

Chapter 8

Title VI and Environmental Justice

8.1 Introduction

This chapter discusses how to analyze impacts related to environmental justice issues as part of the community impact assessment process. Transportation planning and project development can have considerable economic, social, and environmental impacts on communities—both positive and negative. *Environmental justice* refers to the fair treatment of all races, cultures, and income levels with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Any federally funded transportation project or improvement conducted by Caltrans must comply with all appropriate federal and state civil rights and environmental justice guidance.

The concept of environmental justice stems from federal laws and policies developed to ensure that the civil rights of minority and low-income populations are protected and that the decision-making process for federally funded projects is free from discrimination. [Title VI of the Civil Rights Act of 1964](#) established the foundation for environmental justice. Title VI states:

No person in the United States shall, on the grounds 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.

[Executive Order \(EO\) 12898](#), Federal Actions to Address Environmental Justice in Minority Populations and Low-income Populations, was signed by President Clinton in 1994. EO 12898 states:

Each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations.

In response to EO 12898, the U.S. Department of Transportation (USDOT) issued [USDOT Order 5610.2](#) on April 15, 1997, establishing USDOT's environmental justice strategy. The USDOT Order requires the following of responsible DOT officials:

Ensure that any of their respective programs, policies or activities that will have a disproportionately high and adverse effect on populations protected by Title VI ("protected populations") will only be carried out if:

1. A substantial need for the program, policy or activity exists, based on the overall public interest, and
2. Alternatives that would have less adverse effects on protected populations (and still satisfy the need identified in subparagraph (1) above), either (i) would have other adverse

social, economic, environmental or human health impacts that are more severe, or (ii) would involve increased costs of extraordinary magnitude.

The following are the key principles of the USDOT environmental justice strategy.

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

The Federal Highway Administration (FHWA) issued [FHWA Order 6640.23](#) on December 2, 1998, establishing policies and procedures for FHWA to use in complying with the strategies established by [Executive Order 12898](#) and [USDOT Order 5610.2](#). In December 2001, the FHWA Western Resource Center issued interim guidance for [Addressing Environmental Justice in Environmental Assessments/Environmental Impact Statements](#). This document provides guidance for conducting and documenting the environmental justice assessment and provides a checklist for including the assessment in the environmental document.

In January 2003, Caltrans published the [Desk Guide, Environmental Justice in Transportation Planning and Investments](#) (Desk Guide). The purpose of the Desk Guide is to provide information and examples of ways to promote environmental justice to those involved in making decisions about California's transportation system—public agencies, concerned citizens, community-based organizations, and elected officials.

The Desk Guide provides a detailed discussion of the history and regulatory context of environmental justice as it pertains to transportation planning and project development. In addition, the Desk Guide is an excellent source of information for analysts preparing environmental justice evaluations for long-range planning and for project development.

8.2 Implementing Title VI and Analyzing Environmental Justice Impacts

Title VI and environmental justice requirements apply equally to all phases of transportation planning, from the development of long-range plans to the implementation of individual projects. The following steps provide an effective approach for implementing Title VI and assessing environmental justice impacts of transportation planning and project development.

- Determine whether the action would result in adverse effects.
- Identify protected populations that would be affected by the action.
- Determine whether there would be a disproportionate impact.
- Engage protected populations in a meaningful way throughout the process.

- Propose measures to avoid, minimize, or mitigate adverse effects.

Title VI and environmental justice equity analysis can and should begin once the nature of the transportation plan or project is known. The process begins with an analysis of potential impacts of the project.

8.2.1 Assessing Potential Impacts

As stated in the beginning of this section, transportation projects can have both adverse and beneficial effects on communities. Both the USDOT and FHWA define adverse effects as:

...the totality of significant individual or cumulative human health or environmental effects, including interrelated social and economic effects, which may include, but are not limited to: bodily impairment, infirmity, illness or death; air, noise, and water pollution and soil contamination; destruction or disruption of man-made or natural resources; destruction or diminution of aesthetic values; destruction or disruption of community cohesion or a community's economic vitality; destruction or disruption of the availability of public and private facilities and services; vibration; adverse employment effects; displacement of persons, businesses, farms, or nonprofit organizations; increased traffic congestion; isolation, exclusion or separation of minority or low-income individuals within a given community or from the broader community; and the denial of, reduction in, or significant delay in the receipt of, benefits of DOT programs, policies, or activities.

So, the community impact assessment process should consider the typical range of social, economic, and environmental issues in the analysis of adverse effects, as well as whether the project would deny, reduce, or significantly delay benefits to a population protected under Title VI. Additionally, both the USDOT and FHWA encourage the consideration of offsetting benefits to the adversely affected minority and low-income populations so that, in the final analysis, consideration is given to the net effect of the project on the community.

The community impact assessment provides an analysis of the project's social and economic impacts such as impacts on community cohesion, land use, public services, relocation, employment, etc. Other technical reports prepared in support of the environmental process can provide the analysis of impacts related to issues such as noise and vibration, air quality, water quality, and human health. Early coordination with the technical staff preparing these reports will ensure that the level of detail needed to support the environmental justice analysis is provided in the technical reports and supporting documentation.

Methods for assessing the social and economic impacts of a project are discussed in Chapters 5 through 7 of this document and are also covered in more detail in the [Desk Guide](#). Other sources of information related to the analysis of socioeconomic impacts of transportation projects can be found in Appendix A.

8.2.2 Identifying Protected Populations

To determine whether a project would have a disproportionate and adverse impact on minority or low-income populations, the analyst needs to know three primary things.

- Location of the impacts

- Severity of the impacts
- Demographic characteristics of the people that would be affected

Analysis Techniques

Much of the literature on environmental justice focuses on methods for establishing thresholds for identifying “environmental justice communities.” While these thresholds may be useful in calculating the relative effects of a project on protected populations, it is important to remember that a community’s perception of itself may be as important as what the statistics indicate. Involving protected populations in the development of the public participation plan and in the initial steps of delineating neighborhoods and communities for the community profile will improve participation by these groups, ultimately increase the acceptability of impact findings by the affected community. Section 8.2.4, *Public Involvement*, below addresses when and how to involve protected populations in this process.

The analyst should keep in mind that the size of the community is not a factor in determining whether there are disproportionately high and adverse effects. Environmental justice equity determinations are based on effects, not on the size of the affected populations. What is important is the comparison between impacts on minority and low-income groups relative to non-minority or higher income populations (see Section 8.2.3 “Disproportionate and Adverse Impacts” below).

The Council on Environmental Quality has established definitions for NEPA analysis (Council on Environmental Quality 1997).

Minority individuals are defined as members of the following population groups: American Indian or Alaskan Native; Asian or Pacific Islander; Black; or Hispanic.

Minority populations should be identified where either: (a) the minority population of the affected area exceeds 50 percent or (b) the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis.

Low-income populations in an affected area should be identified with the annual statistical poverty thresholds from the Bureau of the Census’ Current Population Reports, Series P-60 on Income and Poverty. In identifying low-income populations, agencies may consider as a community either a group of individuals living in geographic proximity to one another, or a set of individuals (such as migrant workers or Native Americans), where either type of group experiences common conditions of environmental exposure or effect.

It should be noted that while these are the official definitions for NEPA analyses, they may not be appropriate for assessing environmental justice issues in transportation plans in California where minority individuals are the majority of residents and living expenses in some areas are unusually high.

Chapter 4 of the [Desk Guide](#) and case studies in Chapter 6.2 of the Desk Guide describe how some agencies have used alternative methods for identifying “communities of concern” when

considering transportation plan equity. Thresholds for low-income or minority communities may also need to be adapted to compensate for limitations in available data. When establishing thresholds for a specific plan area or project location the analyst should focus on identifying groups whose interests are traditionally under-represented and involve these groups in making decisions about the approach for conducting the environmental justice analysis.

In addition to low-income and minority populations, FHWA policy also encourages discussion of other groups protected under Title VI in the analysis of community impacts. FHWA policy states the following.

Within the framework provided by Executive Order 12898 on Environmental Justice, the USDOT Order (5610.2) addresses only minority populations and low-income populations, and does not provide for separate consideration of elderly, children, disabled, and other populations. However, concentrations of the elderly, children, disabled, and other populations protected by Title VI and related nondiscrimination statutes in a specific area or any low-income group ought to be discussed. If they are described as low-income or minority, the basis for this should be documented.

For community impact assessment, concentrations of the elderly, children, the disabled, or similar population groups (i.e., female head of household) could also experience adverse impacts as the result of an action. All impacts on sectors of the community, including minority and low-income populations as well as impacts on the community as a whole, should be routinely investigated, analyzed, mitigated, and considered during decision making, similar to investigations of impacts on minority populations and low-income populations. (FHWA 2006)

Data Sources

Data sources and methods for collecting demographic data are discussed in Chapter 3, *Developing a Community Profile*. For the environmental justice analysis, the most important demographic data pertain to race, ethnicity, and income. Geographic information systems (GIS) can aid greatly in identifying the location of minority and low-income populations within the study area and assist in determining the distribution of impacts among protected populations.

8.2.3 Identifying Disproportionate and Adverse Impacts

FHWA defines a disproportionately high and adverse effect on minority and low-income populations as an adverse effect that either:

- is predominately borne by a minority population and/or a low-income population; or
- will be suffered by the minority population and/or low-income population and is appreciably more severe or greater in magnitude than the adverse effect that will be suffered by the non-minority population and/or non-low-income population.

Evidence of substantially disproportionate adverse impacts on a protected population under Title VI can be considered a form of discrimination that is subject to civil rights action. When determining whether a particular program, policy, or activity would have disproportionately high and adverse effects on minority and low-income populations, the analyst should take into

account mitigation and enhancement measures and potential offsetting benefits to the affected minority or low-income populations.

Chapter 5 of the [Desk Guide](#) provides a “Model Environmental Justice Analysis for Transportation Projects” that describes a sound approach to determining whether a project would have disproportionately high and adverse impacts on low-income or minority populations. Another excellent source of information on assessment methods for environmental justice analysis can be found in Chapter 10 of the [Florida DOT Community Impact Assessment Handbook](#). The Florida DOT handbook recommends the following steps for determining whether a project would result in disproportionate impacts (Florida DOT 2000).

- Identify the potential population that might be affected by the transportation project.
- Compare the distribution of potential impacts on local populations. An evaluation should be completed for minority and low-income populations and the population as a whole. Consider the relative impact on each population as compared to the proportion of the population that each group comprises. This comparison could be made for each potential adverse impact resulting from a proposed alternative.
- An area of measurement needs to be selected for conducting this assessment, such as census tract, census block group, traffic analysis zones from the regional traffic model, neighborhood, and so on. The nature and size of the area of measurement should be based on the level of detail of available data, the size of the project, and the potential area affected. Consider applying more than one area of measurement to determine whether the potential impacts are disproportionate. Also, look at the potential impacts from the perspective of a variety of potentially affected populations.

For example, if an increase in noise adversely affects only five percent of the non-minority study area population, but affects eighty percent of the minority population, this would indicate a disproportionate impact on the minority population. Looked at another way, the same increase in noise may potentially affect the only low-income neighborhood in the community, raising concerns that the low-income neighborhood was being singled-out and disproportionately affected. Looked at still another way, impacts on the low-income or minority population may be roughly equivalent or lower than impacts on the non-low-income and non-minority populations in the broader jurisdiction. The point is to determine whether the project would cause disproportionate impacts in minority and low-income communities.

- Review the results with members of the potentially affected population. This step will give the community an opportunity to review all the related and supporting facts and give the transportation agency an opportunity to receive additional input concerning project effects and community needs. This effort should be viewed as an opportunity to “partner” with members of the community to develop the best transportation solution possible.
- Document if the potential exists for disproportionate and high adverse impacts on a minority or low-income population. If a disproportionate and high adverse impact is determined, then the community should be consulted regarding the mitigation of potential impacts. Ensure that the information generated from this assessment and any mitigation efforts are made part of the permanent project file.

A similar process can be used to evaluate an action's benefits to minority and low-income populations. The following are examples of benefits that should be considered.

- Improved accessibility to jobs and activities
- Safer transportation systems or driving routes
- Reduced travel times
- Availability and level of service of transit to protected populations
- Improvements in socioeconomic, human health, or environmental conditions

There are no definitive guidelines for deciding how to measure the proportionality of the distribution of benefits and burdens for a plan or project. Some of the issues that the analyst must consider include the period over which benefits and burdens should be evaluated, how to weigh the effectiveness of mitigation measures, and how to measure the net impact of a project's benefits and burdens.

If it is determined that a project may have an adverse effect on a minority or low-income population, measures to avoid, minimize, or mitigate adverse effects must be considered.

8.2.4 Public Involvement

One of the fundamental principles of environmental justice is to ensure the full and fair participation by all potentially affected communities in the transportation decision-making process (FHWA 2006). It is often difficult for minority and low-income members of a community to participate in the decision-making process for transportation planning and they are therefore often underserved by transportation systems. It is essential to make every reasonable effort to remove barriers that impede participation by underrepresented populations.

The USDOT publication, [*Public Involvement Techniques for Transportation Decision-Making*](#), specifically addresses the issue of engaging minority and low-income populations through the public involvement process. Inadequate access to project information combined with low understanding of the decision-making process for transportation projects is a major cause of perceived discrimination by minority and low-income populations. The standard public involvement and outreach program for transportation improvement projects does not intentionally exclude minority and low-income populations, but the techniques applied are often inadequate to reach these populations. Only by being involved in the decision-making process and having access to project information can a community expect that their needs or concerns will be addressed. Otherwise, the agency gives the perception that it is not open to community concerns. Further, the transportation agency can only hope to achieve community acceptance of the transportation project by addressing community concerns or objectives in project development.

Below are several specific things to consider in ensuring a successful public involvement process.

- Take care to ensure that the public involvement program reaches all target audiences. Public involvement and outreach techniques should reach people where they live and in ways that have meaning to them.
- Determine how local residents receive information and use that medium to reach out to the community. This is the key to providing access to information and the decision-making process for all potentially affected populations. For example, the local Spanish-language newspaper may reach more households in a predominately Hispanic neighborhood.
- Even if a public involvement program seems adequate, be aware that some groups simply need more assistance than others in navigating the public decision-making process. Low literacy levels, unfamiliarity with the process, and language barriers are among the factors that can reduce access to decision-making among various groups.

Sometimes, even when the target audience is reached, the message may be unclear, misunderstood, or mistrusted. This can be reduced through attention to the cultural bias of a specific population and sensitivity to the subtleties of cross-cultural communication. For example, if the minority community originates from a non-democratic country, then a government agency seeking input in an open decision-making process might be alien to them. A public workshop format may not be the appropriate means for involving this particular minority population. Instead, alternative methods may need to be explored to build their trust and to involve them in ways that are not perceived as threatening.

8.3 Addressing Project Impacts

FHWA policy states the following.

The programs, policies, and activities that will have disproportionately high and adverse effects on minority populations or low-income populations will only be carried out if further mitigation measures or alternatives that would avoid or reduce the disproportionately high and adverse effects are not practicable. In determining whether a mitigation measure or an alternative is „practicable,“ the social, economic (including costs) and environmental effects of avoiding or mitigating the adverse effects will be taken into account. ([FHWA 2006](#))

In addition to the mitigation measures proposed for reducing direct impacts, mitigation approaches increasingly include compensating the community in other ways. For example, community enhancements such as parks, landscaping, or pedestrian amenities may be offered as compensation for the negative impacts resulting from the project. One approach to developing these measures is through a comprehensive public involvement strategy focused on mitigating the action’s impacts on the affected communities. Providing benefits that enhance a community can offset a project’s adverse effects resulting in a win-win situation.

It is important to document the process followed in determining the appropriate measures to avoid, minimize, or mitigate the project’s adverse effects. Good documentation will satisfy state and federal requirements as well as help to communicate the approach and findings to local stakeholders and affected populations.

See the Federal Highway Administration’s [Environmental Justice Website](#) for a discussion of relevant case studies and mitigation strategies for addressing environmental justice. Also see

FHWA's [Community Impact Mitigation: Case Studies](#) for a discussion of relevant case studies and mitigation strategies for addressing impacts on communities.

8.4 Additional Resources

- California Department of Transportation. 2003. [Environmental Justice in Transportation Planning and Investments Desk Guide](#). Available: http://www.dot.ca.gov/hq/tpp/offices/opar/ejandtitlevi_files/EJDeskGuideJan03.pdf
- Federal Highway Administration (FHWA). [Environmental Justice Website](#). 2006. Available: <http://www.fhwa.dot.gov/environment/ej2000.htm>
- Federal Highway Administration (FHWA). [Environmental Justice Case Studies](#). Available: <http://www.fhwa.dot.gov/environment/ejustice/case/index.htm>
- Federal Highway Administration. [Community Impact Mitigation: Case Studies](#). Available: <http://www.ciatrans.net/Casestud.html>
- Florida DOT/CUTR. 2000. [Community Impact Assessment: A Handbook for Transportation Professionals](#). Available: <http://www.cutr.usf.edu/index2.htm>
- IAIA. 1993. [Guidelines and Principles for Social Impact Assessment](#). Available: http://www.nmfs.noaa.gov/sfa/social_impact_guide.htm
- Illinois DOT. 2007. [Community Impact Assessment Manual](#). Available: <http://www.dot.state.il.us/desenv/CIAManual.pdf>
- Transportation Research Board (TRB). 2004. [Guidebook for Assessing the Social and Economic Effects of Transportation Projects](#). Available: http://onlinepubs.trb.org/Onlinepubs/nchrp/nchrp_rpt_456-a.pdf
- Transportation Research Board. 2004. [NCHRP Report 532, Effective Methods for Environmental Justice Assessment](#). Available: http://onlinepubs.trb.org/Onlinepubs/nchrp/nchrp_rpt_532.pdf
- U.S. Department of Transportation. 1997. [US Department of Transportation Order on Environmental Justice \(Order 5610.2\)](#). Available: http://www.fhwa.dot.gov/environment/ejustice/dot_ord.htm
- U.S. Environmental Protection Agency. 2004. [Toolkit for Assessing Potential Allegations of Environmental Injustice](#). Available: <http://www.epa.gov/compliance/resources/policies/ej/ej-toolkit.pdf>