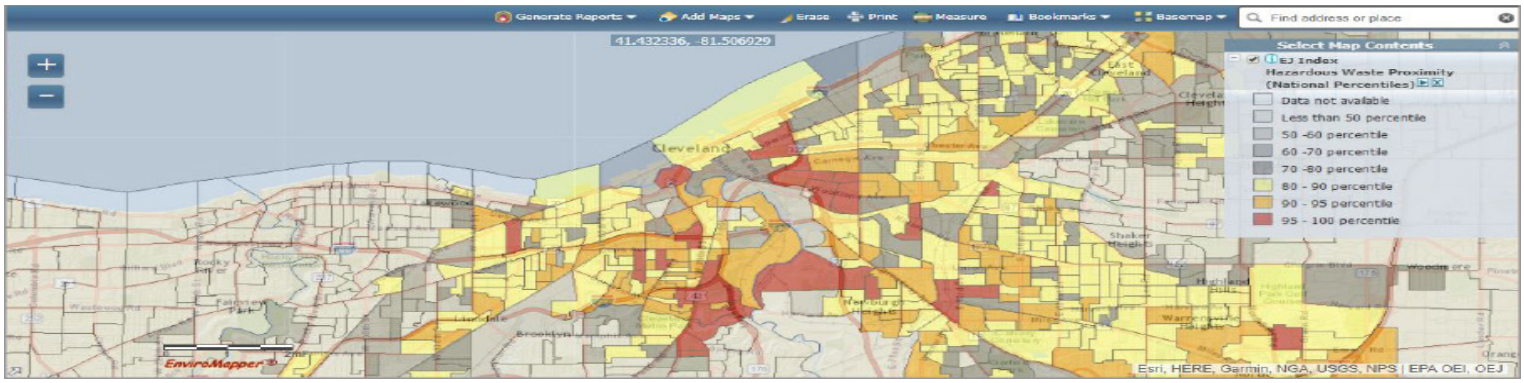
United States Environmental Protection Agency

EJSCREEN Fact Sheet



How does EPA use EJSCREEN?

EPA uses EJSCREEN to identify areas that may have higher environmental burdens and vulnerable populations as the Agency develops programs, policies and activities that may affect communities. A few examples of what EJSCREEN supports across the Agency include:

- Informing outreach and engagement practices;
- As an initial screen for voluntary programs, enhanced outreach in permitting, and prioritizing enforcement work;
- Developing retrospective reports of EPA work; and
- Enhancing place-based activities.

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.

Additionally, note that EPA is not requiring state, local, or tribal partners to use EJSCREEN in any context.

What is Environmental Justice?

EPA defines environmental justice (EJ) 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." EPA's goal is to provide an environment where all people enjoy the same degree of protection from environmental and health hazards and equal access to the decision-making process to maintain a healthy environment in which to live, learn, and work.

What is EJSCREEN?

An important first step to ensuring environmental justice for all people in this country is to identify the areas where people are most vulnerable or likely to be exposed to different types of pollution. For this reason, EPA developed EJSCREEN to help aid in efforts to ensure programs, policies, and resources are appropriately inclusive and consider the needs of communities most burdened by pollution.

Proximity to traffic is one of the 11 environmental indicators.

EJSCREEN is an environmental justice screening and mapping tool that utilizes standard and nationally-consistent data to highlight places that may have higher environmental burdens and vulnerable populations. The tool provides both summary and detailed information at a high geographic resolution for both demographic and environmental indicators.

EJSCREEN also provides 11 EJ Indexes, which combine demographic information with a single environmental indicator (such as proximity to traffic) that can help identify communities that may have a high combination of environmental burdens and vulnerable populations. The tool displays this information in color-coded maps, bar charts, and standard reports on an easy to use web interface. All of this information can be used to assist efforts by stakeholders and advocates to protect human health and the environment in communities affected by pollution.

How can EJSCREEN be accessed?

EJSCREEN will be available as part of EPA's GeoPlatform that helps coordinate mapping activities, applications, and data across the Agency. It will be available through the EPA website, and will not require any downloads to use the tool.

What are the limitations of 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 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.

Users of this tool should also 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. Lastly, while the use of percentiles provides useful perspective by putting the 11 environmental indicators in common units, it simply means those two scores are equally common (or equally rare) in the United States. It does not mean the risks are equal or comparable.

How can the public use EJSCREEN?

EJSCREEN can be a useful tool to help communities and others identify areas with higher environmental and economic burdens in order 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 must be nationally available at the Census tract or block group level. EPA uses demographic data from the U.S. Census Bureau American Community 5-year Summary Survey (ACS), which include demographic indicators for race/ethnicity, poverty, age, educational level and language barriers.

Demographic Indicator	**Description** (Source: 2013 - 2017 ACS Estimates)
Low-Income	Percentage of block group population at or below twice the federal "poverty level"
Minority	All people other than non-Hispanic white-alone individuals
Less than high school education	Percentage of people age 25 or older without a high school diploma
Linguistic isolation	Percentage of people in household in which all members over age 14 years speak English less than "very well"
Individuals under age 5	Percentage of people under the age of 5
Individuals over age 64	Percentage of people over the age of 64

EJSCREEN puts each indicator or index value in perspective by reporting the value as a percentile. For example, the lead paint indicator may show 60% of housing in an area was built prior to 1960. It may not be obvious whether this is a relatively high or low value, compared to the rest of the nation or state. Therefore, EJSCREEN also reports that 60% pre-1960 puts the area at the 80th percentile. For a place at the 80th percentile nationwide, that means 20% of the US population has a higher value.

The 11 environmental indicators are based on information developed from direct measurements, proxy estimates of pollution exposure, and facility location information. Environmental and proximity indicators are screening-level proxies for exposure or risk – not actual exposure or risk.

Environmental Indicator	**Year of Data**
Particulate Matter (PM 2.5)	2016
Ozone	2016
NATA Diesel Particulate Matter	2014
NATA Air Toxics Cancer Risk	2014
NATA Respiratory Hazard Index	2014
Lead Paint Indicator	2013-2017
Traffic Proximity	2017
Proximity to Superfund (NPL) Sites	2019
Proximity to Risk Management Plan (RMP) Facilities	2019
Proximity to Hazardous Waste Facilities	2019
Wastewater Discharger Indicator	2019

EPA

For More Information

To find more detailed information about EJSCREEN visit: https://www.epa.gov/ejscreen
For questions, requests, feedback, and issues using EJSCREEN, e-mail enviromail_group@epa.gov.