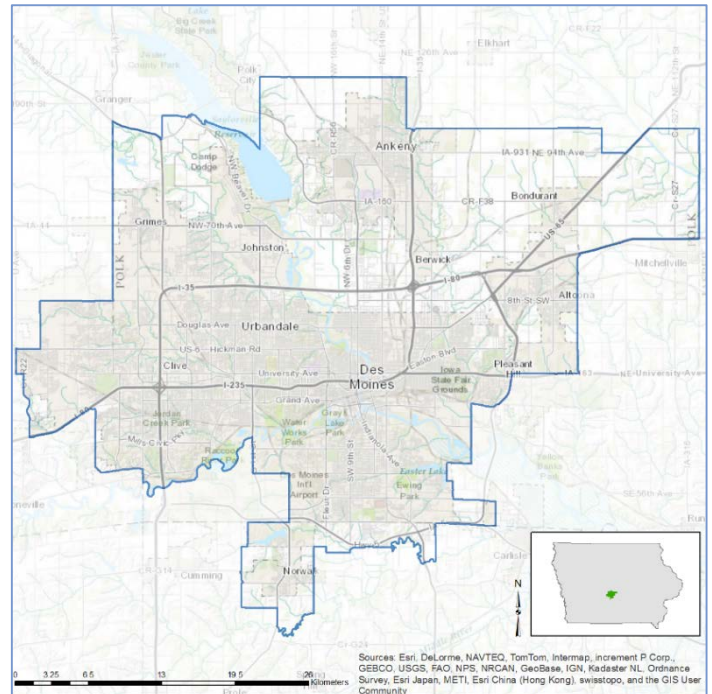# Des Moines, IA and surrounding area

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 Des Moines, Iowa.
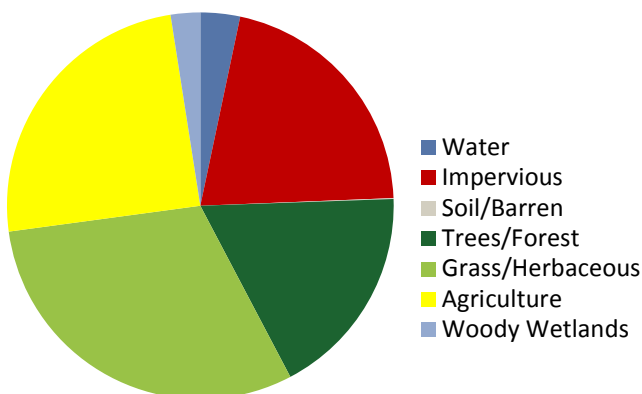
Background

The Des Moines, Iowa area was chosen as an EnviroAtlas community because it offers several opportunities to leverage existing community engagement activities. The EnviroAtlas boundary for the Des Moines area was determined using the 2010 Census definition of an Urban Area. It includes the city and suburbs of Des Moines. The area measures 880 square kilometers, and encompasses 312 census block groups.

The Des Moines area is in the Western Corn Belt Plains

Sources: Esri, DeLorme, NAVTEQ, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, and the GIS User Community

ecoregion. It has severe, humid climate with hot summers and cold winters. The region was historically vegetated with tall grass prairies; however, most of the region has been converted into agriculture. The community's economy is anchored in the financial and insurance industries. The largest employers include Wells Fargo & Co., Mercy Medical Center, UnityPoint Health, and Principal Financial Group. The demographics of the Pittsburgh 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

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

Des Moines Area Demographics 2010 Census	
Total population	456,017
Under 13 years old	19.45%
Over 70 years of age	7.26%
Other than white/non-Hispanic	18.88%
Below twice the U.S. poverty level	23.55%

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:
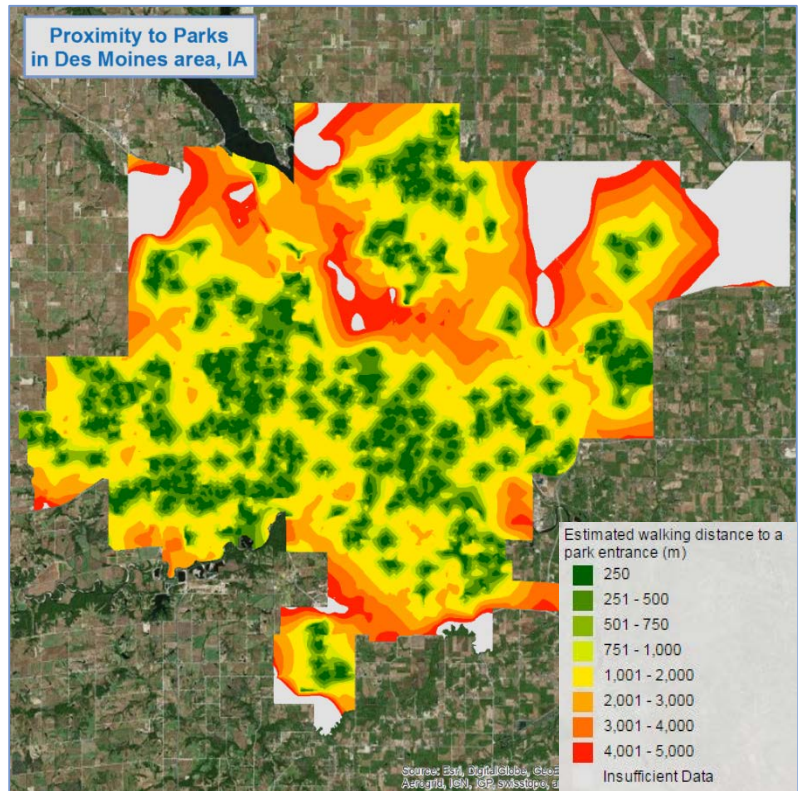
Green Space and Trees

Research indicates that physical and visual access to trees and other green space has positive physiological, cognitive, and emotional benefits. There are 1,444 square meters of green space per person. In the Des Moines community area:

- 14 out of 312 K-12 Schools have less than 25 percent green space within 100 meters.
- There are 1,502,221 tons of carbon stored in the local tree biomass, with an additional 46,883 tons sequestered annually.
- 636,939 kilograms of ozone are removed from the air by local tree biomass every year.

Access to Parks

Parks provide access to green space, encourage physical activity, and improve the livability and aesthetics of urban

Proximity to Parks in Des Moines area, IA

Estimated walking distance to a park entrance (m)
- 250
- 251 - 500
- 501 - 750
- 751 - 1,000
- 1,001 - 2,000
- 2,001 - 3,000
- 3,001 - 4,000
- 4,001 - 5,000
- Insufficient Data

areas. Those who live closer to parks may be more likely to receive the multiple benefits associated with this proximity.

- An estimated 18 percent of the Des Moines area is located within easy walking distance (500 meters) of a park entrance (dark and medium green areas in figure above).
- An estimated 33 percent of the Des Moines population does not have a park entrance within half of a kilometer (yellow to red areas in figure above).

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 Des Moines 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.