www.epa.gov/enviroatlas

Chicago, IL and surrounding area

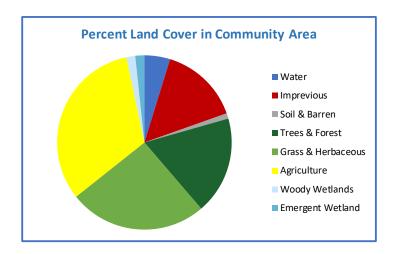
Towns and cities rely on clean air, clean water, green space, and other natural amenities for economic sustainability and quality of life, yet their benefits are not always fully understood or considered in local decisions. EPA and its partners are producing EnviroAtlas to help communities better use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

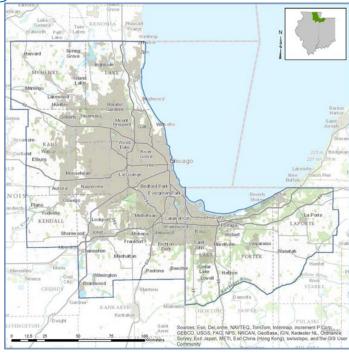
EnviroAtlas includes an online interactive mapping application that anyone can use. The interactive map contains over 300 maps available for the U.S., as well as 100+ fine-scale maps for selected U.S. communities about existing and potential benefits from the local natural environment. The EnviroAtlas 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 Chicago, Illinois.

# **Background**

The EnviroAtlas boundary for the Chicago area includes seven complete counties in IL: McHenry, Lake, Cook, DuPage, Kane, Will, and Kendall; and three complete counties in IN: Lake, Porter, and LaPorte. The area measures 14,633 square kilometers, and encompasses 6,409 census block groups.

The Chicago area is in the Chicago Lake Plain ecoregion. It has a mild climate with very warm and humid summers and moderately cold winters. The area was historically vegetated with woodlands; however, much of the natural





vegetation has been removed for urbanization. The leading industry sectors in the area are finance and commerce. The U.S. Government and Chicago Public Schools are Chicago's largest employers. The demographics across the entire 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 wellbeing disparities resulting from disproportionate distribution of urban greenery.

Chicago Area Demographics 2010 Census	
Total population	9,203.201
Under 13 years old	17.37%
Over 70 years of age	8.31%
Other than white/non-Hispanic	48.09%
Below twice the U.S. poverty level	29.62%

# **MaEcosystem 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:

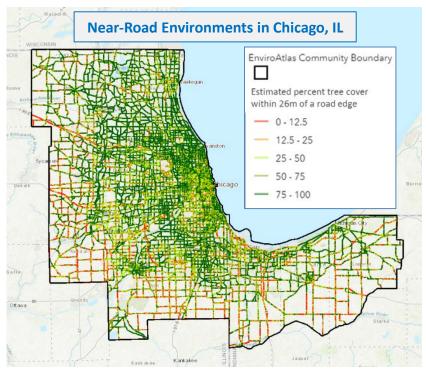
### **Stream and Lake Buffers**

Natural land cover adjacent to streams and rivers, sometimes called the riparian area or zone, helps protect water quality and supply for drinking, recreation, and aquatic habitat. The EnviroAtlas community component quantifies riparian vegetation in both 15- and 50-meter buffers. These reflect water quality and habitat guidelines, respectively, although standards vary across geographies.

- An estimated 4 percent of the Chicago community land area is within 50 meters of a stream, river or lake.
- 20 percent of these 50-meter buffers contain less than 20 percent vegetated cover.

#### **Near-Road Environments**

Studies indicate that the capacity of trees to filter and deflect airflow may reduce the health impacts of vehicular pollution on nearby populations.



In EnviroAtlas, you can find detailed maps of tree coverage along both high-speed and walkable roads. In the Chicago community area,

- An estimated 72 percent of the population lives within 300 meters of a high-speed roadway. This distance is within the zone of air pollutant drift from unobstructed roadways.
- For 53 percent of the estimated population living within this 300-meter zone, nearby high-speed roads have less than 25% adjacent tree cover.
- Depending on local factors, specific areas (along red and orange lines in the figure above) may benefit from vegetative or other physical barriers to reduce vehicular air pollutant drift.

### **EnviroAtlas Tools and Features**

- Learn more about EnviroAtlas data: <a href="https://www.epa.gov/enviroatlas/enviroatlas-data">https://www.epa.gov/enviroatlas/enviroatlas-data</a>
- Search our data layers and access their fact sheets: https://www.epa.gov/enviroatlas/enviroatlas-dynamic-data-matrix
- Explore data for the Chicago 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: <a href="https://www.epa.gov/enviroatlas/enviroatlas-eco-health-relationship-browser">https://www.epa.gov/enviroatlas/enviroatlas-eco-health-relationship-browser</a>
- 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.