What Is the Best Way to Address Environmental Justice Issues?

FINAL REPORT 506

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Arizona Department of Transportation 206 South 17th Avenue Phoenix, Arizona 85007 in cooperation with U.S. Department of Transportation Federal Highway Administration

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16. Abstract

The information we received from the DOTs surveyed included a variety of responses regarding the level of implementation of environmental justice (EJ) policies, procedures and programs. Even though the level of implementation varies among the DOTs, the basic principles of EJ evaluation and response are consistent. Below, we have provided a synopsis of what can be called "best practices" for implementing an effective EJ program. The two models have been utilized in differing degrees by many DOTs. At least three DOTs have implemented the two models. However, the macro-level model has not been in practice for a long period of time and therefore its effectiveness has not fully been measured. Neither has the success of the micro-level (project specific) action been determined.

Even though there appears to be no considerable evidence of legal challenges to the more basic approaches used by some DOTs, the utilization of the proposed "best practices" is warranted. Continuing interest and concern for EJ issues in Arizona, and the potential for increased public awareness suggest that methods that formalize ADOTs EJ policies and procedures in this manner should be continued and expanded were necessary.

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Executive Summary

The Arizona Department of Transportation (ADOT) initiated this research project to investigate environmental justice (EJ) as it relates to transportation agencies. Recent executive orders and legislation have mandated the identification and consideration of EJ issues by agencies receiving federal funding. An objective of this research is to take stock of how transportation agencies have been addressing EJ issues, and highlight successful or thorough approaches for the purpose of developing recommendations for ADOT.

The key goals of this research project are to (1) compile issues that may be defined as within the realm of EJ, and (2) identify processes for successfully addressing these issues. A literature review was completed to provide an understanding of the background of EJ, as well as identify key issues and ideas. Interviews were conducted with local community leaders to discuss definitions and issues associated with EJ. Surveys were distributed to transportation agencies in all 50 states to identify issues, program approaches, successes, and problems. All of these endeavors are discussed in subsequent chapters.

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, requires federal agencies to make EJ part of their mission through existing legislation such as Title VI of the Civil Rights Act of 1964. Section 602 of Title VI, Nondiscrimination in Federally Assisted Programs, requires each federal agency to ensure that no person, regardless of race, color, or national origin, is excluded from participation in, denied benefits of, or subjected to discrimination under any program or activity receiving federal financial assistance.

It should be noted that in many instances agencies include the handicapped and the elderly in their analysis.

ADOT has prepared a guidance document on Title VI and Environmental Justice. This document provides guidance to ensure that Title VI and EO 12898 are adequately considered in the transportation environmental planning process. The ADOT guidance document advocates the "utilization of a strong public involvement process and systematic interdisciplinary approach to the identification and evaluation of a broad range of alternatives, as well as by continuing to identify, avoid, minimize and mitigate adverse effects and impacts."

It is recommended that Departments of Transportation (DOTs) follow USDOT and EPA guidance on EJ. In fact, DOTs, as well as all federal agencies, are required to make EJ part of their mission through existing legislation such as Title VI of the Civil Rights Act of 1964. During this research we surveyed and interviewed DOTs. The information we received included a variety of responses regarding the level of implementation of EJ policies, procedures and programs. Even though the level of

implementation varies among the DOTs, the basic principles of EJ evaluation and response are consistent. Full results of the surveys can be found in subsequent chapters.

Community members were also surveyed and interviewed. The purpose of these interviews was to determine what environmental justice issues are prominent in minority or low-income communities generally, and the links that these communities see between transportation and environmental justice, in addition to learning what their feelings were about how ADOT communicates with affected parties regarding current projects. One of the most frequently voiced concerns was over the lack of available transportation to low-income and minority groups and respondents identified this as a potential environmental justice issue. The other environmental justice issue that respondents identified involved road expansion or new highway construction and the likelihood that low-income areas will be displaced rather than higher income areas such as Scottsdale.

While the primary focus of environmental justice concerns is the avoidance of disproportionate negative impacts on disadvantaged segments of the population, this is not to say that transportation projects produce only negative impacts. Proximity to transportation facilities may enhance access to economic opportunities that can be exploited only via travel from one's neighborhood to other locations. It is also possible that proximity to transportation facilities could increase the value of properties that can be converted to uses benefiting from ease of access to the transportation network. Nevertheless, the positive impacts of transportation facilities are not the subject of this report. Those interested in these positive impacts should consult the existing literature on the economic impacts of transportation facilities and their construction.

In concluding the paper, we offer discussion and recommendations on the data and information collected. We present as discussion two models that have been utilized in differing degrees by many DOTs. Recommendations are provided at the conclusion of the paper which are based on our research, surveys and interviews.

SECTION 1: INTRODUCTION

Overview of Purpose and Need for Research Project

The Arizona Department of Transportation (ADOT) initiated this project to investigate environmental justice (EJ) as it relates to transportation agencies. A combination of executive orders and legislation mandates the identification and consideration of EJ issues by agencies receiving federal funding. For ADOT, compliance with these mandates requires an understanding of how to address the relationship between agency activities and adverse environmental impacts to minority or low-income populations. An objective of this research is to take stock of how other transportation agencies have addressed EJ issues, and highlight successful or thorough approaches for the purpose of developing recommendations for ADOT.

The key goals of this research project are to (1) compile issues that may be defined as within the realm of EJ, and (2) identify processes for addressing these issues. A literature review was completed to provide an understanding of the background of EJ, as well as identify key issues and current ideas. Interviews were conducted with local community leaders to discuss definitions and issues associated with EJ. Surveys were distributed to transportation agencies in 48 states to identify issues, program approaches, successes, and problems. All of these endeavors are discussed in subsequent chapters. The remainder of this section will provide background information on EJ as a legal concept, statutory requirement, and set of issues to be addressed in environmental and transportation planning.

While the primary focus of environmental justice concerns is the avoidance of disproportionate negative impacts on disadvantaged segments of the population, this is not to say that transportation projects produce only negative impacts. Proximity to transportation facilities may enhance access to economic opportunities that can be exploited only via travel from one's neighborhood to other locations. It is also possible that proximity to transportation facilities could increase the value of properties that can be converted to uses benefiting from ease of access to the transportation network. Nevertheless, the positive impacts of transportation facilities are not the subject of this report. Those interested in these positive impacts should consult the existing literature on the economic impacts of transportation facilities and their construction.

Background of Environmental Justice and Issues Relating to Transportation

Background

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, requires federal agencies to make EJ part of their mission through existing legislation such as Title VI of the Civil Rights Act of 1964. Section 602 of Title VI, Nondiscrimination in Federally Assisted Programs, requires each federal agency to ensure that no person, regardless of race, color, national origin, age, sex, or disability, is excluded from participation in, denied

Executive Order 12898 was issued by President Clinton in February of 1994 only a decade after the environmental justice movement came to national attention.

benefits of, or subjected to discrimination under any program or activity receiving federal financial assistance. The Federal Highway Administration (FHWA) is the agency under the U.S. Department of Transportation (USDOT) that administers federal financial assistance to ADOT for the planning and construction of some transportation projects in the state. As a recipient of federal financial assistance, ADOT is responsible for complying with Title VI.

Title VI was enacted to ensure minority populations are no longer denied equal protection and benefit from federal programs related to education, employment, healthcare, housing, and welfare. With increased consciousness of the negative effects of environmental harm, there arose a sentiment that minorities should also be assured of equal protections from environmental harm.

This concern led to the EJ movement and Executive Order 12898. In a memorandum describing the intent of the order, President Clinton directed all federal departments and agencies to apply existing environmental and civil rights statutes to prevent minority and low-income communities from bearing disproportionately high and adverse environmental effects.

Minority and low-income populations are defined by the USDOT in their final Order 5610.2 on Environmental Justice (Federal Register, April 15, 1997), and the Office of Management and Budget Bulletin No. 00-02 (March 9, 2000).

Low-Income means a person whose median household income is at or below the Department of Health and Human Services poverty guidelines.

Minority means a person who is (1) Black or African American, (2) Hispanic or Latino (3) Asian, (4) American Indian or Alaskan Native, or (5) Native Hawaiian or other Pacific Islander.

It should be noted that in some instances agencies include the handicapped (wheelchair-bound) and the elderly in their analyses. This is a logical expansion of

EJ and it is recommended that these groups are also included in the planning process. However, at this time these groups are not included in the federal EJ order.

Issues Relating to Transportation

EJ involves the identification of disproportionate impacts to minority or low-income populations. However, "impacts" have been defined in several different ways. Key interpretations of EJ impacts or issues include the following:

- Location/siting issues. In general, EJ impacts have been associated with the siting of undesirable or environmentally hazardous facilities in areas that are disproportionately populated by minority or low-income residents. These facilities may include landfills, industrial land uses, the use of toxic or hazardous chemicals, or highways. The key issue is that the risks associated with environmental hazards whether chemical, noise or other effects are disproportionately located in communities that do not have the resources to contest the siting decisions. In addition, lower property values in some of these communities make the locations desirable for industrial businesses or other endeavors (such as building a road) that will require right-of-way or site acquisition. It may be perceived that these communities are appropriate for less desirable but necessary facilities due to appearance or out of bias. Overall, disproportionate adverse impacts to affordable neighborhoods or historically minority neighborhoods could constitute an EJ issue.
- Public participation. Another key issue in EJ discussion is the accessibility of and participation in decision-making processes. This could be a general issue for all populations, in terms of adequate and full public information and the meaningful inclusion of public input in the process. This issue also encompasses the potential need to reach out to minority or low-income communities, which may require translation of public information into other languages, advertising public meetings in a wider variety of publications, holding public meetings in different neighborhoods or at different times. The key goal of more open public participation is to assure that decisions are made with full understanding of the issues, and to provide an understanding to the potentially affected communities of the decision-making criteria.
- Public transportation access. Typically, low-income and/or minority communities will comprise a greater proportion of the ridership of public transportation. As a result, public transportation is disproportionately significant to these groups for finding and maintaining jobs, among other responsibilities. Therefore, the provision of adequate public transportation has been interpreted as an EJ issue.
- Funding decisions. The prioritization of certain projects may have implications for the communities that receive transportation benefits. As an example, the diversion of transit funding to build freeways to accommodate higher-income communities may be interpreted as an EJ issue. Agencies

should be attentive to the distribution of funding benefits throughout the entire community.

How Does ADOT Address Environmental Justice?

ADOT has prepared a guidance document on Title VI and Environmental Justice. This document provides guidance to ensure that Title VI and EO 12898 are adequately considered in the transportation planning process. Their document was developed from several sources including the Region 9 Guidance Addressing Environmental Justice in the Environmental Impact Statement developed by the FHWA and Federal Transit Authority; the Review Draft Guidance for Incorporating Environmental Justice Concerns in Environmental Protection Agency's (EPA's) National Environmental Policy Act (NEPA) Compliance Analysis; and the USDOT Order to Address Environmental Justice in Minority Populations.

The ADOT guidance document advocates the "utilization of a strong public involvement process and systematic interdisciplinary approach to the identification and evaluation of a broad range of alternatives, as well as by continuing to identify, avoid, minimize and mitigate adverse effects and impacts." The document is summarized below.

Environmental Screening Analysis

The environmental screening analysis is the first step in identifying EJ and Title VI concerns. This analysis is performed to determine if sensitive populations, such as low-income or minority populations, are present. This analysis should be performed as soon as the project area or proposed action is determined. The guidance document suggests the analysis should be implemented concurrently with the scoping process for environmental impact statements (EISs) and environmental assessments (EAs). Two primary questions are suggested to guide this analysis:

Question 1- Does the potentially affected community include minority, aging, disabled and/or low income populations? Use census data, local organizations and Metropolitan Planning Organizations (MPOs) to characterize populations. Composition of the population should then be compared to characteristics of the populations surrounding the project and the larger community.

Question 2- Are environmental impacts likely to fall disproportionately on minority and or low-income members of the community?

If answers to both questions are no then the screening should be documented in EISs, EAs, Records of Decision (ROD) and Findings of No Significant Impact (FONSI). According to the guidance, "yes" answers should trigger enhanced public

participation and an analysis designed to identify impacts on both the larger population and on EJ populations.

Incorporating EJ Concerns into EIS/EA Development

EJ assessment data and analysis should be documented in EISs or EAs even if there are no EJ issues or impacts identified. If a potential EJ issue is identified, an analysis should be conducted and public participation should be utilized to solicit community involvement, and develop alternatives and mitigation measures.

Incorporating EJ Concerns into Scoping

Prior to the initiation of the scoping process, public outreach strategies should be defined. Public participation efforts should clearly describe any EJ concerns and specifically ask the public to suggest alternatives and mitigation measures aimed at reducing or avoiding potential effects. Comparative socioeconomic environmental and health analysis of all reasonable alternatives and mitigation measures should be provided at the appropriate time in the process.

Identifying Adverse Impacts

The guidance document gives suggestions on how to determine whether an action would have an adverse impact.

- Identify populations and demographics in the study area
- Identify any adverse impacts to the population
- Determine if these adverse impacts are high and/or disproportionate for EJ populations
- Consideration will be given to offsetting mitigation and enhancement measures as well as to any other offsetting benefits that will accrue to the affected population

Mitigation Measures

When potential disproportionately high and adverse effects are identified, mitigation measures should be developed. Members of the communities affected should be consulted. Enhanced public involvement efforts should be conducted to ensure mitigation measures are identified and that effects are identified and analyzed. The USDOT proposed order on Executive Order 12898 as published in the June 25, 1995 Federal Register and recommends the following general approach.

- Avoid or minimize the degree or magnitude of the action or its implementation
- Mitigate or eliminate adverse impacts by repairing, rehabilitating, or restoring the affected environment or community resource

- Reduce or eliminate adverse impact over time by long-term preservation and maintenance operations
- Compensation for adverse impacts by replacing adversely impacted resources or environments

Public Participation

It is essential that all groups potentially affected by a proposed project, especially EJ populations, should be involved in the public participation efforts of ADOT. EJ populations and stakeholders should be identified early to ensure they are given an opportunity to participate in the project. Special consideration should be given to language/cultural barriers, technical background, literacy, privacy issues, and preferred types of communication. The level of effort exhausted in soliciting community involvement should reflect the significance or disproportionate nature of the effect and level of community concern over the project.

Decisions, Coordination and Review

Decision documents should discuss EJ concerns, alternatives, mitigation measures and how EJ considerations were factored into decision. The guidance document gives example language to be used when writing sections of environmental documents and states that a staff person in the Environmental Planning Group would be available to review projects and reports.

How Have Other DOTs Addressed Environmental Justice?

It is recommended that Departments of Transportation (DOTs) follow USDOT and EPA guidance on EJ. In fact, DOTs, as well as all federal agencies, are required to make EJ part of their mission through existing legislation such as Title VI of the Civil Rights Act of 1964. Some DOTs do not have formalized policies and procedures relating to EO 12898; however, most follow some formalized Title VI policies. Of those surveyed, responses were varied when asked, "How does your agency follow USDOT and/or EPA guidance on Environmental Justice...." (see Section 4 for a summary of responses). Several agencies have detailed policies and guidance documents available as support for those within their agencies planning projects or programs. For example, Minnesota DOT has prepared detailed, step-by-step policies for their project/program managers as well as a detailed document outlining methods and approaches for public involvement when non-traditional stakeholders are involved. More information regarding how DOTs address EJ can be found in Section 3.

Research Methods

The primary purpose of this research is to identify issues associated with transportation agencies and EJ, and the processes that have been established to address these issues. The following methods were used to identify EJ issues:

- **Literature review**. The review focused primarily on the historical background and statutory/legal context of EJ. Sources included journal articles, state DOT publications, legal decisions, and online guidance from the USDOT and state DOTS. The summary literature review is provided in Section 2.
- Community Leader Interviews. Twelve community representatives were identified to be interviewed over the phone or in person. The purpose of these interviews was to determine what EJ issues are generally prominent in minority or low-income communities, and the links that these communities perceive between transportation and EJ. The intention was to identify specifically local issues, potentially generate ideas or concerns that have not been developed in the literature, or confirm the scope of issues raised in the literature.

The interviewees were selected to represent a wide diversity of organizing issues, race and ethnicity, and income levels. A questionnaire was developed to guide each interview, to aid in comparison and reduce interviewer bias in leading each discussion. The questionnaire and list of interviewees are included in Section 4.

- Agency Surveys. A written survey of state DOTS comprised the primary means of investigating the processes that have been established to address EJ, as well as identifying issues in other states. The written survey was sent via email or U.S. mail to 48 state DOTs. Twenty responses were received, for a response rate of 42%. The results of the survey can be found in Section 3 and a copy of the survey is included in Appendix A.
- Agency Phone Interviews. Because EJ in transportation is still an emerging issue, the majority of the survey respondents had not developed specific EJ programs. The DOTs that responded to the survey and had relatively significant experience with EJ issues were called for further discussion. Three DOTs were called for additional information, which can be found in Section 3.

Section 2: Literature Review

Introduction

This section will review historical, legislative, and legal background of EJ and discuss implementation so that ADOT may better fulfill its directive to ensure compliance with Executive Order 12898.

Historical Background

Executive Order 12898 was issued by President Clinton in February of 1994 after the EJ movement came to national attention. With the recognition of environmental harm following the environmental movement of the sixties and seventies, there came awareness that minority and low-income communities have frequently been disproportionately burdened with pollution and hazardous land uses. Concern solidified into the EJ movement from protests in 1982 against the State of North Carolina's decision to site a toxic landfill in a minority community. The landfill would bring polychlorinated biphenyls (PCB)-contaminated soil from 14 other counties in the state to the predominantly low-income and minority area of Warren County. Local resistance soon gained national attention and spurred further study of the issue.

These studies found examples of institutionalized environmental inequity. Other studies reported that poor communities were often favored for unwanted lands uses as there was little expectation of resistance from community residents. The National Law Journal found the EPA took longer to act on abandoned toxic sites and fined polluters of minority communities 54% less than polluters of white communities (NLJ, 1992).

A report requested by the U.S. General Accounting Office found three out of every four landfills in the south were located near predominately minority communities (GAO, 1983).

Executive Order 12898 attempts to address environmental inequities by ensuring that existing legislation such as the Civil Rights Act of 1964, the National Environmental Policy Act of 1969, and the Clean Air Act is strictly enforced with specific concern for minority and low-income communities. The next section will discuss the background of civil rights and environmental legislation.

Legislative Background

The foundation of anti-discrimination legislation is the 13th, 14th, and 15th Amendments to the United States Constitution. The 13th amendment was ratified in 1866 and although it abolished slavery it did not address racial equality. The 14th amendment, adopted two years later, specifically provided equal protection under the laws to all people regardless of race. The Equal Protection Clause of this

amendment still plays an active role in modern litigation. The 15th amendment guarantees the right to vote regardless of race.

The progressive steps taken by the three Civil War amendments were soon undermined by state imposed racial segregation. The Supreme Court upheld segregation in its 1896 ruling in *Plessy v. Ferguson*. Almost a century after it was ratified, the spirit of the 14th amendment was revived after Black Americans mobilized in protests and civil disobedience. The Civil Rights Act of 1964 barred discrimination in accommodations, prohibited job discrimination, and established a procedure for withholding federal funds from any program that discriminated by race.

The Civil Rights Act of 1964 states that no person shall be excluded or discriminated against based on race, color, national origin, age, sex, or disability under any program or activity that receives federal assistance. Title VI of the Civil Rights Act requires that federal agencies and departments must take action to carry out this policy. Executive Order 12898 affirms the Civil Rights Act by requiring an assessment of potential disproportionately high and adverse environmental impacts to minority communities that may result from federal actions. In addition, the order includes consideration for low-income populations.

Just as the Civil Rights Act of 1964 pervaded all levels of government by requiring consideration of discrimination in all programs and actions receiving federal financial assistance, NEPA took the same broad effect by requiring federal agencies to consider the environmental impacts of all programs and actions involving the federal government. NEPA, in fact, redirects the decision-making process of the federal government by prescribing the evaluation process for determining impacts to environmental, social, and economic factors. This has served to open up the planning and decision-making process to greater public scrutiny. The Clean Air Act of 1990 also includes conformity provisions that hold transportation investment accountable as part of state plans to protect the public from air pollution. NEPA and the Clean Air Act are cited in Executive Order 12898 as existing statutes to be used in pursuing EJ goals, particularly in the impact assessment of federal actions, development of mitigation measures, and public participation in the decision making process.

More recent legislation has continued to expand and define how government agencies address EJ. The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) and its reauthorization through the Transportation Equity Act for the twenty-first century (TEA-21) (P.L. 105-178) include provisions associated with EJ specific to transportation. TEA-21 continues an

emphasis on public involvement in planning as established under ISTEA. The disadvantaged business enterprise and job access programs provide an opportunity for members of minority and low-income communities to participate in transportation projects. TEA-21 also includes incentives for employers to provide merit benefits other than parking spaces for employees, and subsidize transit use and car/van pooling. These provisions facilitate access to jobs for minority and low-income populations that are less likely to own personal vehicles, as well as help achieve pollution reduction goals.

In addition, TEA-21 addresses potential disproportionate impacts to disabled and elderly populations by providing incentive grants to make intercity buses accessible, and enables Surface Transportation Program funds to be used to make sidewalks accessible. Statutory protection for these groups is provided by Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 790), the Age Discrimination Act of 1975 (42 U.S.C. 6101), and the Americans with Disabilities Act (P.L. 101-336).

The State of Arizona is addressing EJ concerns through the Arizona Department of Environmental Quality, which currently requires its Air Quality, Water Quality, Hazardous Waste, and Solid Waste Divisions to notify EJ populations that may be impacted in permitting decisions within 31 days of an application under A.R.S. § 49-111 Public Notification Policy.

EJ legislation is a complex issue and is designed to be open to continuous public scrutiny. It is no surprise then that agencies may occasionally find themselves in litigation as this issue is still being worked out. The next section will review cases dealing with EJ.

Legal Background

Recent discrimination litigation centers around the U.S. Supreme Court decision in *Village of Arlington Heights vs. Metropolitan Housing Development Corporation* (429 U.S. 252, 1977). Although *Arlington Heights* was not an EJ lawsuit, it did involve alleged discriminatory actions taken by government. Metropolitan Housing Development Corp. (MHDC) accused the Village of Arlington Heights of discrimination in its denial of a rezoning to allow development of mixed race low- and moderate-income housing. The Supreme Court followed its ruling in *Washington v. Davis* (426 U.S. 229, 1976), which stated that to prove a violation of the Equal Protection Clause of the 14th Amendment a plaintiff must not only show discriminatory effect, but evidence of racially discriminatory intent. Justice Powell's opinion in *Arlington Heights* included the following four ways to prove discriminatory intent: circumstantial proof of sufficiently disparate impact, discrimination in applying statutory criteria, shift in procedure, or statements evincing intent to discriminate.

Sometimes the evidence of discriminatory effect is so overwhelming that it supports intent. In two cases reviewing unequal municipal services, discrimination was determined through the disparate impacts. In *Hawkins v. Town of Shaw* (437 F 2nd 1286, 5th Cir. 1971) 98% of the houses on unpaved streets were Black homes, although the population of the town was only 60% Black. In *Ammons v. Dade*

County (594 F. Supp. 1274, M.D.Fla., 1984) nearly twice as many Black homes as White homes were on unpaved streets and lacked sewer service.

To further confuse the issue, the Supreme Court sent the case back to the court of appeals to determine if Title VIII of the Civil Rights Act of

Challenges based on the Equal Protection Clause must show discriminatory effect and discriminatory intent, while challenges based on the Civil Rights Acts are satisfied by showing discriminatory effect only.

1968 (The Fair Housing Act) was violated. The court of appeals found that under the Fair Housing Act the plaintiff had only to show discriminatory effect, not intent. These apparently conflicting decisions seem to show that it is harder to prove an action unconstitutional than illegal.

Three cases are cited as dealing with environmental racism: *Bean v. Southern Waste Management Corp.*(482 F. Supp. 673, S.D. Tex. 1979), *East Bibb Twiggs Neighborhood Ass'n. v. Macon-Bibb County Planning and Zoning Administration* (706 F. Supp. 880, M.D. Ga.1989), and *R.I.S.E., Inc. v. Kay* (768 F. Supp. 1144, E.D. Va. 1991). All three cases had to do with solid waste landfill location and all three were unable to meet the criteria of providing evidence of discriminatory intent as required under *Arlington Heights*. Although the actions filed against these suits did appear to have disproportionate adverse impact on minority populations, a study of the history decisions by the defendants in the above cases showed that either non-minorities were disproportionately impacted by decisions in the past or that the location was chosen solely for practical reasons, such as proximity to existing industry. Neither was discriminatory intent found through a study of the procedures and records of statements for the decisions.

Transportation related EJ cases include *Ralph W. Keith v. Volpe* (858 F2nd 467, 9th Cir. 1988) and *Coalition of Concerned Citizens Against I-670 v. Damian* (608 F Supp. 110, S.D. Ohio 1984). *Keith* dealt with the displacement of minority and low-income residents during freeway expansion. When residents sought an injunction to the freeway construction, the District Court approved a consent decree, which allowed construction to continue with certain provisions. The decree required the defendants to create a Housing Plan coordinated and implemented by the state with an Housing Advisory Committee of representatives from affected cities. The Housing Plan was to provide 3,700 units of replenishment housing divided among the affected cities with 55% of the units affordable for low-income households and 25% affordable for moderate-income households.

Two developments received the approval of the Housing Advisory Committee to provide 128 of the 275 units required for the City of Hawthorne. Cerise Development proposed 32 units and received approval from the Hawthorne City Council with the stipulation that only 35% of units would be rented to low-income households. The stipulation limiting affordable units 35% of rental units was in conflict with the 55% required in the decree. Kornblum Development proposed 96 apartment units. After two public hearings the Hawthorne City Council denied approval of the applications for lot split, zone change, and site development.

The plaintiffs in this case argued that the City of Hawthorne had violated the Fair Housing Act under Title VIII of the 1968 Civil Rights Act and the 14th Amendment. The District Court found that under the Fair Housing Act the plaintiff only had to prove discriminatory effect, not intent. The case was decided for the plaintiff.

In Coalition of Concerned Citizens Against I-670, the plaintiffs sought an injunction to stop the construction of the freeway because, they claimed, the defendants failed to involve the public in the decision for the need of the freeway and the project disproportionately impacted minorities. The project followed an abandoned railroad line through an area that was 90% Black; however, there was minimal displacement of residents due to the availability of railroad right-of-way.

Ohio DOT, FHWA, Mid-Ohio Regional Planning Commission, and City of Columbus were involved in the decision-making process for I-670. The Mid-Ohio Regional Planning Commission (MORPC) is the federally designated Municipal Planning Organization and participated in review of the project. MORPC includes a tenmember Executive Committee, which includes one member appointed to represent minority and low-income groups and a Policy Committee, which includes the Executive Committee and members of the Transit Authority and state and federal highway departments. A Transportation Advisory Committee (TAC) and Citizens' Advisory Committee (CAC) periodically review staff reports before the Executive and Policy Committees. Membership in the CAC is open and includes individuals from government, neighborhood organizations, civil groups, professional interest groups, and low income and minority groups. However, there is no formal process to solicit new members. Individuals and organizations must hear about the CAC through the media and join on their own initiative.

The court review of the decision-making process found the initial Systems Planning Study did little to address the social impacts of the alternatives beyond counting the number of homes and businesses displaced and had no discussion of impact to minority groups. The Final Environmental Impact Statement (FEIS), however, was much more successful in addressing social impacts by including a socioeconomic section that discussed freeway location impacts on community cohesion,

accessibility, and availability of services. Impact on disadvantaged groups was also considered. The court found that public involvement at this stage was substantial including 16 meetings of the CAC to discuss the project, several public informational meetings, a newsletter mailed to 200 people, and radio and talk show participation by public officials. The court also found the second study of mass transit alternatives due to public concern in good faith although the alternative was rejected as inadequate. In addition the committee was heavily weighted in favor of business and

The court did find that the CAC was insufficient to comply with public involvement requirements because no attempts were made to solicit involvement in the CAC from members of the community.

government and the systems analysis focused very little on social impacts.

On the charge that minority populations were disproportionately impacted by the project, the court found the defendants had justified the selected location with sufficient nondiscriminatory reasons. The court required only discriminatory effect independent of intent be shown according to FHWA Regulations (Title 23 of the Code of Federal Regulations, Part 200) and in this case although there was

disparate effect, the impact was justified. Specifically, the freeway was needed and the selected route minimized the taking of homes, used abandoned railroad right-of-way, and had less impact on minority communities than alternative routes. The court ruled for the plaintiff on the charge that the defendant had partially failed to comply with public involvement requirements, but this was not sufficient for an injunction.

EJ litigation calling on existing environmental legislation such as NEPA and the Clean Air Act is rare. Most discrimination challenges are under Civil Rights Acts. A case of note, however, is *American Lung Association v. Environmental Protection Agency* (134 F. 3d 388, D.C. Cir 1998). The EPA in setting its National Ambient Air Quality Standards (NAAQS) allowed levels of sulfur dioxide that could cause substantial physical effects among some asthmatics as the EPA did not consider that a public health problem. Several environmental and health organizations sought tougher standards that would protect asthmatics. The court ruled that the NAAQS must protect "sensitive citizens" and held that the EPA did not adequately explain why severe effect experiences by some asthmatics did not amount to a public health hazard.

Implementation

Executive Order 12898 contains six sections. The first section, Implementation, directs each federal agency to make EJ part of its mission and promote enforcement of environmental and health statutes in areas with minority and low-income populations. The second section, Federal Agency Responsibilities for Federal Programs, reaffirms Title VI of the Civil Rights Act of 1964 stating that federal agencies shall conduct their "programs, policies, and activities that substantially affect human health and the environment" in a manner that ensures no person or population is excluded or discriminated against based on race, color, or national.

The third section, Research, Data Collection, and Analysis, calls for continued research into EJ issues. Each federal agency is to "collect, maintain, and analyze information assessing and comparing environmental and human health risks borne by populations identified by race, national origin, or income". The fourth section seeks to inform and protect the usually poorer populations that eat fish and wildlife from environmentally hazardous areas. The fifth section, Public Participation and Access to Information, spells out ways agencies can increase public participation. The final section, General Provisions, covers administrative information.

The USDOT released an EJ strategy as required by Executive Order 12898 in 1995. This strategy sought to integrate EJ considerations with existing methods for compliance with NEPA, Title VI, and other applicable statutes. It also defines "disproportionately high and adverse effect" as an adverse effect that is predominantly borne by a minority and/or minority population, or as an effect that will be experienced by those communities disproportionately ("appreciably more severe or greater in magnitude than the adverse effect that will be suffered by non-minority population and/or low-income population"). An adverse effect may include deleterious health effects; air, soil, water pollution; destruction of man-made or

natural resources including aesthetic values; disruption of community cohesion or economic vitality; displacement; or significant delay in the receipt of benefits from USDOT programs or policies. Minority or low-income persons are defined as largely Black, Hispanic, Asian American, American Indian or Alaskan Native, or those whose household income is at or below the Department of Health and Human Services poverty guidelines.

In April 1997, USDOT issued a final order to fill out the EJ strategy and better direct agencies in addressing EJ in transportation. The USDOT final order directed agencies to avoid disproportionate effects on minority and low-income populations by the following means: identifying and evaluating the environmental, health, social, and economic effects of programs and actions; proposing measures to avoid or mitigate disproportionate effects; considering alternatives that avoid or minimize any disproportionate impacts to these communities; and seeking input from affected minority and low-income populations in considering alternatives.

To identify whether a mitigation measure or alternative is "practical", agencies are to evaluate social, economic, and environmental costs and impacts of mitigating or avoiding the adverse effects. Agencies may support programs or actions with high or disproportionate impact to minority and low-income populations only if there is a substantial need for the program and alternatives that reduce impacts to minority and low-income communities either cause more severe impacts elsewhere or increase costs an "extraordinary magnitude."

The FHWA describes four ways state DOTs may successfully integrate EJ into their activities: development of the technical capability to assess the benefits and adverse effects of transportation activities among different population groups and develop appropriate procedures, goals and performance measures; ensure that Statewide Transportation Improvement Program findings of statewide planning compliance and NEPA activities satisfy the letter and intent of EJ principles; enhance public involvement activities to ensure the meaningful participation of minority and low-income populations; and work with federal, state, and local, and transit planning partners to create and enhance intermodal systems and other projects that improve the natural and human environment for minority and low-income communities.

American Indian tribes fall within the populations to be considered for EJ concerns, but are unique because of their governmental status. Indian tribes are sovereign governments with inherent powers of self-government not delegated by Congress. However, tribes do not have full sovereignty as other nations do under international law. The United States defines tribes as "domestic dependant nations" which are under the authority and jurisdiction of the federal government. NEPA applies for all federal actions on tribal lands, and federal environmental programs and uniform minimum standards are applicable nationwide including on tribal lands.

Environmental law on tribal lands is under the authority of both inherent tribal powers to govern their lands and federal environmental statutes, which usually treat tribes as states. Tribes may regulate and enforce environmental law through their own authority, but most prefer to seek primacy in implementing and administering federal

environmental statutes, which often have some financial assistance. Primacy may also be given to states, so that the authority for administrating environmental policy for an entire territory could be granted to either tribe or state depending on which could best implement the policy. If neither has the resources, the federal agency may step in to implement the policy itself. Due to very limited state authority on tribal lands, however, states cannot show authority over pollution sources on tribal lands and no state has taken primacy historically.

Public Participation

The fifth section of Executive Order 12898, Public Participation and Access to Information, lists four steps for federal agencies to increase public participation in decision-making processes. Section 5 directs agencies to convey public recommendations for incorporation of EJ into federal agency programs and policies to the national interagency Working Group on Environmental Justice. Agencies are expected to make sure public documents, notices, and hearings relating to human health or the environment are concise, understandable, and readily accessible to the public including translating

Agencies are expected to make sure public documents, notices, and hearings relating to human health or the environment are concise, understandable, and readily accessible to the public.

this information for limited English speaking populations. The Working Group on Environmental Justice, set up in Section 1, is to hold public meetings for fact-finding, receiving comments, and conducting inquiries. Comments and recommendations from the public meetings are to be summarized and available for public review.

The court review of the decision making process in *Coalition of Concerned Citizens Against I-*670, noted in the last section, may be useful in discussing public participation policy. As mentioned above, the court criticized the initial Systems Planning Study as not thoroughly addressing social impacts. The focus of the study was the physical displacement of businesses and residences with no discussion of social impacts and specifically impacts on minority and low-income populations. This shortcoming was improved in the FEIS, which discussed impacts on community cohesion, accessibility, and availability of services. The court found the amount of public involvement sufficient with 16 meetings of the CAC, several public informational meetings, a newsletter, and radio and talk show participation by public officials. However, the court stated that the make-up of the Citizens' Advisory Committee was lacking in that there were no attempts to solicit involvement from members of the affected community and the committee was heavily weighted in favor of business and government.

From this judicial review of methods of public involvement, several generalizations can be made. First, lack of public input during the initial part of the need study and decision led to a strong negative public reaction that lengthened and repeated parts of the process including a second mass transit study. This emphasizes the need to get the public involved early on in the decision-making process. Also as discussed

by the court, a strong effort should be made to recruit members of affected communities to serve on involved committees. This may require extra effort in targeting people and accommodating possible lack of experience in the applying for and serving on governmental committees. Committee members in business and government often have more time or may even be employed to attend committee meetings. This leads to government committees that are dominated by these interests as was the case here. Again, effort must be made to include and accommodate minority and low-income community members.

Providing the public with information about projects is essential.

Executive Order 12898 encourages translation of documents for limited English speaking communities. Provisions may also be made for translators to be present at public and meetings. The court commended MORPC on the number of meetings of the CAC to

discuss the I-670 extension. Public meetings and newsletters were key to keeping communities informed. Also of benefit was the accessibility of public officials through radio and talk shows.

Research, Analysis, and Cumulative Effects

Section 3-301 of the Executive Order directs agencies to research the effect of environmental impacts on human health. This includes human health research of "diverse segments of the population in epidemiological and clinical studies, including segments at high risk from environmental hazards, such as minority populations, low-income populations and workers who may be exposed to substantial environmental hazards," and identification of multiple and cumulative exposures. NEPA already calls for consideration of cumulative impacts in EAs. Cumulative impacts, according to the definition in Title 40 of the Code of Federal Regulations §1508.7, are impacts that result from the incremental impact of the action when added to other past, present, and foreseeable future actions. These impacts are not usually fully discussed in NEPA documents due to their complexity, a lack of available information, or concerns about the scope of the analysis.

Central to the impact assessment process is the identification of resources to be studied for impacts. Concerns about scope are appropriate. The first section of NEPA explains the purpose of NEPA documents is to "concentrate on the issues that are truly significant to the action in question, rather than amassing needless detail." In addition, Section 5-5 of Executive Order

Cumulative impacts are significant and cannot be dismissed by being identified as temporary or by breaking them into smaller effects.

12898 requires public documents to be "concise, understandable, and readily accessible to the public." Yet assessment must be of sufficient detail that the best decision can be made.

In response to the twenty-fifth anniversary review of NEPA document by the EPA, the Office of Federal Activities issued guidance in 1999 on assessing cumulative impacts. The guidance suggests reviewers should consider the following when

determining cumulative impacts: whether a resource is especially vulnerable to incremental effects; if the action is one of several similar actions in the same geographic area; whether other activities have a similar effect on a resource; if an effect has been historically significant for a resource; and if other analyses in the area have found cumulative effects problems. Analysis of cumulative impacts must also consider impacts of other actions in the past and foreseeable future. Possible impacts in the future may be determined by a review of long-range plans from government agencies and private interests, as well as trends in motion.

When studying past impacts, an important aspect of determining the significance of cumulative impacts is understanding the amount of environmental degradation that may have already occurred. Using current conditions as a baseline or benchmark may overlook past impacts. The guidelines suggest analyzing historical cumulative impacts by comparing the environment in its natural condition to the environment with the expected impacts of the action and the impacts of other actions. In reviewing impacts to EJ communities, however, these suggestions may not be applicable or appropriate. Minority and lower-income communities are frequently located in environments that are severely modified or are resource poor.

Thresholds may be more useful in reviewing impacts on minority and low-income communities than establishing "naturally occurring" conditions. Thresholds may include quantitative standards, qualitative standards, and desired management goals. Maximum levels of sulfur dioxide in the air would be an example of quantitative standards while community cohesiveness might be an example of qualitative standards. A desired management goal might be adequate open space.

A discussion of cumulative impacts is essential in review of possible impacts to minority and low-income communities. These communities are often located in locations that have fewer resources and more adverse effects. Cumulative effects of air quality have become a special concern as discussed in *American Lung Association v. EPA*. Research has found Black children six times more likely to die of asthma than White children in the United States.

Transportation Inequity

The EJ movement arose from a realization that minorities are frequently disproportionately affected by the siting of hazardous land uses such as toxic industries and landfills. Transportation concerns and litigation have included disproportionate condemnations of residences for road construction and diminished air quality. As the movement matures, public awareness is growing of the less direct health and social costs of environmental inequity to minority and low-income communities. Other concerns include access to transportation and jobs, and disparities in transportation funding.

In 1996 a coalition of civil rights and environmental groups filed suit against the Los Angeles Metropolitan Transit Authority (MTA) which had cut service, raised fares, and eliminated economical monthly passes for bus users while commuter rail service

flourished. The lawsuit charged MTA was spending 70% of its discretionary funds on rail projects, which benefited 6% of its riders, while bus service that was used mainly by minority and low-income populations was neglected. The board of the MTA supported a settlement approved by the court which called for over 150 new buses to be added to the fleet over a two year period, increased security, and reasonable fares.

Road construction can result in disproportionate impacts on minority and low-income populations based on claims that affected communities will benefit from improved access. This claim is rarely supported in documentation by evidence of how access will be improved for these specific populations. Increased automobile access without provision of adequate public transportation may not benefit these populations, which often have lower rates of car ownership.

Summary

The EJ movement developed over concern that minority and low-income communities were bearing a disproportionate burden of negative environmental impacts from governmental and corporate activities. In 1994, President Clinton issued Executive Order 12898 which directed all federal agencies to address EJ

concerns through existing legislation including the Civil Rights Acts and NEPA. Litigation has centered on discrimination in violation of the Equal Protection Clause and Title VI of the Civil Rights Act of 1964. These challenges often require the plaintiff to prove discriminatory intent as well as discriminatory effect.

More recent legislation such as ISTEA and TEA-21 has addressed EJ in transportation.

The USDOT and FHWA have issued orders, which spell out how agencies are to comply with protecting minority and low-income communities from disproportionate adverse environmental impacts. Implementation advice includes enhanced minority and low-income population participation and more research on how populations are affected by transportation projects. Research is becoming more specific with increased information about cumulative impacts and the recognition that the lack of funding for public transportation may adversely affect minority and low-income populations. Overall, a critical element in addressing environmental justice is to adequately document the range of alternatives evaluated to a proposed action and the analysis of both the positive and adverse impacts to potentially affected communities.

Literature Cited:

Gerrard, Michael B. Law of Environmental Justice: theories and procedures to address disproportionate risks. Chicago, III: American Bar Association, 1999.

McDonald, Laughlin. The Rights of Racial Minorities. New York: Puffin Books, 1998.

The National Law Journal, Special Issue: Unequal Protection: The Racial Divide in Environmental Law, Sept. 21, 1992.

U.S. General Accounting Office, Report, Siting of Hazardous Waste Landfills and Their Correlation With Racial and Economic Status of Surrounding Communities, GAO/RCED-83-168, B-211461 (June 1, 1983).

Witt, Elder. *The Supreme Court and Individual Rights, Second edition*. Washington, D.C.: Congressional Quarterly, 1988.

Section 3: Agency Survey Results Summary

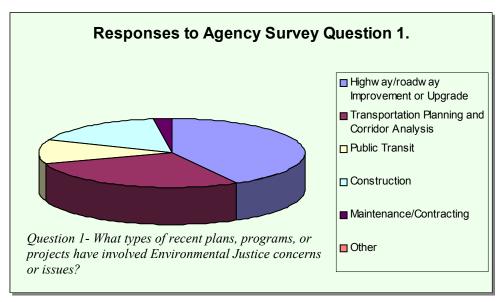
Introduction

Forty-eight surveys were sent to DOTs around the country via email and U.S. Mail. Seven surveys were returned via email and 13 surveys were returned via U.S. Mail for a total of 20 surveys returned. Each survey contained 7 questions. Questions 1, 2, 3 and 5 were multiple choice of which more than one answer could be chosen. The results of these questions are summarized in graphs below. Question 4, 6 and 7 were essay questions and are summarized in both narrative and table format later in this section. Appendix A contains an example of the survey form sent to the agencies.

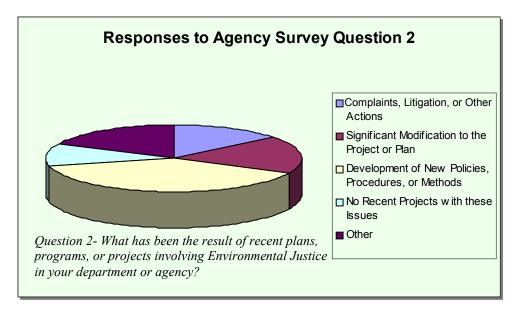
From the responses received from the written surveys, it was determined that three DOTs would be contacted to participate in a more intensive phone survey. The phone survey results can be found in later in this section.

Summary of Questions 1,2,3 and 5 From the Agency Survey

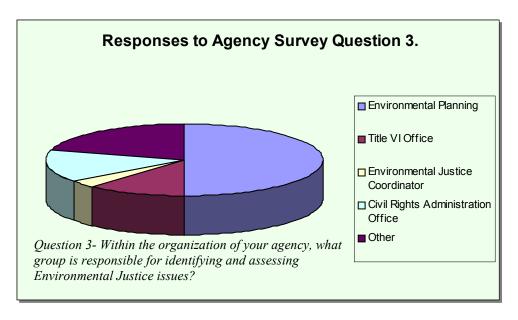
Questions 1, 2, 3, and 5 solicited from the agencies background information regarding environmental justice issues. Graphs of the responses can be found in the figures below.



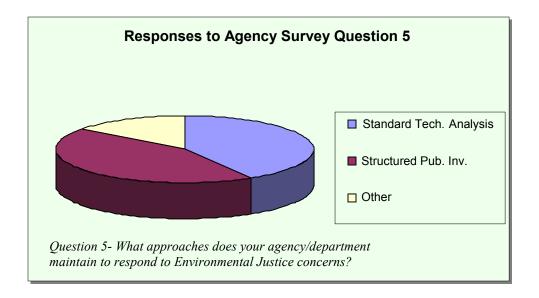
Most agencies have had environmental justice issues or concerns with highway/roadway improvement or upgrade and transportation planning and corridor analysis projects.



The results of this question are more evenly distributed. Only 3 respondents reported not having any projects with environmental justice issues. In addition to the suggested answers, five respondents answered "other". These answers suggest DOTs have a greater recognition of environmental justice issues after they have been involved with a project with an environmental justice issue.



Half of the respondents reported that the Environmental Planning office is responsible for identifying and assessing environmental justice issues.



Most of the respondents utilize both standard technical analysis and structured public involvement when responding to environmental justice concerns. Six respondents cited "other" methods.

Summary of Questions 6 and 7 From the Agency Survey

Question 6 was asked to assess how each agency structured their environmental justice program to comply with established guidelines such as Executive Order 12898 and Title VI of the Civil Rights Act. Again, several of the agencies were very detailed and formalized with their programs while others are still in early stages and less formalized when addressing environmental justice. Listed below is a table summarizing each response to Question 6.

Table 3-1 Ag	gency Responses to Question 6
Respondent	Response
Oklahoma	Incorporated in planning process and project development
Iowa	EJ is fully evaluated in all of our EAs and EISs. If a particular group is disproportionately impacted, every effort is made to lessen the impact or change the project.
Ohio	ODOT and MPOs developed our own guidance. It is on our planning
	website. www.dot.state.oh.us/planning (Continued)
Kansas	Data on demographics of those populations that would be impacted is collected for all new construction and or major modification on projects. The intent is to identify any potentially negative impacts and ensure that minorities and or low income do not bear a disproportionate burden.
Mississippi	By being inclusive, reaching out to located effects and identifying

Table 3-1 Ad	gency Responses to Question 6
Respondent	Response
	communities.
Louisiana	We have yet to adopt standard procedures, but utilize existing public involvement and Title VI procedures to analyze projects with sensitivity towards environmental justice issues per EO 12898.
Tennessee	Through Title VI implementation plan.
Wyoming	Coordinate with FHWA recommended approach.
Maine	Integrated with NEPA.
Texas	TxDOT is beginning to implement the community input analysis process, which includes EJ. This is done during the NEPA process.
Montana	All program areas are monitored for compliance, annual reviews are conducted both internally and externally.
Missouri	As directed and needed, early and often.
Minnesota	MnDOT has developed a step-by-step procedure to identify and address EJ issues. It has been provided to MNDOT project managers as part of our public involvement plan/policy.
Colorado	The presence of low income/minority households and businesses in a project area are identified by using public involvement efforts as well as Census Tract data and other data sources. Any potential impacts as a result of the project are assessed as we do with all project impacts. If there are any adverse impacts which cannot be mitigated, these are analyzed and determined if they are disproportionate. If so, mitigation efforts are identified including avoidance if possible. To date no CDOT projects have determined that there will be disproportionately high or adverse impacts.
Florida	- See 5b from above - Title VI Policy and Compliance Program - Community Impact Assessment (CIA) Program
Illinois	The Division of Highways Environmental Policy Section issued procedural guidelines to all Districts. Also, soon guidance to be published in a Socioeconomic Impact Assessment Guidebook, produced in the Environment Section, will be available. Every EIS or EA is reviewed by the Socioeconomic Specialist and the Title VI Coordinator for compliance with the Executive Order. The actual text for the document is often supplied by the S/E Specialist. Our Planning Office has been made aware of the Federal initiative to incorporate EJ assessment into early planning.

Table 3-1 Ag	ency Responses to Question 6 (Continued)	
Respondent	Response	
Michigan	MDOT has established procedures to ensure that the environmental justice incorporated into all planning and environmental activities, are department's public involvement process. Currently, MDOT is in the proof establishing a document that will outline these procedures and proguidance in incorporating environmental justice into MDOT's plane environmental and public involvement processes.	nd the ocess ovide
Nevada	I don't understand your question. We follow the regulations.	
New Hampshire	Through consultation with FHWA and formal public participation.	
New Jersey	By addressing in the NEPA process.	

Question 7 asked "What specific guidance or methods for public involvement procedures on individual projects or in long-range planning has your agency established to respond to Environmental Justice guidelines?"

Table 3-2 Ag	gency Responses to Question 7
Respondent	Response
Oklahoma	Incorporated extensive outreach in realignment of I-40 through downtown OKC. Section in State and MPO long range plans with environmental justice analysis.
Iowa	Advanced notice of public meetings Newsletters Letters to everyone in the project corridor Websites for particular projects giving status reports Handicap accessible meeting sites
Ohio	See webpage www.dot.state.oh.us/planning
Kansas	We are in the process of updating our statewide long-range plan, which will incorporate environmental justice issues. We are also updating our MPO administrative manual that will cover environmental justice as well.
Mississippi	Holding meetings beyond minimum required.
Louisiana	No specific policies adopted. Have utilized innovative public involvement (steering committees, charrettes, etc.) to identify potential impacts and issues. We follow guidance per FHWA studies dealing with community impact assessment.

Respondent	gency Responses to Question 7 (Continued) Response
Tennessee	Public notification of projects Title VI and EJ public forums
Wyoming	Nothing to date.
Maine	None.
Texas	A section in the environmental procedures manual (unpublished) will be for NEPA process.
Montana	The same as those required by Title VI.
Missouri	Early knowledge of project area demographics.
Minnesota	In 1998, a public involvement task force was formed to update MnDOTs public involvement guidance. An EJ taskforce was also formed to develop guidance on EJ. Both can be found in "Hear Every Voice" located at www.dot.state.mn.us/publinvolve/parner.html
Colorado	Have public involvement procedures for NEPA and have not yet but will be incorporating environmental justice into them. There are public involvement guidelines for long range planning.
Florida	Project Development and Environment (PD&E) Manual CIA Handbook
Illinois	An emphasis has been put on public involvement in areas where low-income or minority populations live. This means that an extra effort is made to hold the meetings at easily accessible locations, to use as many types of local media as possible and to use door-to-door announcements where appropriate.
Michigan	MDOT recognizes that public involvement plays a crucial role in the environmental justice process. As previously mentioned, MDOT has established procedures and methods that will allow the opportunity for active participation from low-income populations and minority populations in the transportation decision-making process. Some of these procedures include: identifying low-income and minority populations, including neighborhood leaders, area church leaders, business owners, etc., who reside in the affected neighborhoods and can assist in the public involvement process by encouraging residents to participate in the process; identifying locations for meetings that will best meet the needs of the residents, and stilling public trust and interest in the project or plan.
Nevada	None

Table 3-2 Ag	ency Responses to Question 7
Respondent	Response
New Hampshire	None. We use our Public Involvement Procedures for NH Transportation Improvement Projects, which were not developed specifically with EJ in mind.
New Jersey	In the process of developing. To date we have adjusted the CED form to address EJ. FHWA division office now reviewing.

Agency Phone Interviews

Overview

Three DOTs were chosen, from the 20 written survey responses received, to participate in a more detailed and intensive phone interview.

The goal of the interview was to ascertain the level of sophistication of each DOTs environmental justice program, the commonalties in their implementation and the level of effectiveness of their programs.

The factors involved in choosing these DOTs included:

Well developed environmental justice program

Formalized environmental justice polices, procedures and/or guidance documents

Established and detailed website relating environmental justice information

The three DOTs chosen, Michigan, Ohio, and Minnesota, demonstrated in their written surveys that their EJ programs were formalized and advanced in comparison with other DOTs. The Ohio and Minnesota DOTs had developed their own guidance documents for their staff and program managers. These documents were extensive and detailed and in many cases available on their websites.

Minnesota DOT formed a transportation committee on environmental justice in order to develop guidance on implementing EJ effectively throughout the organization. Participation in the committee consisted of a cross-section of 22 individuals from MDOT and the FHWA, including engineers, project managers, equal opportunity office representatives, administrators, and planners. The products of this committee included *MnDOT's Environmental Justice Draft Guidance* and the *MnDOT Handbook on Methods and Approaches to Enhance Involvement in Non-Traditional Transportation Stakeholder Communities and Neighborhoods*.

Ohio DOT, in an effort to develop uniform approach to addressing EJ, organized an Ohio EJ transportation task force which included the Ohio FHWA, FTA, Ohio's MPO,

the Ohio Association of Regional Councils and ODOT's Office of Environmental Services, Office of Public Transportation and Office of Urban and Corridor Planning. One of the first products of the task force was the *Guidance and Best Practices for Incorporating Environmental Justice into Ohio Transportation Planning and Environmental Processes.* This document was intended for the transportation organizations in Ohio to use as guidance when considering EJ issues and included the handicapped and elderly in their process.

Michigan DOT has established EJ procedures and are in the process of establishing a guidance document to outline the procedures and provide guidance in incorporating EJ into MDOT's planning, environmental, and public involvement processes. This DOT was chosen on the basis that they were in the process of establishing their guidance.

Phone Interview Format

The environmental justice contact from the three DOTs, Minnesota, Ohio and Michigan, were contacted via telephone and were interviewed in an informal, conversational manner. Each interview included questions such as:

- What is current status of your policies and programs?
- Have there been any changes to your policies since you filled out the written survey?
- How did you communicate your policies and procedures to your staff and departments?
- What problems did you experience trying to develop policies, procedures and guidance?
- What improvements would you make to your current policies?
- Advice for other DOTs

Phone Interview Results

Minnesota

MnDOT's written survey indicated they had "developed a step-by-step procedure to identify and address EJ issues". Additionally their website contained downloadable copies of their guidance documents including their public involvement guidance. For these reasons MnDOT was chosen as a phone interview candidate.

A phone interview was conducted with Gerry Larson of the MnDOT. The following questions were asked and answers documented.

Table 3-3 MnDOT Phone Interview			
Question	Response		
Who was involved in your task force? What is current status of your policies, programs	Two senior staff, the Director of Environmental Services and Director of Planning lead the taskforce. The other 20 members included representatives from FHWA, operating district, planners, attorney general's office rep. and some involvement from FHWA Midwest Resource Center. The taskforce divided into two groups, project development and planning. The two groups came back together to complete the guidance. The draft document was reviewed my many internal departments as well as community minority councils. No changes have been made. The guidance		
and guidance documents? Have you made any changes since completing the written survey?	document needs to be finalized.		
How did you communicate your policies and procedures to the DOT staff?	We presented the material at pre-design engineers meetings and discussed steps of program. Other departments may have done training.		
What problems did you experience utilizing the taskforce to develop policies, procedures and guidance?	No problems arose.		
What improvements would you make to your current policies?	No improvements.		
Advice for other DOTs	Approach EJ with a non-defensive attitude. It is not something to be scared of.		

<u>Ohio</u>

ODOT's written survey indicated they had developed their own guidance and had a website that contained EJ information. Once reviewing the guidance document, it was determined to conduct a phone interview with ODOT.

A phone interview was conducted with Suzann Gad of the ODOT. The following questions were asked and answers documented.

Table 3-4 ODOT Phone Interview	
Question	Response
What is the current Status of your guidance document.	It is still in draft form. Have not had a chance to finalize yet.
How difficult was it to work as a task force?-	No difficulties working with taskforce. They met 3-6 months to draft the guidance and will come together again when finalized to review. FHWA, MPOs, FTA, DOT districts, central office staff, local transit authorities, community representatives were all involved in taskforce.
What more would you like to accomplish?	It feels like Ohio DOT is much further ahead of other DOTs in country. Doesn't feel like any further innovations or advances to policies, procedures or guidance documents are needed at this point.
How was your program communicated to the project managers and departments?	Several training sessions were conducted, one with the FHWA for district people, consultants and MPOs. Over 200 people trained. Involved, What is EJ, How to incorporate EJ, What is expected of departments, consultants, etc.
Have you seen the guidance document actually implemented?	The guidance was used when developing their Statewide Transportation Improvement Program. EJ has been incorporated into the public involvement training program and is now included in the new draft public involvement manual.
Advice for other DOTs?	It is important to get planning, transit, community and environmental people all at the table when discussing approach development for EJ. Make sure everyone has a baseline understanding of what EJ is. If you incorporate EJ into everything there is no need for a standalone EJ program.

<u>Michigan</u>

MDOT's written survey indicated they had developed policies and procedures and were in the process of developing a guidance document. Because they were in the middle of the development process, they were chosen for a phone interview.

A phone interview was conducted with Lori Noblet of the MDOT. The following questions were asked and answers documented.

Table 3-5 MDOT Phone Interview			
Question	Response		
According to your survey, your guidance document was in process. Has the guidance now been developed?	Yes. The document has been developed and is in internal review. A task group was used to create the document. The group was made up of internal MDOT staff including project level person, statewide person, public involvement officer, modeling person.		
How do you plan on communicating guidance to staff and departments?	Training sessions are planned for the staff. Early Preliminary Engineering meetings have been set up to discuss issues with the consultants that work on projects. EJ will be a component of these meetings. The consultants are not documenting EJ adequately in the NEPA documents.		
What problems did you experience trying to develop policies, procedures and guidance with a task group?	No problems at all. We all recognized that there was a need so all those involved were willing to discuss and work on document. One person from the group took the lead in developing and researching and the others reviewed.		
Advice for other DOTs	Educate staff and consultants on EJ issues and make resources available to them. One person can't be responsible for EJ. It takes a team approach.		

Section 4 – Results of Community Surveys

Introduction

As part of the study on environmental justice, a nine-question survey was composed and verbally administered to selected participants. The purpose of these interviews was to determine what environmental justice issues are prominent in minority or low-income communities generally, and the links that these communities see between transportation and environmental justice, in addition to learning what their feelings were about how ADOT communicates with affected parties regarding current projects. This section will provide an overview of the survey participants, a summary of the environmental and transportation issues identified, a discussion of how environmental justice was identified by the participants, and overall suggestions provided during the surveys. A copy of the survey used can be found following this discussion.

Overview of Participants

Of those contacted regarding the survey, 11 people agreed to participate; 6 were interviewed over the phone and 5 were questioned in person.

Groups, agencies, and organizations who deal with the public and who would potentially be familiar with environmental issues were identified. Leaders or appropriate contacts for these groups were then invited to participate in the survey. Additional contacts were identified based on recommendations from other participants, or based on the need to involve a group or region that had not yet been represented in the survey. A list of participants and their affiliations can be found in Table 4-1. Some interviewees chose to remain anonymous, and those names are withheld in the table.

Table 4-1 Participants							
Name	Organization and Department	Title					
Sandy Bahr	Sierra Club	Conservation Outreach Director					
Ron Galeda	Sunnyslope Village Alliance (Mr. Galeda is also a member of the Citizen Transportation Oversight Committee).	President					
Bobbie Craver	Sunnyslope Historical Society	President					
Andrew Ortiz	Arizona Community Action Association	Executive Director					
Laraine Stewart	Area Agency on Aging	Deputy Director					
Frank Rivera	Hispanic Chamber of Commerce	Vice-Chair					
Denise Meredith	Greater Phoenix Black Chamber of Commerce (Ms. Meredith is also State Director of the Bureau of Land Management).	Board Member, former President					
Rich Dent	Bureau of Reclamation, Native American Affairs Office	Phoenix Area Contact					
Marie Lopez-Rogers	Marie Lopez-Rogers Avondale City Council						
Withheld City of Phoenix (department withheld)		Witheld					
Withheld	City of Phoenix (department withheld)	Witheld					

Environmental Issues

Participants were asked to identify environmental issues that are important to their community, the valley, and the state. Responses included the following:

- air quality
- water quality and quantity
- siting of high-industrial or commercial areas, waste facilities, and electrical facilities in low-income areas
- lack of adequate transit
- infrastructure needs (such as water treatment facilities) and service needs (fire dept., medical, utilities, etc.)
- brownfields
- illegal dumping
- urban growth (sprawl)
- wildlife/open space and urban interface
- displacement of populations due to neighborhood rehabilitation or construction
- lack of affordable housing
- lack of regional planning
- management of public lands
- airport noise

disappearance of riparian areas.

In general, although the participants represented a wide range of groups and interests, several of the issues they identified were similar. For example, of the most common issues identified, air quality was noted by six of eleven people and water quality, facility siting issues, and transit issues were specified by five people.

Transportation Issues Identified

Survey participants were also asked to identify specific transportation issues that they feel affect their community, in addition to the Valley and state. Transportation issues identified included the following:

- lack of mass transit in rural and outlying areas
- lack of adequate transportation alternatives and dependence on automobiles (caused by lack of options)
- traffic congestion
- road widening (misconception that it helps congestion but may only exacerbate the problem)
- practicality of light rail and elevated transit systems
- road expansion (increased pollution and resident displacement).

The two most frequently voiced concerns focused on a lack of regional transportation, planning, and communication (seven responses), and inaccessibility of transportation to those groups who need it most, including low-income, minority, and elderly groups (six responses). These two topics were common to responses regardless of respondent affiliation or previous experience with environmental and transportation issues.

The lack of regional transportation was discussed on several different levels. Some comments focused on the complete lack of transportation services in rural and outlying areas. However, most of the comments focused on a perceived lack of communication or

64% of respondents felt that a lack of regional transportation and planning was an issue.

planning between different cities within the Valley. One person said that planning is focused on one city at a time, and that no one seems to realize that transportation decisions made within one community affect several others. The example provided was the widening of the Superstition Freeway, and how one community's decision to widen affects others by increasing traffic and air pollution. The representative of Avondale pointed out that the west valley is not recognized as part of the transit system even though they have demonstrated a need. Many respondents also discussed the difficulty in traveling between cities using public transportation. They felt that this resulted in other serious problems including an inability to reach employment or services not offered in their community (such as doctor appointments). One respondent stated that current bodies organized specifically to

improve the transportation system are inadequate, and too politically motivated to accomplish anything meaningful.

The second most frequently voiced concern involved the lack of transportation access to those groups who would most benefit, such as low-income, minority, or elderly groups. Representatives from Avondale, Sunnyslope, the Hispanic Chamber of Commerce, and the Area Agency on Aging all stated that typically, low-income, minority, and elderly groups are the ones who do not have vehicles and depend on public transportation. Yet, the best facilities and routes are sited in areas where most families have two cars or more. If there are bus routes available to low-income groups, the scheduled stops are too minimal to allow for timely travel. This leads to other problems, such as an inability to keep a job, support a family, or remain active in the community. One respondent discussed his sense of the irony of the planned light rail system, which he felt would be placed only in wealthy areas and would be completely inaccessible to people lacking another means of transportation. He also felt the light rail option would cause other problems, such as increasing congestion.

Environmental Justice

Of the eleven people interviewed, six of them had previous knowledge of environmental justice; the remaining five were unfamiliar with the term. Of those surveyed, seven thought that environmental issues affected some communities disproportionately, while six people felt that transportation issues were disproportionate by community. Some of the examples provided involved the placement of facilities and highways in low-income and minority neighborhoods (both the siting of unwanted facilities and the lack of desirable ones), lack of available transportation for low-income and minority communities, lack of infrastructure, and airport expansion and noise in low-income areas.

As discussed above, one of the most frequently voiced concerns was over the lack of available transportation to low-income and minority groups and respondents identified this as a potential environmental justice issue. Examples sited include reluctance to build bus shelters in low-income communities, less bus routes available, infrequent stops that prevent timely travel, and transit alternatives not being offered to south and west Phoenix. The other environmental justice issue that respondents identified involved road expansion or new highway construction and the likelihood that low-income areas will be displaced rather than higher income areas such as Scottsdale.

Overall Suggestions

Survey participants were asked to describe how they perceive ADOT's current communication with their community regarding their transportation projects, and suggestions for improving that communication. Five of the respondents felt that ADOT is doing a good job of communicating with the public, and putting forth a good effort to involve local communities. Three people were neutral and had no opinion or

interaction to base an opinion on; the remaining three respondents felt that ADOT's public involvement efforts were inadequate. Interviewee comments are paraphrased below:

Compliments

- ADOT is trying hard to accept and work with community input. They have people at every single meeting held by the transportation authority, then they actually come back with a list of issues and try to address them.
- They contact us to coordinate construction and check on our constraints.
- ADOT does a very good job communicating, and has put public relations firms on their teams specifically to keep the community informed and updated during construction.
- We have a good relationship with ADOT, they are a big part of our recreation program.
- On the new I-17 project they did an excellent job [with public information]. I
 was pleased with the effort and thought it was a new way of getting
 information out.

Suggestions

- Begin discussions during the development stage of a project, not after a decision has already been made.
- Make an effort to talk to and meet with people. Even contact via phone or email would help. I know more about ADOT's projects from their website or from people who don't work there.
- The problems are with the municipalities. ADOT and the municipalities need to communicate better.
- Our District 18 legislatures and our county supervisor have a coffee chat once a month. ADOT could go to those meetings, or to our board meetings. We get a lot of information at those meetings.
- In projects that affect predominantly minority areas, public relations efforts should be bilingual. ADOT should also involve Hispanic public relations firms as part of their team. It is more meaningful to the public if they can relate to someone, rather than being intimidated by them. They could also give us a

call and we can send someone to the meeting to ensure the people we work with are informed.

- Send us notices of meetings so we can partner in the distribution of information. We can even put it in our newsletter or translate it into Spanish. I also suggest sending personnel to meetings so information isn't always relayed through a third party.
- There hasn't been a real relationship built where we can sit down with ADOT and talk about the higher scope of things. When they come here for public meetings or forums it is only on a specific project.
- Other than local media and press releases I haven't seen a lot of interaction. They have to be a face and not just a name. They need to go to public meetings and interface.

Summary

Overall, several key observations may be drawn from the community interviews. First, a premium is placed on interaction between ADOT and the community groups. This includes public hearing opportunities, as well as less formal opportunities for discussion. Accessibility to ADOT staff is desired by community groups, both in terms of opportunities for interaction and the need for bilingual public information efforts. Several interviewees commented generally that they would benefit from developing a "relationship" with ADOT, in addition to typical formalized participation opportunities.

Another key point is including the public in "big picture" planning discussions as well as specific projects. This may assist in creating a true relationship between ADOT and EJ (and other) communities as well as provide participation opportunities in a proactive manner, as opposed to the sometimes-controversial project-specific meetings.

Consistently with the literature review, interviewees identified public transit and air quality as key issues. A lack of transportation alternatives to the automobile was seen as a key link to potentially adverse impacts on EJ populations. The jurisdiction and means to address these problems may lie with municipalities or regional agencies; an implication of the responses may be that ADOT should coordinate with these entities or otherwise support them to proactively address EJ issues.

Section 5 – Discussion and Recommendations

Discussion

We have evaluated the current status of EJ legislation and how it is applied in various state DOTs. Additionally, we surveyed community views regarding EJ and transportation issues. This section contains discussion and recommendations for ADOT and other DOTs that may be in the process of developing an approach and guidance documents for EJ. Each DOT has instituted EJ policies and programs to differing levels of practice, however valuable lessons can be learned from those DOTs that have advanced guidance documents and programs, as seen in Section 3.

In the section below, a two level approach to EJ has been outlined- a macro-level and a micro-level approach. We based this approach on information collected from agency surveys, community surveys, and published literature on the subject of EJ. The macro-level approach is a broader approach to developing and incorporating policies, procedures and guidance documents for a state DOT. The micro-level approach is a narrow, project/program specific approach that is largely based on the Federal Highway Administration's Community Impact Assessment process. The section concludes with more specific recommendations for achieving the macro- and micro-level approaches, based primarily on the community interview and survey responses.

Even though there appears to be no considerable evidence of legal challenges to the more basic approaches used by some DOTs, the utilization of the proposed "best practices" is warranted. Increasing public awareness and concern for EJ issues in Arizona suggest that the development and evaluation of ADOT's EJ policies and procedures should be continued.

Macro-Level Approach to Environmental Justice

<u>Coordinate</u>- efforts with other transportation agencies
<u>Create</u>- detailed, formalized policies, procedures and guidance
<u>Communicate</u>- policies and procedures with staff and departments
<u>Consider</u>- the effectiveness of the policies and procedures, yearly

• <u>Coordinate</u>- efforts with other transportation agencies, jurisdictions, and the community

Each DOT developing an approach to environmental justice should coordinate their efforts with other transportation agencies in the area. The Ohio DOT created a taskgroup of DOT staff including the planning, transit and environmental departments as well as other transportation agencies and

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community representatives. The taskforce met for 3-6 months and developed the guidance document in use at the DOT today. Additionally, the Minnesota DOT created a 22-person committee to develop guidance materials. This approach seems highly successful when implementing such a broad reaching program such as environmental justice.

Create- detailed, formalized policies, procedures and guidance

Many of the agencies are on the verge of incorporating environmental justice more formally into their policies, programs and procedures. Progressing to formalized programs, procedures and policies is an objective that only a few DOTs have accomplished, however, without this formalization it is sometimes difficult to track whether or not EJ is truly being considered when implementing programs or projects.

In creating guidance documents, other DOTs should be contacted to assess how they approached the development of their programs and to determine the effectiveness of other programs. Additionally, extensive resources are available through the regional offices of the FHWA. Of the three DOTs interviewed via telephone, all three stated that the FHWA regional office was a valuable resource when developing the guidance, planning training, attending meetings and providing overall support for the process.

• <u>Communicate-</u> policies and procedures with staff and departments

Once formalized policies and procedures are developed they must be communicated effectively to all staff and departments responsible for program and project development and implementation. A memo or email would not be adequate communication in this case. Some employees may not be familiar with environmental justice or the importance placed upon it and therefore may not read the memo, policies, etc. Meetings and training sessions would be the preferred method of dissemination for the new policies. Additionally, several of the DOTs suggested that consultants be included in the meetings and training sessions. In fact, one of the DOTs stated that the consultants, more often than not, were not documenting EJ correctly in NEPA documents.

• <u>Consider-</u> the effectiveness of the policies and procedures, yearly

Quality control should be an integral part of any program. Considering the effectiveness of the policies and procedures each year should be automatically built into the EJ approach. Especially given that EJ is fairly new and new approaches are evolving at DOTs throughout the country. If changes are suggested and incorporated, meetings and or training sessions should again be conducted for staff and consultants to communicate the change in policy.

Micro-Level Approach to Environmental Justice

This micro-level approach is patterned after the USDOT Federal Highway Administration's Community Impact Assessment process as discussed in their quick reference guide, publication number FHWA-PD-96-036, published in September of 1996. The USDOT document provides much more detail than presented in this section.

The micro-level approach is designed to be incorporated into specific projects or programs. Currently, ADOT has already developed guidance that incorporates major elements of this approach at a project level for NEPA documents.

<u>Define</u>- project study area <u>Develop</u>- community profile <u>Analyze</u>- impacts <u>Identify</u>- solutions Document- findings

<u>Define</u>- project study area

At the beginning of any project or program a basic geographic area of influence should be determined. This area would be the portion of the community, town, city, neighborhood, population, etc. that would be involved with the project/program. For example, if a transportation agency was interested in modifying existing bus routes, the study area would not only include the streets on which the routes currently run, but the neighborhoods and communities those routes would service.

• <u>Develop</u>- community profile

Once the project study area has been defined then a community profile should be developed. The community profile can be used as the affected environment section of NEPA documents. To create a community profile, according to the USDOT Federal Highways Administration's Community Impact Assessment reference document.

"Determine the characteristics of the affected area, such as neighborhood boundaries, locations of residences and businesses, demographic information, economic data, social history of communities and land use plans."

Analyze- impacts

In this step the impacts from the project or program should be investigated and analyzed. According to the USDOT Federal Highways Administration's

Community Impact Assessment reference document (Sept. 1996), when looking at impacts and analyzing the effects of the project/program on a community the following guidelines should be utilized:

- ☑ Be cognizant of both positive and negative impacts.
- Consider both temporary and long-term impacts as well as secondary and cumulative
- ☑ Keep community goals in mind when identifying impacts.
- ☑ Recognize the public's perception of impacts.
- Focus on the magnitude of an issue or controversy, as it determines the level of specificity the analyst must adopt.

• Identify - solutions

Once impacts are determined, solutions should be investigated and applied to the project. Tools used in this step include avoidance, minimization, and mitigation. Documentation at this level is very important. During this step, the agency is recognizing potential impacts to a community and committing to avoid, minimize, and/or mitigate the impacts accordingly.

<u>Document</u> – findings

This step in the process is probably the most important. Throughout the steps of the process, reasoning, rationale and actions should be documented and in this stage compiled into the appropriate environmental document. The environmental documented should present an accurate, detailed account of the process, findings, data, community, potential impacts, and solutions analyzed throughout the process. Additionally, public involvement should be well documented including public comments, meetings held, scoping and any other public contact.

Public Involvement

Public involvement is the cornerstone of any good environmental justice policy or program. If a potentially affected population is identified that is within the range of criteria of the EJ policies and regulations, a heightened public involvement effort should be conducted. Public involvement should be utilized at all stages of project and program development and implementation. According to the FHWA in their Community Impact Assessment document (Sept. 1996), DOTs should

"Use public participation as a basis to develop project alternatives, a source of information to develop the community profile, a tool to identify and evaluate impacts, and a method to identify acceptable ways to address impacts."

Continuous and open public participation is an important precept in complying with environmental justice guidance, NEPA, and state law. Each project may be associated with specific considerations related to cultural or language barriers. The location, timing, and advertising of public meetings may require different approaches depending on the community. Stakeholders to be sought for input for a particular project should be considered as part of the initial planning of a public participation program. ADOT has established several on-call consultants for public involvement, which should assist in successful project-level implementation.

Recommendations

The following information includes our recommendations for ADOT regarding the best way to address environmental justice. ADOT's current approach to addressing EJ has been consistent with federal guidelines and generally comparable to other state DOTs that have active programs in place. A few DOTs have applied programs that exceed the minimum requirements of implementation. We recommend that ADOT follow their example and implement a more formalized model for both the macro and micro levels of their organization.

- Utilize macro-level approach when developing DOT-wide EJ approach as discussed earlier in this section.
 - <u>Coordinate</u>- efforts with other transportation agencies. Utilization of a taskgroup has proved to be an effective method of collaboration.
 - <u>Create</u>- detailed, formalized policies, procedures and guidance
 - <u>Communicate</u> policies and procedures with staff and departments through meetings and training sessions.
 - Consider- the effectiveness of the policies and procedures, yearly.
- Utilize micro-level approach when implementing EJ on a project/program specific basis as discussed earlier in this section.
 - Define- project study area.
 - **Develop** community profile
 - **Analyze** impacts
 - **Identify** solutions
 - Document- findings

The EJ-related analysis of impacts at a project level could include such factors as impacts to community cohesion, accessibility, and the availability of services as well as "traditional " impacts such as noise and air quality.

- Utilize **public involvement** at all levels of project/program development and implementation. Also in the public involvement protocols:
 - Develop and utilize notification database incorporating community leaders and groups.

- Reproduce materials for projects and programs in Spanish as well as English as a standard practice. Consider other languages that may be appropriate on a project-by-project basis.
- Utilize EJ approach when developing statewide transportation planning documents.
- Develop a task force to evaluate, revise, and communicate EJ guidance continuously. This task force could also be responsible for training staff on EJ requirements and guidance, and acting as the contact for feedback and suggested changes.
- Consider the formation of a community planning group to meet several
 times a year to exchange information and provide a liaison to the public and
 community groups. This group could provide the basis for a better relationship
 with the community groups, as they indicated a desire for in interviews, and
 provide a forum for "big picture" discussions. The result could be avoiding
 future conflicts on specific projects and improving the levels of mutual respect
 and credibility between the agency and the public.
- Evaluate links between funding decisions, environmental planning, and project management at ADOT. This may be an appropriate responsibility for the task force. Consider whether there are disconnects between these decision makers, such that EJ goals pursued at a project level are not supported at an overall level in terms of funding distribution.
- Establish transit planning partnerships with municipalities, regional groups, and transportation groups to address EJ issues of concern to community groups in a proactive manner.

APPENDIX A: Survey Forms

Environmental Justice Survey

Arizona Department of Transportation Research Center

March 13, 2001

1.			of recent plans, programs, or projects (i.e., within the past we involved Environmental Justice concerns or issues?
		a.	Highway/roadway improvement or upgrade
		b.	Transportation planning and corridor analysis
		c.	Public transit
		d.	Construction
		e.	Maintenance/contracting
		f.	Other
2.	within	the pa	en the result of recent plans, programs, or projects (i.e., ast 5-6 years) involving Environmental Justice issues in ment or agency?
		a.	Complaints, litigation, or other actions
		b.	Significant modification to the project or plan
		c.	Development of new policies, procedures, or methods
		d.	No recent projects with these issues
		e.	Other
3.			rganization of your agency, what group is responsible for nd assessing Environmental Justice issues
		a.	Environmental planning
		b.	Title VI office
		c.	Environmental Justice coordinator
		d.	Civil rights administration office
		e.	Other
4.			environmental planning function located within your anizational structure?
5.			aches does your agency/department maintain to respond tental Justice concerns?
		a.	Standard technical analysis methods (e.g., socioeconomic/demographic

		study) b. Structured public involvement methods to assure notice and encourage participation by affected groups c. Other approaches
6.	Environ	es your agency follow USDOT and/or EPA guidance on mental Justice to ensure compliance with Executive Order and Title VI of the Civil Rights Act?
7.	on indiv	ecific guidance or methods for public involvement procedures idual projects or in long-range planning has your agency ed to respond to Environmental Justice guidelines?
8.	Name:	rovide your contact information below.
	Phone: E-mail Mailing	address:
		Thank you for participating in our survey.

Jennifer Donahue, Project Manager

Environmental Planning Group 4350 East Camelback Road, Suite G-200

Phoenix, Arizona 85018

602-956-4370 Fax: 602-956-4374 jdonahue@epgaz.com

COMMUNITY Environmental Justice Survey Questions

Explain environmental justice to the interviewee. Explain the goal of the interview (identify issues that ADOT may want to address), Explain why we identified them as a contact. Agency ______, Name ______, Title _____ Can we publish your survey? What group/community do you represent or work with? Please describe the group or position and how you interface with the community. Before today, have you heard of Environmental Justice? If so, how, when. Ask them to explain fully how they are familiar with the term. What environmental issues do you feel are important to your community or the community you work with? To the Valley? State? Country? What transportation issues are important to your community or the community you work with?

Do you feel transportation problems affect your community or the community you work with specifically? Do you feel those same problems affect other communities in the valley equally?
Do you feel environmental problems affect your community or the community you work with specifically? Do you feel those same problems affect other communities in the valley equally?
How do transportation organizations (ADOT) communicate with you and your community or the community you work with regarding transportation projects?
How could ADOT improve their communication with you and your community or the community you work with regarding transportation projects?

Appendix B: DOT Environmental Justice Contact List

State/Agency Name	Contact Name	Title	Phone #	E-mail Address	Mailing Address
	Joe Bearrentine		(334) 242-6149	bearrentinejo@dot.st ate.al.us	Alabama DOT Design Bureau T-205 1409 Coliseum Blvd Montgomery, AL 36130
Arkansas SHTD	John Isom		(501) 569-2519		Arkansas State Hwy. and Transp. Department PO Box 2261 Little Rock, Arkansas 72003-2261
California DOT	Greg King		(916) 653-0647	greg_king@dot.ca.go v	CalTrans Envrironmental Program (ms27) 1120 N St Sacramento, CA 95814
Colorado DOT	Robin Geddy		(303) 757-9794	robin.geddy@dot.stat e.co.us	4201 East Arkansa Ave Denver, Co 80222
Connecticut DOT	Mike Lonergan		(860) 594-3336	mike.lonergan@po.st ate.ct.us	2800 Berlin Turnpike PO Box 317546 Newington, Connecticut 06131-7546

Delaware DOT	Terri Fulmer			tfulmer@mail.dot.stat e.de.us	Deleware Department of Transportation P.O. Box 778 Dover, DE 19903
Florida DOT	Lee Ann Jacobs, AICP	Trans. Policy Coord.	(850) 922-7211	leeann.jacobs@dot.s tate.fl.us	605 Suwannee Street, Mail Station 37 Tallahassee, Florida 32399-0450
Georgia DOT	Harvey Keepler		(404) 699-4401	harvey.keepler@dot. state.ga.us	Georgia DOT Harvey Keepler 3993 Aviation Circle Atlanta, GA 33036
Idaho DOT	Dennis Clark		(208) 334-8203		Idaho DOT Dennis Clark 3311 W State St Boise, ID 83703-5881
Illinois DOT	Barbara Stevens	Socioeconomic Specialist	(217) 785-4245	stevensbh@nt.dot.st ate.il.us	Illinois DOT Room 330 2300 S Dirksen Pkwy Springfield, IL 62764
Indiana DOT	James Juricic	Section Manager	(317) 232-5305		Environmental Assesment Section Room N 8488 100 N Senate Ave Indianapolis, Indiana 06204

lowa DOT	Russell Sinram	Program Planner	(515) 239-1577	russell.sinram@dot.s tate.ia.us	lowa DOT Office of Environmental Services 800 Lincoln Way Ames, lowa 50010
Kansas DOT	Rene Hart		(785) 368-7341	rhart@ksdot.org	Kansas DOT Bureau of Transportation Planning 217 Southeast 4th St Topeka, Kansas 66603
Kentucky	Annette Coffey	Director	(502) 564-7183		Kentucky Transportation Cabinet Annette Coffey 125 Holmes St Frankfort, Kentucky 40622
Louisiana DOTD	Vincent Russo, Jr.	Environmental Eng. Administrator	(225) 248-4190	vrusso@dotd.state.la .us	Louisiana Department of Transportation and Development P.O. Box 94245 Baton Rouge, LA 70804-9245
Maine DOT	Duane Scott		(207) 287-5736	duane.scott@state.m e.us	Maine DOT 16 State House Station Augusta, ME 04333
Maryland DOT	John Lewis	Chief Special Projects	(410) 865-1303		Maryland DOT John Lewis PO Box 8755 BWI Airport, MD 21240

Massachusetts EOTC	Luisa Paiewosky	Director of Transportation Planning	(617) 973-7858	luisa.paiewosky@sta te.ma.us	Massachusetts Hwy Dept Room 4150 10 Park Plaza Boston, MA 02116
Michigan DOT	Lori Noblet		(517) 335-2906	nobletl@mdot.state. mi.us	Environmental Section 425 W Ottowa St PO 30050 Lansing, Michigan 48909
Minnesota DOT	Abagail McKenzie		(651) 296-6194 (800) 657-3774 (general)		Minnesota DOT Transportation Building 395 John Ireland Boulevard Saint Paul, MN 55155
Mississippi DOT	E. Claiborne Barnwell		(601) 359-7920	cbarnwell@mdot.stat e.ms.us	Mississippi DOT Environmental Location Division P.O. Box 1850 Jackson, MS 39202
Missouri DOT	Ernie Perry		(573) 526-4317	perrye@mail.modot.s tate.mo.us	Missouri DOT 1617 Missouri Blvd. PO Box 270 Jefferson City, MO 65102

Montana DOT	Janet Gilbertson	compliance specialist	(406) 444-6334	jagilbertson@state.m t.us	Montana DOT Title 6 Coordinator PO Box 201001 Helena, MT 59620
Nebraska DOR	Cindy Veys	Env. Sec. Manager	(402) 479-4410		Nebraska Department of Roads Environmental Section Manager PO Box 94759 Lincoln, Nebraska 68509-4759
Nevada DOT	Daryl James		(705) 888-7013	<u>djames@dot.state.nv</u> <u>.us</u>	Nevada DOT Environmental Division 1263 South Stewart St Carson City, NV 89712
New Hampshire DOT	William (Bill) Hauser	Administrator - Bureau of Environment	(603) 271-3226	bhauser@dot.state.n h.us	New Hampshire DOT Bureau of Environment PO Box 483 Concord, NH 03302-0483
New Jersey DOT	Jack McQuillan		(609) 530-2833	jmcquillan@cpm.dot. state.nj.us	New Jersey DOT Jack McQuillan 1035 Parkway Ave Trenton, NJ 08625

New Mexico HTD			(505) 827-3248		New Mexico Highway and Transportation Department 1120 Cerrillos Rd PO Box 1149 Santa Fe, NM 87504-1149
New York DOT	Mary Ivey		(518) 457-4054		Mary Ivey Governor Harriman State Campus Building 5 Albany, NY 12232
North Carolina DOT	Teresa Banks	southern resource center	(404) 562-3592		North Carolina DOT Teresa Banks 1 S Wilmington St Raleigh NC 27601
North Dakota DOT			(701) 328-2576		North Dakota DOT 608 East Boulevard Ave Bismark, ND 58505-0700
Ohio DOT	Suzann Gad	Urban and Corridor Planning	(614) 644-7093	sgad@dot.state.oh.u s	Ohio DOT Suzann Gad 1980 W Broad St Columbus, OH 43223
Oklahoma DOT	David Steb	Planning Division Eng.	(405) 521-6916	david.streb@odot.org	Okalhoma DOT David Steb 200 Northeast 21st St Oklahoma City, OK 73105

Oregon DOT	Pieter Dykman	Research supervisor	(503) 986-3477		Oregon DOT
		Supervisor			Pieter Dykman
					555 13 th St NE
					Salem, OR 97301
Dannaulyania					
Pennsylvania DOT					Pennsylvania DOT
					Forum Place
					555 Walnut St
					Harrisburg, PA 17101-1900
Rhode Island		Civil Rights	(401) 222-6940		Rhode Island DOT
DOT		Admin.			a B B
					Civil Rights Bureau
					Two Capitol Hill
					Providence, RI 02903-1124
	Blanche Sproul		(803) 737-1395	sproulbs@dot.state.sc.	South Carolina DOT
DOT				<u>us</u>	
					Environmental Management Office
					PO Box 191
					Columbia, SC 29202-0191
	Willis		(605) 773-3137		South Dakota DOT
וטטו	McLaughlin				700 Foot Prooducy
					700 East Broadway
T	A Davidan		(045) 744 0004	1 1 0 11-4-4-4	Pierre, SD 57501
Tennessee	A. Dexter		(015) /41-3681	dsamuels@mail.state.t	Tennessee DOT
DOT	Samuels			<u>n.us</u>	FOE Doodrick St
					505 Deadrick St
					Suite 400
					Nashville, TN 37243

Texas DOT	Melissa Neeley		(512) 416-2620		Texas DOT
				<u>x.us</u>	Melissa Neeley 125 E 11th St Austin, TX 78701-2483
Utah DOT	Charles Larson	Manager	(801) 956-4102		Utah DOT Charles Larson 4501 South 2700 West Salt Lake City, UT 84119-5998
Vermont DOT			(802) 828-3960		Vermont DOT 1 National Life Drive, Drawer 33 Montpelier, VT 05633
Virginia DOT		public affairs	(804) 786-2716		Virginia DOT Public Affairs Division Central Office 1401 East Broad St Richmond, VA 23219
Washington DOT	Alix Berg	Technical assistance plnr	(360) 705-7950		Washington DOT Environmental Affairs Office PO Box 47331 Olympia, WA 98504-7331
West Virginia DOT		Dir. Transportation Plnng	(304) 558-3113		West Virginia DOT 1900 Kanawha B lvd. East Bld. 5, Room 152 Charleston, WV 25305-0430

Wisconsin DOT	Caroline Amegashie	EJ Coord.	(608) 266-2965	Wisconsin DOT
	, and gains			Bureau of Environment P.O. Box 7965 Room 451 4802 Sheboygan Avenue Madison, WI 53707-7965
Wyoming DOT	Timothy Stark	PE	(307) 777-4379	 Wyoming DOT 5300 Bishop Blvd Cheyenne, WY 82009-3340

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Survey	