



U.S. Department of Transportation
Federal Highway Administration

Environmental Justice and Equity Resources

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FHWA Office of Human Environment

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Environmental Justice

Overview

Environmental Justice (EJ) at the FHWA means identifying and addressing disproportionately high and adverse effects of the agency's programs, policies, and activities on minority populations and low-income populations.

Guiding Principles

To ensure the full and fair participation by all potentially affected communities in the transportation decision-making process.

To avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority or low-income populations.

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

Environmental Justice

History
Legislation
EJ, Title VI, & Equity
EJ at DOT
EJ at FHWA
Case Studies
Training
Resources
Key References

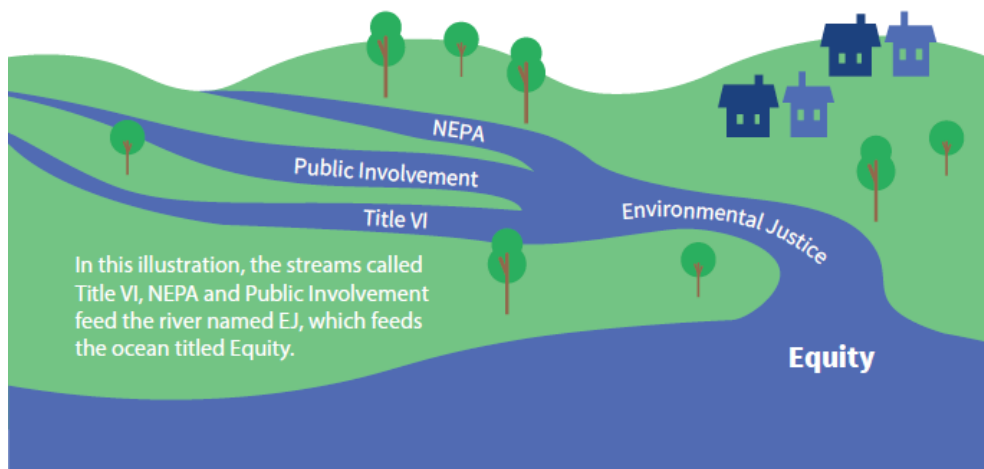
FHWA → Environment → Environmental Justice

Environmental Justice, Title VI, Non-Discrimination, and Equity

Although Environmental Justice (EJ), Title VI, Non-Discrimination, and Equity are distinct elements, collectively they can contribute to the development of an equitable transportation system. These elements are regularly mistaken and used interchangeably, thus, making it essential to understand their differences.

EJ at FHWA focuses on identifying and addressing disproportionately high and adverse human health or environmental effects of the agency's programs, policies, and activities on minority populations and low-income populations to achieve an equitable distribution of benefits and burdens. This objective is to be achieved, in part, by actively adhering to the principles and practices of both Title VI and the National Environmental Policy Act (NEPA) during the development and implementation of transportation activities. The classes covered by EJ vary slightly from those covered by Title VI and other nondiscrimination statutes, as depicted in Table 1.

Coming Together for Equity



www.fhwa.dot.gov/environment/environmental_justice/

Equity in Transportation

Equity in transportation seeks fairness in mobility and accessibility to meet the needs of all community members. Particular focus is given to individuals in one of the following population categories:

- Low Income
- Minority
- Elderly
- Limited English Proficiency (LEP)
- Persons with Disabilities



Highlighting Transportation Plans and Projects

- **City of High Point, North Carolina Downtown Multi-modal Vision Plan to Increase Access, Promote Use, and Foster Economic Development (2019)**
- **I-70 East Environmental Impact Statement, Denver, Colorado (2019)**
- **Demonstrated Advances in Nondiscrimination, including Environmental Justice: US 26 Outer Powell Transportation Safety Project, Portland, OR (2017)**
- **Walk Bike Thrive! A Regional Vision for a More Walkable, Bikeable, and Livable Metro Atlanta (2017)**



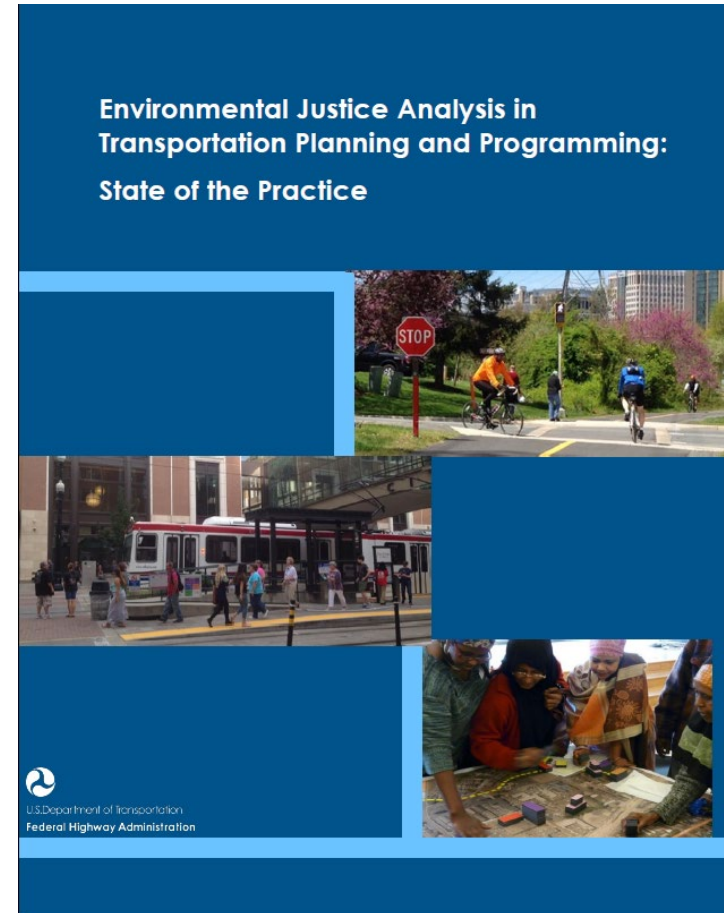
Source: Oregon DOT



Source: Colorado DOT

EJ Analysis in Transportation Planning and Programming

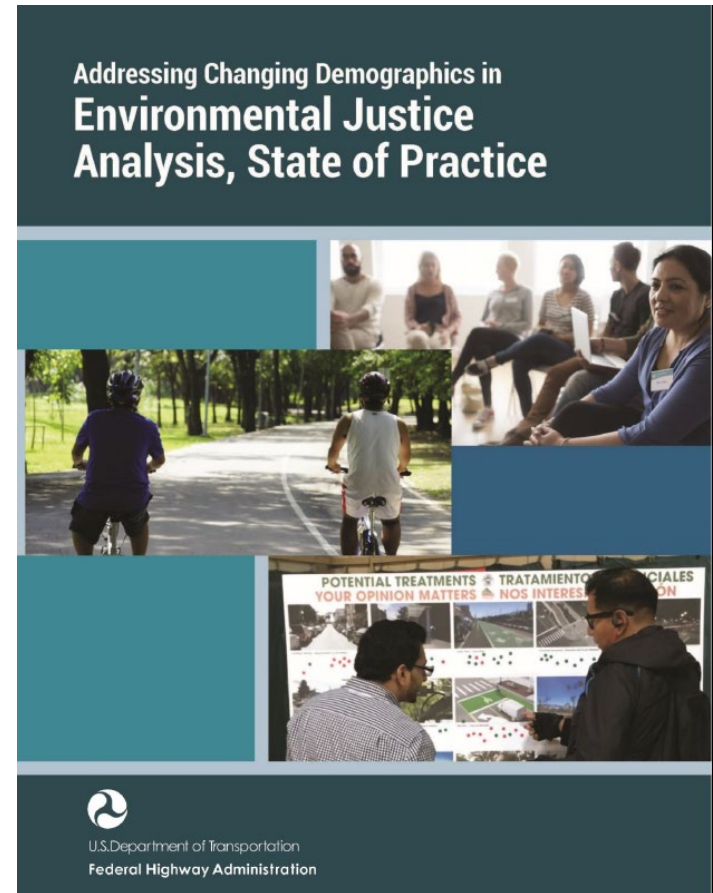
1. Providing Opportunities for Meaningful Public Involvement
2. Identifying EJ Populations
3. Understanding EJ Needs and Concerns
4. Assessing Benefits and Burdens of Plans and Programs
5. Assessing Whether Adverse Effects Are Disproportionately High
6. Deploying Strategies to Address Disproportionately High and Adverse Effects (Imbalances and Needs)
7. Best Practices



https://www.fhwa.dot.gov/environment/environmental_justice/publications/

Addressing Changing Demographics in EJ Analysis

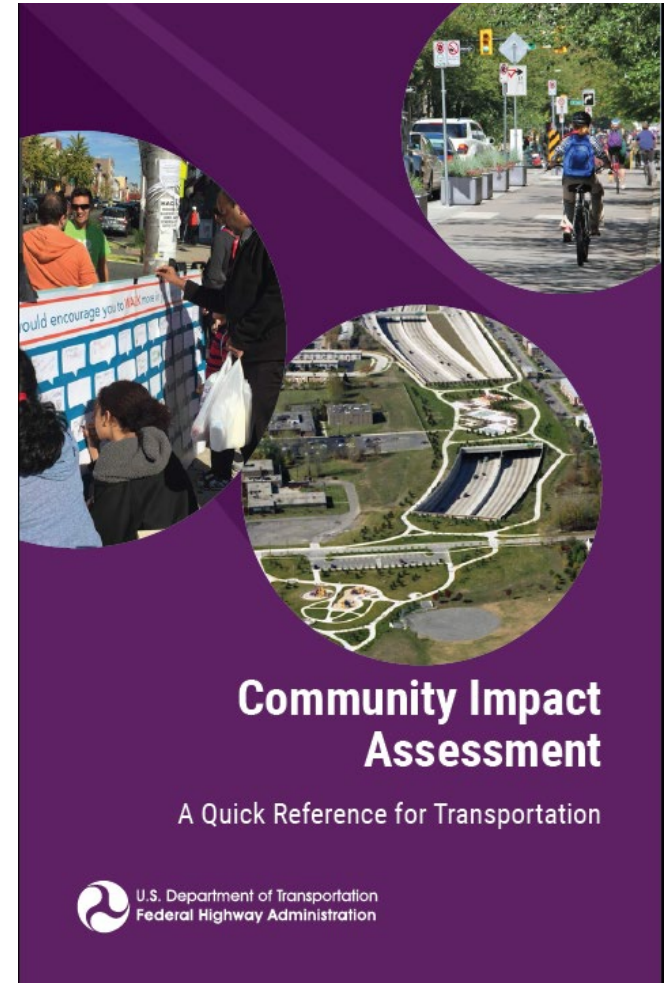
- I. Context, Goals and Objectives
- II. Changing Demographics: Trends and Forecasts
- III. State of the Practice & Notable Practices
- IV. Key Takeaways
- V. Notable Practice Example Case Studies
 1. Mid-Ohio Regional Planning Commission
 2. Metropolitan Transportation Commission
 3. Atlanta Regional Commission
 4. Florida Department of Transportation
 5. Metro (Portland, OR)



https://www.fhwa.dot.gov/environment/environmental_justice/publications/

Community Impact Assessment (CIA) Reference Guide Update

- New CIA Resources
- Best Practice Examples
- Updated Assessment Techniques/Strategies
- Effective Public Involvement



<https://www.fhwa.dot.gov/livability/cia/>

Active Transportation

Pursuing Equity in Pedestrian and Bicycle Planning

April 2016

Laura Sandt, Ph.D.
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Jesse Cohn, MRP

For:
U.S. Department of Transportation
Federal Highway Administration



Pedestrian and Bicycle Information Center
www.pedbikeinfo.org

 **pedbikeinfo**
Pedestrian and Bicycle Information Center

FACTS & FIGURES TOPICS RESOURCES WEBINARS



Equity

RELATED TOPICS: Vision Zero, Health, Community Engagement

Historically, many low-income communities and underserved populations have been left out of conversations about transportation planning and this has led to unsafe conditions where pedestrians and bicyclists are over-represented in crashes. An equitable transportation system fosters fairness and helps facilitate access to opportunities for all community members. Equity can be considered both a process and an outcome. To achieve transportation equity, communities must engage in inclusionary, authentic outreach to address underlying disparities of mobility and access and prioritize equity during all stages of the planning and implementation process. This involves building an accessible, affordable, and reliable transportation network that effectively serves all people. Discriminatory enforcement of traffic laws is a form of transportation inequity.

Transportation equity requires understanding the unique needs and safety concerns of different populations and providing the appropriate amount of resources to each group. Numerous studies have shown that enhancing the ability of traditionally underserved populations to travel via nonmotorized modes can potentially lead to improved outcomes in public health, safety, and economic development; promote economic development and resource efficiency; strengthen inclusive neighborhood relations; and bolster public transit services. Benefits of an equitable transportation system positively impact the entire community.

Resources	Examples	Related Webinars
Pursuing Equity in Pedestrian and Bicycle Planning provides an overview of transportation equity, nonmotorized transportation options for traditionally underserved populations, and strategies for improving equity for	America Walks Social Justice Toolkit provides tools and resources to consider equity and mitigate disparities by working towards healthy, productive walking environments for everybody.	Pursuing Equity in Pedestrian and Bicycle Planning (6/26/2016) Transportation Equity: Issues and Approaches to Reduce Disparities in Access to Pedestrian and Bicycle

<http://www.pedbikeinfo.org/>



Tolling and Road Pricing

Impacts of Congestion Pricing on Low-Income Populations

Efforts to Measure and Respond to Income-Equity Concerns



U.S. Department of Transportation
Federal Highway Administration



U.S. Department of Transportation
Federal Highway Administration

December 2016

Environmental Justice and Tolling: A Review of Tolling and Potential Impacts to Environmental Justice Populations

Increasingly, tolling has become an integral part of transportation infrastructure as cities and States respond to urban mobility challenges and face decreased funding for transportation projects. Toll revenues are often essential to pay the capital cost of the toll facility, as well as its operations and maintenance. Expanded use of tolling has also been promoted during the last several Federal-aid Highway Program authorization periods. Environmental Justice (EJ) populations can be affected by tolling, but the impacts vary widely by context and type of project (i.e., full facility tolling or partial facility tolling; a.k.a., "managed lanes"). This fact sheet describes different planning-level tolling scenarios and their potential impacts on EJ populations as well as a project-level evaluation of tolling projects and questions that should be answered to understand the socio-economic impact of tolls.

What is an EJ Population?

Per FHWA Order 6640.23A, the following defines an Environmental Justice population:

Low-income Population - Any readily identifiable group of low-income persons¹ who live in geographic proximity, and, if circumstances warrant, geographically dispersed/transient persons who will be similarly affected by a proposed FHWA program, policy, or activity.

Minority Population - Any readily identifiable group of minority persons² who live in geographic proximity, and, if circumstances warrant, geographically dispersed/transient persons who will be similarly affected by a proposed FHWA program, policy, or activity.

¹ Persons whose median household income is at or below the Department of Health and Human Services poverty guidelines.

² Minority persons include individuals who are Black, Hispanic or Latino, Asian American, American Indian and Alaska Native, or Native Hawaiian and other Pacific Islander.



Figure 1: SR 520 Bridge in Seattle, WA, is a fully tolled facility.
Image Source: Washington State Dept. of Transportation

Frequently Asked Questions to Understand the Socio-Economic Impacts of Tolls:

- How will low-income and non-low-income households use the transportation facilities after a toll is imposed?
- How would tolls affect the economic status of low-income and non-low-income households on average?
- For residents who choose to use tolled routes, how much time will they save? For those who would use non-tolled routes or shift to public transportation or car pool, how much extra time will they spend in travel?
- How will the potential behavioral changes differ by income status?

Source: Patrick, Robert, Romich, Jennifer, and Thacker, Jennifer. The Impacts of Tolling on Low-Income Persons in the Puget Sound Region. (2009) Washington State Dept. of Transportation, Office of Research and Library Services

NCHRP RESEARCH REPORT 860

NATIONAL
COOPERATIVE
HIGHWAY
RESEARCH
PROGRAM

Assessing the Environmental Justice Effects of Toll Implementation or Rate Changes

Guidebook and Toolbox

The National Academies of
SCIENCES • ENGINEERING • MEDICINE
NATIONAL ACADEMY OF SCIENCES
RESEARCH REPORT 860

https://www.fhwa.dot.gov/environment/environmental_justice/publications/



Complete Trip ITS4US Deployment Program



COMPLETE TRIP
ITS4US
DEPLOYMENT PROGRAM



ITS JPO High-Priority Research Areas

- Automation
- Data Access and Exchanges
- Emerging and Enabling Technologies
- Cybersecurity for ITS
- Complete Trip – ITS4US
- Accelerating ITS Deployment

The lack of transportation options for all travelers, including travelers from underserved communities, is a persistent challenge for access to jobs, education, healthcare, and other activities.

As a response to these challenges, the U.S. Department of Transportation (U.S. DOT) is increasing its investments in innovations that enhance access and mobility for all travelers. The U.S. DOT is launching a new department-wide initiative to expand access to transportation for people with disabilities, older adults, and individuals of low income. The Complete Trip portfolio will identify ways to provide more efficient, affordable, and accessible transportation services for people with disabilities, older adults, and other underserved communities that often face greater challenges in accessing essential services.

As part of the Complete Trip portfolio, the Complete Trip – ITS4US Deployment Program is a multi-modal effort led by the Intelligent Transportation Systems Joint Program Office (ITS JPO) with support from the Office of the Secretary, the Federal Transit Administration, and the Federal Highway Administration. This program will make up to \$40 million available to enable communities to showcase innovative business partnerships, technologies, and practices that promote independent mobility for all.

The Complete Trip – ITS4US Deployment Program expects to procure and award multiple large-scale, replicable, real-world deployments of integrated innovative technologies to address the challenges of planning and executing complete trips.

PHASE 1: Concept Development	PHASE 2: Design and Test	PHASE 3: Operate and Evaluate
<ul style="list-style-type: none">• Concept Development for Complete Trip Deployment• Establish Cohort Roundtables	<ul style="list-style-type: none">• Design, Test, and Deploy Complete Trip Solutions• Evaluation Framework and Planning	<ul style="list-style-type: none">• Demonstrate Multiple Large-Scale Deployments• Evaluate Deployments• Share Data and Lessons Learned

Intelligent Transportation Systems Joint Program Office



U.S. Department of Transportation



Alignment with U.S. DOT Strategic Goals

Safety
Infrastructure
Innovation
Accountability

The Complete Trip – ITS4US Deployment Program aims to solve the mobility challenges of all travelers, regardless of location, income, or disability, in accessing jobs, education, healthcare, and other activities.

Vision
Innovative and integrated complete trip deployments support seamless travel for all users across all modes, regardless of location, income, or disability.

Mission
Facilitate the integration and deployment of emerging technologies, along with innovative and replicable traveler-centric partnerships, business models, and practices to foster reliable, spontaneous, independent, safe, affordable, accessible, and efficient mobility options for all travelers.

Guiding Principles

- Integrated, Innovative, and Emerging Technologies
- Inclusive Design
- Long-Term Viability and Partnerships
- Open and Secure Data and Standardization

Complete Trip Concept

The success of a complete trip can be defined in terms of an individual's ability to go from origin to destination without gaps in the travel chain.

A complete trip may include multiple links or trip segments such as trip planning; outdoor navigation; intersection crossing; boarding and use of vehicles; transfers between vehicles, modes, and payment services; stop and station use; indoor and outdoor transitions; indoor navigation; and completion of travel to destination. If one segment of the trip is inaccessible, unreliable, or inefficient, then access to subsequent segments is broken, and the trip cannot be completed.



People with Disabilities

Older Adults

Low Income

Rural Residents

Veterans

Limited English Proficiency

To learn more about this program, visit:
<https://its.dot.gov/its4us>

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Intelligent Transportation Systems Joint Program Office



U.S. Department of Transportation

<https://www.its.dot.gov/its4us/index.htm>

Improving Access to Opportunity

Community Connections Innovations Handbook and Toolkit (2019)

https://www.fhwa.dot.gov/planning/community_connections/handbook/

Guidebook for Measuring Multimodal Network Connectivity (2018)

https://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/multimodal_connectivity/

Integrating Shared Mobility in Multimodal Planning: Improving Regional Performance Goals to Meet Public Goals (2018)

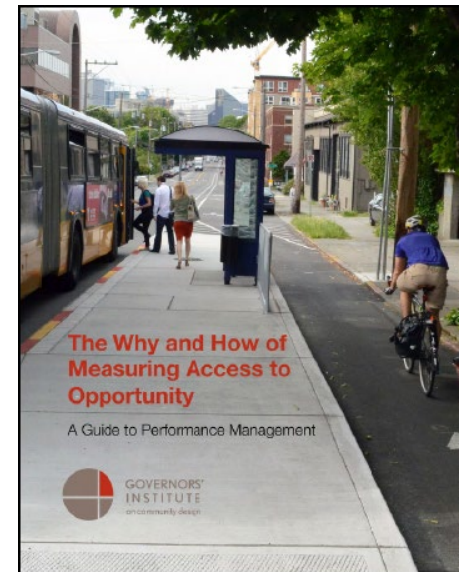
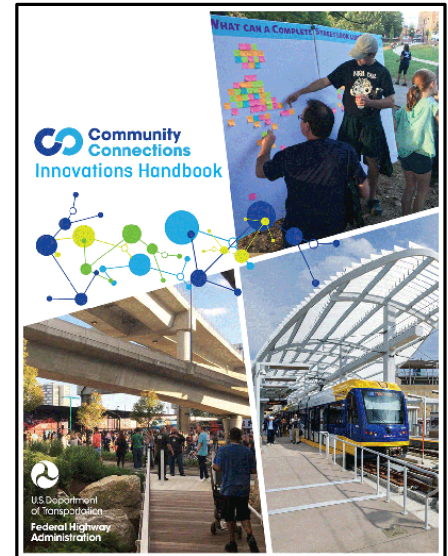
https://www.planning.dot.gov/documents/SharedMobility_Whitepaper_02-2018.pdf

The Why and How of Measuring Access to Opportunity: A Guide to Performance Management (2017)

<https://smartgrowthamerica.org/resources/measuring-access-to-opportunity/>

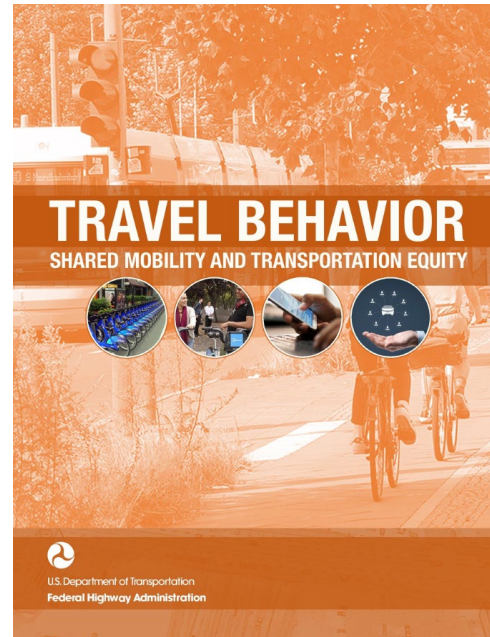
Health in Transportation Corridor Planning Framework (2016)

https://www.fhwa.dot.gov/planning/health_in_transportation/planning_framework/



Mobility Innovation

- Shared Mobility
- Automated and Connected Vehicles
- Micromobility
- Curbspace Management



Public Involvement/Public Participation

Public Involvement

- Authorizing Legislation
- Statute, Regulation and Executive Orders
- Case Studies
- Project Development
- Virtual Public Involvement
- Publications
- Reference Tool
- Related Links
- Other Resources
- Archive
- Virtual Public Involvement
 - ▶ Extending our Reach Video Series and Webinars
 - ▶ Fact Sheets
 - ▶ Technical Assistance

FHWA → Planning

Public Involvement/Public Participation

Public participation is an integral part of the transportation process which helps to ensure that decisions are made in consideration of and to benefit public needs and preferences. Early and continuous public involvement brings diverse viewpoints and values into the decision-making process. This process enables agencies to make better informed decisions through collaborative efforts and builds mutual understanding and trust between the agencies and the public they serve. Successful public participation is a continuous process, consisting of a series of activities and actions to both inform the public and stakeholders and to obtain input from them which influence decisions that affect their lives.

The public, in any one area or jurisdiction, may hold a diverse array of views and concerns on issues pertaining to their own specific transportation needs. Conducting meaningful public participation involves seeking public input at specific and key points in the decision-making process issues where such input has a real potential to help shape the final decision or set of actions.

Public participation activities provide more value when they are open, relevant, timely, and appropriate for the intended goal of the public involvement process. Providing a balanced approach with representation of all stakeholders and including measures to seek out and consider the needs of all stakeholders, especially those that are traditionally underserved by past and current transportation programs, facilities, or services.

To assist those who would like to improve public participation processes and strategies, this site provides links to relevant information and exemplary case studies and examples.

Information for the Public on Transportation Decision Making

Have you ever wondered how decisions are made about transportation projects that affect your life? How do government officials decide where to put a bus stop, road, or bridge? How are these and other transportation projects planned? And how can you make sure your opinions are heard and considered by the planners, road designers, elected officials, and other citizens? The Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) wrote a [guide](#) to give you the answers to these and other transportation-related questions.

Recent Items

- Updated: [Extending our Reach Video Series and Webinars](#) (6/28/19)
- [Technical Assistance Opportunities](#) (5/2/19)

Related Items

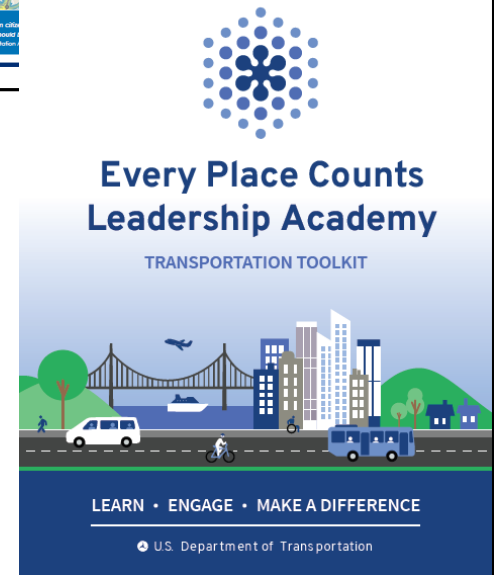
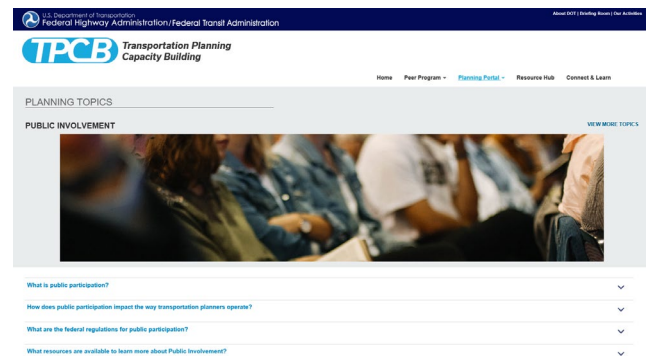
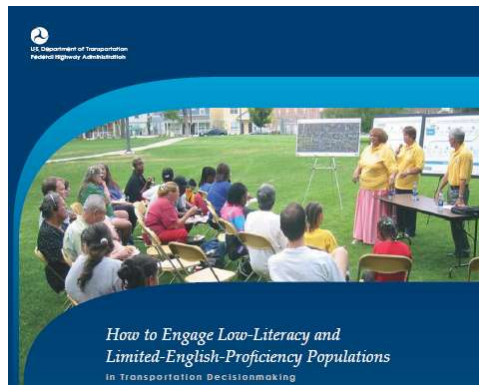
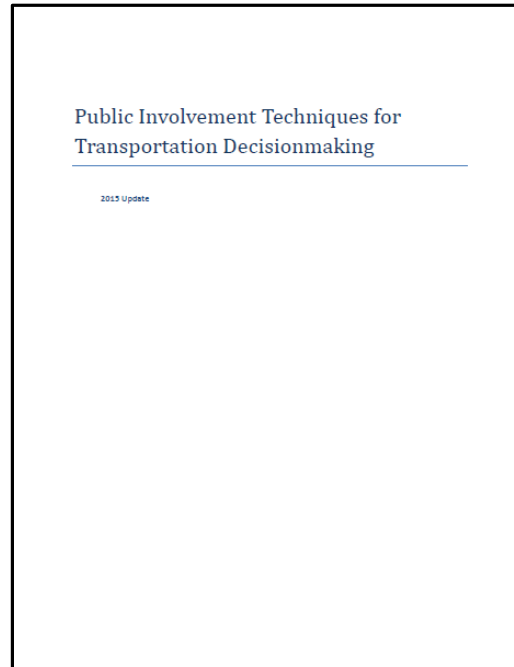
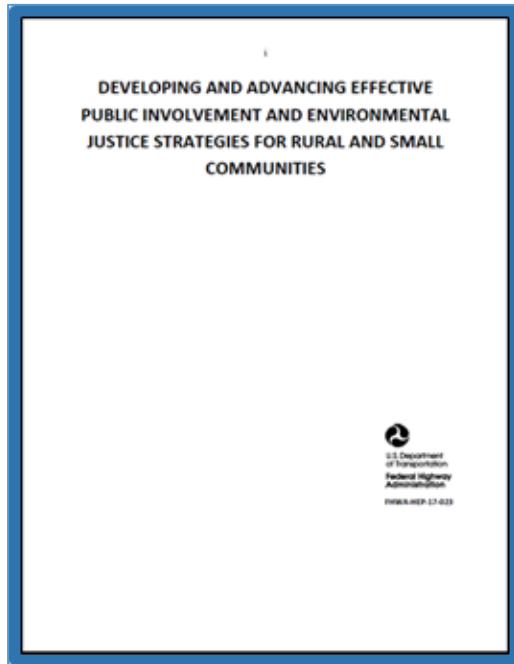
- [Transportation Planning Capacity Building](#)
 - [Public Engagement](#)
 - [Case Studies](#)
- [FHWA Resource Center Planning Team](#)
- [FHWA Office of Civil Rights](#)

www.fhwa.dot.gov/planning/public_involvement/

https://www.fhwa.dot.gov/planning/public_involvement/vpi/





Public Involvement Resources



National Highway Institute Training Resources

Environmental Justice and Public Involvement

- **Fundamentals of EJ, WBT**
(Course #142074)
- **EJ Analysis, Instructor-led**
(Course #142075)
- **Basics of Public Involvement in
Transportation Decision Making, WBT**
(Course #142077)
- **Title VI Analysis, Instructor-led** (Under
Development)



Fundamentals of Environmental Justice now offered as a Web-based Training


This new 4-hour course can be completed online, from anywhere.

The U.S. Department of Transportation and its partners are committed to integrating the principles of environmental justice (EJ) and nondiscrimination into all Federal programs and activities. NHI's latest Web-based Training, Fundamentals of Environmental Justice, explains how environmental justice applies to each stage of transportation decision making. In this course, participants are presented with a variety of strategies and resources for considering EJ throughout the transportation decision-making process.

Register Today @ www.nhi.fhwa.dot.gov

Participants will learn:

- To describe EJ as it relates to transportation
- Definitions, principles, and benefits related to EJ
- The importance of public involvement in the transportation decision-making process
- EJ considerations in all phases of transportation decision-making, including planning, environmental review, design, right of way, construction, and operations and maintenance.



Target Audience

This course was designed for transportation practitioners (from entry to senior level) employed at a range of organizations, including State Departments of Transportation, Metropolitan Planning Organizations, local transportation agencies, and consulting firms.

This training is recommended for data analysts, planners, project-development specialists, environmental specialists, civil rights specialists, consultants, and professionals in other roles that may require knowledge of environmental justice and transportation.

Others who interact with minority and/or low-income communities; provide community services; and elected officials and their representatives may also benefit from this course.

National Highway Institute, Federal Highway Administration
1310 North Courthouse Road, Suite 300, Arlington, VA 22201

703.235.0500 | 877.558.6873
www.nhi.fhwa.dot.gov/ej/ej.asp
ehs@nhi.fhwa.dot.gov

www.nhi.fhwa.dot.gov



Additional Training Resources

FHWA Resource Center Technical Assistance
www.fhwa.dot.gov/resourcecenter



FTA/NTI EJ Courses

<http://www.ntionline.com/courses/>



EJ/Equity Collaboration

- Federal: USDOT, FHWA, Interagency EJ Working Group, National Science Foundation
- Partnering Organizations: TRB, AASHTO, APA

Upcoming Event

- TRB Transportation Equity Conference, Sept. 7-9, 2021 Washington, D.C.,



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