

Portland area, Maine

EnviroAtlas includes maps and research on for selected communities in the United States. The EnviroAtlas boundary for the Portland, ME area encompasses 146 census block groups and includes the cities of Portland, Westbrook, Saco, and Biddeford, the towns of Cape Elizabeth, Old Orchard, Scarborough, Yarmouth, Cumberland, and Falmouth, as well as unincorporated areas of Cumberland and York Counties. This fact sheet highlights some of the community data available in EnviroAtlas.

Overview

The Portland area covers over 522 square kilometers and has an estimated population of nearly 200,000 people.

Demographic maps in EnviroAtlas can help screen for potential disparities in the benefits that neighborhoods receive from nature, also called ecosystem services, as well as their associated health impacts.

Total land area	522.32 km ²
Total population	191,292
Under 1 year old	1.06%
Under 13 years old	13.78%
Over 70 years of age	10.85%
Non-white/Hispanic	10.17%

Landcover

Using one-meter aerial photography, the EnviroAtlas community component estimates land coverage for the area. This unique data provides insight into the ecosystem services or benefits the community may receive from existing natural resources.

Landcover	Percent of area
Forest	46.77%
Grass/Herbaceous	18.41%
Impervious	13.36%
Water	19.38%
Barren/soil	1.33%

Green space and access to parks

Research indicates access to and visibility of green space and vegetation has positive physical, mental, and emotional benefits. EnviroAtlas estimates that in this area:

- There are 1779.48 square meters of green space per person.
- Over 68 percent of the population does not have a park within walking distance.
- Over 17,000 residents have less than 5 percent tree coverage within 50 meters of their home.
- 7 out of 99 K-12 schools and 15 out of 131 day care centers do not have green space within a 100 meters of the building.



Pollutant Removal by Tree Cover

Natural resources such as trees, soils, and wetlands absorb pollutants and nutrients from the air and water. EnviroAtlas estimates the volume of removal, as well as the health costs and incidences of diseases avoided by these natural filtration processes. Each year in this area:

- Trees remove over 690,000 kilograms of particulate matter (PM10)
- Over 300 cases of acute respiratory symptoms are avoided because of the ozone removed by tree cover
- The removal of nitrogen dioxide by tree cover can save nearly \$13,000 in hospital admissions
- The mean concentration of Total Suspended Solids (TSS) is reduced by over 30,000 kilograms
- Trees sequester approximately 370,000 kilograms of carbon

Near-Road Environments

Studies indicate that the capacity of trees to filter air may reduce impacts of road pollution on human health and well-being. EnviroAtlas analyzes the coverage of trees next to busy roads. In the Portland area:

- Nearly 70 percent of the population live within 300 meters of a busy roadway
- 56 percent of these roads have greater than 25 percent tree coverage alongside
- Over half of the estimated population (54 percent) live within 300 meters of a roadway that has little to no tree coverage.