

The logo banner features the acronym 'CEEJAC' in large, white, bold, sans-serif capital letters. To the right of the acronym is a vertical white line, followed by the full name 'Connecticut Equity and Environmental Justice Advisory Council' in a smaller, white, sans-serif font. The background of the banner is a dark purple gradient with a faint, textured image of a forest.

CEEJAC

**Connecticut Equity
and Environmental
Justice Advisory Council**

Welcome and Introductions: *Edith Pestana, EJ Program Administrator, CT DEEP*

Ground Rules: *Edith Pestana*

CT EJ Screen Mapping Tool (draft for feedback): *Dr. Yaprak Onat*, Assistant Director of Research for the Connecticut Institute for Resilience and Climate Adaptation (CIRCA)

Questions from CEEJAC Members on the Tool: *Facilitated by Dr. Mark Mitchell*

Public Comment on the Tool: *Facilitated by Edith Pestana*

Next CEEJAC Quarterly Meeting: *June 21, 2023*

CEEJAC MEETING GROUND RULES

During the discussion, all members should:

- Listen respectfully, without interrupting.
- Listen actively and with an ear to understanding others views.
- Only have one conversation at a time.
- Be mindful to give others the opportunity to speak.
- Focus on the task at hand rather than the position.
- Avoid off-topic conversations.
- Criticize ideas, not people.
- Commit to learning, not debating.
- Avoid blame, speculation and inflammatory language.
- Avoid assumptions about any member of the group.

Environmental Justice Screening Tool

Yaprak Onat, PhD, PE

Assistant Director of Research

Connecticut Institute for Resilience & Climate Adaptation

5/22/23



Outline

01

About

The mapping tool aim and goals of the project

02

Capacity

Limitations and capacity of the tool

03

The Use

How can the mapping tool be used?

04

Development

The development process and feedback system

05

The Data

Data categorization and indicators

06

Sneak Peak

Demo of version 1.2 and Project Timeline

Environmental Justice Screening Tool

Combines environmental and demographic data to highlight areas where **vulnerable populations** may be **disproportionately impacted** by pollution.



The mapping tool aims to



Data Integration

Supplemented with local information and experience



Easy Access

Web-based GIS tool for statewide



Policy making

The first screening for State, County, and Municipal decision making

The mapping tool's capacity

This Mapping Tool DOES:

- Identify potential sources of pollution.
- Identify areas that present potential hazards in the event of an accident or emergency.
- Identify census tracts near potential pollution sources.
- Identify the degree to which a community, by census tract, is vulnerable due to socioeconomic and health disparities.

This Mapping Tool DOES NOT:

- Does not reflect actual exposures to pollution
- Does not model the overall pollution burden nor reflect the number of individuals that may be affected by pollution.
- Does not model the positive or negative likelihood of an individual's risks for poor health outcomes.
- Does not release private addresses, information, or names.



Limitations of the mapping



Various Dataset

Nothing is really “equal weight”



Resolution

Inconsistent data representation



Realistic

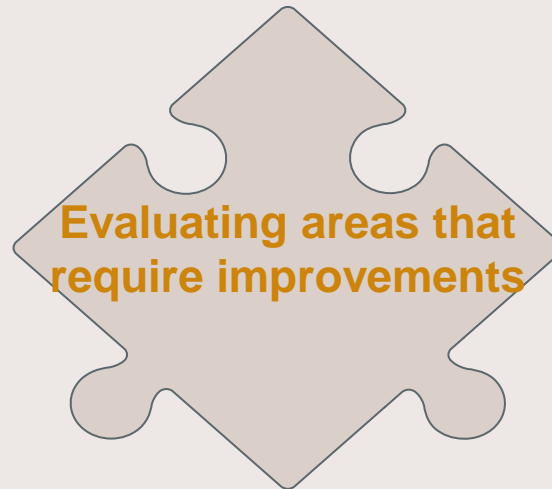
The impact of the pollution may be inadequate



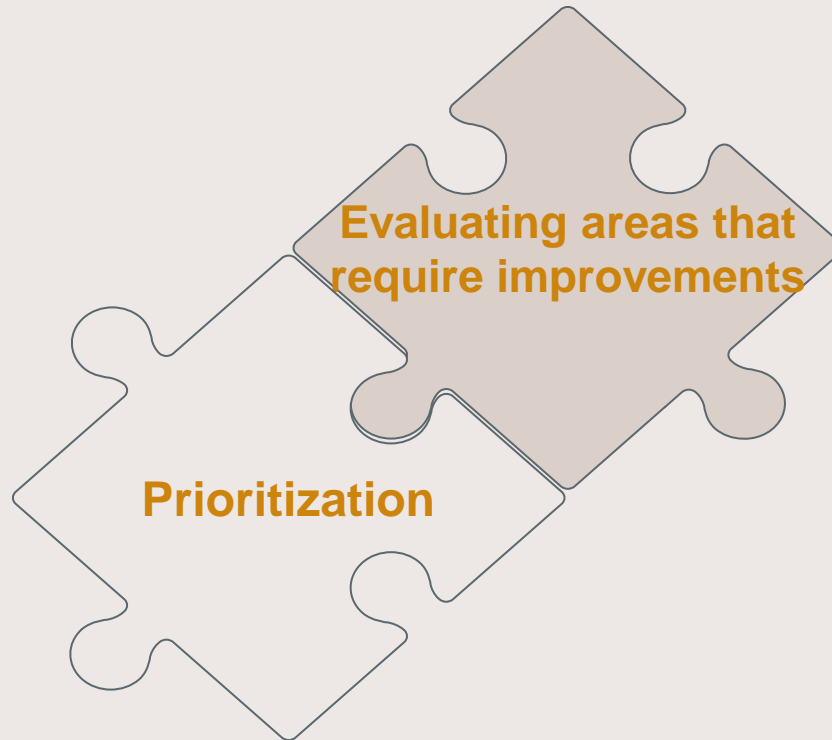
Expert need

Evaluation of need multidisciplinary expert collaboration

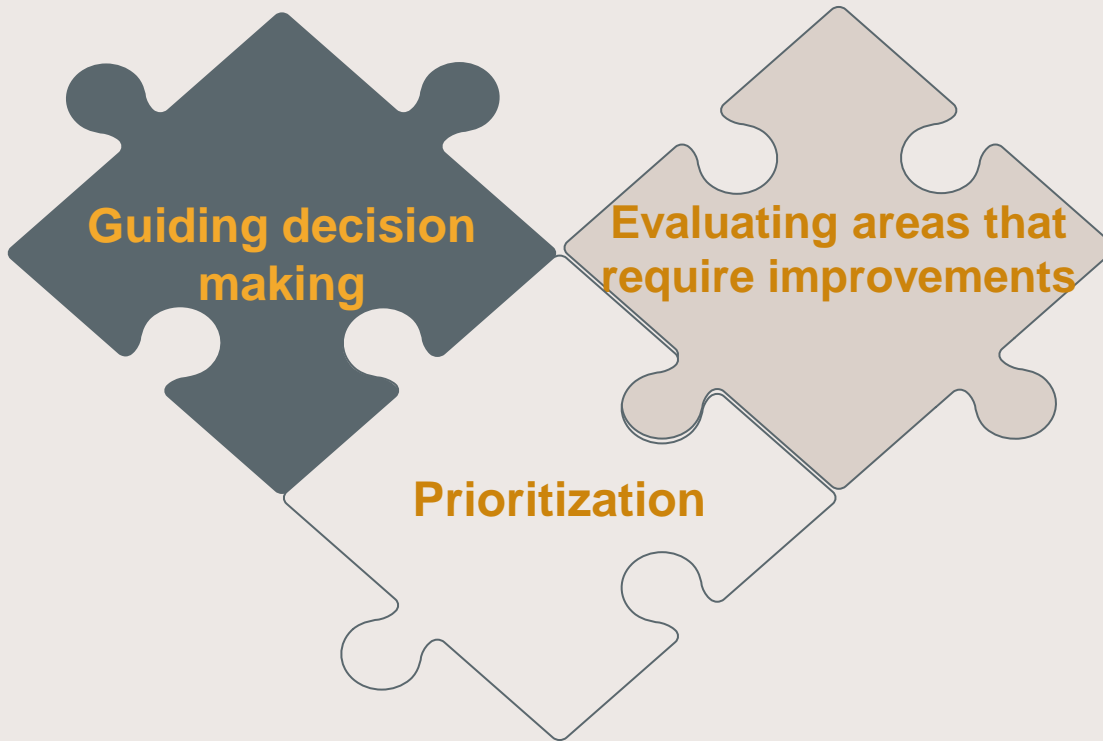
How can you use the tool?



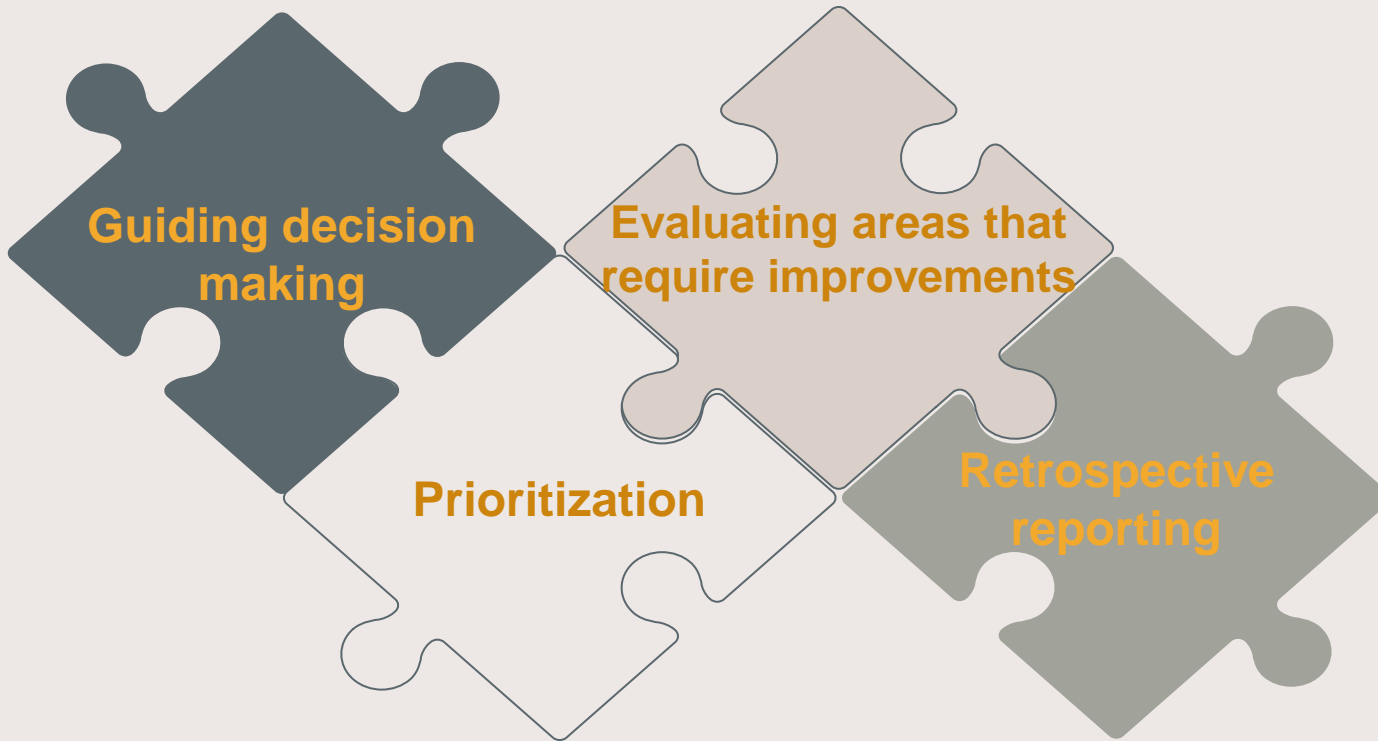
How can you use the tool?



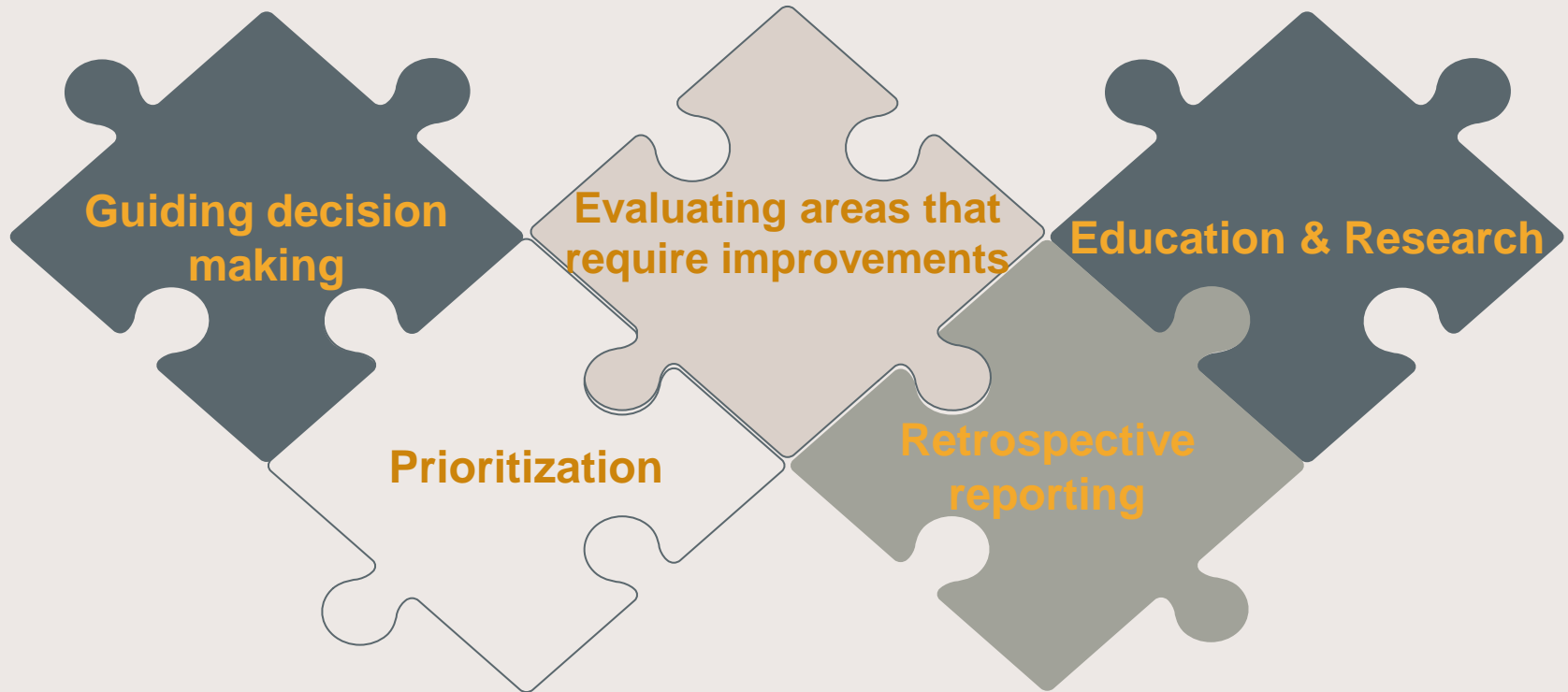
How can you use the tool?



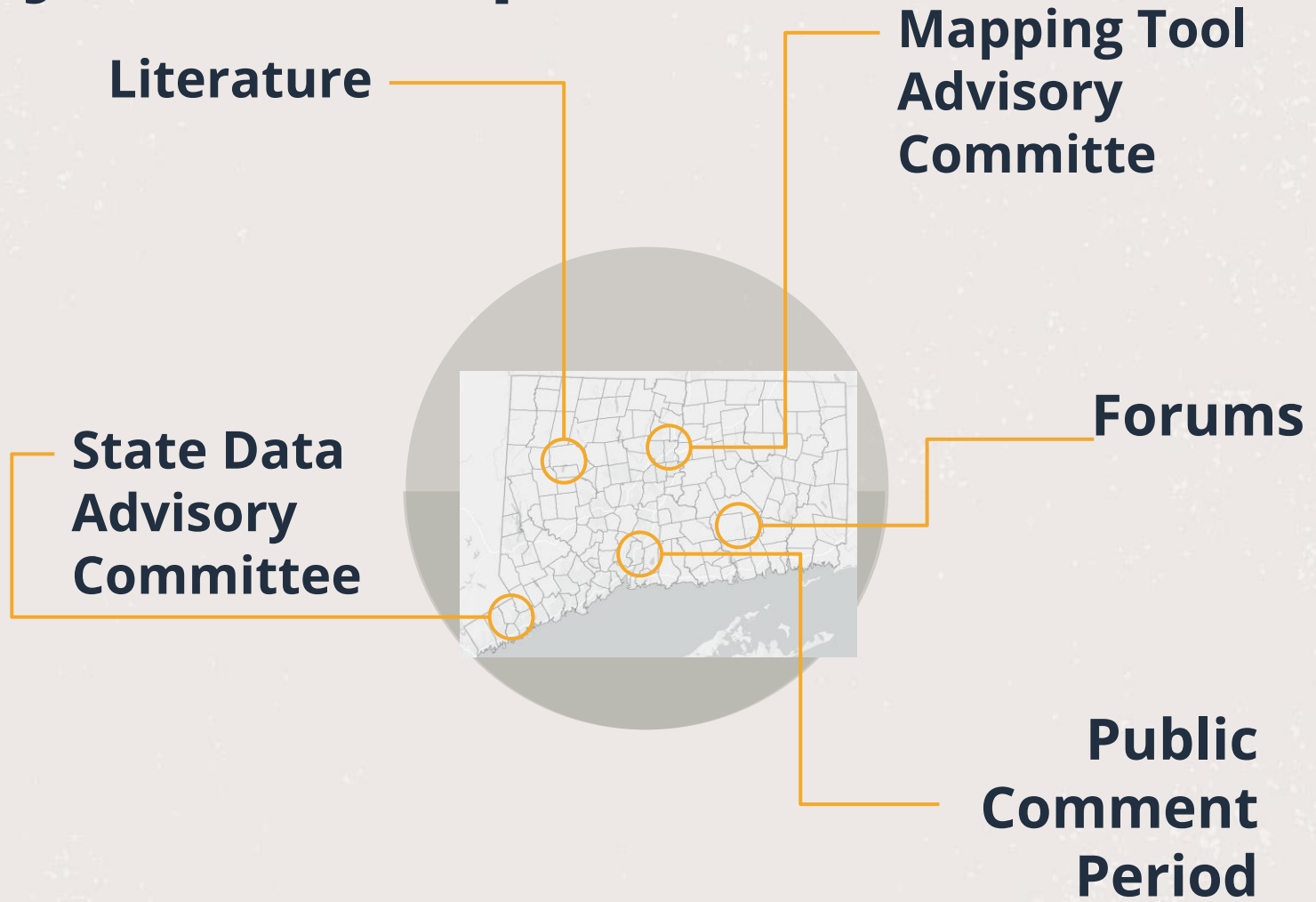
How can you use the tool?



How can you use the tool?



Project Development



State Data Advisory Committee (SDAC)

- Office of Policy & Management
- Department of Housing
- Yale Center on Climate Change & Public Health
- DataHaven
- Department of Economic and Community Development
- Department of Transportation
- Department of Public Health
- Department of Emergency Services and Public Protection
- Clean Air Association of the Northeast States (NESCAUM):
- Connecticut Data Collaborative

Mapping Tool Advisory Committee

- **Goal:** Fund organizations and individuals to advise on environmental justice mapping efforts for Connecticut
- **Members:** 2 organizations and 4 individuals
- **Eligibility:** Individuals with lived experience or representatives from community-based organizations (CBOs)
 - Operation Fuel
 - Groundwork Bridgeport
 - Individuals from Bridgeport, Windsor, New Haven, Hartford

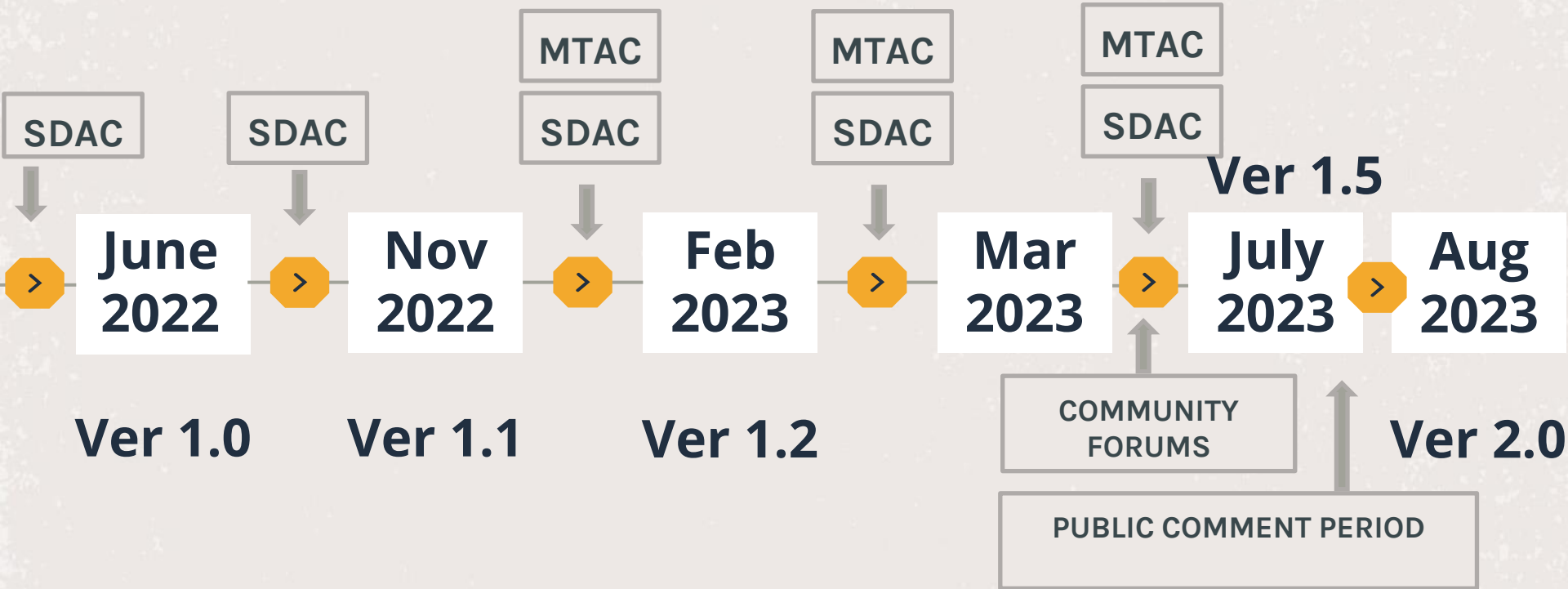




Forums

Bridgeport
Waterbury
Hartford
Groton
New Haven

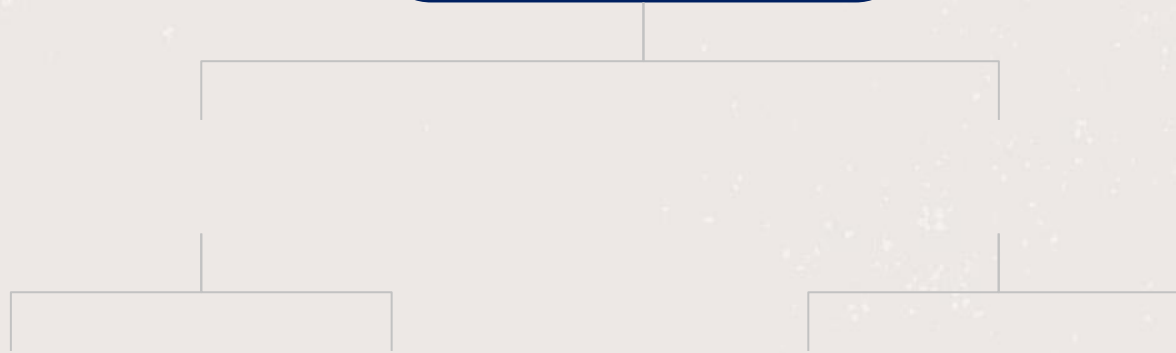
Project Timeline



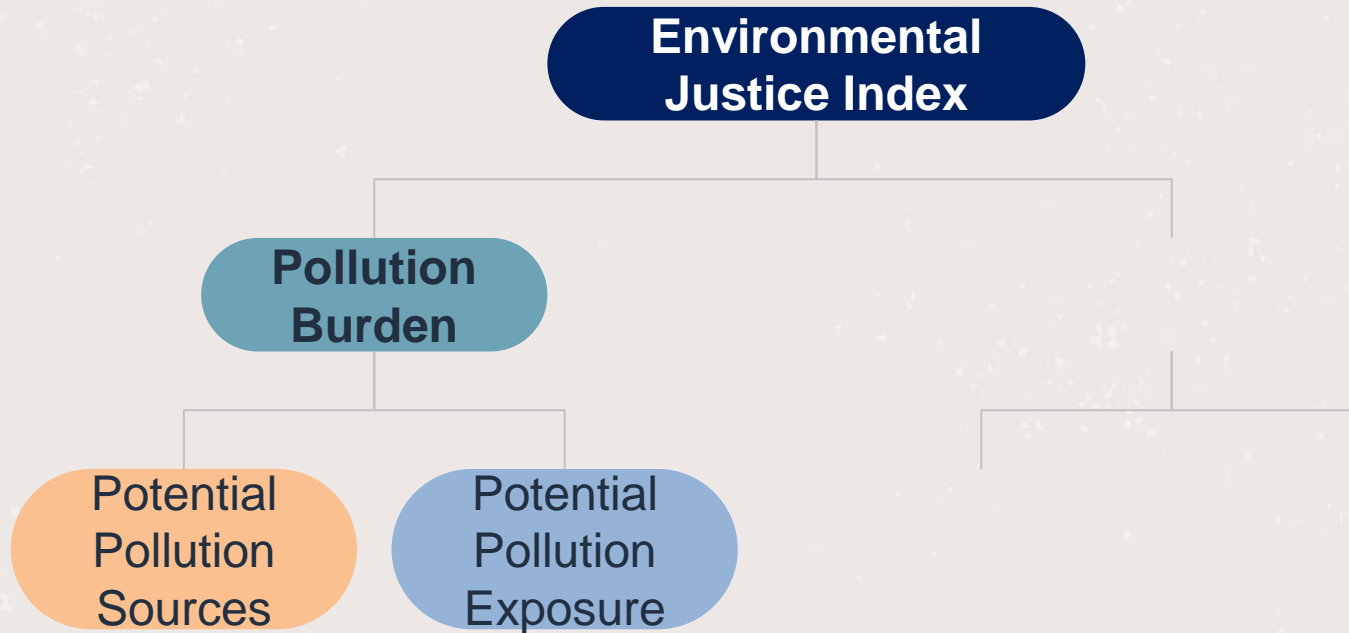
5 SDAC & MTAC meetings
5 Community Forums
5 Public Comment Period

Data Categorization

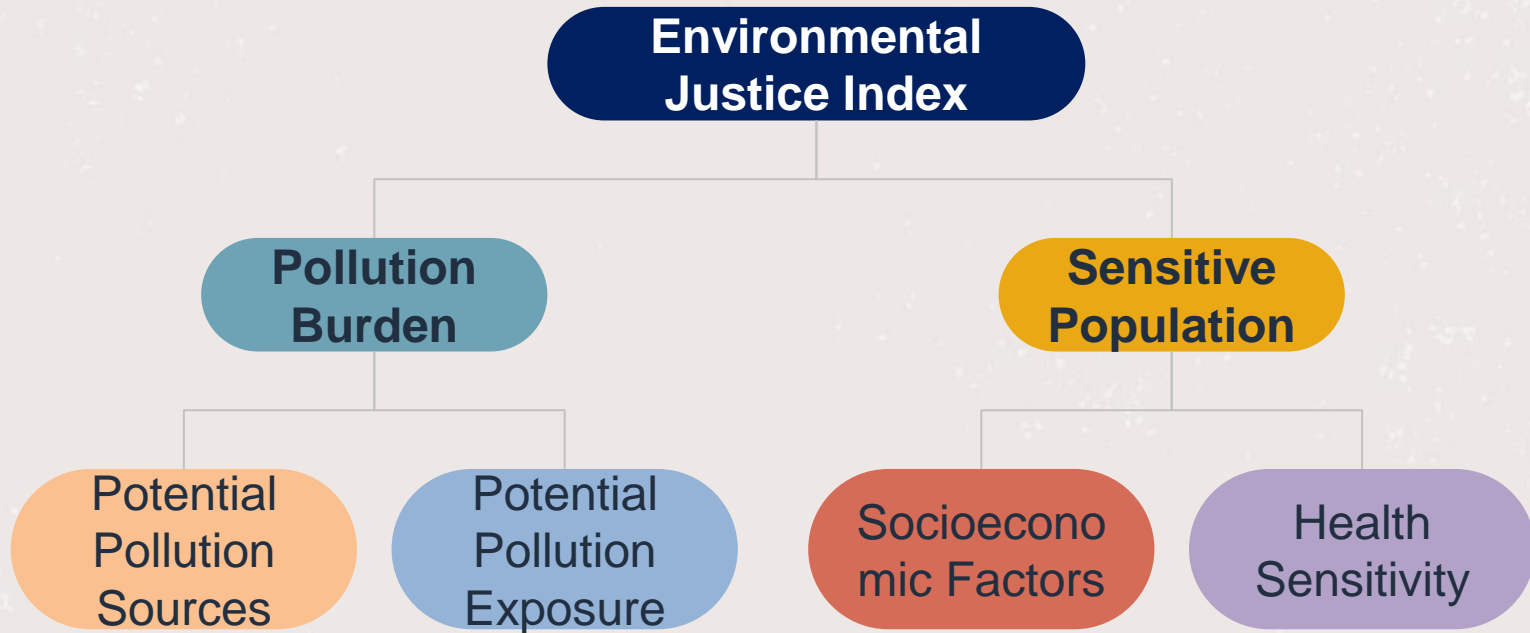
**Environmental
Justice Index**



Data Categorization

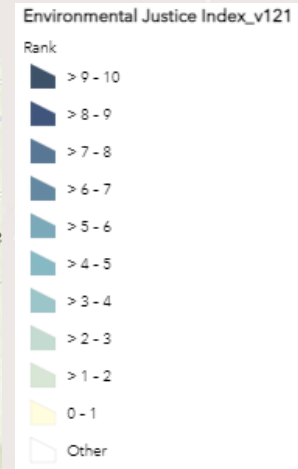
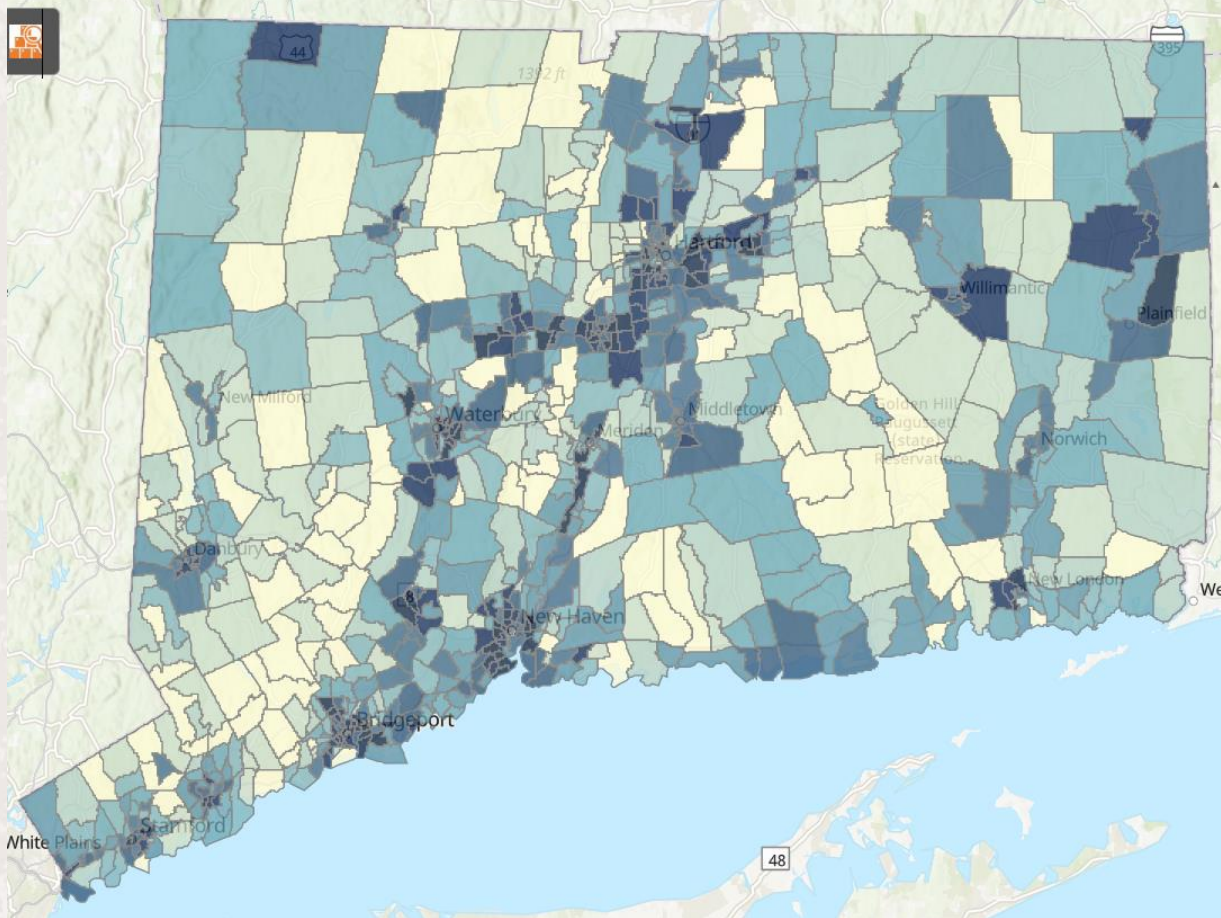


Data Categorization



Overall Score	Environmental Justice Index Score = Pollution Burden x Sensitive Populations			
Composite Category	Pollution Burden $\frac{\text{average}(PPS) + 0.5 \times \text{average}(PPE)}{1.5}$		Sensitive Populations $\frac{\text{average}(SF) + \text{average}(HS)}{2}$	
Category	<i>Potential Pollution Sources (PPS)</i>	<i>Potential Pollution Exposure (PPE)</i>	<i>Socioeconomic Factors (SF)</i>	<i>Health Sensitivity (HS)</i>
Indicator	<ul style="list-style-type: none"> • Brownfield sites • Proximity to Superfund Sites • Impervious Surfaces • Incinerators • Landfills • Housing Lead Risk • Municipal Transfer Stations • Potentially Contaminated/Clean-Up Sites • Recycling Processing Facilities • Significant Environmental Hazards • Underground Storage Tanks • Facilities Managing Hazardous Chemicals • Wastewater Discharges 	<ul style="list-style-type: none"> • Diesel PM Emissions • Noise • Ozone • Particulate Matter 2.5 • Toxic Releases from Facilities • Major Sources of Air Pollution • Minor Air Pollution Sources • Minor Air Pollution Facilities • Traffic Density 	<ul style="list-style-type: none"> • Housing Burden • Linguistic Isolation • Poverty levels • Unemployment • Race/Ethnicity • Educational Attainment • Median Income • Population Age < 5 • Population Age > 65 • No Health Insurance • Mobile Homes • Multi-unit Housing • Rent-ownership Ratio • Public Transportation Use • Single Parent Households • Food Insecurity 	<ul style="list-style-type: none"> • Asthma Emergency Dept. Visit Rate • Cardiovascular Disease Mortality Rate • Emergency Dept. Visits for Chronic Lung Disease • Childhood Elevated Lead Levels • Diabetes Mortality Rates • Population with Disability • Emergency Dept. visits from Heat Stress • Low Birthweight Rate of Infants • Declined Mental Health • Depression Rates • EPA Cancer Risk • EPA Respiratory Hazard Risk

CT EI Index ver 1.2



Composite representation

- Pollution is accumulated in major cities and highway line
- Population characteristics are dominant on the east

Connect



<https://connecticut-environmental-justice.circa.uconn.edu/>

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Connecticut Environmental Justice Mapping Tool

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Thank you!

Do you have any questions?

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