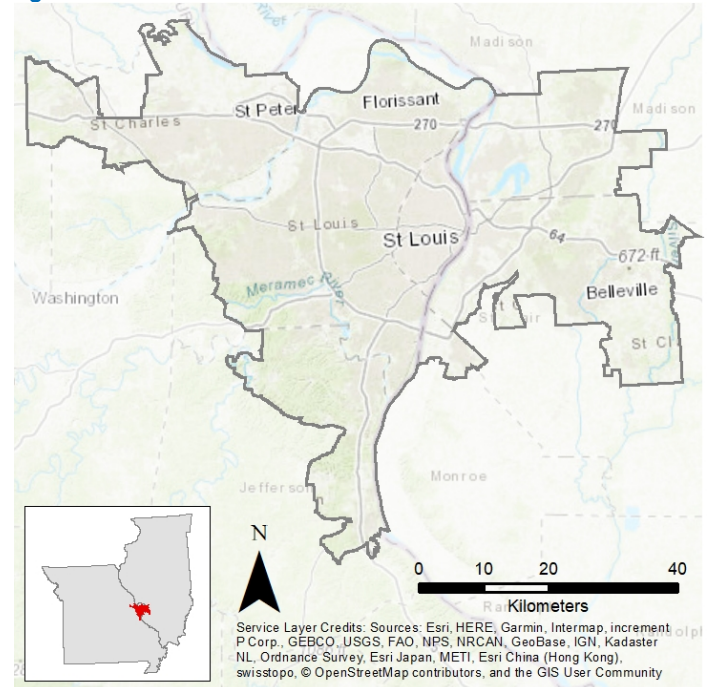# St. Louis, Missouri and vicinity

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 St. Louis, Missouri.
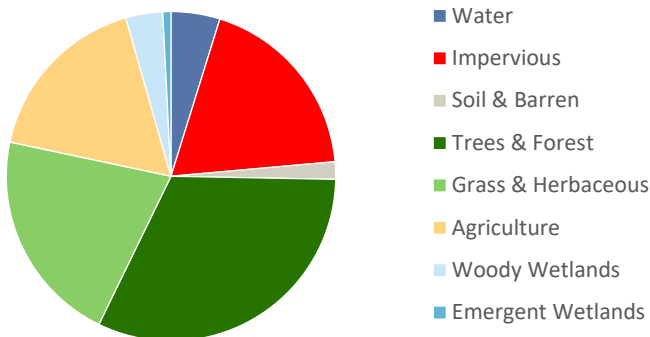
Background

The EnviroAtlas boundary for this area was determined using the 2010 Census definition of an Urban Area. In addition to St. Louis, the boundary encompasses part or all of St. Charles, St. Louis, and Jefferson Counties, Missouri, and Madison, St. Clair, and Monroe Counties, Illinois. The area measures 3,663 square kilometers and encompasses 1,552 census block groups.

The St. Louis area falls along the Mississippi River, south of its confluence with the Missouri River, and in the Interior River Valley and Hills ecoregion. It has a humid subtropical climate with hot, humid summers and cold winters.

Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, © OpenStreetMap contributors, and the GIS User Community

The area was historically prairie and open forest, and many residential neighborhoods have maintained large native shade trees. The leading industry sectors are manufacturing and health care. BJC Health Care, Washington University in St. Louis, and SSM Health are among the largest employers in the metropolitan area. The demographics of the 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.

Percent Land Cover in Community Area

- Water
- Impervious
- Soil & Barren
- Trees & Forest
- Grass & Herbaceous
- Agriculture
- Woody Wetlands
- Emergent Wetlands

St. Louis Area Demographics 2010 Census	
Total population	2,174,437
Under 13 years old	16.8%
Over 70 years of age	9.3%
Other than white/non-Hispanic	30.4%
Below twice the U.S. poverty level	27.1%

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:
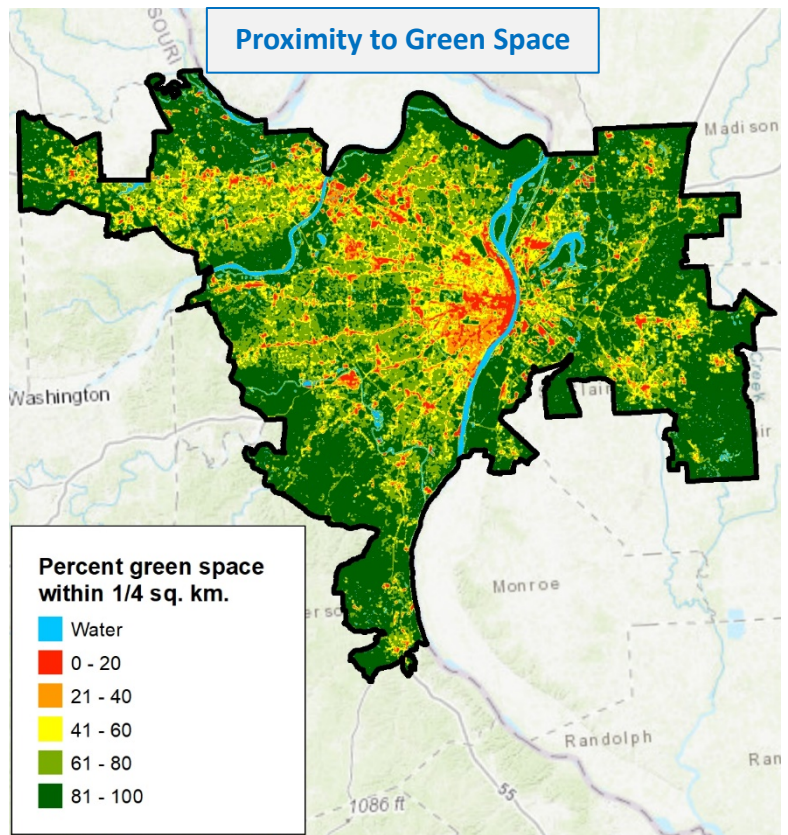
Green Space and Trees

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 St Louis area:

- There are 1,232 square meters of green space per person.
- Almost 60 percent of the pedestrian-accessible street length is bordered by at least 20% tree canopy.
- Only about 22,000 residents likely have limited to no views of trees from their homes. (This estimate does not account for obstructed window views.)
- 158 K-12 schools (17%) have less than 25 percent vegetation coverage within 100m of the building. Students in these schools may benefit from enhanced views of tree cover, gardens, and other greenery from classroom and cafeteria windows.

Proximity to Green Space

Percent green space within 1/4 sq. km.
- Water
- 0 - 20
- 21 - 40
- 41 - 60
- 61 - 80
- 81 - 100

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 St. Louis community area:

- An estimated 52 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 74 percent of the estimated population living within this 300-meter zone, nearby high-speed roads have less than 25% adjacent tree cover.

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 St. Louis 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.