



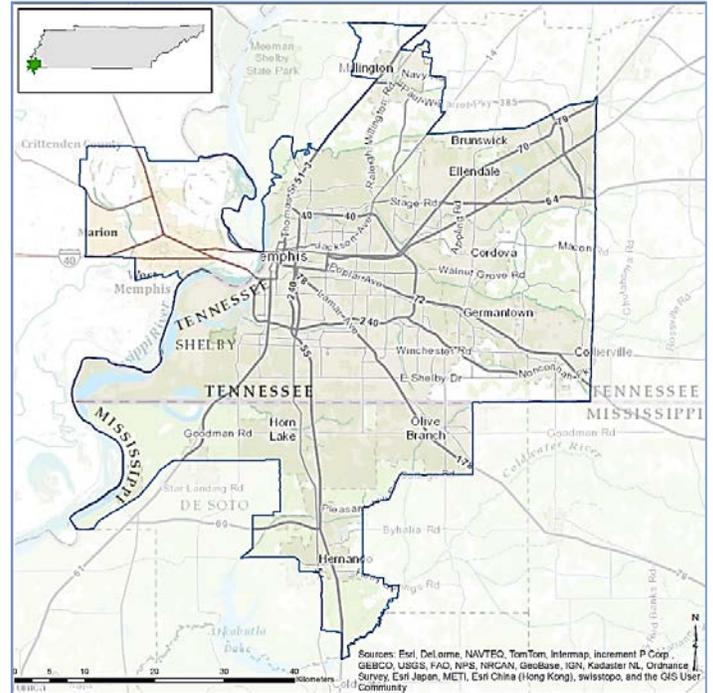
## Memphis, TN and surrounding area

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 200 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 Memphis, Tennessee.

### Background

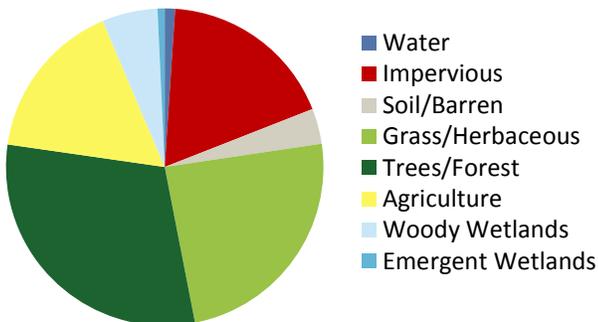
The Memphis, Tennessee area was chosen as an EnviroAtlas because it offers several opportunities to leverage existing research and community engagement activities. It has also received poor public health and sustainability ratings that can be evaluated from a green infrastructure perspective. The EnviroAtlas boundary for the Memphis area was determined using the 2010 Census definition of an Urban Area. In addition to Memphis, it includes Olive Branch, MS, West Memphis, AR, and Arlington, TN, as well as additional towns within Shelby



(TN), Crittenden (AR), and DeSoto (MS) Counties. The area measures 2,361 square kilometers, and encompasses 703 census block groups.

The Memphis area is in the Mississippi Valley Loess Plain ecoregion. It has a mild, humid climate with hot summers and mild winters. The region is mostly forested with upland and southern mesophytic forests where the natural vegetation has not been converted to agriculture. The leading industries are transportation and shipping. FedEx, International Paper, and AutoZone are among the largest employers in the area. The demographics of the Memphis community area indicate that the potential exists for income

Percent Land Cover in Community Area



Memphis Area Demographics  
2010 Census

Total population	1,091,638
Under 13 years old	19.05%
Over 70 years of age	6.85%
Other than white/non-Hispanic	57.79%
Below twice the U.S. poverty level	37.46%

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.”

## 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:

### 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 analyzes stream and lake buffers with widths of 15 and 50 meters.

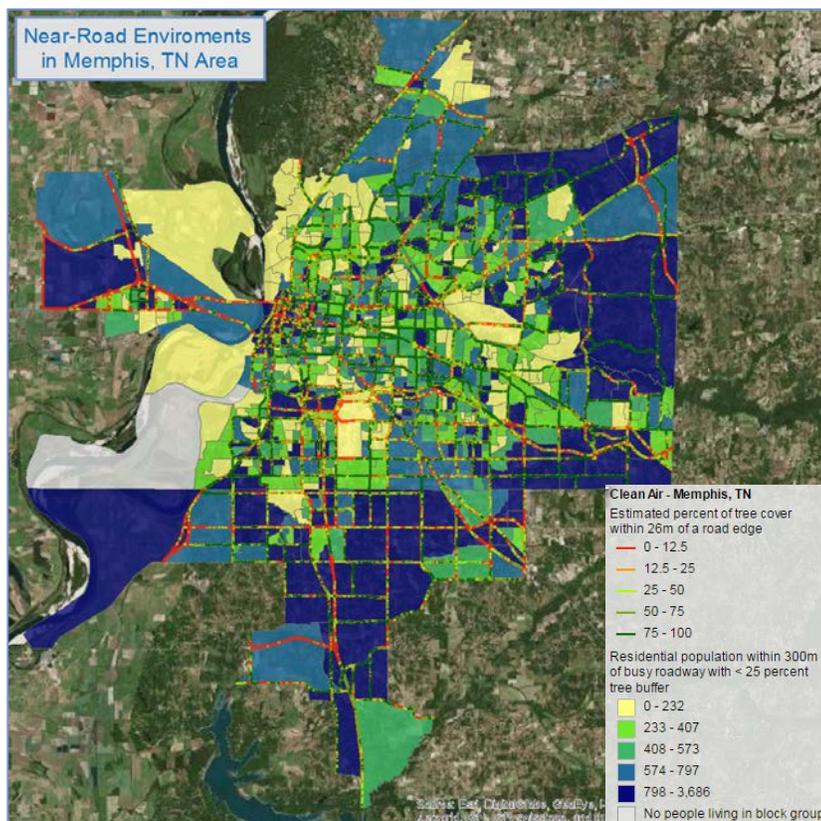
- An estimated 18% of Memphis’s land area is within 50 meters of a stream or lake.
- 74% of Memphis’s 50 meter stream and lake buffers are vegetated.

### Near-Road Environments

Studies indicate that the capacity of trees to filter air may

## EnviroAtlas Tools and Features

- Learn more about and download 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 Memphis 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>



The distribution of tree cover near busy roadways

reduce the health impacts of vehicular pollution. In EnviroAtlas, you can find analyses of tree coverage near busy roads.

- 18% of the estimated Memphis population lives within 300 meters of a busy road with <25% tree buffer (yellow to blue block groups in the figure above).
- 36% of the busy roadways in Memphis have greater than 25% tree coverage (roadways indicated by green lines in the figure above).

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](http://www.epa.gov/enviroatlas).