

# How Green are U.S. Cities compared to the Rest of the World?

A Comparative Analysis of Urban Greenspace using Stowell et al.'s (2023) global urban greenness indicator dataset for 1,000+ cities (Global Greenspace Indicator Dataset)

Christopher B.

cb9110a@american.edu

2024-03-27

## Background

**Normalized Difference Vegetation Index (NDVI)** - A widely-used, accurate metric for quantifying the health and density of vegetation using sensor data (e.g., satellites)

### **Dataset Contents:**

- Peak and Annual 1x1 km NDVI for over 1,000 urban centers
- Additional information regarding the climate zone
- Level of Development (Human Development Index)

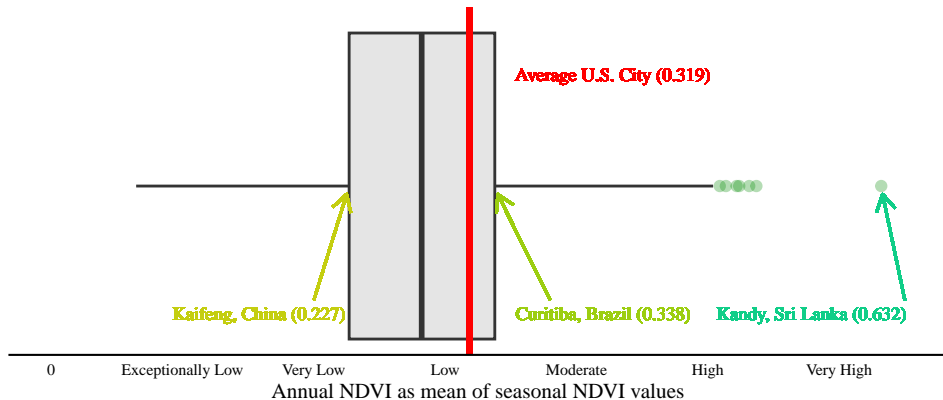
### **Uses:**

- Identifying urban centers that lack greenspace
- Developing climate-related plans to counter climate effects in urban centers
- May be adapted to fit other health-related studies

# Global Average NDVI in 2021

## Global Annual NDVI (City-Level)

How the Average U.S. City Compares with Global Mean Annual NDVI



## Peak NDVI

### Peak NDVI in Select Countries and U.S. Cities

