

Open Data for Sustainable Communities

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US EPA Office of Sustainable Communities

Open Data Panel

New Partners for Smart Growth Conference

February 2, 2017



Smart Growth
PROGRAM

Data Tool

Smart Location Mapping



US Environmental Protection Agency

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Smart Location Mapping

Interactive maps and data for measuring location efficiency and the built environment

You will need Adobe Reader to view some of the files on this page. See [EPA's About PDF page](#) to learn more.

- [Background](#)
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Background

A large body of research has demonstrated that land use and urban form can have a significant effect on transportation outcomes.

A National Database of Smart Growth Characteristics



4 Units per Acre



Density
Diversity
Design of Street Network
Destination Accessibility
Distance to Transit



11 Units per Acre



Image sources: Lincoln Land Institute's "Visualizing Density" and Victor Dover

Open Data Access



Smart Location Database

The Smart Location Database is a nationwide geographic data resource for measuring location efficiency. It includes more than 90 attributes summarizing characteristics such as housing density, diversity of land use, neighborhood design, destination accessibility, transit service, employment, and demographics. Most attributes are available for every census block group in the United States.

EPA first released the Smart Location Database in 2011 and released version 2.0 in July 2013. Please review the [Smart Location Database Technical Documentation and User Guide](#) for a full description of all available variables, data sources, data currency, and known limitations.

Figure 1 illustrates one of the variables in the Smart Location Database. The map shows patterns of spatial variation in transit service availability and density in Los Angeles and its surrounding cities and suburbs.

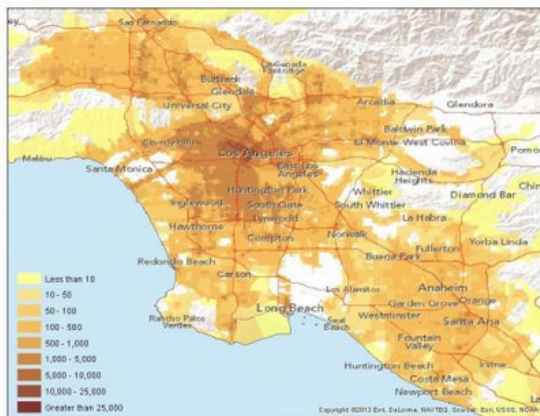


Figure 1: Transit Service Density in the Los Angeles Metropolitan Region (Aggregate frequency of transit service per hour per square mile during evening peak period)

Access the Data

[Interactive map viewer](#) [\[iv\]](#)

[Download data for your community](#) [\[v\]](#)

Download data for the entire nation:

- [Shapefile \(ZIP\)](#) (800 MB)
- [Dbf \(ZIP\)](#) (85 MB)
- [Esri Geodatabase \(ZIP\)](#) (417 MB)

[Metadata](#)

[Web services](#)

Online interactive map viewer
“Clip n’ Ship”

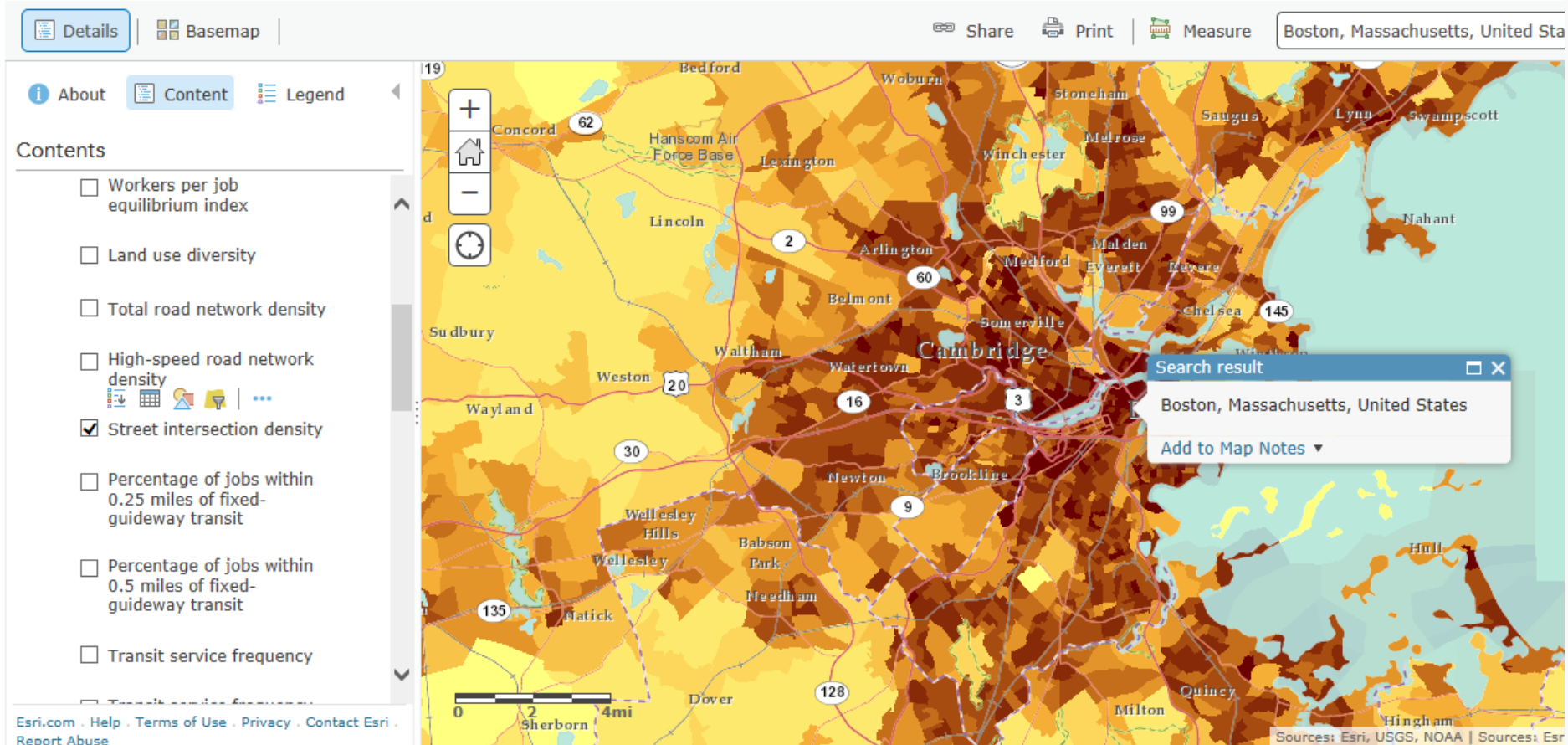
Complete dataset for download

<http://www2.epa.gov/smartgrowth/smart-location-mapping#SLD>

Mapping Tool



ArcGIS ▾ Smart Location Database



New Spin Off Product

National Walkability Index



Details

Basemap

Print

Measure

Boston, Massachusetts, United States

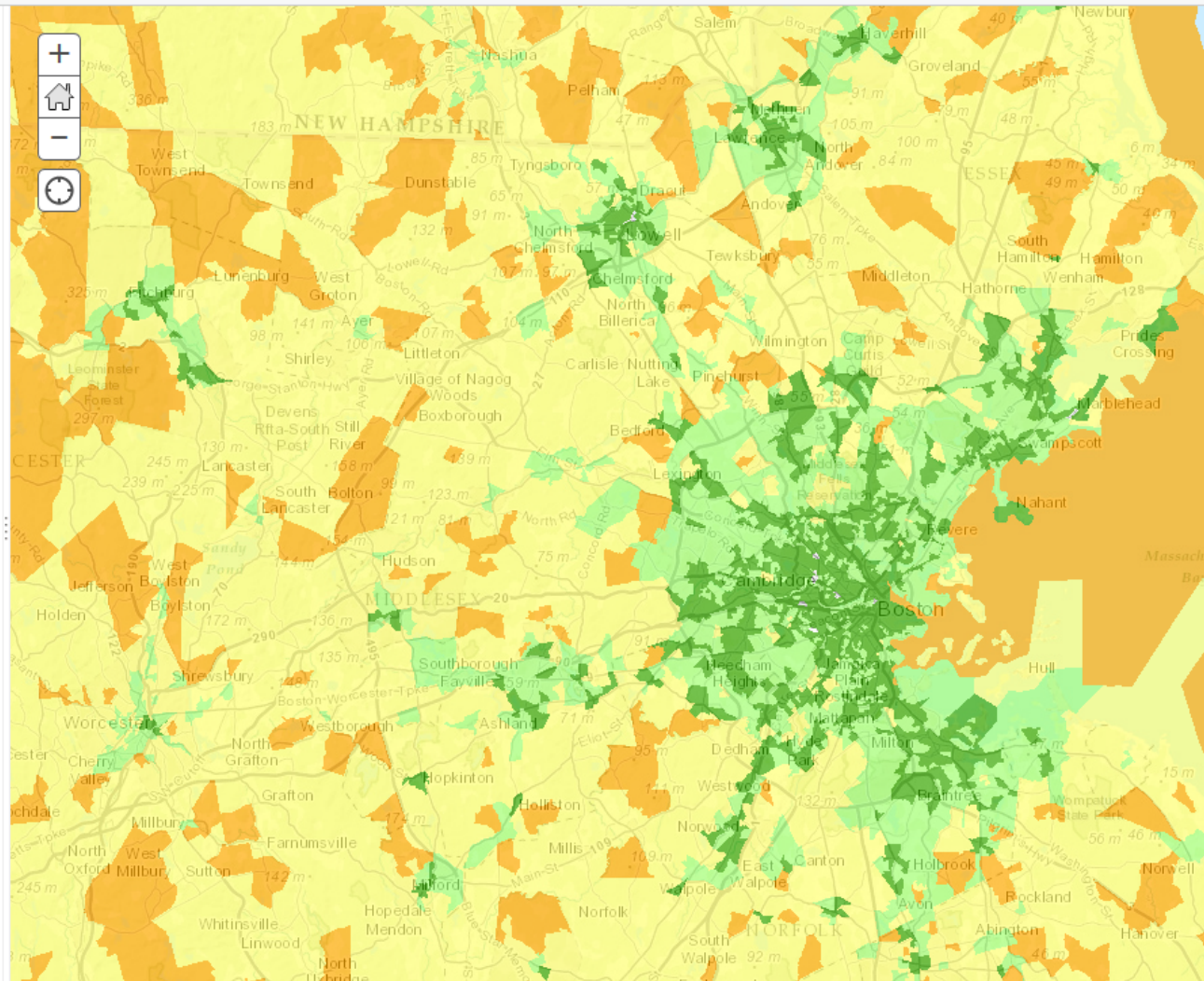


Legend

WalkabilityIndex

NationalWalkabilityIndex

- 1 - 5.75 (Least Walkable)
- 5.76 - 10.50 (Below Average Walkable)
- 10.51 - 15.25 (Above Average Walkable)
- 15.26 - 20 (Most Walkable)



GSA / EPA Tool

Smart Location Calculator



GSA

Smart Location Calculator

Measuring the environmental benefits of workplace location efficiency

60 School St, Boston, Massachusetts, 02108, USA

Employees:

Male: %

60 School St
Boston, Massachusetts 02119

74
Smart Location Index

60 School St
Boston, Massachusetts 02108

91
Smart Location Index

[Export all](#) [Compare statistics](#)

Layers & Legend

- ☐ Show Regional Boundaries
- ☒ Show Blockgroup Scores

SLC Score

Transparency:

Legend

- 0 - 39 (Very Low)
- 40 - 59 (Low)
- 60 - 69 (Fair)
- 70 - 79 (Good)
- 80 - 89 (Very good)
- 90 - 100 (Excellent)

How it works:
[Background](#) [Data & Methodology](#)

Resources:
[User Guide](#) [FAQ](#)

Feedback:
slc@gsa.gov



<https://www.slc.gsa.gov/slc/#>

Applications of the Data



- AARP Livability Index
- Livable Transit Corridor Evaluation Tool
- National Environmental Database

Related Federal Open Data



- EJ Screen
- National Sustainability Atlas
- Location Affordability Portal