PA BROWNFIELDS CONFERENCE

March 25-27, 2024
The Penn Stater, State College, PA

Environmental Justice Tools for Brownfields

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environmental justice

"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.

This goal will be achieved when everyone enjoys:

The same degree of protection from environmental and health hazards; and, Equal access to the decision-making process to have a healthy environment in which to live, learn, and work"

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what is a brownfield?

"...real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant."*

*(Public Law 107-118 (H.R. 2869) - "Small Business Liability Relief and Brownfields Revitalization Act", signed into law January 11, 2002)

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environmental justice and brownfields

450,000 brownfields in the US are predominantly located in communities of color and low-income communities

How did they come to be?

- Sanctioned industrial, commercial land uses
- Squatting; unregulated land uses
- Vacancy, abandonment, tax-title
- structure fires
- Illegal dumping

(National Brownfields Coalition)

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EJ and brownfields

Opportunity →

Brownfields redevelopment can mitigate past land reuse injustices

Opportunity →

Transformation leads to environmental, health, social, and economic benefits for communities

Equitable Development

Meeting the needs of communities through actions and programs that reduce inequalities while creating physical spaces that are healthy and vibrant

Equitable Development

Strong prioritization of policy and action that address environmental justice issues and climate change

Equitable Development

Funding creates pathway to create healthy, resilient, and just communities now

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the EJ movement: a brief timeline

- **1934** – Redlining and Housing Loan Discrimination

- **1979** – Houston, Texas Landfill Lawsuit

- **1982** – Warren County, NC PCB Landfill – widely considered the catalyst for the EJ movement

- **1983** – Publication of Solid Waste Sites and the Houston Black Community

- **1983** – US General Accounting Office Study on the Location of Hazardous Waste Landfills

- **1990** – Environmental Equity Workgroup

- **1994** – Executive Order 12898

- **2002** – EPA Begins EJ Action Plan

Expanding the Conversation

working for environmental justice

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redlining

- Maps created for the Federal Housing Authority

- Zoned A to D with maps color-coded green to red(best to worst ratings)

- Surveyors completed rating forms that included race and "foreign-born" nationality

- FHA refused to insure "red" zones and loans were denied

- Rental housing costs pushed working-class minority populations to industrial areas

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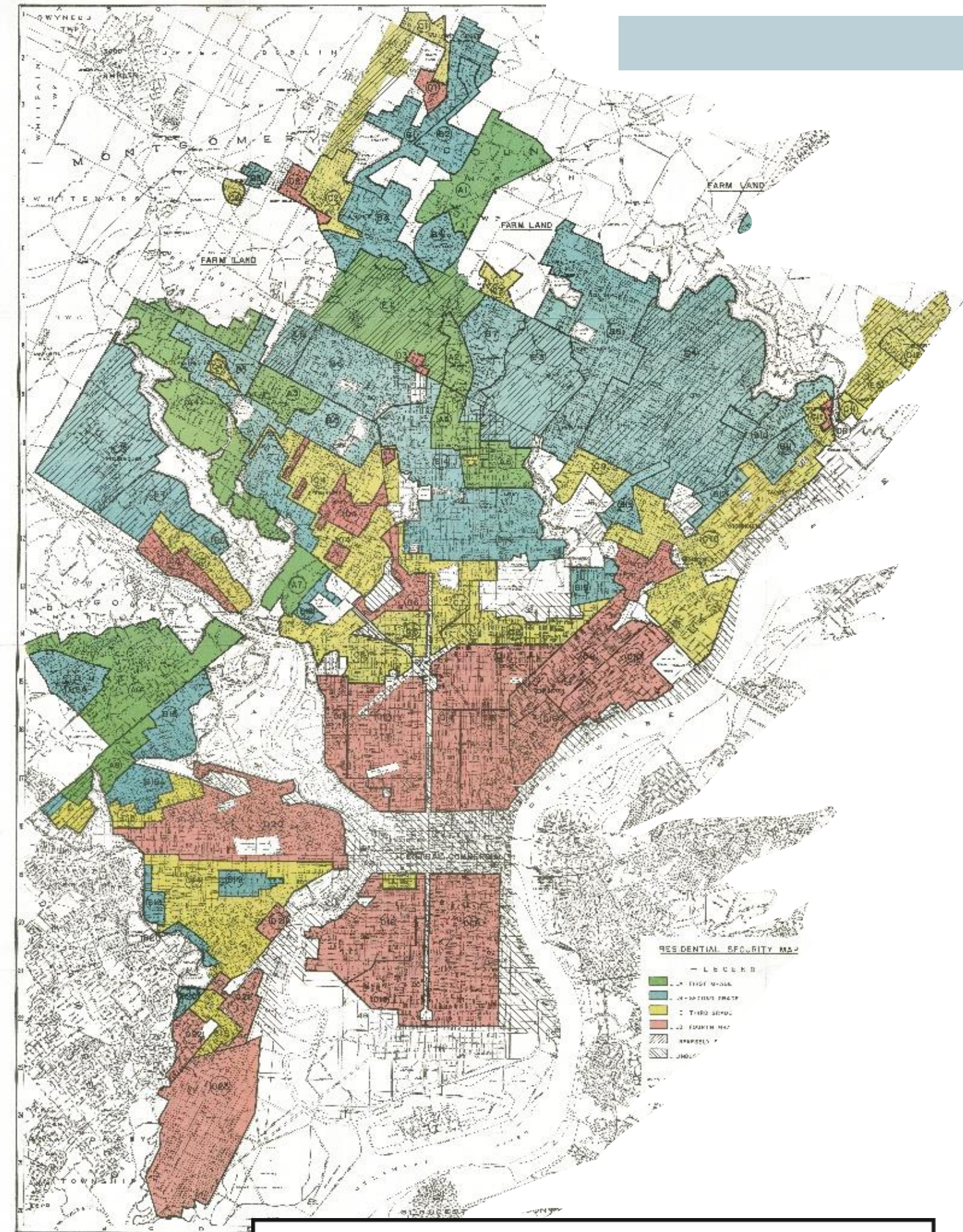
regulatory oversight

1964 | Title VI: Civil Rights Act

1964 | Safe Drinking Water Act

1976 | Resource Conservation and Recovery Act (RCRA

1977 | Clean Water Act I

1980 | CERCLA

1963 to 1990 | Clean Air Act

- Disenfranchised communities had little voice in what industries and activities occurred in their neighborhoods since they didn't own them or were poorly represented politically

- Many poor communities were subject to groundwater contamination from years of industrial and commercial activities or aging infrastructure

- States lacked funds to identify and clean up industrial areas

- Air quality is low due to high vehicle and industrial emissions

PCB protests -

Warren County, NC

PCB-contaminated soil scraped from 240 miles of North Carolina roads was transported to a rural landfill near Afton, Warren County, North Carolina

Local black farmers joined with environmental activists to protest the placement of the soil in the local landfill

The protests are considered the catalyst for the EJ Movement

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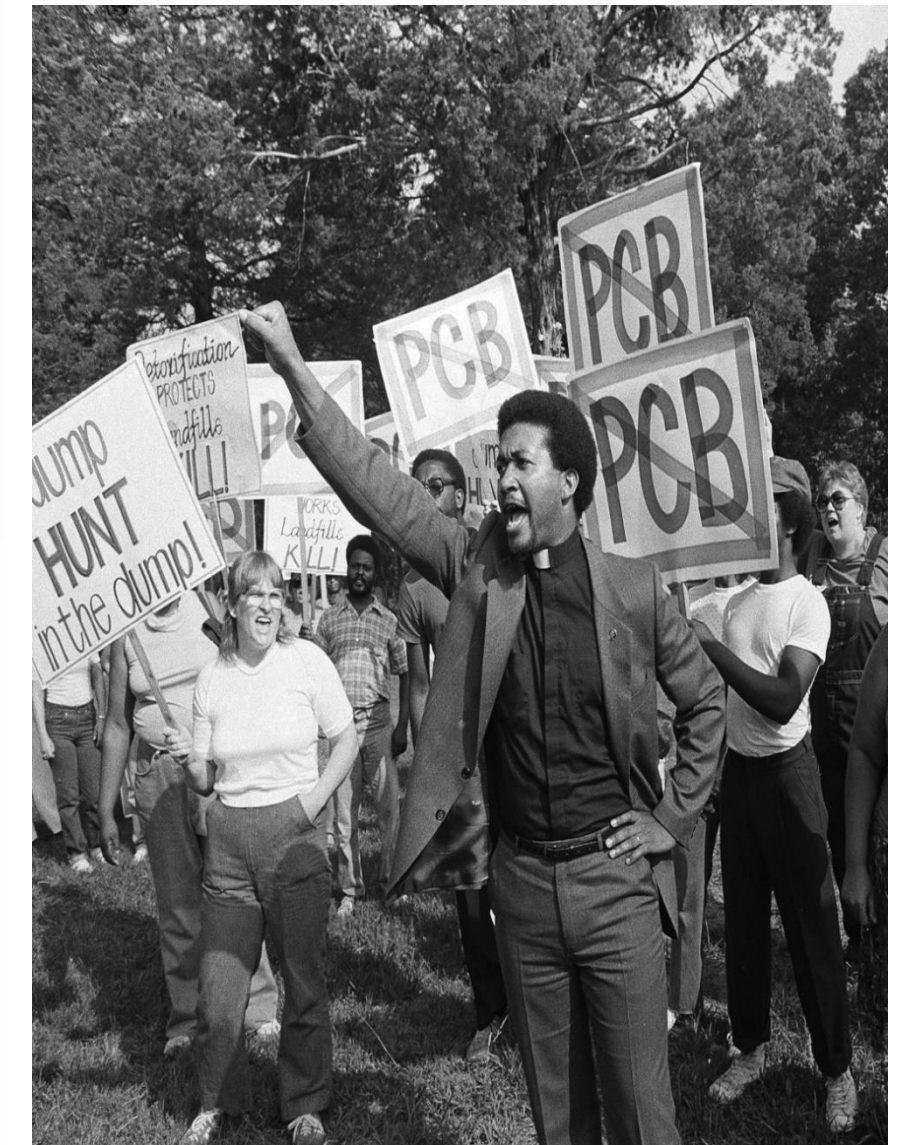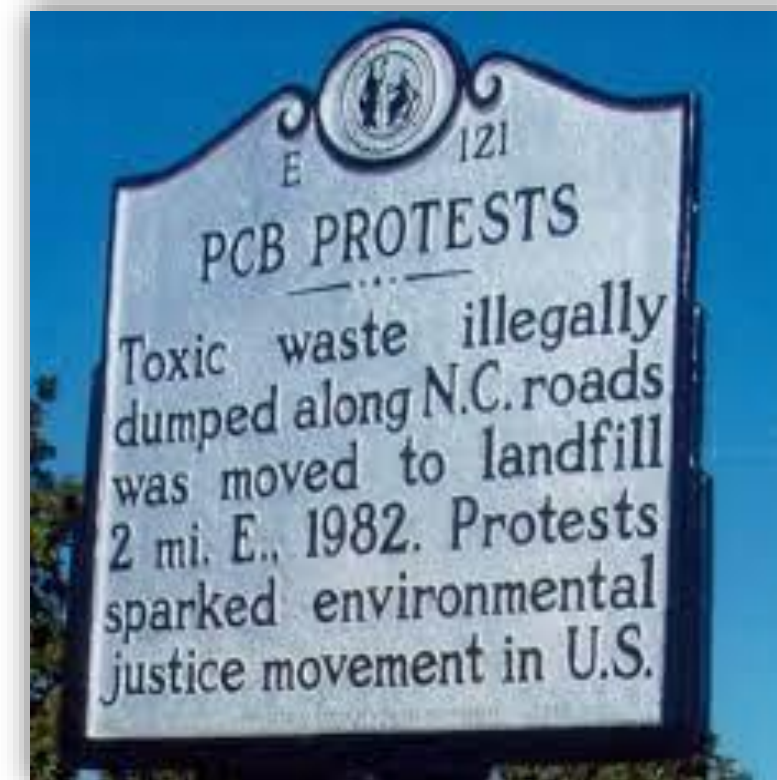
executive order 12898

directed federal agencies to develop environmental justice strategies to help address disproportionately high and adverse human health or environmental effects of their programs on minority and low-income populations

Factors considered included: public health, cumulative impacts, social costs, and welfare impacts

EPA activities included: setting standards, permitting facilities, making grants, and issuing licenses or regulations.

Resources created to identify EJ communities and present data (Online, interactive sources)

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EPA's EJ Screen
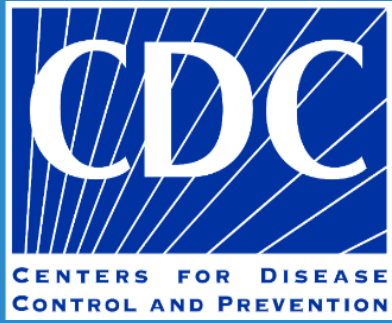
Centers for Disease Control

US Census Bureau Data Tables:
ACS Subject Tables: S0101, S1901, S1501, S1602, S1702, S1810

US Bureau of Indian Affairs State Tribal Information

Climate and Economic Justice Screening Tool

County Health Rankings & Roadmaps
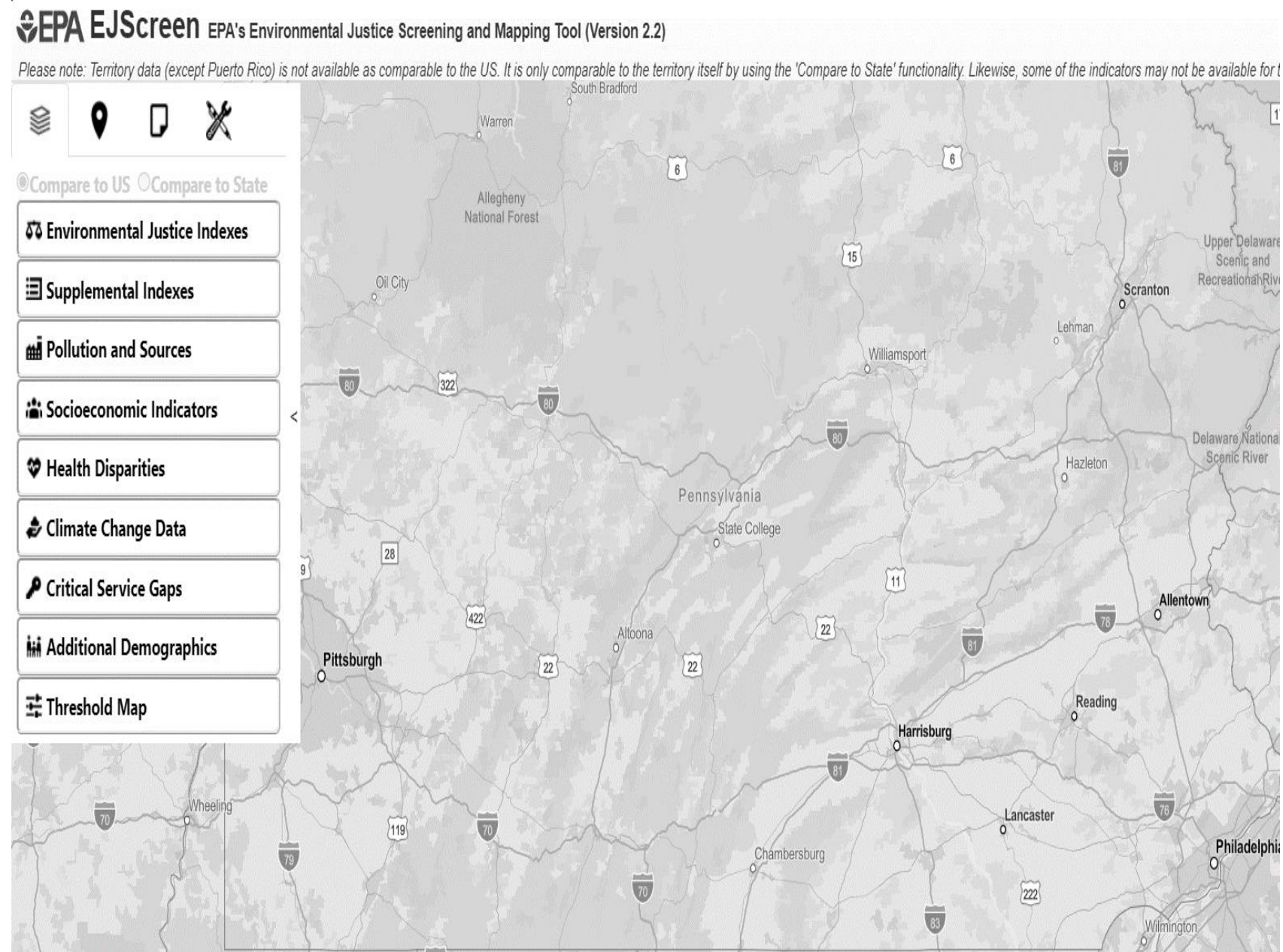
Community Health Surveys local hospitals, governments

data sources

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

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EPA EJScreen

- https://ejscreen.epa.gov/mapper/

- Created by US EPA

- Interactive map

- Graphically displays environmental, socioeconomic data, health disparities, poverty, demographics and critical service gaps

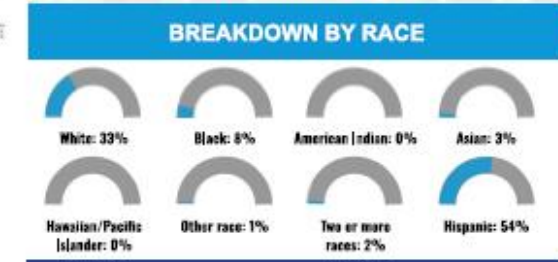- Data are sourced from the American Community Survey, Decennial Census, the CDC, and other agencies.

- Produces printable reports and data spreadsheets

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site location and 1-mile radius

EJScreen Community Report

o Identify a location by address, polygon, or by dropping a pin

o Select the appropriate radius

o EJScreen produces the report immediately with graphics (including the ones shown here

o Easy to use!

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EJScreen Tables and Graphics

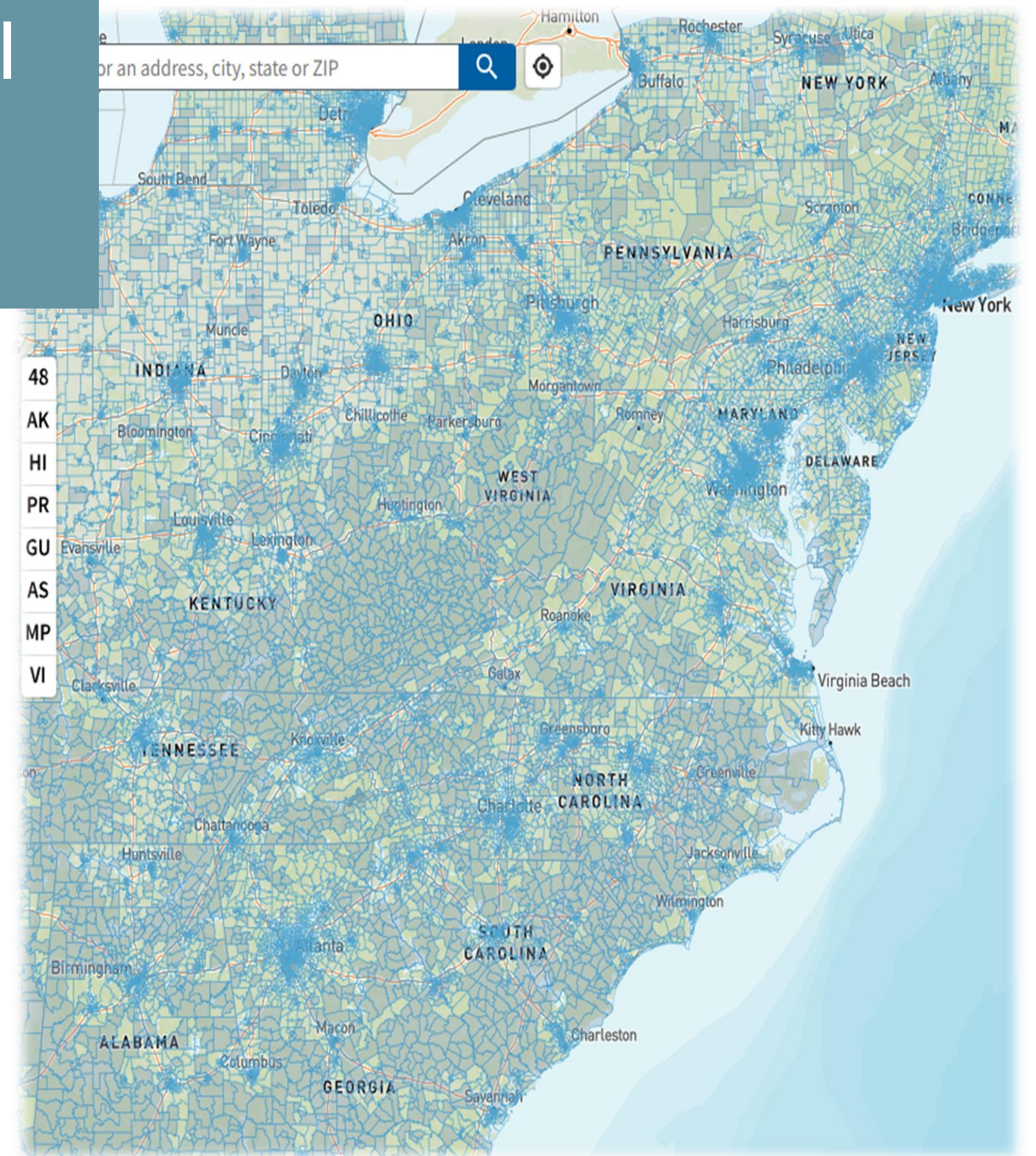Factors considered Tabulated results list individual indices

Results are charted for visual comparison

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Climate and Economic Justice Screening Tool

The CEJST is based on a census tract and block group level. Enter an address or zoom to a location and click on the tract

- https://screeningtool.geoplatform.gov/en/

- The tool uses census tract-level data to report on overburdened and underserved areas.

- Data sources include the American Community Survey by the US Census Bureau, the Federal Emergency Management Agency (FEMA), First Street Foundation, Department of Energy LEAD Tool, the EPA Office of Air and Radiation, the Centers for Disease Control and Prevention (CDC), Department of Housing and Urban Development, Trust for Public Lands, and more.

- The criteria for qualifying as a "disadvantaged" community is to rank in the 90th percentile for many categories, although that threshold varies for some criteria, such as educational attainment and poverty.

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Climate and Economic Justice Screening Tool

This tract was chosen randomly.

Click on the map and the results are returned immediately. Each of the boxes at the right that are shaded blue indicate that a burden threshold has been exceeded.

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Census Bureau Data Tables

The CEJST is based on a census tract and block group level. Enter an address or zoom to a location and click on the tract

Label	United States			Louisiana			Iberville Parish, Louisiana		
	Total	Below poverty level	Percent below poverty level	Total	Below poverty level	Percent below poverty level	Total	Below poverty level	Percent below poverty level
	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate
Population for whom poverty status is determined	316,715,051	42,510,843	13.4%	4,532,714	871,467	19.2%	29,497	5,381	18.2%
AGE									
Under 18 years	72,235,700	13,377,778	18.5%	1,087,359	295,682	27.2%	6,850	1,894	27.6%
Under 5 years	19,430,702	3,948,405	20.3%	302,660	91,109	30.1%	1,804	689	38.2%
5 to 17 years	52,804,998	9,429,373	17.9%	784,699	204,573	26.1%	5,046	1,205	23.9%
Related children under 18 years	71,912,137	13,078,339	18.2%	1,083,843	292,529	27.0%	6,766	1,810	26.8%
18 to 64 years	194,990,552	24,545,633	12.6%	2,768,184	489,422	17.7%	18,013	2,930	16.3%
18 to 34 years	71,601,235	11,638,198	16.3%	1,046,539	231,733	22.1%	6,821	1,110	16.3%
35 to 64 years	123,389,317	12,907,435	10.5%	1,721,645	257,689	15.0%	11,192	1,820	16.3%
60 years and over	69,423,553	6,697,494	9.6%	967,813	130,047	13.4%	6,536	844	12.9%
65 years and over	49,488,799	4,587,432	9.3%	677,171	86,363	12.8%	4,634	557	12.0%
SEX									
Male	155,133,161	18,909,451	12.2%	2,189,627	375,622	17.2%	14,060	2,304	16.4%
Female	161,581,890	23,601,392	14.6%	2,343,087	495,845	21.2%	15,437	3,077	19.9%

- Thousands of tables and subjects

- Compare metrics at multiple levels e.g. Nation, State, County, Census Block

- Can generate maps as well as export tables

- Much more granular compared to EJScreen or CEJST

- Can be difficult to navigate if you don't know the tables that you need in advance

- Commonly used tables include the ACS Tables S0101, S1901, S1501, S1602, S1702, S1810

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County Health Rankings & Roadmaps

THANK YOU
Questions?

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