Philadelphia, PA and surrounding area

Towns and cities rely on clean air, clean water, green space, and other natural amenities for economic sustainability and quality of life, yet their benefits are not always fully understood or considered in local decisions. EPA and its partners are producing EnviroAtlas to help communities better use environmental assets for public good.

EnviroAtlas includes an online interactive mapping application that anyone can use. The interactive map contains over 300 maps available for the U.S., as well as 100+ fine-scale maps for selected U.S. communities about existing and potential benefits from the local natural environment. The EnviroAtlas community component is based on 1-meter resolution land cover data. Information derived from these data is summarized by census block groups; more spatially explicit map layers are also provided. This fact sheet highlights some of the many community data layers available for the featured area of Philadelphia, Pennsylvania.

Background

The EnviroAtlas boundary for the Philadelphia area was determined using the 2010 Census definition of an Urban Area. In addition to Philadelphia, it includes Wilmington, DE and Camden, NJ as well as other towns within 14 PA, NJ, DE, and MD counties. The area measures 6,544 square kilometers and encompasses 3,974 census block groups.

The Philadelphia area falls along the boundary between the Atlantic Coastal Plain and Piedmont ecoregions. The climate is typically represented by hot and humid summers with mild spring/fall and moderately cold winters.

The area was historically vegetated with hardwood forests; however, much of the natural vegetation has been removed for urbanization and cultivation. The leading industry sectors in the area are financial services and health care. Comcast and the University of Pennsylvania are the city’s largest employers. The demographics of the Philadelphia 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 urban greenery.

Philadelphia Area Demographics 2010 Census

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population</td>
<td>5,425,378</td>
</tr>
<tr>
<td>Under 13 years old</td>
<td>16.36%</td>
</tr>
<tr>
<td>Over 70 years of age</td>
<td>9.43%</td>
</tr>
<tr>
<td>Other than white/non-Hispanic</td>
<td>37.27%</td>
</tr>
<tr>
<td>Below twice the U.S. poverty level</td>
<td>25.31%</td>
</tr>
</tbody>
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Ecosystem Services Overview
In EnviroAtlas, the benefits humans receive from nature are grouped into seven categories that demonstrate the interconnectedness of these ecosystem services:

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

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. Lack of these resources in the places where we live, learn, work, and play can adversely impact human health and well-being. In the Philadelphia community area:

- There are 1,530 square meters of green space per person.
- About 50,975 residents have less than 5 percent tree coverage within 50 meters of their home.
- There are 21,955,079 tons of carbon stored in the local tree biomass, with an additional 696,624 tons sequestered annually. Carbon in the atmosphere is an important factor related to climate stabilization.
- 13,097,476 kilograms of the common air pollutant ozone are removed from the air by local trees every year.

Access to Parks
Parks provide access to green space, encourage physical activity, and improve the livability and aesthetics of urban areas. Those who live closer to parks may be more likely to receive the multiple benefits associated with this proximity. Easily accessible parks are generally considered to be within 500 meters’ walking distance, which takes less than 15 minutes for an average healthy person.

- An estimated 44 percent of the Philadelphia population has a park entrance within 500 meters’ walking distance (dark and medium green areas in figure above).
- An estimated 51 percent of the Philadelphia area does not have a park entrance within 2 kilometers’ walking distance (orange to red and grey areas in figure above).

EnviroAtlas Tools and Features
- Learn more about EnviroAtlas data: https://www.epa.gov/enviroatlas/enviroatlas-data
- Search our data layers and access their fact sheets: https://www.epa.gov/enviroatlas/enviroatlas-dynamic-data-matrix
- Explore data for the Philadelphia community area in our interactive mapping application: https://www.epa.gov/enviroatlas/enviroatlas-interactive-map
- Use our Eco-Health Relationship Browser to explore ecosystems, the services they provide, and their benefits to human health and well-being: https://www.epa.gov/enviroatlas/enviroatlas-eco-health-relationship-browser
- Contact us with questions about EnviroAtlas: https://www.epa.gov/enviroatlas/forms/contact-enviroatlas

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 www.epa.gov/enviroatlas.