

Portland, ME and surrounding area

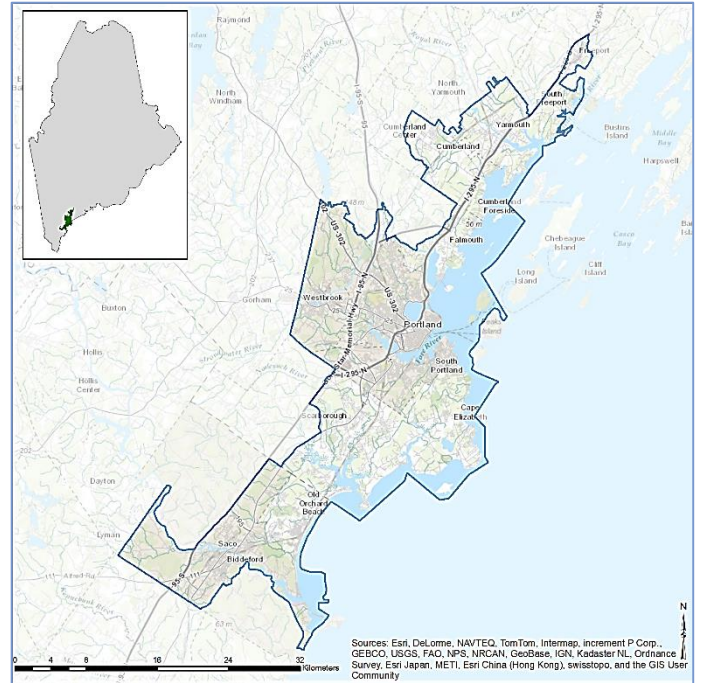
EnviroAtlas combines maps, graphs, and other analysis tools, fact sheets, and downloadable data into an easy-to-use, web-based educational and decision-support tool. EnviroAtlas helps users understand the connections between the benefits we derive from ecosystem services and the natural resources that provide them. For more information, please visit our [website](http://enviroatlas.epa.gov).

For selected U.S. communities, EnviroAtlas includes fine-scale maps and other information about existing and potential benefits from the local natural environment. This fact sheet highlights some of the many community data layers available.

Background

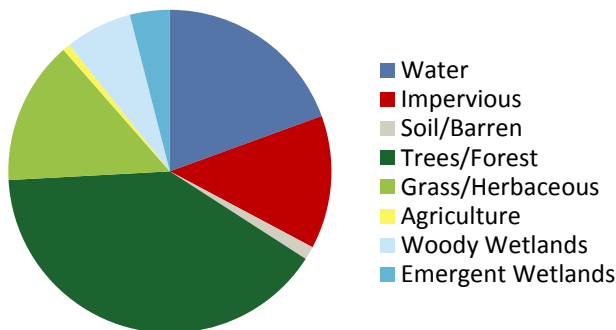
The Portland, ME area was chosen as the second EnviroAtlas community based on its inclusion as the research pilot for [EPA's Community-Focused Exposure and Risk Screening Tool](#) (C-FERST) and additional opportunities to leverage existing research and community engagement activities. It also has received high quality of life ratings that we wanted to evaluate from an ecosystem services perspective. The EnviroAtlas boundary for the Portland area was determined using the 2010 Census definition of an Urban Area. In addition to Portland, it includes portions of Biddeford and Yarmouth, as well as additional towns within York and Cumberland Counties. The Portland area measures 523 square kilometers, and encompasses 146 census block groups.

The Portland, ME area is in the Northeastern Coastal ecoregion. It has a continental, humid climate with warm



summers and severe winters. This area is vegetated with pine and mixed oak-pine forests, although much of the area has been converted to urban and suburban development. The community is home to Maine's largest port and historically had an economic emphasis on fishing and manufacturing. The leading industries today are service-based; the largest employers are the Maine Medical Center, life insurance carrier Unum Provident, and Mercy Hospital. The demographics of the Portland community area indicate that the potential exists for income and other disparities in the distribution of environmental assets. EnviroAtlas includes demographic maps that can help screen for potential health and well-being disparities resulting from disproportionate distribution of "green infrastructure."

Percent Land Cover in Community Area



Portland Area Demographics

Total population	191,292
Under 13 years old	13.78%
Over 70 years of age	10.85%
Other than white/non-Hispanic	10.17%
Below twice the poverty level	27.64%

Ecosystem Services Overview

In EnviroAtlas, ecosystem services are organized into seven benefit categories:

- Clean air
- Clean and plentiful water
- Natural hazard mitigation
- Climate stabilization
- Recreation, culture, and aesthetics
- Biodiversity conservation
- Food, fuel, and materials (data available only in select communities)

Examples of some of the data included in EnviroAtlas are detailed below:

Green Space and Trees

Research indicates that physical and visual access to trees and other green space has positive physiological, cognitive, and emotional benefits. In the interactive map's table of contents, green space data layers can be found under all of the benefit categories.

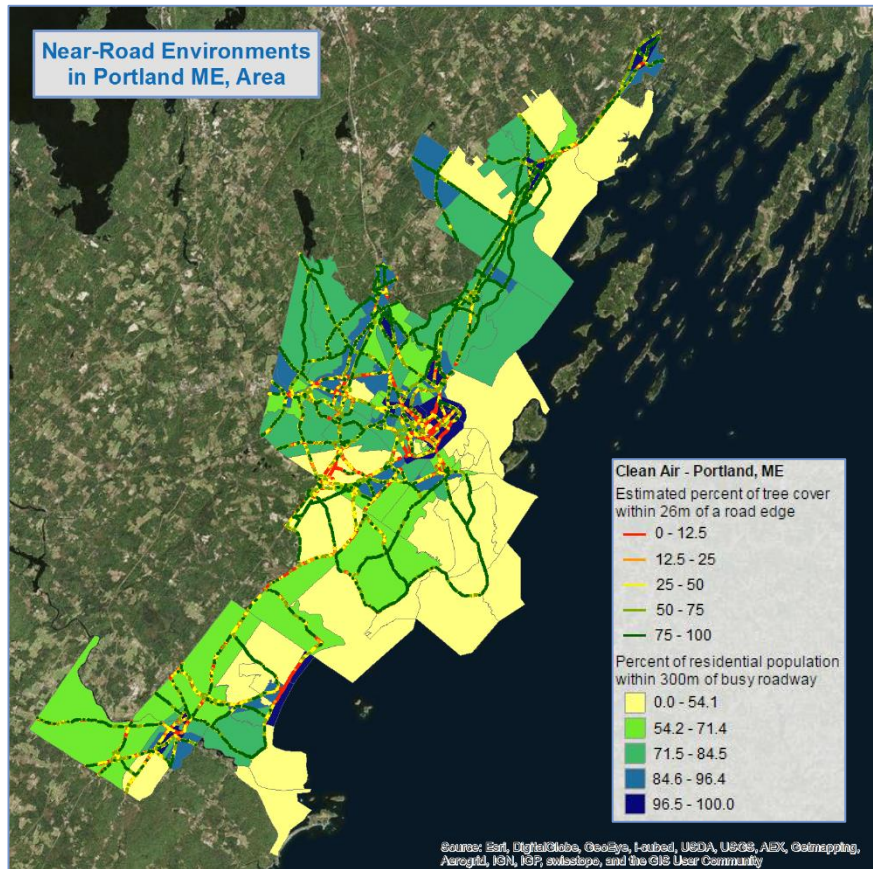
- There are 1,800 square meters of green space per person.
- Almost 17,500 residents have less than 5 percent tree coverage within 50 meters of their home.
- There are 1,878,292 tons of carbon store in the local tree biomass, with an additional 53,980 tons sequestered annually.
- 1,111,724 kilograms of ozone are removed from the air by local tree biomass every year.

Near-Road Environments

Studies indicate that the capacity of trees to filter air may reduce the health impacts of vehicular pollution. In EnviroAtlas, you can find analyses of tree coverage near busy roads.

EnviroAtlas Tools and Features

- [EnviroAtlas Community Component](#): data layers based on 1-meter land cover summarized to the block group scale.
- [EnviroAtlas National Component](#): data layers based on 30-meter land cover summarized to the watershed scale.
- [EnviroAtlas Interactive Map](#): go directly to the interactive map.
- [EnviroAtlas Fact Sheets](#): Describe the project, each community, and each data layer in detail.
- [Eco-Health Relationship Browser](#): An interactive relational tool that explores ecosystems, the services they provide, and benefits to human health and well-being.
- [Contact the EnviroAtlas Team](#): Please contact us if you have any questions about EnviroAtlas.



- An estimated 70 percent of the Portland area population lives within 300 meters of a busy roadway (yellow to blue block groups in the figure above)
- 53 percent of the estimated population lives within 300 meters of a roadway that has little to no tree coverage (roadways indicated by red and orange lines in the figure above).

In addition to the Clean Air benefit category, near-road vegetation data layers can also be found under Biodiversity Conservation, and Recreation, Culture and Aesthetics in the interactive map's table of contents.

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