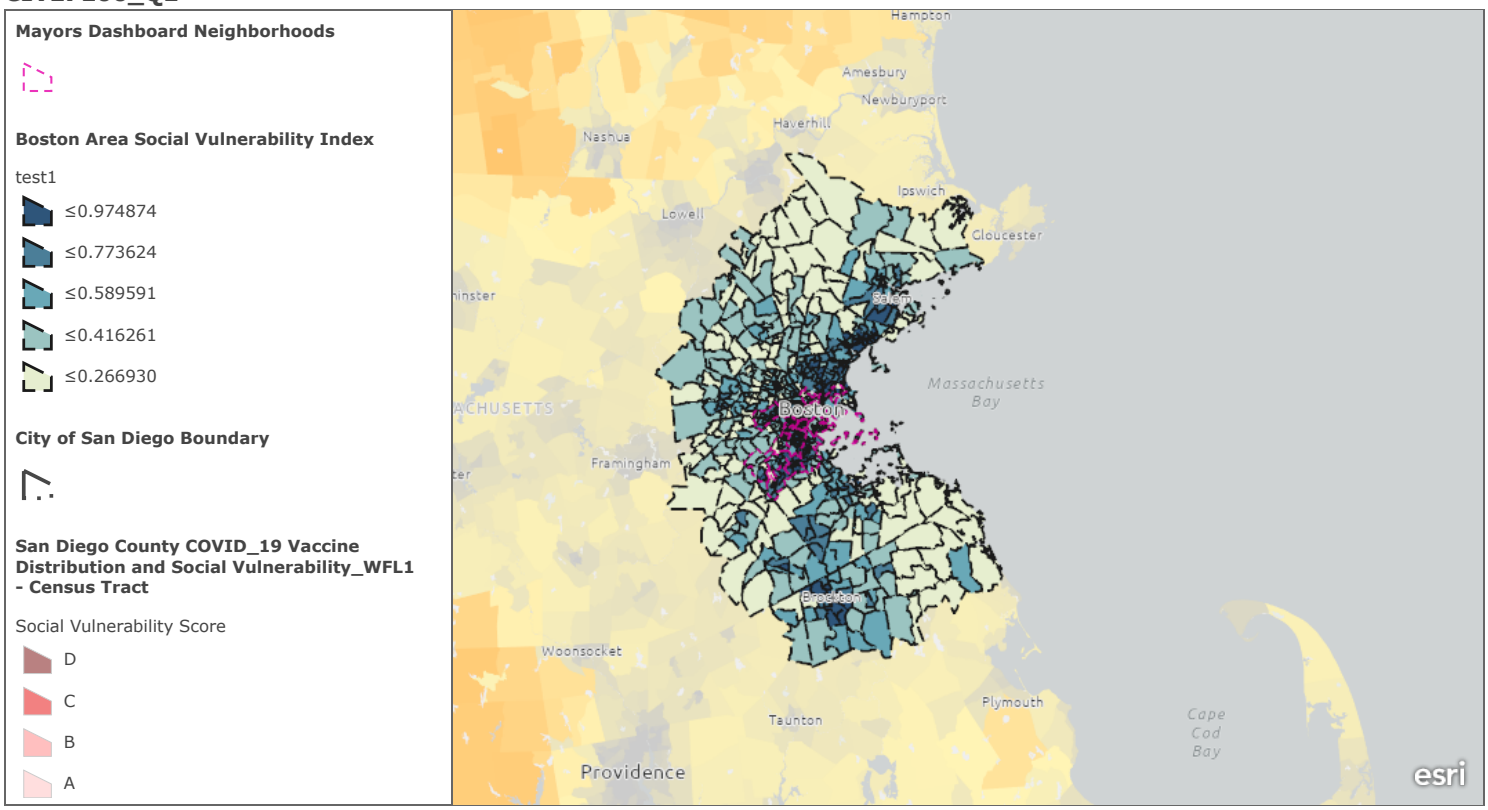
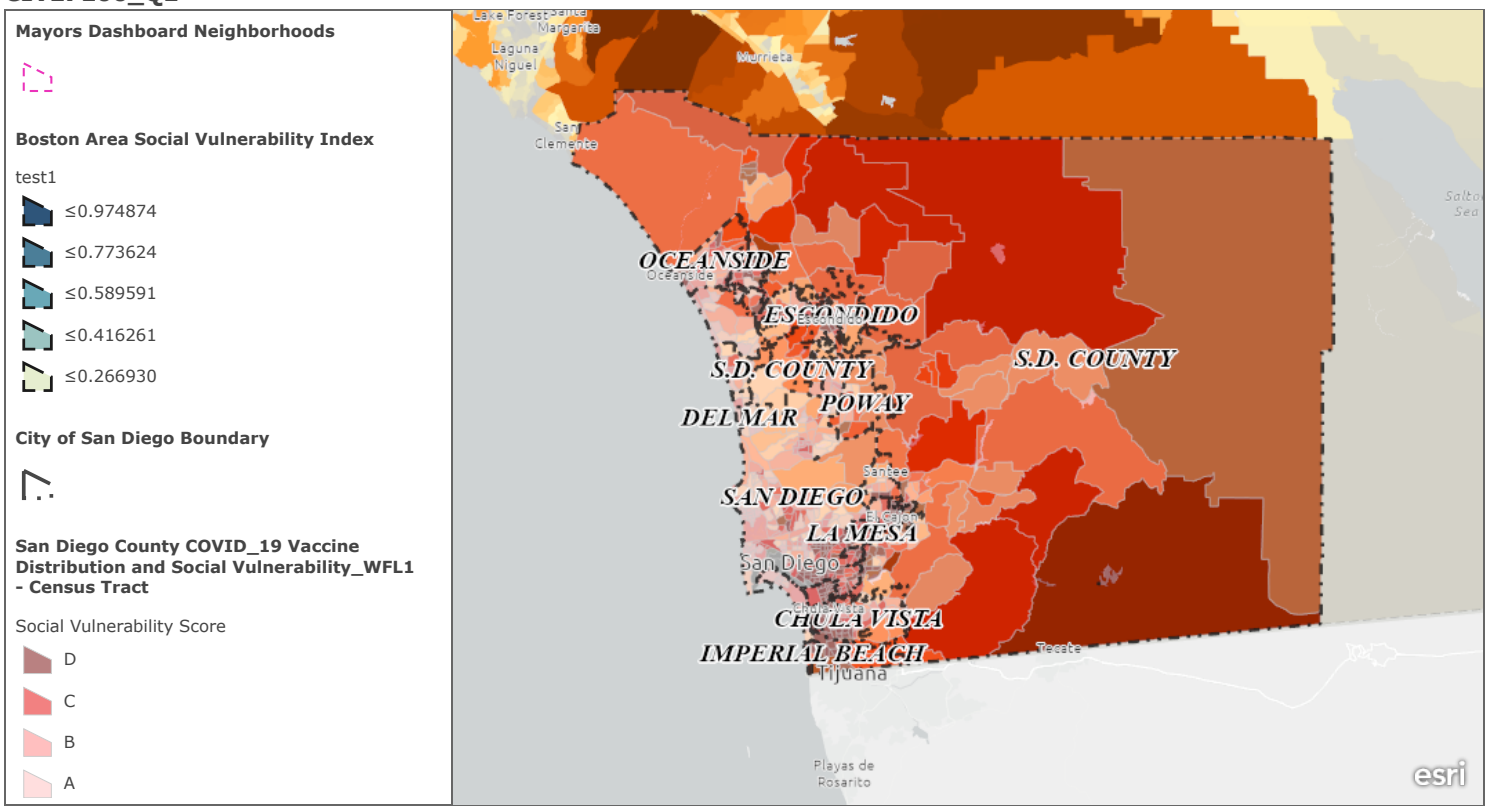
CIVE7100_Q1



Hazard map due to wildfires for Boston and San Diego

Seismic Hazards Progam, California Geological Survey, California Department of Conservation | CDC/ATSDR/Division of Toxicology and Human Health Sciences/Geospatial Research, Analysis & Services Program | Esri Canada, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS | Esri Canada, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS

CIVE7100_Q1



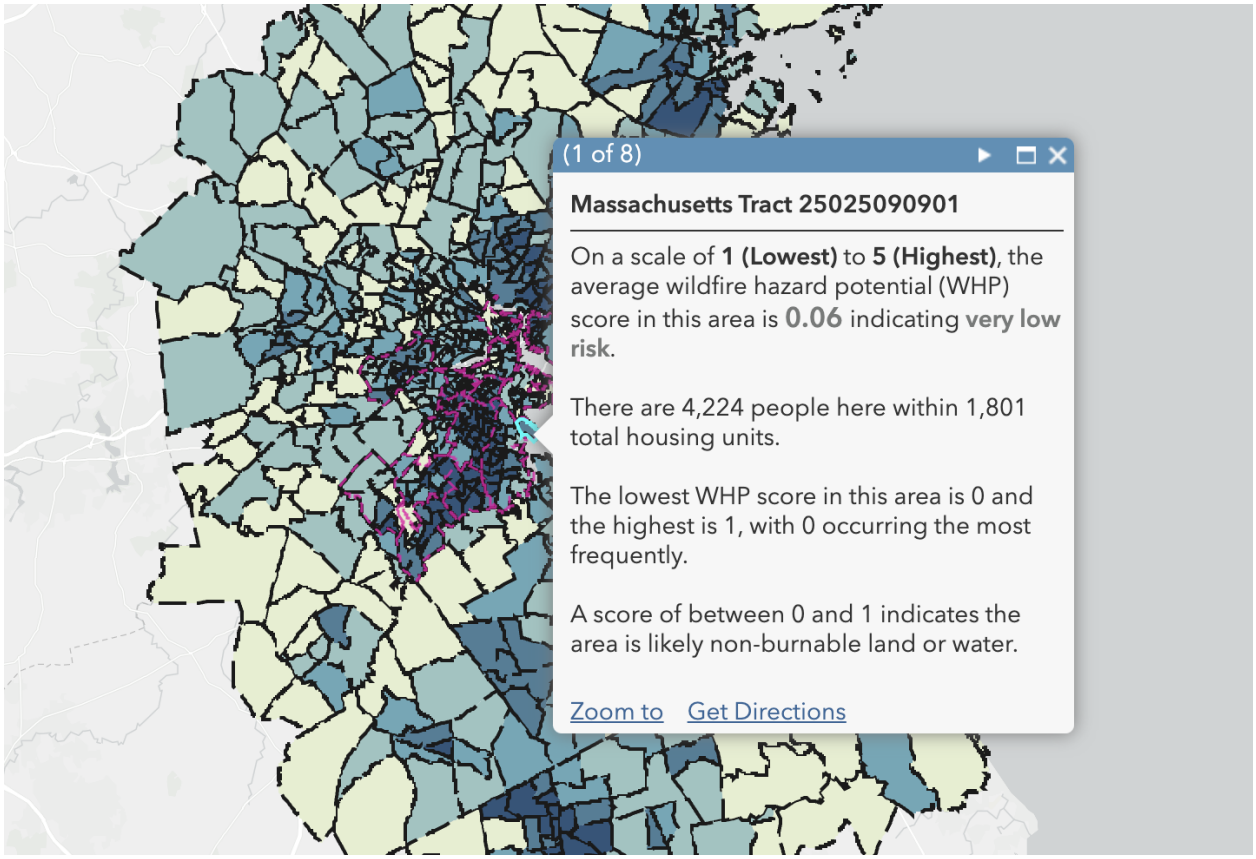
Hazard map due to wildfires for Boston and San Diego

Seismic Hazards Progam, California Geological Survey, California Department of Conservation | CDC/ATSDR/Division of Toxicology and Human Health Sciences/Geospatial Research, Analysis & Services Program | SanGIS, California State Parks, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, Bureau of Land Management, EPA, NPS | SanGIS, California State Parks, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, Bureau of Land Management, EPA, NPS

Examples of Hazard risk (wildfire hazard) and SVI for both cities

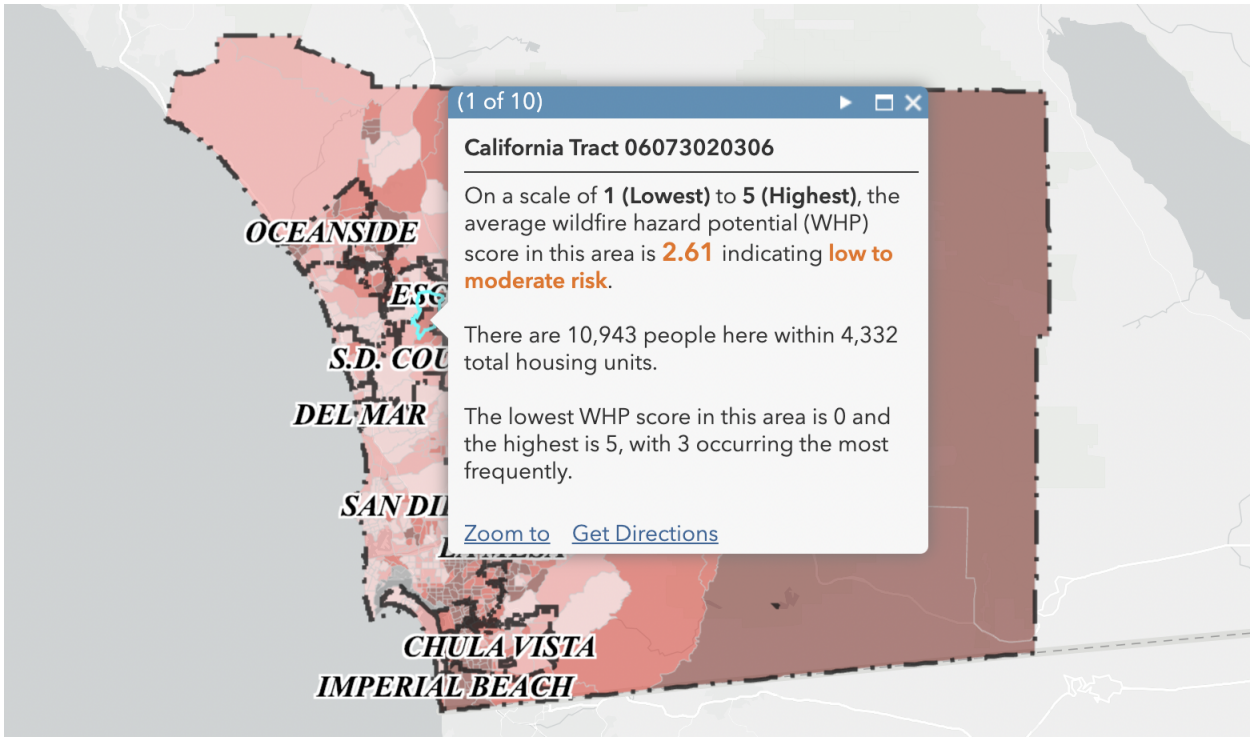
Hazard risk:

Boston:



Boston is very less prone to wildfire hazards.

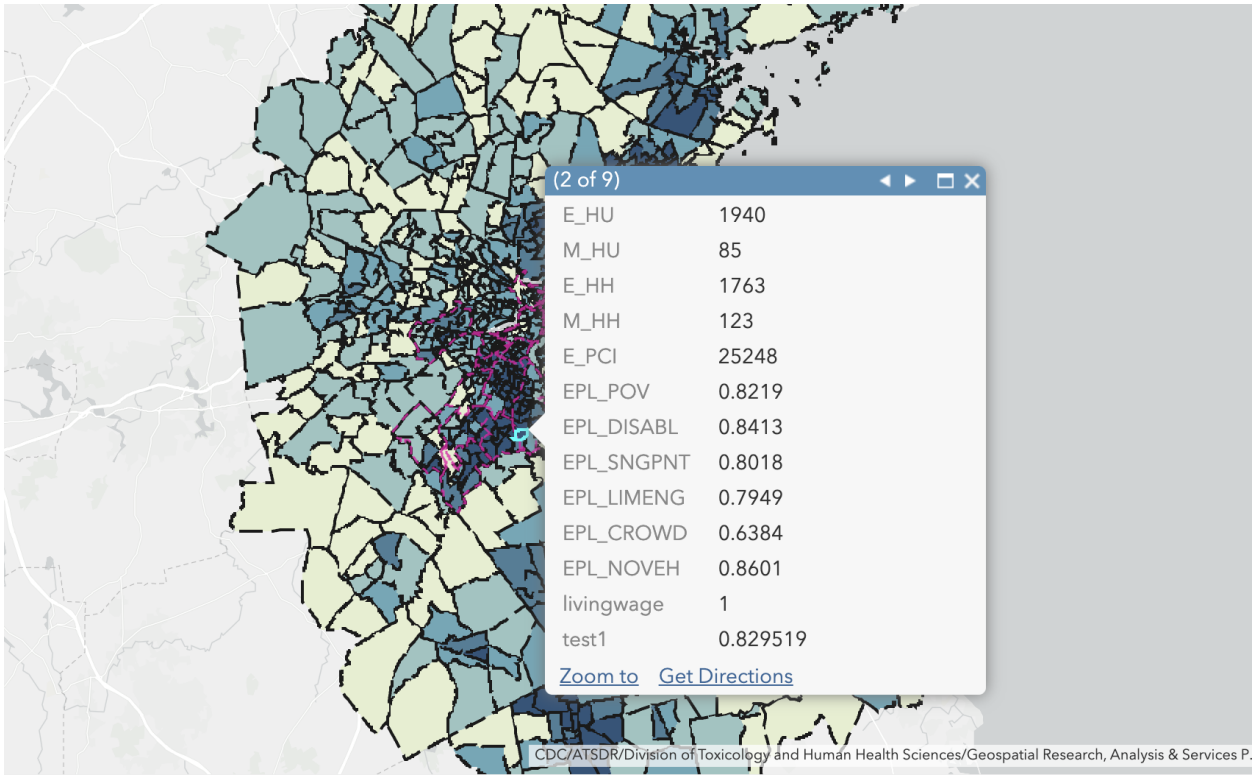
San Diego:



San Diego shows a higher wildfire hazard potential. This was expected because the state of California is known to be prone to serious wildfires as opposed to the east coast states.

Social Vulnerability Index:

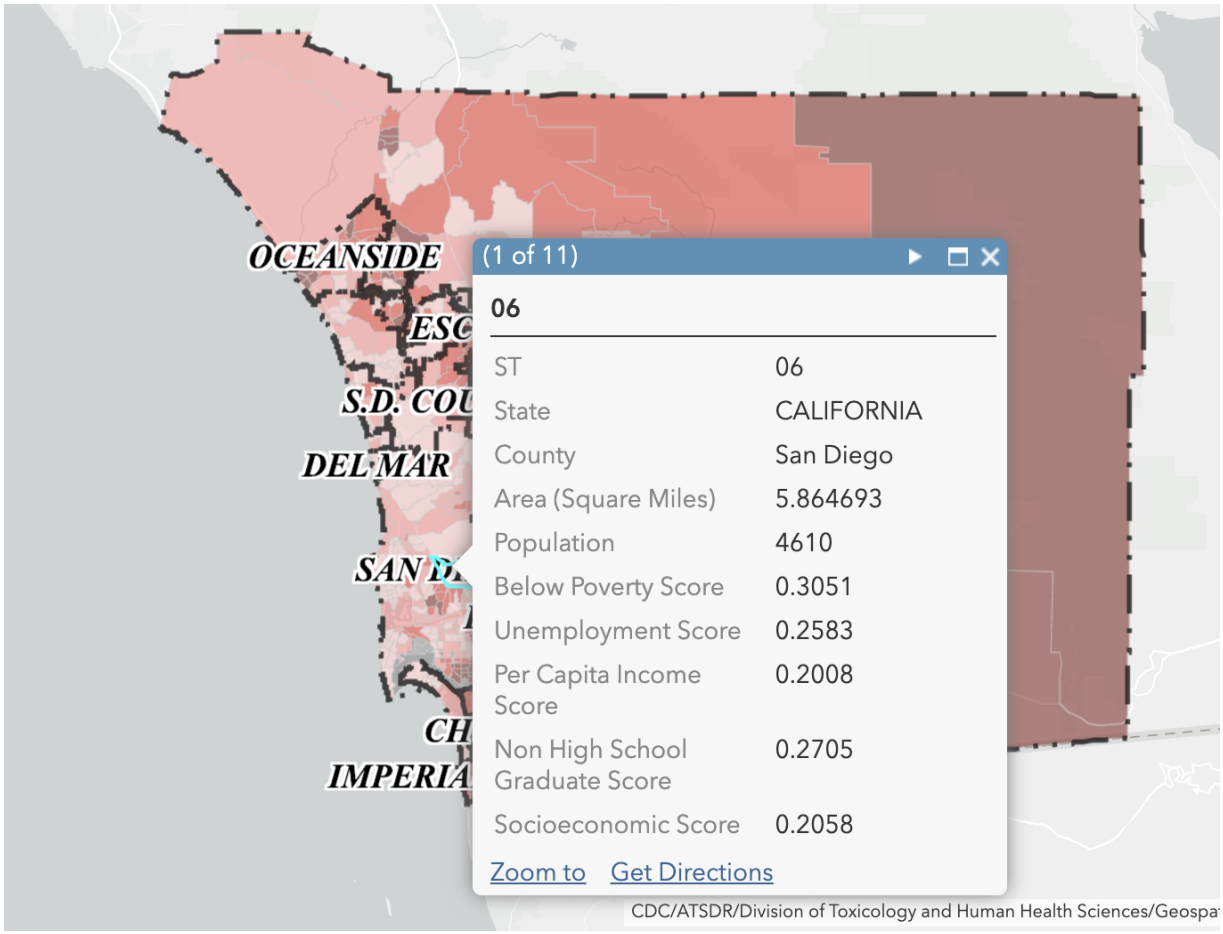
Boston:



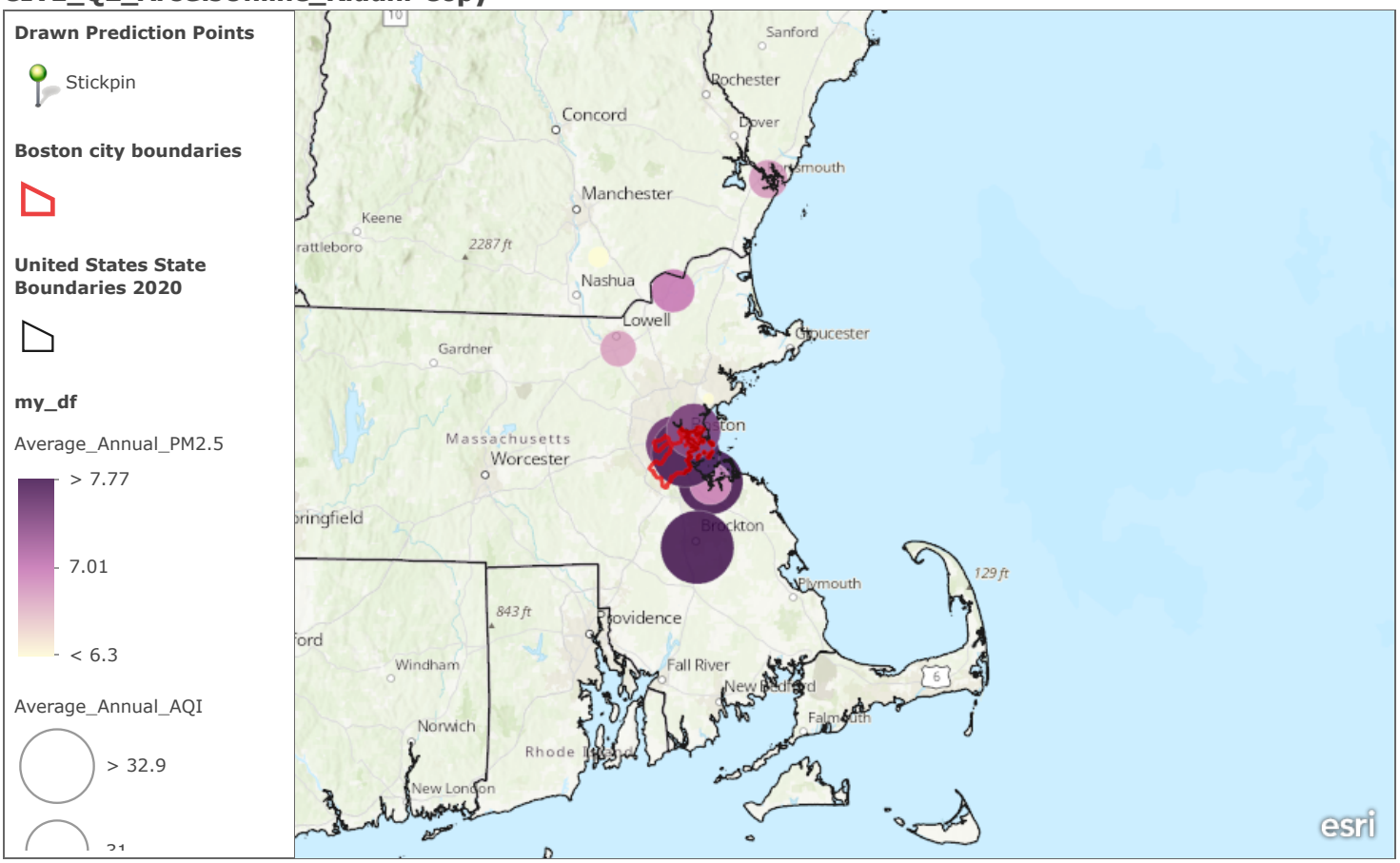
In the description above, the Boston Area SVI parameters are as follows-

1. **EPL_POV: Poverty level**
2. **EPL_DISABL: Disability**
3. **EPL_SNGPNT: Single Parent Household**
4. **EPL_LIMENG: Limited English**
5. **EPL_CROWD: Over occupied rooms**
6. **EPL_NOVEH: Access to vehicle.**

San Diego:


OCEANSIDE
DEL MAR
IMPERIA
(1 of 11)
06
ST 06
State CALIFORNIA
County San Diego
Area (Square Miles) 5.864693
Population 4610
Below Poverty Score 0.3051
Unemployment Score 0.2583
Per Capita Income Score 0.2008
Non High School Graduate Score 0.2705
Socioeconomic Score 0.2058
Zoom to
Get Directions
CDC/ATSDR/Division of Toxicology and Human Health Sciences/Geospa

CIVE_Q2_ArcGisOnline_Riddhi-Copy

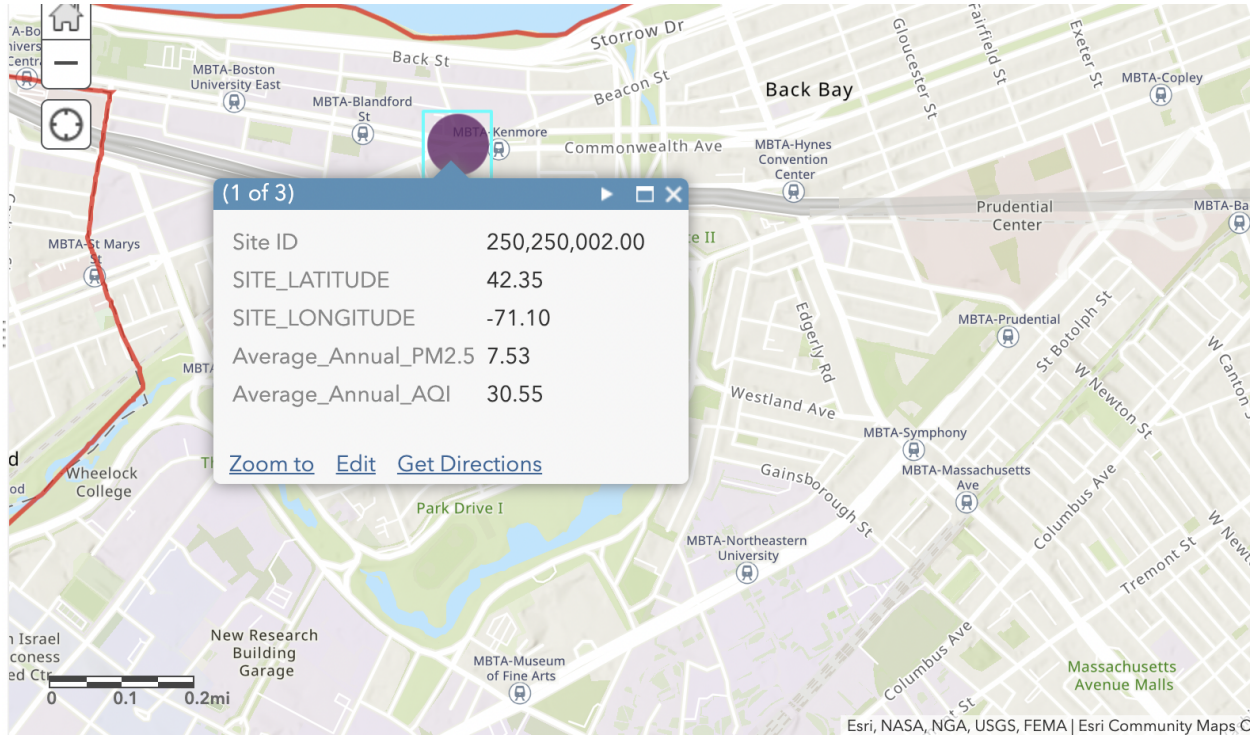


Esri, USGS | Esri Canada, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS

1. Comment on what you see in the map and if the areas with higher PM2.5 pollutant coincide with the areas of higher AQI:

From the visualization in the above page, we can see that wherever the average PM2.5 Pollution is higher (symbolized with darker colours), it is also seen that the average annual AQI is also higher (symbolized with bigger circles.)
The areas with higher PM2.5 are seen to coincide with areas of higher AQI.

2. Avg AQI and PM2.5 in Northeastern University:



The Average annual PM2.5 concentration = 7.53
Average annual AQI = 30.55