

# Transit Desert Index



## Summary

Transit Desert Index measures the gap between level of transit service (supply) and needs of the transportation-dependent population (demand).

## Description

The term "transit desert" is a new concept that looks at the gap between level of transit service (supply) and needs of a particular population (demand). These populations are often referred to as "transit dependent," people that are too young, too old, or too poor or who are physically unable to drive. "Transit deserts" in this case are defined as areas that lack adequate public transit service given areas containing populations that are deemed transit-dependent. Reports Available: <https://digitalcommons.usf.edu/cgi/viewcontent.cgi?article=1054&context=jpt> and <https://dc.uwm.edu/cgi/viewcontent.cgi?article=1169&context=ijger>.

## Credits

The Urban Information Lab (UIL) at UT Austin (<https://sites.utexas.edu/uil/transit-deserts/>). E\_ and RPL\_ attributes are from 2018 CDC's Social Vulnerability Index (SVI) ([https://www.atsdr.cdc.gov/placeandhealth/svi/documentation/SVI\\_documentation\\_2018.html](https://www.atsdr.cdc.gov/placeandhealth/svi/documentation/SVI_documentation_2018.html)).

Downloaded from <https://www.arcgis.com/home/item.html?id=f1b6dd3c82d748ca9ac1e98972de5e5a> on 4/4/21

## Use limitations

There are no access and use limitations for this item.

## Extent

**West** -124.375841 **East** -69.809925  
**North** 49.002324 **South** 24.545049

## Scale Range

**Maximum (zoomed in)** 1:5,000  
**Minimum (zoomed out)** 1:150,000,000

## ArcGIS Metadata

### Topics and Keywords

\* CONTENT TYPE Downloadable Data

### Citation

TITLE Transit Desert Index

PRESENTATION FORMATS \* digital map

### Resource Details

DATASET LANGUAGES \* English (UNITED STATES)

SPATIAL REPRESENTATION TYPE \* vector

\* PROCESSING ENVIRONMENT Version 6.2 (Build 9200) ; Esri ArcGIS 10.8.1.14362

#### CREDITS

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Downloaded from <https://www.arcgis.com/home/item.html?id=f1b6dd3c82d748ca9ac1e98972de5e5a> on 4/4/21

#### ARCGIS ITEM PROPERTIES

\* NAME  
\* LOCATION  
\* ACCESS PROTOCOL Local Area Network

## Extents

#### EXTENT

##### GEOGRAPHIC EXTENT

##### BOUNDING RECTANGLE

EXTENT TYPE Extent used for searching

\* WEST LONGITUDE -124.375841

\* EAST LONGITUDE -69.809925

\* NORTH LATITUDE 49.002324

\* SOUTH LATITUDE 24.545049

\* EXTENT CONTAINS THE RESOURCE Yes

##### EXTENT IN THE ITEM'S COORDINATE SYSTEM

\* WEST LONGITUDE -13845455.280684

\* EAST LONGITUDE -7771205.298136

\* SOUTH LATITUDE 2819966.769289

\* NORTH LATITUDE 6275255.748001

\* EXTENT CONTAINS THE RESOURCE Yes

## Spatial Reference

#### ARCGIS COORDINATE SYSTEM

\* TYPE Projected  
\* GEOGRAPHIC COORDINATE REFERENCE GCS\_WGS\_1984  
\* PROJECTION WGS\_1984\_Web\_Mercator\_Auxiliary\_Sphere  
\* COORDINATE REFERENCE DETAILS

##### PROJECTED COORDINATE SYSTEM

WELL-KNOWN IDENTIFIER 102100

X ORIGIN -22041257.952553775

Y ORIGIN -30241100

XY SCALE 144148035.48642668

Z ORIGIN -100000

Z SCALE 10000

M ORIGIN -100000

M SCALE 10000

XY TOLERANCE 0.001

Z TOLERANCE 0.001

M TOLERANCE 0.001

HIGH PRECISION true

LATEST WELL-KNOWN IDENTIFIER 3857

WELL-KNOWN TEXT PROJCS["WGS\_1984\_Web\_Mercator\_Auxiliary\_Sphere",GEOGCS

["GCS\_WGS\_1984",DATUM["D\_WGS\_1984",SPHEROID

["WGS\_1984",6378137.0,298.257223563]],PRIMEM["Greenwich",0.0],UNIT

["Degree",0.0174532925199433]],PROJECTION["Mercator\_Auxiliary\_Sphere"],PARAMETER

["False\_Easting",0.0],PARAMETER["False\_Northing",0.0],PARAMETER

["Central\_Meridian",0.0],PARAMETER["Standard\_Parallel\_1",0.0],PARAMETER

["Auxiliary\_Sphere\_Type",0.0],UNIT["Meter",1.0],AUTHORITY["EPSG",3857]]

#### REFERENCE SYSTEM IDENTIFIER

- \* VALUE 3857
- \* CODESPACE EPSG
- \* VERSION 8.8(9.3.1.2)

## Spatial Data Properties

#### VECTOR

- \* LEVEL OF TOPOLOGY FOR THIS DATASET geometry only

#### GEOMETRIC OBJECTS

- FEATURE CLASS NAME tracts\_transit\_desert\_index
- \* OBJECT TYPE composite
- \* OBJECT COUNT 49958

#### ARCGIS FEATURE CLASS PROPERTIES

- FEATURE CLASS NAME tracts\_transit\_desert\_index
- \* FEATURE TYPE Simple
- \* GEOMETRY TYPE Polygon
- \* HAS TOPOLOGY FALSE
- \* FEATURE COUNT 49958
- \* SPATIAL INDEX TRUE
- \* LINEAR REFERENCING FALSE

## Distribution

#### DISTRIBUTION FORMAT

- \* NAME File Geodatabase Feature Class

## Fields

#### DETAILS FOR OBJECT tracts\_transit\_desert\_index

- \* TYPE Feature Class
- \* ROW COUNT 49958

#### FIELD OBJECTID

- \* ALIAS Object ID
- \* DATA TYPE OID
- \* WIDTH 4
- \* PRECISION 0
- \* SCALE 0
- \* FIELD DESCRIPTION  
Internal feature number.
- \* DESCRIPTION SOURCE  
Esri
- \* DESCRIPTION OF VALUES  
Sequential unique whole numbers that are automatically generated.

#### FIELD Shape

- \* ALIAS Shape
- \* DATA TYPE Geometry
- \* WIDTH 0
- \* PRECISION 0
- \* SCALE 0
- \* FIELD DESCRIPTION  
Feature geometry.
- \* DESCRIPTION SOURCE  
Esri
- \* DESCRIPTION OF VALUES  
Coordinates defining the features.

#### FIELD STATE\_FIPS

- \* ALIAS State FIPS Code
- \* DATA TYPE String
- \* WIDTH 2
- \* PRECISION 0
- \* SCALE 0

#### FIELD CNTY\_FIPS

- \* ALIAS County FIPS Code
- \* DATA TYPE String
- \* WIDTH 3
- \* PRECISION 0
- \* SCALE 0

#### FIELD STCOFIPS

- \* ALIAS State and County FIPS Code
- \* DATA TYPE String
- \* WIDTH 5
- \* PRECISION 0
- \* SCALE 0

#### FIELD TRACT

- \* ALIAS Tract
- \* DATA TYPE String
- \* WIDTH 6
- \* PRECISION 0
- \* SCALE 0

#### FIELD FIPS

- \* ALIAS FIPS Code
- \* DATA TYPE String
- \* WIDTH 11
- \* PRECISION 0
- \* SCALE 0

#### FIELD OBJECTID\_1

- \* ALIAS Object ID
- \* DATA TYPE Integer
- \* WIDTH 4
- \* PRECISION 0
- \* SCALE 0

#### FIELD OID\_

- \* ALIAS OID
- \* DATA TYPE Integer
- \* WIDTH 4
- \* PRECISION 0
- \* SCALE 0

#### FIELD GEOID

- \* ALIAS US Census ID for Tract
- \* DATA TYPE String
- \* WIDTH 8000
- \* PRECISION 0
- \* SCALE 0

#### FIELD STATE

- \* ALIAS US State
- \* DATA TYPE String
- \* WIDTH 8000
- \* PRECISION 0
- \* SCALE 0

#### FIELD COUNTY

- \* ALIAS US County
- \* DATA TYPE String
- \* WIDTH 8000
- \* PRECISION 0
- \* SCALE 0

#### FIELD AREA\_SQMI

- \* ALIAS Area of Tract (square miles)
- \* DATA TYPE Double
- \* WIDTH 8
- \* PRECISION 0
- \* SCALE 0

#### FIELD td\_index

- \* ALIAS Transit Desert Index
- \* DATA TYPE Double
- \* WIDTH 8
- \* PRECISION 0
- \* SCALE 0

#### FIELD td\_demand\_zscore

- \* ALIAS Z-score of Transit Demand Population
- \* DATA TYPE Double
- \* WIDTH 8
- \* PRECISION 0
- \* SCALE 0

#### FIELD td\_demand\_pop

- \* ALIAS Transit Demand Population
- \* DATA TYPE Double
- \* WIDTH 8
- \* PRECISION 0
- \* SCALE 0

#### FIELD td\_supply\_zscore

- \* ALIAS Z-score of Transit Supply
- \* DATA TYPE Double
- \* WIDTH 8
- \* PRECISION 0
- \* SCALE 0

#### FIELD num\_stops

- \* ALIAS Number of Transit Stops Per Route
- \* DATA TYPE Integer
- \* WIDTH 4
- \* PRECISION 0
- \* SCALE 0

FIELD num\_intersects

- \* ALIAS Number of Street Intersections
- \* DATA TYPE Integer
- \* WIDTH 4
- \* PRECISION 0
- \* SCALE 0

FIELD num\_pois

- \* ALIAS Number of Points of Interest
- \* DATA TYPE Integer
- \* WIDTH 4
- \* PRECISION 0
- \* SCALE 0

FIELD RPL\_THEMES

- \* ALIAS Overall Tract Summary Ranking
- \* DATA TYPE Double
- \* WIDTH 8
- \* PRECISION 0
- \* SCALE 0

FIELD E\_TOTPOP

- \* ALIAS Population Estimate
- \* DATA TYPE Integer
- \* WIDTH 4
- \* PRECISION 0
- \* SCALE 0

FIELD E\_POV

- \* ALIAS Persons Below Poverty Estimate
- \* DATA TYPE Integer
- \* WIDTH 4
- \* PRECISION 0
- \* SCALE 0

FIELD E\_UNEMP

- \* ALIAS Civilian (Age 16 Plus) Unemployed Estimate
- \* DATA TYPE Integer
- \* WIDTH 4
- \* PRECISION 0
- \* SCALE 0

FIELD E\_NOHSDP

- \* ALIAS Persons (Age 25 Plus) with No High School Diploma Estimate
- \* DATA TYPE Integer
- \* WIDTH 4
- \* PRECISION 0
- \* SCALE 0

FIELD E\_AGE65

- \* ALIAS Persons Aged 65 and Older Estimate
- \* DATA TYPE Integer
- \* WIDTH 4
- \* PRECISION 0
- \* SCALE 0

FIELD E\_AGE17

- \* ALIAS Persons Aged 17 and Younger Estimate
- \* DATA TYPE Integer
- \* WIDTH 4
- \* PRECISION 0
- \* SCALE 0

FIELD E\_DISABL

- \* ALIAS Civilian Noninstitutionalized Population with a Disability Estimate MOE
- \* DATA TYPE Integer
- \* WIDTH 4
- \* PRECISION 0
- \* SCALE 0

FIELD E\_SNGPNT

- \* ALIAS Single Parent Household with Children Under 18 Estimate MOE
- \* DATA TYPE Integer
- \* WIDTH 4
- \* PRECISION 0
- \* SCALE 0

FIELD E\_MINRTY

- \* ALIAS Minority (All Persons Except White, Non-Hispanic) Estimate
- \* DATA TYPE Integer
- \* WIDTH 4
- \* PRECISION 0
- \* SCALE 0

FIELD E\_LIMENG

- \* ALIAS Persons (Age 5 Plus) Who Speak English \_Less than Well\_ Estimate
- \* DATA TYPE Integer
- \* WIDTH 4
- \* PRECISION 0
- \* SCALE 0

FIELD E\_NOVEH

- \* ALIAS Households with no Vehicle Available Estimate
- \* DATA TYPE Integer
- \* WIDTH 4
- \* PRECISION 0
- \* SCALE 0

FIELD RPL\_THEME1

- \* ALIAS Percentile Ranking for Socioeconomic Theme Summary
- \* DATA TYPE Double
- \* WIDTH 8
- \* PRECISION 0
- \* SCALE 0

FIELD RPL\_THEME2

- \* ALIAS Percentile Ranking for Household Composition Theme Summary
- \* DATA TYPE Double
- \* WIDTH 8
- \* PRECISION 0
- \* SCALE 0

#### FIELD RPL\_THEME3

- \* ALIAS Percentile Ranking for Minority Status/Language Theme
- \* DATA TYPE Double
- \* WIDTH 8
- \* PRECISION 0
- \* SCALE 0

#### FIELD RPL\_THEME4

- \* ALIAS Percentile Ranking for Housing Type/Transportation Theme
- \* DATA TYPE Double
- \* WIDTH 8
- \* PRECISION 0
- \* SCALE 0

#### FIELD Shape\_Length

- \* ALIAS Shape Length
- \* DATA TYPE Double
- \* WIDTH 8
- \* PRECISION 0
- \* SCALE 0
- \* FIELD DESCRIPTION  
Length of feature in internal units.

- \* DESCRIPTION SOURCE  
Esri

- \* DESCRIPTION OF VALUES  
Positive real numbers that are automatically generated.

#### FIELD Shape\_Area

- \* ALIAS Shape Area
- \* DATA TYPE Double
- \* WIDTH 8
- \* PRECISION 0
- \* SCALE 0
- \* FIELD DESCRIPTION  
Area of feature in internal units squared.

- \* DESCRIPTION SOURCE  
Esri

- \* DESCRIPTION OF VALUES  
Positive real numbers that are automatically generated.

## Metadata Details

- \* METADATA LANGUAGE English (UNITED STATES)
- \* METADATA CHARACTER SET utf8 - 8 bit UCS Transfer Format

SCOPE OF THE DATA DESCRIBED BY THE METADATA \* dataset

SCOPE NAME \* dataset

\* LAST UPDATE 2021-08-17

#### ARCGIS METADATA PROPERTIES

METADATA FORMAT ArcGIS 1.0  
METADATA STYLE FGDC CSDGM Metadata  
STANDARD OR PROFILE USED TO EDIT METADATA FGDC

CREATED IN ARCGIS FOR THE ITEM 2021-08-11 17:00:48

LAST MODIFIED IN ARCGIS FOR THE ITEM 2021-08-17 12:35:30

#### AUTOMATIC UPDATES

HAVE BEEN PERFORMED Yes  
LAST UPDATE 2021-08-17 12:35:21