PennDOT Office of Planning

Environmental Justice Plan
Executive Summary

Developed for:

Pennsylvania Department of Transportation
Office of Planning
Center for Program Development and Management
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I. Introduction

In 2002, the PennDOT Office of Planning decided to develop comprehensive guidance to assist PennDOT planners and its planning partners to address environmental justice (EJ) during planning and programming processes. In view of the lack of documented guidance and best practices available to assist State departments of transportation (DOTs) to incorporate environmental justice into the early stages of the planning process, the PennDOT Office of Planning has decided to develop its own guidance.

Inside Every Voice Counts
The purpose of Every Voice Counts is to provide guidance and flexibility rather than fixed prescriptions for addressing EJ in transportation planning and programming. Agencies should be prepared to use this guidance to develop processes that address the distinct character of their jurisdictions, including area demographics, the size and character (rural, suburban, or urban) of their jurisdictions, the specific transportation needs and priorities of the area’s elected leaders, and the agency’s resources.

This Executive Summary provides the highlights of the comprehensive Every Voice Counts guidance document. Every Voice Counts includes this Executive Summary, the Every Voice Counts guidance document, and a toolbox of supplemental information and resources.

The primary components of Every Voice Counts are:

1. An overview of the PennDOT planning and programming process, including the major players, federal and state process requirements, and products.

2. Technical guidance addressing the three major components of an EJ process:
   a. Identifying EJ target groups and populations;
   b. Public involvement; and
   c. Integrating EJ into plan or program development.

3. Recommendations for PennDOT and the Planning Partners for getting started in implementing a Title VI and environmental justice program.

4. Appendices - supplemental information to provide additional detail where needed.

5. The Every Voice Counts Toolbox, a CD of resources and materials for agencies to refer to and use to strengthen their ability to meet EJ requirements.

This work was sponsored by the Pennsylvania Department of Transportation. The contents of this report reflect the views of the authors, who are responsible for the facts and the accuracy of the data presented herein. The contents do not necessarily reflect the official views or policies of the Commonwealth of Pennsylvania or the United States Department of Transportation at the time of publication. This report does not constitute a standard, specification, or regulation.
II. PennDOT Planning and Programming - An Overview

The planning and programming process should set the framework for ensuring that EJ is adequately addressed during project delivery and can help PennDOT District staff or transit property staff to identify issues of concern in advance of initiating project development. An effective planning process that seeks out and considers the needs of low-income, minority and other targeted populations should result in:

1. Policies and plans that reflect the transportation needs and priorities of all Pennsylvanians;

2. Projects that are identified and prioritized in Transportation Improvement Programs (TIPs), the Twelve-Year Transportation Program (TYP), and Statewide Transportation Improvement Program (STIP) that reflect the priorities of all Pennsylvanians; and

3. Projects with the potential for impacts to targeted communities are flagged to help decision makers during project planning and development at the PennDOT District or by a transit property.

Federal transportation policy, as provided in authorizing legislation and supportive regulations, frames the planning and programming process followed by PennDOT and the planning partners. PennDOT, like most state DOTs, has institutionalized its own version of the transportation planning process. The following describes the major elements of that process.

- **Statewide Long-Range Transportation Plan** - The statewide long-range transportation plan (LRTP) articulates transportation policy for the state, addressing all transportation modes.

- **Metropolitan Planning Organization Long-Range Transportation Plan** - MPO LRTPs are similar in content and scope to the Statewide LRTPs. MPO and RPO plans are required to be financially constrained by the revenues that are estimated to be available over the life of the plan. Additionally, the programs and projects within the plan must conform to the State Implementation Plan for air quality.

- **Twelve-Year Transportation Program (TYP)** - Every two years PennDOT prepares and submits a twelve-year program of transportation improvements to the State Transportation Commission for their approval. Transportation projects comprise all transportation modes including highways, bridges, public transit, aviation, rail freight, bicycle/pedestrian, and intermodal.

- **Statewide Transportation Improvement Program (STIP)** - The first four years of projects in the TYP is the Statewide Transportation Improvement Program (STIP).

- **Transportation Improvement Programs (TIP)** - The STIP consists of the individual TIPs from the MPOs and RPOs. Multimodal in scope, the TIP contains a fiscally constrained prioritized list of projects for the designated period.

III. Identifying Targeted Communities

The USDOT Order on Environmental Justice issued in April 1997 provides broad descriptions of the individuals and groups that are to be considered when identifying targeted communities. The exact descriptive language is provided in Appendix B of this guidance. The groups include low-income persons and populations as defined by the U.S. Department of Health and Human Services Poverty Guidelines and minority persons and populations - Black, Hispanic, Asian American, American Indian and Alaskan Natives. These definitions can be viewed as the minimum requirements against which an agency can establish its own, more inclusive procedures for addressing EJ in transportation decision-making.

There are three primary reasons for identifying targeted populations. One is to integrate techniques for involving such populations and individuals in the public involvement process. A second purpose is to identify and integrate the transportation needs and priorities of these populations in plans and programs. The third is to assess the effects of alternative policies, investments and programs on these individuals.

The underlying principle in identifying a targeted population is inclusiveness. It is important to consider all groups that are typically underrepresented in transportation decision-making or affected by other factors that might limit their access to the full benefits of the transportation system. Figure 1 provides an initial checklist to use when developing the community identification process.
Public involvement is the cornerstone of an effective Environmental Justice (EJ) strategy for transportation planning and programming. It is the fundamental tool by which minority and low-income populations have representation and a voice in the process. Figure 2 outlines a strategy for building and implementing an effective public involvement program that incorporates outreach to EJ target communities.

The goal of an agency’s public involvement program should be to build public ownership of the resulting transportation plan or program. The efficacy of a comprehensive public involvement program that incorporates an effective EJ strategy rests in its ability to:

- Identify and involve target populations;
- Determine transportation needs and concerns of all affected publics;
- Develop goals to guide a public involvement plan that include specific performance expectations for involving low-income, minority and other targeted populations in the process; and
- Test the effectiveness of the process against these goals and make necessary adjustments to achieve desired results.

IV. Public Involvement

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Figure 1. Identifying Targeted Populations

- Make a list of potential demographic groups to consider for the region. Start with the required EJ populations defined by the Executive Order and supportive guidance.
- Consider groups that are underrepresented in typical public involvement and transportation decision making processes, have limited access to the full benefits of the transportation system, or have encountered disproportionate impacts from past transportation decisions.
- Decide on the level of detail required for identifying groups spatially and identify data sources to use to conduct a spatial demographic assessment.
- Engage leaders and representatives of demographic groups to help identify target populations, spatially and non-spatially.
- Conduct a spatial demographic assessment to identify the distribution and concentrations of targeted groups identified above.
- Verify results through field visits and community consultation, as appropriate and feasible.

Figure 2. Public Involvement Program

- Begin networking to get the word out of the upcoming public involvement process, identify key stakeholders, transportation issues, and public involvement strategies and techniques.
- Develop specific performance goals for the Public Involvement Program (PIP) that reflect issues in the region or with this plan. The goals should facilitate evaluation of the PIP midstream and after implementation.
- Identify all stakeholders, including targeted EJ communities.
- Identify issues and barriers related to involving specific groups, such as language concerns, that need to be addressed in the PIP.
- Compile a “long list” of possible public involvement techniques that include interactive and more passive forms of public involvement.
- Develop a milestone chart of the plan or program development chart with identified public involvement activities for each.
- Begin implementation.
- Evaluate and modify PIP as needed.
The intent of EJ is to seek an equitable distribution of benefits and impacts that can be attributed to specific transportation actions. To accomplish this, agencies need to understand and address the transportation needs and concerns of the EJ targeted communities in the plan or program. The following describes how EJ may be addressed during a systemwide needs analysis and during the definition and evaluation of the plan or program alternatives.

Defining Transportation Needs
A transportation needs assessment examines the quality of the transportation network with the goal of building a “to-do” list to be addressed through the long-range plan or program. The outcomes of a needs assessment become the basis for identifying plan goals and objectives as well as alternative plan or program scenarios. Needs assessments include technical analysis and public involvement. The technical elements use data to examine such factors as condition of infrastructure, modal usage data, customer satisfaction data, and operations efficiency. Public involvement provides first-hand verification of the technical assessment results.

A needs assessment based on EJ considerations uses a demographic assessment to identify transportation trends and service quality to EJ communities. Imbalances in system performance vis-à-vis the population-at-large or among different demographic groups may be identified using this tool.

Figure 3 outlines a process for conducting a needs assessment, featuring a demographic assessment.

Figure 3. Needs Assessment Checklist

✓ Conduct systemwide technical assessment of transportation performance to identify needs.

✓ Create a non-spatial demographic assessment that correlates transportation performance and usage data against demographic groups in the Plan jurisdiction, such as modal usage data and commute times.

✓ Create a spatial demographic assessment to correlate current transportation system performance against spatially distributed demographic groups, such as lane miles, levels of service, and access to transit routes and facilities.

✓ Conduct public involvement to share data and discuss transportation needs, priorities and preferences of targeted EJ populations and to verify conclusions drawn from data profiles.

✓ Project spatial and non-spatial demographic information to the end year of the plan or program in question to forecast changes in demographics over time.
Defining Alternatives
The fundamental focus of achieving environmental justice in transportation planning is how the plan’s policies, investments, or services impact or benefit EJ groups relative to the population as a whole. EJ should be proactively addressed by integrating environmental justice into the definition and analysis of plan or program alternatives, rather than waiting to assess the impacts of a draft plan or program.

Addressing EJ in plan development may affect what are defined as the benefits of transportation, as well as the strategies for creating them. A sample of transportation policy or project strategies to meet a wide range of stated needs is provided in Figure 4.

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<thead>
<tr>
<th>Sample Transportation Needs/Goals</th>
<th>Sample Transportation Strategies</th>
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<td>Economic/Community Development</td>
<td>• Transit-oriented development</td>
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<td>• Transportation enhancements</td>
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<td></td>
<td>• Streetscapes and &quot;Main Street&quot; programs</td>
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<td></td>
<td>• Airport or Port access improvements</td>
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<td>Mobility</td>
<td>• Highway improvements</td>
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<td></td>
<td>• Bike and pedestrian facilities</td>
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<td></td>
<td>• Transit lines, routes and services</td>
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<td>Safety and Security</td>
<td>• Lighting and signage</td>
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<td>• Traffic calming and routing</td>
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<td>• Pedestrian crossings, markings and signage</td>
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<td>• Marked or barrier separated bike lanes</td>
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<td>• Police presence or security procedures</td>
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<tr>
<td>Accessibility</td>
<td>• Land use incentives/programs</td>
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<td>• Modal improvements targeting underserved destinations</td>
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Figure 4. Sample Transportation Needs and Strategies
Alternatives Analysis and Selection
Wherever possible, agencies should assess a range of alternative policy or investment strategies for addressing environmental justice (and other transportation system performance factors) in advance of finalizing a plan or program. This provides the opportunity to adopt a plan or program that performs best against EJ as well as other performance criteria.

Agencies should adopt a set of criteria for judging the overall performance of alternatives, based on a technical analysis of the alternatives compared to the status quo and one another. Any or all of the following questions may be appropriate as the basis for a comprehensive alternatives impact assessment:

- Under which plan or program alternative are targeted communities better off?
- How well do targeted communities benefit relative to other (non-targeted) communities?
- Which scenario of policies or projects offers the most benefits to targeted communities, regardless of other beneficiaries?
- Which scenario offers the least benefits and/or the most impacts (or costs) to the targeted communities relative to other (non-targeted) communities?

Performance Measures
To evaluate alternative plans or programs, an agency will need to select the performance measures that will form the basis of that evaluation. Performance measures can be either quantitative or qualitative; the type used typically depends on the amount of specific data and analysis tools that are available to an agency. These types of measures can be applied at several levels - be it state-wide, by a MPO or RPO, county, township, or municipality. Figure 5 shows a list of possible performance measures agencies may select by area of transportation performance.
<table>
<thead>
<tr>
<th>Performance Category</th>
<th>Examples of Performance Measures</th>
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| Accessibility                | • Number of jobs within “X” minutes by mode  
• Average number of defined destinations (college, hospital, retail centers) within “X” minutes travel time  
• Demographic distribution of people living ¼ mile from fixed route transit station  
• <1 mile access to bike paths, marked bike routes  
• Access to transit facilities by type - rail, bus, express services, etc. (distance to major facilities by type)                                                                 |
| Fees and Expenditures        | • Share of user fees, taxes or fares compared to modal use or income (ability to pay)  
• Distribution of alternative plan/program expenditures by mode (compared against needs or access, stated preferences, or usage data)                                                                 |
| Travel times/ Congestion or Delay | • Average or distribution of travel times for work trips  
• Average travel times to regional activity centers  
• Average travel times by trip type  
• Travel time savings by population group  
• Travel times by mode, incorporating effects of improvements contained in transportation plan                                                                                                                                 |
| Transit service              | • Percentage of population within “X” miles of bus route or transit station  
• Percentage of population with quality of transit service "X" (such as rail or bus/cost of service/travel times or frequencies of service)                                                                 |
| Distribution of transportation investments | • Distribution of new or improved transportation facilities, including new roads, bridges, trails, sidewalks, etc.                                                                 |
| Infrastructure conditions    | • Quality of pavements/bridges serving areas (International Roughness Indices, for example)  
• Quality of pedestrian facilities including access to/connectivity of sidewalks  
• Distribution of vehicle ages and types (transit vehicle breakdown rates; average fleet age)                                                                                                                                 |
| Safety                       | • Accident rates - by modal category  
• High-accident locations  
• Reported criminal incidents at various facilities, such as rest areas, transit stations, parking lots                                                                                                                                 |
| Environmental quality        | • Air quality conformity  
• Distribution of environmental mitigation, such as noisewalls  
• Distribution of transportation enhancements                                                                                                                                                                                  |
At the End of the Day...

After reading through this guidance and toolbox, the intent of a more equitable and fair transportation planning process is likely to be heard loud and clear. Nonetheless, in actually applying the techniques, some uncertainties may remain, such as: “What have we really accomplished?” or “Have our EJ efforts been successful?” At the “end of the day,” agencies should feel comfortable that they have achieved the following list of EJ accomplishments:

✔ EJ groups and communities have been identified for the study area.
   Agencies should feel familiar with the demographic composition of the study area and which groups they intend to target for compliance with EJ and Title VI. These groups should be identified area wide (non-spatially) as well as spatially. Any assumptions made about community demographics should be verified through meetings with community leaders and visual tours, as appropriate.

✔ Agency staff has identified and met with community leaders representing targeted EJ communities.
   Establishing relationships with community leaders representing targeted EJ communities can go a long way in building trust with members of those communities and drawing their participation into the planning process. Community leaders can assist an agency with identifying EJ communities in the study area; by using public involvement techniques, venues and forums that draw participation by community members; by raising transportation needs and issues important to their constituency; and can be knowledgeable participants on a community advisory committee.

✔ The public involvement program includes a strategy for engaging minority and low-income populations in transportation decision-making.
   The public involvement program should include multiple approaches for involving minority and low-income populations in the planning and programming process, such as conducting leadership interviews, holding meetings in the communities, participating in community events, producing targeted mailings and publications, and advertising in popular TV, radio and other print media.

✔ The transportation needs of EJ populations and any potential system performance imbalances have been identified.
   A system wide analysis of the transportation needs has identified the needs of EJ targeted communities and groups. Additionally, imbalances in system performance among demographic groups, such as differences in mobility, accessibility or quality of services, have been identified and flagged for response through the planning and programming process. Needs have been identified both through a technical review of system performance as well as through involvement of targeted groups and citizens.

✔ The process has an established procedure for evaluating and selecting among proposed plan or program alternatives.
   Performance measures have been used to assess the effects of proposed plan or program alternatives on EJ targeted communities and groups. Different agencies will utilize different tools and measures for evaluating their plan or program alternatives, depending on the content of the plan or program, the size and character of their jurisdiction (rural, suburban, urban), and available resources. However, at the “end of the day” an agency should feel comfortable that plan and program alternatives have been evaluated in consideration of the needs and preferences of EJ communities and groups. Additionally, the agency has established criteria for selecting among alternatives that includes consideration of EJ issues and concerns. And finally, that the evaluation and selection process actively involved the public in decision-making.

✔ A process has been established for considering the issues and concerns raised by targeted EJ communities in decision-making.
   Public involvement is about listening - and about acting. An agency ought to have an established system for seriously considering the issues raised by members of the EJ population. Ideally public involvement reinforces the technical process, such as the identification of transportation needs and the evaluation of alternatives. This offers a direct means of applying public input to the decision-making process.
The long-range plan includes goals and objectives that reflect the transportation needs of targeted EJ populations. For an agency balancing numerous interests and demands, it can be particularly challenging to specifically integrate the interests of EJ communities into the plan. Ideally, the long-range plan contains goals and objectives that reflect the transportation needs and priorities of the targeted EJ communities. Some agencies may wish to include goals and objectives that specifically address environmental justice or equity concerns.

The TIP, STIP and/or TYP provide a fair distribution of resources, as determined through the planning and programming process. The transportation needs and preferences of targeted EJ communities reflected in the long-range plan should result in a program of projects that address those needs. Again, this can be a particularly challenging goal to meet, given competing demands for scarce transportation resources, but this is often a true test of an agency’s attention to EJ and Title VI concerns. Evidence of attention to EJ in programming can include anything from including or advancing specific projects of importance to EJ communities to how resources are allocated among geographic areas or modes.