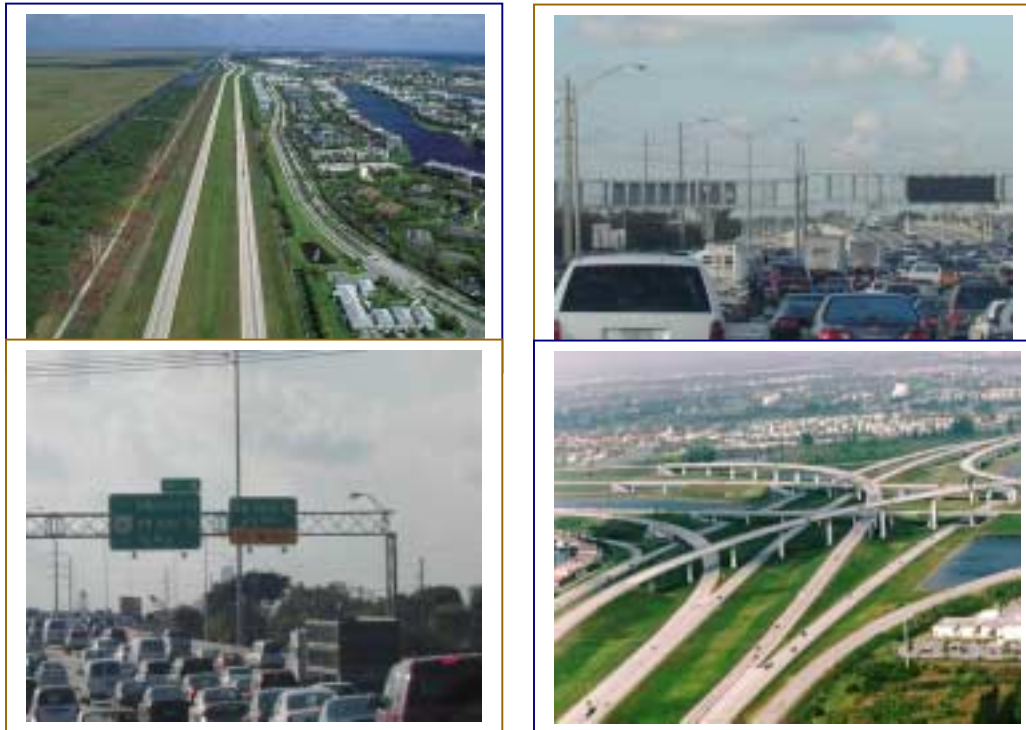


Florida Trends and Conditions 2001 – 2002



Transportation and Environmental Justice

Prepared for:
Florida Department of Transportation

Contract No.:
BD-171

Prepared by:



November 2002

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Prepared in cooperation with the State of Florida Department of Transportation.

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FM 4058101B201

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Trends and Conditions Research

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Florida Department of Transportation

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Executive Summary

In the mid to late 1980s and early 1990s, research showed that low-income and minority communities were disproportionately affected by environmentally hazardous facilities. Consequently, on February 11, 1994, President Clinton signed executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*. The Executive Order required federal agencies to:

- 1) focus action on the environment and human health conditions in minority and low-income communities;
- 2) promote nondiscriminating in federal programs that substantially affect human health and the environment; and
- 3) provide minority communities and low-income communities greater access to information on, and opportunities for public participation in, matters relating to human health and the environment.

Since environmental justice concerns can have an impact on transportation decision-making, the Florida Department of Transportation (FDOT) asked the Anthony James Catanese Center for Urban and Environmental Solutions (formerly known as the FAU/FIU Joint Center for Environmental and Urban Problems) to provide a report that would give an overview of environmental justice and its potential impacts on transportation decisions.

This report gives an overview of the emergence of environmental justice as a public policy issue and shows that, given the relatively recent emergence of environmental justice, many issues remain unsolved. The report reveals that there is little research about the relationship between transportation and the occurrence of environmental justice. At the same time, the report argues that since transportation is a key component in addressing issues such as poverty, unemployment, and ensuring equal access to educational and governmental institutions, it is important for transportation decision-makers to take a proactive

approach in the pursue of environmental justice. Finally, the report shows that current FDOT initiatives regarding social impact assessment, public outreach and environmental justice are an indication that FDOT is developing a proactive approach that is much more comprehensive than what is required by Executive Order 12898.

Transportation and Environmental Justice

In the 1980s, research showed that low-income and minority communities were disproportionately burdened with environmental hazards.¹ In the early 1990s, based on this research and the activities of grassroots groups, environmental justice reached the agenda of federal government.² On February 11, 1994, this resulted in Executive Order 12898, “*Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations.*”³ With this order, the President directed all federal agencies to establish internal directives to address environmental justice issues and develop a strategy to address environmental justice issues that could potentially result from their decision-making.

Consequently, on June 21, 1995, the U.S. Department of Transportation (DOT) issued an Environmental Justice Order that contained DOT’s strategy to address these issues.⁴ According to the DOT Order:

*Planning and programming activities that have the potential to have a disproportionately high and adverse effect on human health or the environment shall include explicit consideration of the effects on minority populations and low-income populations.*⁵

Both Executive Order 12898 and the DOT Order focus on providing meaningful participation opportunities as the main strategy to address environmental justice issues. Unfortunately, neither of the two orders discusses how to provide these opportunities or how to identify potential issues.

This paper starts with a history of environmental justice, which shows the evolution of environmental justice throughout the past three decades, and the increasing importance it has acquired. Next, the paper gives an overview of the federal reaction to the emergence of this issue as an important component of federal policies. The paper then sketches some of the dilemmas confronting the

transportation sector in attempting to address environmental justice issues. Finally, the paper outlines the components that should be part of a successful environmental justice strategy within a transportation context.

History of Environmental Justice

There is a substantial amount of literature about the disproportionate impact of environmentally hazardous activities and the negative side effects of environmental regulation on communities with a high percentage of racial minorities. Although there have been articles about environmental injustice dating back to the late 1960s and early 1970s, environmental justice did not become a major issue until 1982.⁶ In that year, more than 500 people were arrested while blocking trucks loaded with PCBs in Warren County, a rural and predominately black county in North Carolina. The residents had been protesting the proposed siting of the PCB landfill for four years and finally turned to this civil disobedience campaign. Although the blocking of the PCB trucks proved unsuccessful in stopping the operation of the landfill, national media coverage focused the attention of both researchers and government agencies on the relationship between pollution and race.⁷

One of the effects of the protest in Warren County was a study by the U.S. General Accounting Office (GAO) concerning the racial and socio-economic makeup of four communities surrounding hazardous waste landfills in the southeastern part of the United States. The GAO found that three out of the four landfills were located in predominately poor and black communities.⁸ Although the results were clear, the regional geographic scope was an important shortcoming of the GAO study, which made it impossible to generalize the findings to other parts of the United States. The first comprehensive study about the occurrence of environmental justice was conducted four years later in 1987. In that year, the United Church of Christ's Commission for Racial Justice published the results of a comprehensive national study of the demographic patterns associated with the sites of hazardous waste facilities. The study found

that race was the single best predictor for the presence of a commercial hazardous waste facility in a community.⁹ The study also found that it was difficult for minority communities to obtain information about environmental hazards. Finally, the study pointed out that although race is the single best predictor of the occurrence or non-occurrence of a commercial waste facility, there was a link between the economic situation in a community and environmental problems in general. The study concluded that eliminating hazardous wastes in minority communities should be a priority at all levels of government.

Later studies supported the results of the GAO and the Commission for Racial Justice, and showed that racial minorities were not only disproportionately impacted by landfills and hazardous waste facilities, but also were exposed to higher levels of pollutants in general.¹⁰ In a national study of lead poisoning in children, the Federal Agency for Toxic Substances and Disease Registry found that, independent of social class factors, African-American children were two to three times more likely than white children to suffer from lead poisoning.¹¹ Other researchers found a relation between air pollution and race, independent of social class variables such as income, education, and occupational status. Gianessi, Peskin, and Wolff performed a national analysis of the distribution of air pollution by income and race.¹² Using data from the Environmental Protection Agency (EPA) to calculate an estimated U.S. dollar amount suffered from exposure to air pollution, they found that racial minorities were much more likely to suffer greater damage from air pollution than whites at all income levels. In another national study, Gelobter used pollution exposure indices and found that over a period of almost 15 years (1970-1984) racial minorities were consistently exposed to significantly more air pollution than whites.¹³

Although there is consensus about the occurrence of environmental injustices in most of the literature, there is little consensus about the reason for the occurrence of environmental injustices. Some authors argue that minorities tend to be passive about environmental issues and do not typically get involved in

environmental decision-making, which in turn makes it more likely that they become the recipient of environmentally undesirable facilities.¹⁴ Others argue that minorities are deliberately marginalized or altogether excluded from serious deliberations of environmental issues.¹⁵ Lazarus found that policy-makers seldom solicit racial minorities for environmental planning and decision-making boards.¹⁶ Similarly, Vos, Sapat, and Thai found in a study about solid waste management in northern Illinois that minorities were not involved in the decision-making because they simply were never asked or informed about the opportunity to get involved.¹⁷ Checkoway demonstrated that notices in the legal section of newspapers, meetings held in locations away from public transportation opportunities and during daytime/weekday hours, technical language in documents, and procedural rules for public hearings and meetings that constrain two-way communication, all worked against adequate representation of minorities in public participation activities.¹⁸ Other researchers found that the domination of whites on environmental planning and decision-making bodies form an invisible color and class barrier for racial minorities to get involved in environmental decision-making.¹⁹ Even where attempts are made to involve minorities in deliberations, the timing, location, and format of such deliberations or outreach make the motives more suspicious and untrustworthy for minorities.

Environmental Justice and Transportation

There has been limited research on environmental justice issues and transportation. As shown before, early environmental justice studies in the 1980s investigated the disproportionate impact of environmentally hazardous facilities on communities of color.²⁰ Subsequent research in the 1990s showed that environmental justice extended beyond siting issues and included the formulation of health standards and the enforcement of environmental regulations.²¹ The research, which is available regarding environmental justice and transportation, focuses mostly on techniques and strategies that can be used by transportation decision-makers to address potential environmental justice issues.²² Stolz argues that, although transportation is often overlooked in environmental justice issues,

it is a fundamental element in the “*struggle for equality of opportunity*”.²³ In an article on a proposed light rail system in Austin, Texas, Almanza and Alvarez argue that both low-income and minority residents are usually left out of the transportation planning process and therefore have little or no control over potential environmental and economic impacts on their communities.²⁴ Their study in Austin shows that the proposed light rail system provides low-income and minority residents only with limited access while it increases noise and air pollution, reduces access to community resources, and reduces property values.²⁵ Dittmar and Chen argue that urban low-income communities have historically received less funding for transportation from the federal government.²⁶ Similarly, Stolz argues that low-income and minority households are faced with a double injustice. First, they have to devote a much larger percentage of their income to transportation, and second, they “*bear the brunt of transportation infrastructure improvements.*”²⁷ Meanwhile, a study by Oakland’s Metropolitan Transportation Commission found that low-income and minority communities had better accessibility to transit than the other communities and also benefited equally or more than other communities from transportation investments.²⁸ The Commission explained these counterintuitive findings by arguing that the location of low-income and minority communities in the urban core provided them with better than average access to public transit as well as better than average access to employment and activity centers. The Commission further argued the priority of transportation decision-makers in Oakland is to maintain and sustain the existing system before the system is expanded, which again benefits those in the urban core most.²⁹

Federal Responses to the Emergence of Environmental Justice Issues

In the 1990s, based on the mounting evidence of the disproportionate impact of environmental regulations on minority and low-income communities, the federal government developed policies on how to address environmental justice issues. The federal response started with actions by the EPA in 1990 and expanded to

all federal agencies in 1994, after President Clinton issued Executive Order 12898, "*Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations.*"³⁰

The EPA's response

Based on the growing evidence of the occurrence of environmental injustices, early in 1990, the Congressional Black Caucus, a bi-partisan coalition of academicians, social scientists, and political activists met with EPA officials to share information about the increasing evidence of the occurrence of environmental injustices. Consequently, in July 1990, the EPA created the Environmental Equity Workgroup to address the allegation that racial minority and low-income populations bear a higher environmental risk burden than the general population. In June 1992, the Environmental Equity Workgroup published its findings in the report, *Reducing Risks in All Communities*. In this report the workgroup concluded:

1. There are clear differences between racial groups in terms of disease and death rates.
2. Racial minority and low-income populations experience higher than average exposures to air pollutants, hazardous waste facilities, and contaminated fish.
3. Risk assessment and risk management procedures are not in themselves biased against certain income or racial groups but can be improved to better take into account equity considerations.
4. EPA's program and regional offices are well suited to address environmental equity concerns but there is a need for environmental equity awareness training.
5. Native Americans are a unique racial group that is faced with distinct environmental problems, and tribes often lack the infrastructure, institutions, and resources that are necessary to protect their members.³¹

The workgroup recommended that the EPA increase the priority given to environmental justice issues, adopt a policy on environmental justice, and

establish an office responsible for addressing environmental justice issues within the EPA.³² Five months later, in November 1992, the EPA created the Office of Environmental Equity, which was renamed the Office of Environmental Justice (OEJ) in 1994.³³ The OEJ provides coordination and oversight regarding environmental justice issues to all parts of the EPA. The OEJ also coordinates communication and public outreach activities, provides technical and financial assistance to outside groups, and serves as a central environmental justice information clearinghouse.

Since the establishment of the OEJ, the EPA has tried to integrate environmental justice into its day-to-day operations. When Administrator Browner assumed office in 1993, she made environmental justice an EPA priority when she stated:

*Many people of color, low-income and Native American communities have raised concerns that they suffer a disproportionate burden of health consequences due to the siting of industrial plants and waste dumps, and from exposures to pesticides or other toxic chemicals at home and on the job and that environmental programs do not adequately address these disproportionate exposures.*³⁴

In 1994, Executive Order 12898 established the EPA as the lead agency responsible for the coordination of programs aimed at addressing environmental justice issues.³⁵ (For a discussion of Executive Order 12898, see the next section). To comply with the directives in the order, the EPA issued its environmental justice strategy in April 1995.³⁶ In this document, the EPA made clear that environmental justice starts and ends in communities. It also stated that the EPA would “...work with communities through communication, partnership, research, and the public participation processes” and “...help affected communities have access to information which will enable them to meaningfully participate in activities.”³⁷

Recent initiatives by the EPA have made citizen participation not only an important component of strategies to prevent environmental injustice, but also the launch pad of environmental decision-making, planning, and remediation. In its 1997 strategic plan, the EPA states:

*Citizens are also taking a more active role in environmental decision-making—demanding a seat at the table as local, state and national issues are debated. Recognizing the value and potential of a well-informed and committed citizenry for affecting positive change, the Agency supports meaningful public involvement in environmental issues.*³⁸

In its 2000 strategic plan, the EPA takes public participation even further by not only explicitly acknowledging that certain people have traditionally been excluded from environmental protection efforts, but also stating that the EPA will increasingly have to rely on local initiatives:

*We are committed to encouraging environmental action and stewardship more broadly throughout society and are working to make information widely available so others can understand and help solve environmental problems. Our efforts involve businesses and industry, but they also include individuals and organizations that have often been on the fringes of environmental protection efforts in the past.*³⁹

On August 9, 2001, EPA Administrator Whitman issued a memo to all EPA regional administrators reaffirming the EPA's commitment to environmental justice and its integration into all EPA's programs and activities. The administrator stated that environmental justice is to be achieved for all communities and people across the U.S.⁴⁰ According to the memo, environmental justice is achieved when:

*[E]veryone, regardless of race, culture, or income, enjoys the same degree of protection from environmental and health **and** (emphasis in original) equal access to the decision-making process to have a healthy environment in which to live, learn, and work.⁴¹*

Environmental justice in other federal agencies

Environmental justice became an important issue for all federal agencies when, on February 11, 1994, President Clinton signed Executive Order 12898, “*Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations.*”⁴² With this order, President Clinton directed all federal agencies to establish internal directives to address environmental justice issues.

The three specific goals are:

- 1. to focus attention of federal agencies on the human health and environmental conditions in minority communities and low-income communities with the goal of achieving Environmental Justice;*
- 2. to foster non-discrimination in federal programs that substantially affect human health or the environment;*
- 3. to give minority communities and low-income communities greater opportunities for public participation in, and access to public information on, matters relating to human health and the environment.⁴³*

As mentioned before, the executive order established the EPA as the lead agency responsible for the coordination of programs aimed at addressing environmental justice issues.⁴⁴ Finally, the executive order established an Interagency Working Group (IWG) on environmental justice chaired by the EPA Administrator and comprised of the heads of the EPA, the departments of Justice, Defense, Energy, Labor, Interior, Transportation, Agriculture, Housing and Urban Development, Commerce, Health and Human Services, the Council

on Environmental Quality, the Office of Management and Budget, the Office of Science and Technology Policy, the Domestic Policy Council, and the Council of Economic Advisors.⁴⁵ Since its inception, the IWG has published a directory identifying environmental justice contacts in federal agencies, intended to enhance coordination and communication among federal agencies, and improve the general public's access to federal agencies regarding environmental justice issues.⁴⁶ The IWG has also published the *Integrated Federal Interagency Environmental Justice Action Agenda*, in which the IWG describes 15 demonstration projects aimed at coordinating federal initiatives and resources.⁴⁷

The executive order, along with the accompanying presidential memorandum, contains several important directives for federal agencies:

1. It requires the development of agency-specific environmental justice strategies.⁴⁸
2. It recognizes the importance of research, data collection, and analysis with respect to multiple and cumulative exposures to environmental risks for low-income and minority populations.⁴⁹
3. It requires agencies to ensure effective public participation and provide access to information, which specifically includes the translation of crucial public documents for limited-English-speaking populations.⁵⁰

The presidential memorandum, which accompanied the executive order, clearly states that the order does not establish new regulations enforceable in court. According to the memorandum:

*[T]he executive order is only intended to improve the internal management of the Executive Branch and is not intended to create any right, benefit, or trust responsibility, substantive or procedural, enforceable by law or equity by a party against the United States, its agencies, its officers or any person.*⁵¹

Instead, the executive order restates the provisions in Title VI of the Civil Rights Act of 1964, which prohibits discriminatory practices in programs that receive federal funding.⁵² At the same time, the executive order refocuses attention on the 1969 National Environmental Policy Act (NEPA), which states that it is the goal of federal environmental policy “to ensure for all Americans a safe, healthful, productive, and aesthetically and culturally pleasing environment.”⁵³

The importance of NEPA for addressing environmental justice issues was further underscored by the *Draft Guidance for Addressing Environmental Justice under the National Environmental Policy Act*, which was issued by the Council on Environmental Quality (CEQ) in May 1996.⁵⁴ According to the draft guidance, federal agencies should examine the following issues when performing an environmental impact assessment under NEPA:

- the composition of affected communities and populations;
- health data concerning the potential for cumulative exposure to health or environmental hazards;
- cultural, social or economic factors that may increase the effects of a decision;
- public participation strategies; and
- community or tribal representation in the NEPA process.⁵⁵

Environmental justice and the Department of Transportation

To comply with the directive in Executive Order 12898, DOT issued a proposed order on environmental justice issues on June 29, 1995. After a period of public comment, DOT issued its final order on April 15, 1997. The DOT Order directs the Operating Administrations to determine the most effective and efficient way of integrating the process and objectives of the executive order into existing regulations and guidance.⁵⁶ It also establishes procedures for DOT to use in complying with Executive Order 12898.⁵⁷ The main objective of the DOT Order is to develop a process that integrates the existing regulatory requirements and

ensures that the interests and well being of minority populations and low-income populations are considered and addressed in the transportation decision-making process.⁵⁸

According to the DOT Order, DOT will observe three principles in undertaking the integration of environmental justice into existing operations and to comply with the executive order:

1. *Planning and programming activities that have the potential to have a disproportionately high and adverse effect on human health or the environment shall include explicit consideration of the effects on minority populations and low-income populations.*
2. *Procedures shall be established or expanded, as necessary, to provide meaningful opportunities for public involvement by members of minority populations and low-income populations during the planning and development of programs, policies, and activities.*
3. *Steps shall be taken to provide the public, including members of minority populations and low-income populations, access to public information concerning the human health or environmental impacts of programs, policies, and activities, including information that will address the concerns of minority and low-income populations regarding the health and environmental impacts of the proposed action.*⁵⁹

DOT is also required, under Title VI of the Civil Rights Act of 1964, to ensure that:

No person is excluded from participating in, denied the benefits of, or subjected to discrimination by any program or activity of DOT

*because of race, color, or national origin.*⁶⁰

In December 1998, the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) issued DOT Order 6640.23, which required the FHWA and the FTA to implement the principles in the DOT Order.⁶¹ The strategy adopted by the FHWA and FTA to implement Executive Order 12898 is very similar to the strategy adopted by DOT. According to the order, it is the FHWA's longstanding policy to actively ensure non-discrimination in federally funded activities. The order also states that it is the FHWA's continuing policy to identify and prevent discriminatory effects by actively administering its programs, policies, and activities to ensure that social impacts to communities and people are recognized early and continually throughout the transportation decision-making process, from early planning through implementation.⁶²

Legal Context

In November 2001, the Environmental Law Institute (ELI) published a report in which it analyzed the EPA's statutory authority to promote environmental justice under ten different environmental statutes (National Environmental Policy Act, Federal Water Pollution Control Act, Clean Air Act, Resource Conservation and Recovery Act, Comprehensive Environmental Response, Compensation and Liability Act, Federal Insecticide, Fungicide and Rodenticide Act, Federal Food, Drug, and Cosmetic Act, Safe Drinking Water Act, Toxic Substances Control Act, Emergency Planning and Community Right-to-Know Act).⁶³ The report shows that all these environmental statutes contain tools that the EPA can use to further environmental justice. However, it is also clear that the most important mandates to promote environmental justice, besides the directives in the executive order, can be found in Title VI of the Civil Rights Act and the National Environmental Policy Act.⁶⁴

Title VI of the Civil Rights Act

Title VI of the Civil Rights Act of 1964 directs all recipients of federal funding to eliminate discrimination on the basis of race, color, or national origin. Title VI 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.*⁶⁵

Title VI bars intentional discrimination and also unjustified disparate impact discrimination. Disparate impacts result from policies and practices that are neutral on their face (i.e., there is no evidence of intentional discrimination), but have the effect of discrimination on protected groups.

Title VI has successfully been raised as an issue in some transit service provider cases and mandates that transportation planners take into account the involvement of low-income and minority communities in the planning process.⁶⁶ Metropolitan Planning Organizations (MPOs) should identify and address Title VI and environmental justice implications of their planning processes and investment decisions. They should ensure that their transportation programs, policies, and activities serve all segments of the region without generating disproportionately high costs and that Title VI and environmental justice are integral throughout the transportation planning process and, by extension, to those who participate in the transportation process.

National Environmental Policy Act

The National Environmental Policy Act of 1969 (NEPA) serves as the Nation's basic environmental protection charter. A primary purpose of NEPA is to ensure

that federal agencies consider the environmental consequences of their actions and decisions as they conduct their respective missions.⁶⁷ NEPA's purposes 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.*⁶⁸

Environmental justice is not specifically mentioned in NEPA, but an environmental justice analysis that is a form of social impact assessment, must be conducted within the framework of NEPA. The specific purpose of such analysis is to determine whether a proposed federal activity would impact low-income and minority populations to a greater extent than it would impact a community's general population.⁶⁹ Section 101 of NEPA directs the federal government:

to use all practicable means and measures, including financial and technical assistance, in a manner calculated to foster and promote the general welfare, to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans.

According to section 101(b), "*it is the continuing responsibility of the Federal Government to use all practical means...to improve and coordinate Federal plans, functions, programs, and resources*" so that the nation may accomplish six specific goals:

- *...fulfill the responsibilities of each generation as trustee of the environment for succeeding generations...*,
- *...assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings...*,
- *...attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences...*,
- *...preserve important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment which supports diversity and variety of individual choice...*,
- *...achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities...*,
- *...enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources...*⁷⁰

To implement the executive order, each federal agency must develop its own approach to evaluating environmental justice under NEPA. As mentioned before, the Council on Environmental Quality (CEQ) issued a guidance on recommendations for considering environmental justice in the NEPA process in 1996.⁷¹ The CEQ's recommendations are summarized in Table 1.

NEPA has influenced all federal agencies, including the Federal Highway Administration. NEPA requires and FHWA is committed to the examination and consideration of potential impacts on sensitive social and environmental resources when considering the approval of a proposed transportation facility. The FHWA's NEPA project development is a balanced approach to transportation decision-making that takes into account the potential impacts on the human and natural resources and the public's need for safe and efficient transportation improvements.⁷²

Table 1: CEQ’s Recommendations for Considering Environmental Justice⁷³

Stage of NEPA Process	CEQ’s Recommendations
Scoping	<p>Seek input from low-income and minority groups.</p> <p>Develop a proactive outreach strategy that relies on individuals, community organizations, and non-mainstream media.</p> <p>Ensure effective communications with diverse groups through cooperative working relations and educational efforts.</p>
Public Participation	<p>Use innovative approaches to overcome linguistic, institutional, cultural, economic, and historic barriers to effective participation.</p>
Determine Affected Environment	<p>Use Bureau of Census or other demographic data to identify the composition of potentially affected populations by race, ethnicity, and income.</p>
Evaluating Impacts	<p>Identify, quantitatively and spatially, whether the effects on minority or low-income populations would be disproportionately high and adverse.</p> <p>Include a written statement as to the nature and extent of such impacts.</p>
Comparing Alternatives	<p>Encourage the potentially affected persons to recommend alternatives.</p> <p>Consider low-income and minority impacts in identifying the environmentally preferable alternative.</p>
Record of Decision	<p>Specifically identify how any disproportionately high and adverse impacts on a low-income minority population were considered in the decision-making process.</p> <p>Disseminate the ROD to the affected community, using translation and plain-English summaries if necessary.</p>
Mitigation	<p>Seek community input on ways to mitigate any disproportionately high or adverse impacts to minority or low-income populations.</p> <p>Consider the needs and preferences of such people in developing or adopting mitigation measures.</p>

Florida's Response to Environmental Justice

In response to the executive order and the mounting evidence that environmental regulations had a distributive effect, several states established an environmental justice strategy.⁷⁴ Florida was one of the seven most active states (Florida, California, Maryland, New Jersey, New York, Oregon, and Tennessee).⁷⁵ In 1994, Florida created the Environmental Equity and Justice Committee, which was charged with performing a study to provide objective information about the occurrence of environmental injustices in Florida, and assess how Florida could best prevent future occurrences.⁷⁶ In its 1996 final report, the Committee concluded that minority and low-income communities in Florida were disproportionately impacted by environmentally hazardous facilities.⁷⁷ It recommended that environmental justice and equity concerns be considered by each state agency as an element in their functional plans and that local governments incorporate environmental justice issues in their planning and zoning decisions. The Committee also suggested that state, regional, and local agencies develop environmental outreach programs to educate residents about environmental risks.⁷⁸

Consequently, in 1998, the state legislature established the Center for Environmental Equity and Justice at Florida Agricultural and Mechanical University in Tallahassee. This center has the task to “*conduct and facilitate research, develop policies, and engage in education, training, and community outreach with respect to environmental equity and justice issues.*”⁷⁹ Since its establishment, the center has organized annual conferences on environmental justice issues in Florida. The center has also entered into a memorandum of agreement with the South Florida Water Management District and the U.S. Army Corps of Engineers to address potential environmental justice issues in the implementation of the Comprehensive Everglades Restoration Plan.

In 1999, the state legislature also established a Community Environmental Health Program under the responsibility of the Center for Environmental Equity and Justice. This program was established to “ensure the availability of public health services to members of low-income communities that may be adversely affected by contaminated sites located in or near the community.”⁸⁰ The same statute also instructs the Florida Department of Health to establish a Community Environmental Health Advisory Board to “identify the community environmental health needs and types of services which should be provided.”⁸¹ Finally, environmental justice is specifically addressed in Florida’s Brownfield Redevelopment Act. Chapter 376.78 of this act states:

*According to the statistical proximity study contained in the final report of the Environmental Equity and Justice Commission, minority and low-income communities are disproportionately impacted by targeted environmentally hazardous sites. The results indicate the need for the health and risk exposure assessments of minority and poverty populations around environmentally hazardous sites in this state. Redevelopment of hazardous sites should address questions relating to environmental and health consequences. Environmental justice considerations should be inherent in meaningful public participation elements of a brownfields redevelopment program.*⁸²

Florida Department of Transportation’s Response to Environmental Justice

In 1996, FDOT established the Working Group on Community Impact Assessment, Public Involvement and Environmental Justice, as a response to the Executive Order 12898, the FHWA/FTA Interim Policy Guidance on Public Involvement and the FHWA’s emphasis on community assessment.⁸³ In the report, the working group reviewed FDOT’s “current practices, policies and

procedures for evaluating, and addressing socio-economic, public involvement, and environmental justice issues” and where necessary made recommendations for improvements.⁸⁴ In its report, the Working Group concluded that FDOT was “generally complying with the state and federal policies and procedures for community impact assessment, public involvement, relocation, environmental justice and civil rights (Title VI).”⁸⁵ Based on its review, the Working Group formulated 15 themes, which are represented in Table 2.

Table 2: “Themes” identified by FDOT Working Group⁸⁶

There is a need for training in civil rights, public involvement, conflict mediation, cultural diversity and sensitivity, communication skills, media relations and community impact assessment to strengthen programs and practices.
There is a need for better in-house and external coordination in identifying and addressing social and community values beginning in Transportation Planning and continuing through Construction and Maintenance.
There is a need to focus more on the human environment or human community, which means giving equal weight to the human environment and the same level of consideration that has historically been afforded the natural or physical environment. This will require educating in-house personnel on the application of policies, procedures and practices so that the Department is more open to working with citizens and sensitive to citizens’ needs, goals and concerns about their communities.
Mitigation of social impacts needs to be traditional and non-traditional in form. Mitigation must be reasonable and have a direct relationship to proposed transportation activities.
Solving community problems should be part of the Transportation Planning and Project Development processes, where applicable.
A holistic approach to project development and problem solving should be applied. Decision making should be “inclusive” and involve full consideration of community values.
Public involvement needs to be a continuous process beginning with the Transportation Planning phase (e.g.MPO)and continuing through Construction and Maintenance.
Public involvement needs to be creative and innovative throughout all phases. During the PD&E phase, public involvement should be structured to make a contribution to the assessment of community impacts and aid in satisfying NEPA requirements.
Collaborative problem solving and partnering are keys to successful project development and meeting community needs.
Early and continuous networking with community groups and organizations is an important communication tool that will lead to collaborative decision making and better community decisions.
Community values can best be understood when there is a strong relationship between the local comprehensive plans, MPO long range plans and the NEPA process for individual projects. This is especially true regarding secondary and cumulative impact assessments.Local governments and MPOs need to better define community values and address them in their respective plans. FDOT should be an active partner in this process, since the Department is a customer and recipient of these plans.
The public needs to be involved in the Transportation Planning Phase concerning modal choice decision making and in the PD&E phase concerning alternative development, impact assessment, and mitigation decision making.
General education of the public, local governments, state resource agencies and other partners in FDOT’s decision making process is needed. This should be a continuous education process.
FDOT should ensure that commitments made to address community value issues are carried forth and implemented regardless of the source or phase in which the commitment is made. A commitment compliance program should be established to track and ensure commitment implementation.
Recognition of community values, fairness, equal treatment, and equal access to decision making should be standard business practice from Transportation Planning through Construction and Maintenance.

The “themes” in Table 2 show that the Working Group had an excellent understanding of the issues that need to be addressed in order to prevent disproportionate burdens from transportation decision making. In their report the Working Group continues with 37 recommendations that all serve to better incorporate community and environmental justice concerns into FDOT’s practices, procedures and policies. The recommendations of the working group go well beyond the directives in Executive Order 12898 and the legal requirements of Title VI and are even more comprehensive than the CEQ’s recommendations for incorporating environmental justice in the NEPA process (see table 1).

Issues in Developing an Environmental Justice Strategy

After reviewing the literature on, and regulatory framework for, environmental justice, it becomes clear that there are several recurring issues facing agencies when developing strategies to address environmental justice issues. The first issue relates to the question, what exactly is fair?⁸⁷ Does fairness refer to a certain standard level of risk, or is an increased level of risk acceptable if there is a positive trade-off for the acceptance of this risk? Vicki Been argues that housing values are lower in communities with higher environmental risks, allowing residents with lower incomes to buy a home.⁸⁸ Hornstein argues that the risk-based approach that forms the foundation of environmental regulations leads us to focus on “expected losses” instead of on “expected utilities.”⁸⁹ This argument seems particularly powerful in the case of transportation, since the siting of transportation facilities can have substantial benefits for a community in the form of increased mobility of the residents and increased economic attractiveness for business.

While the Clean Air Act specifically prohibits the consideration of potential benefits in the setting of acceptable ambient air standards, other environmental acts are less clear about this.⁹⁰ While the executive order clearly states that agencies need to address the disproportionate negative environmental impact of

decisions on communities, it is important to realize that communities might decide that they are willing to accept negative environmental impacts in return for positive trade-offs such as jobs and economic development. Covin and Walker state:

*[T]he environmental community must come to understand that not all such facilities are unwanted by the host community and that, in those cases where a community wishes to have such a facility, its decision is to be respected.*⁹¹

The issue of trade-offs is especially difficult if expected losses and expected utilities do not occur at the same time or for the same group. In other words, while a local community bears the burden of increased risks, the positive effects might extend well beyond that community, be located outside of the community, or occur at a later time. Greenberg argues that one way to address environmental justice issues is to make sure that the spatial-temporal distribution of increased risks and benefits are balanced so that those who benefit from the project also bear the burden.⁹²

This argument has significant consequences for transportation. It could indicate that negative environmental effects of a transportation decision could somehow be mitigated by creating benefits for the community affected by the decision. Benefits could simply be an increase in the mobility of the community or the provision of better access to public transportation. It is also possible to include secondary benefits such as an increased opportunity for economic development. The challenge for transportation is to become sensitive to the needs of low-income and minority communities so that these communities can reap the benefits of transportation decisions, thereby offsetting some of the potential negative effects.

The second issue is whether fairness refers to a standard level of acceptable risk or community approval of a level of risk. Current initiatives to address environmental justice include a strong focus on increasing community outreach and public participation in decision-making.⁹³ Executive Order 12898 specifically directs agencies:

*to give minority communities and low-income communities greater opportunities for public participation in, and access to public information on, matters relating to human health and the environment.*⁹⁴

Although this is likely to lead to better decision-making, it does not necessarily lead to “environmentally just” decisions. The question then becomes whether fair decision-making refers to decision-making outcomes, decision-making processes, or both. The previous issue that was raised assumed that it is possible to have some kind of trade-off between negative and positive effects, indicating that fairness refers mostly to “community approval of level of risk.”

The third issue is whether environmental justice refers to a fair distribution of environmental risks or the absence of risk. Current legislation focuses on mitigating the disproportionate negative environmental effects on minority and low-income communities, while it does not address the avoidance of the occurrence of risk in general. Several authors and the environmental justice movement argue that environmental justice is not only unfair and unjust, but also that it is impossible to achieve lasting solutions for environmental problems as long as the issues of environmental injustice persist.⁹⁵ These authors argue that as long as it is possible to pass on the costs of environmental pollution to a powerless group, environmental legislation only leads to a change of the location of that pollution. In other words, environmental injustice turns environmental legislation into an effect-oriented approach, which shifts the effects from the affluent areas to the powerless. According to these authors, we need a source-

oriented approach to make it impossible to pass the costs of pollution on to others.⁹⁶

The fourth issue is how to evaluate the outcomes of an environmental justice strategy. This issue is closely related to the previous issues. If environmental justice refers to the absence of risks, evaluation of environmental justice strategies simply means researching whether the strategy avoided the creation of additional risk or was able to reduce existing risks in a community. If environmental justice refers to a fair distribution of risks among communities, evaluation is slightly more complicated. In this case it would be necessary to compare the occurrence of risk in the affected community with the occurrence of risk in communities not affected by the decision. If environmental justice is interpreted as community-approved risk, evaluation could simply be done by a representative survey of affected residents. However, evaluation becomes difficult if environmental justice means that there is an increased risk in a community, but it is acceptable since there has been a positive trade-off for the acceptance of that risk.

The final issue relates directly to transportation and revolves around the question; what is an equitable transportation system? While the executive order only directs federal agencies to look at the effects of decision-making on human health and environmental conditions in low-income and minority neighborhoods, several authors argue that environmental justice goes beyond simply health and environmental conditions. For example, according to Stolz⁹⁷ an equitable transportation system has to fulfill five requirements:

- *Ensure opportunities for meaningful public involvement in the transportation planning process.*
- *Be held to standards of public accountability and financial transparency.*
- *Equally prioritize efforts to revitalize poor and minority communities in addition to expanding infrastructure.*

- *Ensure benefits and burdens from transportation projects are equally distributed across all income levels.*
- *Provide high quality services to low-income minority communities.*⁹⁸

Strategies to Address Environmental Justice

Executive Order 12898, Title VI of the Civil Rights Act, and NEPA do not prescribe the specific methods and processes for ensuring environmental justice in transportation planning. Therefore, state and local transportation agencies are free to explore and devise analytical techniques and public involvement approaches to, successfully and efficiently, integrate environmental justice considerations into decision-making. Since 1994, many federal and state agencies have adopted environmental justice strategies.⁹⁹ Although all strategies are different, it is possible to extract common themes, discussed more fully below, which should be considered as part of an environmental justice strategy:

1. Increase the awareness of staff in transportation agencies regarding environmental justice issues, the need for meaningful public participation, and barriers that staff might encounter.
2. Evaluate the successes and failures of the agency's prior public involvement activities.
3. Identify low-income and minority communities and disproportionate environmental impacts with the help of census data and Geographic Information Systems (GIS).
4. Get to know the community.
5. Find the best ways to include the community in the planning process to ensure that their needs are met.
6. Evaluate the results.

Increase awareness among staff

In order to address environmental justice issues, staff has to be aware of the potential of disproportionate negative environmental impacts of transportation

decisions on low-income and minority communities. Staff also has to become aware of their own preconceptions about low-income and minority communities and how these preconceptions can influence their decision-making.

Environmental justice should be about more than simply following legislation and regulations; it should become part of the culture of an agency. It is important to realize that any environmental justice strategy can only succeed if it is supported by agency staff. Staff needs to realize that addressing environmental justice issues will improve transportation decision-making, but there are factors that prevent certain communities from participating in decision-making. In a 1996 study on the participation of minorities in solid waste management decision-making, Vos argues that planners should not only ensure participation of low-income and minority population, but also be aware of *other social and economic problems that draw up resources and make it difficult to participate in decision-making*.¹⁰⁰ Staff also need to realize that many low-income and minority communities have had bad experiences with government agencies and do not trust agency staff.¹⁰¹

Once staff is aware of the potential for disproportionate impacts of their decisions on low-income and minority communities, they need to be informed about the use of analytical tools that can be used to determine potential disproportionate effects as well as the shortcomings of these tools. Finally, they need to be trained in more effective public participation methods.

Although increasing awareness and staff training should be an ongoing effort within the agency, EPA Region IV offers an environmental justice workshop for agencies and communities that can serve as a starting point. The workshop is a two-day orientation in which participants explore the meaning of environmental justice generally, and as it relates to their day-to-day responsibilities. The workshop explores the origins of the environmental justice movement, perceptions and definitions of environmental justice, and some of the relevant

laws. The workshop also provides an overview of GIS and other analytical tools helpful in understanding the issue. Finally, the workshop offers opportunities to meet with people addressing environmental justice on a day-to-day basis.¹⁰²

Evaluate existing public involvement programs

Environmental justice strategies heavily focus on public outreach and the inclusion of all potentially affected parties in the decision-making process. Before developing an environmental justice strategy, it is important to evaluate the successes and failures of existing processes to include minority and low-income residents. This will allow the agency to build on what has already proven successful rather than starting with something new. It will also help with the identification of staff's existing opinions and perceptions about the participation of low-income and minority residents, and the value of public participation in general.

Identify low-income and minority communities

To evaluate the potential distributive effects of transportation decisions on minority and low-income populations, it is necessary to identify the areas where these populations reside.¹⁰³ Both the executive order and the DOT Order on Environmental Justice recognize four different groups: Blacks, Hispanics, Asian-Americans, American-Indian and Alaskan Natives, and low-income. The DOT Order defines minority populations as:

*[A]ny readily identifiable group of minority persons who live in geographic proximity, and, if circumstances warrant, geographically dispersed/transient persons who will be similarly affected by a proposed DOT program, policy or activity.*¹⁰⁴

The Council on Environmental Quality's (CEQ) *Environmental Justice Guidance Under The National Environmental Policy Act* is a little more specific and states

that minority populations should be identified if the minority population of the affected area is greater than 50 percent, or when the percentage minority population in the affected area is “*meaningfully*” greater than the general population.¹⁰⁵ The DOT Order defines low-income populations similar to minority populations:

*[A]ny readily identifiable group of low-income persons who live in geographic proximity, and, if circumstances warrant, geographically dispersed/transient persons who will be similarly affected by a proposed DOT program, policy or activity.*¹⁰⁶

CEQ’s guidance states that low-income populations should be identified with the annual statistical poverty thresholds from the Census Bureau’s Current Population Reports, Series P-60 on Income and Poverty.¹⁰⁷ Without detailed local knowledge, the easiest and most comprehensive approach to identifying these communities, is by mapping the percentages of these residents by census block groups using GIS. While the census tract is the most common unit of analysis in urban areas, it is typically considered too large for analysis in environmental justice research.¹⁰⁸ Ideally, analysis should be performed at the census block level, which is roughly the size of a city block. However, while race data is available at this level, income data is not, and therefore census block groups offer the most detailed level of analysis. Since census blocks do not follow neighborhood boundaries, the use of census block groups could lead to the exclusion of “*pockets*” of low-income or minority residents. To prevent this, it is necessary to perform analyses at different data aggregation levels. According to the EPA’s *Final Guidance For Incorporating Environmental Justice Concerns in EPA’s NEPA Compliance Analysis*, it is important to realize that even when the percentage of low-income or minority residents in a community is relatively small, these residents may still experience a disproportionately high adverse effect.¹⁰⁹

The second step is to identify the impact of a particular transportation decision on different populations. This step involves determining the extent of the spatial effects of the decision. In a study on environmental justice and transportation investment policy, Forkenbrock and Schweitzer suggest that two types of analysis might be helpful to determine the potential environmental justice effects of a transportation decision:

1. Analysis of the contours of the noise or air pollution that might be generated by a transportation decision.
2. Analysis of the relative accessibility to transportation that might be affected by a transportation decision.¹¹⁰

Although the analysis suggested by Forkenbrock and Schweitzer provides a basis for the potential effects of transportation decisions on low-income and minority residents, it does not provide a complete overview of potential disproportionate effects. In addition to a potential increase in pollutant levels, transportation decisions can have other substantial effects on communities that are not accounted for in the above-mentioned analysis. The DOT Order acknowledges that transportation decisions can have other disproportionate negative effects and states:

Adverse effects means 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.*¹¹¹

Analysis of demographics and environmental effects provides some indication of where to find minority and low-income populations, and where the effects of a transportation decision will occur. However, the real issue is whether these populations are, or will be, confronted with “*disproportionately high and adverse human health effects*” or “*disproportionately high and adverse environmental effects.*”¹¹² The EPA’s Final Guidance also specifically states:

*...analyses must consider the cumulative effects on a community by addressing the full range of consequences of a proposed action as well as other environmental stresses which may be affecting the community.*¹¹³

Here cumulative effects are defined as “*the incremental impact(s) of the action when added to other past, present, and reasonably foreseeable future actions.*”¹¹⁴ Furthermore, the CEQ warns agencies that impacts in low-income and minority populations can differ significantly from impacts on the general population due to cultural practices such as subsistence fishing, use of well water, and patterns of living.¹¹⁵

To determine the existence of disproportionate effects, the geographic location of low-income and minority populations should be compared to the distribution of environmental risks. Given the complexity of the task, this can best be achieved by the use of GIS to create maps that show the distribution of environmental risks relative to the location of low-income and minority populations. Data about the location of environmental risks is available from the EPA but the calculation of overall risk is complex. In 1997, the EPA’s Science Policy Council issued a report

on cumulative risk assessments that can provide guidance in determining whether environmental threats provide a greater risk to low-income or minority populations.¹¹⁶ However, according to the accompanying memorandum from EPA administration Browner, the report does not provide guidance about the consideration of other factors such as “... *the social, economic, behavioral, or psychological factors that also might contribute to adverse health effects.*”¹¹⁷

Get to know the community

Public outreach often fails because decision-makers are not familiar with the communities impacted by their decisions. It is important to assume a proactive rather than a reactive position by getting to know the real needs of the community before starting a public involvement program. Simple things, such as walking around the community, learning the history of a community, identifying community leadership, and identifying community communication structures, can help improve the effectiveness of environmental justice strategies dramatically.

Include the community in the planning process

Meaningful public involvement in transportation decision-making is essential for achieving environmental justice goals. Participation by low-income and minority communities helps to ensure that the needs of these communities and potential disproportionate environmental impacts are raised and hopefully addressed.¹¹⁸ According to the EPA, experience has demonstrated that efforts to address environmental justice issues without meaningful community input result in failure.¹¹⁹ In general, an informed and involved community is a necessary and integral part of the decision-making process.

Unfortunately, there has been a lack of participation on the part of low-income and minority communities. Earlier in this report it was shown that there are different opinions about the causes for this lack of participation. Regardless of the specific reasons, it is important to realize that the traditional approach to

public involvement has not been able to engage low-income and minority residents in the decision-making process. The challenge now is to increase the participation of these communities in transportation decision-making, and be sensitive to the specific needs of these communities.

Several federal agencies have suggested methods to improve public outreach to low-income and minority communities. In the brochure, *Serving a Diverse Society*, the EPA makes the following suggestions:

- Use facilitators for meetings.
- Identify and work with informal networks.
- Build bridges for long-term relationships.
- Hold workshops with community leaders.
- Be sensitive to culturally diverse groups.¹²⁰

In a DOT-sponsored conference on transportation and environmental justice, similar suggestions were made:

- Strengthen the role of neighborhood and community-based organizations.
- Educate agency staff on methods to promote citizen involvement.
- Use intermediary or liaison organizations.
- Recognize the limitations of traditional public hearings.
- Involve low-income and minority populations in the beginning of the planning process.
- Provide information at common locations such as churches, grocery stores, and schools.¹²¹

The Department of the Interior's (DOI) environmental justice strategy focuses on improving public outreach to low-income and minority populations. In a 1995 memorandum, DOI suggests ways to improve outreach by using:

- Local (ethnic-oriented) newspapers.
- Ethnic radio stations.
- Churches.

- Civic associations.
- Minority business associations.
- Federal, state, and local tribal governments.
- Homeowners associations and neighborhood watch groups.
- Rural cooperatives.
- Senior citizen associations.¹²²

The recommendations from the EPA, the DOT-sponsored conference, and DOI show that there is a large array of tools that can be used to reach out to low-income and minority communities to increase their participation in transportation decision-making. Of course, an effective outreach strategy will use a variety of tools, targeting different groups or individuals in different ways as well as the same groups or individuals in different ways. Experience with environmental outreach in minority communities in south Florida has shown that participation in community events can be greatly expanded by advertising events in a variety of ways, in a variety of different places (such as churches, minority-oriented newspapers, flyers, word of mouth, and personal invitation).¹²³

The question then becomes how to determine the best mix of tools for a particular community. One way to determine this is to start with a small core group of participants, and then broaden the public involvement program with their help.¹²⁴ Such a core group can provide information about the community and help establish a working relationship with the community. After this, the groups can be dissolved, or remain as mediator between agency staff and the larger community while the project progresses. The group can be comprised of a broad range of interests or limited to community interests. A group should in general meet regularly and, given the specific target audience, it is important to provide participants with administrative and limited financial support. Participants could also be offered training to enhance their knowledge of transportation planning and community organizing.

Evaluate results

It is important for transportation agencies to evaluate the successes and failures of their environmental justice strategy. However, evaluation is complicated and neither the presidential executive order nor the DOT order, contain performance indicators. The executive order merely directs federal agencies to develop an environmental justice strategy, to provide access to information, and to ensure effective public participation. The EPA has also not provided agencies with any guidance about the evaluation of environmental justice strategies. According to the National Academy of Public Administration, the EPA has not established “*performance, outcome, or accountability measures ... making it extremely difficult to determine whether the agency has made any progress in implementing its strategy.*”¹²⁵

The problem with the evaluation of environmental justice strategies is that the executive order is unclear about the desired outcome. The directive merely is to consider the impact of agency’s decisions on low-income and minority communities, to provide information and to ensure meaningful participation in decision-making. The order effectively tries to improve the decision-making process by making it more inclusive. The assumption is that a better decision-making process will lead to “just” decisions. The question then becomes, “what should be evaluated?” In order to show compliance with the directives in the executive order, it suffices to show that potential disproportionate impacts were considered and that there was the opportunity for the public to have meaningful involvement in the decision-making process. This could simply be achieved by documenting the decision-making process. On the other hand, as discussed before, Title VI of the Civil Rights Act is much more specific and states that:

*No person in the United States shall, on the ground of race, color or national origin, be excluded from participating in, be denied the benefits of, or subjected to discrimination under any program or activity receiving Federal financial assistance.*¹²⁶

Title VI bars not only intentional discrimination but also disparate impacts resulting from policies and practices that are neutral on their face, but have the effect of discrimination on protected groups. This could mean that the evaluation of environmental justice strategies is not limited to the decision-making process, but also includes the evaluation of decision-making outcomes. Given the dilemmas identified earlier in this report, this kind of evaluation is extremely difficult.

Conclusion: Environmental Justice As an Opportunity for Transportation Decision-Making

As shown in this report, environmental justice refers to the fair treatment of all people with respect to the development, implementation and enforcement of environmental laws and regulations. Typically, environmental justice issues involve a disproportionately high burden on low-income and minority communities with negative environmental externalities of activities. In the case of transportation, environmental justice is more complicated and refers not only to avoiding negative environmental health and environmental effects, but also to the provision of meaningful participation opportunities and equitable access to transportation.

It is important to see environmental justice as an opportunity to make better transportation decisions. In its environmental justice brochure, DOT has clearly stated that environmental justice improves transportation decision-making by:

- Making transportation decisions that meet the needs of all people.
- Designing facilities that fit into communities.
- Enhancing the public involvement process and strengthening community-based partnerships.
- Improving the tools for analyzing the impacts of transportation decisions on minority and low-income communities.

- Partnering with other public and private agencies to leverage resources and achieve a common vision for communities.
- Avoiding disproportionately high negative impacts on minority and low-income communities.
- Minimizing unavoidable negative impacts by identifying these impacts early on in the planning process and mitigating the effects.¹²⁷

This report has shown that, given the relatively recent emergence of environmental justice as a component of federal policy, many issues remain unsolved. Since transportation is a key component in addressing issues such as poverty, unemployment, and ensuring equal access to educational and governmental institutions,¹²⁸ it is important for transportation decision-makers to take a proactive approach in the pursuit of environmental justice. In order to do this successfully, more research is needed on the issues that have been identified in this report. The recommendations from the FDOT Working Group on Community Impact Assessment, Public Involvement and Environmental Justice show that FDOT is developing a strategy that is not only proactive but also goes well beyond the requirements under Title VI.

Appendix 1: Definition of terms

In order to understand what the environmental justice movement is, it is necessary to have a more specific idea of the concepts related to environmental justice. The following definitions will explain the basic ideas conveyed in environmental justice:

- **Environmental Equity** → An ideal of equal treatment and protection for various racial, ethnic, and income groups under environmental statutes, regulations, and practices applied in a manner that yields no substantial differential impacts relative to the dominant group. Although environmental equity implies elements of “*fairness*” and “*rights*” it does not necessarily address past inequities or view the environment broadly, nor does it incorporate an understanding of the underlying causes and processes.
- **Environmental Racism** → “*Racial discrimination in environmental policy-making, enforcement of regulations and laws, and targeting of communities of color for toxic waste disposal and siting of polluting industries,*” according to Reverend Benjamin E. Chavis, Jr., former Chairman of the NAACP. Racial discrimination can be intentional or unintentional and is often a manifestation of “*institutional racism.*” This term acknowledges the political reality that created and continues to perpetuate environmental inequity and injustice.¹²⁹
- **Environmental Equity** → No person or particular group of persons suffers disproportionately from environmental degradation or intentional discrimination, or is denied enjoyment of a fair share of environmental improvements.¹³⁰
- **Environmental Justice Movement** → A movement promoting the fair treatment of people of all races, income, and culture with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment implies that no person or group of people should shoulder a disproportionate share of the negative

environmental impacts resulting from the execution of this country's domestic and foreign policy programs.¹³¹

- **Fair Treatment** → No group of people, including racial, ethnic, and/or socioeconomic groups, should bear a disproportionate share of the negative consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal environmental programs and policies.¹³²
- **Meaningful Involvement** → Public involvement should satisfy the following criteria: (1) Potentially affected community residents have an appropriate opportunity to participate in decisions about a proposed activity that will affect their environment and/or health; (2) the public's contribution can influence the regulatory agency's decision; (3) the concern of all participants involved will be considered in the decision-making process; and (4) the decision-makers seek out and facilitate the involvement of those potentially affected.¹³³

Endnotes

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