EJSCREEN Fact Sheet

How does EPA use EJSCREEN?

EJSCREEN is used by EPA to screen for areas that may be candidates for additional consideration, analysis, or outreach as the agency develops programs, policies and activities that may affect communities. In the past, the agency has employed EJ screening tools in a wide variety of circumstances. A few examples of what EJSCREEN supports across the agency include:

- Informing outreach and engagement practices;
- Implementing aspects of permitting, enforcement, compliance, Superfund removal actions and voluntary programs;
- Developing retrospective reports of EPA work; and
- Enhancing geographically based initiatives.

EJSCREEN is not used by EPA staff for any of the following:
- As a means to identify or label an area as an "EJ community;"
- To quantify specific risk values for a selected area; or
- As the sole basis for EPA decision-making or making a determination regarding the existence or absence of EJ concerns.
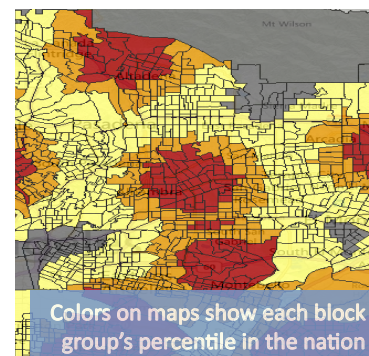
What is EJSCREEN?

EJSCREEN is an environmental justice (EJ) screening and mapping tool that provides EPA with a nationally consistent dataset and methodology for calculating "EJ indexes," which can be used for highlighting places that may be candidates for further review, analysis, or outreach as the agency develops programs, policies and other activities. The tool provides both summary and detailed information at the Census block group level or a user-defined area for both demographic and environmental indicators.

The summary information provided by EJSCREEN is in the form of EJ Indexes which combine demographic information with a single environmental indicator (such as proximity to traffic) that can help identify communities that contribute the most toward overall national disparity in the given environmental indicator. The tool also provides additional detailed demographic and environmental information to supplement screening analyses in color-coded maps, bar charts, and standard reports on an easy to use web interface. All of this information assists EPA in incorporating environmental justice principles into the agency's work.

Why did EPA create a nationally consistent EJ screening tool?

EPA defines environmental justice as, "the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies." EJSCREEN was developed as one of several commitments EPA made under Plan EJ 2014, which is a roadmap that has helped integrate environmental justice considerations into the agency's programs, policies and activities. The tool was created to help EPA staff and managers consider environmental justice issues in all of EPA's work.

Colors on maps show each block group's percentile in the nation

How can EJSCREEN be accessed?

EJSCREEN will be available to the public in late 2014 as part of a suite of tools, data and services known as EPA's GeoPlatform that will help coordinate mapping activities, applications, and data across the agency. The GeoPlatform will support a wide variety of uses, including components of EJSCREEN as well as other data and applications.

What are the limitations to the tool?

For EPA's purposes, EJSCREEN will be used as an initial step in highlighting locations that may be candidates for further review. But EPA recognizes that screening level results have significant limitations and are not intended or designed to provide a complete risk assessment. For example, EJSCREEN does not provide data on every environmental impact and demographic indicator that may be relevant to a particular location, and data may be several years old. Thus, EPA will supplement EJSCREEN outputs with additional information and local knowledge before making any decisions about potential environmental justice issues.

Similarly, public users of this tool should be aware that screening tools are subject to substantial uncertainty in their demographic and environmental data, particularly when looking at small geographic areas like a census block group.
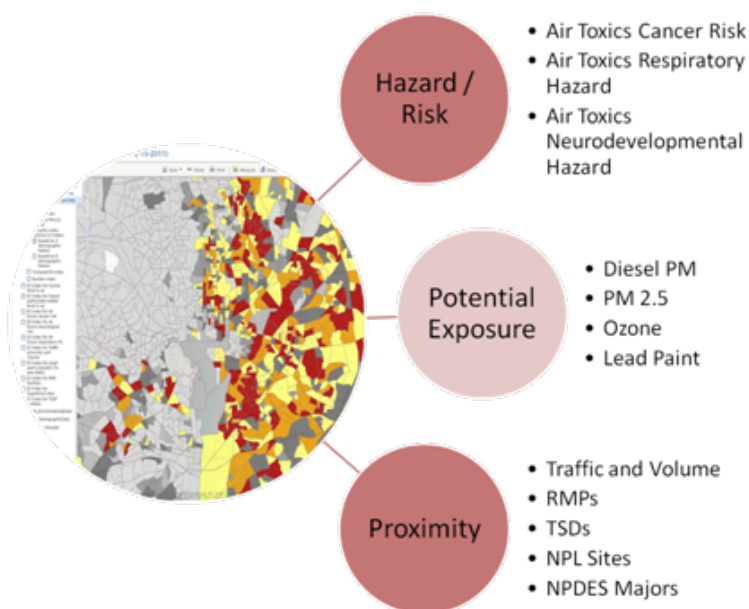
How can the public use EJSCREEN?

EPA is planning to release EJSCREEN to the public before the end of 2014 to help communities obtain information and to participate meaningfully in decision-making processes that impact their health and environment.

The public will be able to use EJSCREEN to access high-resolution environmental and demographic information for communities in the United States. The tool may help users identify areas with minority and/or low-income populations, potential air and water quality issues, and other factors that may be of interest. EJSCREEN may also be used to support educational programs, grant writing, community awareness efforts, and other purposes.

What kind of data does EJSCREEN use?

Because EJSCREEN is intended as a national tool, environmental and demographic data selected for the tool had to be nationally available at the Census tract or block group level. EPA used demographic data from the U.S. Census Bureau American Community 5-year Summary Survey (e.g. 2008-2012), which include demographic indicators for race/ethnicity, poverty, age, educational attainment and linguistic isolation.

The twelve environmental indicators are based on information developed from direct measurements or proxy estimates of pollution exposure, and facility location information. The twelve environmental indicators can be grouped into one of three categories based on the relationship of the data to potential risk, potential exposure, or proximity to pollution sources or environmental concerns.

Hazard / Risk
- Air Toxics Cancer Risk
- Air Toxics Respiratory Hazard
- Air Toxics Neurodevelopmental Hazard

Potential Exposure
- Diesel PM
- PM 2.5
- Ozone
- Lead Paint

Proximity
- Traffic and Volume
- RMPs
- TSDs
- NPL Sites
- NPDES Majors

How was EJSCREEN developed?

This process has built on past experience in developing EJ screening tools, such as EJSEAT, the comprehensive review of EJSEAT provided by the subcommittee of the National Environmental Justice Advisory Council (NEJAC), and input from EPA regions and headquarters offices that have experience using EJSEAT and their own screening tools.

For More Information

To find out more about environmental justice at EPA, visit:
http://www.epa.gov/environmentaljustice/