

Environmental Justice in NEPA Documentation Process
(American FactFinder)
01/27/2012

EJ Analysis and NEPA Documentation Levels

An environmental justice analysis is required for any project that may result in a disproportionately high adverse impact on a minority or low-income population in or near the project area. The requirements for analysis depend on the level of document and the type of impacts.

1. EA and EIS level documents: Demographic data should be obtained and analyzed before and/or during the scoping stage. The information obtained should be used in coordination planning and public involvement planning.
2. CE level documents:
 - a. No analysis required for projects that have fewer than two relocations or less than 0.5 acre of right of way.
 - b. Full analysis for projects that have two or more relocations or 0.5 acre or more of right of way.

Potential EJ impacts are detected by locating minority populations and low-income populations in and near the project area, calculating their percentage in the area relative to a reference population, and determining whether there will be adverse impacts to them. The reference community is typically a county, city, or town and is called the community of comparison (COC). The community that overlaps the project limits is called the affected community (AC). The AC needs to be contained within the COC.

An AC has a population of concern for environmental justice if the population is more than 50 percent minority or low-income or if the percentage of low-income population or minority population in the AC is 25 percent higher than the percentage of low-income or minority population in the COC.

Any disproportionate impact on an EJ population that cannot be eliminated in design requires notification of INDOT's Equal Opportunity division. The project will likely need to be processed as an EA.

Data Source

US Bureau of the Census decennial data contain low income and minority data. Minority data is available at all aggregation levels (tract, block group, and block) but low income data is only available at the tract and block group level. Listed below is procedures for accessing 2000 Census data. Procedures for utilizing 2010 Census data will be developed in early 2012.

Accessing Data from the Census

Data from the Census can be obtained through the following steps.

1. Open the Census website main page: <http://www.census.gov/>
2. Click on the graphic for Data at the top of the page and Select American FactFinder.
3. The American FactFinder is located at the following link <http://factfinder2.census.gov>
4. The American FactFinder page has several tools available. On the navigation bar on the left, choose *Geographies*. The *Select Geographies* window will appear allowing for Name, Address and Map searches. Please select the *Map* tab.
5. The map feature will assist in the identification of the affected community (AC) and community of comparison (COC). (The COC is typically a county, city, or town and the community that overlaps the project limits is the AC.) First, locate your project area using the map tools above the map. Once the location has been obtained, select the *Boundaries and Features* tab in the lower left corner of the *Select Geographies* window. A new window will appear, please make sure that 2000 data is displayed. Under Boundaries, 2000 Census Tract and 2000 Block Group will need to be selected. (Both Boundary and Label should be checked). Click the Update button at the bottom of the window. The Map will now have Census Tracts and Block Groups displayed. Click the Download/Print button and select PDF & Landscape for the radio buttons. A Map will be generated and should be included in your EJ Analysis.
6. On the *Select Geographies* page, several Geography Filter options are available. Select the appropriate COC & AC and then add them to your selection. If done correctly, the COC and AC will appear in Your Selections box.
7. On the navigation bar on the left, choose *Topics*; select *Datasets* from inside the *Topics* box.
8. Under *Datasets*, Select *2000 SF3 Sample Data*. After you have selected this dataset, the selection will now appear in Your Selections.
9. The search results for the Sample Data will be generated. From the search results Select P007 Hispanic or Latino by Race from the table and P087 Poverty Status in 1999 by Age. Once they have been selected click the view button at the bottom of the page.
10. Both P007 and P087 data tables are then generated. Please note that the data is presented on two separate pages and will need to be downloaded separately.
11. The P007 table will not need to be modified as all data elements will be needed. Click the download button. A spreadsheet can be generated in Microsoft Excel format by selecting the appropriate button.
12. For P087 however, the table will need to be modified. The “Total” and “Income in 1999 below Poverty Level” are the only two values needed. Click the download button. A spreadsheet can be generated in Microsoft Excel format by selecting the appropriate button.
13. The pages can be printed for reference and included in the EJ Analysis.

Calculations for Demographic Analysis

The Excel files can be used to analyze the Census data.

1. Load the Census data into Excel. Excel has formula options and can be used to conduct the necessary calculations.
2. Add together any tracts or block groups as necessary to create the AC. Label the COC and the AC.
3. Calculate percentages: Create rows or columns to perform the following calculations:
 - a. Percent Minority: Use Hispanic or Latino by Race (P007); calculate non-white as proxy for minority.

$$\text{Percent Minority} = (\text{Total population} - \text{Not Hispanic or Latino: White alone}) / \text{Total population}$$

- b. Percent Low Income: Use number associated with “Income by 1999 below Poverty Level” (P087)
$$\text{Percent Low Income} = \text{Income by 1999 below Poverty Level} / \text{Total population}$$
4. Calculate 125 percent of COC for minority and low-income to set the threshold of an EJ population. Record this value in the table and perform the comparison.

Interpreting the Demographic Analysis

Determine whether the percent of the population that is minority or low-income is elevated in the affected communities. Elevated means that the concentration of these individuals in the AC is 25 percent higher than in the COC.

If you find that you have an EJ population that is 50% or more in the AC, you must count it as an elevated population regardless of the percentage above or below the COC.

If you find no indications of EJ populations, you can stop the analysis and describe what you did in the remarks section.

If you do find one or more EJ populations, you will need to determine whether or not the adverse impacts disproportionately impact the EJ population relative to the non-EJ populations.

References and Notes for EJ in the NEPA process

1. USAF. 1997. Guide for Environmental Justice Analysis with Environmental Impact Analysis Process (<http://www.afcee.af.mil/shared/media/document/AFD-070830-060.pdf>)
 - Identification sequence: identify impacts, determine if adverse, identify population
 - Population analysis:
 - a. identify community of comparison (COC) as the smallest governmental or geopolitical unit that encompasses the impact footprint of each resource,
 - b. identify census tracts that lie within or partially within the impact footprint
 - c. compare the percent M and LI between the affected census tracts and the COC
 - d. ≥ 50 percent minority is automatic EJ impact
 - e. Census tracts ≤ 50 percent and $< \text{COC}$ is interpreted as no EJ concern.
 - f. Census tracts $> \text{COC}$ is interpreted as an EJ impact.
 - g. E and f are subject to ground-truthing to resolve ambiguity in special distribution of populations of interest within the census tracts.
2. CEQ. 1997. Environmental Justice: Guidance under the National Environmental Policy Act (<http://ceq.hss.doe.gov/nepa/regs/ej/justice.pdf>)
 - Demographic analysis may not be warranted if an agency action will not cause adverse environmental impacts.
 - A minority population exists if greater than 50 percent of affected population or if the percent minority is “meaningfully greater” than the general population.
 - Consider the relative risk, significance, and cumulateness of environmental and human health impacts.
3. ODOT. 2002. Guidance and Best Practices for Incorporating Environmental Justice into Ohio Transportation Planning and Environmental Processes. (http://www.dot.state.oh.us/Divisions/TransSysDev/Environment/NEPA_policy_issues/ENVIRONMENTAL_JUSTICE/Documents/EJ_Book_Complete.pdf)
 - Identification sequence: identify populations, apply disproportionate test.
 - EJ issue exists if percent LI or percent M is 25 percent higher in the affected area than in the reference population.
 - Includes analysis questions for specific impacts:
 - Bodily impairment, infirmity, illness, or death
 - Air, noise, and water pollution and soil contamination
 - Destruction or disruption of man-made or natural resources
 - Destruction or diminution of aesthetic values
 - Destruction or disruption or community cohesion
 - Destruction or disruption of a community’s economic vitality
 - Destruction or disruption of the availability of public or private facilities and services
 - Vibration
 - Adverse employment effects
 - Displacement of persons, businesses, farms, or nonprofit organizations
 - Increased traffic congestion
 - Isolation
 - Exclusion or separation of minority or low-income individuals within a given community or from the broader community
 - The denial or, reduction in, or significant delay in the receipt of, benefits