

EPA's Smart Location Database



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Background: EPA's Smart Growth Program

- ▶ Helps communities pursue smart growth strategies through:
 - ▶ Grants and technical assistance
 - ▶ Partnerships
 - ▶ **Research and tool development**



Urban Form and Travel

“D” Variables



- ▶ Density
- ▶ Diversity
- ▶ Design of Street Network
- ▶ Destination Accessibility
- ▶ Distance to Transit



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](#) [Exit](#)
[iv]

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

Download data for the entire nation:

- [Shapefile \(ZIP\)](#) (800 MB)
- [Data](#) (17 MB)
- [EIS Geodatabase](#) (ZIP)

[Metadata](#)

[Web services](#)

The Smart Location Database

Online interactive map viewer

“Clip n’ Ship”

Complete dataset for download

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

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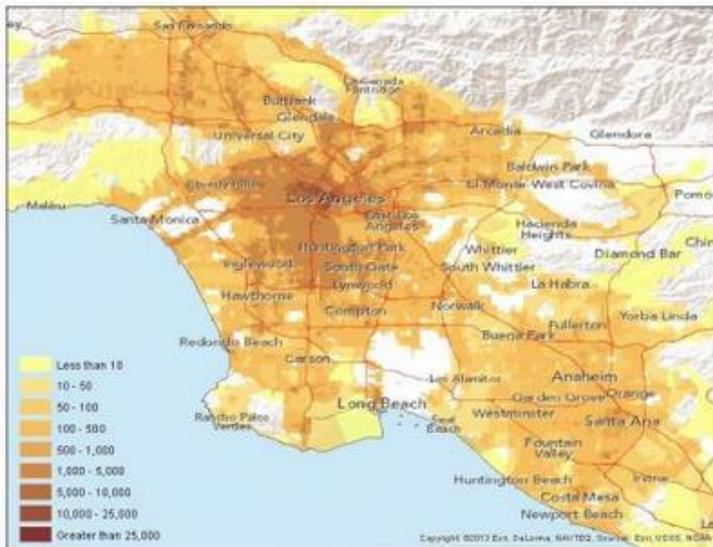


Figure 1: Transit Service Density in the Los Angeles Metropolitan Region (Aggregate frequency of transit service per hour per square mile during evening peak period)

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Download data for the entire nation:

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

[Metadata](#)

[Web services](#)

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The SLD as a resource

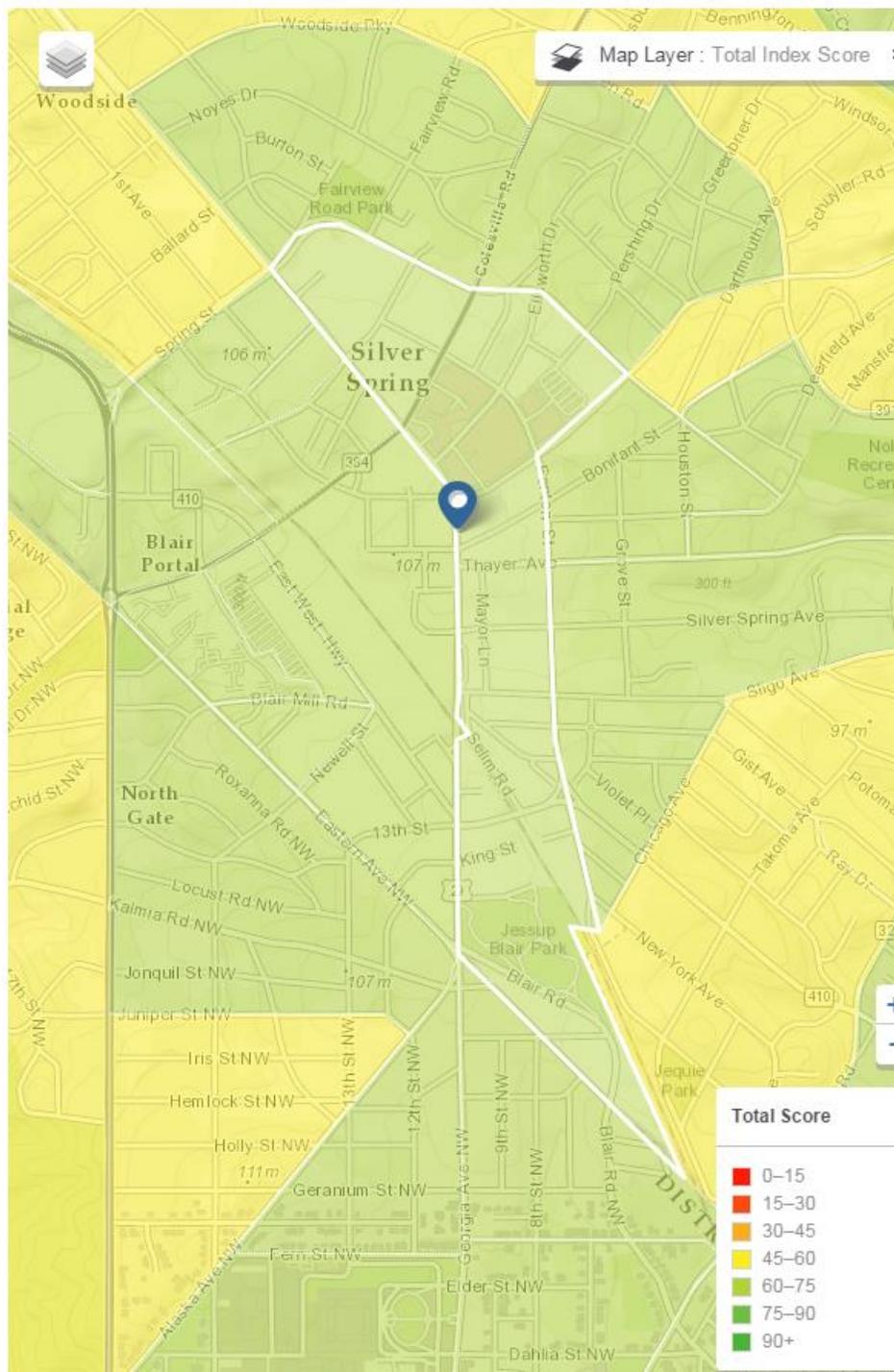
- ▶ Examples of other organizations and federal agencies using SLD data for other mapping applications and as a decision-making tool

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CUSTOMIZE THIS SCORE

CATEGORY SCORE

- 56 HOUSING
Affordability and access
- 77 NEIGHBORHOOD
Access to life, work, and play
- 75 TRANSPORTATION
Safe and convenient options
- 40 ENVIRONMENT
Clean air and water
- 82 HEALTH
Prevention, access, and quality
- 63 ENGAGEMENT
Civic and social involvement
- 38 OPPORTUNITY
Inclusion and possibilities



Livability Index | Great Neighborhoods for All Ages



How livable is your community?

enter your address, city, state or zip code

social engagement

LEARN MORE

Smart Location Calculator

Measuring the environmental benefits of workplace location efficiency



1311 East-West Hwy, Silver Spring, Maryland, US

Employees:

Male: %

1311 E West Hwy
Silver Spring, Maryland 20910



77 Smart Location Index

75 Block Group SLI

[More scores](#)

Distance to nearest transit stop: miles

Distance to rail transit: miles

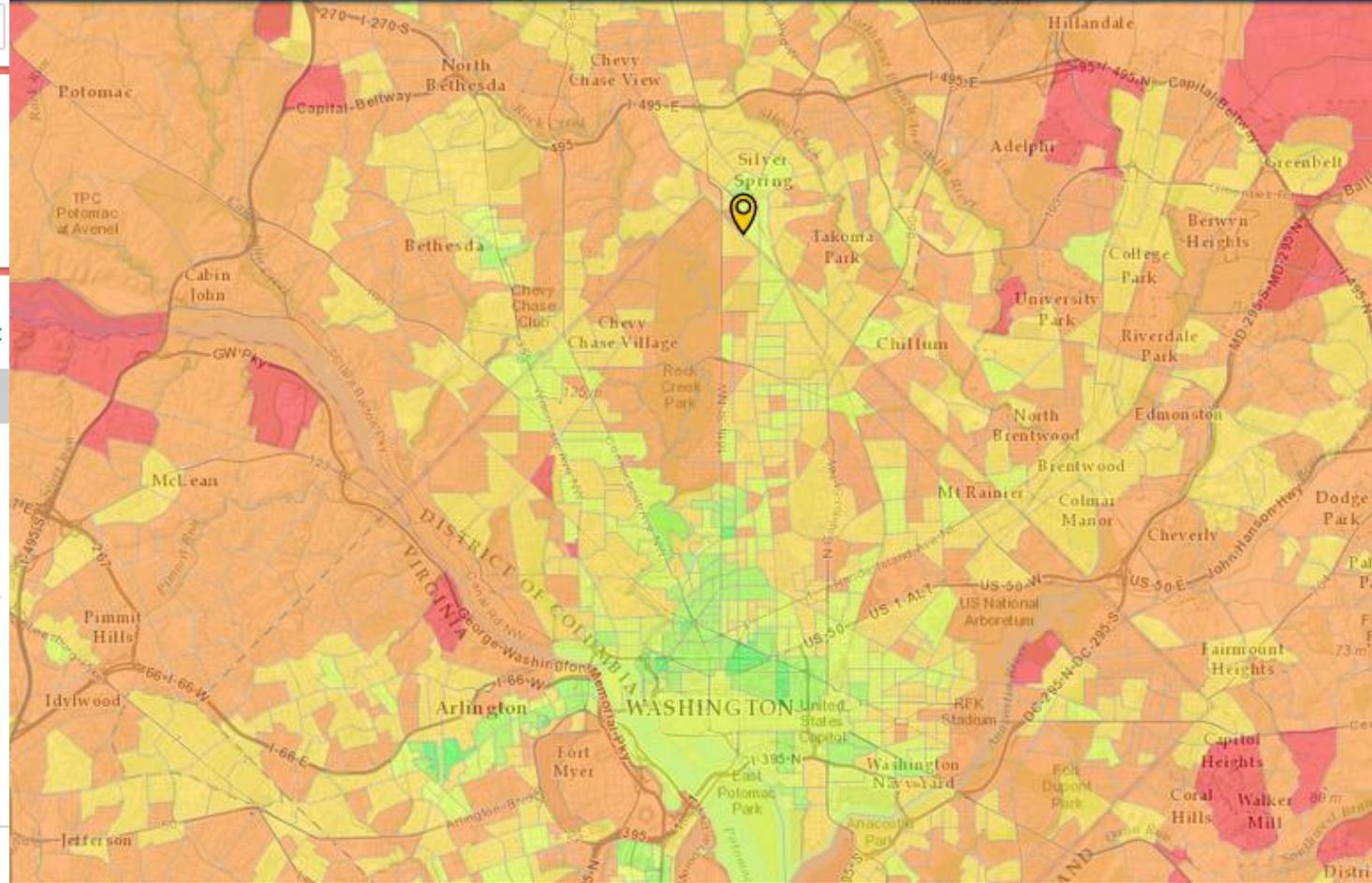
or move pointers on the map

Use average block group distance to transit values

Existed in 2010

Occupied in 2010

[Show statistics](#)



Layers & Legend

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)

The challenges we face

- ▶ Urban form variables are proxies for what is actually going on
- ▶ Reliance on other federal data (Census/American Community Survey, LEHD, etc.)
 - ▶ Important resource to us, makes our dataset possible
 - ▶ Challenges with granularity of some datasets and our needs
- ▶ Transit data from transit agencies across the country – uniformity of data, updates, accuracy

Contact & links

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

SLD user guide: <http://www2.epa.gov/smartgrowth/smart-location-database-technical-documentation-and-user-guide>

Thank you!!