

OPTION GREEN 2021

Disparate Environmental Impacts:
Causes and Solutions to Environmental Injustice





Coronavirus Updates and Information

Governor Murphy Signs Historic Environmental Justice Legislation

09/18/2020

Nation's Strongest Measure to Protect Overburdened Communities from Pollutants

Fulfilling a commitment to enact sweeping protections for environmental justice communities, Governor Phil Murphy today, alongside U.S. Senator Cory Booker, Mayor Ras Baraka, Senator Troy Singleton, Assemblyman John Micaletto, and environmental advocates, signed legislation (S232), which requires the New Jersey Department of Environmental Protection to evaluate the environmental and public health impacts of certain facilities on overburdened communities when reviewing certain permit applications. New Jersey is the first state in the nation to require mandatory permit denials if an environmental justice analysis determines a new facility will have a disproportionately negative impact on overburdened communities.

The bill defines an overburdened community as any community where 35 percent of the households qualify as low-income according to the U.S. Census, 40 percent of households are minority, or 40 percent of households have limited English proficiency. There are approximately 310 municipalities with populations totaling approximately 4,489,000 that have overburdened communities within their municipalities.

Defining “Overburdened Community”

- Low-Income: At least 35% of households qualify as low-income households; or
- Minority: at least 40% of the residents identify as minority or as members of a state recognized tribal community; or
- Limited English proficiency: at least 40% of the households have limited English proficiency



Environmental and Public Health Stressors

Environmental stressors to include, but not be limited to:

Concentrated areas of air pollution;
Mobile sources of air pollution;
Contaminated sites;
Transfer stations or other solid waste facilities;
Recycling facilities;
Scrap yards
Point-sources of water pollution including, but not limited to, water pollution from facilities or combined sewer overflows

- Public health stressors are “conditions that may cause potential public health impacts in the overburdened community
- Public health impacts include, but are not limited to:
 - Asthma
 - Cancer
 - Elevated blood lead levels
 - Cardiovascular disease
 - Developmental problems







Market Economics

Economic reasons:

- A. Market forces in site selection
- B. Market-driven changes after siting

Political Power/Laws

- A. Lack of Political Power is the problem
- B. Environmental Law is the problem

Sociohistorical

- No victims and no perpetrators-> can be both
- Historical events with long-term impacts

Land Use

1. Restrictive social covenants
2. Exclusionary zoning
3. Expulsive zoning

Neighborhood restrictive covenants

Greenlake neighborhood:

"No person or persons of Asiatic, African, or Negro blood, lineage or extraction shall be permitted to occupy a portion of said property or any building thereon except a domestic servant or servants who may actually and in good faith be employed by white occupants of such premises"

Laurelhurst neighborhood:

"No person other than one of the White Race shall ever be permitted to occupy any portion of any lot in said plot or any building at any time thereon, except a domestic servant actually employed by a white occupant of such building"

Broadmoor neighborhood:

"No part of said property hereby conveyed shall ever be used or occupied by any Hebrew or by any person of the Ethiopian, Malay, or Asiatic race ...excepting only employees in domestic service..."

Queen Ann neighborhood

"No person or persons of Asiatic, African or Negro blood, lineage, or extraction shall be permitted to occupy a portion of said property"

Ballard/Sunset Hills neighborhood

"No part of said property hereby conveyed shall ever be used or occupied by any Hebrew or by any person of the Ethiopian, Malay or any Asiatic Race."

See: complete database of [414 racial restrictive covenants](#)



***Southern Burlington County
NAACP v Mount Laurel II,
456 A.2d 390 (NJ1983)***

Read Legal Aid's Lawsuit To Stop East Harlem Rezoning

AUTHOR
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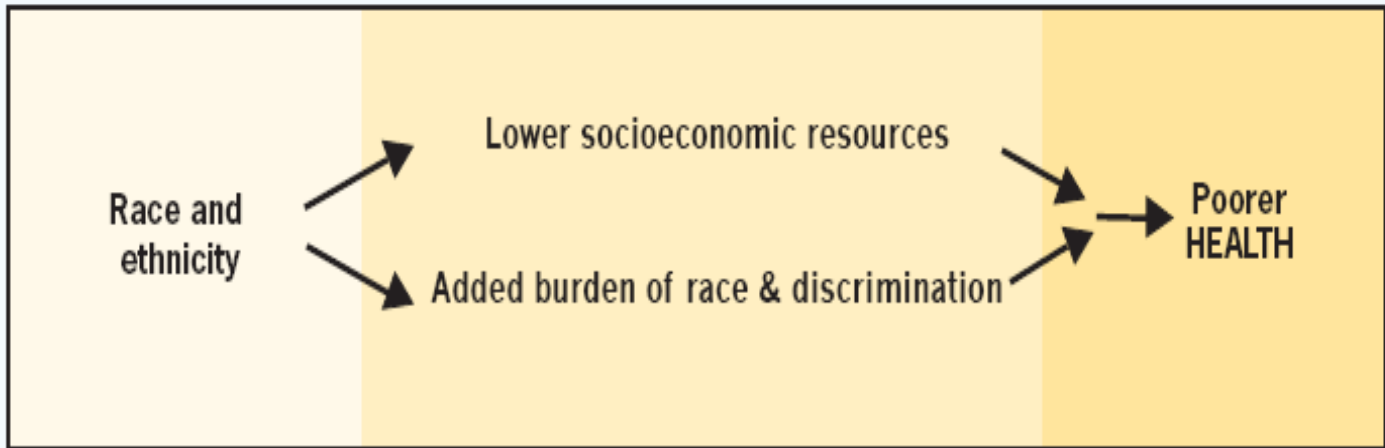
DATE
January 19, 2018



Environmental Racism

Two types of racism:

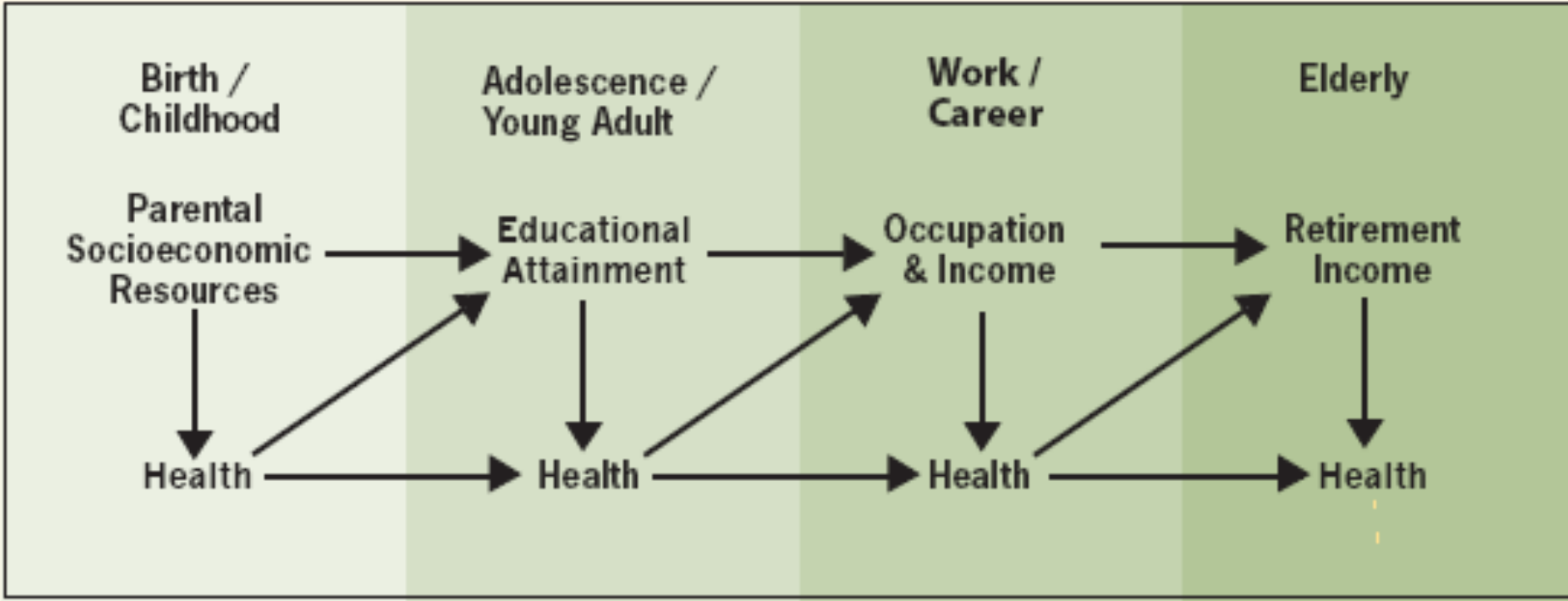
1. Intentional /Overt
2. Structural/Institutional





Number of loan applications by race and ethnicity and percent denied 2015-2016

County	White applications	White denied	Black apps	Black denied	Hispanic apps	Hisp denied	Asian apps	Asian denied
Atlantic	1,966	10.4	76	15.8	155	17.4	167	11.4
Bergen	10,044	8.6	465	15.7	1,580	11.8	3,785	10.6
Burlington	5,124	7.1	391	14.1	232	14.2	655	8.7
Camden	4,055	6.1	330	19.7	325	16.3	525	10.9
Cape May	1,153	7.5	2	50.0	24	20.8	14	28.6
Cumberland	420	11.0	34	23.5	83	16.9	10	0.0
Essex	5,335	7.2	922	22.0	866	13.5	1,340	9.1
Gloucester	3,160	6.1	130	23.1	103	13.6	145	9.7
Hudson	4,646	9.0	307	18.2	969	16.1	2,865	11.0
Hunterdon	2,555	8.2	35	8.6	115	13.0	189	6.9
Mercer	3,149	7.2	230	21.3	374	13.1	1,530	11.3
Middlesex	5,289	8.5	493	18.3	1,088	14.4	6,170	10.4
Monmouth	11,131	8.3	225	26.2	517	10.8	896	10.2
Morris	8,443	7.1	161	15.5	620	11.3	1,522	9.6
Ocean	9,436	8.1	120	21.7	343	14.3	148	10.8
Passaic	3,559	9.2	126	15.9	764	14.1	490	13.5
Salem	406	6.4	12	33.3	16	18.8	5	60.0
Somerset	4,346	7.8	296	12.2	463	12.7	2,508	8.0



SO WHY DO WE NEED TO FIND LONG-TERM SOLUTIONS?



Neighborhood Feature	Hazard	Health Effect
<p>Biological /Chemical environment</p> <ul style="list-style-type: none"> ■ Air ■ Water ■ Soil 	<ul style="list-style-type: none"> ■ Air & water pollution ■ Noise ■ Waste ■ Lead paint ■ Other environmental hazards 	<ul style="list-style-type: none"> ■ Respiratory diseases ■ Hearing loss ■ Sleep deprivation ■ Developmental delays ■ Impaired cognition
<p>Built environment</p> <ul style="list-style-type: none"> ■ Housing ■ Transportation ■ Commercial establishments ■ Billboards ■ Parks ■ Libraries 	<ul style="list-style-type: none"> ■ Housing-related environmental toxins ■ Allergens ■ Inadequate access to healthy food ■ Increased exposure to fast food, alcohol and tobacco products ■ Exposure to tobacco smoke ■ Lack of recreation 	<ul style="list-style-type: none"> ■ Asthma ■ Obesity ■ Alcohol and tobacco addiction (leading to liver, lung and cardiovascular disease) ■ Hypertension (due to obesity and lack of exercise) ■ Compromised immune system
<p>Social environment</p> <ul style="list-style-type: none"> ■ Levels of neighborhood stress and support ■ Enforcement of common rules for public behavior ■ Behavioral norms 	<ul style="list-style-type: none"> ■ Violence ■ Crime ■ Social isolation ■ Low levels of interpersonal trust ■ Public disorder 	<ul style="list-style-type: none"> ■ Anxiety ■ Fear ■ Hyper-vigilance ■ Depression ■ Stress related behavior (over-eating, smoking, addiction)

Short Distances to Large Gaps in Health



Current Geographic Area

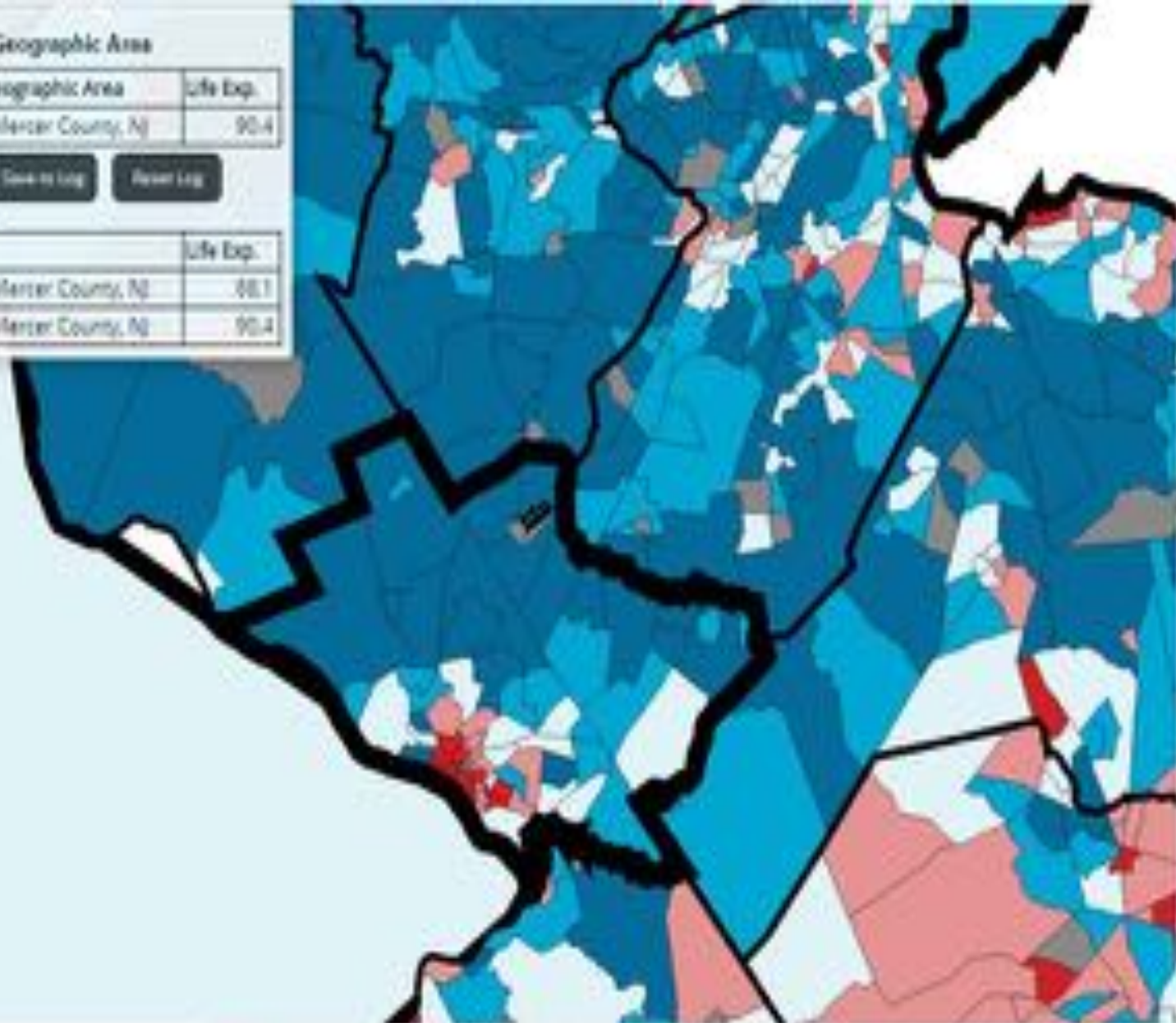
Current Geographic Area	Life Exp.
0040 00, Mercer County, NJ	90.4

View as Log

Reset Log

Log

Geo Area	Life Exp.
0010 00, Mercer County, NJ	88.1
0040 00, Mercer County, NJ	90.4



Life Expectancy at birth (Quintiles)



Geographic areas with no data available are filled in gray

U.S.

State

County
Tracts

County

Info Tool

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Activate Windows

Go to Settings to activate Windows.

Straight line distance: 10.24 miles , 16.49 kilometers (km) , 54091 feet , 16487 meters
Driving distance: 23.40 miles , 21.56 kilometers (km) , 70728 feet , 21558 meters



Rank	Country	years	Date of Information
1	<u>Monaco</u>	89.40	
2	<u>Singapore</u>	86.19	
182	<u>Ethiopia</u>		67.90
183	<u>Madagascar</u>		67.86
187	<u>Burundi</u>		67.07

VULNERABILITY

Definition: the potential for loss or other adverse impacts; or the capacity to suffer harm

Vulnerability: The conditions determined by physical, social, economic, and environmental factors or processes which increase the susceptibility of an individual, a community, assets or systems to the impacts of hazards (UNISDR).



Mount Vesuvius and Pompeii



Theory and concepts



2005 Hurricane Katrina

Types:

1. Individual
2. Social
3. Environmental



Census Tract 18, Mercer County,
New Jersey

2016 Overall SVI Score:
0.9935

Possible scores range from
0 (lowest vulnerability) to
1 (highest vulnerability).

A score of **0.9935**
indicates a **high level of**
vulnerability.

Theme Rankings

⌘ Zoom to

Activate Windows
Go to Settings to activate Windows



(1 of 2)

Census Tract 48, Mercer County,
New Jersey

2016 Overall SVI Score:
0.2511

Possible scores range from
0 (lowest vulnerability) to
1 (highest vulnerability).

A score of **0.2511**
indicates a **low to moderate**
level of
vulnerability.

🔍 Zoom to

Activate Windows
Go to Settings to activate Windows.

SO WHAT CAN WE DO?



EDUCATION AND AWARENESS



Databases

- <https://www.naphsis.org/usaleep>
- <https://www.cityhealthdashboard.com>
- <https://www.usa.gov/statistics>
- <https://www.data.gov/>
- <https://www.nlm.nih.gov/enviro/index.html>
- <http://geodata.grid.unep.ch/>
- <https://wonder.cdc.gov/>
- <https://wonder.cdc.gov/WelcomeT.html>
- <https://ephtracking.cdc.gov/DataExplorer/#/>
- <https://www.healthsystemtracker.org/dashboard/>
- <https://www.countyhealthrankings.org/>
- <https://www.google.com/publicdata/directory>
- <https://www.epa.gov/environmental-topics/location-specific-environmental-information>
- <https://www.cdc.gov/publichealthgateway/cha/data.html>
- <https://www.cdc.gov/nceh/tracking/topics/EnvironmentalJustice.htm>

NJ Databases

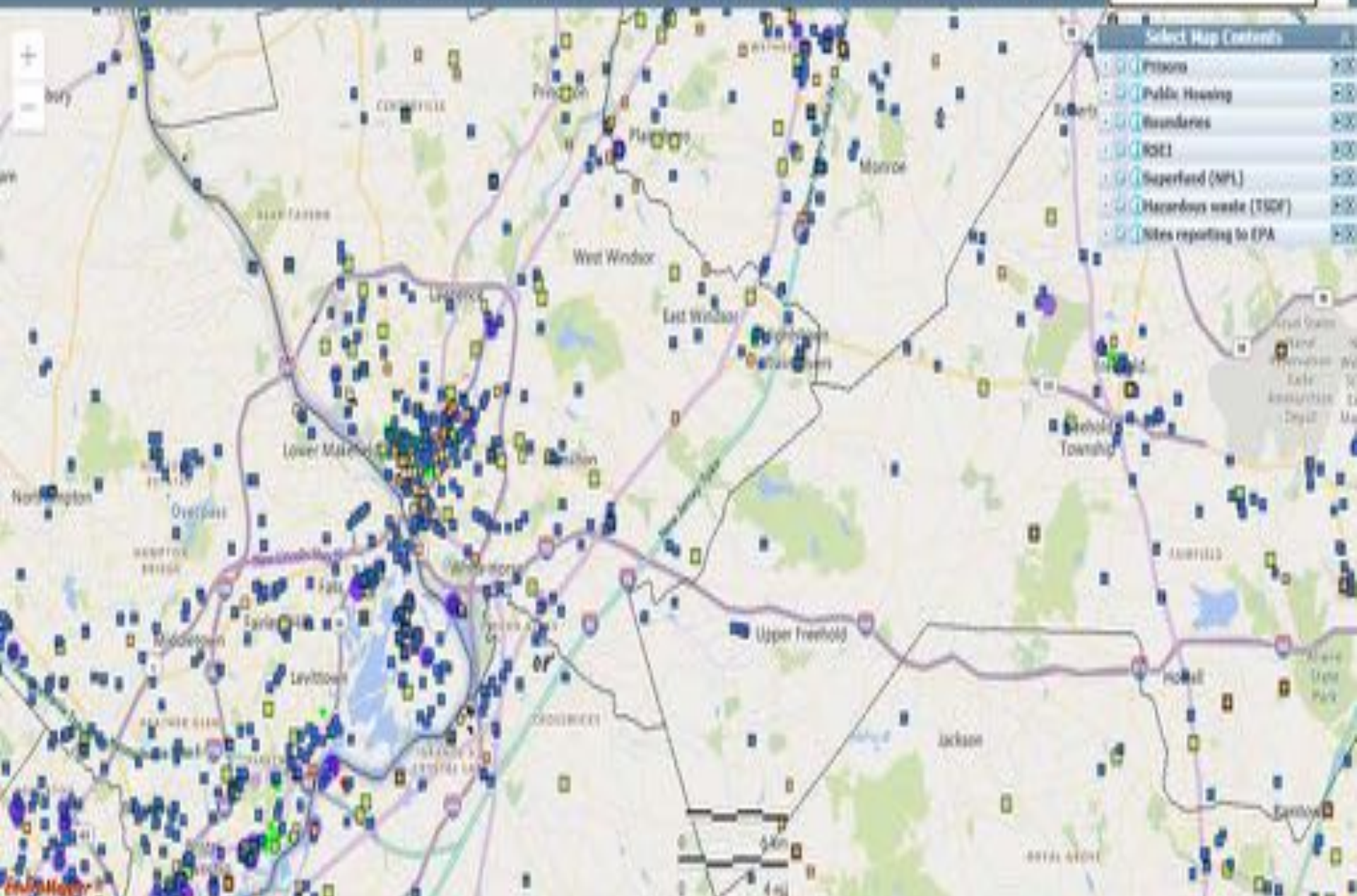
- <https://www.countyhealthrankings.org/explore-health-rankings/use-data/go-beyond-the-snapshot/find-more-data/new-jersey-state-resources>
- <https://www.rwjf.org/en/library/collections/better-data-for-better-health.html>
- [DataMiner Enforcement Blotter \(DEP Compliance and Enforcement\)](#)
- [DataMiner Community Right to Know Reports](#)
- <https://www.nj.gov/health/ceohs/public-health-tracking/>
- <https://www-doh.state.nj.us/doh-shad/community/snapshot/Builder.html>

Short Distances to Large Gaps in Health



Select Location Add Maps Clear Selected Locations Print Measure Save Screen Download

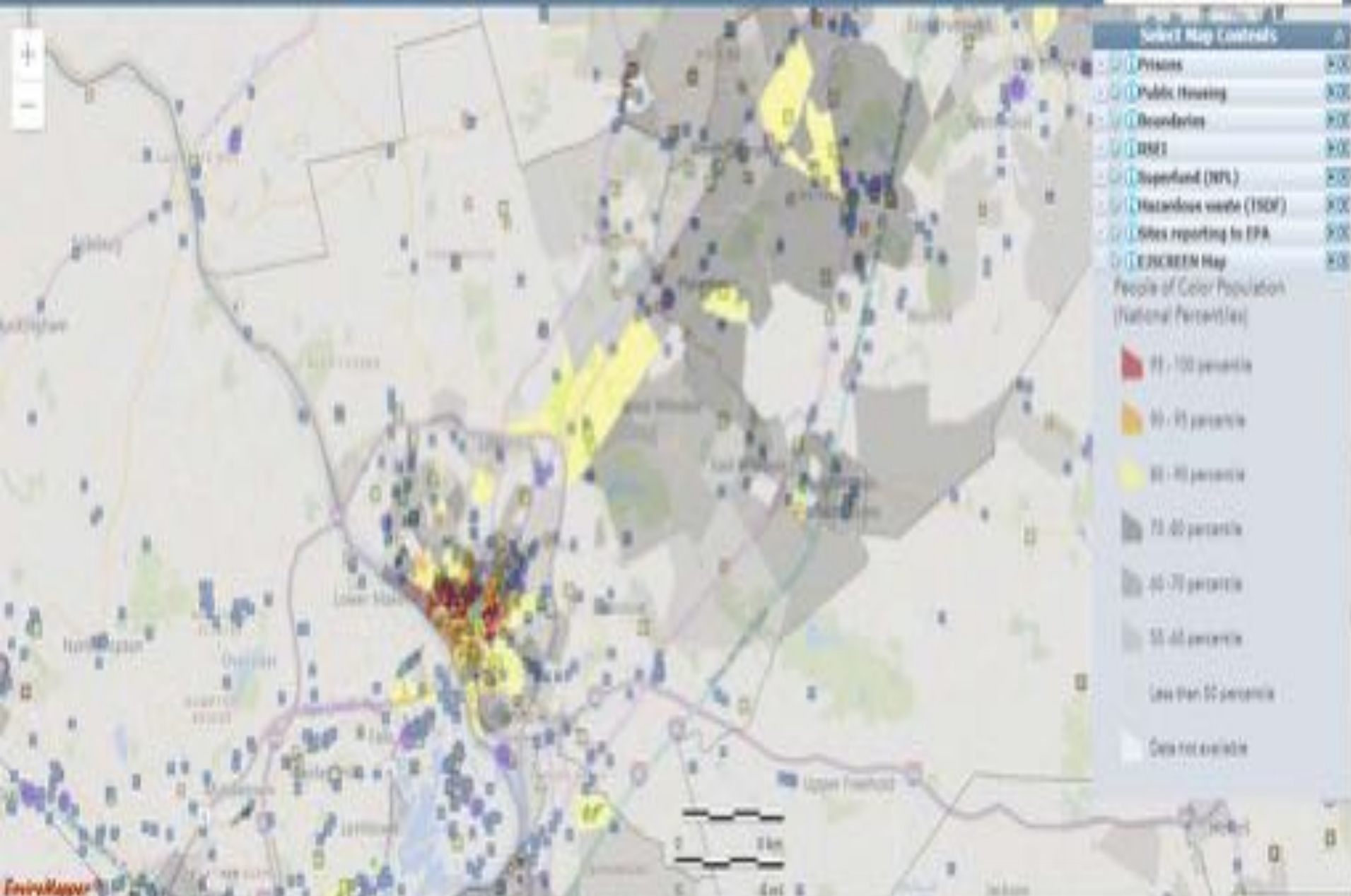
Find address or place



Click Map Contents

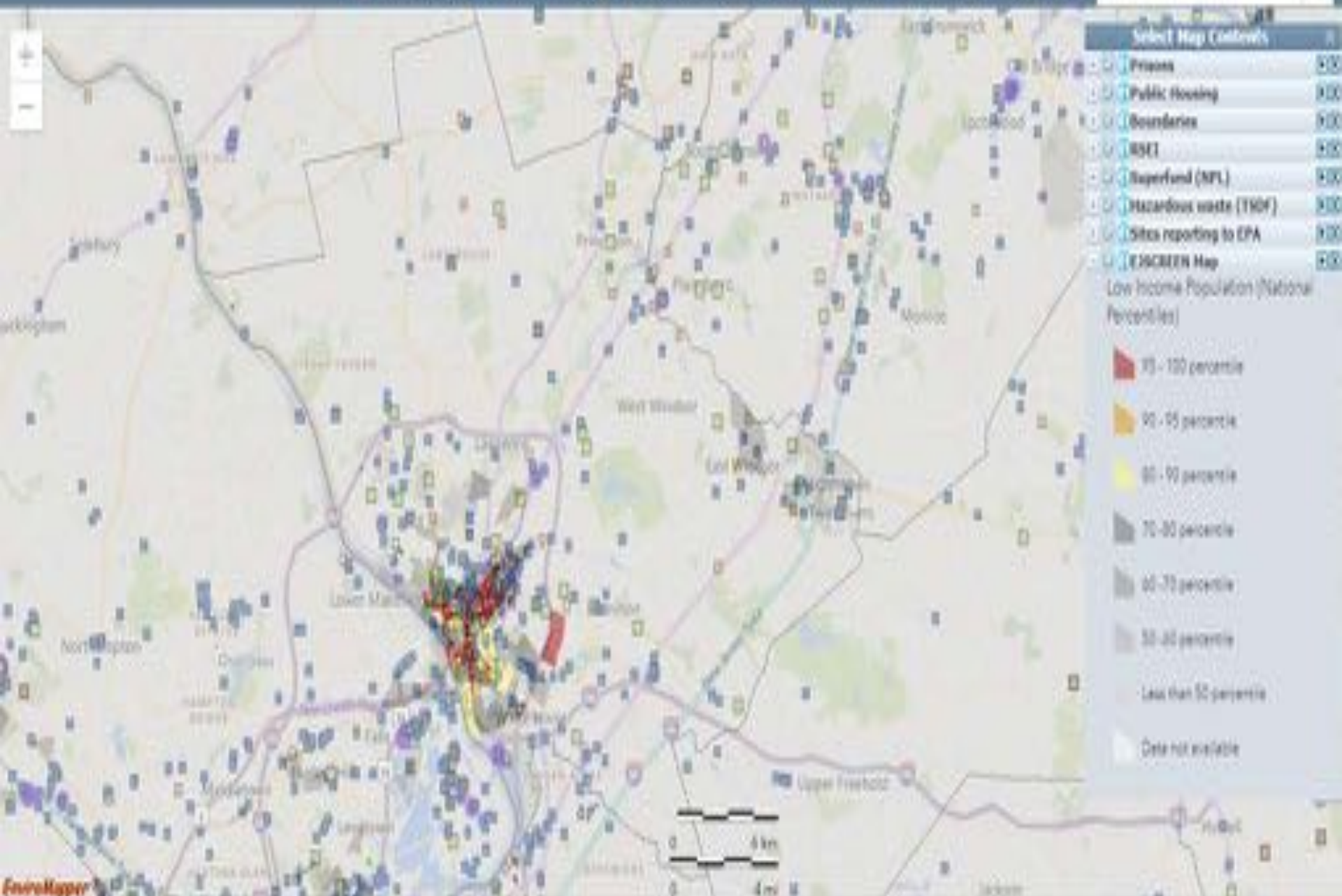
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Prisons	200
Public Housing	200
Boundaries	200
ROE1	200
Superfund (NPL)	200
Hazardous waste (TSCA)	200
Sites reporting to EPA	200

[Select Location](#) |
 [Add Maps](#) |
 [Clear Selected Locations](#) |
 [Print](#) |
 [Request](#) |
 [Save Screen](#) |
 [Rezoom](#)



Select Location Add Maps Clear Selected Locations Print Measure Save Session Basemap

Find address or place



Select Map Contents	
<input type="checkbox"/>	Prisons
<input type="checkbox"/>	Public Housing
<input type="checkbox"/>	Boundaries
<input type="checkbox"/>	RSEI
<input type="checkbox"/>	Superfund (NPL)
<input type="checkbox"/>	Hazardous waste (TRHF)
<input type="checkbox"/>	Sites reporting to EPA
<input type="checkbox"/>	EJSCREEN Map
Low Income Population (National Percentiles)	
<input type="checkbox"/>	75 - 100 percentile
<input type="checkbox"/>	60 - 75 percentile
<input type="checkbox"/>	45 - 60 percentile
<input type="checkbox"/>	30 - 45 percentile
<input type="checkbox"/>	15 - 30 percentile
<input type="checkbox"/>	Less than 15 percentile
<input type="checkbox"/>	Data not available

HELP TO GATHER NE INFORMATION



Crowdsourced Data

➤ <https://smellmycity.org/>



Citizen Science in the Ironbound



Residents of Newark's Ironbound community received an EPA Community Action for Renewed Environment (CARE) grant in 2009 to address concerns about air quality. Local sources of air pollution include: NJ's largest incinerator and 34 other waste related facilities, the Ports of Newark and Elizabeth (responsible for approximately 7,000 truck trips daily), and the heavily trafficked highways and rail lines that surround the community. As a result of these and other sources, 25 percent of Newark children suffer from asthma, three times the state average, and asthma is the leading cause of absenteeism for Newark's school-age children. The community identified actions to target its poor air quality, which included increasing air monitoring capabilities, educating the community about air quality issues, advocating for the enforcement of existing laws, and adopting new laws or ordinances.

Video:

https://www.youtube.com/watch?v=Uevr3vjWDt8&feature=emb_logo

Citizen Science toolbox:

<https://www.epa.gov/air-sensor-toolbox>

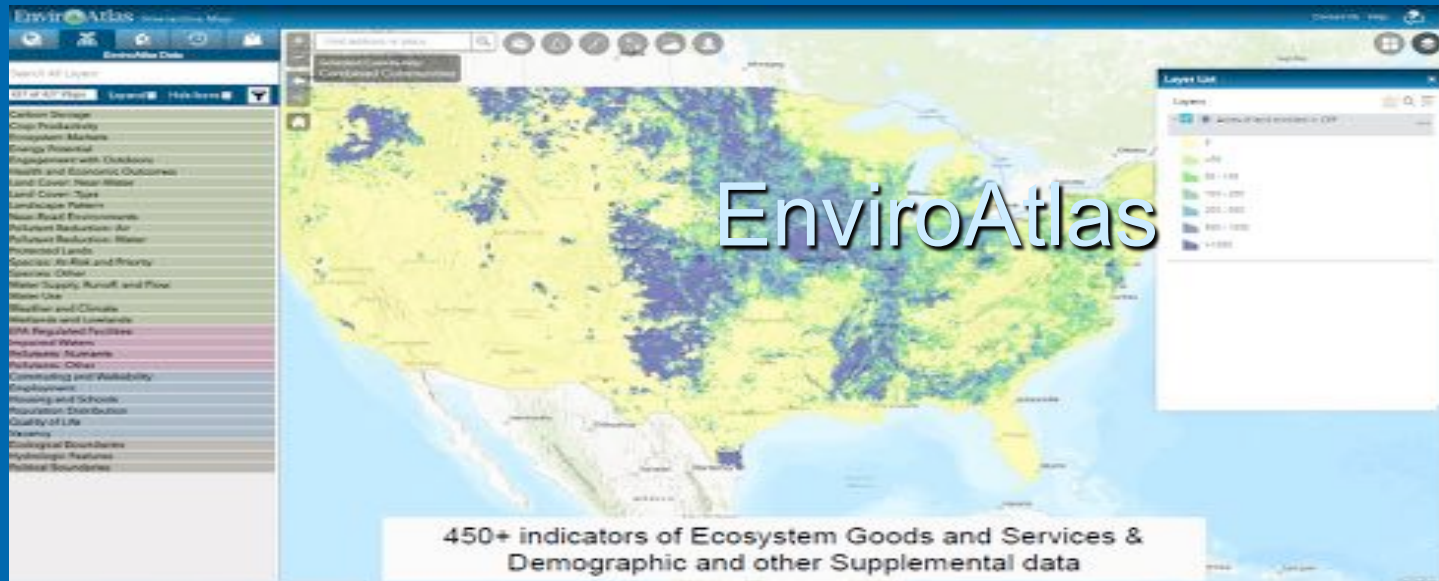
The data they collected:

<https://catalog.data.gov/dataset/citizen-science-in-the-ironbound-community>

Community Asset Mapping

- <https://www.communityscience.com/knowledge4equity/AssetMappingToolkit.pdf>
- <https://www.citylab.com/life/2020/04/neighborhood-maps-coronavirus-lockdown-stay-at-home-art/610018/>





- Mapping tool that focuses on ecosystem service benefits
- Includes some demographic indicators
- <https://www.epa.gov/enviroatlas/enviroatlas-interactive-map>

USE THE LAWS



Legal Options

- <https://www.epa.gov/sites/production/files/2015-04/documents/citizen-guide-ej.pdf>

**HELP TO CREATE NEW LAWS OR
CHANGE OLD ONES**

The background features several faint, concentric circular ripples in a lighter shade of blue, resembling water droplets or ripples on a pond, scattered across the lower right and bottom center of the page.

Legislative Process and Your Contacts to Congress

Legislation is Introduced

Ask your member of Congress to introduce a bill

Ask your member of Congress to co-sponsor a bill

All bills are then referred to Committee

Ask your member of Congress to offer amendments to a bill

Committee votes on bills

Ask your member of Congress to vote a certain way on a bill in Committee

Bills that were approved by Committee are debated on the chamber floor

Ask your member of Congress to make a public statement about a bill in a speech

Ask your member to offer amendments to a bill

Chamber votes on bills

Ask your member of Congress to vote a certain way on a bill in the chamber vote

Policy Change

- Strategy 1: Bans
- Strategy 2: Environmental Justice Policies and Programs
- Strategy 3: Require Review Processes
- Strategy 4: Proactive Planning
- Strategy 5: Targeting Existing Land Uses
- Strategy 6: Public Health Codes

Optional: For links to the policies see here:

<https://www.nrdc.org/sites/default/files/local-policies-environmental-justice-national-scan-tishman-201902.pdf>

JOIN A GROUP



Joining Boards!

Boards

- **You can serve on local-level boards or commissions that make decisions on area issues**
 - Boards at the local-level need citizen involvement to work effectively
- **Find out what is available**
 - Visit your local government website, which lists all boards and commissions and their existing vacancies
 - Attend a meeting of the board you are interested in joining
- **Apply**
 - Citizen Leadership Form from local government website
- **Tips to make it onto the board**
 - Reach out to people currently on the board
 - Regularly attend meetings
 - Introduce yourself to the official in charge of appointing board members

What it means to be a group member

Groups

- Attend town halls or other events with elected officials
- Visit elected officials' offices
- Organize events
- Letter writing campaigns to elected officials
- Publicize group's position
- Attend other groups' events, build a coalition of support
- Research policy developments related to the group's goal
- Share information about your issue



- Stay informed about the group's plans
- Join coordinated activities that the group is planning

CHANGE THE WAY YOU THINK



Multi-solving and Systems Thinking

- Learn to think about relationships
- What is Multi-solving video: <https://www.climateinteractive.org/videos/multisolving-videos/>

THE ICEBERG MODEL

Use this tool to help you think more systemically!



EVENTS

What is happening?

PATTERNS OF BEHAVIOR

What trends are there over time?

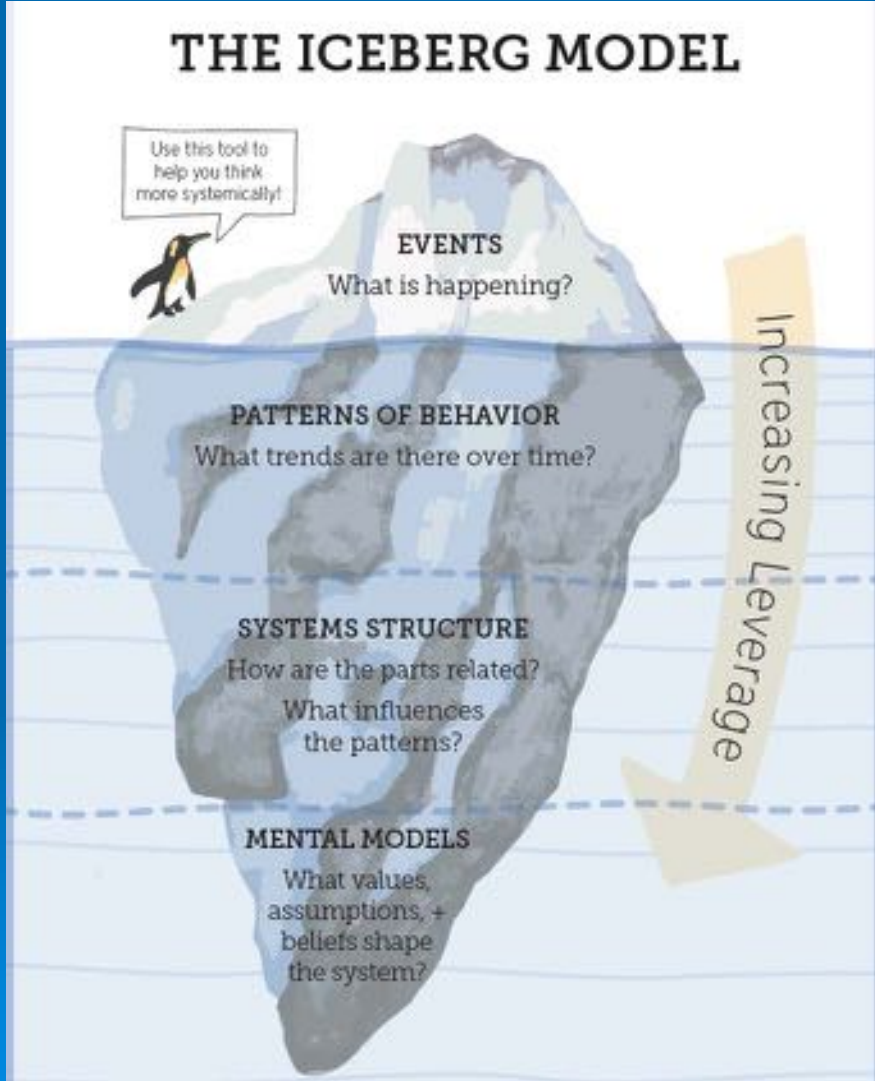
SYSTEMS STRUCTURE

How are the parts related?
What influences the patterns?

MENTAL MODELS

What values, assumptions, + beliefs shape the system?

Increasing Leverage



ENCOURAGE SUSTAINABILITY



COMMUNITY SUSTAINABILITY

Community sustainability

- A. Community Capacity
- B. Community Cohesion
- C. Community Resilience



Links

- Proven strategies;
 - <https://www.countyhealthrankings.org/take-action-to-improve-health/what-works-for-health/strategies?f%5B0%5D=health-factor%3AAir%20and%20Water%20Quality>