

Environmental Justice Mapping at EPA

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What is environmental justice?

"Environmental Justice" is 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.



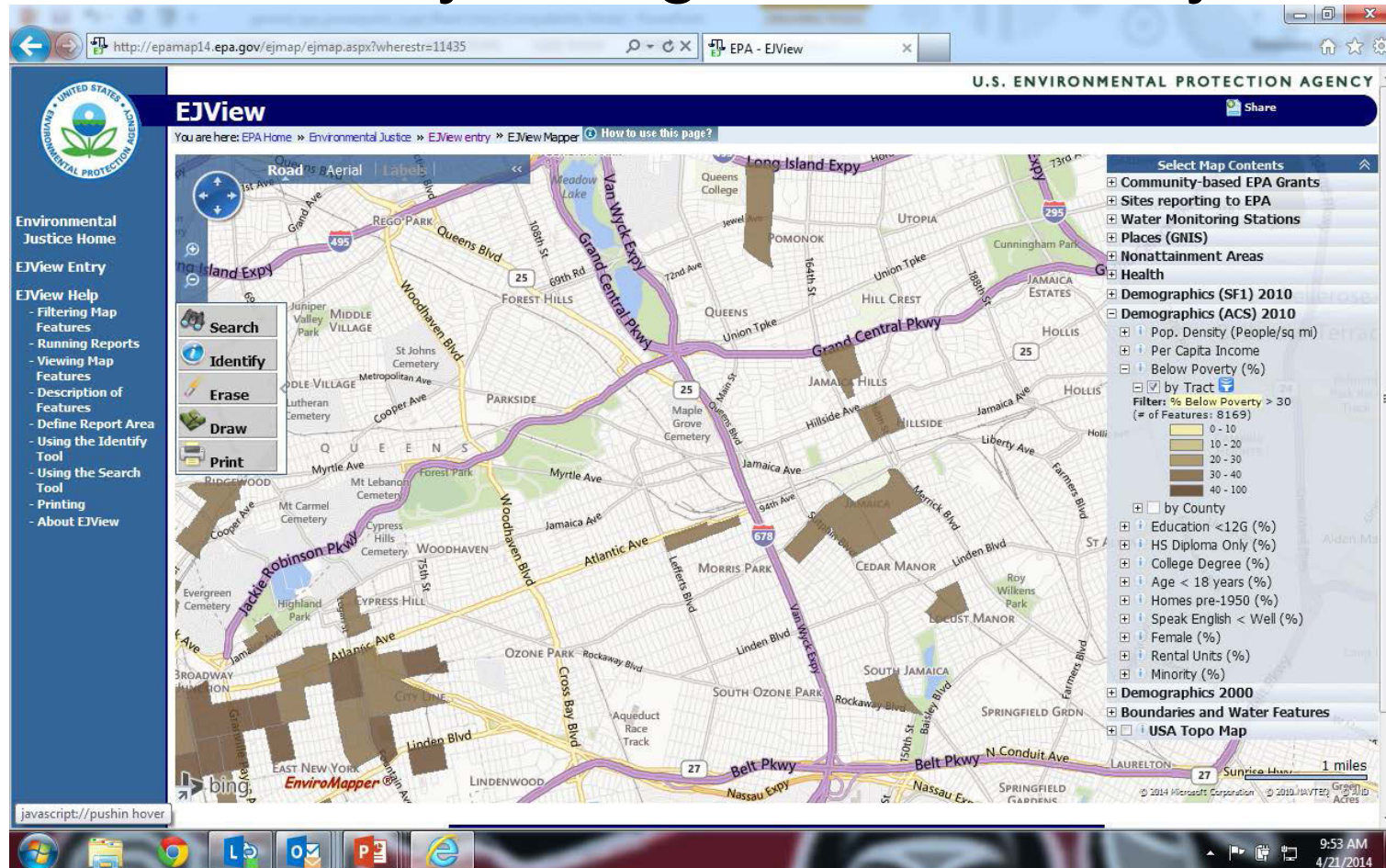
EJView Tool – Predominantly Minority

The screenshot displays the EPA EJView web application. The browser address bar shows the URL: <http://epamap14.epa.gov/ejmap/ejmap.aspx?wherestr=11435>. The page title is "EPA - EJView". The main content area shows a map of Queens, NY, with a red overlay indicating predominantly minority areas. The map is titled "EJView" and includes a search bar, map controls, and a legend on the right side. The legend is titled "Select Map Contents" and includes the following items:

- Community-based EPA Grants
- Sites reporting to EPA
- Water Monitoring Stations
- Places (GNIS)
- Nonattainment Areas
- Health
 - Demographics (SF1) 2010
 - Population Density 2010
 - Minority (%) 2010
 - by Block
 - by Blockgroup
 - Filter: Percent Minority > 40 (# of Features: 78318)
 - by Tract
 - by County
 - Age < 18 years (%) 2010
 - Female (%) 2010
 - Renter (%) 2010
 - Demographics (ACS) 2010
 - Demographics 2000
 - Boundaries and Water Features
 - USA Topo Map



Predominantly Living Below Poverty Level





Socioeconomic and Environmental Info

The screenshot displays the EPA EJView web application interface. At the top, the browser address bar shows the URL <http://epamap14.epa.gov/ejmap/ejmap.aspx?wherestr=11435>. The page header includes the EPA logo and the text "U.S. ENVIRONMENTAL PROTECTION AGENCY".

The main content area features a map of the Briarwood neighborhood in Queens, New York. A popup window titled "Briarwood" is open, displaying the following information:

- Size of the area: 0.48 sq mi
- Instructions: 1. (Optional) Specify a buffer distance for the polygon. Enter a distance: 0.0 mi. 2. Click the following buttons to get reports:
- Buttons: ACS Summary Report, Census 2010 Summary (SF1), Census 2000 Summary (SF3), Health Report, Environmental Report
- A "Delete" button is also visible.

On the right side of the map, there is a "Select Map Contents" panel with the following options:

- Community-based EPA Grants
- Sites reporting to EPA
- Water Monitoring Stations
- Places (GNIS)
- Nonattainment Areas
- Health
- Demographics (SF1) 2010
- Demographics (ACS) 2010
 - Pop. Density (People/sq mi)
 - Per Capita Income
 - Below Poverty (%)
 - Education <12G (%)
 - HS Diploma Only (%)
 - College Degree (%)
 - Age <18 years (%)
 - Homes pre-1950 (%)
 - Speak English < Well (%)
 - Female (%)
 - Rental Units (%)
 - Minority (%)
- Demographics 2000
- Boundaries and Water Features
- USA Topo Map

The left sidebar contains navigation and help links:

- Environmental Justice Home
- EJView Entry
- EJView Help
 - Filtering Map Features
 - Running Reports
 - Viewing Map Features
 - Description of Features
 - Define Report Area
 - Using the Identify Tool
 - Using the Search Tool
 - Printing
 - About EJView

At the bottom of the screen, the Windows taskbar shows the system tray with the date and time: 10:00 AM, 4/21/2014.



EJView Environmental Report



Location: -73.851986,40.693655,-73.848553,40.688058,-73.827953,40.694306,-73.830700,40.700162,-73.836536,40.69690

Study Area: 0.0 mile around the polygonal location

Sites and Facilities	Count
Air Facility System (AFS)	7
Superfund Sites (NPL)	0
Toxic Releases (TRI)	0
Hazardous Waste (RCRAInfo)	30
Water Dischargers (PCS & ICIS)	0
Brownfields (ACRES)	0
Radiation Information Database (RADInfo)	0
Toxic Substances Control Act (TSCA)	0

Environmental Concerns	Count
National Water Information System (NWIS) sites	
STORage and RETrieval (STORET) sites	
Impaired Streams	
Impaired Waterbodies	
National Parks	

Places	Count
Schools	5
Hospitals	1
Worship Places	7



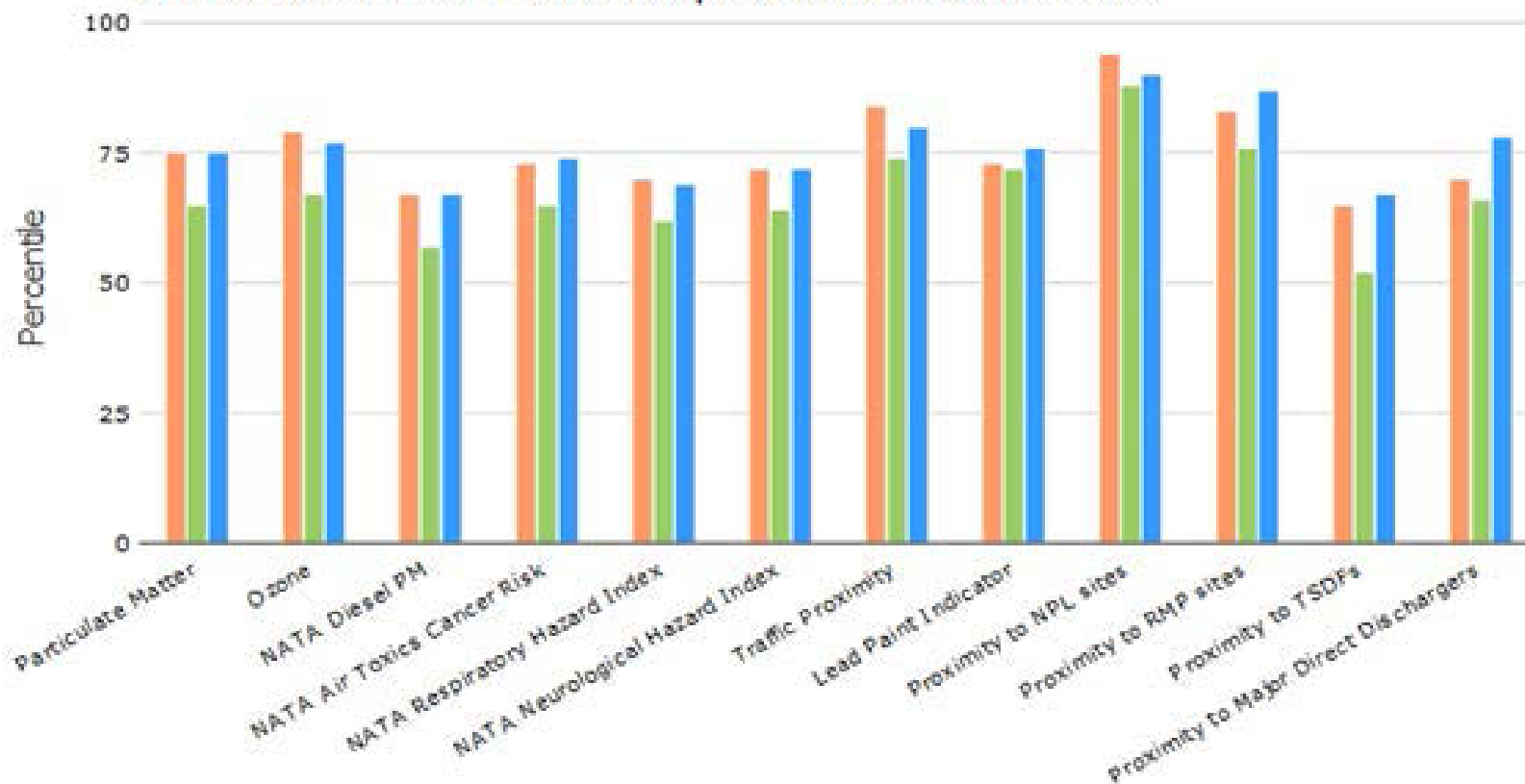
EJView to be replaced by EJSCREEN

- How does EPA use this information to allocate resources like grants and inspections?
- Can we get a nationally consistent approach to locating potential EJ areas?
- What do we do about approaching EJ consistently across **consistently different** areas like inner cities and rural areas?



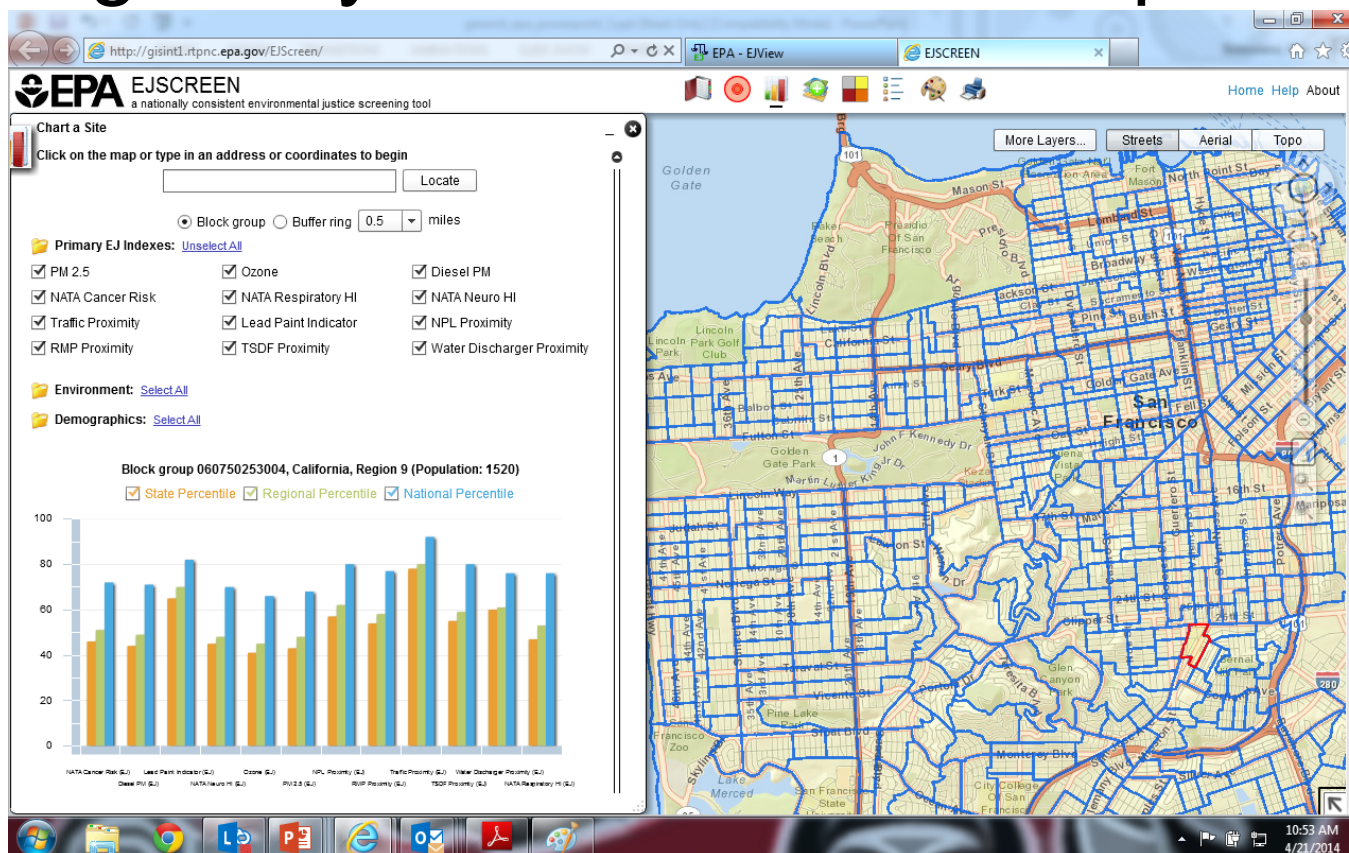
EJSCREEN looks at 12 environmental

EJ Index for the Selected Area Compared to All Places in the U.S.



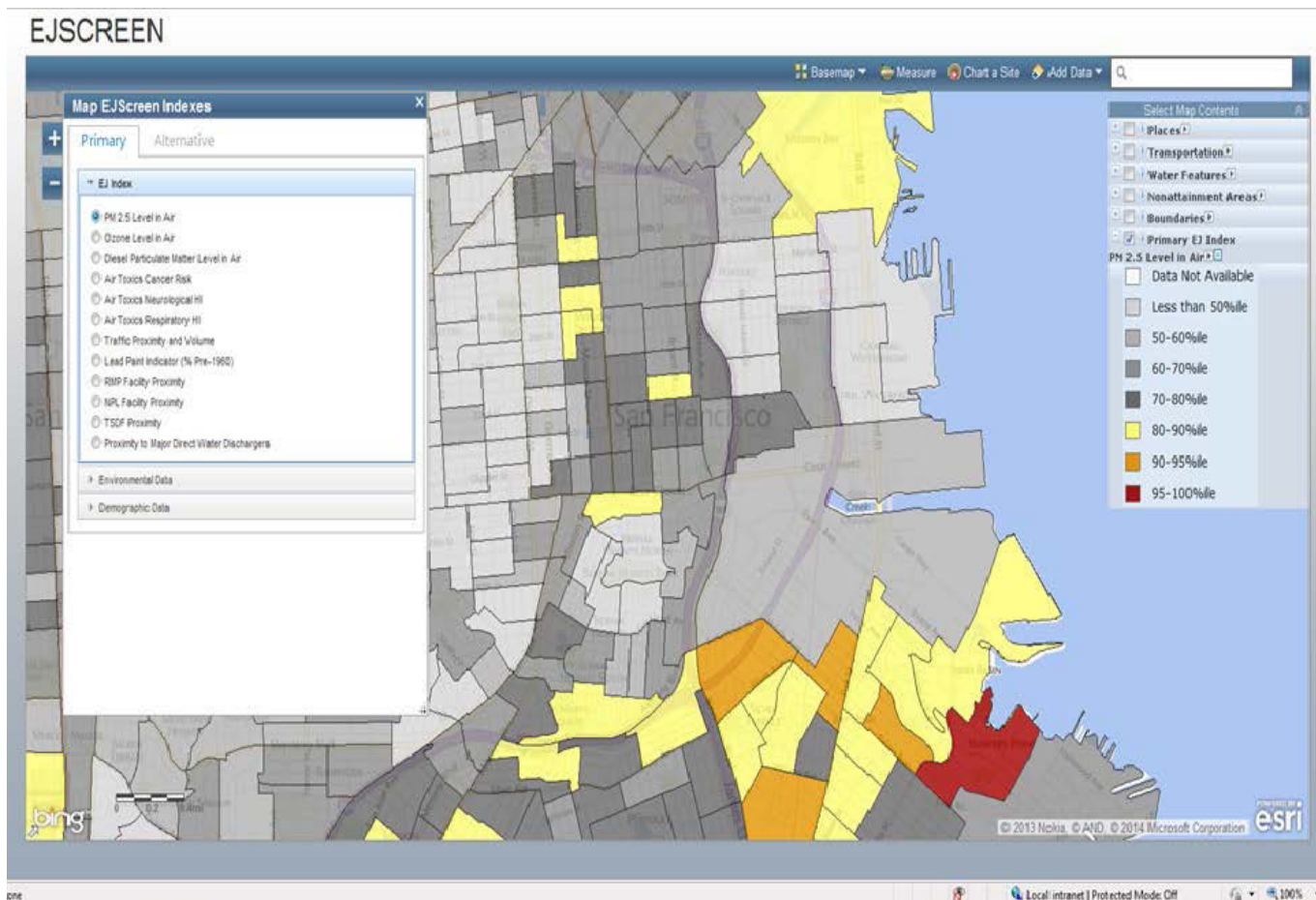


EJSCREEN provides a nationally, regionally or state-relative response





EJSCREEN is being redesigned for public use





Ability to draw an area and run reports

EJSCREEN

The screenshot displays the EJSCREEN web application interface. At the top, there is a navigation bar with options like 'Basemap', 'Measure', 'Chart a Site', and 'Add Data'. A search bar on the right shows 'Slidell, LA'. On the left, a 'Chart a Site' pop-up window offers three methods: 'Click on map to select a census block group', 'Enter a block group id' (with an example '060750229021'), 'Enter a location or a latitude/longitude' (with an example '37.751204, -122.431539 or Fairfax, VA'), and 'Draw a Site' with drawing tools. The main map shows a green-shaded polygon over a residential area. A 'Site Details' pop-up window is open, showing a 'Report' tab with a list of report types: 'EJScreen report', '2008-2010 ACS report', '2010 Census report', '2000 Census report', and 'Environmental report'. Each report type has a 'SAMPLE' icon and an information icon. The map includes various street names like 'N Perimeter Rd', 'E Perimeter Rd', and 'Hass Rd'. A scale bar and the Esri logo are visible at the bottom left and right respectively.



Amazing amounts of demographic data at the Census Block Group Level

The screenshot shows a web application window titled "Map Demographics" with a close button (X) in the top right corner. Below the title bar, the text "2010 demographics by Tract" is displayed. There are four tabs: "EJScreen", "2012 ACS" (which is selected and highlighted in blue), "2010 Census", and "2000 Census".

The main content area contains several configuration options:

- Category:** A text input field containing "Age By Language Spoken at Home by Ability to Speak English for Age".
- Select a variable:** A dropdown menu showing "Total Population 5 years and over".
- Method:** A dropdown menu showing "Natural Breaks".
- Breaks:** A dropdown menu showing "5".
- Colors:** A color palette with five color swatches (yellow, orange, red, dark red, dark blue) and a refresh icon.
- Transparency:** A horizontal slider ranging from 1.0 on the left to 0.0 on the right, with a marker at approximately 0.7.
- Border:** A dropdown menu showing "1" and a black square icon.

An "Add to Map" button is located at the bottom right of the configuration area. A light blue tooltip box on the right side of the interface contains the text: "2012 ACS contains a subset (31 raw ACS tables in total for Blockgroup level) of 2008-2012 American Community Survey data."

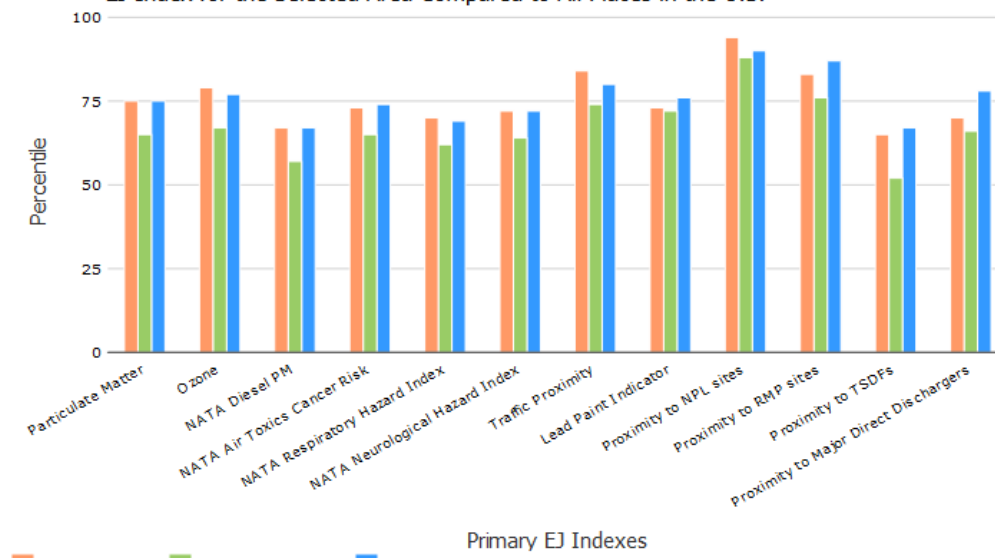


EJScreen Report for Block Group 221030407043, Louisiana
Population: 1540



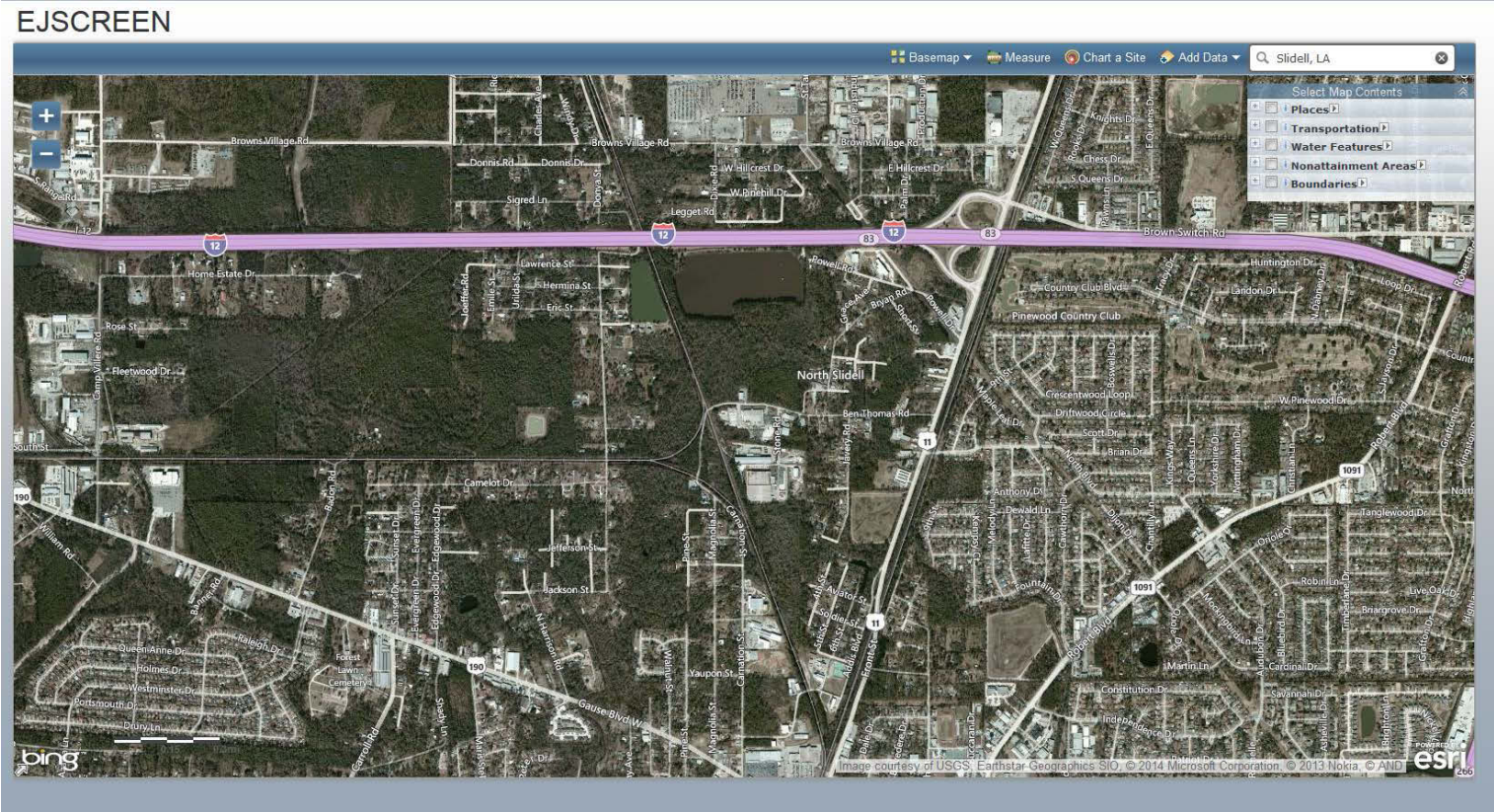
Selected Variables	State Percentile	Region Percentile	National Percentile
Primary EJ Indexes			
Particulate Matter	75	65	75
Ozone	79	67	77
NATA Diesel PM	67	57	67
NATA Air Toxics Cancer Risk	73	65	74
NATA Respiratory Hazard Index	70	62	69
NATA Neurological Hazard Index	72	64	72
Traffic Proximity	84	74	80
Lead Paint Indicator	73	72	76
Proximity to NPL sites	94	88	90
Proximity to RMP sites	83	76	87
Proximity to TSDFs	65	52	67
Proximity to Major Direct Dischargers	70	66	78

EJ Index for the Selected Area Compared to All Places in the U.S.





Ability to see various backdrops such as imagery from various time-slices





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