

Fundamentals of Environmental Justice - Refresher -

Hawaii DOT
Honolulu, HI
January 29, 2016

Presented by:

Brian Betlyon & Keith Moore
FHWA Resource Center
Planning and Environment Teams
brian.betlyon@dot.gov
keith.moore@dot.gov

Explain relationship of Title VI of Civil Rights Act of 1964 & Environmental Justice (EJ) Executive Order 12898

List fundamental principles of EJ

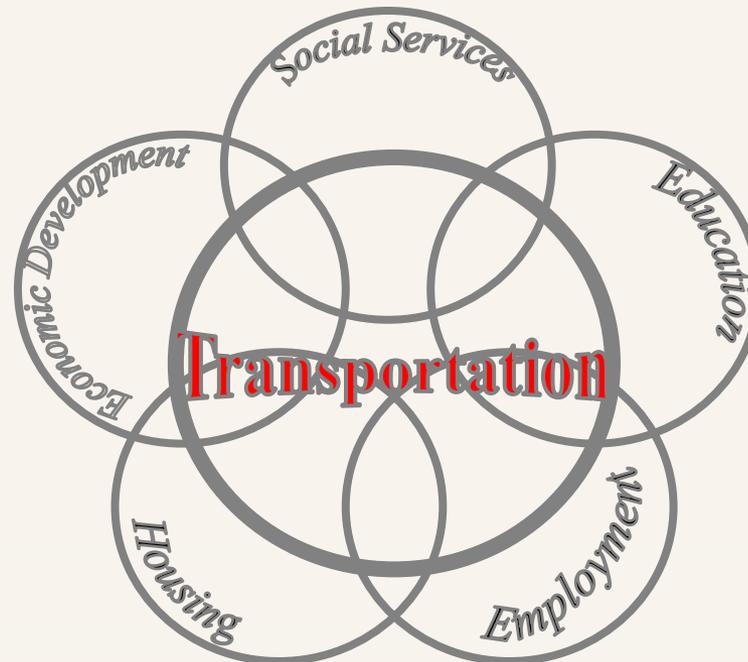
Identify groups addressed by the Executive Order

List potential effects of concern

Discuss EJ analysis techniques

Title VI and Environmental Justice

“Transportation can be both a **means** and a **barrier** to economic development, employment, housing, education and social opportunities... ”



Why Should We Care?



Consider this...

Excerpt from preface to National Equity Atlas (2014):

The Face of America is Changing

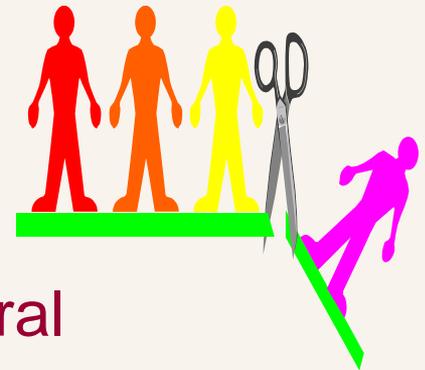
“The United States is undergoing a profound demographic transformation in which people of color are quickly becoming the majority. Already more than half of all children under age five are of color, and by 2044, people of color will be the majority overall. This shift is happening not only in cities, the traditional bastions of diversity, but also in suburban and rural communities across the country.”

Not limited to prohibitions of Title VI of the Civil Rights Act of 1964 (**Race, Color, National Origin**)

Includes other civil rights provisions of Federal statutes and related authorities that prohibit discrimination in programs and activities receiving Federal financial assistance (23 CFR 200.5(p)) **including Executive Order 12898 on Environmental Justice.**

No person in United States shall, on ground of race, color, or national origin, be:

- excluded from participation in,
- denied benefits of, or
- subjected to discrimination



under any program or activity receiving Federal financial assistance.

Environmental Justice

- Executive Order (DOT & FHWA Orders)
- Minority and / or low-income communities
- Compliance via Planning & NEPA
- Avoid, minimize, mitigate adverse effects
- **Does not create any rights or remedies**

Title VI

Law

Race, Color, National Origin

One tool for implementing EJ

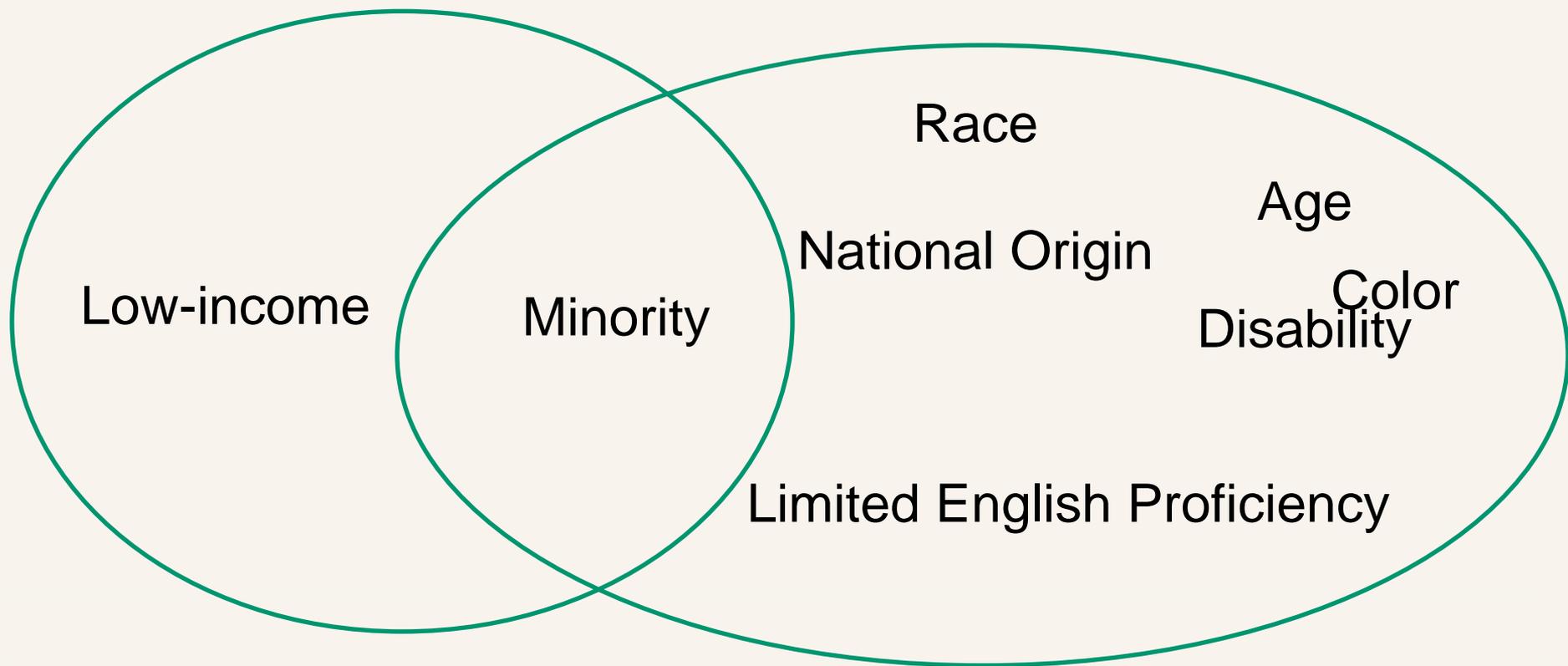
Compliance via formal Title VI program

Court action for intentional discrimination

Complaints of unintentional discrimination

EJ

Title VI & Related Statutes



Definitions and Principles

“The fair treatment & meaningful involvement of all people regardless of race, color, national origin or income with respect to the development, implementation & enforcement of environmental laws, regulations & policies.”

Fair treatment: "...no group of people should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal & commercial operations or the execution of federal, state & local, & tribal programs & policies."

Meaningful involvement ensures that:

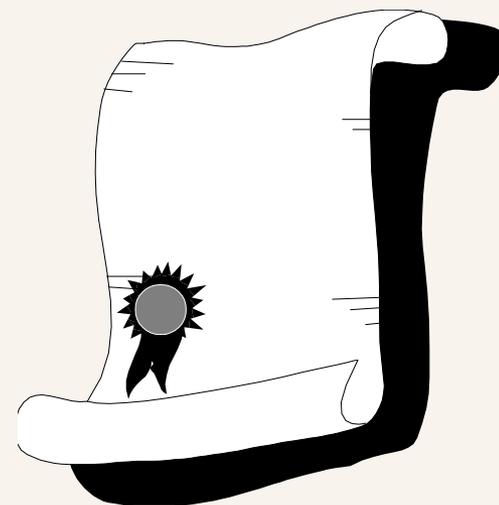
Potentially affected community residents have an appropriate opportunity to participate in decisions about a proposed activity that will affect their environment &/or health

Public's contribution can influence regulatory agency's decision

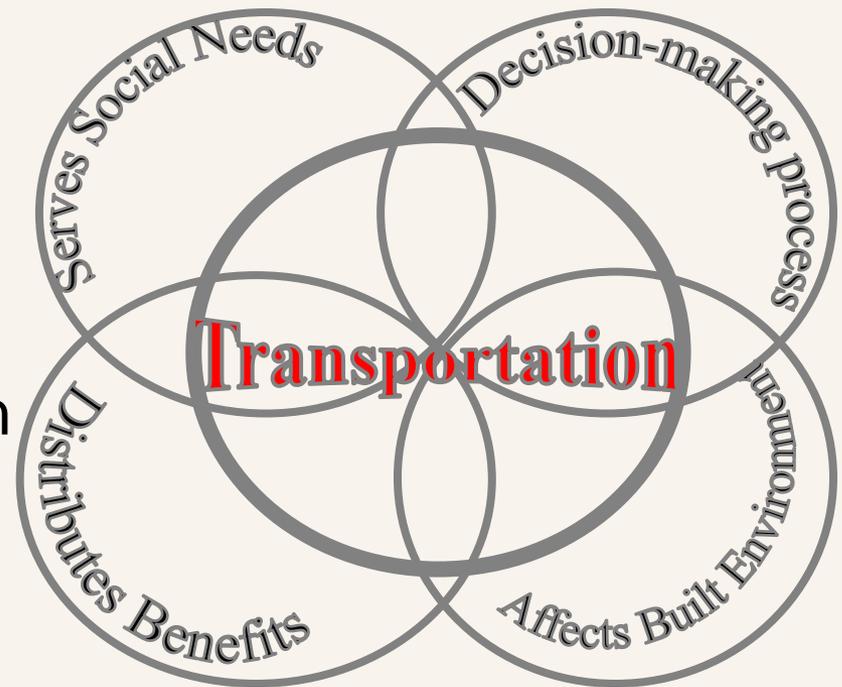
Concerns of all participants involved will be considered in decision-making process

Decision-makers seek out & facilitate involvement of those potentially affected.

Reaffirms that each Federal agency must make environmental justice part of its mission by identifying & addressing disproportionately high & adverse human health or environmental effects of its programs, policies & activities on minority & low-income populations.



- Avoid disproportionately high & adverse human & environmental effects
- Prevent denial, reduction, or delay in benefits received by minority & low-income populations
- Ensure full & fair participation of affected populations in transportation decision making



Measures of benefit that States/ MPOs have used:

- Accessibility to jobs or other activities
- Travel times to selected activity centers
- Provision and quality of transportation services
- Proximity to projects
- Asset conditions

EJ Populations and Potential Effects

Minority - a person who is:

- Black/African-American
- Hispanic or Latino
- Asian American
- American Indian & Alaskan Native
- Native Hawaiian and other Pacific Islander

Low-Income – a person whose:

- Median household income is at or below U.S. Department of Health and Human Services poverty guidelines.
- Of any race or ethnicity

Adverse effect - totality of significant individual or cumulative human health or environmental effects

Disproportionately high & adverse - an effect that:

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

Adverse Effects Include:

“Interrelated social & economic effects, which may include, but are not limited to:

Bodily impairment;

Infirmity;

Illness or death;

Air, noise, & water pollution & soil contamination;

Destruction or disruption of man-made or natural resources;

Adverse Effects Include:(2)

- Destruction or diminution of aesthetic values destruction or disruption of community cohesion or a community's economic vitality;
- Destruction or disruption of availability of public & private facilities & services;
- Vibration;
- Adverse employment effects;

Adverse Effects Include: (3)

Displacement of persons, businesses, farms, or nonprofit organizations;

Increased traffic congestion, isolation, exclusion or separation of minority or low-income;

Individuals within a given community or from broader community

Denial of, reduction in, or significant delay in receipt of, benefits of DOT programs, policies, or activities.”

Appendix of U.S. DOT Order

Where might these adverse effects be identified and/or addressed?

Visioning Process

Planning Studies and Documents

Programming Tasks and Documents

Project Development Activities

National Environmental Policy Act (NEPA) documentation

Right-of-Way, Construction, Operations and Maintenance

Other Activities – please enter in chat pod



Recent Developments

On Aug. 4, 2011, 17 Federal agencies signed a memorandum of understanding that aims to address and reduce disproportionately high and adverse effects from environmental degradation that affects indigenous, low-income, and minority communities.



Review Department-Wide efforts on EJ

- new guidance, tools, circulars to enhance EJ.
- new focus on early engagement and considering EJ through to project implementation and service.

Clarify role of key DOT elements in complying with EO 12898 and the EJ MOU

- DOT Working Group, OST Policy Office, OST Civil Rights

EJ Focus areas:

- NEPA, Title VI, climate change, goods movement
- Transportation access to jobs and quality of transportation services in EJ communities
- *Ladders of Opportunity* – Planning Emphasis Area

EJSCREEN Tool - EPA



EPA United States Environmental Protection Agency

Learn the Issues | Science & Technology | Laws & Regulations | About EPA

Search EPA.gov

EJSCREEN: Environmental Justice Screening and Mapping Tool

Contact Us | Share

Launch the EJSCREEN Tool

Explore EPA's environmental justice screening and mapping tool



Links

- Environmental Justice at EPA
- Grants and Other Funding Opportunities
- EPA's Environmental Justice in Action Blog

In order to better meet the Agency's responsibilities related to the protection of public health and the environment, EPA has developed a new environmental justice (EJ) mapping and screening tool called EJSCREEN. It is based on nationally consistent data and an approach that combines environmental and demographic indicators in maps and reports.

What is EJSCREEN?



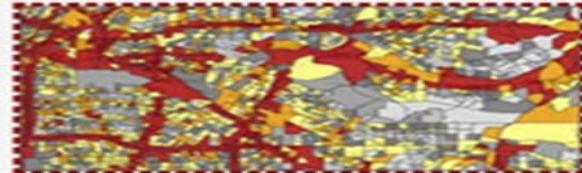
- [What is EJSCREEN?](#)
 - [How was It Developed?](#)
 - [How Does EPA Use It?](#)
 - [Purposes and Uses](#)

Learn to Use EJSCREEN



- [Learn to Use EJSCREEN](#)

Launch the Tool



- [Launch the EJSCREEN Tool](#)

Understanding Results



Technical Information



Additional Resources



www2.epa.gov/ejscreen

EJ Website

http://www.fhwa.dot.gov/environment/environmental_justice/index.cfm

Environmental Justice Reference Guide (2015)

*Emerging Trends and Best Practices Guidebook,
June 2011*

*Guidance on Environmental Justice and NEPA –
2011*

NHI Training Course (#142042): Fundamentals
of Environmental Justice.

Title VI of Civil Rights Act

- “No person”

Environmental Justice (EJ) Executive Order 12898

- Minorities
- Low Income

U.S. DOT EJ Order

- Principles
- Adverse Effects

Questions

EJ and Planning-Level Analyses: Techniques

Brian Betlyon - RC Planning TST



Planning thru Project Development

Public involvement and EJ are relevant to all stages

Planning

Environmental
Review

Design

Right-of-Way

Construction

Maintenance
and
Operations

Potential Title VI / E.J. Indicators in Planning

1st Tier

- Commuting time (all modes)
- Transportation affordability
- Mobility for those who rely on transit
- Access to jobs & services (by mode)

2nd Tier

- Safety & security of system
- Level of maintenance
- Disproportionate impacts or benefits
- Consistency of standards across system (landscaping, lighting, upkeep, maintenance)

An Established Approach will.....

Demonstrate commitment from leadership

Relate to an EJ protocol or plan

Assess adequacy of current planning activities.

Include Work Program tasks

Afford committee and/or public review opportunities

Define actions to implement improvements.

An Established Approach will be reflected in these Planning Products

Work Program

Public Participation Plan

Transportation Plan

Transportation Improvement Program (State and Metro)

Congestion Management Process

Other planning products??

Assessment of Analysis Techniques



Low Tech Analysis Techniques



Tool - Geographic Information Systems

Integrates geo-referenced data from diverse sources.

Provides more complete picture.

Allows aggregation and disaggregation of data to appropriate scale for analysis.

Facilitates mapping and visualization.

Long Range Plan Activities

Update demographic profiles as appropriate

Consider tracking factors beyond minority and low-income

- # of Zero-car households
- # of individuals over 65 years of age

More LRP Activities - Transit

Analyze transit routes – base year and future scenarios

- Consult with transit operators – share data
- Proximity of EJ populations to transit service
- Service improvements near and long term) what locations will be served; correlation to forecasted job and service locations

Additional Potential Activities

Analyze auto and pedestrian crashes – any EJ relationships??

Timing of various categories of project implementation in LRP and
TIP

Effectiveness of Public Participation opportunities

MPO and State DOT Technical Methods

- ✓ Is there an established analytical approach to EJ compliance?
Any disproportionately high and adverse impacts?
- ✓ Have they identified populations of concern? Updated 2000 Census data?
- ✓ Have they documented an assessment of the impact of implementing Plans and Programs?

Any Advisory Committees in Place?

Help assess planning activities.

- Philadelphia, Columbus, Washington, D.C., San Francisco, Minnesota DOT, Baltimore

Help refine analytical methods.

- San Francisco committee examined alternative accessibility measures to find most meaningful.

Notes on Future Distributions of EJ Populations

Typically use regional forecasts of total population by TAZ and assume same demographic breakdown as existed in most recent data.

No one is forecasting shifts in racial and ethnic characteristics by analysis geography.

May adjust minority percentages in total population and then allocate based on current TAZ percentages.

Reasonableness Check.

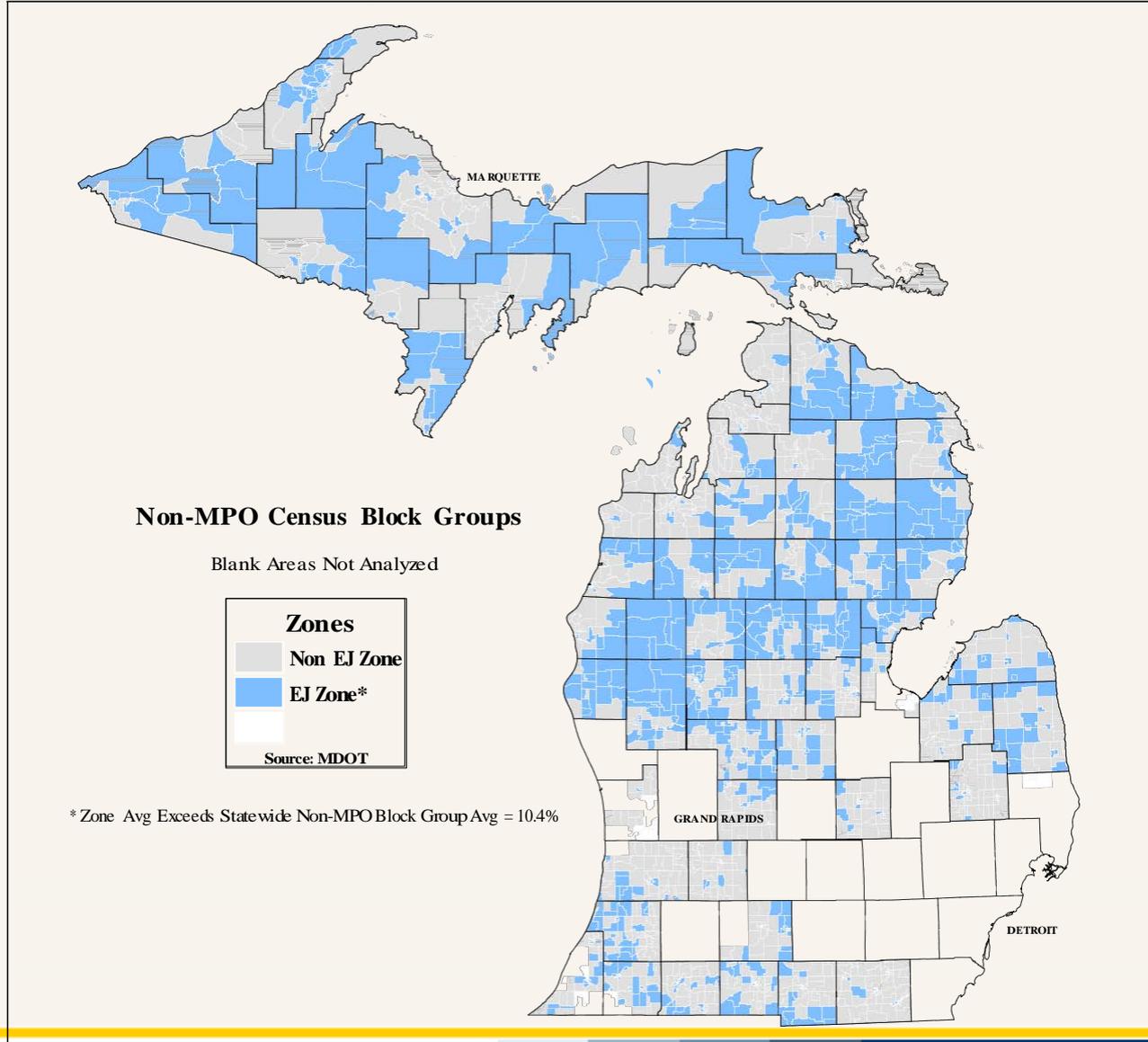
Mapping and Display of Data

Population groups with overlay of proposed projects.

Shows where specific population groups are located so outreach and assessment can be directed to those areas.

Illustrates the distribution of transportation projects in relation to different population groups.

Figure 25. Percent of 2000 Population below Poverty Line



EPA United States Environmental Protection Agency

Español | 中文: 繁體版 | 中文: 简体版 | Tiếng Việt | 한국어 | Lo

Learn the Issues | Science & Technology | Laws & Regulations | About EPA

Search EPA.gov

EJSCREEN: Environmental Justice Screening and Mapping Tool

Contact Us | Share

Launch the EJSCREEN Tool

Explore EPA's environmental justice screening and mapping tool



Links

- Environmental Justice at EPA
- Grants and Other Funding Opportunities
- EPA's Environmental Justice in Action Blog

In order to better meet the Agency's responsibilities related to the protection of public health and the environment, EPA has developed a new environmental justice (EJ) mapping and screening tool called EJSCREEN. It is based on nationally consistent data and an approach that combines environmental and demographic indicators in maps and reports.

What is EJSCREEN?



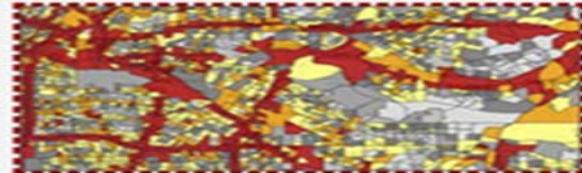
- [What is EJSCREEN?](#)
 - [How was It Developed?](#)
 - [How Does EPA Use It?](#)
 - [Purposes and Uses](#)

Learn to Use EJSCREEN



- [Learn to Use EJSCREEN](#)

Launch the Tool

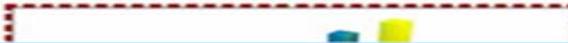


- [Launch the EJSCREEN Tool](#)

Understanding Results



Technical Information



Additional Resources



www2.epa.gov/ejscreen

Where to find Low-Income Data

DHHS poverty guidelines set income standards according to household size.

DOTs and MPOs typically set thresholds based on household incomes below certain amount – such as \$17,000 or \$20,000, independent of household size.

Source of annual DHHS guidelines:

<http://aspe.hhs.gov/poverty>

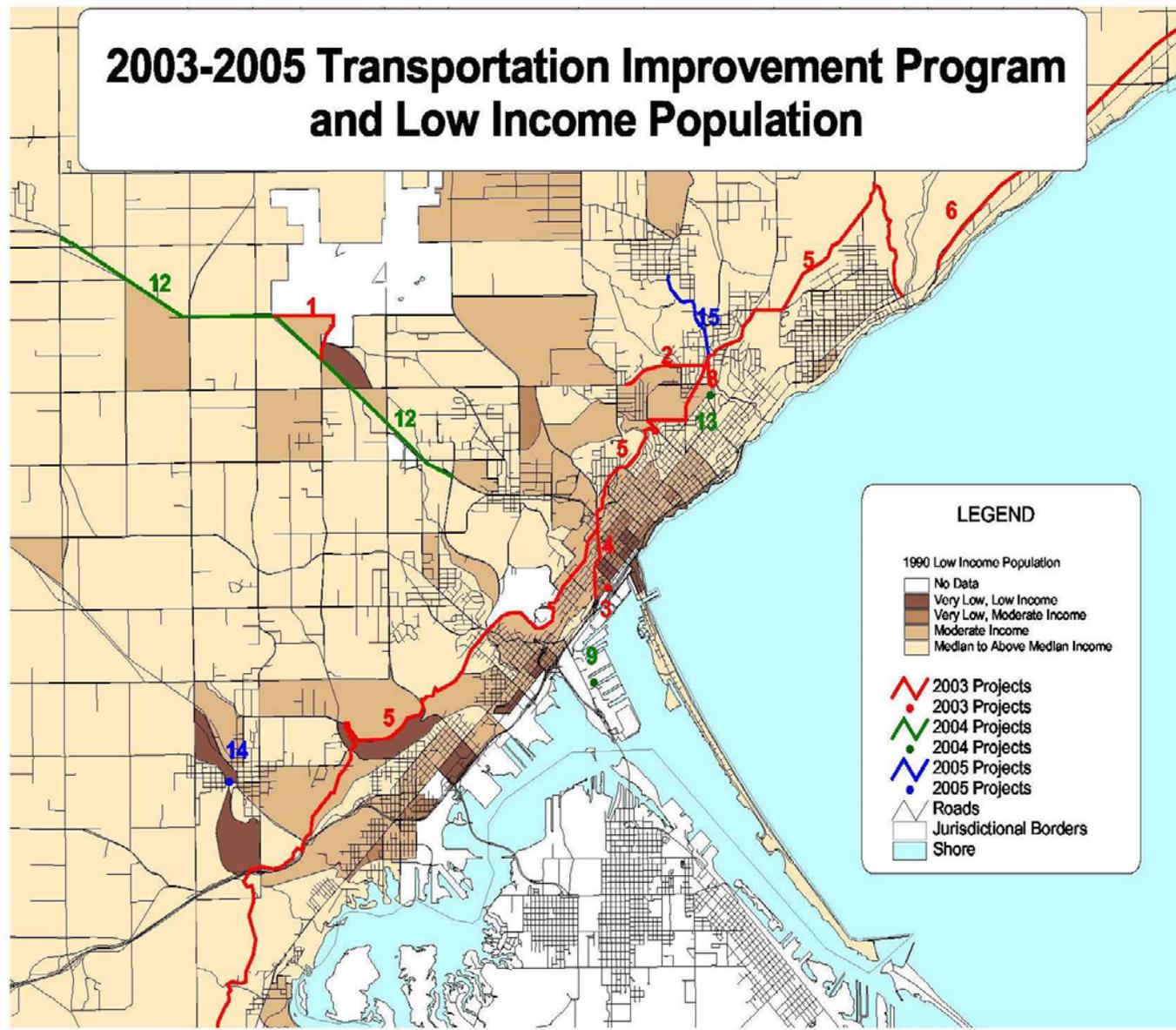
Proximity to Projects

Characteristics of people living near new or improved transportation facilities.

Overlay projects in TIP or LRP with population data. Assume communities receive benefits in proportion to proximity to projects or by dollar amount spent.

Duluth TIP Project Mapping

2003-2005 Transportation Improvement Program and Low Income Population



2003-2005 Minnesota MIC TIP Project List

Fiscal Year 2003

1. Airport Road Loop, Phase 1
2. Arrowhead Rd. Reconstruction
3. Lake Superior RR Museum
4. Mesaba Avenue Reconstruction
5. Skyline Pkwy Wayfinding
6. T.H. 61 Overlay & Culvert Repair
- *7. UMD Bus Pass Program
8. Wallace Avenue Reconstruction

Fiscal Year 2004

9. Arthur Avenue
- *10. Regular Route Bus Purchase (10)
- *11. STRIDE Bus Purchase (4)
12. T.H. 53: Anderson to Midway
13. Granitoid Street Preservation

Fiscal Year 2005

14. 2nd St. & DM&IR RRRG
15. Woodland Avenue Reconstruction

Project funding information is included in the tables on pages 16-19. Project descriptions are on pages 20-22.



High Tech Analysis at a Systems Level

Just the Basics



Are our Partners Measuring Impacts?

Negative in consequence

Potential negative impacts may include:

- Community cohesion/disruption
- Economic (reduced employment)
- Increased noise, emissions
- Threat to cultural, historic resources
- Diminished aesthetics

Are our Partners Measuring Benefits?

Tool of choice – 4 step travel demand model

Measures of benefit that States/ MPOs have used:

- Accessibility to jobs or other activities
- Travel times to selected activity centers
- Provision and quality of transportation services
- Proximity to projects
- Asset conditions

Accessibility (Potential Benefit)

Ability to reach desired destinations.

Number of jobs within X minutes travel time.

– Most Common Range is 30 to 45 minutes.

Percentage of population within Y minutes of a hospital, shopping area, park or locally defined place of significance.

Typically calculated separately for auto and transit.

Uses travel times by O-D pair and mode and Population and Employment by TAZ.

Travel Times (Potential Benefit)

Average travel times to regional activity centers.

- San Antonio and Raleigh

Average travel times by trip type.

- Columbus

Travel time savings resulting from the proposed projects

- Seattle and Southern California

Requires zone to zone travel times and demographic data by TAZ.

MPO NOTEWORTHY PRACTICE

Mid-Ohio Regional Planning Commission
Columbus, OH
www.morpc.org

MORPC Measures

Number of job opportunities close

Number of HBS opportunities

Number of HBO opportunities

% Population close to college

% Population close to hospital

% Population close to major retail

Average travel time (Work, HBS, HBO, HB)

Average travel time to Columbus CBD

Transit accessibility to Columbus CBD

% Congested Travel

Highway investments

MORPC – Analysis

Accessibility Measures

Public Transit and Automobile

Opportunities within X travel time

- Jobs within 20 minute peak period drive
- Jobs within 40 minute peak period transit trip

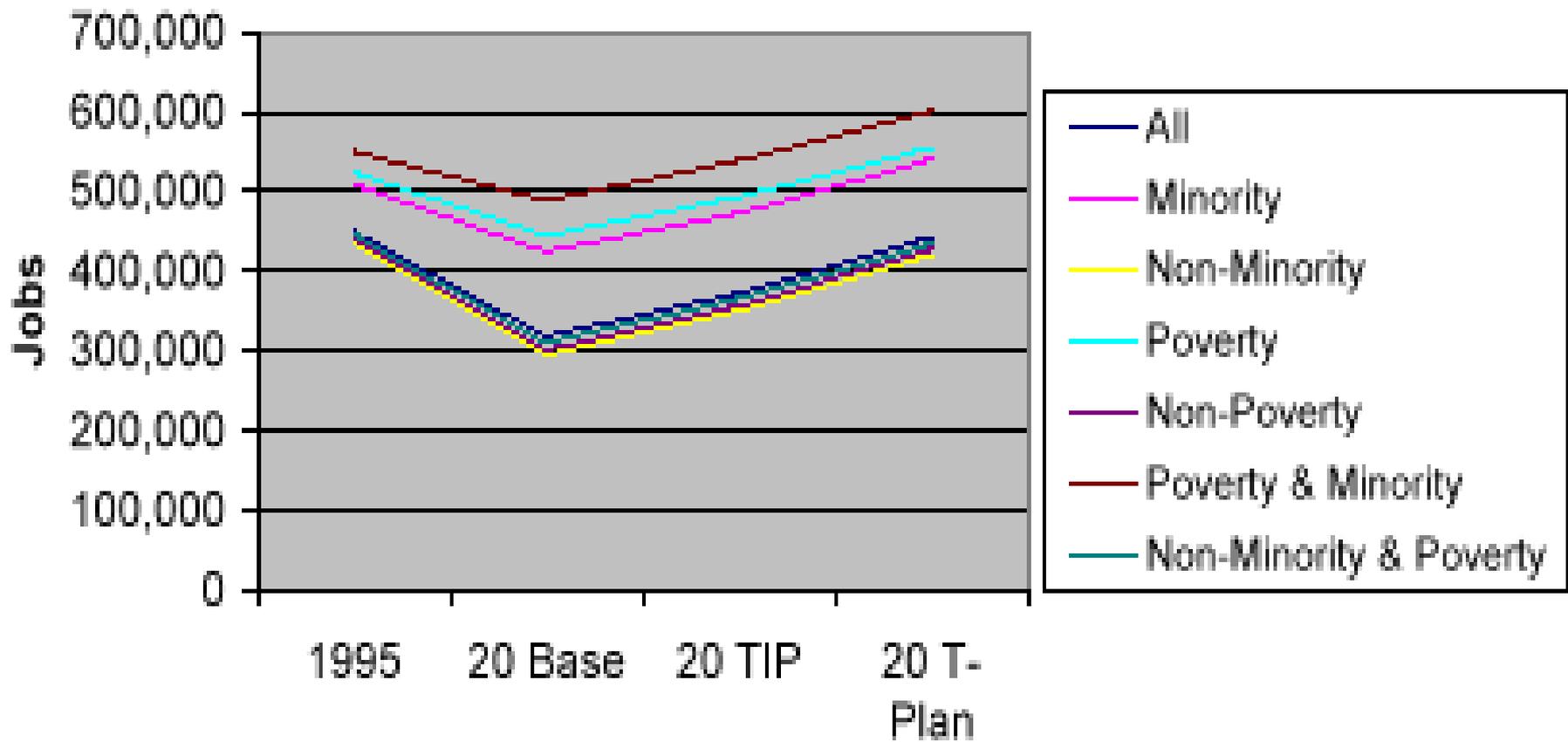
Considers travel demand and land use changes

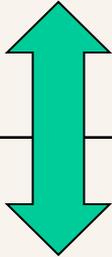
Different measure types

- Population based
- Geographic based
- Visual

Measures of Effectiveness (MOEs)

Jobs Within 30 Minute Drive Time



		Possible Comparisons	
		Disadvantaged	Non-Disadvantaged
Without Plan		A 	B 
With Plan		C 	D 

Measure It - Does It Matter?

For the measure being compared, is the difference between the two populations, or the change from the base to plan scenario:

- Statistically significant?
- Practically significant?

What if multiple measures give conflicting results?

- Utilize trade-offs and professional judgement

It's Really a MATTER OF SCALE!

Statewide

- Statewide Transportation Plans and Programs; Public Participation Plans

Regional

- Metropolitan Plans and Programs
- MPO Public Participation Plans

Local/Community

- Corridor Studies
- Specific Projects

EJ Threads to Project Level Analysis

Review “red flags” raised at a systems level

Consult regional EJ-population maps

Consider adverse economic, social and environmental effects in more detail

Eliminate and minimize such adverse effects

Inform decision-making process

Consider overall public interest for final decision (NEPA process)

Resource – “*Community Impact Assessment Handbook*” FHWA

Discussion

