



# **CLIMATE AND ECONOMIC JUSTICE SCREENING TOOL (CEJST) USER GUIDE**

A brief guide designed to assist  
with data collection for grant  
applications and reporting  
using the CEJST tool

**EPA PREPARED: Building evidence-based tools  
to integrate community experiences**

**September 2024**

## ABOUT THIS GUIDE

This document is developed by the “EPA PREPARED: Building evidence-based tools to integrate community experiences” project under the U.S. Environmental Protection Agency cooperative agreement for Promoting Readiness and Enhancing Proficiency to Advance Reporting and Data.

The guide serves as a resource on navigating EPA’s Climate and Economic Justice Screening Tool to collect socioeconomic, environmental, public health, and other community data to be used for grant applications and reporting. The guide provides an abbreviated summary of the main steps of using the online mapping tool, focusing on data collection for grant narratives and reports.

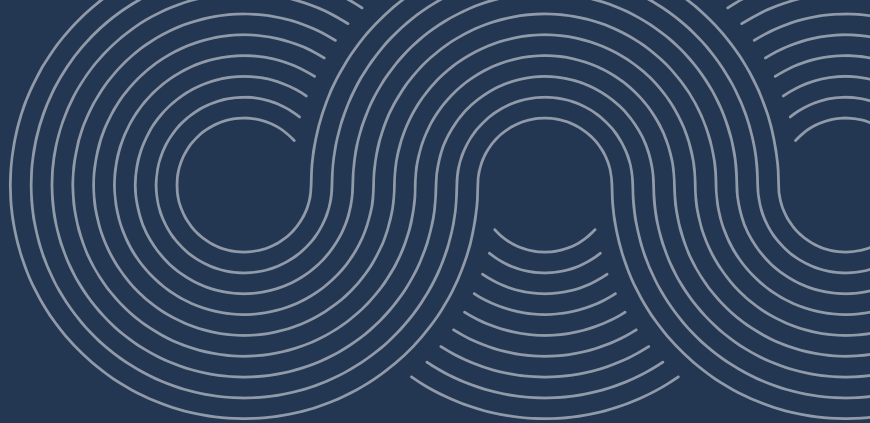
### **Electronic Access**

The document is electronically available at the UMass Dartmouth EPA PREPARED website: <https://epaprepared.sites.umassd.edu/>

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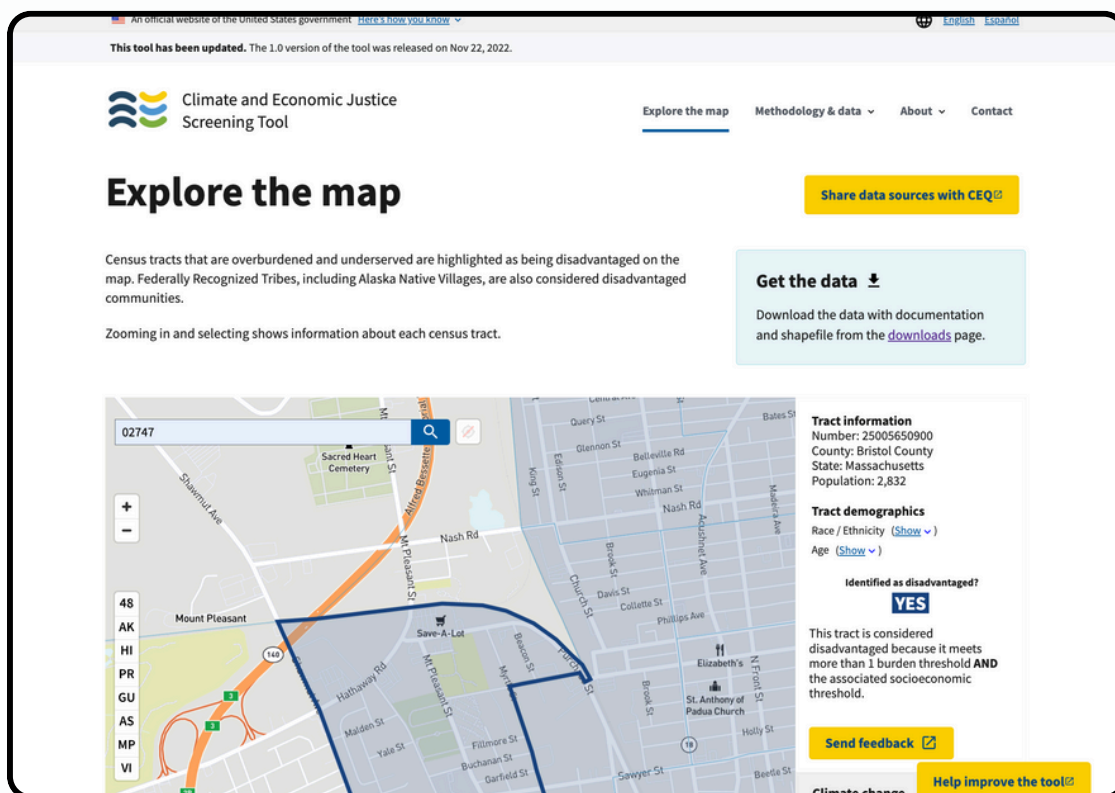
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## 1. Introduction

The Climate and Economic Justice Screening Tool (CEJST) is an interactive map developed by the Council on Environmental Quality (CEQ) under the Executive Order 14008 to identify communities that are disproportionately affected by burdens related to climate change, energy, health, housing, legacy pollution, transportation, water and wastewater, and workforce development.

**To access the CEJST tool, visit the website:**


<https://screeningtool.geoplatform.gov>

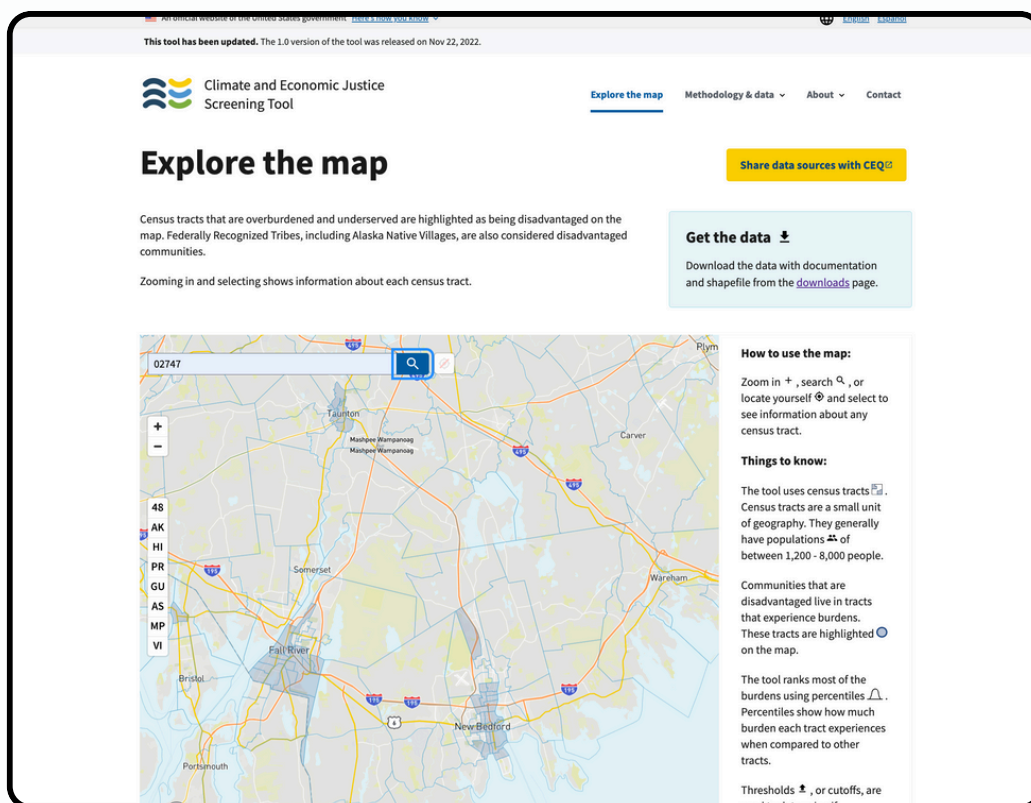




## 2. Explore the Map

Under the **Explore the Map** feature, you may find census tracts that experience burdens and are identified as disadvantaged, highlighted in grey.

To search for a specific location, use the search bar located at the top of the map. Type in the location (as address, city, state or ZIP code) and click the  icon to zoom in on the specific area. Once the location is selected, you can click on the highlighted census tracts to access detailed information about the community's burdens under the eight categories of climate change, energy, health, housing, legacy pollution, transportation, water and wastewater, and workforce development.



### 3. Methodology & Data

The CEJST methodology is designed to identify and prioritize disadvantaged communities burdened by environmental, health, transportation, infrastructure, and socioeconomic challenges. A combination of datasets from U.S. Census, Federal Emergency Management Agency (FEMA), Department of Energy, Centers for Disease Control and Prevention (CDC), Department of Housing and Urban Development (HUD), and others is utilized to highlight communities facing significant risks, such as exposure to pollution, climate change impacts, and socio-economic hardships.

CEJST's methodology highlights **disadvantaged census tracts** across all the U.S. states, the District of Columbia, and the U.S. territories based on the following criteria:

- Census tracts that meet the thresholds for at least one of burden categories, and specifically, they are:
  - a. **At or above the threshold for one or more environmental, climate, or other burdens, and**
  - b. **At or above the threshold for a socioeconomic burden (low-income or other socioeconomic variable)**
- Or, communities within the boundaries of Federally Recognized Tribes

In addition, a census tract that is completely surrounded by disadvantaged communities and is at or above the 50% percentile for low income is also considered disadvantaged.

## CEJST Parameters

CEJST identifies burdens related to eight (8) categories with the associated parameters summarized in the following table:

### Climate Change

- Expected agriculture loss rate
- Expected building loss rate
- Expected population loss rate
- Projected flood risk
- Projected wildfire risk

### Energy

- Energy costs
- Particulate matter of 2.5 micrometers or less (PM 2.5) in the a

### Health

- Asthma
- Diabetes
- Heart disease
- Low life expectancy

### Housing

- Historic underinvestment
- Housing cost
- Lack of green space
- Lack of indoor plumbing
- Lead paint

### Legacy Pollution

- Abandoned mine land present
- Formerly Used Defense Site (FUDS) present
- Proximity to hazardous waste facilities
- Proximity to Superfund or National Priorities List (NPL) sites
- Proximity to Risk Management Plan (RMP) sites

## CEJST Parameters

### Transportation

- Diesel particulate matter
- Transportation barriers
- Traffic proximity and volume

### Water and Wastewater

- Underground storage tanks and releases
- Wastewater discharge

### Workforce Development

- Linguistic isolation
- Low median income
- Poverty
- Unemployment

## Thresholds

The abovementioned parameters are reflected as percentiles for each variable and compared to **two thresholds**:

**90th percentile for the majority of environmental, health, transportation and infrastructure parameters.\***  
The census tracts are flagged if they are at or above the 90th percentile compared to the nation



**65th percentile for the main socioeconomic variable of low income populations.** The census tracts are flagged if they are at or above the 65th percentile compared to the nation

\*Parameters not reported as a percentile but defined as a Yes/No parameter include historic underinvestment, presence of abandoned mine land and presence of formerly Used Defense Sites (FUDS).

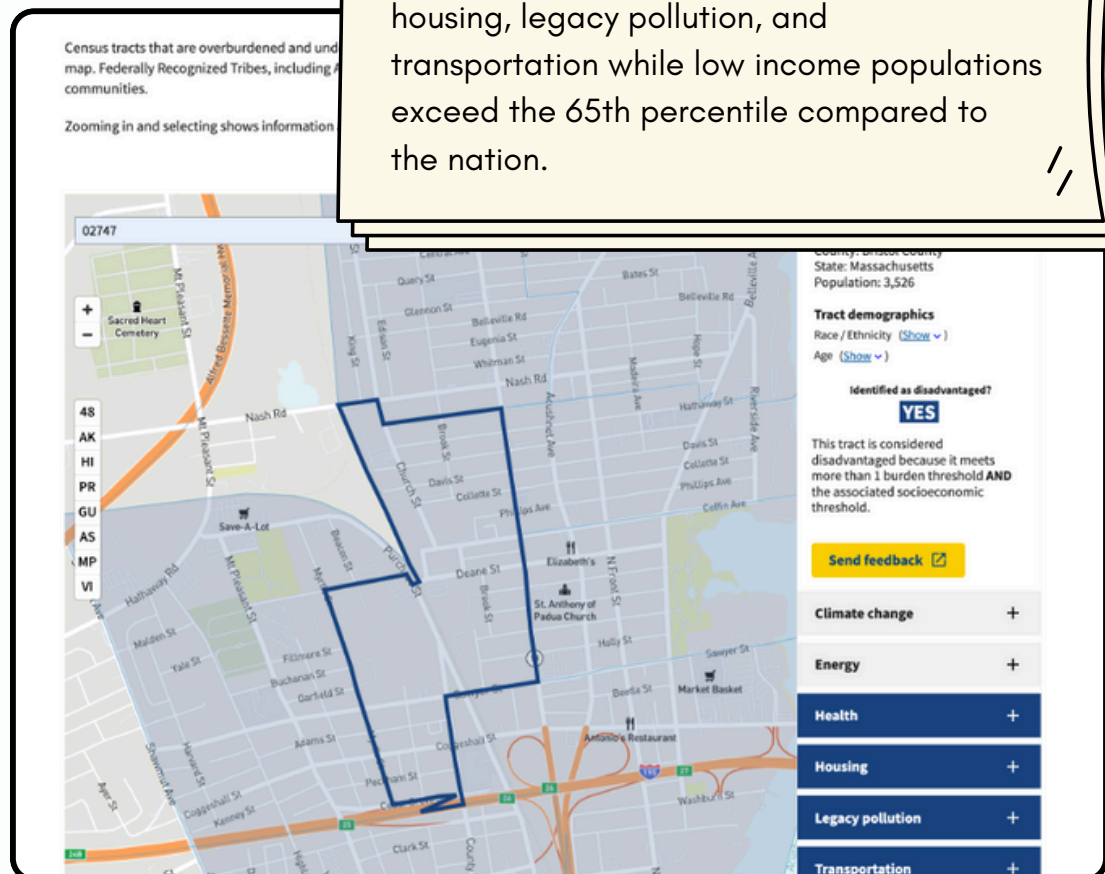
### Note

**90th Percentile Explanation:** A census tract which ranks at the 90th percentile for a parameter has a higher prevalence of that parameter compared to the 90% of all other census tracts across the nation. In other words, this tract falls within the top 10% for that parameter, indicating a relatively high level compared to most other areas.

#### 4. Identifying Disadvantaged Census Tracts

Census tracts that are overburdened and underserved are highlighted as disadvantaged on the map based on CEJST's methodology. When zooming in and selecting specific census tracts, detailed information is displayed on the right, such as the tract number, county, state, and population. Demographics including race/ethnicity and age are also displayed as Show/Hide menus.

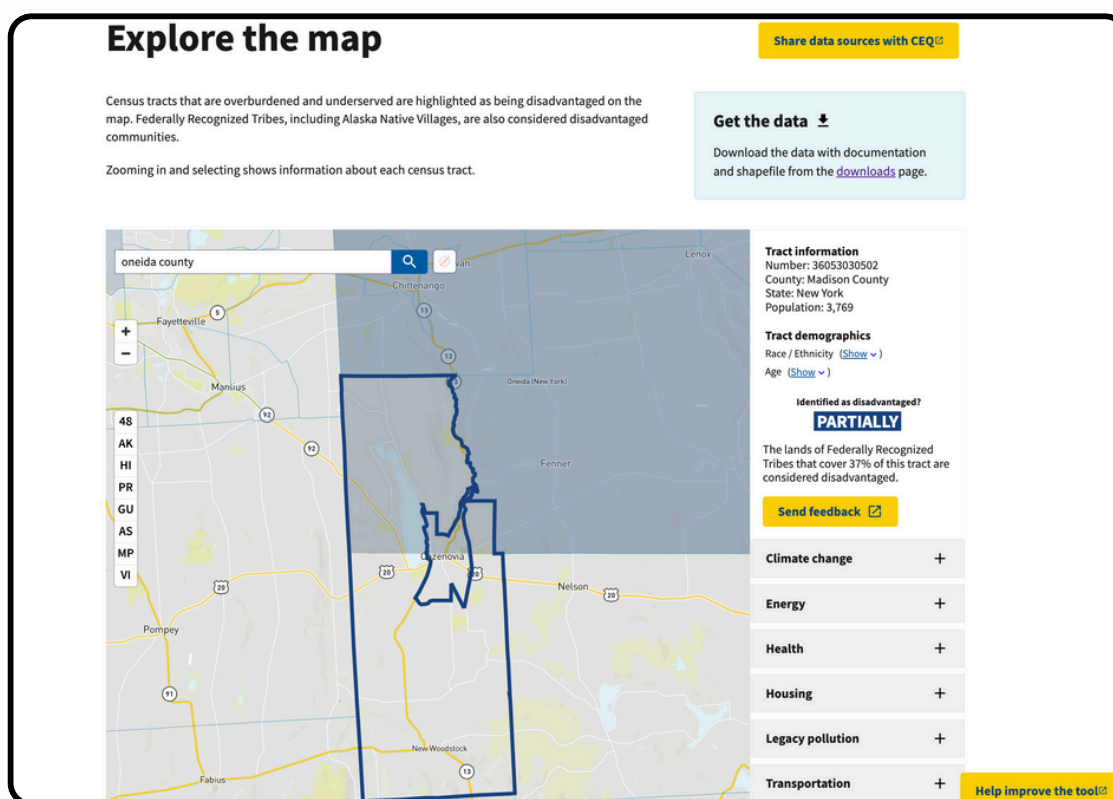
In the example below, the tract is identified as disadvantaged because it meets more than one burden threshold under health, housing, legacy pollution, and transportation while low income populations exceed the 65th percentile compared to the nation.





## 5. Tribal Lands & Partially Disadvantaged Tracts

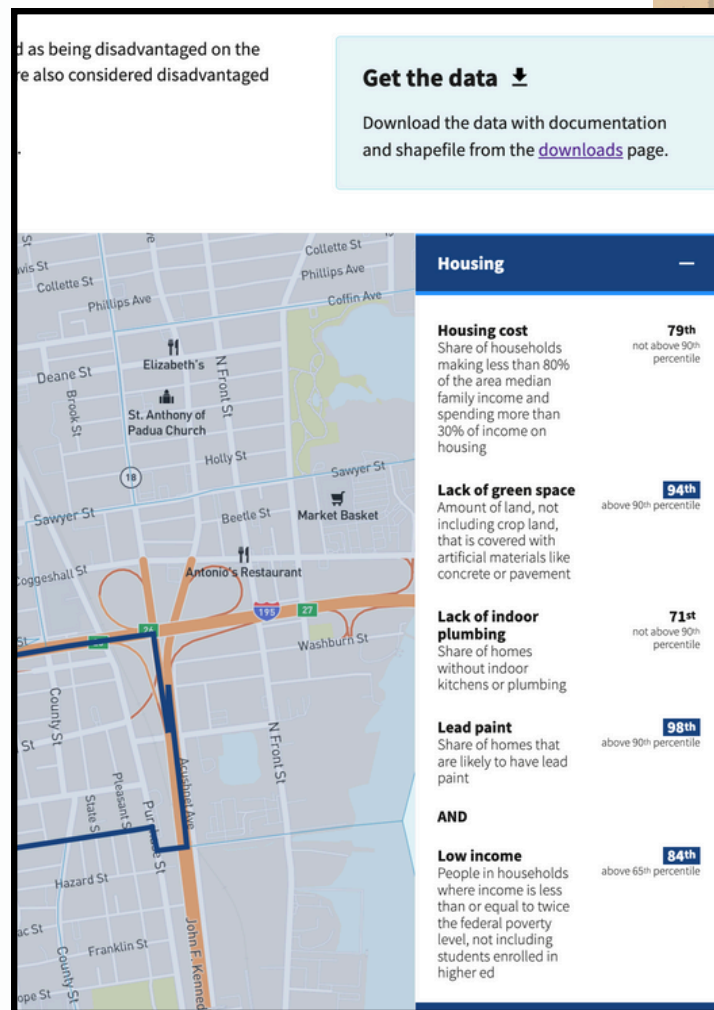
Census tracts that include areas within Federally Recognized Tribal lands are, in some cases, classified as partially disadvantaged. In these cases, the portions of the tract that encompass Tribal lands meet one of the criteria for being considered disadvantaged. The tool labels such tracts as "Partially disadvantaged," indicating that the designation applies only to the specific areas within the tract that overlap with Tribal lands.





## 6. Example 1 - Housing Burdens

In the example below, the census tract is designated as disadvantaged as it exceeds the threshold (90th percentile) under the housing burden for lack of green space and lead paint, and the threshold (65th percentile) for low-income populations.



**Housing Costs** - a 79th percentile indicates a significant share of households in this area that spend more than 30% of their income on housing. This suggests a housing cost burden for residents but it does not exceed the threshold of the 90th percentile

**Lack of Green Space** - A 94th percentile indicates that a large portion of the area is covered with artificial materials like concrete or pavement rather than natural green areas. The census tract is flagged under this category because it is exceeding the 90th percentile.

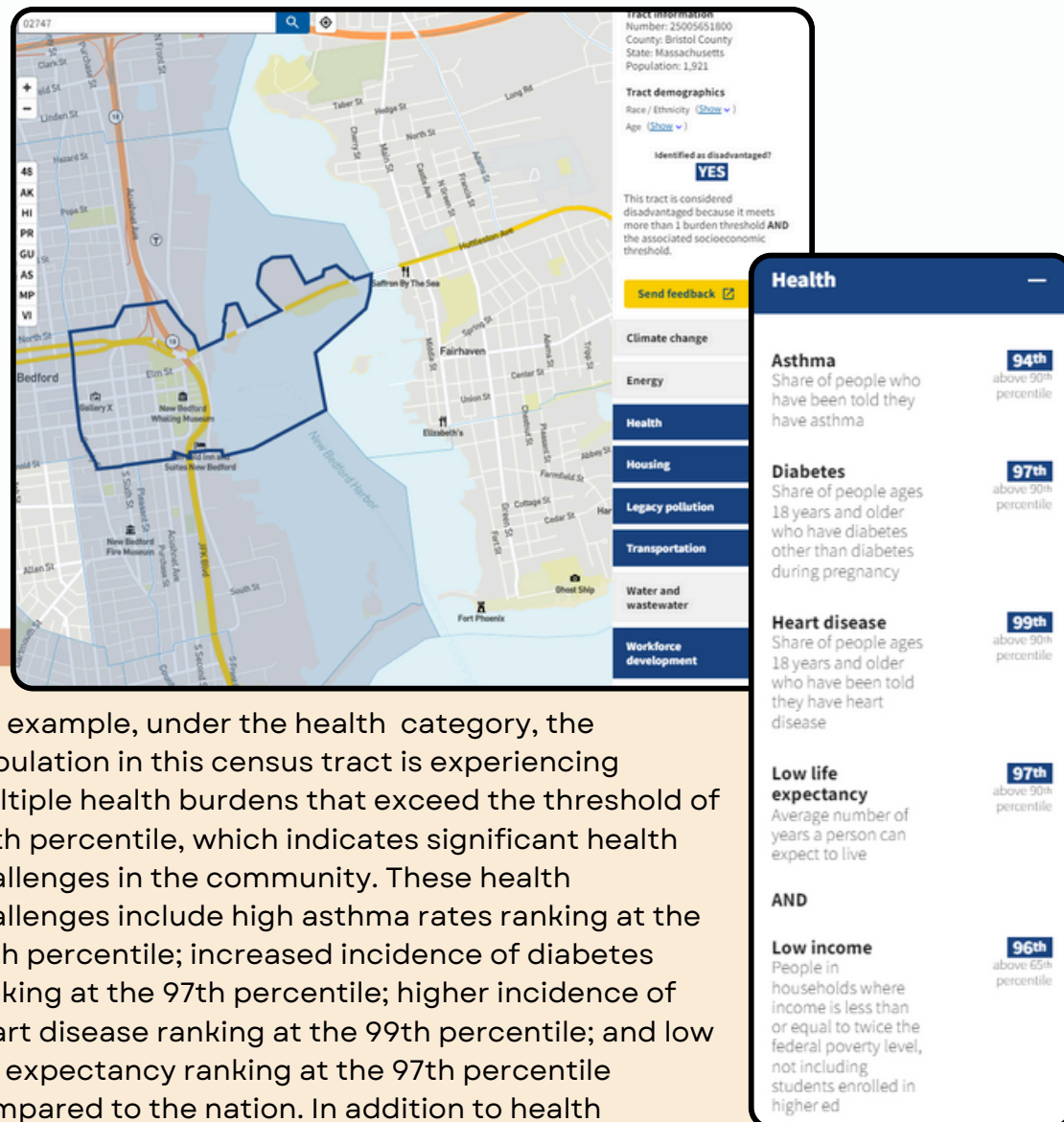
**Lack of Indoor Plumbing** - A 71st percentile highlights a high number of houses in the area without kitchens or indoor plumbing. Although there is a high number of households affected, the census tract is not flagged as it does not exceed the 90th threshold.

**Lead Paint** - The tract is flagged for lead paint as it ranks at the 98th percentile for homes with likely presence of lead paint, indicating an environmental health risk within this area.

**Low Income** - The census tract is at the 84th percentile for low income populations which exceeds the threshold of the 65th percentile for socioeconomic burdens.

## 7. Example 2 - Identifying Multiple Indicators

This map highlights a census tract which is identified as disadvantaged due to exceeding the threshold for multiple burdens and the associated socioeconomic threshold.



For example, under the health category, the population in this census tract is experiencing multiple health burdens that exceed the threshold of 90th percentile, which indicates significant health challenges in the community. These health challenges include high asthma rates ranking at the 94th percentile; increased incidence of diabetes ranking at the 97th percentile; higher incidence of heart disease ranking at the 99th percentile; and low life expectancy ranking at the 97th percentile compared to the nation. In addition to health burdens, the community also has a high percentage of low-income populations which ranks at the 96th percentile when compared to the nation.

