



Cape Cod Bridges Program

Bourne, Massachusetts

Appendix 4.9
EJScreen Community Report

SUBMITTED TO:
Secretary of Energy and Environmental Affairs
Executive Office of Energy and Environmental Affairs (EEA)
Massachusetts Environmental Policy Act (MEPA) Office
100 Cambridge Street, Suite 900
Boston, MA 02114

PROPONENT:
The Massachusetts Department of Transportation
Highway Division
10 Park Plaza
Boston, MA 02116

Submitted August 2025

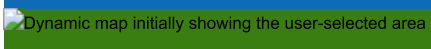
massDOT
Massachusetts Department of Transportation

EJScreen Community Report

This report provides environmental and socioeconomic information for user-defined areas, and combines that data into environmental justice and supplemental indexes.

5-mile DGA Report

the User Specified Area
Population: 52,936
Area in square miles: 136.00



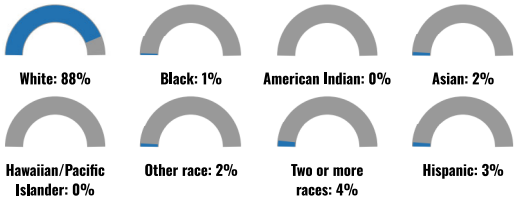
LANGUAGES SPOKEN AT HOME

LANGUAGE	PERCENT
English	93%
Spanish	2%
French, Haitian, or Cajun	1%
Other Indo-European	2%
Total Non-English	7%

COMMUNITY INFORMATION



BREAKDOWN BY RACE



BREAKDOWN BY AGE



LIMITED ENGLISH SPEAKING BREAKDOWN



Notes: Numbers may not sum to totals due to rounding. Hispanic population can be of any race.
Source: U.S. Census Bureau, American Community Survey (ACS) 2018-2022. Life expectancy data comes from the Centers for Disease Control.

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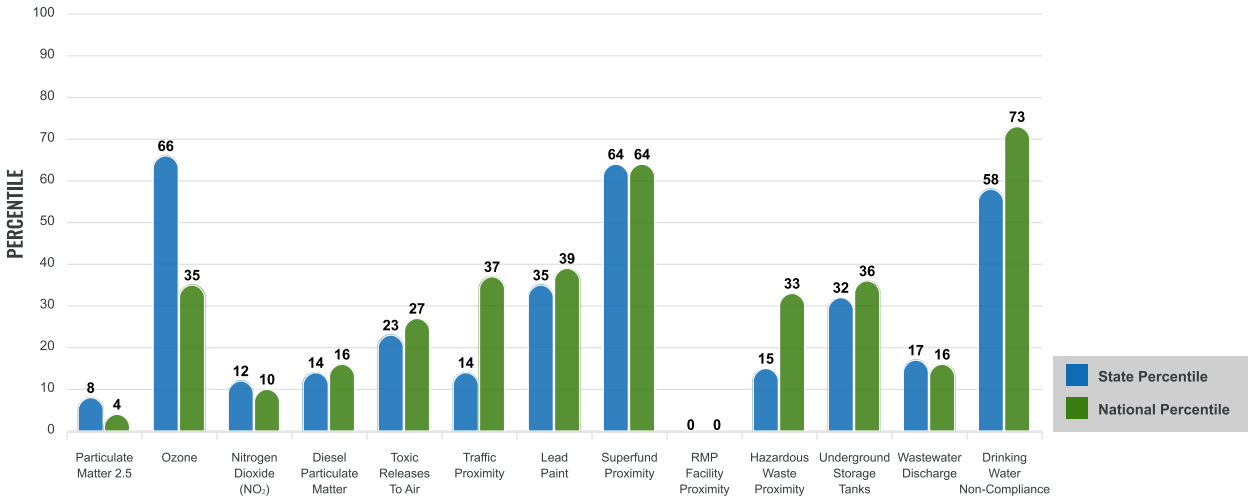
Environmental Justice & Supplemental Indexes

The environmental justice and supplemental indexes are a combination of environmental and socioeconomic information. There are thirteen EJ indexes and supplemental indexes in EJScreen reflecting the 13 environmental indicators. The indexes for a selected area are compared to those for all other locations in the state or nation. For more information and calculation details on the EJ and supplemental indexes, please visit the EJScreen website.

EJ INDEXES

The EJ indexes help users screen for potential EJ concerns. To do this, the EJ index combines data on low income and people of color populations with a single environmental indicator.

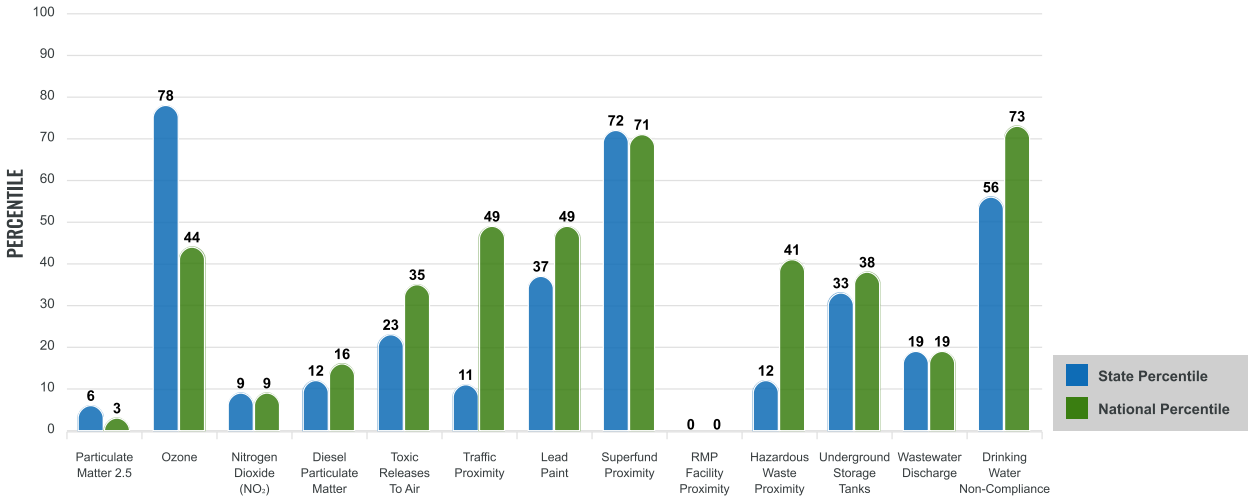
EJ INDEXES FOR THE SELECTED LOCATION



SUPPLEMENTAL INDEXES

The supplemental indexes offer a different perspective on community-level vulnerability. They combine data on percent low income, percent persons with disabilities, percent less than high school education, percent limited English speaking, and percent low life expectancy with a single environmental indicator.

SUPPLEMENTAL INDEXES FOR THE SELECTED LOCATION



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EJScreen Environmental and Socioeconomic Indicators Data

SELECTED VARIABLES	VALUE	STATE AVERAGE	PERCENTILE IN STATE	USA AVERAGE	PERCENTILE IN USA
ENVIRONMENTAL BURDEN INDICATORS					
Particulate Matter 2.5 ($\mu g/m^3$)	5.63	6.52	5	8.45	3
Ozone (ppb)	60	56.7	91	61.8	48
Nitrogen Dioxide (NO_2) (ppbv)	3.4	8.8	7	7.8	9
Diesel Particulate Matter ($\mu g/m^3$)	0.0772	0.176	10	0.191	19
Toxic Releases to Air (toxicity-weighted concentration)	300	2,800	21	4,600	38
Traffic Proximity (daily traffic count/distance to road)	920,000	6,100,000	9	1,700,000	52
Lead Paint (% Pre-1960 Housing)	0.33	0.51	29	0.3	60
Superfund Proximity (site count/km distance)	0.72	0.34	89	0.39	88
RMP Facility Proximity (facility count/km distance)	0	0.37	0	0.57	0
Hazardous Waste Proximity (facility count/km distance)	0.93	11	9	3.5	44
Underground Storage Tanks (count/km^2)	0.98	3.3	36	3.6	52
Wastewater Discharge (toxicity-weighted concentration/m distance)	330	760	93	700000	65
Drinking Water Non-Compliance (points)	2.8	3.2	73	2.2	87
SOCIOECONOMIC INDICATORS					
Demographic Index USA	0.57	N/A	N/A	1.34	18
Supplemental Demographic Index USA	1.24	N/A	N/A	1.64	31
Demographic Index State	0.66	1.19	34	N/A	N/A
Supplemental Demographic Index State	1.31	1.52	48	N/A	N/A
People of Color	12%	31%	28	40%	24
Low Income	16%	22%	49	30%	31
Unemployment Rate	5%	5%	57	6%	57
Limited English Speaking Households	0%	6%	45	5%	57
Less Than High School Education	4%	9%	42	11%	31
Under Age 5	4%	5%	43	5%	38
Over Age 64	26%	18%	82	18%	81

*Diesel particulate matter index is from the EPA's Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. More information on the Air Toxics Data Update can be found at: https://www.epa.gov/haps/air-toxics-data-update.

Sites reporting to EPA within defined area:

Superfund 1
Hazardous Waste, Treatment, Storage, and Disposal Facilities 4
Water Dischargers 81
Air Pollution 27
Brownfields 0
Toxic Release Inventory 4

Other community features within defined area:

Schools 9
Hospitals 1
Places of Worship 4

Other environmental data:

Air Non-attainment ..... Yes
Impaired Waters ..... Yes

Selected location contains American Indian Reservation Lands* ..... No
Selected location contains a "Justice40 (CEJST)" disadvantaged community ..... No
Selected location contains an EPA IRA disadvantaged community ..... Yes

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EJScreen Environmental and Socioeconomic Indicators Data

HEALTH INDICATORS

INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Low Life Expectancy	11%	17%	3	20%	1
Heart Disease	5.7	5.2	68	5.8	50
Asthma	11.1	11.2	55	10.3	76
Cancer	7.7	6.9	68	6.4	78
Persons with Disabilities	14.5%	12.1%	72	13.7%	61

CLIMATE INDICATORS

INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Flood Risk	11%	12%	64	12%	70
Wildfire Risk	0%	0%	0	14%	0

CRITICAL SERVICE GAPS

INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Broadband Internet	8%	9%	54	13%	42
Lack of Health Insurance	3%	3%	56	9%	15
Housing Burden	No	N/A	N/A	N/A	N/A
Transportation Access Burden	Yes	N/A	N/A	N/A	N/A
Food Desert	Yes	N/A	N/A	N/A	N/A

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