the desirability of local and regional areas for residential development. Projects that alter the existing cohesion of a neighborhood or result in the change of available services due to commercial acquisitions may prompt some residents to move elsewhere. The application of the access code may also result in changes in individual property use and merits consideration in the planning phase. Any one or a combination of these features could result in indirect displacement. When assessing for potential demographic impacts due to either direct and/or indirect displacements, the following questions should be answered.

- » Would any increases or decreases in population be expected as a result of the project?
- » What displacements, if any, would be expected as a result of the project?
- » Would any displacement of minority or low-income populations be expected as a result of the project?
- » Are there any disproportionately adverse effects on special populations?

» Would the project decrease commute times to employment centers making land outside the area more desirable for residential use?

» Would the project be the cause of significant physical changes that would influence people's decision to relocate from or to the study area?

4.1.2 Community Cohesion

A sense of community is generally exhibited through frequent social interaction, use of community facilities and services, local participation in social activities, and an expressed solidarity. Members of a "cohesive community" may have a collective outward identity. Other indicators include the presence of recognized community leaders, residential stability, a family orientation, active elderly populations, defined community or neighborhood organizations, and area name identification.

A proposed project can create a physical or perceived barrier with a neighborhood, discouraging interaction across the facility. The barrier effect is particularly damaging to cohesiveness if it involves physically isolating one section of a neighborhood from the rest. Isolation of the area could lead to a variety of unwelcome circumstances, such as increased residential turnover, social isolation for the elderly or disabled, and increased crime.

Understanding Community Cohesion

"Community cohesion" is the closeness or bond that occurs within a neighborhood or sub-community. The components of cohesion – which can include ethnic and racial composition, age, and the expression of "roots" – combine to create attachment and cohesion.

- Is there evidence that the neighborhood is cohesive?
- To what degree do residents have a sense of belonging to there neighborhood?
- Will project alternatives damage or facilitate that cohesiveness?

However, transportation projects that are properly conceived can adopt features that improve community cohesion. For example, a transportation improvement project may remove cut-through traffic from nearby residential streets and provide additional pedestrian crossings, making it easier for neighborhood children to cross streets and generally increasing opportunities for neighborly interaction. Consider the following questions when evaluating the potential for project-induced impacts on community cohesion:

» Is there evidence that community cohesion exists in the neighborhood adjacent to the project corridor?

» Would the project result in any barriers dividing an established neighborhood(s) or would it increase neighborhood interaction?

» What changes, if any, in traffic patterns through an established neighborhood(s) would be expected as a result of the project?

» Would any changes to social relationships and patterns be expected as a result of the project?

» Is the project expected to result in increased pedestrian and bicycle movements?

» Would the project result in any loss, reduction or enhancement of connectivity to a community or neighborhood activity center(s)?

» If there is evidence of cohesion, will the proposed project damage that cohesiveness, and if so, to what extent?

4.1.3 Community Facilities and Services

Potential direct impacts to community facilities and services can be either short- or long-term. During construction activities, access to a particular resource may be impeded or the mobility of a public service (e.g., fire equipment, emergency medical services, etc.) may be disrupted or delayed. There are also cases where a transportation facility may require temporary closures or significant detours. Among the most troubling potential impacts to community facilities and services may be serious encroachments to the continuing operations of a community facility or direct displacements requiring the facility's relocation. In these cases, the impacts become particularly consequential if the facility is the only one of its kind serving a community (e.g., high school, library, senior center, etc.).

Indirect impacts include additional travel time due to detours or road reconfiguring. When assessing potential impacts to community facilities and services it is also important to consider if existing community facilities and services can accommodate growth induced by a proposed project.

The review of community facilities and services in the study area will reveal where each resource is located which will help determine which segment(s) of the population will be affected and for what period of time. Some facilities provide crossover or interchangeable services. For example, if one library is inaccessible for a period of time, patrons may be able to use a different branch during the interim. Medical services may be available at alternate facilities with no additional travel time. Other community facilities, however, offer unique services that a community cannot do without or easily replace such as schools which are carefully assigned to districts and serve a set number of students. If there are disruptions in access to the school or a relocation of school becomes necessary, there is a substantial level of coordination, mitigation planning and funding required to address the impacts to these civic institutions.

Alternatives to adverse effects on community facilities and services must be considered when project implementation threatens the displacement or long-term access to the facility. Major re-routing, detours, or lengthy road closures should be avoided if services or facilities will be rendered inaccessible. If an important community facility such as a religious institution or school must be displaced, it is necessary to identify an alternative location through coordination with the facility officials. When assessing for potential impacts to community facilities and services in the affected community, the following questions should be answered.

- Will there be temporary or permanent access changes to public/private facilities such as hospitals, schools, libraries, police or fire departments? Would this change impede the delivery of these services?
- Does the project affect safe access to community facilities?
- Will travel times be altered for vehicles and/or pedestrians?
- Will the usage of existing facilities be disrupted or altered? If yes, are alternate facilities available?
- Will major services or facilities be altered or displaced?
- Will barrier effects be created?

4.1.4 Safety and Emergency Response

Safety, in the context of socioeconomic effects, focuses on the effects of a proposed project on neighborhood safety. The topic requires consideration of whether residents feel safe in their neighborhood and includes issues such as emergency services, crime, and pedestrian and bicycle safety (see Section 4.4.2 for pedestrian and bicycle safety and Section 4.5.2 for community safety).

Life support facilities – such as hospitals, police and fire protection, and ambulance services – provide critical services to the community and are particularly sensitive to abrupt changes in traffic patterns. Both the short- and long-term effects to the delivery of emergency services must be considered during transportation decision-making. It is essential to know where emergency service routes are and how construction activities and/or operation of a proposed project would affect the delivery of these services. It may be appropriate to consult with local service providers to determine if project elements (e.g., potential barriers or increased traffic volumes) could affect emergency response times. When assessing if and how the delivery of emergency response services would be affected by a proposed project, the following questions should be answered:

- Would the project result in the creation of isolated areas that would be difficult for emergency services to access?
- Would any increase or decrease in emergency services response time (fire, police, EMS) be expected as a result of the project?
- Will the project impede or improve access for emergency services to neighborhoods?
- Would any buildings that house emergency services need to be relocated as the result of the proposed project?

Potential Negative Effects to the Delivery of Emergency Services

- Barrier effects caused by transportation projects can impede or enhance the delivery of emergency services in a neighborhood.
- Increased congestion or local street closures caused by roadway projects can delay emergency response times.
- Detour routes can also delay emergency response times.

Potential Positive Effects to the Delivery of Emergency Services

- Decreased congestion or improved neighborhood access attributable to a proposed project can improve emergency response times.

4.2 Economic Impacts

Many communities pursue transportation improvements as a means of attracting economic development, but the impacts of a proposed project may also raise economic concerns, which can include the disruption of business activity during construction, the effect of new or wider roads on residential property values, adverse direct impacts of right-of-way acquisition, and the effect of median improvements on corridor businesses. A proposed project can affect businesses and residences in different ways. For example, wider roads and increased vehicular movements may adversely affect residential property values, whereas commercial property values may be positively affected by the same factors.

Major economic impacts due to a transportation project occur in both the public and private sector. In the private sector, employment and income levels change, thus affecting individuals and households, as well as retail, service, and manufacturing businesses. Changes in transportation infrastructure may significantly affect accessibility both regionally and locally, inducing people to change their residences as

well as their destination preferences for work or to satisfy shopping and recreational needs. Indirectly, a proposed project can result in changes in property values which may or may not be beneficial to the owner(s) or the community.

Changing the local business environment can affect business activity by making the shopping experience more or less pleasant. For example, increased noise and vibration dust during construction can make the shopping experience less pleasant and discourage business patronage. Depending on the size of the project, construction activities can continue for a significant amount of time and some businesses may not be able to generate enough revenue during this time to continue to operate. If a property is made more or less desirable by a proposed project, it will be reflected in its property value and level of business activity.

In the public sector, transportation-related induced development can put added pressure on public facilities and services. This can lead to higher property taxes and/or "user fees". Communities bypassed by major projects have also seen their fiscal and employment base erode as commercial firms that are highway-dependent invest elsewhere.

The impact assessment should, therefore, consider economic effects of a proposed project broadly, and look for ways a project could be shaped to help advance the economic goals of a community or neighborhood. Identifying and addressing potential economic impacts in the context of an open public involvement process will improve project outcomes and local support. The following section provides an overview of potential economic impacts that may result from a proposed project.

4.2.1 Effects on Business and Employment

Potential economic impacts on businesses include changes in business activity, changes in available parking and land due to right-of-way acquisition, changes in the marketability or resale value of land for development, and changes in the local availability of employees. Impacts can be direct, indirect, or induced. One issue that affects business activity is altered traffic volumes and patterns as a result of a proposed project. How a business could be affected by a reduction in pass-by traffic can vary according to the type of business. A destination business is often unaffected or positively affected by reduced through traffic, whereas a convenience store or impulse business relies on pass-by traffic and may be adversely affected.

The assessment may warrant surveys of local businesses to identify the degree to which the study area may be affected. Such surveys may involve scheduled or walk-in interviews, mail surveys or workshops. The conduct of such surveys is not routine (they are performed on a case-by-case basis), can be highly sensitive to administer, and warrant coordination with the ROW Division. An additional site visit and conversations with local planners may be appropriate to help determine the magnitude of potential impacts without conducting business surveys. The assessment should separately consider impacts to business activity both during construction activities and operation of the proposed project. Section 4.6 discusses relocation impacts. When assessing potential economic impacts to the local and regional economy that may result from a proposed project, answer the following questions:

- Would the loss of any business be expected as a result of the project?
- How many jobs would be lost?
- For businesses that are directly affected, are there other businesses in the study area offering comparable services?

- Would the project result in the loss of parking, loss of visibility, loss of access or other disruptions caused by construction activities or the operation of the project?
- Would access to businesses be affected by either a decrease or increase in vehicular movements along the project corridor or business activity centers accessed via the project corridor?
- Does the project involve a bypass or long-term detour of a local business district?
- Will changes in land use occur due to the proposed project?
- Will the remaining portion of a business that is partially acquired be too small for the business to continue to operate? Will the remaining portion of the business be deemed an uneconomic remnant?
- Is the project within or presently accommodating a particular type of business sector (e.g., manufacturing, service, or retail)?
- Will the proposed project affect a major employer?

4.2.2 Special Needs Patrons

Special needs populations may have limited mobility options due to physical or financial restrictions. These mobility limitations cause special needs populations to rely on businesses and purveyors of goods and services that they can reach given their specific circumstances. Other businesses that provide comparable goods or services or are located in a nearby area may, in fact, not be accessible to a special needs population because of the lack of public transit, the quality of the surrounding pedestrian and bicycle network, the grade of entry, etc.

Special Needs Patrons
- Elderly
- Physically and Mentally Disabled
- Low-Income
- Limited-English Proficiency / Linguistically Isolated
- Ethnic and Racial Minorities

As a result, the removal or temporary disruption of businesses serving special needs patrons would adversely affect these populations. The effect of removing businesses serving special needs patrons could be comparable to the actual relocation of special needs patrons themselves, depending on where residents are able to relocate in relation to the services they require (see Section 4.6.4). The impact of relocating businesses serving such populations may decrease if there are other businesses within immediate proximity to the affected community offering the same services.

Local businesses may employ special needs patrons and play a vital role in their livelihood. The disruption or removal of these businesses could result in adverse impacts to these people. The ability for them to continue to work with the business should it reopen in a new location or find a new place of employment within close proximity to the existing business location will depend on the environment in which the project would be sited and the project itself. When assessing potential economic impacts that special needs populations may experience as a result of a proposed project, the following questions should be answered:

- Would neighborhood segmentation occur?
- Are changes in travel time or patterns likely?
- Are there retirement homes or nursing homes in the study area?

- Are there handicapped groups, non-English speaking and/or low-income populations located within the study area?
- Would the project result in the removal or disruption of businesses employing special needs patrons?
- Are there other establishments in the study area providing similar services that could employ these people?
- Would the project result in the removal or disruption of businesses providing goods and services to special needs patrons?
- Are there other establishments in the study area providing similar services that would be able to absorb the demand of special needs patrons?
- Would special needs patrons experience a disproportionately high share of adverse project-induced impacts (see Section 4.7)?

4.2.3 Tax Base Changes

The public sector has an interest in determining the effect of transportation projects on their tax base due to changes in land use. Two types of taxes that can be affected by a proposed project are property and sales tax. Sales taxes are collected by a government entity based on gross sales receipts of businesses in the jurisdiction. Therefore, the amount of sales tax collected will change as business activity changes. Sales tax revenues are also used to fund the activities and programs of special use districts and other government agencies. Generally, impacts to sales tax revenues as a result of transportation projects are considered relatively minor (depending on the scale of the project) and are difficult to estimate with accuracy.

How to Identify Changes in Property Value

- Identify the land use character of the area and assess the project's compatibility with the viability of existing and future land uses.
- Identify property value impacts on adjacent properties and properties father from the project corridor.
- Consider continued site accessibility, preservation of community character, and desirability of land use changes (e.g., residential to office or commercial).

Property taxes are collected by a government entity based on the assessed value of property in the jurisdiction. County and local governments (public works, schools, libraries etc.) rely upon property tax revenues to fund a significant portion of their activities and programs. When land that was once taxed, such as commercial development or highly productive farmland, is converted to public use and transferred into the nontaxable public domain, the local revenue base is lowered. Depending on local development conditions, this can be a temporary loss with subsequent induced growth eventually offsetting the near-term loss in the tax base.

Typically, a change in business activities has a direct impact on the tax base. The type of fiscal impact depends on the types of businesses introduced or displaced. Complementary land development, such as businesses that benefit from high volumes of vehicular traffic (e.g., gas stations, restaurants, hotels, etc.), is more likely near interchanges in rural areas where property values were originally low. Interchanges in suburban and urban areas where property values were high before project planning and implementation are more likely to support higher density, mixed-used development. When assessing possible changes from the tax base that may result from a proposed project, the following questions should be considered:

» Would any real property be removed from the tax rolls as a result of the project?

» Is it likely that taxable property values for properties not directly affected by the proposed project would increase or decrease as a result of the project?

» Would changes in business activities increase or decrease the tax base?

4.2.4 Economic Development Opportunities

Transportation projects, if properly conceived, can be a catalyst for new economic development. The review of municipal plans and other local documents as well as conversations with local officials, municipal planners, local agencies and organizations, and other stakeholders will reveal areas the affected community has identified for (re)development. Transportation agencies can work with municipal planning departments, economic development groups, as applicable, and the community to design projects that are not only safe and efficient but also meet the needs of the affected community by providing safe connections, improved access points, and other enhancements (e.g., lighting, improved sidewalks, etc.), depending on the project, that would help to achieve desired goals. The success of this effort is largely dependent on effective levels of communication, coordination and collaboration.

As discussed in the *Smart Transportation Guidebook* (a 2008 publication jointly commissioned by the Pennsylvania Department of Transportation and NJDOT), the role of economic development can be analyzed in a variety of ways, including but not limited to the following considerations:

» Will the proposed project result in opening up more area to development?

» Is the proposed project located in a growth area identified by the MPO and/or municipality?

» Will it serve to attract "big-box" retail or regional distribution uses?

» Will it strengthen a "Main Street," or otherwise compete with sprawl?

» Will it add to the visitor appeal of a scenic or historical asset?

» Will the project result in sufficient travel-time savings for commuting labor, consumers or freight transportation providers to change the attractiveness and competitiveness of a local area or region for additional business activity or investment?

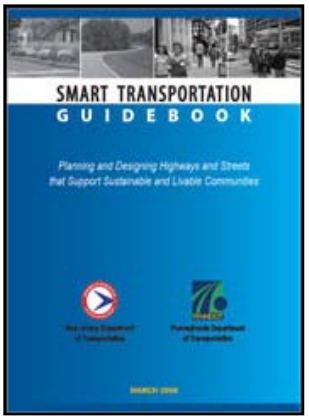


Figure 4-1 - The Smart Transportation Guidebook can be found at: http://www.smart-transportation.com/guidebook.html.

These and other potential economic development consequences can be assessed by the practitioner, drawing upon a combination of guidance materials on transportation and economic development and transportation and "indirect" effects literature, following discussions with project stakeholders, and/or analysis of available economic base data and travel demand modeling outputs (e.g., travel-time). The level of effort devoted to these considerations can vary greatly depending on the project's complexity and controversy. Greater levels of effort may be warranted when the project's benefits need to be fully weighed and balanced against a project's adverse costs.

4.3 Land Use Impacts

Predicting how transportation projects will affect land use and community planning objectives is an important step in the socioeconomic effects evaluation. Although land use planning activities fall outside the jurisdiction of transportation agencies, lack of consideration of land use impacts can counteract the effectiveness of long-range transportation planning and growth management efforts. The analysis of land use impacts improves the potential to coordinate with agencies involved in land use decisions and engage them in a collaborative planning process.

The *Smart Transportation Guidebook* proposes and identifies strategies to manage capacity by better integrating land use and transportation planning. The desire to travel through a place must be balanced with the desire to travel to a place. Roadways have many purposes, including providing local and regional mobility, offering access to homes and businesses, and supporting economic growth. The guidebook provides guidance on planning and designing non-limited access roadways in New Jersey and Pennsylvania, from local streets through multi-lane state highways. Smart Transportation is driven by two important concepts that have taken root in transportation and land use planning: CSS and Smart Growth. Additionally, the roadway design should be compatible with the existing land use context, or planned land use context that reflects community vision.

Where appropriate, transportation projects should also be planned in coordination with the New Jersey Office of Smart Growth (OSG), which coordinates planning throughout the state to protect the environment and guide future growth into compact, mixed-use development and redevelopment. The OSG implements the goals of the State Development and Redevelopment Plan to achieve comprehensive, long-term planning in addition to integrating planning with programmatic and regulatory land-use decisions at all levels of government and the private sector. Coordination with the OSG during the various stages of transportation decision-making can help design projects that fit more harmoniously into communities and support desired changes in land use.

4.3.1 Land Use Patterns / Urban Form

The implementation of a proposed project, depending on its size and scale, can affect the rate of growth and development patterns in the affected and surrounding community. Some types of development may directly result from a proposed project. However, most land use impacts are not the direct result of a proposed transportation project but occur indirectly due to changes in travel time and increased land accessibility. The result may be shifts in the spatial distribution of development over time (different than those without the proposed project), including such oft-observed effects as the introduction of new activity centers along a widened suburban corridor or localized commercial development surrounding roadway improvements in more rural areas.

Regional growth patterns depend on a range of factors, including the availability of water and sewer service, the health of the regional and local economy and the quality of transportation infrastructure. The rate and pattern of development is a key factor in predicting the need for additional roadway capacity. At the same time, the availability and efficiency of transportation systems is a major factor in development decisions. Although it is not possible to determine precisely how a transportation project will affect regional growth patterns, the assessment will uncover information that could be of significant value to transportation, economic development, and growth management programs.

NJDOT often works with regional and local agencies to implement projects that satisfy the transportation needs of both the affected community and region while at the same time designing projects that support existing or desired land use patterns. In this way, roadway improvements may change trip-making and travel patterns, and they also change accessibility to natural, cultural, and community resources. The following questions should be answered when determining if a land use pattern and/or urban form would be altered by a proposed project:

- Would the project result in a change in the character or aesthetics of the existing landscape?
- Would the project likely influence growth and future land use patterns?
- Would the project open up new areas for either residential or commercial development?
- Are there development plans for areas within close proximity to the project that could support new or improved corridors?

4.3.2 Consistency with State, County, Regional and Local Plans

Transportation projects can be evaluated for their ability to stimulate desirable land use changes and avoid adverse impacts on community development and growth management objectives. A thorough review of the State Development and Redevelopment Plan, initiatives from the Office of Smart Growth,, and county, regional and local plans should be conducted to determine if a proposed project is consistent and compatible with goals for the area. If a proposed project would be sited in environmentally sensitive and protected areas, NJDOT should consult with the New Jersey Pinelands Commission, the New Jersey Highlands Council, and the New Jersey Meadowlands Commission, as appropriate.

Oftentimes, a transportation project can help achieve desired land use changes and stimulate economic development for an area, as outlined in comprehensive and redevelopment plans. However, in other communities, a similar project may result in increased traffic and growth, which have been identified in local plans as undesirable. In such instances, it may be appropriate for NJDOT to engage in dialogue with the affected municipality(s) to identify ways the proposed project can meet their needs and the needs of the larger regional and state transportation network. When determining if a proposed project is consistent with state, county, regional, and local plans, the following questions should be answered:

- Is the project compatible with local growth management and development policies?
- Is the project compatible with adopted transportation, land use and area plans?
- Would the project help support the principles of Smart Growth?

4.3.3 Parklands and Open Space / Section 4(f)

Parklands and open space are valued community resources, the disturbance of which can have significant impacts, depending on the number of people using the resource and the presence of other resources within close proximity. Parklands and open space can simply be areas that residents visit for leisure and recreational purposes. They can also be protected by conservation easements held by a governmental unit or non-governmental entities recorded in the deed records. The New Jersey Department of Environmental Protection's (NJDEP) Green Acres Program provides protection for a

substantial number of properties, as does Section 4(f) of the U.S. Department of Transportation Act of 1966. The use of such resources for non-recreation purposes can result in adverse effects to users and can require coordination on the part of NJDOT, FHWA, and the government agency through which the land has been protected. Below is a brief description of the programs protecting parklands and open space.

New Jersey Department of Environmental Protection, Green Acres Program

The NJDEP Green Acres Program was created in 1961 to meet New Jersey's growing recreation and conservation needs. A municipality, county, or non-profit agency can apply for Green Acres funding to either purchase or improve existing resources. Part of the requirement of this process is to inventory all parcels owned by the applicant and held for recreation and open space purposes. These parcels are listed on each applicant's Recreation and Open Space Inventory (ROSI). The ROSI includes all parcels held for recreation and open space purposes regardless of whether or not they receive Green Acres funding. A jurisdiction may also have recently secured funding for other properties that are not yet listed on the ROSI.

For all transportation projects where any property interest is required – temporary, permanent, full or partial acquisition or easement – the ROSI should be reviewed to determine if properties protected by the NJDEP Green Acres Program would be affected. ROSI's are available on the NJDEP website but they are often not up to date and it is more appropriate to contact the property owner to obtain a copy of the most current list. If the affected property is listed on the ROSI – regardless of whether or not it has received Green Acres funding – or if the governmental unit contains a Green Acres parcel anywhere in its jurisdiction, or has accepted Green Acres funds at any time in the past, a Green Acres application for the disposal, diversion, or conveyance of the affected property(s) must be prepared. All NJDEP-owned parcels, if affected by a proposed project, must go through the same process. Compensation would be monetary or in the form of replacement property..

Remember that not all jurisdictions have applied for Green Acres funding in the past, and in such cases, coordination with property owners would be required but the Green Acres application process would not.

U.S. Department of Transportation, Section 4(f) Program

Section 4(f) of the Department of Transportation Act (DOT Act) of 1966 stipulated that the Federal Highway Administration (FHWA) and other DOT agencies cannot approve the use of land from publicly owned parks, recreational areas, wildlife and waterfowl refuges, or public and private historical sites unless the following conditions apply:

- There is no feasible and prudent alternative to the use of land; and
- The action includes all possible planning to minimize harm to the property resulting from use.

The use of Section 4(f) property occurs when land is permanently incorporated into a transportation facility, when there is a temporary occupancy of land that is adverse in terms of the statute's preservation purpose, or when there is a constructive use, which refers to a project's proximity impacts that are so severe that the protected activities, feature, or attributes of a property are substantially impaired. Section 4(f) has undergone changes in recent years. Under the provisions established in 2005 with the passage of SAFETEA-LU, if the US DOT determines that a transportation use of Section 4(f) property results in a *de minimis* impact, analysis of avoidance alternatives are not required and the Section 4(f) evaluation process is complete. For publicly owned public parks, recreation areas, and wildlife and waterfowl refuges, a *de minimis* impact is one that will not adversely affect the activities, features, or attributes of the property. For historic sites, a *de minimis* impact means that FHWA has determined (in accordance with 36 CFR Part 800) that either no historic property is affected by the project or that the project will have "no adverse effect" on the historic property. A *de minimis* impact determination does not require analysis to determine if avoidance alternatives are feasible and prudent, but consideration of avoidance, minimization, mitigation or enhancement measures should occur. There are certain minimum coordination steps that are also necessary.

Section 4(f) Process

Section 4(f) is a substantive law, meaning there is a specific standard that must be met to demonstrate compliance. This is in contrast to procedural laws, such as NEPA, where it must simply be demonstrated that the proper process was followed. If a project uses a Section 4(f) property and a finding of *de minimis* impact is not made, FHWA or FTA can approve the use of that property only if they find that (1) there is no feasible and prudent avoidance alternative to the use of the Section 4(f) property, and (2) all possible planning to minimize harm to the Section 4(f) property has been incorporated into the alternative.

What are De Minimis Impacts?

Section 6009(a) of SAFETEA-LU amended existing Section 4(f) legislation to simplify the processing and approval of projects that have only "de minimis" impacts on resources protected by Section 4(f).

De minimis impacts are those that, after consideration of any measure(s) to minimize harm (such as any avoidance, minimization, mitigation, or enhancement measures), do not adversely affect the activities, features or attributes of the Section 4(f) property. A *de minimis* determination fulfills all Section 4(f) requirements. When a *de minimis* impact is determined, an evaluation of avoidance alternatives and whether or not they are feasible and prudent is not required. However, it is still necessary to implement measures to minimize harm (which must be taken into account when determining whether the impact is *de minimis*). A *de minimis* determination cannot be made when there is a constructive use since such a use, by definition, involves impacts to a Section 4(f) resource such that the protected activities, features, and attributes would be substantially impaired.

On Dec. 13, 2005, FHWA and FTA provided Guidance for Determining *De Minimis* Impacts to Section 4(f) Resources. The Section 4(f) regulations issued on March 12, 2008 incorporate the basic requirements contained in the December 2005 guidance and take precedence over the guidance when there is an inconsistency. The law enacted slightly different provisions for historic sites than for parks, recreation areas, and refuges. The Section 4(f) final rule clarifies the legal standards for making each of these findings.

Before approving a project that uses Section 4(f) property, FHWA and its partner agencies must either determine that the impacts are *de minimis* or undertake a Section 4(f) Evaluation. If the Section 4(f) Evaluation identifies a feasible and prudent alternative that completely avoids Section 4(f) properties, it must be selected. If there is no feasible and prudent alternative that avoids all Section 4(f) properties, FHWA has some discretion in selecting the alternative that causes the least overall harm, FHWA must also find that all possible planning to minimize harm to the Section 4(f) property has occurred. An alternative is prudent if it satisfies the criteria set forth in the regulations which include factors that assess: safety or operational problems, how well project purpose and need are met, the severity of social,

economic, and environmental impacts, and the severity of impacts to environmental resources protected under other Federal statutes.

If a determination is made that there is no feasible and prudent alternative to the use of the land from the property and the action includes all possible planning to minimize harm to the property resulting from such use, then the acquisition may be approved. For historic bridges and transportation facilities, a Section 4(f) evaluation is not necessary if the project would not result in an adverse effect to that particular resource.

Certain transportation improvements may result in a *net benefi*t for Section 4(f) properties. The FHWA stipulates that a "net benefit" is achieved when the transportation use, the measures to minimize harm and the mitigation incorporated into the project enhances the Section 4(f) property when compared to both the future no action or avoidance alternatives and the present condition of the Section 4(f) property. A project does not achieve a "net benefit" if it will result in a substantial diminishment of the function or value that made the property eligible for Section 4(f) protection.

If parkland and open space areas were identified during the community profile or other component of the environmental review, it is important to understand how these resources may be affected by a proposed project. In some cases, there may be a direct effect requiring the acquisition of some type of property interest – full or partial acquisition or easement. In other cases, access to these resources may be impeded depending on where they are located in proximity to its user groups. For example, if a proposed project has an isolating effect on a certain neighborhood or would bisect certain areas, access to this resource may be impeded; thereby resulting in an adverse impact. When determining if adverse impacts to parklands and open space resources may result from a proposed project, answer the following questions:

- Would parkland or open space be affected as a result of the project?
- If yes, would the resource be able to continue to operate after implementation of the project?
- What is the current use of this resource (i.e., active or passive recreation)?
- Is this a heavily used resource?
- Are there alternate resources that could accommodate this user group?
- Would properties encumbered by the NJDEP Green Acres Program and/or identified as Section 4(f) properties be affected by the project?
- Would access to parkland and open space in the area be impeded as a result of the project?
- Would there be an increase in noise at this resource affecting its utility?

4.3.4 Scenic Rivers and Water Supply Watersheds / Section 6(f)

Scenic rivers and water supply watersheds are located across New Jersey. Their protection plays a vital role in both the quality of life enjoyed by area residents as well as their overall well-being by ensuring that drinking water is safe for consumption. Similar to the NJDEP Green Acres Program, funds from Section 6(f) of the Land and Water Conservation Fund Act may be used by local, state, and federal agencies for

land acquisition, park amenities, and other park development costs. Once a city, county, or agency has used Section 6(f) funds, the land or the park cannot be eliminated or acquired without coordination with the National Park Service and the development of mitigation measures for the eliminated items.

The completion of the Socioeconomic Screening Form and communication with others participating in the environmental review will have determined if these resources are present in the study area. If such resources have been identified in the study area, the next step is to determine if, and the extent to which, a proposed project would affect these resources. When determining if adverse impacts to protected water bodies and Section 6(f) resources would result from a proposed project, answer the following questions:

- Are there any water bodies in the vicinity of the proposed project designated as a national Wild and Scenic River? If yes, how is this resource used by the community (e.g., fishing, picnicking, etc.)?
- Would the proposed project be sited in an area enjoyed by the community or located in an area not easily accessible by pedestrians?
- Were Section 6(f) funds used to purchase land, park amenities, or other park development costs in the study area?
- Are there other areas within close proximity to the affected Section 6(f) property that could be a suitable replacement for acquired lands?

4.4 Mobility, Access and Connectivity

Mobility, access, and connectivity define the ability to move freely and easily through a community environment. Several conditions make this possible such as well-maintained sidewalks and bicycle paths/lanes, access to public transportation, absence of congestion, enhancements that make it easier for those with mobility limitations to move around. The definition includes all modes of transportation and places special emphasis on the ability of non-driving populations (i.e., physically and mentally disabled, elderly, children, low-income, and other transit dependent populations) to move freely about the neighborhood and access goods and services for their everyday needs. One of the primary objectives of transportation improvements is to improve these elements for all of its users. The following provides an overview of some of the considerations essential to planning for transportation improvements.

4.4.1 Access to Public Transportation

Access to public transportation is essential for those who are dependent upon it for commuting, healthcare, education, childcare, shopping, among others. For many, their livelihoods depend on the effective delivery of these services (see Section 3.2.1). For others, the option of public transportation, as compared to driving a private vehicle, can play a role in selection of a residential community or workplace.

The construction and operation of a proposed project can temporarily and/or permanently affect the delivery of public transportation services. During construction activities, lane closures or sidewalk disruptions, for example, can require that bus stops be temporarily relocated. Oftentimes, the temporary relocation of a bus stop is located within close proximity to the original bus stop. While this may not affect all users, those who are not particularly mobile may experience great hardship. In other cases, road closures along transit routes may adversely affect a sizable number of transit users. Depending on the

project, it may be necessary for NJDOT to coordinate with NJ TRANSIT on the location of transit stops should they not be able to reopen where they had been previously. When determining if access to public transportation would be altered by a proposed project the following questions should be answered:

Figure 4-2 - Relocation of bus stops or lack of bus shelters can create hardships for those dependent upon public transportation to access work, school and shopping.

- » Are there bus stops and/or transit stations in the study area?
- » Would access to public transportation facilities, such as bus shelters or train stations, be increased or reduced as a result of the project?
- » Is there a high concentration of transit dependent populations in the study area (i.e., low-income, elderly, children, mentally or physically disabled)?
- » Will facilities be temporarily relocated, and if so, would the new location present access challenges to any populations?
- » Will service reliability and timeliness of services be affected as a result of the project?

4.4.2 Pedestrian and Bicycle Considerations

Pedestrians and bicyclists may use a combination of streets, sidewalks, and/or paths to move between areas. Walking and bicycling have become more popular as gas prices have increased, as people have become increasingly concerned about their physical health and the environment, and as shared paths and linkages have been improved. For some, these activities serve as the primary mode of transportation, as an inter-modal connection, or as part of leisure and recreational time.

Figure 4-3 - Trampled grass can provide indications of unmet pedestrian needs and possible safety issues to address.

The types of bicycle and pedestrian projects for which NJDOT is responsible include: safe routes to school; intersection improvements; bicycle facilities; pedestrian facilities; multi-use paths/trails; streetscapes; and traffic calming. The implementation and maintenance of such facilities improves the overall safety of an area but also improves the ease at which pedestrians and bicyclists can move through their communities, which can greatly improve ones quality of life.

While specific bicycle or pedestrian facilities may not exist in the affected community, consideration must nevertheless be given to trips taken using these modes. For example, the absence of sidewalks is not an

indication that there are no pedestrians in the area but may mean that they are forced to walk in the roadway presenting a danger to the individual as well as drivers. Additionally, in the absence of sidewalks that are well-maintained, pedestrians may be forced to create their own walkways. Indications of alternative pedestrian or bicycle paths, such as trampled grass areas, may be observed.

The following questions should be considered when determining if pedestrian and bicycle considerations would be altered by a proposed project:

- Would pedestrian mobility be increased or decreased as a result of the project?
- Would bicycle mobility be increased or decreased as a result of the project?
- Are there existing safety issues for pedestrians and/or bicyclists in the affected community?
- Have pedestrian or bicycle improvements recently been made in or near the affected community?
- Would access to these improvements be impeded as a result of the project?
- In reviewing the project database or speaking with NJDOT Bicycle and Pedestrian Program Coordinator reveal that improvements have been identified for the area? Can they be incorporated into project design?
- Does the project design include pedestrian or bicycle improvements?
- Should pedestrian or bicycle improvements be considered for incorporation into project design?

NJDOT Pedestrian and Bicycle Safety and Improvement Programs

The NJDOT website acts as a clearinghouse of information related to pedestrian and bicycle safety and improvements being made across New Jersey. These resources should be reviewed to determine where in proximity to the affected community that improvements have been identified for iementation. Below is a list of some of the resources available on the website. The NJDOT Bicycle and Pedestrian Program Coordinator can be contacted with additional questions.

- *New Jersey Bicycle and Pedestrian Database.* A searchable collection of completed projects from across the state. Queries can be initiated by type of facility (i.e., safe routes to school, multi-use path/trail, etc.), location, and when it was built. It also includes the funding source and difficulties that may have arisen during its planning, design, or construction.
- *Bike Compatible Roadways & Bikeways.* Planning and Design Guidelines.
- *New Jersey Bicycle and Pedestrian Master Plan.* Phase Two of the master plan will inventory existing bicycle facilities, provide a prioritization list of bicycle and pedestrian improvements, and outline opportunities for improving the bicycle or pedestrian compatibility of existing projects.
- *Bicycle and Pedestrian Resource Project.* An information clearinghouse and technical resource center that identifies significant bicycle and pedestrian plans, policies, and projects across the state.
- *Kids Korner.* A variety of resources designed for children to promote bike safety.

4.4.3 Connectivity

Connectivity is an issue across and between all modes. The ability to travel continuously through a well-connected network as well as the ability to take multi-modal trips with adequate connections between modes is critical for creating a transportation network that serves and meets the needs of all members of the community. The transportation network does not adequately meet the needs of all users if gaps or barrier effects exist. If not properly conceived, the construction and/or operation of a proposed project can exacerbate real or perceived barrier effects. The practitioner should consider the following questions when determining if connectivity would be altered by a proposed project:

- How would the project affect inter-modal connections?
- Would any change in connectivity between residential and non-residential areas be expected as a result of the project?
- How would changes in connectivity affect protected populations (i.e., low-income, minority, elderly, physically and mentally disabled, etc.)?

4.4.4 Accessibility and Parking Considerations for Persons Protected Under the Americans with Disabilities Act

The removal – temporary or permanent – of walkways and parking spaces used by persons protected under the American with Disabilities Act (ADA) can result in significant adverse impacts for those who use them. The availability of safe and convenient parking in desirable locations is especially important to people with mobility limitations. By increasing the distance that one must travel from their car to their destination, narrowing of a travel lane from the designated parking area to shopping areas, or otherwise impeding travel to and from parking facilities can place extreme constraints on those with mobility limitations.

If the construction of a proposed project would remove parking spaces designated for handicapped persons, impede walkways, or access to elevators and/or escalators, mitigation will be required to minimize adverse impacts.

This is also true for the operation of a proposed project. ADA design standards require coordination by NJDOT to replace or designate handicapped parking spaces should they be lost due to new infrastructure or if new parking is made available. The following questions should be considered when determining if accessibility and parking considerations would be altered by a proposed project:

- Would a change in any public parking areas be expected as a result of the project?
- Would designated handicapped parking spaces be lost during construction activities?
- Will the distance, grade, terrain, or width of passage between parking facilities and businesses be impacted as a result of this project?
- Would new travel corridors to accommodate those with mobility limitations be necessary?

4.4.5 Traffic Congestion and Safety Considerations

Congestion levels generally worsen when vehicle volumes exceed roadway capacity or in the event of an incident such as a breakdown or accident. During certain periods of construction activity, roadway improvements have the potential to increase congestion and reduce capacity. This may be due to curious onlookers, lane shifts, or lane closures. Unfortunately, congestion is not only limited to construction activities. Congestion often leads to frustrated drivers who engage in poor or risky driving behavior. This type of behavior creates hazardous conditions which put drivers, as well as pedestrians and bicyclists, at risk.

When designing roadway improvements, it is important to consider how congestion will affect the safety of the various user groups traveling on a particular corridor during construction and operation of a proposed project. Appropriate signage and traffic updates can alert users of upcoming congestion and/or help keep vehicles off of congested roadways. The following questions should be addressed when determining if congestion and safety would be altered by a proposed project:

- What changes to existing traffic patterns are anticipated as a result of the project?
- Would vehicular mobility increase or decrease as a result of the project?
- Are there existing safety issues within the study area?
- How would the proposed project affect these issues? What types of mitigation or enhancements would be appropriate?

4.5 Quality of Life Issues

Quality of life issues can be defined as the features that combine to create the totality of a person's perception of their own life. In other words, what are the attributes that contribute to a person's sense of place and attachment to their environment? Answers can vary widely among people living in different environments (i.e., urban, rural, or suburban), in different age groups, and of differing racial and ethnic backgrounds. Generally, low crime levels, access to goods and services, recreational opportunities, good schools and public services, and adequate public transportation are mentioned among the top contributors to overall happiness and quality of life. Other quality of life issues such as diversity and equity, civic engagement, access to local foods, and diversity of land uses may be of importance to some but not to others.

The best and most appropriate way to identify those quality of life issues important to community members is through effective public outreach and visioning activities. A thorough understanding of these issues early in the decision-making process can help ensure that projects are designed with the community in mind and are not met with opposition later. For example, a project can be designed to avoid or minimize the impact to valuable community resources such as an old building (that may not be listed as historic) or a scenic vista. For those transportation facilities that are designed in tandem with economic development plans, an understanding of the quality of life issues most valued in a community can help create a dynamic mixed-use environment built to meet the needs and interests of its users.

4.5.1 Compatibility with Community Vision and Goals

In addition to the review of planning reports to determine a proposed project's compatibility with state, regional, county, and local goals and objectives, it is important to understand how various members of the public perceive a proposed project. However, it may be difficult to capture community vision and goals during general public meetings.

Differing from other types of public meetings, which may be intended to inform affected communities about a proposed project, visioning sessions tend to include a smaller group of stakeholders to brainstorm about how a project can benefit area residents and fit more harmoniously into the community. Participants in visioning sessions are often representatives of community groups and organizations that have a diverse constituent base which helps to ensure that all affected parties are properly represented.

Visioning can be performed in all affected communities. This is particularly true in communities that have been the recipients of unwelcome transportation projects and/or environmental degradation that have had long lasting effects on area residents. There are a wide variety of techniques that have been creatively employed during visioning activities, many of which are described through online resources. Depending on the nature of the project and the controversy surrounding it, visioning sessions can be challenging and achieving consensus may prove difficult. Ideally, the activities should culminate in a Vision Plan or list of goals to be achieved with the implementation of the project. The following questions should be considered when determining if a proposed project is consistent with community vision and goals:

- Is the proposed project consistent with the community vision and goals?
- What changes in project design can be made to better meet the needs of affected communities?
- Are there enhancements that can be made to the surrounding area that would offset some inconsistencies with community vision and goals (i.e., tree planting, improved lighting, benches, etc.)?

4.5.2 Community Safety

People commonly say that neighborhood safety is one of the most important factors that contribute to their overall quality of life. Some elements that contribute to the overall safety of an area include adequate lighting, well-maintained sidewalks and building facades, state-of-good-repair of infrastructure (e.g., bus shelters, signage), pedestrian activity, security cameras in appropriate locations, the presence of public safety services (i.e., police, fire, and EMS), adequately marked street crossings, and pedestrian overpasses in appropriate locations. These contributing elements to neighborhood safety – public works and policing -- are the collective responsibility of several public sector and private parties including NJDOT, county governments and local municipalities, private residents, merchants and owners.

Transportation facilities have the potential to divide neighborhoods, isolate certain parts of a community, or create hard-to-monitor or poorly maintained areas that can invite unwanted behavior. If one or more of these conditions are likely to be present from a project, mitigation measures and offsetting enhancements should be designed accordingly. This may include the installation of new lighting under an overpass or siting of pedestrian bridges in areas easy to access from either side of the roadway. When assessing if impacts to community safety would result from a proposed project, the practitioner should consider the following questions:

- Will the proposed project create areas of isolation that have a real or perceived effect on safety?
- Would "blind or isolated" areas be created that are difficult to monitor for criminal activity as a result of the project?
- Would protected populations receive a disproportionately high and adverse share of isolating factors?
- What are the attributes that the community perceives to be the most important to community safety? Would these be affected by the proposed project?

4.5.3 Air, Noise and Vibration

Air, noise, and vibration impacts can vary significantly by project type and proximity of the proposed project to sensitive receptors, typically neighborhoods, community facilities and other places where people congregate, areas with high levels of pedestrian activity, and historic structures. Potential impacts should be evaluated in terms of their effect on the community, including traditionally underserved populations and relatively immobile populations (e.g., elderly, children and disabled). It is not anticipated that the socioeconomics practitioner would conduct technical studies for air, noise and vibration as they are typically the domain of other technical professionals. Rather, it is important to coordinate with the NJDOT staff or consultant who would conduct such an assessment. Communication with such experts will help reveal where potential impacts may result based on the location of sensitive receptor areas. The practitioner can then determine how potential impacts may affect communities, including low-income and minority populations, during both the construction and operation of a proposed project.

Noise and vibration impacts often begin during construction and continue to a lesser degree during operation. Impacts to air quality typically disappear upon completion of construction. Impacts are generally limited to those areas located immediately adjacent to project corridors but may also include arterial roads connecting to the proposed project corridor due to increased vehicular movements.

Air, noise, and vibration levels often increase during construction activities associated with roadway construction, the extent of which is largely dependent on the amount of ground disturbance necessary to implement a project and the type of construction equipment that is used. Haul routes used by trucks to remove earth as well as to transport equipment to and from construction sites can also contribute to increases in air, noise, and vibration levels in an area. For each project, impacts associated with construction activities should be minimized to the greatest extent possible through the design and implementation of construction mitigation plans. Mitigation measures, such as keeping sidewalks clear of construction debris and dust, can improve the community's experience during the construction process.

Once in operation, roadway improvements on heavily travelled corridors increase the speed and ease at which vehicles move. Oftentimes such an improvement will decrease air particulates (e.g., vehicular emissions) and noise levels (e.g., car horns, general sounds of vehicles moving). Significant vibration impacts tend to be limited to construction activities. However, once in operation, certain roadways may experience more heavy truck volumes which would increase vibration levels (over existing conditions) for those areas within immediate proximity to these roadways. Impacts, during construction and operation of a proposed project, will depend on the proximity of sensitive receptors to a proposed project and indirectly to arterial roads connecting to the proposed project. If properly conceived, such impacts will remain unchanged or decrease from existing conditions once the proposed project is in operation. Any decrease

in such impacts will positively contribute to the overall quality of life enjoyed by area residents. The following questions should be considered when determining if such impacts would result from a proposed project:

- Are there sensitive receptor areas within close proximity to the project area? Residential areas? Community facilities and services?
- If yes, are there protected populations (i.e., low-income, minority, disabled, etc.) present in these areas?
- Would impacts be limited to construction activities or continue through operation?
- What types of mitigation measures would be appropriate to help minimize adverse impacts during construction (e.g., temporary noise walls, dust control, etc.)?
- What types of mitigation measures or enhancements could be made in the area to help minimize adverse effects once the project is in operation (i.e., noise walls, planting of trees, or improved lighting in well travelled pedestrian areas)?

4.5.4 Visual Impacts

Visual impacts - which are easily understood by the affected community, are highly subjective, and can provoke strong emotion - have historically been given low priority during the development of proposed projects. Inattention to visual resources during project development and design can adversely affect cherished community resources and greatly increases the likelihood of active opposition to a proposed project.

Visual resources and detractors collectively define the aesthetic character of a community and contribute to its "sense of place." Different user groups within the community often define these qualities in varying ways. Residents of the community or neighborhood may define its character based upon local landmarks or features that may not be apparent to the casual visitor. Clearly, the placement and design of a proposed project can alter the aesthetic and visual character of the surrounding area. Therefore, transportation facilities should be carefully woven into the surrounding context so that the facility itself becomes an asset, and not a detractor. Both the view of and to the transportation facility should be considered in assessing potential aesthetic impacts of a transportation project. When assessing for visual impacts, the following questions should be addressed:

- What are the visual resources and detractors of the community?
- Will the community's aesthetic character be changed if the transportation project is implemented?
- Will the change be for the better or worse?
- How important is the change to the various community stakeholders?
- Is the design of the project compatible with the community character and goals?
- Has the community voiced its concern regarding visual impacts?
- Can any potential aesthetic impact be avoided or mitigated?
- Would any increase or decrease in visibility for traffic-based businesses be expected as a result of the project?

4.6 Displacements and Relocation Impacts

Depending on the size and scale of a proposed project, property acquisitions may be necessary to allow for new right-of-way. Acquisitions can include land, homes, community facilities, and/or businesses. The practitioner should keep in mind that not all property owners will be willing to negotiate on the sale of part or all of their property and the use of eminent domain – the taking of private property for a public use – may be necessary. The agency should work with property owners to arrive at a sale price negotiated in good faith. If no agreement can be made with the individual property owner then the property will be acquired through the state's exercise of eminent domain.

Displacing and relocating households, businesses, and community facilities can adversely affect the normal functions of both the community where direct impacts would be borne and the community or neighborhood that would absorb some, if not all, of the necessary relocations. The bulk of the impact is usually borne by the neighborhood or community where displacements would be required. Impacts involve modifying relations between people and their homes, neighbors and the institutions they frequent. The intensity of the impact increases with the number of properties requiring relocation. Typically, there are three groups affected by residential and commercial relocations:

- Relocated Households
- Relocated businesses and/or community facilities
- Impacted neighborhoods, both those neighborhoods subjects to relocations and those neighborhoods into which households, businesses, or community facilities are relocated

Not all displacements and relocations result in adverse effects. Depending on the current use of affected properties and surrounding land uses, relocation may be beneficial for affected parties. For example, homes located adjacent to major thoroughfares may not receive the owner's asking price in the open market. However, if they are acquired to allow for construction of an NJDOT-sponsored project, property owners will receive the fair market value for their home.

This section discusses potential relocation impacts to residents, businesses, community facilities, and special needs patrons that may result from NJDOT-sponsored projects. Right-of-Way (ROW) studies will reveal where potential property impacts are anticipated. An additional site visit should

Potential Adverse Displacement and Relocation Impacts

- Reduction in the level of community cohesion and social interaction through the loss of population, business, or community facilities
- Loss of low-income or affordable housing
- Loss of community social support networks
- Reduction in potential community employment opportunities
- Loss of access to quality schools, child care, medical are, or other services provided by displaces business or community facilities
- Disproportionate financial or social/psychological impacts on special needs patrons
- Reduction in local business activity
- Loss of appropriate sites for particular businesses
- Loss of loyal customer base for relocated businesses
- Loss of customer base for remaining neighborhood businesses

Potential Positive Displacement and Relocation Impacts

- Increase in property values due to the removal of blighted areas
- More desirable housing accommodations or residential locations for relocatees
- More desirable business sites for relocated businesses
- Removal of unsafe structures
- Removal of uses that are nonconforming under local regulations
- Additional income for owners of undesirable properties that may not have otherwise sold

be conducted for all projects for which property acquisitions have been identified. Since the ROW drawings will delineate how much of each parcel will need to be acquired, bring a copy of these drawings on the site visit. The drawings will also show where building impacts would result.

NJDOT's three regional ROW offices acquire property that is needed for the construction or improvement of a transportation facility. The acquisition steps include notification, valuation, negotiations (eminent domain, if necessary and as a last resort) and relocation. Early coordination with NJDOT's ROW is important to ensure that relevant information gathered during the Community Assessment and findings from the Field Visit Checklist and/or Socioeconomic Screening Form are communicated to ROW. Identification of potentially vulnerable populations and valued community resources will play a part in the alternatives analysis, the selection of the Preferred Alternative, and may ultimately alter ROW design. Results of any environmental screening prepared by the Division of Environmental Resources is reviewed alongside preliminary ROW plans to identify environmentally sensitive properties and those of particular community importance.

Prior to speaking with affected property owners, it may be useful to meet with municipal officials or local planners to discuss how these parcels contribute to the overall dynamic of the affected community. For example, some parcels identified for acquisition may be underutilized or underdeveloped while others may be integral to a vital residential neighborhood or commercially sustainable place. Residential and business surveys may be appropriate to determine if affected parties are protected populations or if the business provides a unique service not available elsewhere in the community or surrounding area.

The scale and controversy of project alternatives will likely influence NJDOT"s level of resource commitment made throughout the decision-making process. These considerations are further reason for ROW's early and continuing coordination with the Division of Environmental Resources during the early screening and environmental review stages. For example, if a project alternative(s) is expected to have adverse displacement impacts that are appreciably more severe or greater in magnitude for low-income and minority populations than non-minority or non-low income communities then the possibility of EJ impacts may warrant more detailed analyses of the social composition of the

Value of Early ROW Involvement in the Project Delivery Process

FHWA advocates the early involvement of ROW in the Project Delivery Process and the use of diverse, multidisciplinary project teams, comprised of individuals from design, environmental, ROW, survey and mapping, and construction divisions. Such an approach has been used in Florida, among states. Coordination among subject matter experts during the development of the Preliminary Preferred Alternative and in subsequent decision-making stages can save time and money for the project overall.

Although the level of analysis will vary by project type, ROW drawings can assist in the identification and extent of potential social and economic impacts that may result from acquisitions, relocation impacts and other potential effects of project alternatives on the community. An initial survey will inventory the existing real estate market, relocation potential, and potential issues. Early involvement ensures sufficient time to complete required steps in acquisition and relocation process, thereby reducing pressure on the ROW process. Early coordination with ROW will help to determine the division of labor, thereby avoiding duplication of effort in the community assessment process.

ROW staff should be present at public meetings early in the decision-making process if project alternatives may result in displacement impacts. The presence of such experts can help understand how the local community would react to each of the proposed alternatives, to explain potential ROW acquisition and relocation impacts, and to serve as the initial contact in the displacement and relocation process. ROW expertise in the problem screening and concept development phases yields additional benefits to the project delivery process, including a better awareness of the effects that ROW can have on project schedules, improved quality of public involvement, and early identification of critical parcels to prioritize for acquisition and/or relocation planning.

More information is available at www.fhwa.dot.gov/REALESTATE/pdg5.htm and http://www.fhwa.dot.gov/REALESTATE/rowmgt/chap1.htm.

impacted populations in the early planning stages (i.e., the need for a detailed survey may be warranted).

Early public involvement will help to inform all participants of community goals and to gain community acceptance for the project requirements, including displacements and relocations. In coordination with the NJDOT Office of Community Relations, ROW presents information on relocation services at public hearings and public information centers. These meetings provide opportunities for distribution of a relocation brochure, and for response to public questions and comments. The presentation includes information on:

- » the availability of relocation assistance and advisory services, eligibility requirements, and payment procedures;
- » the estimated number of individuals, families, businesses, farm and non-profit organizations that are to be displaced and subsequently relocated by each of the alternatives under consideration;
- » the studies that have been or will be made and the methods that will be followed to assure that housing needs of the relocatees will be met.

NJDOT policies and procedures for acquiring property are discussed in the NJDOT Right of Way Procedures Manual found on the NJDOT website. Staff in NJDOT Regional Offices and the Technical Support Bureau can be contacted for additional information. NJDOT relocation procedures, residential or business, comply with the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended and Chapter 50, NJ Public Laws of 1989. Acquisition of property needed for all NJDOT-sponsored projects comply with the Eminent Domain Act of 1971 (N.J.S.A. 20:3-1, et seq). Under the Uniform Transportation Replacement Housing and Relocation Act (N.J.S.A. 27:7-72 et seq), NJDOT provides relocation assistance to property owners who must move to allow for a proposed project to be constructed.

Potential displacement and relocation impacts to households can be financial, social and psychological in nature. Potential adverse financial impacts to relocated households include increased living expenses, increased property taxes, moving expenses, and increased travel costs to and from work. However, not all potential impacts to relocated households are adverse. Depending on the circumstance, potential positive impacts may include the sale of a property which may have otherwise been difficult to sell on the open market, decreased living and travel expenses, decreased property taxes, ownership of more valuable property, or relocation to decent, safe, and sanitary housing.

Potential social and psychological impacts to members of relocated households generally pertain to changes in the living environment and the emotional attachment to a particular home or neighborhood. This can be especially true for special needs patrons such as the elderly, physically and mentally disabled, non-English speaking households, among others (see Section 4.6.4). Relocating households from a neighborhood can reduce the amount of social support and neighbor-to-neighbor interaction that takes place and can generally reduce the cohesiveness of the community. Although the prevailing attitude is that residential relocation is a negative impact that is highly disruptive, this is not always the case. Individuals and families required to relocate due to a project may improve their quality of living because of a better housing or safer neighborhood situation than the one they left behind. When assessing the extent of potential residential impacts from a proposed project, the following questions should be considered:

- » Will the proposed project result in residential displacements? If so, how many?
- » What proportion of the population in the study area would be affected?

- Will the proposed project cause a disruption in family and social ties?
- What are the household characteristics of the residents to be displaced?
- What types of psychological effects can be anticipated?
- How will neighborhood patterns be disrupted?
- What special relocation problems are anticipated due to current zoning regulations, age, income, minority, etc.?
- How will the local tax based be affected?

4.6.1 Nonresidential

Potential business displacement and relocation impacts tend to be financial, although social and psychological impacts also may occur. Relocation impacts, particularly financial impacts, tend to be more of a concern for small family-owned businesses or businesses that cater to a specific clientele within the study area. This is often of concern for minority-owned or ethnic businesses which cater to a local client base and for whom separation from that client base can jeopardize the existence of that business. An example would be a specialty niche Asian grocery store located in proximity to Asian households. Relocation to a site less accessible to residents of that neighborhood would not only separate that business from its target clientele (a financial impact), but could also result in a social and psychological impact due to reduced interactions with neighborhood customers. Another example would be a restaurant that is well known for a spectacular view and loses customers with the loss of the view. These situations lie in contrast to that of national restaurant chains, for example, which have a broad client base and tend to rely more heavily on vehicular traffic. These types of commercial establishments can survive relocation, particularly with some financial assistance, by identifying a new location with adequately high levels of vehicular traffic and roadside visibility. Potential financial impacts to relocated businesses include:

- Cost to find and obtain a suitable replacement site and build or redesign a facility to meet specific needs
- Moving expenses
- Cost of lost customers
- Cost to promote new location in order to attract new business and inform established client base of new location
- Cost to replace employees unable to continue working at the new location

When assessing the extent of potential business impacts associated with a proposed project, the following questions should be answered:

- Are there businesses that will be displaced as a result of the project?
- Are there businesses that would require partial acquisition as a result of the project?
- How many businesses would be affected (identify full and partial acquisitions) and what type of services they provide?
- Is the community dependent on the type of services provided?

- Are the services offered by the business unique? Are there other businesses within close proximity that offer comparable services?
- Does the community depend upon the business for employment?
- How many jobs would be lost?
- What are the characteristics of displaced employees?
- Is the business highway or non-highway dependent?
- Will access to the business be interrupted?
- Would parking spaces be lost? Is there an opportunity to replace them someplace nearby?
- Will business impacts be temporary or permanent? Would the store need to be shut down during construction activities but could reopen once finished?
- How will the tax base be affected?
- Are there available sites to accommodate businesses displaced as a result of the project?

4.6.2 Public Facilities

Financial impacts of relocation on community facilities tend to be similar to those of small businesses. This is particularly true of those facilities that depend on membership dues or user fees to fund, in part or in total, operating expenses. For example, a local church may depend on the financial generosity and volunteer labor of members from the local neighborhood. Relocation of that church to a distant site may pose a serious financial risk for that church.

The social and psychological impacts of relocation to a community facility can be significant. Many community facilities are supported by and supportive of specific neighborhoods. Displacement and relocation out of those neighborhoods can remove the reason for some community facilities to exist. For example, the mission of a specific Boys and Girls Club in a high crime neighborhood may be to provide a safe haven for young neighborhood children to play and learn after school before parents return home from work. Relocation of that resource to a new site outside of the neighborhood would impair its ability to accomplish its mission. When assessing the extent of potential impacts to community facilities associated with a proposed project, the following questions should be considered:

- Will barrier effects be created?
- Will travel time be altered for vehicular or pedestrian traffic?
- Will land values and usage of existing facilities be altered?
- Are there community facilities and services that would require full or partial acquisition as a result of the project?
- How many community facilities and services would be affected (identify full and partial acquisitions) and what type of services do they provide?
- Is the community dependent on the type of services provided?
- Are the services offered by this resource unique? Are there other community facilities within close proximity that offer comparable services?

» Does the community depend upon this resource for employment?

» How many jobs would be lost?

» What are the characteristics of displaced employees?

» Are there available sites to accommodate community facilities displaced as a result of the project?

4.6.3 Special Needs Populations

Residential relocation can have serious adverse effects, particularly for certain segments of the population. Long-term residents, persons with disabilities, and elderly persons often have particular difficultly adjusting to required relocation. Residents with mobility limitations, such as persons with disabilities and low-income individuals, may find it difficult to meet daily needs due to the loss of facilities and services they depend on to meet their daily needs. These individuals also tend to have greater reliance on community-based social networks and public transportation. Elderly persons have a particular difficulty adjusting to new surroundings and establishing new social ties.

Groups Having More Difficulty Adjusting to Relocation

- Elderly
- Physically and Mentally Disabled
- Low-Income
- Households with School-Aged Children
- Limited-English Proficiency / Linguistically Isolated
- Ethnic and Racial Minorities
- Long-Term Residents

The relocation of businesses and community facilities can also have significant adverse effects for certain segments of the population. Local businesses and community facilities may employ persons with disabilities and their removal from the community would take away the livelihood of these employees. This may also be true of businesses and community facilities located in ethnic neighborhoods where the primary language of both employee and customer is one other than English.

A Note on Special Needs Populations

Some groups may have greater difficultly negotiating adverse project impacts (e.g., seniors, children, persons with disabilities, low-income persons, and foreign-born ethnic minorities). Transportation projects requiring displacement may intensify existing problems of segregation or discrimination for minorities. Additionally, low-income people, seniors, persons with disabilities, and minorities tend to rely on internal community social networks more than other groups and may have difficulty adjusting to disruptions and changes in these networks. Seniors, children and persons with disabilities may require special design features, such as curb cuts and other pedestrian facilities, to facilitate mobility during and after construction activities.

To identify if special needs populations are located in the study area and would be affected by the proposed project, it may be appropriate to speak with municipal officials, local planners, business owners and residents themselves. The identification of special needs populations and the potential impacts that they may face will be difficult without this step. When assessing the extent of potential impacts to special needs populations as the result of a proposed project, the following questions should be addressed:

» Are there large special needs populations in the study area (e.g., minorities, elderly, persons with mental and physical disabilities, etc.)?

» Are the primary user groups of a particular business or community facility identified as a special needs population?

» Will special relocation needs be involved?

» Are there other resources offering similar services located within the study area?

» Are there residential areas or business establishments within close proximity to the study area that could serve as a suitable substitute? For example, suitable housing options for low-income populations would be of similar affordability as their existing housing within the same area. Are there ADA-accessible replacement housing units or business establishments for persons requiring such facilities that are affected as the result of the proposed project?

» Would special needs' populations experience a disproportionately high share of adverse project-induced impacts?

4.6.4 Potential Relocation Sites

Federal Policies for Mitigating Displacement and Relocation Impacts
Select Examples

- *Housing of Last Resort – The Uniform Relocation and the Real Property Acquisition Policies Act of 1970 (URA)* requires that comparable decent, safe, and sanitary replacement housing within a person's financial means be made available before that person be displaced. When such housing cannot be provided by using replacement housing, the URA provides for "housing of last resort," which may involve the use of replacement housing payments that exceed the URA maximum amounts. Housing of last resort may involve the use of other methods of providing comparable decent, safe, sand sanitary housing within a person's financial means. Agencies have broad flexibility in the use of housing of last resort primarily to address difficult or special displacements.
- *Temporary Relocation* – Under the provisions of the URA, temporary relocation should not extend beyond one year before the affected person(s) is returned to his/her previous unit or location. Any residential tenant who has been temporarily relocated for more than one year must be offered all permanent relocation assistance which may not be reduced by the amount of any temporary relocation assistance previously provided.
- *Federal Functional Replacement Program* –The Functional Replacement program provides relief to local public agencies when a highway project requires the acquisition of a public facility. It recognizes that *proper compensation is the facility's replacement cost rather than depreciated current fair market value*. The Functional Replacement program uses replacement cost as "just compensation" so that State and Federal projects do not burden the local agency or the citizens who fund that agency with added costs to rebuild the lost facility. Fire stations, schools, libraries and other municipal buildings are commonly funded under the program as are state maintenance facilities due to their locations adjacent to highways. Identifying functional replacement situations early in the project is critical to ensure adequate time for initiating and completing the various required approvals and completing the construction of the replacement facility in sufficient time.

NJDOT employed the Functional Replacement Program for the Belmont Runyon Elementary School in the City of Newark for the I-78/West Peddie Street Ramps Realignment Project (see description excerpted from Transportation and Environmental Justice: Effective Practices http://www.state.nj.us/transportation/business/civilrights/pdf/ffr.pdf)

For projects where relocation is expected, potential sites that could accommodate those displaced (residential, business, institutional) as a result of the proposed project should be reviewed. This includes the identification of potential development locations that adequately meet the needs of displaced residents and businesses. The success of this effort is largely dependent on a well-developed understanding of affected populations. Speaking with municipal officials, local planners, and affected populations will help identify their needs and possible suitable replacement locations within the community. A review of real estate listings will also help in this effort. The assessment may conclude that there are no suitable locations within the study area which may result in a significant adverse impact for certain populations.

4.7 Title VI & Environmental Justice

Title VI of the Civil Rights Act of 1964 outlawed discrimination in the conduct of all federal activities. It is the policy of the FHWA that discrimination on the grounds of race, color, national origin, disability/handicap, sex, age, or income status shall not occur in any of its programs and activities regardless of whether or not those programs and activities are FHWA funded.

In 1994, *Executive Order (EO) 12898*, *Federal Actions to Address Environmental Justice (EJ) in Minority Populations and Low-Income Populations* reinforced what had been law for more than three decades — Title VI of the Civil Rights Act of 1964. The EO directs every Federal agency to make environmental justice part of its mission by identifying and addressing the effects of all programs, policies and activities on "minority populations and low-income populations." The EO essentially reminded all government agencies receiving Federal funding that they are required to address discrimination as well as the consequences of all of their decisions or actions that might result in disproportionately high and adverse environmental and health impacts on minority and low-income communities.

In 1997, the U.S. Department of Transportation issued its *Order to Address Environmental Justice in Minority Populations and Low-Income Populations (DOT Order)* which addressed the requirements of EO 12898 and set forth DOT's policy to promote the principles of environmental justice in all programs, policies and activities under its jurisdiction. The essence of effective environmental justice practice is summarized in three fundamental principles:

Definition of Minority and Low-income

Title VI of the Civil Rights Act prohibits discrimination on the basis of race, color, or national origin. Executive Order 12898 and the DOT and FHWA Orders on Environmental Justice address persons belonging to any of the following groups:

- Black - a person having origins in any of the black racial groups of Africa.
- Hispanic - a person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.
- Asian - a person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent.
- American Indian and Alaskan Native - a person having origins in any of the original people of North America and who maintains cultural identification through tribal affiliation or community recognition.
- "Minority" is any person who identifies themselves as any race other than Non-Hispanic White Alone.
- Low-Income - a person whose household income (or in the case of a community or group, whose median household income) is at or below the U.S. Department of Health and Human Services poverty guidelines.

» Avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations;

» Ensure the full and fair participation by all potentially affected communities in the transportation decision-making process; and

» Prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

NJDOT, as a partner with the FHWA and a recipient of Federal funds, is required to insure non-discrimination in all its programs and activities. The following section provides an overview of how to assess potential project-induced impacts borne by protected populations. For additional information contact the NJDOT Division of Civil Rights and Affirmative Action (CR/AA) or visit the FHWA website on Environmental Justice.

4.7.1 Identification of Minority and Low-Income Populations

The review of Census data will help identify if minority and/or low-income populations are present in the study area. Since the environmental justice assessment should be conducted on a relatively small geographic level (e.g., block-group or block level for minorities and block group level for low-income) and the Census provides the most reliable source of quantifiable data for this small a geographic area, it should be used as the foundation for the analysis. Depending on how long it has been since the last Census, this information may be somewhat dated and supplementary sources (e.g., free and reduced price lunch program, Temporary Assistance to Needy Families (TANF), property tax records, commercial data suppliers) may be explored depending on data availability. After 2010, the American Community Survey, a relatively new product of the U.S. Census Bureau that is based on continuing surveys, will report information on the tract and block group level and could be used as a supplement.

Establishing of Thresholds

U.S. DOT and FHWA do not specify thresholds for determining whether a target population qualifies as "minority" and/or "low-income." The Council on Environmental Quality (CEQ) recommends that minority populations should be identified where either:

- The minority population of the affected area exceeds 50 percent; or
- The minority population is meaningfully greater than the minority population percentage in the general population or other appropriate unit of analysis.

U.S. DOT, FHWA, and CEQ do not specify an appropriate unit of geographic analysis for comparison purposes. Thus, the low-income and minority composition of the population in the affected area could be compared with county, regional, or state averages. County averages tend to be the most appropriate.

Additionally, conversations with local officials, municipal planners, and representatives of local organizations and religious institutions will help identify where such populations are present. A site visit is also appropriate. Keep in mind though that this information cannot be quantified and should only be used to inform findings from the Census data. If the findings conclude that there will be a significant adverse impact in areas identified as having a high concentration of low-income and/or minority populations, residential and business surveys may be warranted to determine the extent to which these populations would be affected by a proposed project.

The first step is to select a geographic area larger than the study area which will be used as the established threshold for identifying the presence of low-income and minority populations. As noted in the box to the right, the county in which the study area is located is generally the most appropriate. Next, compile data for the blocks and blocks groups in the study area as well as for the larger geographic area that will be used as a comparison (much of this information may have already been collected during the

preparation of the community profile). Census blocks that report having a minority concentration higher than the county average and/or Census block groups that report having a higher percentage of residents living below the poverty line than the county average are potential environmental justice areas and may warrant further evaluation.

Prepare a series of tables, such as the ones demonstrated below, to identify which blocks or block groups exceed the threshold. It is appropriate to prepare a map that shows where areas exceeding these thresholds are located in relation to the project area. It is essential to identify the presence of protected populations early in the decision-making process to assist in customizing public outreach and involvement activities that, if properly conducted, will reveal the concerns of protected populations about the proposed project.

Table 4.7: Example of Thresholds and How Block and Blocks Groups Compare to Established Thresholds

Location	Minority Threshold	Poverty Threshold
Geographic Area of Comparison	51.1%	23.6%

Census Tract	Block	2000 Population	Minority Persons	Percent Minority	Above Threshold
A	1	1,141	1,124	98.5%	X
A	2	738	711	96.3%	X
A	3	412	405	98.3%	X
A	4	433	20	4.6%	

Census Tract	Block Group	Persons in Poverty	Percent in Poverty	Above Threshold	Per-Capita Income	Median Household Income
A	1	482	25.9%	X	$13,675	$26,776
A	1	289	21.4%		$13,590	$24,327
A	2	760	65.8%	X	$4,212	$19,625
B	3	117	48.0%	X	$7,511	$9,375

Source: Source: U.S. Department of Commerce, Bureau of Census, U.S. Census of Population and Housing. SF1 and SF3 data tables

Note: An X denotes Block or Block Groups with a high concentration of minority persons or persons below poverty compared to geographic area thresholds for the same variables.

It is not necessary to compile per-capita and median household incomes but it is useful in the understanding of low-income populations.

4.7.2 Review Project Impact Findings for Adverse Effects

Findings from other resource areas analyzed as part of the environmental review process should be reviewed to determine whether, and to what extent, potential project-induced adverse impacts would affect low-income and/or minority populations in the study area. The review should include but is not limited to air, noise, vibration, traffic and pedestrian movements, displacements, community facilities and recreation areas, contaminated materials, among others. The assessment should analyze potential adverse impacts borne by low-income and/or minority populations during construction and in the future with and without the proposed project.

The extent to which protected populations may be affected by a proposed project will not be fully realized until the analysis of other resource areas (i.e., air, noise, traffic, pedestrian movements, etc.) has been completed and can be reviewed and synthesized by the impact practitioner.

4.7.3 Assessment of Disproportionately High and Adverse Effects

Evidence of substantially disproportionate adverse impacts on a minority or low-income population can be characterized as a form of discrimination that is subject to civil rights action. *Minority and low-income populations disproportionately suffer potential project-induced effects, when the effects are substantially more severe or greater in magnitude than the adverse effects suffered by non-minority and/or non-low-income populations.* The potential for disproportionate impacts of a transportation project is greatest when one or more of the following is true:

- The affected community has not been adequately involved in the decision-making process;
- The affected community is strongly opposed to the project; and
- There is specific evidence that the project will adversely affect a low-income and/or minority community more than non-low income and non-minority communities in the study area.

There is no universal means for determining if a minority and/or low-income community will experience disproportionately high and adverse project-induced impacts. Each project – and each minority and/or low-income community – is different. If a project appears to have a disproportionately high and adverse impact on a low-income and/or minority community, it is necessary to consider systematically how the magnitude and severity of the impact could be prevented or reduced. In assessing the context and intensity of effects on low-income and/or minority populations as compared to non-low-income and non-minority populations, several questions and considerations are appropriate:

- Is the adverse effect predominately borne by the protected population?
- Will the adverse effect be more severe or greater in magnitude for the protected population than for other non-protected populations?
- Does the project impact a resource that is especially important to the affected population? Does the resource serve an especially important social, religious, or cultural function within an environmental justice community?
- Are there mitigation or enhancement measures or offsetting project benefits to the affected environmental justice population?
- What are the type and severity of adverse effects on non-environmental populations?
- Has every reasonable effort been made to equally involve all potentially impacted populations in the decision-making process?
- Has every reasonable effort been made to bridge ethnic or cultural barriers that may obstruct equal access to the decision-making process?

If disproportionately high and adverse impacts are expected, it is necessary to demonstrate that: the project will fulfill a substantial need; alternative measures are not practicable to avoid or reduce the adverse impacts or would have other high adverse social, economic or environmental impacts that are more severe; or would include costs of extraordinary magnitude. In such instances, it is particularly important to weigh the impacts and to consider a full range of mitigation measures that may reduce adverse impacts.

Coordination with the affected environmental justice community is warranted as avoidance, minimization, mitigation and enhancement measures are being contemplated. Affected communities should be asked to help develop and comment on workable avoidance/minimization alternatives as early as possible during the decision-making process. Once measures have been identified, it is important to keep the community informed about the project status and progress throughout subsequent stages of decision-making (e.g., design and construction).

4.7.4 Documentation of Public Outreach Activities

Public involvement activities are designed to inform area residents, workers, and other concerned parties about the potential effects and benefits that may result from a proposed project. If high concentrations of low-income and/or minority populations are identified during the assessment, outreach efforts should take into consideration the environment in which the project would occur to effectively engage these populations in public involvement activities. If high concentrations of minority populations are identified during the assessment, meeting notices and public documents will be prepared in the appropriate language(s) and translators will be present at public events.

The tools and strategies used to reach and engage protected populations should be documented for each project. Documentation should include a list of local publications, media sources, and other outlets such as religious institutions and community centers used to disseminate information about public events. Each outreach plan should be customized to the community in which a proposed project would be located (see Chapter 7). For example, it may be appropriate to host outreach activities in a public place frequented by users of public transportation who may be low-income.

Local agencies, organizations, and groups contacted during outreach activities – to either host or distribute information about public events – should be included in this documentation. These contacts can provide invaluable information about their members and identify potential concerns or issues that may arise when working with certain populations. Additionally, these contacts are often a trusted part of the community so their participation during outreach activities can often mark the success of such efforts. Public outreach activities in areas where protected populations are present should occur early and often in the decision-making process. The stage of decision-making when new concerns and issues arise should be included in the documentation.

If a project appears to have a disproportionately high and adverse impact on minority and/or low-income populations, it is necessary to consider systematically how the magnitude and severity of the impacts could be prevented or reduced. This approach includes avoidance, minimization, mitigation and enhancement (see Section 6.1). Coordination with the affected EJ community is warranted as avoidance, minimization, mitigation, and enhancement measures are being contemplated. Affected communities should be asked to help develop and comment on workable avoidance/minimization alternatives as early as possible in the process. Once measures have been identified, it is important to keep the community

informed about the project status and progress throughout other stages of decision making, all of which should be documented.

4.8 Farmland Impacts

The mapping of lands protected by County, State or Federal farmland protection policies will reveal if farmland impacts will result from a proposed project. The practitioner should keep in mind that protected farmland areas do not necessarily mean that there is an active farm located on the affected parcel, but that the soil has been identified as suitable for agricultural uses. Additionally, other lands may be used for agricultural purposes but not identified as protected farmland. The National Agricultural Statistics Service (NASS), a division of the U.S. Department of Agriculture, can assist in identifying such parcels as it provides yield and acreage for a variety of different crop types.

The extent of potential farmland or agricultural land use impacts will depend on the current use of the parcel, size of the affected property, size of the acquisition, whether the impact would be temporary or permanent, if access to the property would be affected, the unique character of goods produced on the farm (if any), employment impacts, and uneconomic remnants, among other issues.

An overlay map of the proposed project in relation to protected farmland parcels as well as those lands used for agricultural purposes is the first step in identifying the extent of potential impacts. If a property would be affected by a proposed project, in addition to answering the following questions, it will also be helpful to speak with affected property owners and/or conduct historical research to learn more about the nature of the farm. Communication with the State Agricultural Development Committee (SADC), the state agency that establishes and maintains development restrictions on protected parcels, will also be helpful in the identification of protected parcels and potential impacts. The SADC leads in the preservation of New Jersey's farmland and promotes innovative approaches to maintaining the viability of agriculture. The SADC administers a number of programs designed to help counties, municipalities, and non-profit groups purchase and maintain agricultural lands, including: the Farmland Preservation Program; the Right to Farm Program; the Transfer of Development Rights Bank; and the Farm Link Program.

- » Are there protected farmlands or agricultural lands located in or within close proximity to project area?
- » Are there existing farms or protected soil types that will be displaced as a result of the project?
- » Are there existing farms that would require partial acquisition or easements as a result of the project?
- » How many farms would be affected (identify full and partial acquisitions as well as slope, drainage, and/or utility easements) and what type of goods do they produce?
- » Does the community depend upon the farm for employment?
- » How many jobs would be lost?

Some Information on Farmland Properties

- **Tillable Land** is land currently being used for farming activities.
- **Non-Tillable Land** is land located on a farm but not currently being used for farming activities. This includes wooded areas and open space where crops are **not** being grown.

- Are there alternative jobs for displaced employees?
- What types of goods are produced on the affected parcels?
- Are the goods produced on the farm sold in the community or are they exported to larger markets?
- Does the farm produce goods that are unique to the surrounding area or region? For example, does the farm grow a certain type of fruit or vegetable not grown on other farms in the community or region?
- Will access to the farm be interrupted?
- Will the impact to the farm be temporary or permanent?
- Would impacts be limited to non-tillable land?
- Would the impact be limited to easements?
- How will the tax base be affected?
- Are there available sites to accommodate farmlands displaced as a result of the project?

NJDOT relocation procedures comply with the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended and Chapter 50, NJ Public Laws of 1989. NJDOT policies and procedures for acquiring farmlands are further discussed in the NJDOT Right of Way Procedures Manual found on the NJDOT website. The three Regional ROW Offices can be contacted for additional information.

4.9 Indirect and Cumulative Impacts

Indirect (also known as secondary) impacts of transportation projects tend to occur over a longer period of time and may involve changes in the overall development and growth of an area. Indirect impacts from transportation improvements can also be cumulative. For example, the addition of a new interchange may not in and of itself influence regional development patterns, but a new intersection and new arterial roadway may cumulatively influence regional development patterns. The impacts will vary depending upon the nature of the project and other characteristics of an area that affect growth rates.

Indirect and Cumulative Effects

Separate analyses should be conducted to evaluate indirect effects of transportation projects and to evaluate project-related cumulative impacts. However both processes should include consultation with stakeholders and the public, identification of important trends and issues, and analysis of the potential for land use change and related environmental impacts on valued and vulnerable resources

When documenting the environmental assessment or environmental impact statement, care should be taken to clearly differentiate between indirect effects and cumulative impacts. One way to ensure that both topics are sufficiently addressed is to discuss indirect effects and cumulative impacts in separate sections within a single chapter, or as separate chapters

AASHTO's Center for Environmental mental Excellence is an excellent source for more information on indirect and cumulative effects methods, case studies, and best practices.

4.9.1 Indirect Effects

The indirect effects (effects caused by the project, but occurring later in time or farther removed in distance than direct impacts) include changes in land use attributable to the project (induced growth) and impacts on environmental resources that occur as a result of the project's influence on land use. Besides

induced growth and related effects, the definition of indirect effects also includes other potential environmental impacts caused by a project, such as the effect of habitat fragmentation on species viability over time or changes in wetland functions due to stormwater runoff.

The determination of growth inducement establishes whether project alternatives will induce growth or alter the planned pattern of development. Additionally, the project may result in changes in accessibility, travel patterns, and travel time. There are three general categories of induced growth related to transportation projects:

- Projects servicing specific land development, such as a highway interchange for the theme park;
- Projects that would likely stimulate complementary land development, such as the development of a hotel near a large airport; and
- Projects that would likely influence regional land development location decisions, such as a new highway providing convenient access to developable land on the fringe of a metropolitan area.

Determining if a project falls within the first two categories of growth inducement is relatively straightforward. Determining if a project would influence inter-regional and intra-regional land development decisions is less straightforward and more subjective. However, if conditions are generally favorable for growth in a region (i.e., sewer lines, relatively low land prices, natural amenities, etc.), then transportation improvements can dramatically influence the rate and location of development.

The checklist found in *NCHRP Report 403: Guidance for Estimating the Indirect Effects of Proposed Transportation Projects* provides guidance toward the general conclusion on growth inducement potential through the systematic consideration of common market factors applied by real estate investors when making a development or purchase decision. To determine the potential for the project to induce growth in the study area, it would be appropriate to complete the checklist.

Figure 4-4 –Examples of guidance documents that have been prepared to assist agencies and practitioners assess the indirect effects of transportation projects.

As part of this assessment, it is important to evaluate community and regional development trends as well as economic activity and demographic shifts. Public involvement activities will also reveal the concerns of residents and other concerned citizens about how a proposed project would affect their community, both in the short- and long-term. These participants can often shed light on some of the historical and existing trends in the area, which can play a role in how people perceive that a project may (re)shape their community.

Estimating Indirect Effects: An Eight Step Approach

NCHRP Report 466: Desk Reference for Estimating the Indirect Effects of Proposed Transportation Projects presents the following eight-step process:

- *Step 1 – Define the Study Area Boundaries*. Set appropriate study area boundaries for the analysis of indirect effects as well as the timeframe for the analysis.
- *Step 2 – Identify the Study Area Communities' Trends and Goals*. Gather information on community trends and goals in the study area, focusing on socioeconomic and land use issues.
- *Step 3 – Inventory Notable Features*. Identify specific valued, vulnerable or unique elements of the natural environment that will be analyzed in the assessment of indirect effects.
- *Step 4 – Identify Impact Causing Activities of the Proposed Action and Alternatives*. Identify the cause and effect relationships between the transportation project and potential impacts that may come into conflict with the goals identified in Step 2 or the notable features identified in Step 3.
- *Step 5 – Identify Potential Impacts For Analysis*. Compare the impact-causing activities developed in Step 4 with the inventory of goals, trends and notable features that comprise the baseline conditions in Steps 2 and 3.
- *Step 6 – Analyze Impacts*. Determine the magnitude and location of the potential impacts identified in Step 5.
- *Step 7 – Evaluate Analysis Results*. Evaluate the uncertainties in the methodology used to evaluate impacts, in order to better understand the analysis results.
- *Step 8 – Assess Consequences and Develop Mitigation*. Assess the consequences of the impacts and develop strategies to address unacceptable impacts, which occur when an impact identified in Step 6 conflicts with a goal identified in Step 2 or with a notable feature identified in Step 3.

4.9.2 Cumulative Effects

Cumulative effects include the total of all impacts to a particular resource that have occurred, are occurring, and will likely occur as a result of any action or influence, including the direct and reasonably foreseeable indirect impacts of a Federal activity.

CEQ guidance titled *Considering Cumulative Effects under the National Environmental Policy Act* identifies four basic types of effects that can lead to cumulative impacts:

» Type 1: Repeated additive effects on a resource from a single project.

» Type 2: Stressors from a single project that have interactive (countervailing or synergistic) net effect on a resource.

» Type 3: Additive effects on a resource arising from multiple sources (projects, point sources, or general effects associated with development) including recent, current or proposed projects at or near the current project.

» Type 4: Effects arising from multiple sources that affect resources in an interactive fashion.

Cumulative impact analysis requires careful development of the no build alternative scenario to include reasonably foreseeable future actions. Coordination with agency and local officials is an important part of identifying other projects that should be included as part of the no build alternative.

CEQ guidance identifies methods for analyzing cumulative effects, including: questionnaires, interviews and panels, checklists, matrices, networks and system diagrams, modeling, trends analysis, overlay mapping and geographic information systems, carrying capacity analysis, ecosystem analysis, economic impact analysis and social impact analysis. The cumulative effect assessment will reveal anticipated changes in the future without the proposed project and how the introduction of the proposed project to an area would contribute to these changes.

FHWA's Guidance on Cumulative Effects

FHWA issued interim guidance on cumulative effects analysis in 2003, G*uidance: Questions and Answers Regarding the Consideration of Indirect and Cumulative Impacts in the NEPA Process.* The FHWA guidance notes*:*

Cumulative impact analysis is resource specific and generally performed for the environmental resources directly impacted by a Federal action under study, such as a transportation project. However, not all of the resources directly impacted by a project will require a cumulative impact analysis. The resources subject to a cumulative impact assessment should be determined on a case-by-case basis early in the NEPA process, generally as part of early coordination or scoping.

The assessment requires a review of each resource area included as part of the environmental documentation deserving of attention, under both existing and the future no-build conditions. The cumulative effect assessment may reveal that the introduction of a proposed project to an area may overburden existing resources or restore balance to an area expecting significant land development but not enough roadways to support the increase in vehicular movements. For example, there may be considerable development and subsequent infrastructure improvements planned for an area close to a quiet residential neighborhood or an environmentally sensitive area. These actions in the future no build condition may generate a notable amount of new traffic yet not result in a significant adverse impact to the residential neighborhood or environmental area. However, the introduction of a proposed project may introduce enough new vehicular movements to result in significant adverse impacts to already existing communities or plant/animal habitats. By itself the proposed project may not result in adverse impacts, but when combined with other anticipated changes in the area, the cumulative effects may result in adverse impacts.

This Chapter includes:

- Factors for Determining the Appropriate Level of Effort for Socioeconomic Impact Evaluation
- Key Definitions for Socioeconomic Impact Evaluation:
  - Direct, Indirect and Induced Effects
  - Cumulative Effects
  - Determining the Degree of Effect

5.0 Socioeconomic Impact Evaluation Issues

5.1 Determining the Appropriate Level of Effort for Evaluation

The level of assessment, how best to approach the task, and documentation that is reasonable for a project will vary depending upon the size and complexity of the project, the level of controversy involved, and the potential for significant socioeconomic effects. Scenarios that may trigger the need for a more intensive socioeconomic effects evaluation could include recent major shifts in the demographics of a region or the introduction of a new community planning initiative (e.g., sustainable development, community redevelopment areas, or Main Street program).

Socioeconomic effects may be interconnected and must be recognized and memorialized as part of the impact assessment. Case law has established guidelines for use in determining whether an effect warrants further exploration. Legal principles call for analysis of only those effects that are "reasonably foreseeable." These have been defined as effects that are both probable and significant, and can be elicited through the following questions:

» With what confidence can you say that the effect is likely to occur?

» Is there sufficient knowledge about the effect to make its consideration useful?

» Is there a need to know about the effect, due to controversy or other reasons?

5.2 Types of Effects

There are various types of effects that may result from a proposed project or action sponsored or permitted by an agency (e.g., NJDOT or one of its County or local aid partners). The Council on Environmental Quality (CEQ) regulations for implementing the National Environmental Policy Act (NEPA) and other relevant sources provide definitions of three broad types of impacts under consideration:

Direct impacts are "caused by the action and occur at the same time and place. (40 CFR §1508.8)

Indirect impacts are those effects that ". . . are caused by the action and are later in time and farther removed in distance, but are still reasonably foreseeable." Indirect effects "may include growth-inducing 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."(40 CFR §1508.8(b)).

Guidance developed for the National Cooperative Highway Research Program (NCHRP) outlines three main categories of indirect impacts:[1]

- *Encroachment-Alteration Effects* - alteration of the behavior and functioning of the affected environment caused by project encroachment (physical, chemical, or biological) on the environment
- *Induced Growth Effects* - changes in the intensity of land use that are caused by the action/project. These changes would not occur if the action/project does not occur. For transportation projects, induced growth is attributed to changes in accessibility caused by the project.
- *Induced Growth Related Effects* - alteration of the behavior and functioning of the affected environment attributable to induced growth.

Cumulative impacts are "environmental impacts resulting from the incremental effects of an activity when added to other past, present and reasonably foreseeable future activities regardless of what entities undertake such actions. Cumulative effects can result from individually minor but collectively significant activities taking place over time and over a broad geographic scale, and can include both direct and indirect impacts." (40 CFR §1508.7).

CEQ regulations for the implementation of NEPA specifically require that impact assessment include the evaluation of indirect effects and cumulative impacts along with the disclosure of potential direct impacts. The key distinctions between direct, indirect and cumulative effects are shown in Table 5-1.

Table 5-1
Distinctions between Types of Effects

Type of Effect	Direct	Indirect	Cumulative
Nature of Effect	Typical/ Inevitable/ Predictable	Reasonably Foreseeable/ Probable	Reasonably Foreseeable/ Probable
Cause of Effect	Project	Project's Direct and Indirect Effects	Project's Direct and Indirect Effects and Effects of Other Activities
Timing of Effect	Project Construction and Implementation	At Some Future Time than Direct Effect	At Time of Project Construction or in the Future
Location of Effect	At the Project Location	Within Boundaries of Systems Affected by the Project	Within Boundaries of Systems Affected by the Project

Source: *NCHRP Report 403,* 1998.

The impact assessment practitioner should consider that *Direct* project effects are changes in the community that principally occur as a result of implementing a proposed project (e.g., residential and

[1] The Louis Berger Group, Inc., *NCHRP Report 403: Estimating the Indirect Effects of Proposed Transportation Projects,* Transportation Research Board, Washington, D.C., 1998.

commercial displacement, land acquisition, etc.). *Indirect* effects occur over time and often extend beyond the boundary of a community. Indirect effects and *cumulative impacts* (IECI) are much less apparent and can be easily overlooked. Taken with the direct effects of other human actions upon the environment, IECI can ultimately have effects on resources in the same way that the direct impacts along the right-of-way can affect the environment.

5.3 Determining the Degree of Effect

The relative magnitude of social and economic effects can vary across communities, neighborhoods, and stakeholder groups due to differing degrees of sensitivity toward a particular issue or impact. CEQ regulations stipulate that the determination of a significant impact is a function of context and intensity which is defined further below:

» *Context.* The significance of an action must be analyzed in several contexts such as society as a whole (human and national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. For example, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world as a whole, both in the long- and short-term.

» *Intensity.* This refers to the severity of the impact. Responsible officials must keep in mind that more than one agency may make decisions about various aspects of a major action. The following should be considered in evaluating intensity:

- Impacts may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.
- The degree to which the proposed action affects public health or safety.
- Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.
- The degree to which the effects on the quality of the human environment are likely to be highly controversial.
- The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.
- The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.
- Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.
- The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.

- The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.
- Whether the action threatens to violate Federal, State, or local law or requirements imposed for the protection of the environment.

An effect that is perceived by one community as significantly adverse might be widely tolerated or even desirable to another. Such variation can make determining the importance of an effect both challenging and unpredictable. The significance of a potential impact may also vary by the setting in which the proposed project would be sited as well as the surrounding area's natural and socioeconomic conditions (i.e., urban, rural, industrial, commercial, etc.). In addition, consideration should be given to the balance of negative temporary effects inherent in a project that will ultimately result in permanent improvements. Public involvement activities provide a further means for considering the degree of effect (see Chapter 7.0).

Additional guidance for making this determination can be found by considering criteria established by the CEQ Regulations for Implementing the Procedural Provisions of the NEPA (40 CFR 1500-1508), including:

» Probability of the effect occurring;

» Number of individuals affected;

» Likely duration of the effect;

» Relative value of benefits or costs to groups;

» Extent that negative effects can be mitigated;

» Likelihood and nature of indirect effects;

» Relevance to present and future policy decisions;

» Level of uncertainty over possible effects; and

» Presence or absence of controversy.

It is appropriate to consider and balance the possibility of beneficial as well as adverse effects. For example, the additional lanes constructed as part of a widening project may reduce pedestrian mobility mid-block, but could be offset by crosswalk facilities constructed as part of the same project.

The following questions are a useful guide to determining significance:

» What is the nature of the effect?
  - Would the change in the community occur without the project?
  - How many people are affected?

- Are sensitive demographic groups (e.g., elderly, low-income, physically and mentally disabled) affected?
- Is the change expected to be short-term (i.e., temporary) or long-term (i.e., permanent)?

» What is the severity of the effect?

- What is the magnitude of change from baseline conditions?
- Does the community perceive the change as a threat to their cultural, social, or economic well-being?
- Does the perception vary by stakeholder group?
- Will secondary effects strain the capacity of other community resources (e.g., schools and emergency services)?

» What is the potential for mitigation?

- Can the adverse effect be avoided? Minimized?
- Is it feasible to mitigate the adverse effects?
- What is the cost of mitigation and how soon will funding be needed?
- Who will bear the cost of mitigation (e.g., federal, state, or local governments)?

Table 5-2 provides guidance on determining the degree of effect.

Table 5-2
Degree of Effects

Degree of Effect	Socioeconomic Resources
Not Applicable / No Involvement	• There is no presence of the issue in relationship to the project or the issue is irrelevant in relationship to the proposed project.
Enhanced	• Project has a positive effect on the community. • The affected community supports the proposed project.
None	• The proposed project has no effect on the affected community.
Minimal	• The proposed project has minimal adverse effect on elements of the affected community. • There is minimal community resistance to the proposed project. • Little or no mitigation is necessary.
Moderate	• Project has adverse effect on some elements of the affected community. • There is moderate community resistance to the proposed project. Public involvement is needed to seek alternatives more acceptable to the community. • Moderate community involvement is required during project development. • Some mitigation or minimization is needed to gain support from the community.
Substantial / Notable	• Project has substantial adverse effects on the affected community and faces substantial community resistance. • Intensive community interaction with focused public involvement is required during project development to address community concerns. • Project will need substantial mitigation to gain public acceptance.
Potential Dispute (Coordination Required)	• Project is not in compliance with approved local government comprehensive plans and/or affects Title VI compliance.

This Chapter:

- Discusses Strategies for Resolving Issues:
  - Avoidance
  - Minimization
  - Mitigation
  - Enhancement
- Describes the Important Role of the Public Involvement Action Plan
- Emphasizes the Need to Document Environmental Performance Commitments

6.0 Resolving Issues

The socioeconomic impact assessment, including the identification and consideration of potential community impacts, helps to produce a project that fits better into the community, recognizing its history and context, and should help inform decisions from the initial stages of project planning and analysis through subsequent stages of project development, design and construction.

When adverse socioeconomic impacts are identified, the practitioner should seek to identify potential strategies to address them. An effective transportation decision-making process will not only identify potential socioeconomic impacts, but it will also develop solutions to address these potential impacts.

There are a variety of ways to reduce or effectively eliminate project-induced adverse impacts. The practitioner needs to be prepared to actively develop potential solutions to address adverse impacts. Resolving issues is no small task and it is not a "desk-top" exercise; public involvement is a critical means for gaining the insights and perspectives of a variety of players including the affected community, community groups and organizations, local stakeholders, and project planners and engineers.

6.1 Strategies to Resolve Issues

Four broad strategies have emerged as methods for resolving adverse environmental effects, including socioeconomic effects, from transportation projects: avoidance, minimization, mitigation, and enhancement. These strategies may suggest a range of potential solutions for addressing adverse short-term effects (during construction) or long-term effects. It is important to evaluate solutions comprehensively since the resolution of one issue may create another adverse effect.

The impact practitioner should consider the potential effects of these measures on the affected community and confirm that the approach supports the project purpose and need. Also, it is imperative that a practitioner fully vet any potential solutions with authorized NJDOT supervising officials. There may be engineering, environmental, financial, or legal reasons that make a potential solution infeasible. In some cases, it may be possible to address controversial issues through further study of a particular issue during a subsequent stage. This may satisfy those stakeholders who may have been critical of the project without making promises that cannot be met.

The four primary strategies for addressing environmental impacts, including socioeconomic impacts are:

Avoidance

Avoidance measures are alterations to a project so that an effect does not occur. An avoidance alternative can be identified as part of the project development process. This may include re-defining the project description. Examples of avoidance include:

Sample Economic Issue:
Widening an existing road threatens business activities by eliminating parking.

Potential Solution:
Shift alignment to avoid taking parking areas.

- » Bridging over a roadway segment to avoid cutting off the main access to a community focal point;
- » Shifting a project to avoid displacing a church that serves as the focal point of neighborhood activities;
- » Realigning a project to avoid creating a barrier through a cohesive neighborhood; or
- » Redesigning a project to avoid separating a valued community resource such as a park or a senior center from a cohesive neighborhood.

Figure 6-1 - A pedestrian bridge over Route 18 links the community with a riverfront park.

Minimization

Minimization involves modifications to a project to reduce the severity of one or more adverse impacts. Examples of minimization include:

Sample Social Issue:
Additional travel lanes threaten community cohesion.

Potential Solution:
Reduce the design speed to allow narrower traffic lanes.

- » Providing on-street parking instead of additional travel lanes along a corridor where pedestrian movements are high;
- » Realigning a project from the interior of a tract of land to the perimeter to minimize impacts to active agricultural areas;
- » Locating a transit facility so that vacant land is utilized instead of taking a valued neighborhood business; or
- » Redesigning a project to limit effects to one side of the roadway and not to both sides to minimize community effects.

Figure 6-2 The final design for the Route 71 Pedestrian Tunnel at Monmouth University addressed the historic and social contexts of the area.

Mitigation

Mitigation actions are taken to alleviate or offset an effect or replace a protected resource. Examples of mitigation include:

- Creating an access management system to facilitate access to businesses where driveways were closed;
- Constructing a parking structure to compensate for lost private parking;
- Relocating an affected community facility in a new, easily accessible location within the neighborhood;
- Improving crosswalks, adding traffic calming devices and increasing pedestrian times in an area with high levels of pedestrian traffic;
- Replacing all trees removed as a result of a project on nearby parkland;
- Erecting sound or visual buffers to the facility; or
- Eliminating incompatible land uses.

Sample Mobility Issue:
A noise wall threatens mobility by blocking a major pedestrian/bicycle route.

Potential Solution:
Modify the barrier to allow pedestrian/bicycle passage.

Figure 6-3 - Clear noise walls minimize visual and auditory effects along Route 18 in New Brunswick.

Enhancement

Enhancement is the addition of desirable or attractive features to the project to make it fit more harmoniously into the community. By definition, enhancements are not intended to replace lost resources or alleviate effects caused by the project. Examples of enhancements include:

- Providing textured pedestrian crossings in downtown areas;
- Adding landscaping and other amenities to the facility design;
- Incorporating landscaping and street furniture into a project design;
- Providing a small park or recreational use (e.g., fishing pier) along a causeway or under a bridge;
- Providing scenic or rest areas;
- Adding public artwork to a structure;
- Providing bicycle crossings or paths;
- Painting a mural on a sound barrier wall used for mitigation; or
- Providing special amenities to a neighborhood.

Sample Social Issue:
A new median threatens emergency response times.

Potential Solution:
Provide a median opening with emergency signals.

Figure 6-4 - Enhancements in the Route 18 Reconstruction project plan in New Brunswick included improvements to Boyd Park, an important resource for an urban community.

6.2 Document Findings from Public Involvement

Public Involvement Action Plan

The Public Involvement Action Plan (PIAP) serves as a guide to outreach and public involvement efforts for each project. The NJDOT Office of Community Relations acts as the custodian of the PIAP and collects and maintains documentation specific to public input and commitments made through the project development process. Both the NJDOT Design Activity Manual and the Capital Project Procedures outline procedures for implementing the PIAP.

Opportunities for public comment and questions as well as agency responses continue through all project stages. Outreach efforts, public involvement, and agency responses are documented for each project. Documentation of outreach efforts includes minutes of all public meetings, any follow-up to meetings, responses to public comments, and materials distributed at public meetings. For CEs, the public involvement process will be documented on the Socioeconomic Screening Form that will accompany the CED.

For projects that require the preparation of an EA or EIS, public involvement processes and findings should be documented in a summary report, which can be passed through the stages of transportation decision-making. In addition to the community profile and the identification of potential socioeconomic impacts, the summary should include a description of public involvement processes and events, a list of community issues and potential impacts identified during the process, a list of commitments made and/or agreed upon by NJDOT, and key participants and mailing lists.

Public comments may reflect potential adverse effects of construction activities, some of which may require mitigation such as noise barriers, the temporary relocation of bus stops or bicycle paths, etc. The PIAP should identify continuing opportunities for public comment through the construction of the proposed project.

6.3 Environmental Performance Commitments

NJDOT uses both environmental plan sheets and environmental re-evaluation checklists to communicate commitments throughout all phases of project development. Instead of writing commitments only in the contract document, NJDOT outlines commitments in environmental plan sheets and includes those sheets directly in project plans. By placing the environmental commitments on its project plans, there is a greater likelihood of meeting environmental commitments. The environmental re-evaluation checklist reflects the commitments identified in the NEPA document.

Depending on the project and the level of controversy, it may be necessary to identify and include commitments made to the affected community. Such documentation will help ensure that all staff working on a project fully understand the commitments made during earlier stages of decision making. The documentation ensures greater continuity between stages of decision making and should signal to staff the need for heightened concern of particular issues within a specific community.

Environmental performance commitments should be customized for each project as socioeconomic effects from similar type projects in different locations can be notably different. To be accepted, commitments must be relevant, understandable, obtainable, valid, credible, timely, and user-friendly. Identifying appropriate environmental performance commitments for each project can be challenging and

somewhat time-consuming, depending on the project. Several "lessons learned" are important to remember and embrace when formulating environmental performance commitments:

» *Adapt, don't adopt.* When designing environmental performance commitments, they need to be adapted to specific project needs and circumstances, rather than adopting a "canned" model.

» *Public Participation.* User involvement as well as that of affected communities adds time but also valuable buy-in. Solicit input from a variety of groups, organizations, individuals, etc. in the affected community to gain the buy-in that is critical to project success.

» *Community Resistance*. Beware of organizational and personal agendas. In all communities some people will resist change, especially those who have been in the community for many years. Be ready for a certain amount of community resistance.

» *Communication*. You can never communicate enough. Because messages will be understood and interpreted differently by different people, the nature of change almost guarantees increased negative reaction upfront – and certainly increased stress levels. Be prepared to continuously refine internal communications. Appropriate documentation of commitments made during each stage of the decision-making process should be included with other information through project stages.

» *Organizational Framework.* Because an organization exists to serve its customers, and not itself, it must continually be reoriented from an internal bias to an external focus. Let the customers drive the vehicle.

» *User Needs.* Be prepared for different central office and field perspectives. Perspectives of those in the field versus those in central offices are often quite different. When in doubt, it is often wise to err on the side of the field perspective, since field workers are more in tune with customer needs and wants.

Mitigation Strategies for Addressing Adverse Community Impacts
Select Examples

- Leverage funds from the Federal Functional Replacement Program to relocate physically and functionally obsolete public facilities affected by projects.
- Move and rehabilitate homes, rehabilitate homes in place, or construct new housing units.
- Renovate community centers and other facilities including parks that would improve overall quality of life enjoyed by area residents. For example, renovate a former school for elderly housing.
- Combine relocation benefits and housing assistance programs to maximize homeownership.
- Partner with other agencies and the affected community to create a local job training center that can be used to train low-income and/or minority residents in the community in skills to construct the proposed project.
- Strategically engage and vigorously enforce programs to ensure jobs and contracts generated by the project benefit locally affected communities. This may include Disadvantaged Business Enterprises (DBEs), Minority and Women-owned Business Enterprises (M/WBEs), local residents, minorities, and women on a craft-by-craft basis.
- Build creative partnerships to identify the needs and concerns of the affected community and to leverage city, state, and federal funding for locally preferred initiatives.
- In addition to addressing safety and mobility, look for opportunities to reaffirm or build upon the cultural heritage, scenic, aesthetic, or environmental features of a community.
- Fund pedestrian improvements, improved lighting, bus shelters and other street furniture to make residential and commercial districts more attractive.
- When siting sound barriers, work with community members (e.g., youth organizations, schools, community centers) to fund arts-related projects (e.g., murals, street furniture) Other beautification measures can include landscaping such as trees, shrubs, flowers, etc.
- Formally commit to monitoring air quality, noise, periods of construction activity, use of noise attenuating equipment, and periodic informational meetings with local communities to field questions and complaints.

For several examples of mitigation strategies that have been undertaken to address adverse community impacts, see FHWA's Community Impact Mitigation Case Studies, http://www.ciatrans.net/Casestud.html, Transportation and Environmental Justice: Case Studies http://www.fhwa.dot.gov/environment/ejustice/case/index.htm, and Transportation and Environmental Justice: Effective Practices http://ntl.bts.gov/lib/12000/12100/12173/booklet.pdf.

This Chapter includes:

- Discussion of Public Involvement Processes
- Public Involvement Strategies
  - Initial Scoping Discussions
  - Development of the Public Involvement Action Plan
  - Approaches for Conducting Public Involvement Activities
- Assessment of the Public Involvement Action Plan

7.0 Using Public Involvement Processes

7.1 Importance of Conducting Meaningful Public Involvement

As part of NJDOT's project delivery process, public participation efforts should occur early and throughout the decision-making process. It is essential that practitioners representing NJDOT are aware of those features and resources valued in order to avoid, minimize, or mitigate impacts, as well as to narrow the field of alternatives (for planning) and alignments (for projects). The affected community also needs to be informed about the constraints and tradeoffs of the project development process and to accept the stated transportation needs and purpose. The benefits of this approach to public involvement are discussed in Section 1.4.

Proactive and targeted outreach efforts may be needed to elicit involvement by traditionally underserved populations in transportation projects since they may be unaccustomed to participating in such activities. Reasons for this can include cultural differences, language barriers, time or budgetary constraints, distrust or disbelief that their input will be considered, among others. Those responsible for maintaining or preparing contact lists for public involvement activities may also unintentionally omit certain stakeholder groups.

The ability to work effectively across cultures – oftentimes with peoples and cultures with whom neither the agency or the practitioner have familiarity -- requires skills and a degree of self-knowledge, which others in the healthcare, social services and education professions often define as "cultural competency." Cultural competency requires the establishment of policies and practices that will make the agency's services more accessible to diverse populations, providing appropriate and effective services in cross-cultural situations. Seeking greater inclusion, addressing inequities when they appear, conducting a continuous process and self-assessment are hallmarks of these policies and practices. For individuals, cultural competency is an approach committed to lifelong learning, communicating and respectfully working with people different from themselves.

Cultural and social characteristics can affect the participation of certain segments of the population during the decision-making process. For example, people with disabilities find access to transportation more difficult and their ability to participate in public involvement efforts more constrained. Low-income populations, too, often lack both access and time to participate in public involvement activities unless designed to be flexible to accommodate work schedules and childcare needs. Lastly, people with limited educational attainment or newly migrated households may not be fully aware of what transportation services are available or of the opportunities to help improve them. Agencies need to assume

responsibility for reaching out and including these diverse community segments in the decision-making process.

7.2 When Should Public Involvement Activities Begin?

Public involvement should begin as part of the preparation of the Community Profile as described in Section 3.4. But the scope of public involvement activities will vary by project type, its complexity, environmental sensitivity, and community controversy. If project-induced impacts in the affected community are anticipated or if a more extensive environmental documentation (i.e., EA or EIS) is required due to the nature of the project, a more detailed outreach and public involvement program will need to be developed. Early and often public involvement allows the project sponsor to be informed of potential issues, concerns, and impacts in the affected community. With this information, the sponsor agency can work to refine project design to avoid, minimize, or mitigate potential impacts and/or design mitigation measures.

7.3 Public Involvement Strategies

7.3.1 Initial Scoping Discussions

Issues raised by the community in the early stages of project development can alert NJDOT practitioners to potential complications in projects that may otherwise seem routine. The information gathered also serves the design process and identification of alternatives in more complex projects.

As emphasized in Section 3.4, it is important to communicate with area residents before determining the level of environmental documentation that will be necessary for any project. The anticipated level of impact that a project will have upon the community will dictate the extent of public outreach. For example, road resurfacing may not require an extensive public outreach plan while the rework of a highway exit ramp may have extensive impacts on a neighborhood or may invite controversy. A community may have met previous transportation projects with opposition, or may have been adversely affected by a project and negative sentiments may still guide community attitudes. Early outreach provides essential information to the project planners and helps to educate the public concerning their role in the planning process. Any issues raised during this process will help determine the level of further outreach efforts.

7.3.2 Public Involvement Action Plan

A Public Involvement Action Plan (PIAP) is established for each project but will vary in its extent depending on the scale and complexity of the proposed project. The section below will review the PIAP process and identify public involvement processes for more complex projects that may require more involved environmental analyses such as an EA, EIS or a CE for which the effects of the project may not be understood without additional public involvement. PIAPs adopt a variety of techniques and activities to elicit public participation in the decision-making process, and provide technical information in a user-friendly form, fostering an informed and involved general public. The focus should be on a "grassroots"

Figure 7-1 - The Public Involvement process seeks to keep the community informed and to encourage community input in the decision-making process.

effort to partner and work with the residents and the community as the project progresses through the various project phases. The PIAP should be flexible and adaptable to anticipate issues in an effort to avoid problems before they arise.

The Public Involvement Action Plan (PIAP) should:

- Promote the public's decision-making role in developing projects, programs and plans;
- Build public support and gain public agreement on problem definition;
- Build public support for a recommended solution through early public involvement in the identification of options and the early selection of a preferred alternative; and
- Engage the public in the implementation of the preferred alternative to ensure that the design of a project takes into consideration all identified public concerns.

Development of the PIAP will be coordinated with the Office of Community Relations. Purposeful, grounded, specific, and productive public involvement efforts are defined by good organization and well-planned outreach analysis. Public involvement begins with a statement of clearly-defined goals that focus on specific issues to be addressed, the specific kinds of input needed, and the specific "public" that needs to be involved.[1] The more specific a public involvement plan, the greater its chances of producing input NJDOT can use in transportation decision-making. The PIAP is the blueprint for staff that identifies specific ways that people will be:

Figure 7-2 - Public meetings provide an opportunity to inform the community and gather information and comment.

- Introduced to the project's purpose and need;
- Informed about NJDOT's approach to working with people regarding the socioeconomic considerations of specific projects;
- Advised of participatory roles and responsibilities of planners, residents and other community stakeholders impacted by the project;
- Contacted and periodically provided with needed information in accordance with the implementation and refinement of the PIAP; and
- Acknowledged and have their views heard, their comments responded to and their concerns incorporated throughout each stage of transportation decision-making including but not limited to the planning and project development stages.

Early Stakeholder Involvement
Route 9 Bass River Effective Practice

For the replacement of the Route 9 Bridge over the Bass River, early stakeholder interviews helped to clarify community needs and establish limitations on alternatives for detour routes and duration of project construction. The accepted design alternative resulted in closure of the bridge for one weekend for deck reconstruction, therefore limiting the adverse effects of construction activities on local mobility.

[1] FHWA, *Public Involvement Techniques for Transportation Decision Making*.

The plan is structured and executed through a phased approach consistent with the NJDOT Project Delivery Process. The following are the phases of the Project Delivery Process and corresponding public involvement activities.

Problem Evaluation

- » MPO approval and support with the public involvement process

Concept Development

- » Development of the PIAP
- » Establishment of a mailing list
- » Coordination with key stakeholders
- » Creation of opportunities for public input
- » Gaining community consensus in the Purpose and Need statement.
- » Local officials meeting
- » Evaluation of alternatives
- » Identification of fatal flaws
- » Gaining community consensus on the Preferred Alternative

Figure 7-3 - Public involvement with key community stakeholders is critical in early project stages.

Preliminary Engineering

- » Obtain public input concerning issues and concerns
- » Resolve issues before completion of final design

Final Design

- » Maintain community support
- » Maintain communication to inform public

Construction

Tools used during this stage will likely have been established in earlier phases of project development. The emphasis should be on providing information and a means for public comment.

- » Maintain project website to provide information on project progress, traffic advisories, contact information, and feedback surveys or feedback comment forms
- » Provide information phone lines
- » Press releases, cable and radio announcements

7.3.3 Approaches and Techniques for Conducting Public Involvement Activities

The following are some tools that can be used during the initial steps of a PIAP:

Mailing Lists include the names of organizations, residents, media, elected officials, abutters, agency personnel, interest groups. People may request to be on a list, sign up at a meeting, or agencies may share mailing lists that have already been developed.

Public Information Materials provide basic information in a quick, efficient, effective way. Project information can be communicated in the form of billboards, advertisements, brochures, display boards, fact sheets, newspaper articles, posters, press releases, newsletters, fliers, and public service announcements, among others.

Key Person Interviews may include elected officials, community spokesperson, organizational head, or a representative of local media. Interviews are helpful in rapidly getting details about a community, in understanding residents' priorities, in assembling a list of stakeholders, and may help in structuring a public participation plan.

Briefings to describe the project may be held with community representatives, groups, or other stakeholders to establish rapport between the affected community and the transportation agency. They can help clarify issues and provide an informal setting to get feedback.

Video Presentations can convey a consistent message about the proposed project through several meetings. They can help the audience visualize project design or alternatives and be made available through local television stations or public libraries.

Telephone can be used for recorded messages or as a call-in "hot line" with available staff to answer questions. Hot lines, information bureaus, and voice bulletin boards can be utilized to convey messages about meeting dates and project updates.

Media Strategies can be used to spread the word about a proposed project. Such strategies can include newspapers, radio, television and videos, billboards, posters and variable message signs, mass mailings of brochures or newsletters, and flyer distribution. Media strategies are routinely incorporated into projects that need public focus and consensus to move forward. Media strategies can be used to deliver a consistent message and avoid misinformation. Key stakeholders may identify the most effective means of communicating with those residing in the affected community.

Speakers Bureaus. Members of a speakers' bureau provide information about planning or project activities, listen to people's concerns, answer questions, and seek continued participation and input from the public. Agencies sometimes call them "listeners' bureaus" to emphasize two-way communication and the intent to listen to the public.

Public Involvement Volunteers are people from the community temporarily enlisted to assist an agency in developing and implementing a public involvement program to address civic groups, social clubs, professional organizations, neighborhood associations, Chambers of Commerce, county commissioners, local Rotary clubs, neighborhood associations, building industry associations, churches, political clubs, city councils, local planning commissions, and the regional delegation of the State legislature.

As the project progresses, more extensive efforts may be employed to gather information from community members and to keep the public informed concerning project details and progress. Elements of the PIAP that will foster public participation among all stakeholders including underserved groups include:

Stakeholder Mailing Lists/Meetings

Establishment of a stakeholder mailing list will allow project managers to maintain ongoing contact with the community, transfer information, and invite people to public meetings. A database of names and addresses should include: project area residents, elected officials, state and federal agency representatives, media organizations, members of the business community, and other stakeholders. This list will form the basis for outreach for notification of meetings and other public involvement events. Stakeholders may include but are not limited to the following:

- Community Residents in Primary and Secondary Impact Areas
- Community/Neighborhood Group Leaders
- Local Transportation Officials
- Zoning/Planning Board Members
- Public Works Officials
- Hospitals/Religious/School Leaders
- Civic Associations
- Cultural Groups
- Chambers of Commerce
- Business Owners/Executives
- Realtors
- Bankers
- Farmers
- Economic Development Officers
- Environmental Organizations
- Land Conservation Organizations
- Public Safety Officials
- Municipal and County Officials
- New Jersey Department of Transportation (NJDOT)
- Relevant Redevelopment Corporations
- Federal Highway Administration (FHWA)
- Metropolitan Planning Organization
- NJ State Treasury (If applicable)
- NJ State Economic Development Authority (NJEDA)
- NJ Housing and Mortgage Financing Agency (HMFA)
- NJ Joint Management Commission
- New Jersey Transit (NJ Transit)
- Regional Planning Commissions
- New Jersey Department of Environmental Protection (NJDEP)
- United States Army Corps of Engineers (USACE) (If applicable)
- State Office of Smart Growth
- Major Utilities (Electric, Water, Sewer)
- Major Developers

Issues Log

In order to ensure that community input is incorporated into the development of the project in a meaningful way and that the stated concerns of individuals and community interest groups receive prompt and comprehensive responses, it is necessary to systematically document all public comments and maintain a record of the Project Team's responses to questions and issues raised. This documentation can be in the form of a log book, a database for more complex projects, or a project area map showing each comment's origin.

Local Officials Meetings

Meeting with the local municipality on a regular basis at appropriate milestones serves to inform them of project progress and provides opportunities to gain their input and support. Coordination with the local municipality is critical on most transportation projects, since land use issues are addressed in each municipality's master plan. Participants may be drawn from the stakeholder list.

Community Outreach
I-280/Route 21 Effective Practice

The proposed reconstruction of the Route 21/I280 Interchange in Newark, New Jersey would primarily affect minority populations which have in the past experienced adverse effects from other transportation projects. Some of the techniques employed by NJDOT during the initial steps of the public involvement process included stakeholder interviews at community facilities, outreach to local businesses, and follow-up at a public meeting where questions raised during interviews were addressed. Information presented at this meeting was geared to non-professionals. Language interpreters were made available. On behalf of NJDOT, community organizations disseminated information to residents encouraging their participation. The process was designed to foster community support for the transportation project, and to allow individuals to participate in the transportation decision-making process and understand how the proposed project would benefit their community.

Partnering With Organizations to Reach Project Area Communities

Understanding and consensus building in support of the project can be developed with the various communities located within or adjacent to the project area. Working from within the social structures of these various communities is critical to engaging residents, and building a level of trust and respect for public involvement activities. One effective recommended strategy involves partnering with a network of local neighborhood, faith-based and civic organizations that operate close to the daily lives of individuals and families and can reach individuals whom external private and government organizations cannot. These organizations can provide guidance on important community characteristics and needs.

- Organizations working within the targeted community should be recruited to assist with identifying community events for potential outreach as well as to promote attendance at meetings.
- Involving a network of service providers is also valuable in order to reach constituents through shared promotional material and the use of their resources to support potential meeting requirements including transportation for and communication with physically handicapped individuals.
- Local agencies may assist in identifying bus routes or arranging for pick-up and drop-off from convenient locations for community meetings.

Participation in Community Events to Bolster Support through Outreach

Various festivals and local events will serve as opportunities to provide information to various stakeholders including affected project area community members. Information may need to be communicated in more than one language so that it can be easily understood by an affected community.

One of the more effective ways to communicate during community events is through the use of visual aids.

- Corridor maps with photographs of landmarks and before-and-after visualizations located at specific locations are an effective way to communicate with someone who cannot read a

Figure 7-4 - Effective public involvement activities will be held in locations that are convenient for the local population.

language or read a map.

- PowerPoint presentations and continuously playing loop videos could be used with variable voice tracks for events held indoors.
- Braille material and a language assistant can be effective in reaching those who have impaired vision.

Community events provide a relaxed environment to talk with individuals and gather information. Finding out where and when it would be most convenient for the public to attend a future meeting is as simple as asking the affected community stakeholders during community outreach events. The stakeholders will be able to identify a location that is not only convenient, but also safe for them. In addition, stakeholders' advice regarding the best time of day for community meetings helps to provide an idea of the types of workers in the project area including shift, retired, or unemployed workers. Outreach events are also an opportunity to engage in a dialogue about the arrangements needed for a successful meeting, which may include provisions for food, childcare, and transportation. These provisions increase the likelihood that a stakeholder will attend a public meeting.

Figure 7-5 - The presence of language interpreters can be essential to effective communication with all community groups.

Project Specific Web Sites

Use of the Internet for disseminating information has become commonplace as an efficient and cost effective method of communication. Furthermore, it provides an opportunity for "branding" the project name, thereby giving it an identity and distinguishing it from other projects. Project websites tend to provide information on project need, anticipated meetings, newsletters, project graphics, contact information for key project representatives, opportunities to provide input, and other features including a summary of frequently asked questions. The website should be updated frequently to provide the public with current information.

Public Display Boards

At critical stages during the course of project development, presentation boards will be prepared and displayed in public venues such as local schools, community centers and public libraries.

Media Outreach, Announcements and Mailings

Local media outlets including news publications written for particular cultural groups with a local area circulation should be utilized to reach communities with information regarding public meetings. As the project proceeds, opportunities may arise for special interest articles to be written in publication issues focusing on regional transportation issues or specific communities. Editorial boards and journalists assigned to such issues should be contacted at regional newspapers that serve the project area. Press Kits may be provided as well as interviews arranged for NJDOT managers or Commissioner level appointees as deemed appropriate and approved by NJDOT. These types of activities should be arranged through and coordinated with NJDOT. Press releases will be written by NJDOT announcing major milestones and meetings. [2]

[2] NJDOT Draft Public Involvement Plan, Route 29 Boulevard Study, May 2008

Core Participation Groups

As suggested by the FHWA, Core Public Participation groups help transportation agencies develop a working relationship and maintain open communication with the community as a plan or project moves forward. A core group may take the form of a Civic Advisory Committee, Citizens on Decision and Policy Boards, or a Collaborative Task Force. All three are vehicles for participation in the transportation decision-making process. The groups include people with a strong interest in process outcomes and can be expanded to include others with similar interests. These strategies can demonstrate the transportation agency's commitment to public involvement.

» Civic Advisory Committees. A civic advisory committee is a representative group of stakeholders that meets regularly to discuss issues of common concern. Often comprised of representatives of local agencies, these groups provide a vehicle for communication between local residents and their government. CACs may focus on long-range transportation plans or on approaches to specific issues such as environmental concerns. The committee studies issues and may present a variety of opinions or viewpoints to the transportation agency.

Figure 7-6 - Core Participation Groups promote open communication among stakeholders.

» Citizens on Decision and Policy Bodies. Community members can also serve on policy and decision-making committees and boards. These individuals often represent particular civic, environmental, business, or community groups and contribute the community's viewpoint to the process. Citizens on decision and policy bodies are local community people appointed, along with other representatives, to boards or agencies that make decisions or propose recommendations to elected officials. Citizen committees may oversee particular aspects of complex programs.

» Collaborative Task Forces. A collaborative task force is a group that seeks resolution to a specific and often difficult issue within a specific timeframe. Its membership usually includes local residents or representatives from interest groups, appointed by elected officials or

Penns Neck Area EIS
Task Force for Collaborative Planning –
Effective Practice

When improvement plans along Route 1 in the Penns Neck section of West Windsor and its environs encountered opposition, NJDOT formed a Collaborative Task Force in the form of a Partners Roundtable Advisory Committee. The group was comprised of 32 community partners representing citizens groups, business organizations, stakeholders, local governments, transportation advocacy groups, the FHWA, the Delaware Valley Regional Planning Commission, NJDOT and other state agencies. The group met 35 times during the 24-month scoping and EIS development process, engaging in dialogue and document review through the delineation of the project study area, the preparation of the Purpose and Need Statement, the Working Problem Statement, the definition of Project Goals and Objectives, the review of actions and alternatives that were considered in the Draft EIS, and the Synthesis of DEIS findings. This aspect of the public involvement process allowed participants to reach consensus on a solution to the Penns Neck area mobility issues and a satisfactory resolution to community and stakeholder concerns. See Chapter 8 for more information.

the transportation agency. The group may receive technical support from agency staff. Often, the issues addressed have attracted widespread public attention and controversy. The task force works toward consensus and their work results in a unified response to the issue. It can be used productively at any time in a complex project or planning study, but because of time and cost commitments it is often used to resolve an impasse.[3]

Types of Public Meetings

Public meetings can take various forms depending on the stage of the project process and the complexity of the project. Public Information Centers are held for most NJDOT projects, while Public Meetings and Public Hearings involve more formal proceedings. Charrettes, Visioning meetings, and other working group sessions provide structure for interaction between stakeholders and interested parties and NJDOT staff

» Visioning is used to create a statement of goals for a project. These goals may incorporate aspects of the socioeconomic context including safety, mobility, economic development, improved transportation service, alternative means of transportation, aesthetics, and others. A series of visioning meetings results in a goals statement that is incorporated into the transportation project process. Visioning is often used in long range transportation planning.

Figure 7-7 - Charrettes are brainstorming sessions that involve community members in finding solutions to design issues.

» Charrettes are held to resolve a particular problem or issue. Stakeholders work in small groups to define the issue, analyze the problem and alternative approaches, and develop proposals and alternative solutions. Staff people supply information or supportive data. The working group presents a final proposal, and moves to consensus and a final resolution. The open process encourages fresh ideas and allows for full participation from stakeholder groups.

» Public Information Centers (PICs) are informal public gatherings that promote an open exchange of information between NJDOT representatives, elected officials, interested citizens and other stakeholder groups on a proposed transportation project. PICs are held early in a project's development so that issues and problems can be raised and addressed, thereby allowing the project process to move forward. PICs provide an opportunity to assess problems and propose solutions, to consider modifications to project alternatives and, if necessary, abandon project alternatives for which no community support exists.

Figure 7-8 - PICs allow for the informal exchange of information.

[3] To learn more about this project, see http://www.fhwa.dot.gov/REPORTS/PITTD/bridge1a.htm.

Typically, the PIC follows an open-house format and does not include formal presentations. The public is invited to study display boards and to ask questions of the project manager and technical specialists in attendance. NJDOT personnel will answer questions or note unanswered concerns. Since no presentations are made, exhibits of the proposed project and alternatives should be clear to a lay audience and citizens should be able to interpret them with little or no explanation. To supplement the exhibits, handouts should be distributed to all attendees, explaining the purpose of the PIC and the project background, and providing a description of the project, a proposed project schedule, and contact information for more information or to provide comment. The presence of a language interpreter at these meetings ensures that all stakeholders can participate in the transportation project process.

» Public Meetings. A public meeting provides a forum for the exchange of information, however, public meetings follow a formal process and can take place at various times through the project development process to heighten community awareness, obtain public feedback and involve the public in project decisions. A record of the proceedings forms part of the project record. A facilitator runs the meeting and NJDOT representatives present the project, alternatives, and potential impacts. The public has the opportunity to comment and ask questions. For controversial projects, public meetings function as an essential intermediary step before conducting public hearings.

» Public Hearings. The purpose of a public hearing is to solicit public comments regarding the need for a proposed project or its perceived social, economic, environmental or transportation impacts. Hearings provide a formal opportunity for public comment on project alternatives, on the social, economic or environmental effects of the alternatives, and whether the proposed project is consistent with local and/or regional planning goals. Hearings represent the most formal element of a public participation process and are part of the formal project record; they are generally held only when significant social, economic or environmental issues or impacts must be evaluated in making major transportation project decisions. All interested parties are given the opportunity to offer comments; suggestions and register any objections to the proposed project into the public record. Public hearings do not provide for discussions between the presenters and staff; however, a public information center is always held concurrently with the public hearing in an area separate from the official hearing to allow discussion on an informal basis.

NJDOT will conduct a public hearing for any new construction project, on projects involving new alignment, on projects requiring an Environmental Impact Statement or on projects involving local or regional significance. Public hearings may also be held for any project at any time at the discretion of the Commissioner.

FHWA requires that the NJDOT hold public hearings or the opportunity for a hearing for any federally funded project which meets the following criteria:

- Requires significant amounts of right of way;
- Substantially changes the layout and purpose of connecting roadways or of the facility being improved;
- Has a substantial adverse impact on abutting property;
- Has a significant social, economic or environmental effect; and
- Is determined by the FHWA to require a public hearing in the public interest.

The following factors require that an additional opportunity for a public hearing be held:

1. Substantial changes to proposals discussed at an earlier hearing;
2. Substantial unanticipated development in the area of the proposed project;
3. An unusually long lapse of time since the last hearing; or
4. Identification of significant social, economic or environmental effects not previously considered at earlier hearings.

A public hearing is a formal process, but is held at a place and time convenient for the persons affected by the proposed project. A hearing officer is assigned to conduct the hearing and is joined by NJDOT representatives from the various offices involved with the project. The hearing officer, Community Relations Manager or Capital Program Management representative makes a formal presentation that explains:

» The scope and location of the project;
» The description and impacts of each alternative studied;
» Any social, economic or environmental studies that have been conducted and any reports issued;
» Land acquisition and relocation assistance;
» The laws and administrative directives that govern the project and the hearing itself;
» The date for closing the hearing record; and
» Any procedures for commenting or submitting written statements and how any comments will be reviewed and considered in project decisions.

The public hearing process provides a full and formal opportunity for interested citizens, organizations and public officials to comment on transportation proposals. Both oral and written testimony will comprise the official public hearing transcript. All persons wishing to give oral testimony must sign up at the registration table. They will be called to speak in the order they are registered. Each speaker will be allowed five minutes to make a presentation. A court stenographer will record all oral testimony and all questions posed during testimony will be addressed by the NJDOT in writing after the close of the public hearing record.

Written statements may be submitted instead of oral testimony. These statements must be submitted to the NJDOT by the closing date of the hearing record. Written statements will be addressed by the NJDOT in writing after the close of the public record. The date for closing the record is determined before the hearing and included in the public notice. It is normally not less than ten days or more than thirty days after the public session.

Effective Strategies for Public Meetings

- Multi-lingual handouts and staff can facilitate discussions with non-English speaking public.
- Meetings may be held at several locations to optimize attendance.
- Participation can be encouraged through awareness of cultural or religious requirements that would affect the time or place of meeting.
- Provisions for the deaf or hearing impaired including material in Braille or effective sound system.
- Graphical displays of plans and information made available for low-literacy participants.
- Local providers may be used for food, childcare, and transportation where applicable. Using the services of local providers tends to increase "word of mouth" promotion of the meeting. Members of the targeted community may be drawn to public involvement activities in part by their desire to support a local business or trusted "friend" of the community.
- An effective way to reach single parents is to use a licensed childcare operator in the community.
- Employing a community resident to work during a meeting builds trust within the community; this individual may be to address the linguistic needs of residents in attendance. This link allows NJDOT teams to "bridge the gap" in language that may exist between the agency and the community and better recognize social nuances that local residents may know.

7.4 Assessment of the PIAP

Assessment of the PIAP should be made at specific milestones to ensure that public participation has been promoted throughout the project process. Steps to be taken include:

» Review stakeholder list for completeness. Have you reached all affected groups?

» Review effectiveness of public involvement methods. Has the community been given opportunity to contribute to the process, and if not, what other methods might be used? Have sufficient resources been provided to enable the community to understand the project?

» Review information gathered and agency response to community concerns that have been raised. Have all comments been documented? Do current plans reflect community input, needs and values?

» Verify follow-through on commitments resulting from the public participation process. Have commitments been made and documented to carry through the project process?

» Assess project outcomes. Does the completed project successfully address the purpose and needs initially identified? Were project goals met?

Feedback from members of the public informs the decision-making process and provides information on the effectiveness of the public involvement process. The public can provide comments on-line through the project website, through telephone hot lines that provide information and accept messages, at drop-in centers, through surveys distributed at meetings or community events, and in-person during workshops, meetings, or focus groups.

Figure 7 -9 - Successful public involvement depends on the open exchange of information.

This Chapter includes:

- Case Studies of NJDOT Projects that have successfully used Public Involvement and Issue Resolution tools and strategies.
  - Route 18 Reconstructions, New Brunswick
  - Route 71 Pedestrian Tunnel at Monmouth University
  - Route 9 Bridge at Bass River
  - Penns Neck Area EIS Route 1 Section 2S and 3J
  - I-280/Route 21 Interchange Improvements, City of Newark

8.0 Case Studies

The following five case studies illustrate the use of public involvement and issue resolution tools and strategies that might be applicable to future projects under the right conditions. Early and continuing public involvement, the use of Core Participation Groups, attention to context in the design process, and mitigation and enhancement techniques can be used as responses to potentially negative impacts on the socioeconomic context.

Route 18 Reconstruction, New Brunswick

Figure 8-1 - A Community Partnering Team developed as a means for addressing community issues.

One of the principal thoroughfares in Central Jersey, Route 18 carries over 85,000 vehicles per day through the region and provides access to downtown New Brunswick, Rutgers University, hospitals, major corporations, local businesses, performing arts centers, and residential neighborhoods. The corridor lies between New Brunswick and Boyd Park, a 14-acre public recreation space that lies along the Raritan River and Delaware and Raritan Canal. The purpose of the project was to enhance the safety and traffic

operations of a section of Route 18, including improvement of roadway design, vehicular access to and from New Brunswick, and access and mobility for pedestrians, bicyclists and transit users.

The establishment of a Community Partnering Team (CPT) is routine NJDOT practice on large construction projects. The CPT for this project was first formed in June 1999 to gain acceptance for the preferred design alternative. Members of the team included representatives of local institutions, government, and citizens groups. Meetings were held frequently to review the project process. The group formed into task forces including: the CPT, the Communication & Public Information Task Force, the Environmental Control Team, the Steering Committee, and groups addressing Traffic Management and Corridor Aesthetics. In March 2002, at the completion of the Environmental Assessment process, members of the CPT were asked for a list of community issues. The discussion of these issues and any new community concerns continued through 2005. A Public Information Center presentation was held in June 2001 and again in October 2002.

A Communications Plan was finalized in December 2004 to dictate the mechanism for information exchange between the NJDOT and the community stakeholders on construction activities and traffic management throughout the construction phase. The Communication Team Leader, located within the on-site construction office, would maintain a call log, a summary of issues/recommendations matrix, communications network databases, and contact information lists. The Leader would also maintain information phone lines, the project website, the project information update page, a motorist alert update, press releases, coordination with radio and cable outlets, and might provide brief presentations in the community. On-line Communications Feedback Surveys and Feedback Comment Forms were made available.

Figure 8-2 - Improvements to Boyd Park, an important resource for an urban community,

The project design process resulted in the division of Route 18 into local and express lanes, thereby providing improved access to and from New Brunswick for vehicular traffic. Responses to community concerns resulted in formalization of pedestrian pathways, installation of traffic signals at pedestrian crossings, and construction of pedestrian bridges. Enhanced lighting, noise walls, landscaping, burying of utility lines, and improvements to Boyd Park addressed quality of life issues that had arisen during the public involvement process. The early and continuous community outreach ensured public acceptance of the transportation project process.

Route 71 Pedestrian Tunnel at Monmouth University

Figure 8-3 - The design of a pedestrian bridge fits with the historic architectural context of the campus.

The 150-acre Monmouth University campus at West Long Branch is divided by Route 71. For thirty years, a hazardous, mid-block pedestrian crossing was continuously used daily by over 5,000 students and staff members as they moved between dormitories, health facilities and the library located on the north side of Route 71 and classrooms, dining halls, and administrative offices located on the south side of this regional corridor. A crossing guard and flashing traffic light controlled traffic at the crossing, creating traffic congestion along this heavily traveled route. The crossing was the site of numerous vehicular accidents, pedestrian accidents (including one fatality), and accidents involving the crossing guards.

In the search for a solution, safety and traffic flow emerged as the principal concerns of the University and the community. Possible design alternatives included an improved at-grade crossing, a pedestrian bridge, and a pedestrian tunnel. The bridge could not be built without creating an adverse effect on Shadow Lawn, a National Register-listed historic property that serves as administrative offices. The proposed at-grade crossing did not achieve adequate separation of pedestrians and vehicular traffic. The choice of the underpass as the best alternative involved resolution of several issues including safety, drainage, potential impacts to the historic property, and constructability. Perceived safety issues were resolved by linking the tunnel to the campus security system, the provision of adequate lighting, and design of the ramp termini that created gathering areas for students. A pump and underground storage resolved drainage issues. The potential impact on the historic property was addressed through design that reduced the length of walkways, and the use of compatible architectural materials for the approach ramps and retaining walls, such as concrete paver walkways, cast stone elements, decorative balustrade walls, decorative fencing, ceramic tile and bronze railings. The addition of staircases provided easy access from dormitories and reduced impact to lawn areas.

The project goals, i.e. a safe pedestrian crossing and improved traffic flow, were achieved with consideration of the historic and social context of the project area.

Route 9 Bridge at Bass River

The project, involving the replacement of the Route 9 Bridge over the Bass River, is an example of an efficient design and implementation process. Route 9 serves as the principal corridor serving South Jersey coastal communities and provides a link to other regions of the state. The former bridge design allowed for one lane of traffic in each direction with capacity further limited by weight restrictions.

Closure of the bridge for construction required a detour route that would accommodate a bus route providing local service. Early public involvement revealed that maintenance of a major detour for an extended period would be unacceptable to local officials and business owners. Few residential properties would be directly impacted by the project in this lightly populated area.

The project team undertook a site visit to identify issues and concerns early in the process. A hydraulics study showed that the existing bridge height could be maintained. A streamlined project process had alternatives and related permitting requirements identified in the first two weeks. Alternative detour routes were presented to local businesses and officials and the subsequent bridge design and traffic engineering were addressed simultaneously. The accepted design alternative resulted in closure of the bridge for one weekend for deck reconstruction. Early public outreach to local business owners and local officials contributed to the success of the project process and acceptance by the community.

Penns Neck Area EIS Route 1 Section 2S and 3J

Figure 8-4 - The Partners Roundtable Advisory Committee served as the means for reaching consensus.

The purpose of this project was to address traffic congestion, mobility constraints, and safety concerns on Route 1 and the east-west cross streets in the Penns Neck Area of West Windsor and its environs. A draft Environmental Assessment, complete in September 2000, drew significant opposition from some local officials, community and environmental groups. In March 2001, NJDOT undertook the Environmental Impact Statement (EIS) process to explore the full range of possible alternatives to address the original issues regarding traffic, mobility and safety and the concerns raised by the community groups.

As described in the EIS Executive Summary, the intent of the public involvement program was to foster and maintain open lines of communication and active engagement of the public in the EIS process. The public involvement process included stakeholder interviews, small group listening sessions, large group forums, a project website, and the use of six repositories to make project documents available. The principal vehicle for public involvement was the Partners Roundtable Advisory Committee comprising 32

community partners representing citizens groups, business organizations, stakeholders, local governments, transportation advocacy groups, the FHWA, the Delaware Valley Regional Planning Commission, NJDOT and other state agencies. The group formed to address the mobility issues in the Penns Neck Area and the differences in opinion and approach, and to work on reaching consensus on solutions to the mobility issues. The group met 35 times during the 24-month scoping and EIS development process, engaging in dialogue and document review through the delineation of the project study area, the preparation of the Purpose and Need Statement, the Working Problem Statement, the definition of Project Goals and Objectives, the review of actions and alternatives that were considered in the Draft EIS, and the Synthesis of DEIS findings.

Figure 8-5 - The Partners Roundtable Advisory Committee served as the means for reaching consensus.

The preferred alternative that emerged through the EIS process addressed the original traffic and safety issues by improving the flow of traffic and reducing traffic in residential neighborhoods, and addressed community concerns such as disturbance of National Register eligible archaeological sites, National Register listed and eligible historic sites, residential and business displacements, potential floodplain and wetlands impact, impacts to parks and natural areas, habitat fragmentation, potential pollution impacts to the Millstone River, and pedestrian and bicycle access and safety.

The public involvement process allowed participants to reach consensus on a solution to the Penns Neck area mobility issues and a satisfactory resolution to community and stakeholder concerns.

I-280/Route 21 Interchange Improvements, City of Newark

The interchange of I-280 and Route 21 inadequately serves the needs of vehicular traffic through this section of Newark. The interchange lacks a connection allowing traffic to access I-280 westbound from 21 northbound and 21 northbound from I-280 eastbound. Traffic is routed through local and residential streets to the west into Newark and to the east into Harrison. Higher than average crash rates along this section of the I-280 corridor result, in part, from substandard road features. In addition, the structures that form the interchange, i.e. bridges and ramps, require repair and reconstruction. Improvements will allow for more freely flowing traffic and provide more direct routes for traffic the provision of complete interchange movements, reduction of exit and entry ramps, and reduction of traffic on local roadways.

Figure 8-6 – Public Information Centers offered an opportunity for interested parties and key stakeholders to review project plans and ask questions.

The requirement for public involvement necessitated an assessment of the impacts to the local population, resources and facilities. First, population characteristics were identified, revealing that the community was composed of predominantly minority populations. NJDOT needed to tailor public involvement to the specific population and find ways to mitigate the effects on the neighborhood. In addition, the National Register-listed Plume House lies within the project limits as do other potentially eligible historic properties.

Having previously worked in the area, NJDOT knew the project would be challenged. Project managers identified the stakeholders and developed strategies to enable people to express their ideas and concerns and to involve them in the identification of impacts to the community and of possible mitigation strategies. Key people within the community were identified, either through their involvement in previous projects or through conversations within the neighborhood. Acknowledging that community members would be more comfortable speaking in spaces that were familiar, stakeholder interviews were held at two major community organizations, The Apostles' House (a social service agency), and the Historic 8th Avenue Homeowners Association. These groups assisted NJDOT in moving forward by disseminating information and encouraging people to attend a public meeting. Outreach to some local businesses was conducted by phone, and outreach to the neighborhood school, another key stakeholder, helped to spread word of the project through the community.

Figure 8-7 - Key Stakeholder meetings allowed neighborhood groups to voice concerns and discuss possible resolutions to issues.

When the public meeting was held to present the plan for the roadwork, NJDOT representatives were prepared with answers to questions raised at the stakeholder interviews. The level of technical detail in the presentation was adjusted to be comprehensible to non-professionals. An interpreter for Hispanics was present as was an interpreter for Portuguese. NJDOT representatives provided comment forms for those individuals who did not want to speak in public or who might think of comments after the meeting. NJDOT received several comments mailed to them on these forms.

Initial public outreach employed methods that fostered community acceptance and support for the transportation project. The process allowed individuals to participate in the transportation decision-making and to see proposed benefits to their community.

GLOSSARY OF TERMS

A

Access – Any rights the owner may or may not have to place or keep a driveway opening onto a road at a specific location. Generally access rights are a separate issue from condemnation and represent an administrative exercise of the State's police powers. Any questions regarding this issue need to be discussed promptly to avoid incorrect conclusions and delays.

American Association of State Highway & Transportation Officials (AASHTO) – A nonprofit, nonpartisan association representing highway and transportation departments in the 50 states, the District of Columbia, and Puerto Rico. The primary goal of the association is to foster the development, operation, and maintenance of an integrated national transportation system.

Advisory Council on Historic Preservation (ACHP) – An independent agency charged with coordinating Federal, State, and local and private preservation efforts and advising the President and Congress matters of historic preservation. It acts in an advisory capacity and is typically the final sign-off in the Section 106 process.

Alternate Procedures - A procedure authorized by 23 CFR 106(b), 23 USC 117(a) and 23 CFR 640 for administering Federal Aid projects. This procedure combines the Exempt and Certification Acceptance procedures.

Alternative Analysis - The study of various solutions to a transportation concern.
LOSSAR
American Recovery and Reinvestment Act (ARRA) – Economic stimulus package enacted in February 2009 that has dedicated funds for transportation improvement projects.

Americans with Disabilities Act of 1990 (ADA) – Federal law that requires public facilities, including transportation services, to be fully accessible for persons with disabilities. ADA also requires the provision of complementary or supplemental paratransit services in areas where fixed route transit service is operated. Expands definition of eligibility for accessible services to persons with mental disabilities, temporary disabilities, and the conditions related to substance abuse. The Act is an augmentation to, but does not supersede, Section 504 of the Rehabilitation Act of 1973 which prohibits discrimination on the basis of disability against otherwise qualified individuals in programs receiving federal assistance.

Annual Average Daily Traffic (AADT) – Daily traffic that is averaged over a year (see ADT).

Appraisal – The term appraisal means a written statement independently and impartially prepared by a qualified appraiser setting forth an opinion of defined value of an adequately described property as of a specific date, supported by the presentation and analysis of relevant market information.

Archaeological Resources – The locations of prehistoric or historic occupations or activities that can be used to reconstruct the lifeways of cultures. They may range from a single artifact to the extensive ruins of a historic military fortification.

Archaeological Site – Site containing artifacts that may or may not be be significant from past human life and activities.

Arterial - A class of street serving major traffic movement that is not designated as a highway.
SARY
Automobile Orientation (Business Districts) – Urban form characterized by low intensity/density, single use developments served by a transportation network with few opportunities for non-motorized travel.

Average Daily Traffic (ADT) - The average number of vehicles passing a fixed point in a 24-hour time frame. A convention for measuring traffic volume.

Avoidance – Alter the project to avoid a potential effect.

B

Bikeway – A facility designed to accommodate bicycle travel for recreational or commuting purposes. Bikeways are not necessarily separated facilities; they may be designed and operated to be shared with other travel modes.

Build/No-Build – Refers to conformity requirement during Interim and Transitional periods whereby Metropolitan Planning Organizations must demonstrate that building or implementing a long range plan (LRP) and Transportation Improvement Programs (TIPs) will provide more emissions reduction than "not building" or not implementing that same long range plan and TIP.

Bus Lane – A lane reserved for bus use only. Sometimes also known as a "diamond lane."

Business Districts – An area where a concentration of business activities take place.

C

Capital Program Committee (CPC) - A committee established to review and make recommendations concerning all aspects of the NJDOT's Capital program. The committee approves recommendations for the project advancement as presented by the Screening Committee, reviews project advertisement schedule, receive reports on the development of the Capital Program, Statewide Transportation Improvement Program and Study and Development Program, and addresses other issues relating to the capital programming process. The Deputy Commissioner chairs the committee. Voting members consist of the Chief of Staff and Assistant Commissioners.

Capital Program Screening Committee - A committee established by the Capital Program Committee to review in detail project advancing to feasibility assessment, preliminary design and final design. The committee members assure the appropriate scope of work is being pursued. The Screening Committee recommends approval of the appropriate action for each project to the Capital Program Committee. The committee also recommends assignment of projects to the appropriate pipeline. The Director, Division of Capital Investment Planning and Development, chairs the committee. Voting members are the Directors of Project Management, Design Services, Quality Management Services, Environmental Resources, Operations Support, Systems Planning and Research and Project Planning and Development.

Capital Project Procedures - Presents the current practices used in producing a Capital Project, from problem statement, design reviews, construction contract documents, and award, to final closeout.

Categorical Exclusions (CE) – A classification of projects which have been determined not to individually or cumulatively have a significant impact on the human or natural environment and are therefore exempt from the preparation of an Environmental Assessment or Environmental Impact Statement. They are identified in Federal Highway Administration's (FHWA's) regulations (23 CFR 771) as being Class II projects and are processed either through Pipeline 1 or Pipeline 2, depending on the complexity and/or controversial nature of the project.

Central Business District - The most intensely commercial sector of a city.

Certified Categorical Exclusion (CCE) – A CCE is a NJDOT self-certified CE that does not need to be submitted to FHWA for authorization. Documentation and processing requirements for a CCE are detailed in the February 13, 2008 Programmatic Agreement between NJDOT and the NJ FHWA Division Office, which is an update from the November 22, 1997 Memorandum of Agreement (MOA) between the two agencies. The CCE process is used on Pipeline 3 projects that do not cause significant social, economic, or environmental impacts and require nominal documentation.

Citizen Advisory Committee (CAC) - Advisory committee utilized by most Metropolitan Planning Organizations (MPOs) for citizen input into the transportation planning process.

Code of Federal Regulations (CFR) - Compilation of the rules of the executive department and agencies of the federal government. Examples are 23 CFR 450, 23 CFR 771.

Cohesion - the closeness or bond that occurs within a neighborhood or sub-community. The components of cohesion - which can include ethnic and racial composition, age, and the intangible expression of "roots" - combine to create attachment and cohesion.

FHWA defines cohesion as "those behavior or perceptual relationships that are shared among residents of a community that cause the community to be identifiable as a discrete, distinctive geographic entity within the urban pattern. These shared behaviors and feelings bind the community together as a *cohesive* grouping. Cohesion manifests itself in such behavior as: (1) participation in community organizations, (2) neighborhood socializing, and (3) by the use of community facilities. Perceptual manifestations of cohesion include: (1) physiological identification with the neighborhood or community, (2) commitment to it over time, and (3) positive feelings or evaluations concerning it." Note that rural residents also experience cohesion, in some cases a higher degree of cohesion, based on close dependent relationships brought about by familiar tradition and commitment to the land.

Collector-Distributor Street - A road generally parallel to an expressway which collects and distributes traffic at access points to the expressway involving through lanes.

Colocated Use – Location of two or more uses in one facility or on common grounds so as to share common facilities.

Community – A community may be defined by geographic, manmade or natural boundaries with respect to both people and places. The people who comprise a community may share similar social, cultural, ethnic, economic, political or religious characteristics. The people may share common histories, economic profiles or political interests. They may attend the same schools, churches, or social clubs. These people may interact in social settings and share similar values.

FHWA has defined community as "a distinctive, homogeneous, stable, self-contained unit of a larger spatial area defined by geographical boundaries, ethnic, or cultural characteristics of the inhabitants; a psychological unity among the residents; and the concentrated use of the area's facilities. ARY

Community Center – A facility for community organization meetings and/or regularly occurring activities, usually serving the needs of a neighborhood.

Community Characteristics Inventory (CCI) - The history of a community with present and future conditions of an area. Includes physical characteristics of an area, narrative text that describes the community, tables or graphics that summarize data.

Community Facilities – A community facility is any public or private organization that a local population relies upon for goods or services.

Community Focal Point – A facility, place, or object in a community which has special value to the people in that community.

Community Impact Assessment (CIA) - A process used to evaluate the effects of transportation projects on a community and the quality of life currently enjoyed by those in the community.

Community Narrative – Summary of current conditions of a community.

Community Values - Values usually reflected in attitudes based on religion, age, income, and lifestyle. Values directly inspire attitudes toward neighborhood growth, progress, and access changes and are reflected in concerns about the quality of the community or neighborhood.

Commuter Student Population – Number of students of an upper level educational facility that do not reside on campus.

Commuter Assistance Program (CAP) - Program funded by the U.S. Department of Transportation (DOT) which supports numerous congestion-reducing programs in a community in order to achieve the community's traffic reduction and air quality goals.

Comparable Replacement Dwelling – A dwelling which is determined to be: decent, safe and sanitary and functionally equivalent to the displacement dwelling. The term "functionally equivalent" means that it performs the same function and provides the same utility.

Compensable – Those damages to the property that the owner may be entitled to compensation for. Items such as noise and dust that are typical in the construction are not compensable. Non compensable items also include loss of business, circuity of travel, placement of a center divider, etc. Other elements of damages may be compensable depending upon the circumstances. Specific questions should be addressed to the ROW Appraisal Section.

Complete Streets – A NJDOT policy that promotes planning and design to provide safe access for all users by designing and operating a comprehensive, integrated, connected multi-modal network of transportation options.

Comprehensive Plan – The adopted land use plan that will guide growth and development.

Conformity - Process to assess the compliance of any transportation plan, program, or project with air quality control plans. The conformity process is defined by the Clean Air Act.

Congestion Management and Air Quality (CMAQ) - A categorical funding program created under ISTEA which directs funding to projects that contribute to meeting national air quality standards in non-attainment areas for ozone and carbon monoxide.

Congestion Management Systems (CMS) - A systematic process required under ISTEA to provide information on transportation system performance and identify alternative strategies to alleviate congestion and enhance mobility of persons and goods.

Context Sensitive Solutions (CSS) / Context Sensitive Design (CSD) - A collaborative and interdisciplinary approach for involving all stakeholders to develop a transportation facility that fits its physical setting and preserves and enhances scenic, aesthetic, historic, community and environmental resources, while maintaining or improving safety, mobility, and infrastructure conditions.

Core Group - This is a critical activity for Project Managers to ensure the project has proper support. It consists of a working group of various Departmental representatives, FHWA, and external interests, e.g., Metropolitan Planning Organizations (MPOs), local elected officials, community and environmental groups/agencies), where appropriate, which provides a forum for soliciting input and buy-in into the project development process. It serves as a means to tap the knowledge and information pool within NJDOT on a particular transportation problem area and helps build support for the ultimate solution both within the Department and with external agencies and the community.

Critical Path Method (CPM) - A formal scheduling method used on large complex projects to assure design and construction can be completed in the shortest time frame. The Critical Path Method utilizes network based logic to identify the interrelationship of design and construction activities and calculates the longest path of interrelated activities (the critical path) through the process which cannot be delayed without causing the entire project to be delayed.

Cultural Resources – Includes, but is not limited to, buildings, sites, structures, objects, and districts both architectural (above ground) and archaeological (below ground) that could have potential to possess significance.

Cultural Centers – A facility with cultural offerings in such areas as the arts, humanities, science, and human knowledge, belief, and behavior.

D

Deficiency Report - A report that addresses the physical elements of a specific area of roadway that is below current standards and can be prepared concurrently with the Needs Assessment report.

Design Element - A particular feature of a design, such as lane width, cross slope, curb or beam guide rail.

Design Standard - An authoritative principle or rule containing specific criteria and controls for design. These would be contained in the NJDOT's Manuals, Codes and Policies.

Design Value - A particular value or set of values that are specified for each design element within a design standard.

Draft Environmental Impact Statement (DEIS) - An EIS draft that documents evaluation of the potential environmental impacts of a project.

Degree of Effect – Possible effects transportation action has on environmental and community resources.

Delaware Valley Regional Planning Commission (DVRPC) – One of the three MPOs in New Jersey. The DVRPC seeks to build consensus on improving transportation, promoting smart growth, protecting the environment and enhancing the economy. The Commission is the federally designated Metropolitan Planning Organization for the Greater Philadelphia Region, serving a region comprising nine counties: Bucks, Chester, Delaware, Montgomery and Philadelphia in Pennsylvania; and Burlington, Camden, Gloucester and Mercer in New Jersey.

Demand-Responsive – Descriptive term for a service type, usually considered paratransit, in which a user can access transportation service that can be variably routed and timed to meet changing needs on an as needed basis. Compare with Fixed-Route.

Division of Local Aid and Economic Development – The Division's staff members work with county and municipal government officials to improve the efficiency and effectiveness of the state's transportation system.

Displaced Person – Any person who moves from the real property or moves her/his personal property from the real property as a direct result of a written notice of intent to acquire, the initiation of negotiations for, or the acquisition of, such real property, in whole or in part, for a project. This includes a person who occupies the real property prior to its acquisition, but who does not meet the length of occupancy requirements of the Uniform Act.

Dwelling – The place of permanent or customary and usual residence of a person, according to local custom or law, including a single family house; a single family unit in a two-family, multi-family, or multi-purpose property; a unit of a condominium or cooperative housing project; a non-housekeeping unit; a mobile home; or any other residential unit.

Dwelling Site – A land area that is typical in size for similar dwellings located in the same neighborhood or rural area. This definition ensures that the computation of replacement housing payments are accurate and realistic (a) when the dwelling is located on a larger than normal site, (b) when mixed use properties are acquired, (c) when more than one dwelling is located on the acquired property, or (d) when the replacement dwelling is retained by an owner and moved to another site.

E

Easement - A right of way giving individuals other than the owner permission to use a property for a specific purpose.

Effect Determination - Section 106: An undertaking with effects on an historic property eligible for inclusion in the National Register when the undertaking may alter characteristics of the property. Alteration to features of the property's location, setting or use may be relevant, depending on a property's significant characteristics, in determining the effect on a property. An Adverse Effect results when the effect on a

historic property may diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Under certain conditions a project may have an effect on a property but that effect may be determined to be Not Adverse and in certain instances there may be No Effect.

Eminent Domain – If an agreement cannot be reached as a result of bona fide negotiations, condemnation proceedings shall be initiated promptly.

Engineering and Administration Costs - A project's engineering, review and incidental costs, such as Department salaries and overhead, consultant preliminary engineering, utility preliminary engineering, construction engineering, Right of Way plan preparation, and cultural resource mitigation.

Employment-Oriented (Business Districts) – District where employment related uses (e.g., office, industrial, institutional) represent the largest percentage of land uses.

Employment Type – Category for employment (e.g., retail, industrial, service).

Enhancement Activities - Refers to activities related to a particular transportation project that "enhance" or contribute to the existing or proposed project. Examples of such activities include provision of facilities for pedestrians or cyclists, landscaping or other scenic beautification projects, historic preservation, control and removal of outdoor advertising, archeological planning and research, and mitigation of water pollution due to highway runoff.

Enterprise Zone (Business Districts) - An economically depressed area that has been targeted for revitalization by a city or county and state through tax and other incentives given to companies that locate or expand their operations within the zone.

Entity - A distinct class of real-world things about which something is known (e.g., "Community Focal Points" and "Roadways"). Sometimes the characteristics of an entity carry a special significance: it categorizes it into distinct types, and the entity is split to reflect this importance. The new entities are known as subtypes, with the original entity becoming a supertype (e.g., "Community Focal Points" could be broken into the subtypes "Schools," "Hospitals," "Religious Institutions," "Parks," etc.).

Environmental Assessment (EA) - Document prepared for projects identified in FHWA's 23 CFR 771.115 as Class III type projects or those projects for which it is unclear if there is a potential for significant environmental impacts. It provides information on the alternatives considered and their associated impacts. After the EA is made available and a public comment period held, if the project is determined not to have a significant impact on the environment then the FHWA issues a Finding of No Significant Impact (FONSI). If the project is determined to have a Significant Impact, an EIS must be prepared.

Environmental Impact Statement (EIS) - Document prepared for projects identified in FHWA's regulations 23 CFR 771.115 as Class I type projects or those projects that have the potential for significant environmental impacts, and provides information on the alternatives considered and their associated impacts. It is circulated to the public and to review agencies for comments and is prepared as a draft and final document. Its approval is a Record of Decision prepared by FHWA and published in the Federal Register.

Environmental Protection Agency (EPA) - EPA is the federal source agency of air quality control regulations affecting transportation.

Executive Order 215 (EO 215) - A state mandated environmental document. Similar to the federal Environmental Assessment or federal Environmental Impact Statement and required for all state funded projects over $1 million in construction costs. The order has provisions for certain project exemptions and NJDOT has a Memorandum of Agreement on additional projects that are exempt from the EO-215 requirements.

Experimental Feature - A material, process, method, equipment item, traffic operational device or other feature that: (1) has not been sufficiently tested under actual service conditions to merit acceptance without reservation in normal highway construction; or (2) has been accepted but needs comparison with alternative acceptable features for determining their relative merits and cost effectiveness.

Executive Order 12898 – Signed in 1994, this EO reaffirmed the importance of identifying and assessing whether adverse impacts fall disproportionately on minority and low-income populations and whether involvement processes and the benefits of funding and other decision-making were being distributed among all populations.

Executive Order 13166 - This EO, signed in 2000, requires 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.

F

Fair Market Value Definition – "Fair market value" has been defined by the courts as "the value that would be assigned to the acquired property by knowledgeable parties freely negotiating for its sale under normal market conditions based on all surrounding circumstances at the time of the taking." In 2003, the New Jersey Supreme Court cited a 2000 Appellate Division decision, in which "fair market value" was defined as what a willing buyer and a willing seller would agree to as of the date of the taking, neither being under any compulsion to act. Fair Market Value is "the value that would be assigned to the acquired property by knowledgeable parties freely negotiating for its sale under normal market conditions based on all surrounding circumstances at the time of the taking."

Farm Operation – Any activity conducted solely or primarily for the production of one or more agricultural products or commodities, including timber, for sale or home use and customarily producing such products or commodities in sufficient quantity to be capable of contributing materially to the operator's support.

Feasibility Assessment - A study to assess the practicality of certain alternative designs.

Federal Highway Administration (FHWA) – The Federal Agency that oversees the disbursement of federal funds for highway projects. Also ensures that all applicable federal laws have been met before releasing those funds to the State Department of Transportation.

Federal Register - The official publication for Presidential Documents, Executive Orders and Notices, Rules, and Proposed Rules from Federal Agencies and organizations; regulations (also known as rules) regarding such laws as Section 106 of the National Historic Preservation Act are published in the Federal Register prior to their codification in the Code of Federal Regulations (CFR).

Federal Transit Administration (FTA) - Division of the U.S. Department of Transportation that funds transit planning and programs.

Final Environmental Impact Statement (FEIS) - The final version of an EIS which documents evaluation of the potential environmental impacts of a project and the consideration of comments on the draft EIS and public involvement process, in making the recommendation for the Preferred Alternative to be developed using federal funds or the conclusion that the No Build Alternative will be chosen.

Final Scope Development - The refinement of the Initial Preferred Alternative (IPA) based upon environmental studies, community input and the needs of the traveling public. LOSSARY

Financial Capacity, Capability - Refers to U.S. Department of Transportation requirement that an adequate financial plan for funding and sustaining transportation improvements be in place prior to programming federally-funded projects. Generally refers to the stability and reliability of revenue in meeting proposed costs.

Finding of No Significant Impact (FONSI) - A statement indicating that a project was found to have no significant impacts on the quality of the human and natural environment and for which an environmental statement will therefore not be prepared.

Fixed Guideway (Transit Routes) – A system of vehicles that can operate only on its own guideway constructed for that purpose (e.g., rapid rail, light rail). Also includes exclusive right-of-way bus operations and trolley coaches.

Fixed-Route - Term applied to transit service that is regularly scheduled and operates over a set route. Usually refers to bus service.

Free-Trade Zone (Business Districts) – Designated area where export oriented companies located there can enjoy favorable terms and conditions (e.g., exemption from custom duties and reduced taxation).

Full Oversight - A Federal Aid highway project processing category documented in the Stewardship Agreement that requires complete Federal Highway Administration review of all project development processes.

Future Land Use Plan Map – Adopted policy map associated with a local government comprehensive plan that illustrates the allocation of future land use categories for a specified planning period (e.g., 10 or 20 years).

Future Land Use Categories (Generalized) – Generalized categories of the future land use plan map that provide summary descriptions of the primary land use and range of density/intensity allowed under the category.

G

Geocoding – The process that assigns a latitude-longitude coordinate to an address for purposes of displaying on a map.

Green Acres Program - To achieve, in partnership with others, a system of interconnected open spaces, whose protection will preserve and enhance New Jersey's natural environment and its historic, scenic, and recreational resources for public use and enjoyment.

H

High Occupancy Vehicles (HOVs) - Generally applied to vehicles carrying two or more people. Freeways, expressways and other large volume roads may have lanes designated for HOV use. HOV lanes may be designated for use by carpoolers, vanpools, and buses. The term HOV is also sometimes used to refer to high occupancy vehicle lanes themselves.

Highway - Term applies to roads, streets, and parkways, and also includes rights-of-way, bridges, railroad crossings, tunnels, drainage structures, signs, guard rails, and protective structures in connection with highways.

Historic District – A significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development.

Historic Structures – Includes bridges, residences, commercial buildings, constructed features, etc. which, with few exceptions, are at least 50 years old.

Home-Based Work Trip - A trip to or from home for the purpose of one's employment.

Household Income – Total gross income received for a 12 month period from all sources (earned and unearned) including, but not limited to wages, salary, child support, alimony, unemployment benefits, workers compensation, social security, or the net income from a business. It does not include income received or earned by dependent children and full time students under 18 years of age. Household income does not include program benefits that are not considered income by Federal law such as food stamps and the Women Infants and Children (WIC) program. If there is a question on whether or not to include income from a specific program contact the Federal Agency administering the program.

Indian Tribe – As defined by The National Historic Preservation Act, “Indian tribe means an Indian tribe, band, nation, or other organized group or community…, which is recognized as eligible for the special programs and services provided by the United States because of their status as Indian” (36 CFR Part 800 Section 800.16(m)). See http://www.achp.gov/regsrev04.pdf

Infrastructure - A term connoting the physical underpinnings of society at large, including, but not limited to, roads, bridges, transit, waste system, public housing, sidewalks, utility installations, parks, public buildings, and communications networks.

Initial Preferred Alternative (IPA) - The proposed roadway configuration identified during the Feasibility Assessment Review as being best suited for study during the Final Scope Development Stage.

Institute of Transportation Engineers (ITE) - An international society of professionals in transportation and traffic engineering; publishes Trip Generation (a manual of trip generation rates by land use type).

Intelligent Transportation Systems (ITS) - Use of computer and communications technology to facilitate the flow of information between travelers and system operators. Includes concepts such as "freeway management systems," "automated fare collection," and "transit information kiosks."

Intelligent-Vehicle Highway Systems (IVHS) - Narrow grouping of ITS technologies that focus on monitoring, guiding or operating motorized vehicles. See Intelligent Transportation Systems.

Intermodal Facilities – A facility that serves as a connection point between two or more transportation modes, typically transit and some other mode of transport.

Intermodal Management System (IMS) - Systematic process to improve the coordination in planning and implementation of air, water and land-based transportation facilities and services; required for transportation facilities connected to the National Highway System (NHS) as a part of ISTEA; for non-NHS transportation facilities, the extent of an IMS is left to the discretion of state and local officials.

Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) - Legislative initiative by the U.S. Congress that restructured funding for transportation programs. ISTEA authorized increased levels of highway and transportation funding and an enlarged role for regional planning commissions and MPOs in funding decisions. The Act also requires comprehensive regional long-range transportation plans extending to the year 2015 and places an increased emphasis on public participation and transportation alternatives.

Interstate System - The system of highways that connects the principal metropolitan areas, cities, and industrial centers of the United States. The Interstate System also connects the U.S. to internationally significant routes in Mexico and Canada. The routes of the Interstate System are selected jointly by the departments of transportation for each state and the adjoining states, subject to the approval of the U.S. Secretary of Transportation.

J

Jurisdiction – A unit of government which exercises certain powers over a place or facility.

K

L

Land Use - Refers to the manner in which portions of land or the structures on them are used, i.e., commercial, residential, retail, industrial, etc.

Law Enforcement Agency – A public agency charged with enforcing laws that protect the health, safety, and welfare of the members of a community.

Legislatively Designated Authority – A public service authority that is legislatively designated (e.g., transit authority, port authority, expressway authority).

Level of Service (LOS) – A qualitative assessment of a road's operating condition; generally described using a scale of A (little congestion) to E/F (severe congestion).

Limited English Proficiency (LEP) – Refers to persons who are unable to communicate effectively in English because their primary language is not English and they have not developed fluency in the English language. A person with Limited English Proficiency may have difficulty speaking or reading English.

Linguistically Isolated Household – A household in which all member of 14 years old and over have at least some difficulty with English. The U.S. Census Bureau website can be accessed for more information about this topic.

Livability Initiative – A FHWA Initiative that focuses on tying the quality and location of transportation facilities to broader opportunities such as access to good jobs, affordable housing, quality schools, and safe streets.

Long Range - In transportation planning, refers to a time span of more than five years. The Transportation Improvement Program (TIP) is typically regarded as a short-range program, since ISTEA has changed the TIP from a five-year to a three-year document.

Long Range Plan (LRP) – A 20-year forecast plan required of state planning agencies and MPOs; must consider a wide range of social, environmental, energy and economic factors in determining overall regional goals and consider how transportation can best meet these goals.

Long Range Transportation Plan (LRTP) - A document resulting from a regional or statewide process of collaboration and consensus on a region or state's transportation system. This document serves as the defining vision for the region or state's transportation systems and services. In metropolitan areas, the plan indicates all of the transportation improvement scheduled for funding over the next 20 years.

M

Major Investment Study (MIS) - A tool to aid decision-making with respect to an identified transportation need; evaluates cost and effectiveness of alternatives; required by ISTEA when a need for a major metropolitan transportation investment (MMTI) is identified and federal funds are potentially involved.

Management Systems - Six systems required under ISTEA to improve identification of problems and opportunities throughout the entire surface transportation network, and to evaluate and prioritize alternative strategies, actions and solutions. The six management systems include: Pavement Management System (PMS), Bridge Management System (BMS), Highway Safety Management System (HSMS), Congestion Management System (CMS), Public Transit Facilities and Equipment Management System (PTMS) and Intermodal Management System (IMS).

Manual on Uniform Traffic Control Devices (MUTCD) - Defines the standards used by road managers nationwide to install and maintain traffic control devices on all streets and highways.

Memorandum of Agreement (MOA) - Section 106 - Typically an agreement signed by the NJDOT, State Historic Preservation Officer (SHPO), FHWA, and ACHP which documents the methods that will be used to minimize or mitigate impacts of projects on historic resources.

Metropolitan Planning Area (MPA) - The geographic area within which the metropolitan transportation planning process is carried out.

Metropolitan Planning Organization (MPO) - The organizational entity designated by law with lead responsibility for developing transportation plans and programs for urbanized areas of 50,000 or more in population. MPOs are established by agreement of the Governor and units of general purpose local government which together represent 75 percent of the affected population of an urbanized area.

Minimization – To modify the project to reduce the severity of the effect.

Minor and Major Pavement Preservation - Minor and major pavement preservation is noted in FHWA's Memorandum entitled, "Pavement Preservation Definitions" and classified as:

- Minor rehabilitation of pavement consists of non-structural enhancements made to the existing pavement sections to eliminate age-related, top down surface cracking that develop in flexible pavements.
- Major rehabilitation consists of structural enhancements that both extend the service life of an existing pavement and/or improve its load carrying capability.

(Additional guidelines and definitions for Pavement Preservation can be found at the FHWA website.)

Mitigation – To undertake an action to alleviate or offset an effect or to replace an appropriate resource.

Mobility - The ability to move or be moved from place to place.

Mode, Intermodal, Multimodal - Form of transportation, such as automobile, transit, bicycle and walking. Intermodal refers to the connections between modes and multimodal refers to the availability of transportation options within a system or corridor.

Mode-Related Religious Practice – Religious practice that limits transportation mode choice, usually observed on holy days (e.g., practice of not driving on Saturdays, the Jewish Sabbath).

Model - A mathematical and geometric projection of activity and the interactions in the transportation system in an area. This projection must be able to be evaluated according to a given set of criteria which typically include criteria pertaining to land use, economics, social values, and travel patterns.

Modes Served – Transportation modes accommodated by an intermodal facility.

Multi-Purpose or Joint Development Projects - A project with a coordinated planning process that is carried out by highway agencies, other agencies or organizations to study the creative use of highway right of way to provide benefits to communities and to assist in blending highways into the environment they traverse.

N

National Ambient Air Quality Standards (NAAQS) - Federal standards that set allowable concentrations and exposure limits for various pollutants.

National Environmental Policy Act (NEPA) - Federal law passed in 1969 which requires an analysis of environmental impacts of federal actions (including the funding of projects).

National Highway Systems (NHS) - A federal transportation program authorized by ISTEA that designates nationally significant Interstate Highways and roads for interstate travel, national defense, intermodal connections, and international commerce. Other eligible activities include bikeways and park-and-ride lots. The NHS is currently being developed as the first component of a larger, intermodal National Transportation System. See "National Transportation System."

National Highway Traffic Safety Administration (NHTSA) – The National Highway Traffic Safety Administration (NHTSA), under the U.S. Department of Transportation, was established by the Highway Safety Act of 1970, as the successor to the National Highway Safety Bureau, to carry out safety programs

under the National Traffic and Motor Vehicle Safety Act of 1966 and the Highway Safety Act of 1966. NHTSA is responsible for reducing deaths, injuries and economic losses resulting from motor vehicle crashes.

National Historic Landmark – A historic property evaluated and found to have significance at the national level and designated as such by the Secretary of the Interior.

National Historic Preservation Act (NHPA) – Law requiring federal agencies to consider the potential effect of a project on a property that is listed in or eligible for the National Register of Historic Places. If effects are identified, federal and state agencies and the public must identify means to mitigate the harm.

National Register of Historic Places (NRHP) – The national list of districts, sites, buildings, structures, and objects significant in American history, architecture, archaeology, engineering, or culture. It is maintained by the National Park Service on behalf of the Secretary of the Interior under authority of Section 101(a) of the National Historic Preservation Act, as amended. Properties listed may be significant at the national, state, or local level.

National Transportation System (NTS) – ISTEA called for the development of a "National Intermodal Transportation System that is economically efficient and environmentally sound, provides the foundation for the Nation to compete in the global economy, and will move people and goods in an energy efficient manner." The NTS is intended to allow for the development of transportation planning, program management and investment strategies that will bring about a transportation system that will move people and goods more effectively and efficiently, and thereby advance our economic, environmental and social goals.

Nationwide Personal Transportation Study (NPTS) – A transportation study, periodically undertaken by the Bureau of Census, which looks at travel patterns and frequency, transit use, and other travel characteristics at a national level.

Needs Assessment - A report that identifies the shortcomings of a particular roadway with a range from the corridor level to site specific. It typically focuses on congestion/capacity issues and occasionally safety issues.

Neighborhood – Small geographic units typically bounded by main roadways, natural and manmade features (parks, wooded areas, water bodies, etc). A neighborhood is a small group of people living in very close proximity to one another. Each neighborhood may have distinctive characteristics such as social, economic, cultural or religious features that distinguish one neighborhood from another.

New Jersey Department of Environmental Protection (NJDEP) - State agency responsible for the implementation of most of New Jersey's environmental regulations, including air monitoring and assessment.

New Jersey FIT: Future in Transportation (NJFIT) – An initiative of NJDOT, focuses on integrating road building and community building. NJDOT is forming partnerships to coordinate development and redevelopment in towns and cities with transportation needs and investments.

New Jersey TRANSIT - NJ TRANSIT is New Jersey's public transportation corporation. Its mission is to provide safe, reliable, convenient and cost-effective transit service.

New Jersey Transportation Trust Fund Authority (TTFA) - An independent agency of New Jersey state government whose stated mission is to finance the cost of "planning, acquisition, engineering, construction, reconstruction, repair, resurfacing, and rehabilitation of the state's transportation system."

Noise Study Report (NSR) - Report that documents traffic noise impacts.

Non-NHS - Any roadway that is not part of the National Highway System.

Notice of Intent – Document prepared to inform the general public of the scope of a proposed action or project.

Non-conforming Land Uses – Those improvements that do not meet current Municipal standards. These may be preexisting (grandfathered by virtue of existing before the code). It is important to address zoning standards and their impact on the property in relation to both the before condition and the proposed condition.

North Jersey Transportation Planning Authority (NJTPA) - The federally authorized Metropolitan Planning Organization (MPO) that comprises Bergen, Essex, Hudson, Hunterdon, Middlesex, Monmouth, Morris, Ocean, Passaic, Somerset, Sussex, Union and Warren..

O

Obligations - Commitments made by Federal agencies to pay out money as distinct from the actual payments, which are "outlays." Generally, obligations are incurred after the enactment of budget authority. However, since budget authority in many highway programs is in the form of contract authority, obligations in these cases are permitted to be incurred immediately after apportionment or allocation. The obligations are for the Federal share of the estimated full cost of each project at the time it is approved regardless of when the actual payments are made or the expected time of project completion.

Office of Community Relations - This unit of NJDOT promotes ongoing public partnerships with the Department to insure that transportation projects and issues are considered within the context of the communities that are impacted.

Office of Smart Growth (OSG) - Coordinates planning throughout New Jersey to protect the environment and guide future growth into compact, mixed-use development and redevelopment. The Office implements the goals of the State Development and Redevelopment Plan to achieve comprehensive, long-term planning; and integrates that planning with programmatic and regulatory land-use decisions at all levels of government and the private sector.

Operating Entity – The responsible organization for management and operation of a facility (e.g., public, private, quasi-public).

Outreach - Efforts to offer everyone in a community the opportunity to participate in transportation planning.

P

Paratransit - Alternatively known as special transportation when applied to social services systems. Applies to a variety of smaller, often flexibly scheduled and routed nonprofit-oriented transportation services using low-capacity vehicles, such as vans, to operate within normal urban transit corridors or rural areas. These services usually serve the needs of persons that standard mass transit services would serve with difficulty, or not at all. Common patrons are the elderly and persons with disabilities.

Passive/Open Space – Type of park with un-programmed space providing opportunities for recreation.

Peak Hour - The period in the a.m. or p.m. when the largest volume of travel is experienced.

Pedestrian/Transit-Orientation (Business Districts) – Type of urban form that contains a rich mix of residential, retail, and workplaces in setting designed for pedestrian convenience.
SARY
Pedestrian Walkway – A secured path for walking.

Person-Trip – A trip made by one person from one origin to one destination.

Population – A group of people or a number of persons that live in a geographically defined area or share particular demographic characteristics.

Population and Employment Forecasts – Predictions of population and manufacturing levels for a specific area and time period.

Project Development (PD) – The phase a proposed project undergoes once it has been through the planning process. The project development phase is a more detailed analysis of a proposed project's social, economic, and environmental impacts and various project alternatives. What comes from the project development phase is a decision reached through negotiation among all affected parties, including the public. After a proposal has successfully passed the project development phase, it may move to preliminary engineering, design, and construction.

Project Manager (PM) - Individual who manages and is accountable for projects from Scope Development through completion of construction.

Public Authority - A federal, state, county, town or township, Native American tribe, municipal or other local government or instrumentality with authority to finance, build, operate, or maintain toll or toll-free transportation facilities.

Public Comment - A statement of fact or opinion, especially a remark that expresses a personal reaction or attitude, received via a phone call or discussion, e-mail, or letter.

Public Information Officer (PIO) - The individual in an agency responsible for disseminating information and responding to inquiries from the media.

Public Involvement - The process by which public concerns, needs, and values are solicited and incorporated into decision-making.

Public Involvement Action Plan (PIAP) - A written plan of public involvement strategies and activities for a specific transportation plan or project. The PIAP provides a systematic approach to how the outcomes of public involvement activities are integrated into the decision-making process.

Public Participation - The active and meaningful involvement of the public in the development of transportation plans and improvement programs. The Intermodal Surface Transportation Efficiency Act (ISTEA) and subsequent regulations require that state departments of transportation and MPOs proactively seek the involvement of all interested parties, including those traditionally underserved by the current transportation system.

Public Road - Any road or street under the jurisdiction of and maintained by a public authority and open to public traffic.

Q

R

Reconstruction - Any work that includes a lane addition (including auxiliary, acceleration and/or deceleration lanes or any extension thereof), use of a shoulder as a through lane, changes in the width of traveled way, pavement structure replacement, any changes in horizontal alignment, complete deck replacement and parapet replacement.

Projects that re-stripe the roadway to bring the width of through lanes up to the required design value by utilizing a portion of the existing shoulder may be classified under 3R (resurfacing) provided that a design exception is not required. When a project uses the existing shoulder width in its entirety for through lane use, the roadway cross section has been change significantly and therefore the project is to be classified as a reconstruction. Those projects that include widening of the shoulders may be classified as 3R (rehabilitation). Minor widening is defined as a widening, within existing right of way, only to upgrade lanes and/or shoulders to the required design value, exclusive of a full lane addition.

Record of Decision (ROD) - Document prepared by FHWA which presents the basis for which the decision summarize any mitigation measures that will be incorporated in the project and documents any required Section 4(f) approval. Further Federal funding may not be secured for a project until a ROD has been signed.

Recreational Use Type – Primary focus of recreational activity (activity based – sports fields; resource-based – beaches.)

Region - An entire metropolitan area including designated urban and rural subregions; may include groups of counties, etc.

Regionally Significant - A term which has been defined in federal transportation planning regulations as "a project...that is on a facility which serves regional transportation needs...and would normally be included in the modeling of a metropolitan area's transportation network, including, at a minimum, all principal arterial highway and fixed guideway transit facilities that offer a significant alternative to regional highway travel."

Religious Facilities – Buildings or grounds used by religious organizations.

Religious Facility Type – Classification of building use (e.g. sanctuary, shrine, retreat, camp).

Relocatee – Any occupant that is eligible for relocation assistance and relocation payments.

Relocation - The removal of occupants of residential and/or business properties as a result of NJDOT's acquisition of property in order to build or improve one of its facilities,

Resident Student Population – Number of students living on-campus.

Retail-Oriented (Business District) – District where the retail component represents the largest percentage of land uses.

Reverse Commute - Commuting against the main directions of traffic. Often refers to the central city to suburb commute.

Right of Way (ROW) - Priority paths for the construction and operation of highways, light and heavy rail, railroads, etc.; (ROW) real property that is used for transportation purposes; (R/W) defines the extent of the corridor that can be used for the road and associated drainage.

Rehabilitation - Any work that includes:

- Any item in a resurfacing or restoration project
- New concrete median barriers
- Rehabilitation of existing structures
- New signals
- New sign structures (sign bridge, cantilever and bridge mount)
- Access revisions (full compliance with NJ State Highway Access Management Code)
- Minor widening (see Reconstruction)
- Type 2 noise barriers

Restoration - Any work that includes:

- Any item contained in a resurfacing project
- Upgrading existing signals
- Large signs (constructed on breakaway or non-breakaway supports)
- Replacement of concrete medial barriers
- New underdeck, high mast, offset, or conventional lighting systems
- New impact attenuators
- New curb and/or sidewalk
- Regrading existing berm section
- Jacking of concrete slabs
- Bridge deck restoration and component patching
- Structure repairs (includes rehabilitation or replacement of structural components in kind due to severe corrosion, cracking, collision damage and spalling; may be stringers, bearings, pier columns, etc.)
- Landscape improvements
- Access revisions (same as a Resurfacing project)

Resurfacing - Any work that includes:

- Minor amounts of new right of way and/or easements (work will primarily be within existing right of way)
- Pavement milling, resurfacing, or repair
- Bridge bituminous resurfacing
- Bridge deck patching
- Joint replacement and/or repair
- Raised pavement markers
- Replacement of existing impact attenuators
- Repair/replacement of beam guiderail
- Resetting beam guiderail
- New beam guiderail installation
- Small signs (constructed on bendaway supports)
- Upgrading existing lighting systems (underdeck, high mast, offset of conventional systems)
- Replacement of existing curb and/or sidewalk
- Modification of existing sidewalk/curb to comply with Americans with Disabilities Act (ADA) requirements.
- Channelizing, division and refuge islands (without widening the total pavement width)
- Upgrading existing drainage systems (replacing existing inlets, replacing existing pipe, plugging pipe, cleaning pipe and new inlets tied into the existing system)
- Access revisions (only as a consequence of one or more of the above items of work or as a result of a drive way accident analysis)
- Restriping (see Reconstruction)

S

Safe Routes to School / Grants (SRTS)- A federal, state and local effort to enable and encourage children, including those with disabilities, to walk and bicycle to school - and to make walking and bicycling to school safe and appealing.

Sanctuary (Religious Facilities) – A place for public worship.

School Bus Routes – Routes assigned to school buses.

Scenic Byway Program - Program to establish scenic byways which are typically secondary roads having significant cultural, historic, scenic, geological, or natural features. They often include vistas, rest areas, and interpretive sites in harmony with the scenic characteristics of the road.

Section 4(f) - Generally accepted term to mean the process of complying with the requirements to document that there are no prudent or feasible alternatives to the "use" of publicly owned parks, recreation areas, wildlife refuges and historic sites. Originated from Section 4(f) of the 1966 DOT Act re-codified as Section 303 in Title 49.

Section 4(f) Individual or Self-Standing - For projects classified as a CE and which use property protected under Section 4(f), and which do not meet the criteria of either Temporary Occupancy or one of the Programmatic Section 4(f)'s, then a separate document must be prepared (an Individual or Self-Standing Section 4(f)) which presents the evaluation of alternatives to avoid the use of Section 4(f) land and the

evaluation of all possible measures to minimize harm to such lands. Section 4 (f) Programmatic - FHWA has prepared, processed and signed several Programmatic Section 4(f) documents, which if the project's use of the Section 4(f) property meets the criteria of these document, Individual Section (4) documents do not need to be prepared and the Section 4(f) approval can be done at the FHWA district level.

Section 106 – The portion of the National Historic Preservation Act that requires Federal agencies to consider the effects of their undertakings on cultural resources. The head of any such federal agency is directed to afford the Advisory Council on Historic Preservation a reasonable opportunity to comment with regard to such undertakings.

Service Zone – Designated zone or area for which a service is provided by an entity.

Shuttle - Usually a service provided with an up-to-20 passenger vehicle connecting major trip destinations and origins on a fixed- or route deviation basis. Shuttles can provider feeder service to main transit routes, or operate in a point-to-point or circular fashion.

Significant – A prehistoric or historic district, site, building, structure, or object meeting one or more of the Criteria for Evaluation used in considering National Register eligibility. Significance is achieved through association with events or important persons, distinctive physical characteristics, or the potential to yield important information.

Single-Occupant Vehicles (SOVs) - A SOV is a privately operated vehicle with the driver as the only occupant.

Site – The location of an event, a prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself possesses historic, cultural, or archaeological value. Examples include battlefields, campsites and shipwrecks.

Site Boundary – The area limits of a building site.

Small Business – A business having not more than 500 employees working at the site being acquired or displaced by a program or project, which site is the location of economic activity. Sites occupied solely by outdoor advertising signs, displays, or devices do not qualify as a business for purposes of the payment for reestablishment expenses.

Social Equity - The provision of affordable, efficient and accessible transportation services to all people regardless of race, ethnicity, income, gender, or disability. A socially equitable transportation system provides all people with convenient access to meaningful jobs, services and recreational opportunities.

Social Service Facility – A facility that provides public assistance services for persons in the community.

Soft Costs - A project's engineering, review and incidental costs (such as Department salaries and overhead, consultant preliminary engineering, utility preliminary engineering, construction engineering, right of way plan preparation, and cultural resource mitigation).

South Jersey Transportation Planning Organization (SJTPO) - The Metropolitan Planning Organization (MPO) serving Atlantic, Cape May, Cumberland, and Salem counties in South Jersey.

Special Designation – An official designation of an area (e.g., Community Redevelopment Area).

Specifications - The compilation of provisions and requirements for the performance of prescribed work.

- Standard Specifications. A book of specifications approved for general application and repetitive use.
- Supplemental Specifications. Approved additions and revisions to the Standard Specifications.
- Special Provisions. Revisions to the Standard and Supplemental Specifications applicable to an individual project.

Stakeholder – People who may be affected by a project or have an interest in its outcome. They can include residents, employees, travelers, businesses, modal entities, organizations, etc.

State Highway Department - The department, commission, board, or official of any state responsible for highway construction, maintenance and management.

State Historic Preservation Officer (SHPO) – The official appointed or designated pursuant to Section 101(b)(1) of the National Historic Preservation Act to administer the state historic preservation program or a representative designed to act for the State Historic Preservation Officer. The SHPO consults with federal and state agencies during Section 106 review, reviews National Register nominations, and maintains file data on cultural resources.

State Implementation Program (SIP) – A plan mandated by the Clean Air Act that contains procedures to monitor, control, maintain and enforce compliance with the National Ambient Air Quality Standards (NAAQS).

State Licensing Agency – Any state board, commission, department, or agency that issues any occupational or professional license, permit or registration.

State Transportation Improvement Program (STIP) - The STIP serves as the comprehensive, one-volume guide to major transportation improvements planned in the State of New Jersey and as the reference document required under federal regulations (23 CFR 450.216) for use by the Federal Highway Administration and the Federal Transit Administration in approving the expenditure of federal funds for transportation projects in New Jersey.

Statewide Capital Investment Strategy (SCIS) - The 10 Year Statewide Capital Investment Strategy is a decision-making tool used to develop investment options for transportation program categories based upon goals, objectives, and performance measures. The SCIS represents an "asset management" approach to addressing our transportation needs. Asset Management is a systematic, comprehensive approach and process for maintaining, upgrading and operating physical assets cost-effectively.

Swim Lane Flow Chart - A Swim Lane Flow Chart is a special type of flow chart that shows the steps or activities in a work flow but separates them by functional work areas, such as Project Management, Design or Construction. They are displayed in rows horizontally on the page. These horizontal rows look a similar to swim lanes that you might find at a swim meet. There's more information on the Capital Project Delivery portion of the NJDOT website.

Substandard Design Element - A design element that does not meet the specified design value.

Surface Transportation Policy Project (STPP) - A national public interest group dedicated to ensuring that transportation policy and investments help conserve energy, protect environmental and aesthetic quality,

strengthen the economy, promote social equity, and make communities more livable; emphasizes the needs of people, rather than vehicles, in assuring access to jobs, services and recreational opportunities.

T

Technical Advisory Committee (TAC) - A standing committee of most metropolitan planning organizations (MPOs). The function of a TAC is to provide advice on plans or actions of the MPO from planners, engineers and other staff members (not general citizens).

Technical Environmental Study (TES) - Document that contains the technical detail by subject of studies done to evaluate the environmental impacts of a proposed project. Ecology is an example.

Threshold – The point at which potential impacts (i.e., socioeconomic, environmental) may result. For example, if a proposed project would exceed specified decibel levels, potential adverse effects may result.

Traditional Cultural Properties – Properties associated with cultural practices or beliefs of a living community. These practices or beliefs must be rooted in that community's history and be important in maintaining the continuing cultural identity of the community.

Traffic Analysis Zone (TAZ) - The smallest geographical area routinely used for computer travel simulation. The number of dwellings, population, employment, etc. per TAZ are estimated for existing and future years, for subsequent use in trip generation.

Transit-Oriented Development (TOD) - A mixed use community or neighborhood designed to encourage transit use and pedestrian activity.

Transit Routes/Service Areas – Data identifying an area served by transit including travel routes and the area from which ridership is generated.

Transit Village - The areas around transit stations may be redeveloped or revitalized using design standards of transit-oriented development (TOD) to form Transit Villages. TOD helps municipalities create attractive, vibrant, pedestrian-friendly neighborhoods where people can live, shop, work and play without relying on automobiles.

Transportation Demand Management (TDM) – Strategies to reduce peak period congestion which focus on managing travel demand; includes shifting solo drives to carpools or transit, staggered work hours, telecommuting and other similar concepts.

Transportation Equity Act for the 21st Century (TEA-21) - A law enacted in 1998; authorized Federal funding for highway, transit and other surface transportation programs.

Transportation Improvement Program (TIP) - A priority list of transportation projects developed by a metropolitan planning organization that is to be carried out within the three year period following its adoption. The Transportation Improvement Program must include documentation of federal and state funding sources for each project and be consistent with adopted local comprehensive plans.

Transportation Management Area (TMA) - A special designation given to all urbanized areas with a population over 200,000 (or other area when requested by the Governor and MPO). These areas must comply with special transportation planning requirements regarding congestion management systems, project selection and certification; requirements identified in 23 CFR 450.300-.336.

Transportation Research Board (TRB) - A unit of the National Research Council whose purpose is to advance knowledge about transportation systems; publishes the Highway Capacity Manual.

Transportation Systems Management (TSM) - Strategies to improve the efficiency of the transportation system through operational improvements such as the use of bus priority or reserved lanes, signalization, access management, turn restrictions, etc.

Trip Generators/Attractors – Uses within a community that generate or attract high trip volumes, usually identified in transit plans, transportation disadvantaged service plans, pedestrian/bicycle plans, and long range transportation plans.

U

Uneconomic Remnant – The term uneconomic remnant means a parcel of real property in which the owner is left with an interest after the partial acquisition of the owner's property, and which the NJDOT has determined has little or no value or utility to the owner.

U.S. Census – Demographic and population data collected every 10 years for the United States government.

United States Department of Transportation (USDOT) - Agency responsible for transportation at the federal level.

Unified Planning Work Program (UPWP) - Developed by Metropolitan Planning Organizations (MPOs); identifies all transportation and transportation air quality activities anticipated within the next one to two years, including a schedule for completion of activities, the entity completing the activities, and products to be produced.

United States Environmental Protection Agency (USEPA) - An executive agency of the United States Government responsible for managing federal efforts to control air and water pollution, radiation and pesticide hazards, ecological research, and solid waste disposal. It serves as a clearinghouse and commenting agency on all Environmental Impact Statements.

Urban Form (Business Districts) – Characteristic development form of an area (e.g., pedestrian or transit-oriented verses auto-orientated).

V

W

Weight Limits (Bridges) – The maximum weight load a bridge can accommodate

Weiswasser Cases – Property valuation where the NJDOT provides a piece of replacement land to facilitate the cure. Requires consideration of the property with the additional land and consideration without the additional land. The report should reflect two costs, one with the additional land in place and one without the land in place.

Written Notice – No person lawfully occupying the real property to be acquired shall be required to move from a dwelling, or to move a business or farm operation, with not less than 90 days written notice of the date by which such move is required. Immediately upon the project's transmittal to the District office each owner will be notified in writing via certified mail that the Department is proceeding to acquire their property. Each notification will contain a copy of the booklet, "How Property is Purchased for Transportation Projects", which describes the various aspects of the acquisition program and an Individual Parcel Map (IPM). Source 24.102(b)

X

Y

Z

Zone - The smallest geographically designated area for analysis of transportation activity. A zone can be from one to 10 square miles in area. Average zone size depends on total size of study area.

Zoning – A code of development standards set in place by municipalities to control land use. Zoning normally specifies setbacks, building size, development density (bulk requirements) and parking ratios. It should be noted that some zoning codes only address the bulk limits in that zone while a separate portion of the municipal code deals with parking ratios and "aesthetic" standards for development of a site over and above the zoning standards.

From http://www.state.nj.us/transportation/capital/pd/acronyms.shtm

http://www.dot.state.il.us/desenv/CIAManual.pdf

LEGAL AUTHORITY

LEGISLATION AND U.S. CODE

Civil Rights Act of 1964, 42 U.S.C. 2000d-2000d-4 Pub. L. 88-352- Nondiscrimination in Federally Assisted Programs, primary Title VI legislation--mentions race, color, and national origin. Section 601 states that "No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." (Proscribes discrimination in impacts, services, and benefits of, access to, participation in, and treatment under Federal-aid recipients, programs or activities)

Highway Beautification Act of 1965--Pub. L. 89-285, Oct. 22, 1965, 79 Stat. 1028, amended by Pub. L. 97-449, Sec. 2(a), Jan. 12, 1983, 96 Stat. 2439.

The National Historic Preservation Act (NHPA) of 1966 is the keystone of historic preservation law. It establishes the basic elements of the Nation's historic preservation program. At the heart of the program is the National Register of Historic Places (NRHP), a listing of the historic buildings, sites, districts, structures, and objects that are significant in American history, archaeology, culture, or engineering. Section 106 of the NHPA and its implementing regulations, 36 CFR Part 800, requires federal agencies and their agents to "take into account" the effects that any undertaking may have on significant cultural resources (those listed or eligible for listing in the NRHP) that are located within the "Area of Potential Effect (APE)" for the project. The APE is the geographic area within which project activities could potentially impact the qualities that make a historic resource significant.

The Section 106 regulations mandate consultation, defined as "process of seeking, discussing, and considering the views of other participants, and, where feasible, seeking agreement with them regarding matters arising in the section 106 process"(36 CFR Part 800 Section 800.16(f)). It encourages maximum public participation and requires FDOT to seek and consider the views of the public in a manner commensurate with the nature and complexity of an undertaking and its potential effects on historic properties. It also requires consultation with federally recognized Native American Tribes, especially where the action occurs on tribal lands or involves resources of cultural or religious significance to a tribe on or off tribal lands.

The Architectural Barriers Act of 1968, Pub. L. 90-480—prescribes standards for the design, construction, and alteration of buildings to insure, whenever possible, that physically disabled persons will have ready access to, and use of, such buildings.

National Environmental Policy Act of 1969, 42 U.S.C. 4321 et seq., declares national policy to encourage harmony between human and the environment, to promote efforts which will prevent or eliminate damage to the environment, and to stimulate the health and welfare of humans; as well as creates the Council on Environmental Quality. NEPA also requires the consideration of alternatives; including the "no-build" alternative; consideration of social, environmental, and economic impacts; public involvement; and use of a systematic interdisciplinary approach at each decision-making stage of Federal-aid project development.

Federal-aid Highway Act of 1970, 23 U.S.C. 109(h) added by Sec. 136(b) of Pub. L. 91-605, 84 Stat. 1734 (Dec. 31, 1970): first appearance of protection for communities/human environment.

Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, 42 U.S.C. 4601 et seq., as amended by the Surface Transportation and Uniform Relocation Assistance Act of 1987 (STURAA--Pub. L. No. 100-17)--also known as the Uniform Act as Amended--(see 49 CFR Part 24)--provides for uniform and equitable treatment of persons displaced from their homes, businesses, or farms due to Federal-aid programs.--"For the fair and equitable treatment of persons displaced as a direct result of programs or projects undertaken by a Federal agency or with Federal financial assistance." Provides for fair treatment of persons displaced by Federal and Federal-aid programs and projects.

Federal-aid Highway Act of 1973, 23 U.S.C. 324: "Prohibition of discrimination on the basis of sex"--includes "sex" as a protected group with wording similar to Title VI of the Civil Rights Act of 1964.

Rehabilitation Act of 1973, 29 U.S.C. 794--Section 504 includes "handicapped" (physical or mental) as a protected group with wording similar to Title VI of the Civil Rights Act of 1964 (see also Rehabilitation, Comprehensive Services, and Developmental Disabilities Act of 1978). Section 504 provides "(N)o qualified handicapped person shall, solely by reason of his handicap, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity that receives or benefits from Federal financial assistance." Prohibits discrimination based on physical or mental handicap.

Age Discrimination Act of 1975, 42 U.S.C. 6101 (see also 10 CFR 1040.1 et seq. and 45 CFR 90.1 et seq.)--provides that: "(N)o person in the United States shall, on the basis of age, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance as a protected group with wording similar to Title VI of the Civil Rights Act of 1964.
Prohibits discrimination based on age.

Farmland Protection Policy Act, Title XV of the Agriculture and Food Act of 1981 (Pub. L. 98-98, 7 U.S.C. 4201-09)--directs Federal agencies to identify and take into account the adverse effects of Federal programs on the preservation of farmland; consider alternative actions to lessen adverse effect; and assure, to the extent practicable, such programs are compatible with State and local government, and private programs and policies to protect farmland.

Surface Transportation and Uniform Relocation Assistance Act of 1987 STURAA--Pub. L. 100-17)--also known as the (1970) Uniform Act as Amended--(see 49 CFR Part 24)--provides for uniform and equitable treatment of persons displaced from their homes, businesses, or farms due to Federal-aid programs. It provides: "(F)or fair, uniform, and equitable treatment of all affected persons; ... (and) minimizing the adverse impact of displacement...(to maintain)...the economic and social well-being of communities; and...to establish a lead agency and allow for State certification and implementation." Updates the 1970 Act and clarified the intent of Congress in programs and projects which cause displacement or other otherwise necessitate acquisition of property.

Civil Rights Restoration Act of 1987 (Pub. L. 100-259)--restores the broad scope of coverage and adds to Title VI of the Civil Rights Act of 1964 by adding a new section--Section 606. Clarifies the original intent of Congress on Title VI of the 1964 Civil Rights Act, Title IX of the Education Amendments of 1972, the Age Discrimination Act of 1975, and Section 504 of the Rehabilitation Act of 1973. Restores the broad, institution-wide scope and coverage of the non-discrimination statutes to include all programs and activities of Federal-aid recipients, sub-recipients, and contractors, whether such programs and activities are federally assisted or not.

Fair Housing Act Amendments of 1988 (42 U.S.C. 3601-3631)—makes religion a protected group for relocation purposes with wording similar to Title VI of the Civil Rights Act of 1964.

Americans with Disabilities Act of 1990, (Pub. L. 101-336, 42 U.S.C.12101-12213)-- July 26, 1990, Title II - Public Services; and Title III -Public Accommodations and Services Operated by Private Entities. "No qualified individual with a disability shall, by reason of such disability, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination by a department, agency, special purpose district, or other instrumentality of a State or a local government." Provides enforceable standards to address discrimination against individuals with disabilities.

Intermodal Surface Transportation Efficiency Act of 1991, Pub. L. No. 102-240, December 18, 1991--also known as ISTEA--provides for flexible funding of modes of surface transportation and supports substantial emphasis on early program planning and environmental consideration, including transportation enhancements, bicycle and pedestrian programs, and a National Trails system. It enables corridor preservation. It also encourages public participation be extended into planning efforts. It mentions Indian tribal government involvement in planning and describes women to be presumed to be socially and economically disadvantaged individuals for purposes of Disadvantaged Business Enterprises section. Its Declaration of Policy includes improved mobility for elderly, disabled, and economically disadvantaged and social benefits must be considered...with particular attention to...other aspects of the quality of life...

The 1998 Transportation Equity Act of the 21st Century (TEA 21) PL 105-178, repeated the call to balance protection of the natural and human environment and the financial commitment to transportation improvements. The establishment of Environmental Stewardship and Streamlining as one of the FHWA's three "Vital Few Goals" grew out of this legislation. Objective #1 of this goal calls for "Integrated approaches to multimodal planning, the environmental process and project development at a systems level; and/or Context Sensitive Solutions (CSS) at a project level."

The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), August 10, 2005 is the new federal transportation law that will provide federal funding for highway and transit improvements through 2009. SAFETEA-LU addresses challenges such as improving safety, reducing traffic congestion, improving efficiency in freight movement, increasing intermodal connectivity, and protecting the environment.

National Highway System Designation Act of 1995, Pub. L. No. 104-59, November 28, 1995--establishes the NHS and its design criteria which, among other things, may take into Account...(A) the constructed and natural environment of the area, (B) the community ...impacts of the activity..., and (C) access for other modes of transportation. It also allows for an advance payment option and credit for donations of funds, materials, and services toward the State match for transportation enhancement activities.

23 U.S.C. 101--Definitions and declaration of policy--(a) 10 eligible transportation enhancement activities stated. Specific monies set-aside under the Surface Transportation Program for TE activities.

23 U.S.C. 109--"Highway"--Standards for the Secretary of Transportation

23 U.S.C. 109(h)--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. This section states specific potential sociocultural effects that need to be addressed.

23 U.S.C. 109(i)--develop noise standards compatible with different land uses and mentions noise mitigation measures such as acquisition of additional ROW, construction of physical barriers, and landscaping.

23 U.S.C. 109(m)--no approval for a project that will result in the severance or destruction of an existing major route for non-motorized traffic and light motorcycles unless the project provides a reasonably alternate route or such a route exists.

23 U.S.C. 128--"Public hearings"--State highway department certification of a public hearing, or opportunity for one, at a convenient location; of allowing persons whose property will be affected or who are contiguous to the project "to express any objections they may have." The State highway department must also certify that it has "considered the economic and social effects" of a project, and that the project is consistent with the goals and objectives of urban planning as promulgated by the community. The certification is accompanied by a report " which indicates the consideration given to the economic, social,...and other effects...raised during the hearing or...otherwise considered."

23 U.S.C. 133--Surface transportation program--(b) makes transportation enhancement activities eligible projects for STP funds and (c) allocates 10 percent of annual apportioned funds under Section 104(b)(3) only for TE activities. Also eligible for funding is mitigation of damage to wildlife, habitat, and ecosystems caused by a transportation project.

23 U.S.C. 134--"Metropolitan planning"--Transportation Improvement Plan and Long-Range Plan, encourages and promotes use of various modes of transportation; encourages cooperation with State and local officials developing transportation plans and programs; defines urban area as more than 50,000 population; requires projects in urban areas be "based on a continuing comprehensive transportation planning process;" and requires States to consult with and consider the views of responsible public officials in urban areas. In developing the transportation plan 15 factors to consider include the likely effect of transportation policy decisions on and consistency with land-use and development plans; need to relieve and prevent congestion where it does not yet occur; access to intermodal transportation facilities, national parks, recreation areas, and monuments and historic sites; preservation of rights-of-way; and overall social, economic, energy, and environmental effects of transportation decisions. Plans are to be financially constrained and consistent with Statewide (air quality improvement) Implementation Plans, and Metropolitan Planning Organizations (MPOs) are to provide reasonable notice of and an opportunity to comment on the plans.

23 U.S.C. 135--Statewide planning--Statewide Transportation Improvement Plan, Statewide Long-Range Transportation Plan, and long-range bicycle and pedestrian plan--provides for a continuous planning process for consideration of all modes in solving transportation problems, and incorporates the MPO plans above. State DOTs are to consider 23+ items including transportation needs of non-metropolitan areas; recreational travel and tourism; strategies to include bicycle and pedestrian facilities; effect of transportation decisions on and consistency with land-use and development plans; preservation of rights-of-way; access to intermodal transportation facilities, national parks, recreation and scenic areas, and monuments and historic sites; investment strategies to improve rural economic growth and tourism; concerns of Indian tribal governments having jurisdiction; and overall social, economic, energy, and environmental effects of transportation decisions. Plans are to be financially constrained and consistent with Statewide (air quality improvement) Implementation Plans, and State DOTs are to provide reasonable opportunity to comment on the Statewide transportation improvement and long-range plans.

23 U.S.C. 138--Preservation of parklands--(a.k.a. Section 4(f)) a national policy that special efforts should be made to preserve the natural beauty of the countryside and public park and recreation and historic sites.

23 U.S.C. 140--"Nondiscrimination"--State employment assurances. Refers to race, color, creed, national origin, or sex.

23 U.S.C. 143--Economic growth center development highways—authority to make grants to States for projects which promote desirable development of the Nation's natural resources, to revitalize and diversify the economy of rural areas and smaller communities, and to improve living conditions and the quality of the environment.

23 U.S.C. 217--"Bicycle transportation and pedestrian walkway"-- encourages energy conservation and multiple use of ROW, including development and improvement of pedestrian walkways.

23 U.S.C. 315--"Rules, regulations and recommendations"--allows Federal promulgation of rules and regulations to carry out Title 23 of the U.S. Code.

23 U.S.C. 324--"Prohibition of discrimination on the basis of sex"-- provides that: "(N)o person shall on the ground of sex be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal assistance under this title or carried on under this title." (Prohibits discrimination on the basis of sex with wording similar to Title VI of the Civil Rights Act of 1964.)

29 U.S.C. 794--Nondiscrimination under Federal grants and programs: (a) Promulgation of rules and regulations--individuals with disabilities shall not be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance or under any program or activity conducted by any Executive agency or by the United States Postal Service; (b) "program or activity" defined; (c) significant structural alterations by small providers; and (d) standards used in determining violation.

42 U.S.C. 2000d-2000d-4--Prohibition against exclusion from participation in, denial of benefits of, and discrimination under federally assisted programs on ground of race, color, or national origin.

42 U.S.C. 4321 et seq.--National Environmental Policy—Congressional declaration of purpose--The purposes of this chapter are: To declare a national policy which will encourage productive and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; to enrich the understanding of the ecological systems and natural resources important to the Nation; and to establish a Council on Environmental Quality.

42 U.S.C. 4601 et seq.--Uniform Relocation Assistance and Real Property Acquisition Policies for Federal and Federally Assisted Programs.

42 U.S.C. 12101-12213--Codification of the Americans with Disabilities Act of 1990-- Equal Opportunity for Individuals with Disabilities.

49 U.S.C. 303--(a.k.a. 4(f))--Policy on lands, wildlife and waterfowl refuges, and historic sites (a) special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites; (b) cooperate and consult with the DOI, HUD, USDA, and the States in developing transportation plans and programs that include measures to maintain or enhance the natural beauty of lands crossed by transportation activities or facilities; and (c) approve a transportation program or project requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance, or land of an historic site of national, State, or local significance (as determined by the Federal, State, or local officials having jurisdiction over the park, area, refuge, or site) only if: (1) there is no prudent and feasible alternative to using that land; and (2) the program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.

49 U.S.C. 306--outlines the responsibilities of the U.S. Department of Transportation and, at (c) outlines the Secretary's authority to decide whether a recipient has not complied with applicable Civil Rights statutes or regulations, requires the Secretary to provide notice of the violation, and require necessary action to ensure compliance.

REGULATIONS

7 CFR Part 658--Farmland Protection Policy; Final Rule--published in Federal Register Vol 59, No. 116, on Friday, June 17, 1994, pp. 31110-31117--implements the Farmland Protection Policy Act.

10 CFR 1040.1 et seq.--"Nondiscrimination in Federally Assisted Programs."

23 CFR 200--Title VI Program and Related Statutes--Implementation and Review Procedures--includes race, color, religion, sex, and national origin. The FHWA_s regulations implementing Title VI.

23 CFR 200.5--Definitions: (a) Affirmative action; (b) Beneficiary; (c) Public participation; (d) Compliance; (e) Deficiency status; (f) Discrimination; (g) Facility; (h) Federal assistance; (I) Noncompliance; (j) Persons; (k) Program; (l) State highway agency; (m) Program area officials; (n) Recipient; (o) Secretary; and (p) Title VI. Program incorporates subsequent Federal-aid Highway Acts and related statutes; thus, including the Age Discrimination Act and Rehabilitation Act among others.

23 CFR 200.7--FHWA Title VI Policy.

23 CFR 200.9--(State highway agency responsibilities)-- State Title VI assurances and to "Develop procedures for the collection of statistical data...of participants in, and beneficiaries of State highway programs, i.e., relocatees, impacted citizens and affected communities." 23 CFR 200.13--Certification acceptance--Title VI and related statutes requirements apply to all State highway agencies and FHWA divisions; they shall monitor the Title VI aspects of the program by conducting annual reviews and submitting required reports.

23 CFR 450, Planning Assistance and Standards--Subpart B covers Statewide Transportation Planning_ and Subpart C covers Metropolitan Transportation Planning and Programming. Designed to achieve a continuing, cooperative, and comprehensive transportation planning process that results in plans and programs consistent with the comprehensive development of urbanized and non-urbanized areas which are to receive Federal-aid funds.

23 CFR 633--Subpart A specifies required contract provisions to be included in all Federal-aid construction contracts, including Title VI and other proscriptions included in Form FHWA 1273. Subpart B, Appendix A specifies the types of contracts to which Title VI of the 1964 Civil Rights Act apply.

23 CFR 710--Right-of-Way--Subpart B--State Highway Department Responsibilities; Subpart C--Reimbursement provisions; Subpart D--Administrative Settlements, Legal Settlements, and Court Awards; Subpart E--Federal Land Transfers and Direct Federal Acquisition; Subpart F--Functional Replacement of Real Property in Public Owner-ship; Subpart G--Right-of-Way Revolving Fund (advance acquisition).

23 CFR 750--Highway Beautification--includes outdoor advertising adjacent to the Interstate; directional and official signs; exempt signs; and outdoor advertising control.

23 CFR 771--Environmental Impact and Related Procedures—primary guidance for the evaluation of social, economic, and environmental impacts in project development as well as early and continuing coordination with the public--1980 and 1987

23 CFR 771.105(f)--FHWA Policy on Title VI--expands on 23 CFR 200.7 and names categories covered with wording similar to Title VI of the Civil Rights Act of 1964--race, color, national origin, age, sex, handicap.

23 CFR 771.111--Early coordination, public involvement, and project development. (a) Early coordination with appropriate agencies and the public aids in determining the type of environmental document an action requires, the scope of the document, the level of analysis, and related environmental requirements. (b) The Administration will identify the probable class of action as soon as sufficient information is available. (h) For the Federal-aid highway program: (1) Each State must have procedures approved by the FHWA to carry out a public involvement/public hearing program.

23 CFR 1235--FHWA and NHTSA joint regulation governing Uniform System for Parking for People with Disabilities.

28 CFR 35--The Department of Justice's regulations governing nondiscrimination on the basis of disability in State and local government services.

28 CFR 36--The Department of Justice's regulations governing nondiscrimination on the basis of disability by public accommodations and commercial facilities.

28 CFR 41--Implementation of Executive Order 12250, Nondiscrimination on the basis of handicap in federally assisted programs.

28 CFR 42--Subpart C--The Department of Justice's regulations implementing Title VI of the Civil Rights Act of 1964.

28 CFR 42.200--Subpart D--"Nondiscrimination in Federally Assisted Programs-- Implementation of Section 815(c)(1) of the Justice System Improvement Act of 1979"--Also implements Executive Order 12138.

28 CFR 50.3--The Department of Justice's Guidelines for the enforcement of Title VI, Civil Rights Act of 1964.

40 CFR 1500-1508 (CEQ Regulations on Implementing NEPA), effective July 30, 1979-- Relates primarily to the natural and physical environment with some references to the human environment. Provides for environmental procedures and document format into which social and economic impact assessment can be fitted.

40 CFR 1502.22--"Incomplete or unavailable information"--"When an agency is evaluating reasonably foreseeable significant adverse effects on the human environment in an [EIS] and there is incomplete or unavailable information, the agency shall always make clear that such information is lacking." Provides a procedure if such information is essential to a reasoned choice among alternatives and costs of obtaining it are or are not exorbitant. Applies only to EIS projects.

45 CFR 90.1--Nondiscrimination on the Basis of Age in Programs and Activities Receiving Federal Financial Assistance--Age Discrimination Act of 1975, as amended, also permits federally assisted programs and

activities, and recipients of Federal funds, to continue to use certain age distinctions and factors other than age which meet the requirements of the 1975 Act and other regulations.

49 CFR 21--"Transportation"--Nondiscrimination in Federally-Assisted Programs of the Department of Transportation--Effectuation of Title VI of the Civil Rights Act of 1964--includes race, color, national origin.

49 CFR 24--"Uniform Relocation Assistance and Real Property Acquisition for Federal and Federally Assisted Programs"--DOT's regulation implementing the Uniform Act as amended in 1987 for Federal and federally assisted programs requiring compliance with nondiscrimination statutes and executive orders.

BIBLIOGRAPHY

Guidance Documents

American Association of State Highway and Transportation Officials (AASHTO). (2009). *Environmental Issues: SAFETEA-LU Overview* . Retrieved July 1, 2009, from AASHTO Web site: http://environment.transportation.org/environmental_issues/safetea_lu/

American Association of State Highway and Transportation Officials (AASHTO). (2009). *Resource for Information on Section 4(f)*. Retrieved July 1, 2009, from AASHTO Web site: http://environment.transportation.org/environmental_issues /section_4f/

American Association of State Highway and Transportation Officials (AASHTO). (2008). *Above and Beyond: The Environmental and Social Contributions of America's Highway Programs.* Retrieved July 2, 2009 from, Center for Environmental Excellence Web site: http://environment.transportation.org/center/products_programs/above_beyond.aspx

American Association of State Highway and Transportation Officials(AASHTO). (2008). *NCHRP Project 08-36, Task 66:Improved Methods for Assessing Social, Cultural, and Economic Effects of Transportation Projects*. Retrieved July 2, 2009 from Transportation Research Board Web site: http://www.trb.org/trbnet/ProjectDisplay.asp?ProjectID=1280

American Association of State Highway and Transportation Officials (AASHTO). (2005). *Synthesis of Data Needs for EA and EIS Documentation: A Blueprint for NEPA Document Content.* Retrieved July 2, 2009, from Transportation Research Board Web site: http://www.trb.org/NotesDocs/25-25(1)_FR.pdf

American Association of State Highway and Transportation Officials (AASHTO). (2004). *A Guide for Achieving Flexibility in Highway Design*.

American Association of State Highway and Transportation Officials (AASHTO). (2004). *Green Book: A Policy on Geometric Design of Highways and Streets, 5th Edition.*

Council on Environmental Quality (CEQ). *Guidance Regarding NEPA Regulations.* Retrieved July 1, 2009, from Council on Environmental Quality Web site: http://ceq.hss.doe. gov/ NEPA/regs/guidance.html

Environmental Protection Agency. (2009). *EIS Filing System Guidance for Implementing 1506.9 and 1506.10 of the CEQ Regulations.* Retrieved July 1, 2009, from Environmental Protection Agency Web site: http://www.epa.gov/oecaerth/resources/policies/nepa/fileguide.html

Environmental Protection Agency. (1984). *Environmental Protection Agency Review Manual: Policy and Procedures for the Review of Federal Actions Impacting the Environment.* Retrieved July 1, 2009, from Environmental Protection Agency Web site: http://www.epa.gov/compliance/resources/policies/nepa/nepa_policies_procedures.pdf

Federal Aid Highway Act of 1970, 23 USC 109(h) (1970).

Federal Highway Administration. (2009). *Environmental Guidebook*. Retrieved July 1, 2009, from Federal Highway Administration Web site: http://www.environment.fhwa.dot.gov/ guidebook/index.asp

Federal Highway Administration. (2009). *Legislation, Regulations, and Guidance.* Retrieved July 1, 2009, from Federal Highway Administration Web site: http://www.fhwa.dot.gov/hep/legreg.htm

Federal Highway Administration. (2009). *Transportation and Community and System Preservation (TCSP)* Retrieved July 1, 2009, from Federal Highway Administration Web site: http://www.fhwa.dot.gov/tcsp

Federal Highway Administration. (2009). *Re: NEPA*. Retrieved July 1, 2009, from Federal Highway Administration Web site: http://knowledge.fhwa.dot.gov/ReNEPA/ReNepa.nsf/home

Federal Highway Administration. (1998). Summary of Environmental Legislation Affecting Transportation. Retrieved July 2, 2009, from Federal Highway Administration Web Site: http://www.fhwa.dot.gov/environment/env_sum.htm

Federal Highway Administration, Environmental Impact and Related Procedures, 23 CFR 771 (1997).

Federal Highway Administration. (1995). *CIA: A Quick Reference for Transportation*. Retrieved July 2, 2009, from Federal Highway Administration Web site: http://www.fhwa.dot.gov/environment/cia.htm

Federal Highway Administration. (1992). *Secondary and Cumulative Impact Assessment in the Highway Project Development Process.* Retrieved July 1, 2009 from Federal Highway Administration Web site: http://nepa.fhwa.dot.gov/ReNepa/ReNepa.nsf/aa5aec9f63be385c852568cc0055ea16/845bc790d9a8949985256934006ae913/$FILE/Secondary+and+Cumulative+Impact+Assessment+in+the+Highway+Project+Development+Process.htm

Federal Highway Administration. (1987). *Guidance for Preparing and Processing Environmental and Section 4(f) Documents: FHWA Technical Advisory 6640.8A*. Retrieved July 1, 2009, from Federal Highway Administration Web site: http://www.fhwa.dot.gov/legsregs/directives/techadvs/t664008a.htm

Federal Highway Administration. *A Citizen's Guide to Transportation Decision making.* Retrieved July 1, 2009, from Federal Highway Administration Web site: http://www.fhwa.dot.gov/planning/citizen/index.htm

Federal Highway Administration. *Categorical Exclusion (CE) Documentation and Approval.* Retrieved July 1, 2009, from Federal Highway Administration Web site: http://www.environment.fhwa.dot.gov/projdev/docuce.asp

Federal Highway Administration. *Environmental Streamlining and Stewardship.* Retrieved July 1, 2009, from Federal Highway Administration Web site: http://www.fhwa.dot.gov/environment/strmlng/index.htm

Federal Highway Administration. Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). Retrieved July 1, 2009, from Federal Highway Administration Web site: http://www.fhwa.dot.gov/safetealu/

Federal Highway Administration. *Flexibility in Highway Design*. Retrieved July 2, 2009, from Federal Highway Administration Web site: http://www.fhwa.dot.gov/environment/flex/index.htm

Federal Highway Administration and Federal Transit Administration. *Joint Guidance on Purpose and Need.* Retrieved July 1, 2009, from Federal Highway Administration Web site: http://www.environment.fhwa.got.gove.guidebook/Ginterim.asp

International Association for Impact Assessment. (2009). *International Association for Impact Assessment*. Retrieved July 1, 2009, from International Association for Impact Assessment Web site: http://www.iaia.org

International Association for Impact Assessment. 2003. P*rinciples and Guidelines for Social Impact Assessment in USA*.

National Environmental Policy Act (NEPA) of 1969, 42 U.S.C. § 4321-4347 (1969).

National Research Council. (2002). *NCHRP Report 466, Desk Reference for Estimating the Indirect Effects of Proposed Transportation Projects* Retrieved July 1, 2009 from Colorado State Web site: http://ttap.colostate.edu/Library/TRB/nchrp_rpt_466.pdf

National Research Council. (2001). *NCHRP Report 456, Guidebook for Assessing the Social and Economic Effects of Transportation Projects*. Retrieved July 2, 2009, from Transportation Research Board Web site: http://onlinepubs.trb.org/Onlinepubs/nchrp/nchrp_rpt_456-a.pdf

The White House. *Council on Environmental Quality (CEQ).* Retrieved July 2, 2009, from The White House Web Site: http://www.whitehouse.gov/ceq/index.htm

Transportation Research Board. 2009*. Transportation Research Board Bookstore: NCHRP 435 Guidebook for Transportation Corridor Studies: A Process for Effective Decision-Making* http://gulliver.trb.org/bookstore/

Transportation Research Board. (2001). *Guidebook for Assessing the Social and Economic Effects of Transportation Projects.* Retrieved July 2, 2009, from Transportation Research Board Web site: http://gulliver.trb.org/publications/nchrp/nchrp_rpt_456-a.pdf

Transportation Research Board. *Environmental Analysis in Transportation Committee.* Retrieved July 1, 2009, from Institute for Transportation Research and Education Web site: http://www.itre.ncsu.edu/A1F02/default.htm

University of Minnesota Center for Transportation Studies. (2009). Retrieved July 1, 2009, from University of Minnesota Web site: http://www.cts.umn.edu/

U.S. Department of Transportation. *Useful Online Publications and Websites for Community Impact Assessment*. Retrieved July 2, 2009, from Department of Transportation Web site: http://www.planning.dot.gov/Documents/Resources/usefulOnline.htm

Community Impact Assessment

California Department of Transportation. (1997). *Community Impact Assessment, Caltrans Environmental Handbook Volume 4.* Retrieved July 2, 2009, from California Department of Transportation Web site: http://i80.dot.ca.gov/ser/vol4/envhb4.pdf

Citizens for a Better Environment and Environmental Defense Fund. *Inside the Blackbox: Making Transportation Models Work for Livable Communities*. Retrieved July 2, 2009, from Environmental Defense Fund Web site: http://www.edf.org/documents/1859_InsideBlackBox.pdf

Community Impact Assessment. (1998). *Community Impact Mitigation Case Studies.* Retrieved from Community Impact Assessment Web site: http://www.ciatrans.net/Community_Impact_Mitigation/CIM_Introduction.html

Federal Highway Administration. (2000). *Community Impact Assessment*. Retrieved July 1, 2009, from Community Impact Assessment Web site: http://www.ciatrans.net/cia_resources.html#justice

Federal Highway Administration. (2000). *Quick Reference for Transit Projects.* Retrieved July 1, 2009, from Federal Highway Administration Web site: http://www.ciatrans.net/CIA_Quick_Reference/Purpose.html

Federal Highway Administration and Federal Transit Association. (2007). *Useful Online Publications and Websites for Community Impact Assessment.* Retrieved July 1, 2009, from Federal Highway Administration and Federal Transit Association Web site: http://www.planning.dot.gov/Documents/Resources/usefulOnline.htm

Florida Department of Transportation. (2005). *Measuring the Effectiveness of CIA, Recommended Core Measures*. Retrieved July 2, 2009, from Florida Department of Transportation Web site: http://www.dot.state.fl.us/research-center/Completed_Proj/Summary_PTO/FDOT_BC353_28_rpt.pdf

Florida Department of Transportation. (2002). *Community Impact Assessment and Environmental Justice for Transit Agencies: A Reference*. Retrieved July 1, 2009 from University of South Florida Web site: http://www.nctr.usf.edu/pdf/416-05.pdf

Florida Department of Transportation. (1999). *National Community Impact Assessment Research Design Team Recommendations for Development of the Strategic Plan*. Retrieved July 2, 2009, from Florida Department of Transportation Web site: www.dot.state.fl.us/emo/pubs/phys_soc/strarecs.pdf

Florida Department of Transportation. (1997). *Report of the Working Group on Community Impact Assessment, Public Involvement & Environmental Justice* Retrieved July 2, 2009 from Florida Department of Transportation Web site: http://www.dot.state.fl.us/emo/pubs/Phys_Soc/finalcia.pdf

Florida Department of Transportation and Federal Highway Administration. (2000). *Community Impact Assessment Strategic Plan.* Retrieved July 1, 2009, from Community Impact Assessment Web site: http://www.ciatrans.net/

Illinois Department of Transportation. (2007). *Community Impact Assessment Manual.* Retrieved July 1, 2009, from Illinois Department of Transportation Web site: http://www.dot.state.il.us/desenv/CIAManual.pdf

Society for Conservation Biology. (2009). *Catalog of Conservation Social Science Tools*. Retrieved July 2, 2009, from Society for Conservation Biology Web site: http://www.conbio.org/workinggroups/sswg/catalog/

University of Kansas. (2007). *The Community Toolbox* . Retrieved July 2, 2009, from the University of Kansas Web site: http://ctb.ku.edu/en/

University of South Florida. (1998). *National Community Impact Assessment Workshop Summary.* Retrieved July 1, 2009 from Florida Department of Transportation Web site: http://www.dot.state.fl.us/emo/pubs/Phys_Soc/summary.pdf

University of Southern Florida Center for Urban Transportation Research. (2009). *CIA Handbook.* Retrieved July 1, 2009, from University of Southern Florida Web site: http://www.cutr.usf.edu/pub/files/cia.shtml

University of Southern Florida Center for Urban Transportation Research. (2002). *CIA and EJ for Transit: A Reference.* Retrieved July 1, 2009, from University of Southern Florida Web site: http://www.cutr.usf.edu/pub/files/CIA%20%20EJ%20for%20Transit.pdf

University of Southern Florida Center for Urban Transportation Research. (2001). *CIA in Florida Case Studies*. Retrieved July 1, 2009, from University of Southern Florida Web site: http://www.cutr.usf.edu/pub/files/CIA%20in%20Florida.pdf

Context Sensitive Solutions and Context Sensitive Design

American Association of State Highway and Transportation Officials (AASHTO). (2009). *Center for Environmental Excellence by AASHTO: Environmental Justice*. Retrieved July 1, 2009, from the AASHTO Web site: http://environment.transportation.org/environmental_issues/environmental_justice/docs_reports.aspx

American Association of State Highway and Transportation Officials (AASHTO). (2009). *Center for Environmental Excellence by AASHTO: Context Sensitive Solutions*. Retrieved July 1, 2009, from the AASHTO Web site: http://environment.transportation.org/environmental_issues/context_sens_sol/

California Department of Transportation.(2009). *Context Sensitive Solutions*. Retrieved July 2, 2009, from California Department of Transportation Web site: http://www.dot.ca.gov/hq/oppd/context/

Center for Transportation and the Environment, (2007). *Results of Joint AASHTO/FHWA Context Sensitive Solutions Strategic Planning Process.* Retrieved August 28, 2009, from http://environment.transportation.org/pdf/context_sens_sol/portlandsummary_final.pdf

Context Sensitive Solutions.org. (2005). CSS National Dialog Call for Best Practices. Retrieved July 1, 2009, from Context Sensitive Solutions.org Web site: http://contextsensitivesolutions.org/

Federal Highway Administration (2010). *Livability Initiative*. Retrieved August 6, 2010 from http://www.fhwa.dot.gov/livability/.

Federal Highway Administration. (2008). *FHWA and Context Sensitive Solutions (CSS).* Retrieved July 1, 2009, from Federal Highway Administration CSS Web site: http://www.fhwa.dot.gov/context/index.cfm

Georgia Department of Transportation. (2006). *Manual Resources*. Retrieved July 2, 2009, from Georgia Department of Transportation Web site: http://wwwb.dot.ga.gov/csd/resources/links.html

Illinois Department of Transportation. (2006). *Context Sensitive Solutions Strategic Plan for the Illinois Department of Transportation*. Retrieved July 2, 2008, from Illinois Department of Transportation Web site: http://www.dot.state.il.us/css/strategic_plan.pdf.

Illinois Department of Transportation. (2004). *Report to Governor Rod R. Blagojevich and the General Assembly of Illinois Regarding Context Sensitive Solutions, Illinois Department of Transportation.* Retrieved July 2, 2009, from Illinois Department of Transportation Web site http://www.dot.state.il.us/css/shortreport04.pdf.

Illinois Department of Transportation. *IDOT's Context Sensitive Solutions Website*. Retrieved July 2, 2009 from Illinois Department of Transportation Web site: http://www.dot.state.il.us/css/home.html

Illinois Department of Transportation. *CSS Success Stories.* Retrieved June 2, 2009, from Illinois Department of Transportation Web site: http://www.dot.state.il.us/css/success.html

Maryland Department of Transportation. *Context Sensitive Design/Thinking Beyond the Pavement.* Retrieved July 2, 2009, from Maryland Department of Transportation Web site: http://www.sha.state.md.us/Events/OCE/thinkingBeyondPavement/thinking.asp

Michigan Department of Transportation. (2009). *Related CSS Web Pages.* Retrieved July 2, 2009, from Michigan Department of Transportation Web site: http://mich.gov/mdot/0,1607,7-151-9621_41446-143933--,00.html

National Complete Streets Coalition. *New Jersey Department of Transportation Policy*. Retrieved June 5, 2010 from http://www.completestreets.org/.

New Jersey Department of Transportation. (2002). *Context Sensitive Design*. Retrieved July 2, 2009 from New Jersey Department of Transportation Web site: http://www.state.nj.us/dot/csd

New Mexico Department of Transportation. (2009). *Infrastructure Division Context Sensitive Solutions Unit*. Retrieved July 2, 2009, from New Mexico Department of Transportation Web site: http://nmshtd.state.nm.us/main.asp?secid=15512

New York State Department of Transportation. (2009). *NYSDOT Home.* Retrieved July 2, 2009, from New York State Department of Transportation Web site: http://www.dot.state.ny.us/design/css/css.html

New York State Department of Transportation. (2001). *Context Sensitive Solutions Implementation Plan*. Retrieved July 1, 2009, from New York State Department of Transportation Web site: https://www.nysdot.gov/divisions/engineering/design/dqab/css/repository/csdplan.pdf

Pennsylvania Department of Transportation. (2005). *Community Context Audit*. Retrieved July 1, 2009, from Pennsylvania Department of Transportation Web site: http://65.207.30.22/css/www/docs/community_context_audit.pdf

Transportation Research Board. (2004). *Context Sensitive Design Around the Country: Some Examples.* Retrieved July 1, 2009, from Transportation Research Board Web site: http://trb.org/publications/circulars/ec067.pdf

Transportation Research Board. (2004). *NCHRP Web-Only Document 69 (Project 20-24(30)), Performance Measures for Context Sensitive Solutions – A Guidebook for State DOTs.* Retrieved July 2, 2009, from Transportation Research Board Web site: http://onlinepubs.trb.org/Onlinepubs/nchrp/nchrp_w69

Transportation Research Board. (2003). *NHCRP Report 480: A Guide to Best Practices for Achieving Context Sensitive Solutions.* Retrieved July 2, 2009, from Transportation Research Board Web site: http://www.trb.org/news/blurb_detail.asp?id=1373

Transportation Research Board. (2007). *NHCRP Synthesis 373: Multi-Disciplinary Teams in Context-Sensitive Solutions.* Retrieved August 28, 2009, from Transportation Research Board Web Site: http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_syn_373.pdf

U.S. Department of Transportation. (2007). *Integration of Context Sensitive Solutions in the Transportation Planning Process.* Retrieved July 1, 2009 from Context Sensitive Solutions Web site: http://www.contextsensitivesolutions.org/content/reading/css_planning_process/resources/CSSinPlanning07.pdf/

U.S. Department of Transportation. (2006). Integration of Context Sensitive Solutions in the Transportation Planning Process. Retrieved July 2, 2009 from U.S. Department of Transportation Web site: http://www.fhwa.dot.gov/context/integrat.cfm

U.S. Environmental Protection Agency (2010). *HUD-DOT-EPA Interagency Partnership for Sustainable Communities.* Retrieved August 6, 2010 from http://www.epa.gov/smartgrowth/partnership/#livabilityprinciples.

University of Minnesota. (2009). *Flexible Design for 21st Century Challenges: Balancing Competing Objectives and Optimizing Return on Investments Forum.* Retrieved July 2, 2009 from University of Minnesota Web site: http://www.cts.umn.edu/education/csd/index.html

Washington State Department of Transportation. (2002). *Building Projects that Build Communities*. Retrieved July 2, 2009, from Washington State Department of Transportation Web site: http://www.wsdot.wa.gov/biz/csd/BPBC_Final/

Washington State Department of Transportation. (2002). *Context Sensitive Solutions.* Retrieved July 2, 2009, from the Washington State Department of Transportation Web site: http://www.wsdot.wa.gov/biz/csd

Civil Rights and Environmental Justice

California Department of Transportation. (2002). *Caltrans Civil Rights Title VI Program*. Retrieved July 2, 2009 from California Department of Transportation Web site: http://www.dot.ca.gov/hq/bep/title_vi/t6_index.htm

Colorado Department of Transportation. (2009). *Environmental Justice Study, Phase 2.* Retrieved July 1, 2009 from Colorado Department of Transportation Web site: http://www.dot.state.co.us/publications/EnvironmentalJustice/EJ.htm

Environmental Protection Agency. (2009). *Environmental Justice.* Retrieved July 1, 2009 from Environmental Protection Agency Web site: http://www.epa.gov/compliance/environmentaljustice/index.html

Federal Highway Administration. (2006). *Environmental Justice – Summary of Legislation on Nondiscrimination and Environmental Justice.* Retrieved July 1, 2009, from Federal Highway Administration Web site: http://www.fhwa.dot.gov/environment/ej2.htm

Federal Highway Administration. (2001). *Assistance for Reviewing the Application of Title VI and Environmental Justice in the Transportation Planning Process*.

National Cooperative Highway Research Program and Cambridge Systematics, Inc. (2002). *Technical Methods to Support Analysis of Environmental Justice Issues.* Retrieved July 2, 2009, from Somerville Transportation Equity Partnership Web site: http://www.somervillestep.org/files/TechMethodsAnalysisEnvJustice_0402.pdf

New Jersey Department of Environmental Protection. (2004). *Environmental Justice Policy.* Retrieved July 1, 2009, from New Jersey Department of Environmental Protection Web site: http://www.nj.gov/dep/ej/eo.html

Title VI Update Accomplishment Report, 2005-2006, Oregon Department of Transportation

The Louis Berger Group. (2008). *NJDOT Policy and Procedures Development Study: Title VI, Environmental Justice, and LEP Effective Practices.* Retrieved July 1, 2009, from New Jersey Department of Transportation Web site: http://www.state.nj.us/transportation/business/civilrights/pdf/effectivepractices.pdf

Transportation Research Board. (2004). *NCHRP Report 532, Effective Methods for Environmental Justice Assessment.* Retrieved July 2, 2009, from Transportation Research Board Web site: http://onlinepubs.trb.org/Onlinepubs/nchrp/nchrp_rpt_532.pdf

US Commission on Civil Rights. (2003). *Not in My Backyard: Executive Order 12898 and Title VI as Tools for Achieving Environmental Justice.* Retrieved July 2, 2009, from US Commission on Civil Rights Web site: http://www.usccr.gov/pubs/envjust/ej0104.pdf

US Department of Transportation. (2000). *Environmental Justice*. Retrieved July 1, 2009 from Federal Highway Administration Web site: http://www.fhwa.dot.gov/environment/ejustice/case/index.htm

Public Involvement

Environmental Protection Agency. (2009). *Public Involvement*. Retrieved July 2, 2009 from Environmental Protection Agency's Web site: http://www.epa.gov/publicinvolvement/

Federal Highway Administration. (2009). *Public Involvement Techniques.* Retrieved July 2, 2009 from Federal Highway Administration Web site: http://www.planning.dot.gov/Pitool/toc-foreword.asp

Federal Highway Administration. (2008). *Public Involvement.* Retrieved July 1, 2009, from Federal Highway Administration Web site: http://www.fhwa.dot.gov/environment/pubinv2.htm

Federal Highway Administration. *Public Involvement Techniques for Transportation Decision-making*. Retrieved July 2, 2009, from Federal Highway Administration Web site: www.fhwa.dot.gov/reports/pittd/cover.htm

Federal Highway Administration. (2006). *How to Engage Low-Literary and Limited-English-Proficiency Populations in Transportation Decisionmaking*. Retrieved July 2, 2009, from Federal Highway Administration Web site: http://www.fhwa.dot.gov/hep/lowlim/index.htm

International Association for Public Participation. *International Association for Public Participation.* Retrieved July 1, 2009, from International Association for Public Participation: http://www.iap2.org

Tennessee Department of Transportation. (2006). *Traditionally Underserved Populations Outreach and Analysis Approach, Tennessee Long-Range Transportation Plan*. Retrieved July 2, 2009 from the Tennessee Department of Transportation Web site: www.tdot.state.tn.us/plango/library.htm

Tennessee Department of Transportation. *Tennessee Environmental Procedures Manual, Public Involvement Process.* Retrieved July 2, 2009, from the Tennessee Department of Transportation Web site: http://www.tdot.state.tn.us/environment/tepm.htm

Data Resources

Oregon Department of Transportation. (2005). *Performance Measure.* Retrieved July 2, 2009 from Oregon Department of Transportation Web site: http://www.oregon.gov/ODOT/CS/PERFORMANCE/

State of New Jersey.(2006). *Census Transportation Planning Package 2000 Data for New Jersey.* Retrieved July 1, 2009 from State of New Jersey Web site: http://www.wnjpin.state.nj.us/OneStopCareerCenter/LaborMarketInformation/lmi25/cttp/index.html

U.S. Census Bureau. (2009). United State Census 2000. Retrieved July 1, 2009, from U.S. Census Bureau Web site: www.census.gov/main/www/cen2000.html.

U.S. Census Bureau. (2009). *American Community Survey.* Retrieved July 1, 2009, from U.S. Census Bureau Web site: http://www.census.gov/acs/www/

U.S. Census Bureau. (2009). *American Fact Finder*. Retrieved July 1, 2009 from U.S. Census Bureau Web site: http://www.factfinder.census.gov/home/saff/main.html?_lang=en

Self Cert

FEB 2 0 2008

State of New Jersey

DEPARTMENT OF TRANSPORTATION
P.O. Box 600
Trenton, New Jersey 08625-0600

JON S. CORZINE
Governor

KRIS KOLLURI
Commissioner

February 13, 2008

Dennis Merida

Federal Highway Administration
New Jersey Division Office
840 Bear Tavern Road, Suite 310
West Trenton, NJ 08628

Attention: Jeanette Mar

Subject: Programmatic CE Agreement

Dear Mr. Merida:

The recent FHWA/NJDOT Stewardship Agreement and organizational changes in the Environmental Division at NJDOT have presented an opportunity to update the 1997 Programmactic Agreement that established a process enabling NJDOT to self certify certain categorical exclusions. Enclosed is an updated Agreement that clearly defines the project scopes that have historically been considered as "3R" projects, identifies the signatures needed by NJDOT Environmental Management to self certify and relates these project types to the pavement preservation standards recently adopted by FHWA. This updated Programmatic categorical Exclusion Agreement will make this process consistent with the pavement preservation standards addressed in the Stewardship Agreement and replaces previous interagency agreements that defined "3R" projects.

This Agreement is a continuation of the Department's commitment to partner with FHWA in streamlining the project development process at NJDOT.

These changes have been discussed with representatives from your staff at previous meetings with the Department's Program Management Office (PMO) managed by Steve Lavelle. Together, we see this as an opportunity to continue to strive for streamlining efficiencies without compromising the integrity of our efforts.

If you have any questions, contact Elkins Green, Director, Division of Environmental Resources at (609)530-8075. Thank you for your cooperation in this matter.

Sincerely,

Mark L. Stout
Assistant Commissioner
Planning and Development

Enclosures

PROGRAMMATIC AGREEMENT FOR APPROVAL OF CERTAIN CATEGORICAL EXCLUSIONS

BETWEEN THE FEDERAL HIGHWAY ADMINISTRATION AND THE NEW JERSEY DEPARTMENT OF TRANSPORTATION

The Federal Highway Administration, New Jersey Division, hereinafter FHWA, and the New Jersey Department of Transportation, hereinafter NJDOT, have developed this Programmatic Agreement to outline the policy and procedures for environmental processing of certain Class II (CE) Actions as defined in Section 23 CFR 771.117 (and as amended) which normally are found to have not significant social, economic and environmental effects.

The FHWA hereby concurs in advance, on a programmatic basis, with NJDOT's designation that those types of projects listed on Attachment "A", and which satisfy the conditions and criteria in Attachment "B", will not result in significant environmental impacts, and are therefore categorically excluded from the requirement to prepare an Environmental Assessment (EA) or Environmental Impact Statement (EIS). As outlined in this Agreement, the NJDOT will determine and certify that a project meets Federal environmental requirements, and notify FHWA of its findings.

APPLICABILITY – This Agreement applied to projects which involve Federal funding and/or approvals, and supersedes previous agreements, including the "Group 2-Programmatic" list of CE's. This Agreement does not apply to those projects for which an EA or EIS is required.

PROCESS –

1. NJDOT will conduct an interdisciplinary review, and provide appropriate public involvement opportunities, to determine whether a project meets the conditions of Attachments "A" and "B" of this Agreement. This determination shall be appropriately documented [1] in the project file.

2. *NJDOT shall notify the FHWA that CE classification for the project was programmatically determined by a Manager in the Division of Environmental Resources or a Manager in the Bureau of Environmental Solutions, at the time the authorization to proceed with final design, right-of-way acquisition or construction is requested.*

3. NJDOT shall provide a quarterly listing of projects under this Agreement to FHWA, beginning three months from the execution of this Agreement. Documentation will be retained and accessible to authorized representatives of the FHWA and NJDOT for a minimum of three (3) years following completion of construction. Electronic files meeting Federal and State requirements may eventually replace "hard copy."

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[1] "Documentation" as used in this agreement is the appropriate engineering and environmental documentation required for a Federally funded highway project. The level of detail reflected in the documentation will vary, depending on the complexity of the project and its likelihood of environmental impacts.

4. NJDOT may request technical assistance from FHWA at any time. Such requests do not override the provisions contained in this Agreement.

AGREEMENT REVISIONS AND TERMINATION – This Agreement and its attachments may be expanded, deleted, modified, or terminated by mutual consent of the Division Administrator, FHWA and the Commissioner of NJDOT or designee at any time. It is anticipated that FHWA will conduct a process review approximately six (6) months from the execution of this Agreement; this review may result in recommendation for revisions.

APPROVAL OF AGREEEMENT – The undersigned have reviewed this Agreement and determined that it complies with the laws, regulations and policies applicable to the FHWA and NJDOT. Accordingly, it is hereby approved and becomes effective on the last date noted below.

2-13-08
Date

Mark Stout
Assistant Commissioner
Planning and Development

2-2-08
Date

FOR Dennis L. Merida
Division Administrator
Federal Highway Administrator

ATTACHMENT "A"

Only the following (30) activities may be designated as CE's under this Agreement without further approval or documentation, provided they do not cause any of the impacts listed on Attachment "B":

1. Activities which do not involve or lead directly to construction, such as planning and technical studies; grants for training and research programs; research activities as defined in 23 U.S.C. 307; approval of a unified work program and any findings required in the planning process pursuant to 23 U.S.C. 134; approval of statewide programs under 23 CFR part 630; approval of project concepts under 23 CFR part 476; engineering to define the elements of a proposed action or alternatives so that social, economic, and environmental effects can be assessed; and Federal-aid-system revisions which establish classes of highways on the Federal-aid highway system.

2. Approval of utility installations along or across a transportation facility.

3. Construction of bicycle and pedestrian lanes, paths, and facilities.

4. Activities included in the State's highway safety plan under 23 U.S.C. 402.

5. Transfer of Federal lands pursuant to 23 U.S.C. 317 when the subsequent action is not an FHWA action.

6. The installation of noise barriers or alterations to existing publicly owned buildings to provide noise reduction.

7. Landscaping

8. Installation of fencing, signs, pavement markings, small passenger shelters traffic signals and railroad warning devices where no substantial land acquisition or traffic disruption will occur.

9. Emergency repairs under 23 U.S.C. 125.

10. Acquisition of scenic easements.

11. Determination of payback under 23 CFR part 480 for property previously acquired with Federal-aid participation.

12. Improvements to existing rest areas and truck weigh stations.

13 Ridesharing activities.

14. Bus and rail car rehabilitation.

15. Alterations to facilities or vehicles in order to make them accessible for elderly and handicapped persons.

16. Program administration, technical assistance activities, and operating assistance to

transit authorities to continue existing service or increase service to meet routine changes in demand.

17. The purchase of vehicles by the applicant where the use of these vehicles can be accommodated by existing facilities or by new facilities which themselves are within a CE.

18. Track and railbed maintenance and improvements when carried out within the existing right-of-way.

19. Purchase and installation of operating or maintenance equipment to be located within the transit facility and with no significant impacts off the site.

20. Promulgation of rules, regulations, and directives.

21. *Modernization of a highway by resurfacing, restoration, and rehabilitation. Reconstruction is not included in this category. Projects listed below involving pavement are consistent with FHWA's pavement preservation guidelines that define minor and major pavement rehabilitation.*

<u>Resurfacing projects</u>

- *Pavement resurfacing*
- *Milling*
- *Joint replacement and/or repair*
- *Minor safety work (guiderail repair and/or replacement, new guiderail installations, small signs, lighting, sidewalks, and handicapped ramps)*
- *Minor access control*
- *Minor drainage improvements*
- *Installations of long-life pavement markings and raised pavement markers*
- *Sections of pavement repair (upgrading the pavement section to accommodate the widening of lanes – without widening the total pavement width)*
- *Bridge bituminous resurfacing and deck patching*

<u>Restoration projects</u>

- *Any item contained in a Resurfacing project*
- *Safety work (ground mounted signing, lighting, and/or crash cushions)*
- *Jacking of concrete slabs*
- *Minor channelization*
- *Upgrading signals*
- *Structural repairs*
- *Bridge restoration, overlaying (LMC) and component patching*
- *Replacement of median barriers*

<u>Rehabilitation projects</u>

- *Any item contained in a Resurfacing or Restoration project*
- *Additional lanes (left turn, acceleration and/or deceleration lanes only)*
- *Addition of median barriers*
- *Minor sections of realignment*
- *Bridge widenings*
- *Deck replacement*

- *Rehabilitation of existing structures (does not include replacement of structures)*
- *New signals and sign structures*
- *Highway lighting*

22. Highway safety or traffic operations improvement projects including the installation of ramp metering control devices and lighting.

23. Approvals for disposal of excess right-of-way or for joint or limited use of right-of-way, where the proposed use does not have significant adverse impacts.

24. Construction of new bus storage and maintenance facilities in the areas used predominantly for industrial or transportation purposes where such construction is not inconsistent with existing zoning and located on or near a street with adequate capacity to handle anticipated bus and support vehicle traffic.

25. Rehabilitation or reconstruction of existing rail and bus buildings and ancillary facilities where only minor amounts of additional land are required and there is not a substantial increase in the number of users.

26. Construction of bus transfer facilities (an open area consisting of passenger shelters, boarding areas, kiosks and related street improvements) when located in a commercial area or other high activity center in which there is adequate street capacity for projected bus traffic.

27. Construction of rail storage and maintenance facilities in areas used predominantly for industrial or transportation purposes where such construction is not inconsistent with existing zoning and where there is not significant noise impact on the surrounding community.

28. Acquisition of land for hardship or protective purposes; advance land acquisition loans under section 3b of the UMT Act.[2] Hardship and protective buying will be permitted only for a particular parcel or a limited number of parcels. These types of land acquisition quality for a CE only where the acquisition will not limit the evaluation of alternatives, including shifts in alignment for planned construction projects, which may be required in the NEPA process. No project development on such land may proceed until the NEPA process has been completed.

29. Bridge painting.

30. Transportation Enhancement Activities

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[2] Hardship acquisition is early acquisition of property by the applicant at the property owner's request to alleviate particular hardship to the owner, in contrast to others, because of an inability to sell his property. This is justified when the property owner can document on the basis of health, safety or financial reasons that remaining in the property poses an undue hardship compared to others. Protective acquisition is done to prevent imminent development of a parcel which is needed for a proposed transportation corridor or site. Documentation must clearly demonstrate that development of the land would preclude future transportation use and that such development is imminent. Advance acquisition is not permitted for the sole purpose of reducing the cost of property for a proposed project.

NJDOT may not "self certify" as a CE projects which involve any of the following four (4) activities, regardless of potential involvement with any of the issues listed in Attachment "B". Documentation which verifies that the particular project will not cause significant environmental impacts must be submitted to FHWA for their approval of its CE classification:

1. Modernization of a highway by reconstruction, adding shoulders, adding auxiliary lanes (e.g., parking, weaving, turning, climbing), or modifications which result in a redirection of existing movements at an intersection/interchange. (Taken from activities in "d" list #1)

2. Bridge rehabilitation, reconstruction or replacement or the construction of grade separation to replace existing at-grade railroad crossings. (a.k.a. "d" list #3)

3. Transportation corridor fringe parking facilities. (a.k.a. "d" list #4)

4. Construction of new truck weigh stations or rest areas. (a.k.a. "d" list #5)

ATTACHMENT B

A PROPOSED PROJECT MUST BE INDIVIDUALLY APPROVED BY FHWAY IF:

SECTION 4(f) OR 6 (f): The proposed project results in the use of any property or properties protected under Section 4(f) of the Department of Transportation Act, or Section 6(f) of the Land and Water Conservation Fund Act.

HISTORIC PROPERTIES: Consultation with FHWA and the New Jersey State Historic Preservation Officer (SHPO) has resulted in an agreement that the proposed project results in an "Adverse Effect" upon any properties eligible for or listed in the National Register of Historic Places.

WETLANDS: The proposed project results in the placement of fill in 5 or more acres (2 hectares) of freshwater wetlands or State open waters, or it if requires the placement of fill in tidal wetlands, or if a Nationwide 404 permit applies.

ENDANGERED SPECIES: The proposed project affects species or critical habitat of species protected by the Endangered Species Act.

SOLE SOURCE ACQUIFER: The proposed project is located within a designated Sole Source Acquifer and the project requires an EPA approval of a groundwater assessment.

NOISE: The proposed project is a Type 1 Action requiring a noise study in accordance with Section 772 of the Federal Aid Policy Guide.

AIR QUALITY: The proposed project causes any exceedances of the National Ambient Air Quality Standards (NAAQS), or if a Congestion Management Study/Major Investment Study (CMS/MIS) is required.

RIGHT OF WAY: The proposed action requires relocation of any residences or businesses, involves a control of access change or has high risk of hazardous materials involvement.

FIELD VISIT CHECKLIST

The Field Visit Checklist is intended for practitioners who are conducting a preliminary assessment of socioeconomic conditions in a project area. This checklist should be used for projects where the potential for socioeconomic effects are not anticipated or it is unknown if the potential for socioeconomic effects exists. The checklist is particularly appropriate for smaller projects, such as road stripings or sidewalk improvements. If the potential for socioeconomic effects are identified, the completion of the Socioeconomic Screening Form (Appendix F) may be necessary during the next stage of evaluation. For larger projects where the potential for socioeconomic effects are anticipated or have already been identified, it may be appropriate to proceed directly to the completion of the Socioeconomic Screening Form. A discussion with your supervising manager may be appropriate to make this determination.

Some general demographic data may need to be collected from the U.S. Census Bureau and local jurisdiction, if appropriate, prior to the field visit (see Section III., Population Information). In some remote and rural areas, and for some types of projects where impacts are highly unlikely, it may not be necessary to compile Census data prior to your site visit. Your approach should be discussed with your supervisor.

An aerial map of the project area and surrounding environment should be prepared and used as a reference during the field visit. The timing of the site visit should coincide with the anticipated peak hours of activity in the project area (for instance, a sunny day at rush hour). It may be helpful to note the time of day and weather conditions on the Checklist. Photographs should be taken while on the field visit and a photo log prepared as part of project documentation. Photographs should include residential and commercial establishments as well as community facilities and services in the project area. Both the map and photos should be included with the Field Visit Checklist as part of project documentation.

A short written summary, approximately one to two pages in length, should also be prepared. The summary should include any resources or features for which socioeconomic effects from a proposed project may result. This can include but is not limited to the following:

- A brief discussion of the primary thoroughfares in the project area and surrounding land uses.
- The route of identified bus and/or transit routes in the project area. Make mention of land uses surrounding bus stops.
- Location and type of commercial centers (i.e., Main Street, big box retail)
- Location and type of community facilities and services, historical, cultural, and/or natural resources. The name and contact information for these resources should be included.

I. PROJECT INFORMATION			
COUNTY		CITY	
ROUTE		MILES	
PROJECT LIMITS			
BRIEF PROJECT DESCRIPTION			
PROJECT TYPE		PREPARED BY	
		DATE COMPLETED	
		TIME OF DAY/WEATHER DURING FIELD VISIT	

FIELD VISIT CHECKLIST

II. PURPOSE

What is the purpose of this project? (*Check all that apply*):

☐ Reduce Congestion ☐ Improve vehicular/driver safety ☐ System linkage/network

☐ Economic Development ☐ Improve bicycle/pedestrian capacity or safety

☐ Change to current design standards

☐ Other (describe) _____

III. POPULATION INFORMATION

Area for Which Data is Collected *(i.e., municipality, geographic boundaries, Census tracts/block groups/blocks, etc.)*

_____

Total Population _____

Racial and Ethnic Composition:
This information can be retrieved from the P1 and P8 Tables of the SF1 Data Tables provided by the U.S Department of Commerce, Bureau of Census, U.S. Census of Population and Housing, 2000.

% Minority _____ *(Percentage of all those who identify themselves as being of a race other than Non-Hispanic White Alone)*

% Hispanic _____

White:

Non-Hispanic White _____ Hispanic White _____

Non-White Alone:

Black or African American Alone _____ American Indian/Alaska Native _____

Asian Alone _____ Native Hawaiian/Pacific Islander Alone _____

Other _____

% of Population Who Speaks English Less Than Well _____
(Classified as those who identify themselves as speaking English "not well" and "not at all" on Table P19 of SF3 Data Files)

If yes, list native language(s) spoken at home:

_____

FIELD VISIT CHECKLIST

Economic Information:
The following information can be retrieved from the SF3 Data Tables provided by the U.S Department of Commerce, Bureau of Census, U.S. Census of Population and Housing, 2000.

% Below the Poverty Line (Table P87 of SF3 Data Files): _____

% of Renter-Occupied Households (Table H7 of the SF3 Data Files): _____

% of Owner-Occupied Households (Table H7 of the SF3 Data Files): _____

% of Zero-Car Households (Table H44 of the SF3 Data Files): _____

VISUAL OBSERVATIONS

Does the area surrounding the project appear to be low-income? ☐ Yes ☐ No ☐ Don't Know

Does the area around the project appear to have minority populations? ☐ Yes ☐ No ☐ Don't Know

People of the following populations observed *(check all that apply):*

☐ White ☐ Black or African American ☐ Hispanic

☐ Asian ☐ Native American ☐ Other

Does the project area have a considerable number of individuals from the following populations?

☐ Elderly ☐ Children ☐ Disabled / Handicapped ☐ Don't Know

IV. COMMUNITY FACILITIES

Are the following facilities located within a ¼ mile of the proposed project? *Check all that apply*:

☐ School ☐ Hospital ☐ Fire Station ☐ Community / Recreation Center ☐ Religious Institution

☐ Bank ☐ Transit or Bus Station /Stop ☐ Police Station ☐ Public Housing ☐ Grocery Store

☐ Library ☐ Laundromat ☐ Senior Center ☐ Community Pool

☐ Parks/Playground ☐ Passive Open Space

☐ Other Cultural Resources *(i.e., town gathering spot, historic building/monument)*

FIELD VISIT CHECKLIST

V. ACCESS

Will the project alter access to any of the facilities mentioned above?
For vehicles: *(e.g., driveway changes/restrictions, introduction of median, create severed road/cul-de-sac)*

☐ Yes ☐ No ☐ Don't Know

For pedestrians, cyclists and other non-auto: *(e.g., jersey barrier, channeling to crossing, create severed road/cul-de-sac)*

☐ Yes ☐ No ☐ Don't Know

☐ If Yes for either question, please describe

Will the project impact driveways / parking lots? ☐ Yes ☐ No ☐ Don't Know

Will the project impact emergency access? ☐ Yes ☐ No ☐ Don't Know

Is there a NJ TRANSIT station in the project area? ☐ Yes ☐ No ☐ Don't Know

Is there a bus stop in the project area? ☐ Yes ☐ No ☐ Don't Know

If Yes to either question, list the number of the number route and/or the name of the NJ TRANSIT station.

How will the project change the availability or convenience of obtaining transit services?

☐ Increase ☐ Decrease ☐ Stay the Same ☐ Don't Know

VI. COMMUNITY CHARACTERISTICS

The project area consists primarily of:

☐ Residential ☐ Commercial ☐ Industrial / Manufacturing

☐ Recreation / Conservation / Farmlands

Provide a brief description of the area *(i.e., older residential neighborhood with few local commercial uses)*

FIELD VISIT CHECKLIST

Are there any cultural, historic, or natural resources in the project area? *(check all that apply):*

☐ Designated Historic District ☐ Scenic River ☐ Historic Buildings

Describe the level of pedestrian activity in the area ☐ High ☐ Medium ☐ Low ☐ Don't Know

Is there bicycle activity in the area? ☐ Yes ☐ No ☐ Don't Know

VII. COMMUNITY COHESION

Will the project result in any displacements or relocations?

☐ Residential ☐ Commercial ☐ Industrial / Manufacturing ☐ Community Facilities

If Yes, identify the type and the number of each type of displacement or relocation. Include the type of residence (i.e., single family, multi-family), business type (i.e., restaurant, gas station), and/or community facility type (i.e., religious institution, school) and location.

_____

_____

_____

Is the project located with a designated neighborhood or area having a unique identity or community name?

☐ Yes ☐ No ☐ Don't Know

Will the project create a barrier / divide an area / neighborhood? ☐ Yes ☐ No ☐ Don't Know

If Yes, what kind of structure would create this division?

_____

FIELD VISIT CHECKLIST

VIII. PEDESTRIAN AND BICYCLE SAFETY

Are there currently sidewalks along the project corridor? ☐ Yes ☐ No ☐ Don't Know

Are there sidewalks proposed as part of the project? ☐ Yes ☐ No ☐ Don't Know

Are there currently bike lanes and/or paths? ☐ Yes ☐ No ☐ Don't Know

Are there bike lanes/paths proposed as part of the project? ☐ Yes ☐ No ☐ Don't Know

Does the project include widening the road? ☐ Yes ☐ No ☐ Don't Know

Will the project include a median to provide a crossing island refuge? ☐ Yes ☐ No ☐ Don't Know

How will the speed limit be changed?

☐ Increase ☐ Decrease ☐ Stay the Same ☐ Don't Know

Proposed speed limit is _____ mph

Describe other project features that may improve or decrease pedestrian / bicycle safety in the area *(i.e., crosswalks, pedestrian signals, separation of road and sidewalk, driveway restrictions, etc.).*

_____

IX. VISUAL IMPACTS

Are there large / mature trees located close to the project area? ☐ Yes ☐ No ☐ Don't Know

Will the project maintain or remove existing plantings? ☐ Yes ☐ No ☐ Don't Know

Is there development (residential or business) close to the project area? ☐ Yes ☐ No ☐ Don't Know

Will the project include a median? ☐ Yes ☐ No ☐ Don't Know

Will the median be landscaped? ☐ Yes ☐ No ☐ Don't Know

What is the terrain like? ☐ Flat ☐ Rolling ☐ Mountainous

Does the project include any roads designated as scenic byways? ☐ Yes ☐ No ☐ Don't Know

FIELD VISIT CHECKLIST

X. OTHER

Will the project cross or closely parallel active railroad tracks or tracks being converted to a linear path?

☐ Yes ☐ No ☐ Don't Know

If Yes, describe the configuration and proximity to the railroads tracks

_____

_____

If residents or business owners approached you with questions or if there are existing community issues not addressed in this checklist, describe them briefly below.

_____

_____

FIELD VISIT CHECKLIST

PHOTOGRAPH LOG

Include photographs of residential and commercial areas, community facilities and services, land uses, and the area where the proposed project would be sited. Include as many photographs as necessary to accurately demonstrate the socioeconomic environment in which the proposed project would be sited.

FIELD VISIT CHECKLIST

AERIAL MAP

The aerial map should show the entire study area. The map will help the practitioner understand where different land uses may be present. A line(s) should be placed on the map that shows the project alignment or area where improvements are proposed.

FIELD VISIT CHECKLIST

CONTACT INFORMATION: MUNICIPAL OFFICIALS AND COMMUNITY FACILITIES AND RESOURCES

List the names of municipal officials who may provide a good source of information and possibly contacted at a later date. This may include municipal planners, the mayor, city council members, etc. Include the name and address of all community facilities and services located in the project area. Make sure to include the name of staff members that could be contacted at a later date, if available.

SOCIOECONOMIC SCREENING FORM

I. EXECUTIVE SUMMARY

PLANNER		REQUEST FOR SCREENING MADE BY			
SIGNED (Report Author)		PROJECT NAME			
SIGNATURE OF E-TEAM SCREENING COORDINATOR		PROJECT NUMBER			
SIGNATURE OF ENVIRONMENTAL TEAM LEADER		PROJECT TYPE			
		COUNTY		MUNICIPALITY	

Community Context

Brief synopsis of the community context.

NOTABLE FEATURES MAP
(with the location of all notable features/characteristics labeled)

**NOTE: MAP IS NOT DRAWN TO SCALE.

Notable Community Characteristics, Concerns

- List notable community characteristics or concerns that may require further evaluation to determine if impacts may result.

Notable Socioeconomic Impacts

- This should include a brief summary of all potential temporary and/or permanent impacts.

Options/Recommendations

- Identify strategies to minimize, mitigate, or avoid potential impacts. Identify enhancements that could be put in place if impacts cannot be minimized, mitigated, or avoided.

SOCIOECONOMIC SCREENING FORM

*****(Insert site photos of project area quadrants and any other notable community characteristic here, including a description and explanation of their relevance)*****

II. STUDY AREA PHOTOS

Insert Aerial (exported as 7" x 3.75" .jpg from ArcMap)

Figure 1: Aerial Photo of the Project Area and Surrounding Development

Insert 3.5" x 2" photo **Figure 2**	Insert 3.5" x 2" Photo **Figure 3**
Insert 3.5" x 2" Photo **Figure 4**	Insert 3.5" x 2" Photo **Figure 5**

SOCIOECONOMIC SCREENING FORM

8 ½ X 11 COMMUNITY CONTEXT MAP

The following features should be included on a GIS map. Together, they will help the practitioner and NJDOT better understand the environment in which a transportation action is proposed. Please include other features that may be of importance to the community that are not mentioned below. All features should be cleared labeled and those features that may be affected by the proposed transportation action should be included in the write-up found on page 7.

- Project Location
- Primary Study Area
- Secondary Study Area (displaying Census Tract and Block Group Numbers)
- Census areas (tracts, block groups, blocks) with high concentrations of low-income and/or minority residents
- All roads (US, Interstate, SR, County, and local)
- Bridges
- Detour Routes (if applicable)
- Jurisdiction lines (municipal and county)
- Property lines
- All water bodies, differentiating between 303(d) impaired and not impaired
- Community Facilities and Services (i.e., museums, cemeteries, schools, churches, hospitals, EMS, police and fire services, etc.)
- Business Activity and Employment Centers
- Parks and Open Space
- Section 4(f) land
- Section 6(f) land
- Wild and Scenic Rivers
- Airports
- National Trails
- Prime Farmland Soils or Soils of Local and/or Statewide Importance
- Agricultural Development Area and Preserved Farmlands
- Railroad Crossings
- State-Owned Land
- Federally-Owned Land

SOCIOECONOMIC SCREENING FORM

III. REGULATORY APPLICATIONS INVENTORY & SCREENING

A	**AMERICAN INDIAN RELIGIOUS FREEDOM ACT (AIRFA)** Is the project located in a county or community where Native American tribes, bands or communities are present? If yes, identify where Native Americans are present in relation to the proposed transportation action in the Existing Conditions inventory and Appendix A if potential impacts would result.	☐ YES ☐ NO
B	**ENVIRONMENTAL JUSTICE** **Presence** Are there any populations in the study area that meet the criteria for Environmental Justice? • Minority • Low-Income • Limited English Proficiency (LEP) In Appendix A, list languages spoken other than English **Impact** Will the project result in disproportionately high and adverse impacts to any populations in vicinity of the project meeting the criteria for Environmental Justice? If yes, include a discussion of potential impacts in Appendix A.	☐ YES ☐ NO ☐ YES ☐ YES ☐ YES ☐ YES ☐ NO
C	**POTENTIAL SECTION 4(F) PUBLIC RECREATIONAL RESOURCES** Are there any areas that may be protected under Section 4(f) in vicinity of the project? **National Trails System (NTS)** Are there any trails designated as part of the National Trails System (NTS) in vicinity of the project?	☐ YES ☐ NO ☐ YES ☐ NO
D	**SECTION 6(F) LAND & WATER CONSERVATION FUND RESOURCES** Are there any areas protected under Section 6(f) in vicinity of the project?	☐ YES ☐ NO
E	**WILD & SCENIC RIVERS** Are there any water bodies in the vicinity of the project designated as a national Wild and Scenic River?	☐ YES ☐ NO
F	**FARMLAND** Are there any prime farmland or unique soils and/or soils of statewide or local importance in the vicinity of the project? If yes to any of the below, include a brief description of farmlands or soils in the area in Existing Conditions inventory. Identify farms and what they produce if present in the area. Include a discussion in Appendix A if potential impacts may result from the project. **Agricultural Operations** Are there any active agricultural operations in the primary or secondary study areas? **Agricultural Development Areas** Is there land within the vicinity of the project located in an Agricultural Development Area? **Preserved Farmland** Is there land within the vicinity of the project protected by the Farmland Preservation Program?	☐ YES ☐ NO ☐ YES ☐ NO ☐ YES ☐ NO ☐ YES ☐ NO

IV. COMMUNITY CHARACTERISTICS

Community Context & Notable Features Inventory

A	**MODERATE TO HIGH GROWTH RATE** Has the population living around the project area grown notably in recent years? If greater than 1% identify the nature of this growth in Appendix A. • 0% – 0.5% annual growth • 0.6% – 1% annual growth • Greater than 1% annual growth	☐ YES ☐ NO ☐ YES ☐ YES ☐ YES
B	**LOCAL AREA PLANS/GOALS** Are there any local area plans, goals, or zoning initiatives specifically affecting the area where direct socioeconomic impacts may result (e.g. bicycle, pedestrian, greenway, or transit plan; long range growth plan; thoroughfare plan; etc.)? In the Existing Conditions inventory, identify the each plan and include a summary of the plan(s). Include a discussion in Appendix A if the proposed transportation action is not consistent with this plan(s).	☐ YES ☐ NO
C	**KNOWN PLANS FOR DEVELOPMENT** Are there any known plans for development activity in vicinity of the project?	☐ YES ☐ NO
D	**PEDESTRIAN ACTIVITY** Were pedestrians, or evidence of pedestrians (i.e. sidewalks or worn paths), observed in the area?	☐ YES ☐ NO

SOCIOECONOMIC SCREENING FORM

E	**BICYCLE ACTIVITY** Were bicyclists, or evidence of bicyclists, observed in the area on the site visit? Are there any state and/or local designated bike routes in the project area?	☐ YES	☐ NO
F	**TRANSIT ACTIVITY** Were bus routes and/or bus stops observed in the area on the site visit?	☐ YES	☐ NO
	Were NJ TRANSIT rail stations observed in the area on the site visit?	☐ YES	☐ NO
	Were any special users (e.g. handicapped, elderly) observed using these facilities?	☐ YES	☐ NO
G	**COMMUNITY COHESION** Were any specific signs or indicators of community cohesion observed / found?	☐ YES	☐ NO
H	**ACCESS** Are there any driveways or intersections within 500 ft. of the project?	☐ YES	☐ NO
	How is the Right-of-Way in the project area held? ☐ No Control ☐ Partial Control ☐ Limited Control ☐ Full Control		
I	**AIRPORT** Is the project located within 1 mile of an airport?	☐ YES	☐ NO
J	**AREA/COMMUNITY CONTROVERSY** Are there any known community concerns or controversy relative to the project? If yes, include a discussion of this in Appendix A.	☐ YES	☐ NO
K	**DETOUR ROUTE(S)**, if applicable Are there any notable features and/or socioeconomic resources located along the potential detour route(s)?	☐ YES	☐ NO
L	**MARINAS / MARINE REPAIR OPERTIONS / PORT FACILITIES** Are there any marinas, marine repair operations, or port facilities within close proximity to the project?	☐ YES	☐ NO
M	**OTHER** Are there any other issues observed or discovered relative to the project area?	☐ YES	☐ NO

Potential Community Impacts		**TEMPORARY**		**PERMANENT**	
N	**COMMUNITY COHESION** Is the project likely to alter the overall functioning of an identifiable district (e.g. interactions between persons and groups, isolation of persons or groups, change in social values, or change in the physical makeup of the community including residential displacements)?	☐ YES	☐ NO	☐ YES	☐ NO
O	**ADJACENT SOCIOECONOMIC RESOURCES** Are there any notable socioeconomic resources adjacent to the project area that may be impacted (e.g. churches, schools, employment centers, community facilities, historic districts or buildings, named neighborhoods, or other traffic/ pedestrian generators)?	☐ YES	☐ NO	☐ YES	☐ NO
P	**ECONOMIC AND BUSINESS RESOURCES** Are there any direct effects on area businesses or economic conditions likely to result from this project (e.g. displacements, business visibility)?	☐ YES	☐ NO	☐ YES	☐ NO
Q	**COMMUNITY SAFETY** Is the project likely to interact with any area crime issues (e.g. lighting, isolated areas, existing crime issues)?	☐ YES	☐ NO	☐ YES	☐ NO
R	**RECREATIONAL RESOURCES** Will the project affect recreational resources (e.g., parks, playgrounds, community gardens)? Will the project affect access to these resources?	☐ YES	☐ NO	☐ YES	☐ NO
	Will the project affect National Wildlife Refuges?	☐ YES	☐ NO	☐ YES	☐ NO
S	**VISUAL IMPACTS** Will the project have long term aesthetic effects (e.g. visual changes to the structure itself and/or on adjacent view-sheds)?	☐ YES	☐ NO	☐ YES	☐ NO
T	**MOBILITY AND ACCESS** Are there any mobility or access effects likely to be associated with this project (e.g. barrier effect, multi-modal accommodation, available detours, detour and likely user interaction, emergency response, non-motorist access to properties and facilities)?	☐ YES	☐ NO	☐ YES	☐ NO
U	**NON-MOTORIST SAFETY** Will the project affect safety of non-motorists?	☐ YES	☐ NO	☐ YES	☐ NO
V	**OTHER** Are there any other potential impacts associated with the project?	☐ YES	☐ NO	☐ YES	☐ NO

SOCIOECONOMIC SCREENING FORM

Secondary (Indirect) Effects and Cumulative Impacts			
W	**TRAVEL TIMES** Will the project result in notable travel time savings?	☐ YES	☐ NO
X	**TRAVEL PATTERNS** Will the project permanently alter the existing road network (i.e. new connections)?	☐ YES	☐ NO
Y	**PROPERTY ACCESS** Will the project alter any existing access points for properties (i.e. addition or removal of)?	☐ YES	☐ NO
Z	**PROPERTY EXPOSURE** Will the project permanently increase exposure (i.e. Average Daily Traffic Volume) to any properties in the area?	☐ YES	☐ NO
AA	**CREATION OF A TRANSPORTATION OR LAND USE NODE** Is the project likely to open new areas for either travel or growth?	☐ YES	☐ NO
VI. RECOMMENDATIONS			
A	**AVOIDANCE** Alter the project so an impact does not occur.	☐ YES	☐ NO
B	**MINIMIZATION** Modify the project to reduce the severity of an impact.	☐ YES	☐ NO
C	**MITIGATION** Undertake an action to alleviate or offset an impact or to replace an appropriated resource.	☐ YES	☐ NO
D	**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.)	☐ YES	☐ NO
E	**COMMUNITY OUTREACH & PUBLIC INVOLVEMENT** Provide opportunities for early and continuing communication between the community and project staff. In Appendix A, list community groups or leaders that you know of who should be contacted.	☐ YES	☐ NO
F	**FURTHER DOCUMENTATION** The scope and nature of potential impacts warrant additional analysis (e.g. an indirect (secondary) effects and cumulative impact analysis).	☐ YES	☐ NO
G	**OTHER** Any other recommendations based on potential impacts discovered.	☐ YES	☐ NO

APPENDIX A: SUMMARY OF POTENTIAL IMPACTS

III. REGULATORY APPLICATIONS INVENTORY & SCREENING

IV. COMMUNITY CHARACTERISTICS

Community Context & Notable Features Inventory

Potential Community Impacts

Secondary (Indirect) Impacts & Cumulative Effects

VI. RECOMMENDATIONS

APPENDIX B: SOCIOECONOMIC PROFILE

Clearly identify the geographic areas that are included in the study area. A GIS map should be prepared that labels the geographic areas included in the profile. The map should also identify the presence of low-income and or minority populations in the study area. The socioeconomic profile is based on census boundaries (i.e. tracts, block groups, or blocks). Data can be retrieved from the U.S. Census Bureau website, American FactFinder or other NJDOT approved data sources. Depending on the period since the last Census period, the municipality or county in which the proposed transportation project is located may have more current population estimates than

Discuss with your Team Leader prior to the assessment what the geographic boundaries of the study area should be and which census definitions (i.e., tracts, block groups, blocks, etc.) should be used in the assessment. The environmental setting of the proposed transportation action will likely play a critical role in this determination. For example, proposed projects in more urbanized areas should include an assessment conducted on the block and block group level. Projects in more rural areas may warrant the assessment be conducted on the tract or block group level.

Racial and ethnic data should be extracted from the U.S. Census Summary File 1 (SF1) data series. Data collected from the SF1 files allows the user to retrieve data for the smallest geographic area for which census information is available, the block level. Since this information is available on the block level, it would be most appropriate to prepared Tables 1 and 2 using this data.

All other census information should be collected using U.S. Census Summary File 3 (SF3). Using SF3, the block group is the smallest geographic area for which data is available. Tables 3 and 4 would then present the sum of all block groups in a specific geographic area.

Table 1: Population Trends, 1990-2000

	1990	2000	Difference	% Change
Study Area*				
Municipality				
County				

Source: US Census Bureau, Summary File 1, Table P1 (1990 & 2000)
* Census Tract __, Block Group __; Census Tract __, Block Group __

Table 2: Population by Race/Ethnicity, 2000

	Study Area*		Municipality		County	
Race/Ethnicity	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
White						
Non-Hispanic White						
Hispanic White						
Non-White Alone						
Black or African American Alone						
American Indian/Alaska Native						
Asian Alone						
Native Hawaiian/Pacific Islander Alone						
Other*						
Total						
Minority**						
Hispanic Origin						

Source: US Census Bureau, Summary File 1, Table P7 and P8 (2000)
Note: Use Summary File 1, Table P7 to identify the racial composition of the subject areas. Next, use Summary File, P8 to complete the Hispanic and Non-Hispanic White categories.
* The Other category includes census categories 'some other race alone' and 'two or more races.'

SOCIOECONOMIC SCREENING FORM

**The total minority population includes all those who identify themselves as being of a race other than Non-Hispanic White Alone. See Summary File 1, Table P8.

Table 3: Limited English Proficiency (LEP) Population

Area	Non English-speaking, Linguistically Isolated Households		Persons that do not speak English at all or do not speak it well	
	Number	Percent	Number	Percent
Study Area*				
Municipality				
County				

Source: US Census Bureau, Summary File 3, Tables P19-P20 (2000)
* Census Tract __, Block Group __; Census Tract __, Block Group __

Table 4: Poverty, 2000

Area	Below Poverty Level		Below 50% of Poverty Level	
	Number	Percentage	Number	Percentage
Study Area*				
Municipality				
County				

Source: US Census Bureau, Summary File 3, Tables P87-88 (2000)
* Census Tract __, Block Group __; Census Tract __, Block Group __

APPENDIX C: PHOTOS AND RELEVANT INFORMATION

Additional photographs from the site visit of notable resources/conditions or information about municipal goals/objectives, etc.

SOCIOECONOMIC SCREENING FORM INSTRUCTIONS

The Socioeconomic Screening Form inventories the community context and notable features that may be affected by a proposed transportation action. It is designed to memorialize issues and concerns that may be revealed when assessing potential project-induced impacts. The following instructions should be used to assist in the proper completion of the Socioeconomic Screening Form.

METHODOLOGY

The screening form requires the collection of data from the U.S. Census Bureau and other NJDOT-approved data sources as well as information from local plans (i.e., master, county, redevelopment, etc.), policies, maps and regulations. It includes observations from a site visit(s) and conversations with NJDOT staff, local planners, leaders and citizens in an effort to document resources as well as community vision, values and goals. For specific socioeconomic topics, data collection methods, key criteria considerations, and other information that may be necessary to complete the screening form, the table found at the end of the instructions will point you to the appropriate section of the Socioeconomic Guidance Manual.

Wherever possible, map regulatory applications, community attributes, and notable features to assist in the determination of potential effects and ultimately in the decision-making process. All maps and other materials prepared or compiled during the screening should be included in the submission to the division head.

INVENTORY OF EXISTING CONDITIONS – BRIEF DICUSSION

For each of the regulatory applications and community characteristics listed on the screening form (sections IV and V), a brief response should be prepared. Each response can be relatively short but must be inclusive enough to conclude whether the box on the screening form should be affirmatively or negatively checked. If potential impacts, temporary or permanent, are identified a brief discussion of the potential effect should be prepared and included in Appendix A.

Document other areas of concern that were identified through a site visit(s) or conversations with local officials not included in the screening form. The name and title of persons either within NJDOT or externally contacted during the screening should be included in each response, if applicable. Data sources, municipal plans, regulatory applications, and other materials as well as any other sources referenced to complete the screening should be identified under the appropriate heading.

Please provide headings and sections as listed below:

I. EXECUTIVE SUMMARY (Write Last)

COMMUNITY CONTEXT

Provide an introductory paragraph with a one or two sentence description of the project and a one or two sentence description of the community.

NOTABLE COMMUNITY CHARACTERISTICS AND CONCERNS

Provide a bulleted overview of the most notable characteristics of the area and those areas of concern. Each bullet should be 1-2 sentences.

SOCIOECONOMIC SCREENING FORM INSTRUCTIONS

NOTABLE COMMUNITY IMPACTS

Provide a bulleted list of the potential effects identified during the assessment. Each bullet should be 1-2 sentences.

OPTIONS AND RECOMMENDATIONS

Provide a bulleted list of options and recommendations to avoid, minimize, or mitigate potential impacts. Recommendations should include enhancements that can be made in an area to offset adverse effects.

NOTABLE COMMUNITY FEATURES MAP

Community features that may be affected by the proposed transportation action should be highlighted on this map. It is anticipated that this map would be similar to the community context map prepared in Section II, however, those resources where no impacts are anticipated would not be shown.

II. STUDY AREA PHOTOGRAPHS AND COMMUNITY CONTEXT MAP

PHOTOGRAPHS

Keep a photo log of the project area and community features observed during the site visit(s). All photographs should be labeled and saved in the appropriate project folder for easy reference in the future should it be necessary. A selection of photographs, which should include photographs of the project area and notable community features, should be included in this section of the screening form. A 1-2 sentence description should accompany each photograph. Additional photographs should be included in Appendix C, as necessary.

COMMUNITY CONTEXT MAP

The Community Context map should clearly identify the presence of each of the features listed on page 3 of the Socioeconomic Screening Form if located in the study area. The map should be prepared prior to the completion of the screening form and site visit.

CHECKLIST COMPONENT OF THE SCREENING FORM

At the end of the instructions there is a quick reference table for practitioners. The table is organized in the same format as the screening form and indicates which sections of the guidance manual can be referenced for additional information.

III. REGULATORY APPLICATIONS INVENTORY & SCREENING

Based on field visit observations, demographic data, and discussions with local planners, complete this section of the screening form to conduct a regulatory applications inventory and screening. Maps should be prepared as necessary.

A. American Indian Religious Freedom Act
B. Environmental Justice
C. Potential Section 4(f) Public Recreational Resources
D. Section 6(f) Land & Water Conservation Fund Resources
E. Wild & Scenic Rivers

F. Farmland

For all confirmed regulatory applications, label the applicable resource on the Notable Community Features map included in the Executive Summary. A photo of each notable feature should be included in either Section II or Appendix C. A brief description of potential impacts should be included in Appendix A. Note that Environmental Justice includes both a "presence" and "impact" component. While "presence" should be illustrated on the Notable Community Features and Community Context Maps, labeled by community name, only an "impact" needs to be photo-documented.

IV. COMMUNITY CHARACTERISTICS

The brief discussion for each of the below resources should be included in the Existing Conditions inventory. Each description should answer the questions outlined below, which will help affirmatively or negatively check the boxes on the screening form.

COMMUNITY CONTEXT & NOTABLE FEATURES INVENTORY

A. Moderate to High Growth Rate

What is the source and nature of the growth?

B. Local Area Plans / Goals

What is the name of the plan? How does it directly affect the project area? When was it approved? Is it funded (e.g., bike/pedestrian/transit/greenway/parks plans)?

C. Known Plans for Development

What exactly is planned? Where is the development planned? Who provided this information?

D. Pedestrian Activity

Where were pedestrians observed in relation to the project area? Were there sidewalks, worn paths located in the relation to the project area? Were there any special users (e.g. elderly, minority, children, etc.) observed using these facilities?

E. Bicycle Activity

Were there bicycles observed in relation to the project area? Were there bike paths located in the relation to the project area? Was the bike path designated as either a local or state route?

F. Transit Activity

Where were transit facilities and/or patrons observed in relation to the project area? Were there any special users (e.g., elderly, minority, children, etc.) observed using these facilities?

G. Community Cohesion

Based on site visit observations and/or local input, are there any areas or nodes that appear to play a role in fostering community cohesion (e.g., downtown, local institutions, community resources, gateway places, etc.)?

H. Access

Estimate the approximate distance from roads to residential neighborhoods, community resources, and commercial areas which may be affected either during construction or operation of the proposed transportation action.

I. Airport

Are there any airports within 1 mile of the project area? What is the nature of this airport (e.g. regional or international airport)?

J. Area / Community Controversy

If present, note the controversy including the source for such information.

K. Detour Route(s)

Would residential neighborhoods, business districts, community facilities and other resources be affected by construction activities related to the proposed transportation action?

L. Marinas / Marine Repair Operations / Port Facilities

Are there marinas, marine repair operations, or port facilities within close proximity to the project area? Would construction activities or the operation of the project affect access to these areas?

M. Other (i.e. Historic Features, etc.)

POTENTIAL SOCIOECONOMIC IMPACTS

Determine whether impacts would result from the proposed transportation action. A description of potential impacts, temporary or permanent, should be included in Appendix A of the screening form. The nature of the potential impact and how it would affect the community should be discussed. Recommendations to avoid, minimize, or mitigate potential impacts should be included, as appropriate. Enhancements that can be made to offset potential adverse impacts should be identified as well.

N. Community Cohesion
O. Adjacent Socioeconomic Resources
P. Economic and Business Resources
Q. Community Safety
R. Recreational Resources
S. Visual Impacts
T. Mobility and Access
U. Non-Motorist Safety
V. Other

SECONDARY (INDIRECT) IMPACTS & CUMULATIVE EFFECTS

Assess if the proposed transportation action would be a catalyst in promoting land use policies or inducing new development. To the extent possible, identify any reasonably foreseeable secondary social, economic, and environmental impacts caused by the proposed transportation action. The following should be evaluated to identify if the proposed transportation action would alter communities not directly affected by the project.

W. Travel Times
X. Travel Patterns
Y. Property Access
Z. Property Exposure
AA. Creation of a Transportation or Lane Use Node

VI. RECOMMENDATIONS

If potential impacts would result from the proposed transportation project, indicate if there are strategies which would help address and potentially offset some, if not all, project induced impacts. Additionally, indicate whether enhancements can be made in a community that would help offset adverse effects, whether public involvement activities need to be designed, and if other documentation is necessary to determine the limits of potential impacts.

A. Avoidance
B. Minimization
C. Mitigation
D. Enhancement
E. Community Outreach & Public Involvement
F. Further Documentation
G. Other

APPENDIX A: SUMMARY OF POTENTIAL IMPACTS

For each response that indicates a potential impact that may result from the proposed transportation action, identify the condition(s) that have lead to this conclusion. For example, community cohesion may be present in a community but that does not necessarily mean that a proposed transportation action would affect this cohesion. For example, if a proposed project would run directly adjacent to an existing roadway, it is not likely to affect community cohesion. However, if a proposed project would bisect a community it may very well disrupt the existing social fabric of the community.

Responses in this section should be labeled using the alphabetical identifier from above. For example, a response to recreational resources should read R. Recreational Resources followed by the discussion of the potential impact. Recommendations to avoid, minimize, or mitigate potential impacts should be identified, where possible. Additionally, enhancements that can be made in a community to benefit area residents and help offset adverse impacts should be identified.

Lastly, document other potential impacts that were identified through a site visit(s) or conversations with local officials not included in the screening form, as appropriate. The name and title of persons either within NJDOT or externally contacted during the screening should be included in each response, if applicable. Data sources, municipal plans and other materials, and any other source referenced to complete the screening should be identified under the appropriate heading.

SOCIOECONOMIC SCREENING FORM INSTRUCTIONS

APPENDIX B: SOCIOECONOMIC PROFILE

Prepare a brief socioeconomic profile of the primary and secondary study areas and surrounding area. This should be prepared during the Existing Conditions inventory. Refer to Chapter 3 of the guidance manual for a detailed discussion on how to prepare this information.

APPENDIX C: PHOTOS AND RELEVANT INFORMATION

Include additional photos and other relevant information that has not been included in the assessment at this time.

Quick Reference Table for Practitioners

Subject Title	Section in Guidance Manual to Reference for Additional Information
III. REGULATORY APPLICATIONS INVENTORY & SCREENING	
A. American Indian Religious Freedom Act (AIRFA)	Section 3.2.1, Section 4.7
B. Environmental Justice	Section 3.2.1, Section 4.7
C. Potential Section 4(f) Public Recreational Resources	Section 3.3.3, Section 4.3.3
D. Section 6(f) Land & Water Conservation Fund Resources	Section 3.3.3, Section 4.3.3
E. Wild & Scenic Rivers	Section 3.3.6, Section 4.3.4
F. Farmland	Section 3.3.4, Section 4.8
IV. COMMUNITY CHARACTERISTICS	
Community Context & Notable Features Inventory	
A. Moderate to High Growth	Section 3,3,3
B. Local Area Plans/Goals	Section 3.3.3
C. Known Plans for Development	Section 3.3.3
D. Pedestrian Activity	Section 3.3.5
E. Bicycle Activity	Section 3.3.5
F. Transit Activity	Section 3.3.5
G. Community Cohesion	Section 3.1.1, Section 3.4, Section 4.1.2
H. Access	Section 3.3, Section 4.4.3
I. Airport	Section 3.3.5
J. Area/Community Controversy	Section 3.4
K. Detour Routes	Section 4.4
L. Marinas/Marine Repair/Port Facilities	Section 3.3
M. Other	
Potential Community Impacts	
N. Community Cohesion	Section 4.1.2
O. Adjacent Socioeconomic Resources	Section 4.1, Section 4.2
P. Economic and Business Resources	Section 4.2.1

Q. Community Safety	Section 4.5.2
R. Recreational Resources	Section 4.1.3, Section 4.3.3, Section 4.3.4
S. Visual Impacts	Section 4.5.4
T. Mobility and Access	Section 4.4
U. Non-Motorist Safety	Section 4.4.2
V. Other	
Secondary (Indirect) Effects and Cumulative Impacts	
W. Travel Times	Section 4.9
X. Travel Patterns	Section 4.9
Y. Property Access	Section 4.9
Z. Property Exposure	Section 4.9
AA. Creation of a Transportation or Land Use Node	Section 4.9
VI. RECOMMENDATIONS	
A. Avoidance	Section 6.1
B. Minimization	Section 6.1
C. Mitigation	Section 6.1
D. Enhancement	Section 6.1
E. Community Outreach & Public Involvement	Section 6.2, Section 7.0
F. Further Documentation	Section 3.5
G. Other	

EXAMPLE ONLY – USE CED FORM ON SERVER

NEW JERSEY DEPARTMENT OF TRANSPORTATION

CATEGORICAL EXCLUSION DOCUMENTATION

CED Form Updated October 28, 2008

I. GENERAL INFORMATION

DOT Job Code No.		**Federal Project No.**	
Project Management Team		**UPC No.**	
Route & Section		**Structure No.**	
Local Road Name			
Municipality(ies)		**County(ies)**	
Type of Project		**Length**	
From Milepost		**To Milepost**	
Congressional District		**Legislative District**	
ROW Cost		**Construction Cost**	

EXISTING FACILITY			
ROW Width			
No. Lanes & Width			
Shoulder Width		**Median**	
Overall Roadway Width			

PROPOSED FACILITY			
ROW Width			
No. Lanes & Width			
Shoulder Width		**Median**	
Overall Roadway Width			

II. PROJECT DESCRIPTION (attach location map; USGS map suggested)

A. Project Need (briefly explain why the project is needed):

B. Proposed Improvements (provide a brief description of proposed improvements):

C. Right-of-Way Taking

Total area needed:	Est. No. parcels:	In fee-	easements-
Est. No. relocations:	residences-	businesses-	parking spaces-
Community Facilities Affected:			
Area of public recreation land taken: (acres)		Out of a total area of: (acres)	

☐ Green Acres/State-owned Land Involvement

☐ Federally Owned/Federally Funded Land Involvement

Comments:

III. ENVIRONMENTAL CONSIDERATIONS

A. Noise

☐ Sensitive receptors exist within 200 feet for two lanes or 400 feet for four lanes.

☐ Project substantially changes the vertical or horizontal alignment of the roadway.

☐ Traffic volumes or speeds substantially increase.

Conclusion:

☐ Noise study not required. No significant impact anticipated.

☐ Potential noise impacts were studied and are discussed in comments. Project still meets CE criteria.

Comments:

B. Air Quality: CONFORMITY WITH THE CLEAN AIR ACT AMENDMENTS (CAAA) OF 1990

Section 1: Regional Emissions Analysis (STIP or MPO's conforming transportation plan)

☐	Project is included in the FY 20_ - 20_ approved State Transportation Improvement Plan (STIP).
☐	Project is not listed in the FY 20_ - 20_ approved STIP but is included in the MPO's conforming transportation plan.
☐	Project is not included in either the approved STIP or the MPO's conforming transportation plan.

Section 2: Based on its scope, the project is categorized by the Transportation Conformity Rule (TCR) as:	
☐	A project type listed in **Table 2** of the TCR, i.e., **Exempt** from the conformity requirements of the CAAA (i.e., exempt from regional emissions analysis, Carbon Monoxide (CO) analysis, and Particulate Matter PM2.5 and PM10 analyses requirements) and may proceed towards implementation even in the absence of a conforming transportation plan and TIP.
☐	A project listed in **Table 3** of the TCR, i.e., **Exempt** from regional emissions analysis requirement, but local effects of this project with respect to CO, PM2.5 and PM10 concentrations must be considered to determine if a hot-spot analysis is required. *Complete Section 2a below.*
☐	A project type **not listed in Table 2 or Table 3** of the TCR, i.e., must be part of a conforming STIP and/or a MPO's conforming transportation plan and requires CO, PM2.5 and PM10 hot-spot analyses. *Complete Section 2a below.*

Section 2a(1): **Project type listed in Table 3 of the TCR for CO analysis** **Project type not listed in either Table 2 or Table 3 of the TCR for CO analysis**	
☐	Project located in **CO Attainment Area**. CO analysis not required. Project may proceed to the project development process.
☐	The total eight-hour Carbon Monoxide levels are expected to be reasonably below the NAAQS of 9 ppm. This is based on LOS data for the intersection(s) and the total highest traffic volumes at this (those) intersection(s) and the distance of the sensitive receptors to the roadway. No quantitative analysis is required. Project may proceed to the project development process even in the absence of a conforming transportation plan and TIP.
☐	Project located in a Carbon Monoxide **Non-Attainment/Maintenance Area** and requires a Carbon Monoxide hot-spot analysis. A CO Analysis was completed at the following intersection(s): _____ And the results are: _____

Section 2a(2): Project type listed in Table 3 of the TCR for PM2.5 analysis **Project type not listed in Table 2 or Table 3 of the TCR for PM2.5 analysis**	
☐	The project is located in PM2.5 **Attainment Area.** PM2.5 hot-spot analysis is not required. Project may proceed to the project development process.
☐	The project is located in a PM2.5 **Non-Attainment/Maintenance Area** and the project is **not an air quality concern** under 40CFR 93.123(b) (1). Quantitative/qualitative analysis is not required. Project may proceed to the project development process.
☐	The project is located in a PM2.5 **Non-Attainment/Maintenance Area** and the project **is an air quality concern** under 40CFR 93.123(b) (1). A PM2.5 hot-spot analysis was completed at the following location(s): _____ And the results are: _____

Section 2a(3): Project type listed in Table 3 of the TCR for PM10 analysis **Project type not listed in Table 2 or Table 3 of the TCR for PM10 analysis**	
☐	The project is located in PM10 **Attainment Area.** PM10 hot-spot analysis is not required. Project may proceed to the project development process.

☐	The project is located in a PM10 **Non-Attainment/Maintenance Area** and the project is **not an air quality concern** under 40CFR 93.123(b) (1). Quantitative/qualitative analysis is not required. Project may proceed to the project development process.
☐	The project is located in a PM10 **Non-Attainment/Maintenance Area** and the project **is an air quality concern** under 40CFR 93.123(b) (1). A PM10 hot-spot analysis was completed at the following location(s): _____ And the results are: _____

Comments (include LOS, if appropriate):

C. Potential Ecological Constraints (check those that apply)

☐	Floodplains	☐	Shellfish Habitat
☐	Wetlands	☐	Acid Producing Soils
☐	Vernal Pools	☐	Submerged Aquatic Vegetation
☐	Waterbody: ☐ Category One ☐ Trout Production ☐ Trout Maintenance ☐ Non-Trout	☐	Sole Source Aquifer
		☐	Forested Areas
		☐	Threatened and Endangered Species: ☐ State-listed species ☐ Federally listed species
☐	Wild and Scenic River	☐	Other (specify):
☐	Essential Fish Habitat		

Federally Listed Threatened & Endangered Species Checklist:

(Please see http://www.fws.gov/northeast/njfieldoffice/Endangered/consultation.html for guidance on the current US Fish and Wildlife Service (USFWS) Consultation Procedures. County/municipal species lists are only valid for 90 days.)

☐			The proposed project is **not** located in a municipality with extant, historic, or potential occurrence of a federally listed species. The municipality list was checked within the last 90 days and documentation of this determination is included in the project file. No further action is required under the Endangered Species Act (ESA).
☐			The proposed project **is** located in a municipality with extant, historic, or potential occurrence of a federally listed species. Habitat requirements for each of the species have been reviewed and the project's impact area (*i.e., action area) was assessed to determine whether it contains potentially suitable habitat. *Based on existing information or field surveys, the results revealed:*
	☐		The project's impact area (i.e., action area) does **not** contain potentially suitable habitat for a federally listed species. Documentation of this determination is in the project file. No further action is required under the ESA. Concurrence from the USFWS is not required.
	☐		The project's impact area (i.e., action area) **does or may** contain potentially suitable habitat for a federally listed species. *The assessment and all relevant project information:*
		☐	Have been submitted to the US Fish and Wildlife Service's NJ Field Office for ESA **Section 7 consultation.** Correspondence is attached. See comments below.
		☐	Will be submitted to the New Jersey Division of Land Use Regulation Program during the **permitting process.** Project requires authorization under the NJ Freshwater Wetlands Protection Act. See comments below.

*Action Area: The action area is defined by regulation as all areas to be affected **directly or indirectly** by the Federal action and **not merely the immediate area involved in the action** (50 CFR §402.02). This analysis is not limited to the "footprint" of the action nor is it limited by the Federal agency's authority. Rather, it is a biological determination of the reach of the proposed action on listed species. Subsequent analyses of the environmental baseline, effects of the action, and levels of incidental take are based upon the action area.

Conclusion:

☐	No significant impact anticipated
☐	Further studies are needed to obtain permits. Project still satisfies CE criteria.

Comments (briefly describe *all* potential ecological constraints):

D. Anticipated Environmental Permits/Approvals/Coordination (check those that apply)

☐	US Coast Guard	☐	NJDEP Pollutant Discharge
☐	USACOE Section 10 (Navigable Waters)	☐	NJDEP Dam Safety
☐	USACOE Section 404 (Nationwide)	☐	NJDEP Remediation Approval
☐	USACOE Section 404 (Individual)	☐	NJDEP Tidelands Conveyance
☐	USEPA Sole Source Aquifer	☐	EO 11990 Wetlands
☐	NJDEP Freshwater Wetlands—GP	☐	EO 11988 Floodplains
☐	NJDEP Freshwater Wetlands—IP	☐	NJDEP Highlands Preservation Area: ☐ Exempt ☐ Highlands Applicability Determination ☐ Highlands Preservation Area Approval
☐	NJDEP Transition Area Waiver		
☐	NJDEP Coastal Wetlands		
☐	NJDEP Waterfront Development		
☐	NJDEP CAFRA	☐	USDA-Farmland Conversion (Form AD 1006)
☐	NJDEP Flood Hazard Area Permit—GP	☐	NJ Agriculture Development Area
☐	NJDEP Flood Hazard Area Permit—IP	☐	NJDEP Green Acres Program/State House Comm.
☐	NJDEP Stormwater Management: ☐ ≥ 0.25 acre impervious surface ☐ ≥ 1.0 acre disturbance ☐ Unknown at this time	☐	National Marine Fisheries Service
		☐	NJDEP Parks & Forestry (PL 2001 Chapter 10 Reforestation)
		☐	D&R Canal Commission
		☐	Meadowlands Commission
	☐ Approval through NJDEP LURP Permit (or) ☐ NJDOT self-certification	☐	Pinelands Commission
		☐	Endangered Species Act Section 7 Consultation
☐	NJPDES Construction Activity Stormwater GP (RFA)	☐	NJDEP Threatened & Endangered Species Coordination
☐	NJDEP Water Quality Certificate	☐	Other (specify):

Comments:

E. Cultural Resources

	Technical Findings:
☐	Project is not an undertaking for Section 106 purposes; concurrence has been received from FHWA.
☐	No Effect per FHWA/SHPO Agreement of 7/6/00; subject to conditions identified in the Agreement.
☐	No Section 106 Consultation per 5/25/01 SHPO concurrence with *Section 106 Compliance Procedures, Federally Funded Drainage Improvement Program*; subject to conditions identified in the Agreement.
☐	No Effect to significant properties if they exist in APE per 36CFR800.3(a)(1) with SHPO concurrence. (Because the Section 106 regulations allow for a level of effort for conducting and evaluating cultural resources to be commensurate with the undertaking, this category of finding was developed to be used for certain projects when no cultural resources survey has been conducted; and self-imposed conditions, if applicable, are presented as part of the undertaking, e.g., Pipeline 3 or other small-scale projects.)
☐	No National Register (NR) listed or eligible properties in APE (Section 106 Findings = No Historic Properties Affected).
☐	National Register listed/eligible properties exist within APE (***see consultation summary below***).

Archaeology	Architecture				Section 106 Finding
	Bridge	Building	District	Other	
					NR listed/eligible property(ies)—No Historic Properties Affected
					NR listed/eligible property(ies)—No Adverse Effect (NAE)
					NR listed/eligible property(ies)—NAE with conditions
					NR listed/eligible property(ies)—Adverse Effect

	Section 106 Consultation Summary	Date
☐	FHWA concurred with Adverse Effect Finding	
☐	SHPO provided Section 106 consultation comments	
☐	FHWA concurred with No Adverse Effect with Conditions	
☐	ACHP notified of Adverse Effect	
☐	ACHP responded to notification (check one/enter date): ☐ ACHP will participate in consultation ☐ ACHP declined to participate in consultation	
☐	MOA executed by FHWA (check one/enter date): ☐ MOA filed with ACHP ☐ ACHP accepted/signed MOA	
Comments (include MOA stipulations or other conditions, if applicable) :		

F. Section 4(f) Involvement		
Section 1: Historic Sites		
☐	No Section 4(f) Involvement	
☐	Project results in a "constructive use" of Section 4(f) property.	
☐	Project results in a use of Historic site(s) on or eligible for the National Register of Historic Places (check one below):	
	☐	Section 4(f) Involvement. Project is covered under ***de minimis*** **Evaluation of Impacts** and all applicability criteria have been met, including concurrence *first* by the FHWA that the project meets the applicability criteria, and *then* concurrence by SHPO with the "No Effect" or "No Adverse Effect" determination *after* they are notified of the intent to use a *de minimis* finding.
	☐	Section 4(f) Involvement. Project is covered under the **Nationwide Section 4(f) Programmatic Evaluation for minor involvement** and all applicability criteria have been met, including concurrence by the SHPO (or ACHP) with the "No Effect" or "No Adverse Effect" determination.
	☐	Section 4(f) Involvement. Project is covered under the **Nationwide Section 4(f) Programmatic Evaluation for Net Benefits** and all applicability criteria have been met, including notification to and concurrence by the FHWA with the determination.
	☐	Section 4(f) Involvement. Project has an "Adverse Effect" determination. **Individual Section 4(f)** was prepared.
Comments:		

Section 2: Historic Bridges	
☐	No Section 4(f) Involvement
☐	Section 4(f) Involvement. Project is covered under the **Nationwide Section 4(f) Programmatic Evaluation for Historic Bridges.**
Comments:	

Section 3: Publicly Owned Park, Recreation Area, Wildlife or Waterfowl Refuge		
☐	No Section 4(f) Involvement	
☐	Project results in a "Constructive Use" of Section 4(f) property (fill out Site Information below)	
☐	Project requires acquisition from publicly owned recreation land (fill out Site Information below):	
	☐	Section 4(f) Involvement. Project is covered under ***de minimis* Evaluation of Impacts** and all applicability criteria and conditions have been met, including concurrence *first* by the FHWA that the project meets the applicability criteria, and *then* notification to the officials with jurisdiction of the intent to use a *de minimis* finding.
	☐	Section 4(f) Involvement. Project is covered under **Nationwide Section 4(f) Programmatic Evaluation for minor involvement** and all applicability criteria and conditions have been met, including concurrence by the officials having jurisdiction over the property.
	☐	Section 4(f) Involvement. Project is covered under the **Nationwide Section 4(f) Programmatic Evaluation for Net Benefits** and all applicability criteria have been met, including notification to and concurrence by the FHWA with the determination.
	☐	Section 4(f) Involvement. Nationwide Section 4(f) Programmatic applicability criteria were not met; **Individual Section 4(f) Evaluation** was prepared.
Site Information (for projects involving "Constructive Use" or acquisition from publicly owned recreation land, wildlife or waterfowl refuge): **Name of Site** (use local name): _____ **Lot and Block**: _____ **Total acreage of site**: _____ **Acreage of site affected** (acquisition and permanent easements): _____		
☐	Federal encumbrances involved (e.g., Wild and Scenic Rivers Act, Land and Water Conservation Fund Act, Rivers and Harbors Act).	
Comments:		

Section 4: Independent Walkway & Bikeway Construction Projects	
☐	No Section 4(f) Involvement
☐	Section 4(f) Involvement. Project is covered under the **Nationwide Section 4(f) Programmatic Evaluation**. Project requires use of recreation and park areas established and maintained primarily for active recreation, open space, or similar purposes. All applicability criteria have been met, including approval in writing by the official with jurisdiction over the property that the project is acceptable and consistent with the designated use of the property and that all possible planning to minimize harm has been accomplished in the location and design of the bikeway or walkway facility.
Comments:	

G. Hazardous Materials and Landfills	
☐	Involvement with known or suspected contaminated site.
☐	Involvement with underground storage tanks.
Conclusion:	
☐	Low potential for involvement with contamination; no further investigation required.

☐	Further investigation and/or sampling required to determine extent of involvement with contamination. Project still meets FHWA criteria for a CE.

Comments:

H. Socioeconomics	
☐	The project will **not** result in any significant socioeconomic impacts.

Comments:

I. Environmental Justice	
☐	Project will have **no** disproportionately high or adverse effects on low income and/or minority communities.
☐	Project will have disproportionately high and adverse effects on low income and/or minority communities.

Conclusion:

☐	Project is in compliance with the goals of Executive Order 12898 and the requirements of the Civil Rights Act of 1964.
☐	Project is in compliance with the goals of Executive Order 12898 and the requirements of the Civil Rights Act of 1964, through the identification of measures to address disproportionate effects, including actions to avoid or mitigate them. Project satisfies CE criteria.

Comments:

J. Public Reaction (briefly describe input from the Office of Community Relations or current status of public reaction):

K. Environmental Commitments (refer to MOA stipulations or other conditions noted in Section D, if applicable; permit conditions, etc.):

DETERMINATION OF CATEGORICAL EXCLUSION

Project name and location: _____

CE #: _____

The proposed project satisfies the Categorical Exclusion definition outlined in 23 CFR 771.117 (a) and will not result in significant environmental impacts.

Project Manager, Div. of Local Aid and Econ. Dev. — Date

Recommended by:

Environmental Team Leader — Date

Certified ☐
(or)
Approved ☐

Manager, Bureau of Environmental Program Resources — Date

Concurrence
(non-self certified CEs)

Date

Division Administrator, Federal Highway Administration

enclosures (please include any correspondence referenced in the CED):

- ☐ Project Location Map
- ☐ NJ Natural Heritage Program letter
- ☐ USFWS coordination letter(s)
- ☐ NMFS coordination letter
- ☐ SHPO Eligibility & Effects concurrence letter
- ☐ Signed MOA
- ☐ Final Nationwide Section 4(f) Programmatic Evaluation for:
  - ☐ Minor Involvement with Historic Sites
  - ☐ Use of Historic Bridges
  - ☐ Minor Involvement with Publicly Owned Park, Recreation Area, Wildlife or Waterfowl Refuge
  - ☐ Independent Walkway and Bikeway Construction Projects
  - ☐ Net Benefits
  - ☐ *De minimis* Evaluation of Impacts documentation (i.e., notice to SHPO, *de minimis* template)
- ☐ Final Individual Section 4(f)
- ☐ Resolution of Support from Municipality/County
- ☐ Other (specify): _____

Data Resources for the Preparation of the Community Profile and Socioeconomic Studies

Category	Source	Sample Uses	Geography	Limitations and/or Benefits	Decision-Making Stage	Timeliness
Demographics and Population Characteristics						
Racial and Ethnic Characteristics	• U.S. Census Bureau (Summary File (SF-1) - 100% Population Count) (http://factfinder.census.gov/servlet/DatasetMainPageServlet) • American Community Survey (ACS) (http://www.census.gov/acs/www/) • Summary Level and Detailed PUMS Data (http://www.ciesin.org/datasets/pums/pums-home.html)	Profiles of American Communities: • Population Totals • Racial and Ethnic Composition • Hispanic Origin	States, Metropolitan Areas, County, City, Tract, Block Group, Block	• Used to Identify the Presence of Minority Populations • American Community Survey (ACS) 5-Year Estimates for Census tracts and blocks will be available in 2010 • ACS acts as a supplement to Census data	Planning and Project Development	Post-Census; Annual
Demographic Characteristics	• Private - Claritas, Inc. (http://www.claritas.com/sitereports/Default.jsp)	• Provides Post-Census Population Data By Race Estimates • Number per Household • Household Income	Census Tracts	Cost to Retrieve Data/Reports	Planning and Project Development	Annual
Social and Economic Characteristics	• Private - ESRI Business Analyst Online (http://www.esri.com/software/bao/index.html)	• Provides Current Year Estimates and 5- and 10-Year Forecasts • Wide Variety of Demographic, Economic, and Employment Estimates and Forecasts	States, Metropolitan Areas, County, City, Tract, Block Group	• Annual Membership Costs • Well Respected Data Source - Based on U.S. Census Information and Market Trends • Helpful for Understanding the Current Social and Economic Environment in a Community • Useful for the Preparation of a Community Profile and Public Involvement Activities	Planning and Project Development	Current
Active Groups Comprised of People of Color	• Environmental Justice Resource Center (http://www.ejrc.cau.edu/) • Charles Stewart Mott Foundation (http://www.mott.org/)	• Resource Directory of Active Groups • Aid Decision Makers Identify Constituent Groups	National	• Lists Environmental Justice Resource Groups • Groups can be contacted during public involvement activities	Planning, Project Development, ROW, Operations and Maintenance, Construction	Periodic
Limited English Proficiency	• U.S. Census Bureau (Summary File (SF-3) - Sample Data) • American Community Survey • National Institute for Literacy Data (http://www.nifl.gov/)	• Number of Persons Who Speak English Less Than Very Well • Linguistically Isolated Households	States, Metropolitan Areas, County, City, Tract, Block Group	• Identify Small Geographic Areas where Those with Limited English Proficiency (LEP) Reside • Data Tables Do Not Specify Languages Spoken in Communities • National Institute for Literacy Data website Provides Information on ESL Schools by Zip Code • Can Be Helpful in Designing Public Involvement Materials	Planning, Project Development, ROW, Operations and Maintenance, Construction	Decennial, Post-Census, Annual
Meals-on-Wheels Providers	ElderCare Locator Number (http://www.eldercare.gov/Eldercare.NET/Public/Home.aspx)	• Locates Services Locally	Local offices	• Zip, City, County • Helpful for Identifying the Presence of Those with Limited Mobility	Planning	Current
Population Forecasts and Local Contacts	Municipal, County, and/or MPOs	• Forecasts Population Growth • Local Contacts are Familiar with Migration Patterns and Changes in Demographic Composition	Local, County, Regional, MPO and State	• Information may be either Quantitative or Qualitative • Provide Insight into Current Area Trends which may be Helpful during Census Periods	Planning and Project Development	Current

Data Resources for the Preparation of the Community Profile and Socioeconomic Studies

Category	Source	Sample Uses	Geography	Limitations and/or Benefits	Decision-Making Stage	Timeliness
Economic Characteristics						
Income and Poverty						
Food Stamps	• US Department of Agriculture-Food And Nutrition Service (http://www.fns.usda.gov/fns/) • Food Stamp Program Map Machine (http://www.ers.usda.gov/Data/FoodStamps/)	• Number of Participants by Income • How to Apply for Food Stamps • Amount Given Per Household Based on Household Size • Toll-Free Number By State	State and County	• No More Detailed than Zip-Code Level Summary • Used as an Indicator of Where Low-Income Populations are Living • Map Machine is Available Down to the County Level (shows participation in the food stamp program and the receipt of Temporary Assistance for Needy Families	Planning	Current or Annual
Income Statistics	U.S. Census Bureau - Summary Tape File (STF-3) - Sample Population Count	• Median and Family Household Income • Per Capita Earnings	State, MSA, County, Place,Tract, Block Group	• Helpful When Comparing Income Levels for Those Living Above and Below the Poverty Line • Decennial Census	Planning, Project Development, ROW, Operations and Maintenance	Decennial
Family Income Estimates	Federal Financial Institution Examination Council (FFIEC) / Home Mortgage Disclosure Act (http://www.ffiec.gov/hmda/)	• Estimated Median Family Income	Census Tract	• Current Estimates of Median Family Income by Tract with Comparison to Housing and Urban Development (HUD) Regions	Planning, Project Development	Current or Annual
Jobs, Personal Income and Earnings	Bureau of Economic Analysis, Regional Economic Information System (http://www.bea.gov/national/index.htm#gdp)	• Personal Income • Per Capita Earnings • Jobs by Industry	State and County	• Sub-County not Available • Helpful for Identifying Industry Shifts Over a Time Series	Planning	Yearly
Medicaid	Department of Health and Human Services and Health Care Financing Administration (http://www.cms.hhs.gov/)	• Number of Recipients • Eligibility Requirements • Enrollment and Program Information	Statewide and Zip Code	• Specified Runs for Substate Areas • Helpful When Identifying the Presence of Low-Income Populations	Planning	Current or Annual
Poverty Guidelines	U.S. Department of Health and Human Services (http://www.cms.hhs.gov/MedicaidEligibility/Downloads/POV10Combo.pdf)	• Information on Computation • Poverty Level	National	• National Data Only • Used to Determine Eligibility for Federal Programs	Planning, Project Development, ROW, Operations and Maintenance	Annual
Poverty - Number and Percent of People and Households Living Below the Poverty Line	U.S. Bureau of the Census	Number and Percent Living Below the Poverty Line	CMSA/MSA, State, County, Place, Census Tract, Block Group	• Used to Identify the Presence of Low-Income Populations • Used during an Environmental Justice Assessment • The Identification of Low-Income Persons Can Assist in the Design of Public Involvement Activities	Planning, Project Development, ROW, Operations and Maintenance	Decennial
Poverty Rates	U.S. Bureau of the Census	Poverty by State	State	• Unavailable for Sub-State Areas	Planning, Project Development, ROW, Operations and Maintenance	Annual, 3 Year Averages
Poverty Thresholds	U.S. Bureau of the Census	Poverty Thresholds by Size of Family & Number of Children	National	• Poverty Thresholds Do Not Vary Geographically	Planning, Project Development, ROW, Operations and Maintenance	Annual
School Program Data for Low-Income Lunch Programs	• Free and Reduced Price Lunch • Program - National School Lunch Program (http://www.fns.usda.gov/cnd/Lunch/)	• Children From Families With Incomes at or Below 130 percent of the Poverty Level are Eligible for Free Meals. • Those Between 130 Percent and 185 Percent of the Poverty Level are eligible for Reduced-Price Meals	School Districts	• Household Location of Students • Requires Local School Coordination	Planning	Annual

Data Resources for the Preparation of the Community Profile and Socioeconomic Studies

Category	Source	Sample Uses	Geography	Limitations and/or Benefits	Decision-Making Stage	Timeliness
Employment Statistics and Information						
Economic Data by Sector	U.S. Economic Census (http://www.census.gov/epcd/www/econ97.html)	• Profiles U.S. Economy From National to Local Level • Reports Generated For All Geographic Areas	CMSA/MSA, State, County, Place	• Updated every 5 Years • Number of Jobs by Sector and Industry	Planning, Project Development, ROW	Every 5 Years
Employment Location, Payroll and Jobs	ES-202 Program - U.S. Department of Labor's Employment, Wages, and Contributions File	• Compare Residential Location With New Employment Openings • Jobs by Employer Location • Target Jobs and Sectors for Welfare Participants	• State and County • Payroll Addresses of Establishments	• Reported Employment Site May Not Reflect True Location of an Employee • Difficulty with Multi-locational Establishments • Reporting Confidentiality	Planning, Project Development, ROW	Annual
Employment Location, Age, Earnings, Industry, and Local Workforce Indicators	Local Employment Dynamics (LED) OnTheMap, U.S. Census Bureau (http://lehd.did.census.gov/led/)	• Provides Work Area Profile Report by Indicator • Provides Labor Shed Areas	State, County, Zip Code, Congressional District, Metro Area, City	• Can Help Identify Where Workers Live • Difficulty with Multi-locational Establishments • Reporting Confidentiality	Planning, Project Development, ROW, Operations and Maintenance, Construction	Quarterly, Data Available from 2002
Employment and Payroll by Industry - County	U.S. Census Bureau - County Business Patterns (http://www.census.gov/econ/cbp/index.html)	By Industry: • Employment • Payroll • Establishment Size	State, County, Zip Code	• Less timely than ES-202 releases • Sub-County Data Not Available • Confidentiality Provisions	Planning	Annual
Employment Information on Public and Private Businesses	Dun and Bradstreet (http://www.dnb.com/us/)	• Target Jobs for Welfare Participants • Classified Establishments by Type of Economic Activity	Nothing Smaller Than Census Tract	• Potential For Inaccuracies to Small Areas • Cost to Receive Data and Reports	Planning and Project Development	Current, Annual
Employment Data	R.L. Polk and Company (http://www.polk.com/)	• Target Jobs for Welfare Participants, • Classified Establishments by Type of Economic Activity	Nothing Smaller Than Census Tract	• Potential For Inaccuracies to Small Areas • Cost to Receive Data and Reports	Planning and Project Development	Current, Annual
Workforce Information and Resources	Workforce Investment Boards	• Resource for Job Access • Welfare-to-Work • Unemployment Insurance	Statewide	• Requires Inter-Agency Coordination	Planning	Current or Annual
Housing Characteristics						
Building Permit Information	• State of the Cities Data System (http://socds.huduser.org/) • New Jersey Department of Labor and Workforce Development (http://lwd.state.nj.us/labor/index.shtml)	• Issuance of Residential Building Permits by Housing Unit Type	Municipal, County, State and MSA	• Helps Identify Growth Patterns in an Area • Not all Units for Which Permits are Issued are Built	Planning and Project Development	Monthly, Annually
Housing Characteristics	U.S. Census Bureau - American Housing Survey (http://www.census.gov/hhes/www/housing/ahs/ahs.html)	Number of Housing Units: • By Household Size • By Race • By Condition of Housing Units	County, City, Metropolitan Statistical Areas	• Data Not Available for Every Metropolitan Area • Data is Collected Every Four Years for Selected Metropolitan Areas	Planning and Project Development	Every Other Year
Housing Characteristics	U.S. Census Bureau	Number of Housing Units: • By Household Size • By Race • By Condition of Housing Units • By Tenure	States, Metropolitan Areas, County, City, Tract, Block Group, Block	• Most Appropriately Used within a Few Years of the Most Recent Decennial Census • Available Down to the Block Group Level	Planning and Project Development	Decennial

Data Resources for the Preparation of the Community Profile and Socioeconomic Studies

Category	Source	Sample Uses	Geography	Limitations and/or Benefits	Decision-Making Stage	Timeliness
Land Use and Transportation						
Census Geography -- Street Addresses, Governmental Unit Boundaries, Census Tracts, Block Groups-	TIGER (Topologically Integrated Geographic Encoding and Referencing System) Maps (http://www.census.gov/geo/www/tiger/)	• Create Base Maps and Overlay Maps • GIS Mapping Tool	CMSA/MSA, State, County, Place, Census Tract, Block Group, Block	• Periodically Updated • Street Addresses May Not Match Common Name Usage	Planning, Project Development, ROW	Periodically Updated
Community Transportation Assistance Program	Community Transportation Association, U.S. Department of Health and Human Services (http://web1.ctaa.org/webmodules/webarticles/anmviewer.asp?a=23&z=2)	• Provides Information on Community Transportation Issues, including Rural Information • Loan Information	CMSA/MSA, State, County, Place	Designed to Inform Human Service Organizations, Planners, Funders, and Individuals with Expertise, Training, and Support	Planning, Project Development, ROW	Routinely Updated
Commuting Patterns	Census Transportation Planning Package (CTPP), U.S. Department of Transportation (http://www.fhwa.dot.gov/ctpp/)	• Residence Tables • Place of Work Tables • Journey-to-Work Flow Tables	State, County, Municipality	• Only Updated After Decennial Census • Data is Difficult to Manipulate if Not Familiar with Microsoft Access	Planning, Project Development, and Construction	Decennial
Farmlands	County Planning or GIS Departments	• GIS Maps Showing Where Farmlands are Located	Parcel, Municipality, and County	GIS Files May Not be Available for All Counties	Planning, Project Development, Construction, and ROW	Annually, depending on the County
Land Use and Land Cover	NJ Department of Environmental Protection (NJDEP) (http://www.state.nj.us/dep/)	• Environmental Constraints, Urban Land Use	Watersheds	• 2002 Data • Watershed coverage	Plannning, Project Development	Irregularly Updated; Approximately Every 7 Years
Parks and Open Space: Green Acres Properties	• New Jersey Department of Environmental Protection (http://www.state.nj.us/dep/) • Municipalities, Counties, Conservation Districts such as the New Jersey Meadowlands Commission	• Identification of Parcels Protected under the NJDEP Green Acres Program • Each Jurisdiction that Receives Green Acres Funding has a Recreation and Open Space Inventory (ROSI)	Parcel, Municipality, and County	• The NJDEP Green Acres Program Website is Not Always Current • Coordination with Parcels Owners (i.e., Municipality, County Parks, etc.) is Necessary to Determine if the Parcel is Encumbered by the NJDEP Green Acres Program	Planning, Project Development, Construction, and ROW	Routinely Updated but also Depends on the Governing Agency where the Parcel is Located
Property Tax Information	• New Jersey Property Tax System (MOD-IV Database), New Jersey Division of Taxation and New Jersey State Treasury Office (http://www.vitalgov.com/Assessor%20Package.htm) • NJ TaxMaps (http://www.njtaxmaps.com/) • eTax Maps (http://www.etaxmaps.com/) • Local Tax Assessors	• Parcel Specific Tax Information for all of New Jersey	Parcel Level	• Provides Land Use and Tax Assessment Information by Parcel • Includes the Majority of Parcels in New Jersey • NJ TaxMaps and eTax Maps are a Pay Service	Project Development and ROW	Annual
Section 4(f) and 6(f) Properties	• Property Owners (i.e., Municipalities, Counties, etc.) • National Park Service (http://www.nps.gov/index.htm)	• Lists Properties and/or Water Bodies Protected under these Regulations	Locational	Early Identification of these Properties and/or Water Bodies can help Determine Project Design	Planning and Project Development	Annual

Data Resources for the Preparation of the Community Profile and Socioeconomic Studies

Category	Source	Sample Uses	Geography	Limitations and/or Benefits	Decision-Making Stage	Timeliness
Smart Growth & State Planning Zones	Office of Smart Growth (http://www.nj.gov/dca/divisions/osg/)	• Planning Areas • Designated Centers, Nodes and Cores • Critical Environmental Sites • Historical and Cultural Sites	Statewide & Locational	• Coordination with State Planning Efforts	Planning and Project Development	Intermittent and Timed to State Plan Updates
Travel Surveys	Metropolitan Planning Orgnizations (http://www.dvrpc.org/) (http://www.njtpa.org/) (http://www.sjtpo.org/)	• Survey information on the travel characteristics and behavior of commuters	County, Municipal, Traffic Analysis Zones	Depending on When It was Conducted, it Will Likely be More Current than the CTPP	Planning	Intermittent
Travel Patterns	MPO Travel Demand Model	• Ability to Conduct an Analysis of Commuter-Work Flow Patterns	Traffic Analysis Zone (TAZ)	Depending on When it is Used, it Will Likely be More Current than the CTPP	Planning, Project Development, and Construction	Every Five Years
Health and Safety						
Crime - Police Calls for Service	City Police Records	• Identify Staffing Commitment to Particular Locations • Determine Whether Bus and Transit Stops are Fairly Policed • Tool for Community-Based Policing and Strategy Setting	Report Zone - Census Tract, Block Group	• Identification of Services Areas and Emergency Service Routes can Help Determine Construction Haul Routes • Requires Police Report Zone Overlay and Classifying and Data Inputting of Police Service Calls	Planning, Project Development, Construction, Operations and Maintenance	Annual, Quarterly, Current
Crime - Part I Crimes & All Crimes	Crime Records Reported to the State	Community Policing Reports to Communities: • Target Areas With High Incidence of Serious Crimes such as Murder, Rape, Robbery or Petty Crimes that Contribute to Disorder	Police Report or Incident Zones - Census Tracts, Block Groups	• Identification of Services Areas and Emergency Service Routes can Help Determine Construction Haul Routes • Requires Police Report Zone Overlay • Resources Needed to Classify and Input Crime Records to GIS	Planning, Project Development, Construction, Operations and Maintenance	Annual, Quarterly, Current
Fire Protection	Local or County Fire Departments	• Identify Service Areas and Emergency Routes	Depending - Address, Zip Code, Municipality	• Identification of Services Areas and Emergency Service Routes can Help Determine Construction Haul Routes • Resources Needed to Classify and Input Fire Records to GIS	Planning, Project Development, Construction, Operations and Maintenance	Annual, Quarterly, Current
Human Health	State Health Agencies; Center for Disease Control (http://www.cdc.gov/DataStatistics/)	• Reported Cases of Asthma, Vital Health Statistics, Location of Diseases	Metropolitan Statistical Areas; County and Municipal, By Zip Code	May Not be Current or Thorough	Planning and Project Development	Annual
Scheduling of Repair of Streets, Sidewalks and Lighting	Local Public Works Departments	• Operating Costs Comparisons • Conditions Assessment	Local/Regional	May Require Interview	Planning and Project Development	Current or Annual
Spatial Mapping of Socioeconomic Data	LandView III from U.S. Census Bureau (http://www.census.gov/geo/www/tiger/landview.html)	Maps Hazardous Waste Sites Locations and Populations Affected by These Sites	Census Tracts	Uses Census Demographic Data (this data updated every 10 years)	Planning and Project Development	Decennial

Data Resources for the Preparation of the Community Profile and Socioeconomic Studies

Category	Source	Sample Uses	Geography	Limitations and/or Benefits	Decision-Making Stage	Timeliness
Community Facilities and Other Resources						
Historic and Culturally Significant Structures and Sites	• State Historic Preservation Officer (http://www.nj.gov/dep/hpo/) • Municipal Planners, Architects, etc. • Long Time Residents	• Identification of Buildings, Structures, and Sites Listed or Considered Eligible for State or Federal Register of Historic Places • Identification of Places Cherished by the Community that May Not Be Listed on the Register	Municipal	Conversations with Municipal Staff and Area Residents will Help Identify Places of Importance to the Community	Planning and Project Development	Periodic Updates
Location of Day Care, Education and Health Facilities, Religious Institutions	• State Health and Social Service Agencies • State Education and School Districts (http://www.state.nj.us/education/)	Location and Number of Facilities	Local	• May Not Be Current • Can Be Used as an Avenue to Engage People during the Decision-Making Process • The Early Identification of Community Facilities Can Help Shape Project Design	Planning and Project Development	Periodic Updates