Access to Jobs and Workers via Transit

A geospatial data resource from U.S. EPA's Office of Sustainable Communities

Technical Documentation and Data User Guide

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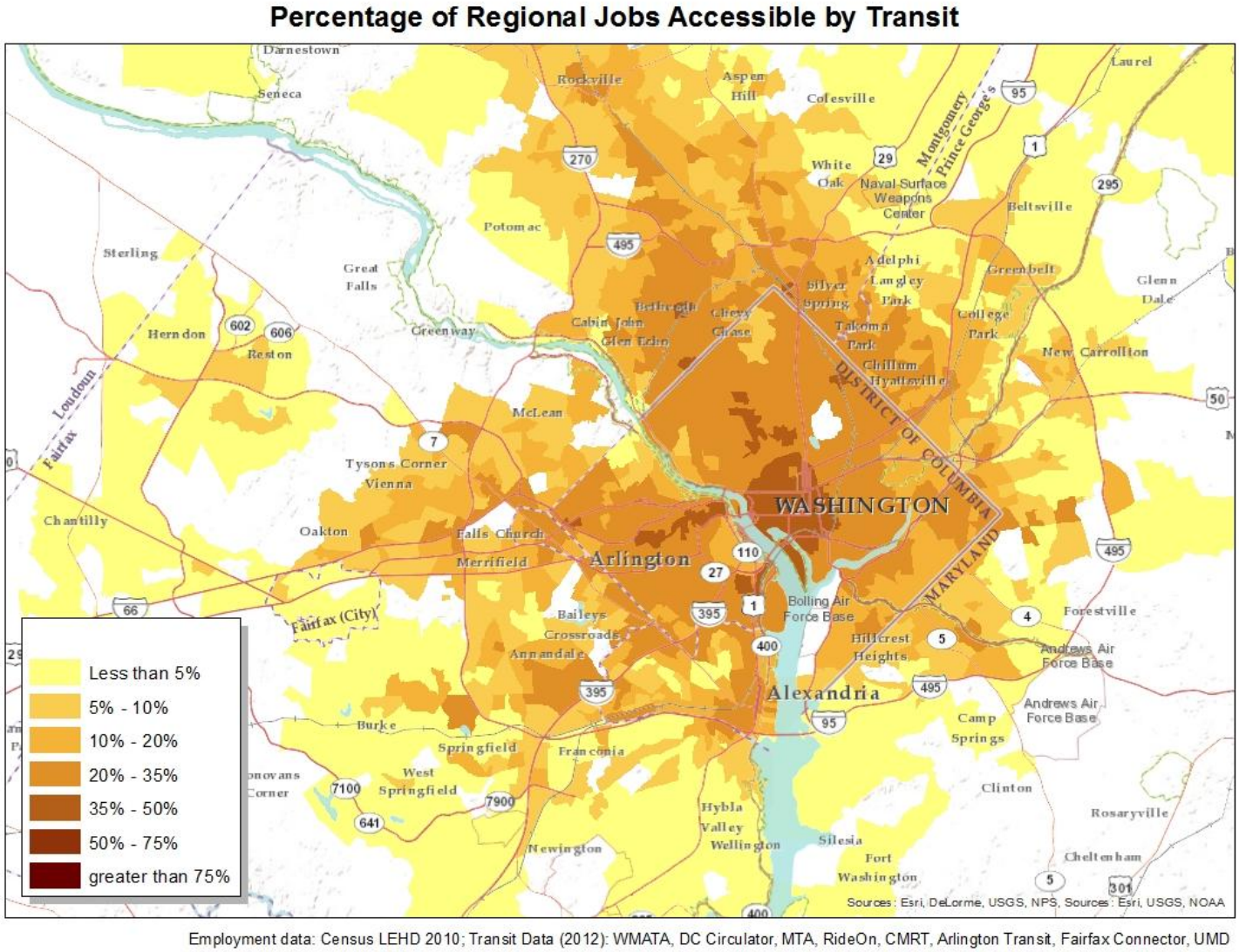
Summary

Access to Jobs and Workers via Transit is a free geospatial data resource and web mapping tool for comparing the performance of neighborhoods in regards to their accessibility to destinations via public transit service. Using publically available transit service data we calculated – for each U.S. census block group – travel time to all other census block groups accessible via transit. Drawing on data from the census we tabulated how many people live and work in those accessible block groups. We combined these data to summarize several indicators of transit accessibility for individual block groups as well as regional benchmarks for comparison. Travel time is limited to 45 minutes and is inclusive of wait times, transfers, and walking to/from transit stops. Coverage is limited to metropolitan regions and counties served by transit agencies that publically share their service data in a standard format called GTFS. A full listing of those areas is included as appendix to this report. Figure 1 displays one variable from this dataset for the Washington DC metropolitan region.

Figure 1. Percentage of Regional Jobs Accessible by Transit, Washington DC Metropolitan Region



Employment data: Census LEHD 2010; Transit Data (2012): WMATA, DC Circulator, MTA, RideOn, CMRT, Arlington Transit, Fairfax Connector, UMD

Background

In early 2013 EPA first released version 2.0 of the Smart Location Database (SLD)[2]. That resource was developed to address the growing demand for data products and tools that consistently compare the location efficiency of neighborhoods across metropolitan regions and across the U.S. Access to Jobs and Workers via Transit is a supplementary data product derived from data used to create the transit accessibility variables in the SLD. This new data release included a variety of performance metrics that summarize for each census block group the total number of jobs, population, or workers by wage category that can be reached in a 45-minute transit ride. Coverage is limited to metropolitan regions and counties served by transit agencies that publically share their service data in a standard format called GTFS. This User Guide provides a full data dictionary and details the data sources and methodology used to derive these variables.

Accessing this dataset

EPA's Access to Jobs and Workers via Transit data is a free resource available to the public for download, web service, or viewing online. The latest information about accessing this and associated datasets can be found at http://www.epa.gov/smartgrowth/smartlocationdatabase.htm#trans45. Options are described below:

Download:

Download this data as a shapefile or single file geodatabase at EPA's Environmental Dataset Gateway. Users who only wish to download data for a single state, metro region, or locality can use EPA's Clip and Ship tool[3].

Web service:

This data is available as an Esri mapping service, REST, SOAP, WMS, and KML. See website for details.

Interactive map viewer:

Several variables from this dataset can be explored using our interactive map viewer. Go to http://www.epa.gov/smartgrowth/smartlocationdatabase.htm for details.

Data Dictionary

Table 1: Variables available in the web service and downloadable data

Service layer name	Variable name in data table	Description
Accessibility Index – Transit to working-age population	TrAccess_Indexi	An index of the relative accessibility of a block group compared to other block groups within the same metropolitan region, as measured by travel time to working-age population via transit. Values closer to 1 are more accessible.

[2] http://epa.gov/smartgrowth/smartlocationdatabase.htm

[3] http://edg.epa.gov/clipship/

Population accessible by transit	Pop_byTr	Total population able to access the block group within a 45-minute transit and walking commute
% of population accessible by transit	Pct_Pop_byTr	Total population able to access the block group within a 45-minute transit and walking commute as a percentage of total regional population.
Jobs accessible by transit	Jobs_byTr	Total jobs reachable within a 45 minute transit and walking commute
% of regional jobs accessible by transit	Pct_Jobs_byTr	Total jobs reachable within a 45 minute transit and walking commute as a percentage of total regional jobs
Workers accessible by transit	Wrks_byTr	Employed population able to access the block group within a 45-minute transit commute from their home location.
% of workers accessible by transit	Pct_Wrks_byTr	Employed population able to access the block group within a 45-minute transit commute from their home location as a percentage of total regional employed population.
Low-wage workers accessible by transit	LoWgWrks_byTr	Workers earning $1,250/month or less that can reach the block group within a 45-minute transit commute from their home location.
% of all low-wage workers in region accessible by transit	Pct_LoWgWrks_byTr	Low-wage workers that can reach the block group within a 45-minute transit commute from their home location as a percentage of all low-wage workers in region.
Low-medium wage workers accessible by transit	LoMeWgWrks_byTr	Workers earning $3,333/month or less that can reach the block group within a 45-minute transit commute from their home location.
% of all low-medium wage workers in region accessible by transit	Pct_LoMeWgWrks_by Tr	Low-medium wage workers that can reach the block group within a 45-minute transit commute from their home location as a percentage of all low-medium wage workers in region.

Table 2: Regional benchmark indicators only available in downloadable data

Variable name in data table	Description
Pop_byTr_min	Minimum Pop_byTr among all block groups within same CBSA
Pop_byTr_max	Maximum Pop_byTr among all block group within same CBSA

Pop_byTr_av	Weighted average Pop_byTr among all block group within same CBSA
Pct_Pop_byTr_min	Minimum Pct_Pop_byTr among all block group within the same CBSA
Pct_Pop_byTr_max	Maximum Pct_Pop_byTr among all block group within the same CBSA
Pct_Pop_byTr_av	Weighted average Pct_Pop_byTr among all block group within the same CBSA
Jobs_byTr_min	Minimum Jobs_byTr among all block group within the same CBSA
Jobs_byTr_max	Maximum Jobs_byTr among all block group within the same CBSA
Jobs_byTr_av	Weighted average Jobs_byTr among all block group within the same CBSA
Pct_Jobs_byTr_min	Minimum Pct_Jobs_byTr among all block group within the same CBSA
Pct_Jobs_byTr_max	Maximum Pct_Jobs_byTr among all block group within the same CBSA
Pct_Jobs_byTr_av	Weighted average Pct_Jobs_byTr among all block group within the same CBSA
Wrks_byTr_min	Minimum Wrks_byTr among all block group within the same CBSA
Wrks_byTr_max	Maximum Wrks_byTr among all block group within the same CBSA
Wrks_byTr_av	Weighted average Wrks_byTr among all block group within the same CBSA
Pct_Wrks_byTr _min	Minimum transit accessibility score among all block group within the same CBSA
Pct_Wrks_byTr _max	Maximum transit accessibility score among all block group within the same CBSA
Pct_Wrks_byTr _av	Weighted average transit accessibility score among all block group within the same CBSA
LoWgWrks_byTr	Number of low wage workers (those earning $1250/month or less) that can reach the block group within a 45 minute transit commute
LoWgWrks_byTr_min	Minimum LoWgWrks_byTr among all block group within the same CBSA
LoWgWrks_byTr_max	Maximum LoWgWrks_byTr among all block group within the same CBSA
LoWgWrks_byTr_av	Weighted average LoWgWrks_byTr among all block group within the same CBSA
Pct_LoWgWrks_byTr_min	Minimum Pct_LoWgWrks_byTr among all block group within the same CBSA
Pct_LoWgWrks_byTr _max	Max Pct_LoWgWrks_byTr among all block group within the same CBSA

Pct_LoWgWrks_byTr _av	Weighted average Pct_LoWgWrks_byTr among all block group within the same CBSA
LoMeWgWrks_byTr_min	Minimum LoMeWgWrks _byTr among all block group within the same CBSA
LoMeWgWrks_byTr_max	Maximum LoMeWgWrks _byTr among all block group within the same CBSA
LoMeWgWrks_byTr_av	Weighted average LoMeWgWrks _byTr among all block group within the same CBSA
Pct_LoMeWgWrks_byTr_min	Minimum Pct_ LoMeWgWrks _byTr among all block group within the same CBSA
Pct_LoMeWgWrks_byTr _max	Max Pct_ LoMeWgWrks _byTr among all block group within the same CBSA
Pct_LoMeWgWrks_byTr _av	Weighted average Pct_ LoMeWgWrks _byTr among all block group within the same CBSA

Data Sources

Block ground boundaries

EPA obtained census block group boundaries from 2010 Census TIGER/Line shapefiles and combined them into a single national ArcGIS feature class. TIGER2010_bg10 is the basic geographic dataset to which all SLD variables are appended. It represents the 2010 geographic boundaries of all BLOCK GROUPs in the United States. EPA also obtained 2010 block group "centers of population"[4] from the Census. These centroids were used in geoprocessing routines developed for spatially derived variables, notably the distance to transit and regional accessibility measures. Finally, the US Census provides tables relating county and county equivalent areas to core based statistical areas (CBSA) and combined statistical areas (CSA). EPA used these tables to associate block groups with their respective metropolitan areas based on county location.

2010 Census

EPA obtained basic population, demographic, and housing data for block groups from the 2010 Census Summary File 1 (SF1).[5] SF1 contains data compiled from the 2010 Decennial Census questions. EPA's Office of Environmental Information tabulated 2010 SF1 data for all U.S. block group within two tables SF1HOUBG and SF1POPBG. SF1HOUBG contains data on housing units, occupancy and tenure. SF1POPBG contains data on population, race, ethnicity, age, and sex.

Longitudinal Employer-Household Dynamics (LEHD)

US Census LEHD Origin-Destination Employment Statistics (LODES) tables summarize employment at the census block level for all 50 states, the District of Columbia, Puerto Rico and the US Virgin Islands. However, the territories and the Commonwealth of Massachusetts are not "regular production" partners in LEHD, and some data for these jurisdictions

[4] http://www.census.gov/geo/reference/centersofpop.html

[5] http://www.census.gov/2010census/data/

are not available[6]. LODES version 6.X utilizes 2010 Census block boundaries. The latest update (version 6.1) is an augmentation of version 6.0 and includes two previously un-reported job types that represent federal employment.[7]

This dataset references the LODES Work Area Characteristics (WAC) tables for employment tabulations. Variables concerning the home location of workers by wage level were obtained from the LODES Residence Area Characteristics (RAC). The structures and field definitions of the RAC and WAC datasets are shared in the Smart Location Database User Guide[8].

InfoUSA

Employment data for Massachusetts are not available in the LEHD. So EPA obtained Massachusetts employment data from the Metropolitan Area Planning Council (MAPC). The original data source for these variables is InfoUSA[9], 2011.

NAVTEQ

EPA has a license to use several NAVTEQ data layers[10] (release date 2011 Q3) including NAVSTREETS for developing walk-time estimates from block group centroids to transit stops. The NAVSTREETS dataset is a detailed nationwide street network with rich attribute information, include functional class and speed categories, direction of travel restrictions, vehicular and pedestrian restrictions, tags for highway ramps and other variables of interest for developing a multimodal travel network and characterizing network design.

GTFS

Local transit agencies can use GTFS (or General Transit Feed Specification[11]) to share transit schedules and associated geographic information in a common format. GTFS files contain stop locations, stop times, routes and trips, and other attributes of the transit network. EPA obtained GTFS data for use in metrics summarizing transit service availability, frequency, and accessibility to destinations via transit. This data was obtained during the months of December, 2012 and January, 2013. Not all transit agencies share their data in this format. But the vast majority of large transit agencies do so. Table 4 in Appendix A lists the 228 transit agencies whose service is reflected in this dataset. An analysis of data from the National Transit Database revealed that transit agencies with GTFS data account for 88% of all transit ridership in the United States. Since many metropolitan regions are served by multiple transit agencies, our metrics derived from GTFS data may paint an incomplete picture of service. Therefore we also calculated for each metropolitan region the percentage of all transit ridership that occurred on systems whose GTFS data is reflected in Access to Jobs and Workers via Transit. Table 5 in Appendix A displays these findings.

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[6] EPA later obtained several Massachusetts employment variables from Metropolitan Area Planning Council. See Info USA below for details.

[7] More information about LODES data can be found at http://lehd.did.census.gov/data/. More information about NAICS (North American Industry Classification System) can be found at http://www.census.gov/eos/www/naics/.

[8] https://edg.epa.gov/data/Public/OP/SLD/SLD_UserGuide.pdf

[9] http://www.infousa.com/

[10] http://www.navteq.com/products_data.htm

[11] Learn more about the GTFS at https://developers.google.com/transit/gtfs/. Agencies can post raw GTFS files for public download on the GTFS data exchange (http://www.gtfs-data-exchange.com/). A full listing of agencies that do and do not share their data in GTFS format is available at City-Go-Round (http://www.citygoround.org/agencies/).

Technical Approach

Modeling transit accessibility involved the preparation of five different origin destination (OD) matrices that were utilized in different ways during the course of the analysis. The five OD matrices are described briefly below:

1. CBG centroid to transit stops (also used in D4a): Contains network walk travel times from CBG centroids to transit stops; model of access and egress portions of transit trips.
2. CBG centroid to CBG centroid by walking: Contains network walk travel times between CBG centroids; model of walk-to-destinations opportunities.
3. Transit stop to transit stop by walking: Contains network walk travel times between transit stops; model of walk-to-transfer opportunities; used as an interim table supporting the transit stop to transit stop by transit vehicle matrix.
4. Transit stop event to transit stop event by transit vehicle: Contains GTFS schedule-derived in vehicle travel times between transit stop events on a single transit vehicle and on a trip-by-trip basis; model of transit service; used as an interim table supporting the transit stop to transit stop by transit vehicle matrix.
5. Transit stop to transit stop by transit vehicle: Contains minimum travel times between stop locations based on connected stop events, in vehicle times, and walk to transfer times; model of total transit system connectivity from boarding stop to all potential alighting stops by fastest route combination.

The transit analysis focused on the basic phases of a transit trip: walking to access transit service, the in-vehicle trip, walking and/or waiting to make a transfer, the second in-vehicle trip (where available), and walk egress from a transit stop to a destination. Each phase is described below with references to the matrices as enumerated above (i.e. Matrix 1 is the CBG centroid to transit stops matrix).

Walk Access to Transit

Walk access to transit was modeled as the network distance from a CBG centroid to each accessible transit stop in the GTFS data set within a 15-minute walk allowance. Travel distances were stored in Matrix 1. A standard wait time of 5 minutes to make the first boarding was applied.

In-Vehicle Time (first trip)

From walk accessible stops, additional ride accessible stops were located. These were stops to which a traveler could ride from the walk accessible stops based on the transit trips serving those stops. The maximum in-vehicle time permitted was 45 minutes. The total amount of in vehicle time from the walk accessible stop of origin was retained when modeling transfer opportunities.

Transfers

For all ride accessible stop events, there may exist transfer opportunities. These were found through matrix 3. Ten minutes total transfer time was permitted, of which five could be spent walking to make the transfer. The arrival time at each ride accessible stop was retained in the data tables when analyzing transfer opportunities. The transfer opportunity stop event needed to be within a five-minute walk of the ride accessible stop of alighting, occurring no more than ten minutes after alighting but after the alighting time plus the walk to transfer time.

In-Vehicle Time (second trip)

A maximum of 45 minutes in vehicle time was allowed. Thus the stops accessible by riding during the second trip had to be reachable within 45 minutes *minus* the time spent on the first in-vehicle leg of the trip. At the completion of the analysis of the second in-vehicle leg of the transit trip, all stop event OD pairs were compiled in matrix 4. Stop events were linked to their stop locations, and pairs were summarized to find the fastest travel time between stop locations by

any combination of walking, riding and transferring during the analysis time period (PM peak). The resulting table was matrix 5.

Walk Egress

With the fastest travel times between stops tabulated in matrix 5, the total travel time between each origin CBG and all transit stops could be derived by adding the walk access time to walk accessible stops and the additional in-vehicle/transfer time required to reach additional stops. From all accessible stops, matrix 1 was again deployed to determine walk egress time to destination CBGs. With walk egress time known, total travel time between CBG OD pairs was known, although in many cases, the same OD pair appeared many times due to the multiplicity of ride accessible stops and connected CBG destinations at the egress end. Thus, that table was summarized to find the minimum total travel time between CBGs in a scratch version of the final CBG to CBG transit travel times matrix.

Walk Competitiveness

For some OD pairs – especially in highly urbanized areas – walk travel times to neighboring CBGs were expected to be competitive with transit travel times, especially considering the five minute wait time required for the first boarding of a transit vehicle in the transit accessibility analysis. Thus, walk times between neighboring CBGs were analyzed for all CBGs that had some access to transit. A maximum 15 minute walk from origin to destination was permitted. The resulting table (matrix 2) was merged with the scratch CBG to CBG transit travel times matrix, and summarized to find the minimum travel time between zones by transit or by walking where walking was modeled to be more expedient than transit.

Transit accessibility was analyzed for the PM peak travel period only, as typically this is a period of relatively intense levels of transit service and during which a rich mix of commuting and discretionary trip-making takes place. GTFS schedules were queried to isolate trips and their related stop events that occur within the 4:45 PM to 7 PM time frame. There is no hard and fast departure time from the CBG origin. Rather, since all possible permutations of traveling by transit between stops were analyzed in the development of matrix 5, the CBG to CBG travel times reported in the final matrix reflect the optimal transit trip connecting those CBGs in the PPM peak period. In the development of matrices 4 and 5, the first transit trips had to be boarded prior to 5:45 PM. These and other key parameters of the transit analysis as described herein are summarized in Table 3 below.

Table 3 –Attributes and Parameters of Transit Accessibility Analysis

Full Travel Period	4:45 PM to 7:00 PM
Travel Period of Walk Departure from CBG origin	4:45 PM to 5:40 PM
Travel Period of First Trip Boarding	5:00 PM to 5:45 PM
Maximum Possible Total Travel Time for the Transit Trip	90 minutes
Maximum Walk Time Allowed for Access	15 minutes
Wait time to Board First Trip	5 minutes
Maximum Total In-Vehicle Travel Time	45 minutes (first and second trips combined)
Number of Transfers Allowed	1
Maximum Time Allowed for Waiting to Make a Transfer	10 minutes

Maximum Time Allowed for Walking to Make a Transfer (subsumed within time for waiting to make a transfer)	5 minutes
Maximum Walk Time Allowed for Egress	15 minutes

Calculating summary indicators

The above analysis resulted in a single OD matrix depicting minimum travel time via transit and/or walking between each origin CBG and all possible destination CBG reachable in less than 90 minutes. EPA then joined Census and LEHD data on employment and working age population to the associated destination CBG of each CBG to CBG OD pair. Then, for each origin CBG, EPA selected all destination CBG with a total travel time of 45 minute or less and summed the following variables: population, housing units, households, jobs, workers (based on home location), low-wage workers (below $1,250/month), medium-wage workers ($1,250-$3.333/month), and high-wage workers (above $3,333/month).[12] Proportional indicators (e.g., % of population accessible by transit) were calculated by dividing the sum of population within all destination CBGs by the total regional population. In general the values for these indicators are between 0 and 1. However, since some transit networks cross regional boundaries the values should be interpreted with caution. For instance a town outside of a major metropolitan region with commuter rail service to the city center may end up with access to a greater number of jobs, workers, or population than is present in its containing CBSA. In other words, the proportional value will be greater than 1.

Calculation of Accessibility Index – Transit to working-age population [TrAccess_Indexi]

This indicator is pulled directly from the variable D5dei in the Smart Location Database. See the SLD User Guide[13] for full documentation.

[12] See the LEHD documentation or the Smart Location Database User Guide for details. https://edg.epa.gov/data/Public/OP/SLD/SLD_UserGuide.pdf

[13] https://edg.epa.gov/data/Public/OP/SLD/SLD_UserGuide.pdf

Appendix A: GTFS Data Coverage

As noted above, only a subset of US public transit agencies share their service data in GTFS format. Table 4 lists all transit agencies whose service data is included in EPA's Access to Jobs and Workers via Transit indicators, sorted by metropolitan region served.

Many metropolitan regions are served by multiple transit agencies. Therefore we also analyzed agency ridership data in the National Transit Database and then summarized by metropolitan region in order to calculate the percentage of all transit trips that occurred on systems whose GTFS data is reflected in these indicators. The results are shown in Table 5. This information can be used to help assess the reliability of EPA's transit accessibility metrics in a region of interest.

Table 4. Transit agencies with GTFS service data reflected in SLD metrics

Agency Name	Service Area	Date of GTFS file obtained
City of Albany / Linn Benton Loop	Albany, OR	2012
Linn Shuttle	Albany, OR	2012
ABQ Ride	Albuquerque, NM	2012
LANTA	Allentown-Bethlehem, PA	2012
Ann Arbor Transportation Authority	Ann Arbor, MI	2012
University of Michigan Transit Services	Ann Arbor, MI	2012
Annapolis Transit	Annapolis, MD	2011
Asheville Transit Service	Asheville, NC	2012
Sunset Empire Transportation District	Astoria-Seaside, OR	2012
Metropolitan Atlanta Rapid Transit Authority	Atlanta, GA	2012
Capital Metro	Austin, TX	2012
Golden Empire Transit District	Bakersfield, CA	2012
BWI Thurgood Marshall Intl Airport	Baltimore, MD	2011
Charm City Circulator	Baltimore, MD	2011
Howard Transit	Baltimore, MD	2011
Maryland Transit Administration	Baltimore, MD	2011
Cascades East Transit	Bend, OR	2012
Birmingham Jefferson County Transit Authority	Birmingham, AL	2012
Blacksburg Transit	Blacksburg, VA	2012
Bloomington Transit	Bloomington, IN	2012
Massport	Boston, MA	2012
MBTA	Boston, MA	2012
Merrimack Valley Regional Transit Authority	Boston, MA	2012
MetroWest Regional Transit Authority	Boston, MA	2012
Lexpress	Boston, MA	2009
Kitsap Transit	Bremerton, WA	2012
NFTA-METRO	Buffalo, NY	2012
Butte-Silver Bow	Butte, MT	2013
Eastern Sierra Transit Authority	California and Nevada (Intercity)	2012
Cape Cod Regional Transit Authority (CCRTA)	Cape Cod, MA	2010

Champaign Urbana Mass Transit District	Champaign-Urbana, IL	2012
Chapel Hill Transit	Chapel Hill, NC	2010
Charlottesville Area Transit	Charlottesville, VA	2012
Chicago Transit Authority	Chicago, IL	2012
Metra	Chicago, IL	2012
Pace Suburban Bus Service	Chicago, IL	2012
North Indiana Commuter Transportation District	Chicago, IL	2010
Southwest Ohio Regional Transit Authority	Cincinatti, OH	2012
Transit Authority of Northern Kentucky	Cincinatti, OH	2012
Clemson Area Transit	Clemson, SC	2012
Greater Cleveland Regional Transit Authority	Cleveland, OH	2012
Mountain Metropolitan Transit	Colorado Springs, CO	2010
Central Ohio Transit Authority	Columbus, OH	2012
Coos County Area Transit	Coos Bay, OR	2011
Curry Public Transit	Coos Bay, OR	2011
Porter Stage Lines	Coos Bay, OR	2012
Corona Cruiser	Corona, CA	2012
Corvallis Transit System	Corvallis, OR	2012
Cottonwood Area Transit	Cottonwood, AZ	2012
Allegany County Transit	Cumberland, MD	2012
DALLAS AREA RAPID TRANSIT	Dallas-Ft Worth, TX	2012
Fort Worth Transportation Authority	Dallas-Ft Worth, TX	2012
DART First State	Delaware (Statewide)	2012
Regional Transportation District	Denver, CO	2012
Detroit Department of Transportation	Detroit, MI	2012
Duluth Transit Authority	Duluth, MN	2012
Lane Transit District	Eugene, OR	2012
Arcata & Mad River Transit System	Eureka-Arcata, CA	2012
Eureka Transit Service	Eureka-Arcata, CA	2012
Redwood Transit System	Eureka-Arcata, CA	2012
Community Transit	Everett, WA	2010
Fairfield and Suisun Transit	Fairfield, CA	2012
Razorback Transit	Fayetteville, AK	2009
Montachusett Regional Transit Authority	Fitchburg, MA	2012
Frederick Transit Meet-The-MARC	Frederick, MD	2011
TransIT Services of Frederick County	Frederick, MD	2013
Lee County Transit	Ft Myers, FL	2011
Citilink	Ft Wayne, IN	2012
Cape Ann Transportation Authority	Gloucester, MA	2012
Franklin Regional Transit Authority	Greenfield, MA	2012
Gunnison Valley RTA	Gunnison, CO	2013
Hampton Roads Transit (HRT)	Hampton Roads, VA	2011
TheBus	Honolulu, HI	2011

Columbia Area Transit	Hood River, OR	2012
Metropolitan Transit Authority of Harris County	Houston, TX	2012
Huntsville Shuttle	Huntsville, AL	2012
IndyGo	Indianapolis, IN	2012
Irvine Shuttle	Irvine, CA	2009
Island Transit	Island County, WA	2012
People Mover	John Day, OR	2011
KCATA	Kansas City, MO-KS	2012
The JO	Kansas City, MO-KS	2012
Kingsport	Kingsport, TN	2012
Basin Transit Service	Klamath Falls, OR	2010
The Shuttle, Inc.	Klamath Falls, OR	2012
Municipal Transit Utility	La Crosse, WI	2012
CityBus	Lafayette, IN	2011
Lakeland	Lakeland, FL	2011
Regional Transportation Commission of Southern Nevada	Las Vegas, NV	2012
LexTran	Lexington, KY	2012
Central Arkansas Transit Authority	Little Rock, AK	2012
Metro - Los Angeles	Los Angeles, CA	2012
Metrolink Trains	Los Angeles, CA	2012
Municipal Area Express (MAX)	Los Angeles, CA	2012
Torrance Transit	Los Angeles, CA	2012
Transit Authority of River City	Louisville, KY	2012
Lowell Regional Transit Authority	Lowell, MA	2012
Metro Transit-City of Madison	Madison, WI	2012
City of Maricopa	Maricopa, AZ	2010
Mason Transit	Mason County, WA	2011
RVTD	Medford, OR	2010
Space Coast Area Transit	Melbourne-Palm Bay, FL	2012
Mendocino Transit Authority	Mendocino, CA	2012
Broward County Transit	Miami-Ft Lauderdale, FL	2012
Miami Dade Transit	Miami-Ft Lauderdale, FL	2012
Tri-Rail	Miami-Ft Lauderdale, FL	2009
City of Milton-Freewater Oregon	Milton-Freewater, OR	2011
Milwaukee County Transit System	Milwaukee, WI	2012
Anoka County	Minneapolis-St. Paul, MN	2011
Maple Grove	Minneapolis-St. Paul, MN	2011
Metro Transit (Minneapolis)	Minneapolis-St. Paul, MN	2011
Minneapolis	Minneapolis-St. Paul, MN	2011
Minnesota Valley	Minneapolis-St. Paul, MN	2011
Other (Minnesota)	Minneapolis-St. Paul, MN	2011
Plymouth	Minneapolis-St. Paul, MN	2011
Prior Lake	Minneapolis-St. Paul, MN	2011

Saint Paul	Minneapolis-St. Paul, MN	2011
Scott County	Minneapolis-St. Paul, MN	2011
Shakopee	Minneapolis-St. Paul, MN	2011
SouthWest Transit	Minneapolis-St. Paul, MN	2011
University of Minnesota	Minneapolis-St. Paul, MN	2011
Mountain Line	Missoula, MT	2012
Ceres Area Transit	Modesto, CA	2012
Modesto Area Express	Modesto, CA	2012
Monroe County Transit Authority	Monroe County, PA	2012
Regional Transportation Authority	Nashville, TN	2010
Shore Line East	New Haven-New London, CT	2012
NJ TRANSIT BUS	New Jersey (Statewide)	2012
NJ TRANSIT RAIL	New Jersey (Statewide)	2012
Coach USA -Short Line	New York (Intercity)	2010
Bee-Line Bus	New York, NY	2012
Long Island Bus	New York, NY	2011
Long Island Rail Road	New York, NY	2012
Metro-North Railroad	New York, NY	2012
MNR Hudson Rail Link	New York, NY	2012
MTA Bus Company	New York, NY	2012
MTA New York City Transit	New York, NY	2012
NY Waterway	New York, NY	2012
Port Authority of New York & New Jersey	New York, NY	2011
Rockland County Department of Public Transportation	New York, NY	2012
TAPPANZEE EXPRESS	New York, NY	2010
Norwalk Transit	Norwalk, CT	2012
Intercity Transit	Olympia, WA	2012
Orange County Transportation Authority	Orange County, CA	2012
Sunline Transit Agency	Palm Springs-Indio, CA	2011
Port Authority Transit Corporation	Philadelphia, PA	2011
SEPTA Rail	Philadelphia, PA	2012
SEPTA Bus	Philadelphia, PA	2012
Port Authority of Allegheny County	Pittsburgh, PA	2012
Berkshire Regional Transit Authority	Pittsfield, MA	2011
Jefferson Transit Authority	Port Townsend, WA	2012
Ride Connection	Portland, OR	2012
TriMet	Portland, OR	2012
Rhode Island Public Transit Authority	Providence, RI	2012
NC State University Wolfline	Raleigh-Durham, NC	2010
Capital Area Transit	Raleigh-Durham, NC	2012
Cary Transit	Raleigh-Durham, NC	2012
Durham Area Transit Authority	Raleigh-Durham, NC	2010

Triangle Transit	Raleigh-Durham, NC	2010
Redding Area Bus Authority	Redding, PA	2012
RTC RIDE	Reno, NV	2012
Riverside Transit Agency	Riverside, CA	2012
Rochester-Genesee Regional Transportation Authority	Rochester, NY	2012
U-Trans	Roseburg, OR	2012
Unitrans (Davis)	Sacramento, CA	2012
Capitol Corridor Joint Powers Authority	Sacramento, CA	2012
Roseville Transit	Sacramento, CA	2012
Sacramento Regional Transit	Sacramento, CA	2012
Cherriots	Salem-Keizer, OR	2012
CityGo	Salina, KS	2009
Utah Transit Authority	Salt Lake City, UT	2012
San Benito County Express	San Benito County, CA	2012
MTS	San Diego, CA	2012
North County Transit District	San Diego, CA	2012
AC Transit	San Francisco Bay Area, CA	2011
AirBART	San Francisco Bay Area, CA	2012
Bay Area Rapid Transit	San Francisco Bay Area, CA	2012
Baylink	San Francisco Bay Area, CA	2012
Blue & Gold Fleet	San Francisco Bay Area, CA	2012
Caltrain	San Francisco Bay Area, CA	2012
County Connection	San Francisco Bay Area, CA	2012
Golden Gate Ferry	San Francisco Bay Area, CA	2012
Harbor Bay Ferry	San Francisco Bay Area, CA	2012
Marin Transit	San Francisco Bay Area, CA	2012
Menlo Park Midday Shuttle	San Francisco Bay Area, CA	2011
Rio Vista Delta Breeze	San Francisco Bay Area, CA	2012
San Francisco Municipal Transportation Agency	San Francisco Bay Area, CA	2012
San Luis Obispo Regional Transit Authority	San Luis Obispo, CA	2012
City of Sandy	Sandy, OR	2012
Santa Cruz Metro	Santa Cruz, CA	2012
Santa Rosa CityBus	Santa Rosa, CA	2010

Sarasota County Area Transit	Sarasota, FL	2012
City of Seattle	Seattle, WA	2012
King County Marine Divison	Seattle, WA	2012
Metro Transit (Seattle)	Seattle, WA	2012
Sound Transit	Seattle, WA	2012
Spokane Transit Authority	Spokane, WA	2012
PVTA	Springfield, MA	2012
Metro St. Louis	St. Louis, MO	2012
San Joaquin Regional Transit District (RTD)	Stockton, CA	2012
Susanville Indian Rancheria Public Transportation Program	Susanville, CA	2012
Alpine Meadows Shuttle	Tahoe, CA	2012
Homewood Ski Shuttle	Tahoe, CA	2012
North Lake Tahoe Express - 24 hour advance reservations required	Tahoe, CA	2012
Northstar-at-Tahoe	Tahoe, CA	2012
Squaw Valley USA	Tahoe, CA	2012
Tahoe Area Regional Transit	Tahoe, CA	2012
Town of Truckee	Tahoe, CA	2012
PSTA	Tampa-St. Petersburg-Clearwater, FL	2012
Hillsborough Area Regional Transit	Tampa-St. Petersburg-Clearwater, FL	2012
Tehama Rural Area Express	Tehama County, CA	2012
Thousand Oaks Transit	Thousand Oaks, CA	2012
Tillamook County Transportation District	Tillamook, OR	2012
Topeka Metro	Topeka, KS	2012
Trinity Transit	Trinity County, CA	2011
Bus Line Service of Turlock	Turlock, CA	2012
Stanislaus Regional Transit	Turlock, CA	2012
Confederated Tribes of the Umatilla Indian Reservation	Umatilla Reservation, OR	2012
Montgomery County MD Ride On	Washington, DC	2012
Maryland Transit Administration	Washington, DC	2011
Central Maryland Regional Transit	Washington, DC	2011
Arlington Transit	Washington, DC	2012
Fairfax Connector	Washington, DC	2012
DC Circulator	Washington, DC	2012
Washington Metropolitan Area Transit Authority	Washington, DC	2012
Shuttle-UM: Department of Transportation Services	Washington, DC	2010
South Metro Area Regional Transit	Wilsonville, OR	2012
Siskiyou Transit and General Express	Yreka, CA	2012

Table 5. GTFS Data Coverage Summarized as Percentage of total Metropolitan Region Transit Ridership

Metropolitan Region	Ridership on GTFS Systems	Ridership on Non-GTFS Systems	% of Total Ridership on GTFS Systems	Key Agencies Missing (only for large metros with partial coverage)
Abilene, TX	-	476,924	0%	
Akron, OH	-	6,162,278	0%	
Albany, GA	-	944,273	0%	
Albany-Lebanon, OR				*GTFS available. But no NTD ridership stats. Assumed 100% on GTFS systems.*
Albany-Schenectady-Troy, NY	-	15,194,277	0%	
Albuquerque, NM	10,760,389	1,083,003	91%	
Alexandria, LA	-	820,450	0%	
Allentown-Bethlehem-Easton, PA-NJ	5,505,748	-	100%	
Altoona, PA	-	595,098	0%	
Amarillo, TX	-	328,602	0%	
Ames, IA	-	4,991,935	0%	
Anchorage, AK	-	4,297,794	0%	
Anderson, IN	-	153,963	0%	
Ann Arbor, MI	11,956,664	-	100%	
Appleton, WI	-	966,548	0%	
Asheville, NC	1,622,510	-	100%	
Athens-Clarke County, GA	-	11,257,766	0%	
Atlanta-Sandy Springs-Marietta, GA	156,062,900	10,793,280	94%	
Augusta-Richmond County, GA-SC	-	645,967	0%	
Austin-Round Rock-San Marcos, TX	38,417,485	-	100%	
Bakersfield-Delano, CA	7,514,503	-	100%	
Baltimore-Towson, MD	123,711,543	-	100%	
Bangor, ME	-	869,999	0%	
Barnstable Town, MA	-	409,625	0%	
Baton Rouge, LA	-	3,729,315	0%	

Battle Creek, MI	-	523,237	0%	
Bay City, MI	-	557,942	0%	
Beaumont-Port Arthur, TX	-	756,323	0%	
Bellingham, WA	-	5,623,158	0%	
Bend, OR	274,084	-	100%	
Billings, MT	-	675,340	0%	
Binghamton, NY	-	3,057,920	0%	
Birmingham-Hoover, AL	2,805,110	-	100%	
Bismarck, ND	-	131,601	0%	
Blacksburg-Christiansburg-Radford, VA	2,954,415	-	100%	
Bloomington, IN	3,027,877	-	100%	
Bloomington-Normal, IL	-	1,609,081	0%	
Boise City-Nampa, ID	-	1,405,568	0%	
Boston-Cambridge-Quincy, MA-NH	369,816,619	2,847,043	99%	
Boulder, CO			100%	Served by RTD (Denver)
Bremerton-Silverdale, WA	3,940,635	-	100%	
Bridgeport-Stamford-Norwalk, CT	1,915,195	8,995,984	18%	Greater Bridgeport Transit Authority; Connecticut Transit - Stamford Division; Milford Transit District
Brownsville-Harlingen, TX	-	1,610,151	0%	
Buffalo-Niagara Falls, NY	28,204,712	-	100%	
Burlington-South Burlington, VT	-	2,514,563	0%	
Butte-Silver Bow, MT				*GTFS available. But no NTD ridership stats. Assumed SLD includes 100% of service.*
Canton-Massillon, OH	-	2,025,920	0%	
Cape Coral-Fort Myers, FL	3,040,037	-	100%	
Casper, WY	-	118,849	0%	
Cedar Rapids, IA	-	1,156,975	0%	
Champaign-Urbana, IL	9,975,213	-	100%	
Charleston, WV			0%	

	-	2,462,650		
Charleston-North Charleston-Summerville, SC	-	3,990,364	0%	
Charlotte-Gastonia-Rock Hill, NC-SC	-	25,090,603	0%	
Charlottesville, VA	2,012,462	-	100%	
Chattanooga, TN-GA	-	3,072,978	0%	
Cheyenne, WY	-	255,348	0%	
Chicago-Joliet-Naperville, IL-IN-WI	626,191,057	1,302,563	100%	
Chico, CA	-	1,285,013	0%	
Cincinnati-Middletown, OH-KY-IN	26,587,332	247,265	99%	
Clarksville, TN-KY	-	710,983	0%	
Cleveland, TN	-	38,976	0%	
Cleveland-Elyria-Mentor, OH	45,071,314	1,119,037	98%	
Coeur d'Alene, ID	-	445,484	0%	
College Station-Bryan, TX	-	1,290,739	0%	
Colorado Springs, CO	3,152,990	-	100%	
Columbia, MO	-	2,263,406	0%	
Columbia, SC	-	2,019,912	0%	
Columbus, GA-AL	-	1,150,708	0%	
Columbus, OH	17,208,787	-	100%	
Coos Bay, OR				*GTFS available. But no NTD ridership stats. Assumed SLD includes 100% of service.*
Corpus Christi, TX	-	5,076,379	0%	
Corvallis, OR	680,402	-	100%	
Crestview-Fort Walton Beach-Destin, FL	-	172,122	0%	
Cumberland, MD-WV	153,661	-	100%	
Dallas-Fort Worth-Arlington, TX	70,586,142	-	100%	
Danville, IL	-	522,062	0%	
Danville, VA	-	233,729	0%	

Davenport-Moline-Rock Island, IA-IL	-	4,168,735	0%	
Dayton, OH	-	10,130,959	0%	
Decatur, IN	-	1,257,409	0%	
Deltona-Daytona Beach-Ormond Beach, FL	-	3,071,247	0%	
Denver-Aurora-Broomfield, CO	96,981,435	-	100%	
Des Moines-West Des Moines, IA	-	4,513,648	0%	
Detroit-Warren-Livonia, MI	38,603,132	14,715,703	72%	Suburban Mobility Authority for Regional Transport
Dover, DE	9,146,873	-	100%	
Dubuque, IA	-	293,252	0%	
Duluth, MN-WI	3,173,485	-	100%	
Durham-Chapel Hill, NC	14,178,569	-	100%	
Eau Claire, WI	-	951,405	0%	
El Centro, CA	-	556,433	0%	
El Paso, TX	-	12,179,796	0%	
Elmira, NY	-	640,742	0%	
Erie, PA	-	3,025,785	0%	
Eugene-Springfield, OR	11,732,650	-	100%	
Eureka-Arcata-Fortuna, CA				*GTFS available. But no NTD ridership stats. Assumed SLD includes 100% of service.*
Evansville, IN-KY	-	1,831,479	0%	
Fairbanks, AK	-	357,816	0%	
Fajardo, PR	-	41,656	0%	
Fargo, ND-MN	-	1,872,630	0%	
Fayetteville, NC	-	992,886	0%	
Fayetteville-Springdale-Rogers, AR-MO	1,327,673	177,959	88%	Fayetteville Area System
Flagstaff, AZ	-	1,142,932	0%	
Flint, MI	-	5,154,073	0%	
Florence, SC	-	104,968	0%	

Fond du Lac, WI	-	135,579	0%	
Fort Collins-Loveland, CO	-	2,050,034	0%	
Fort Smith, AR-OK	-	197,098	0%	
Fort Wayne, IN	1,791,787	-	100%	
Fresno, CA	-	14,062,016	0%	
Gainesville, FL	-	8,939,980	0%	
Gainesville, GA	-	115,245	0%	
Glens Falls, NY	-	316,535	0%	
Grand Forks, ND-MN	-	271,704	0%	
Grand Junction, CO	-	859,193	0%	
Grand Rapids-Wyoming, MI	-	8,865,687	0%	
Great Falls, MT	-	369,472	0%	
Greeley, CO	-	529,791	0%	
Green Bay, WI		1,354,368	0%	
Greensboro-High Point, NC	-	5,137,679	0%	
Greenville-Mauldin-Easley, SC	-	742,100	0%	
Gulfport-Biloxi, MS	-	690,886	0%	
Hagerstown-Martinsburg, MD-WV	-	374,280	0%	
Hanford-Corcoran, CA	-	911,059	0%	
Harrisburg-Carlisle, PA	-	3,182,747	0%	
Harrisonburg, VA	-	1,686,751	0%	
Hartford-West Hartford-East Hartford, CT	-	15,589,020	0%	
Hickory-Lenoir-Morganton, NC	-	159,298	0%	
Holland-Grand Haven, MI	-	218,535	0%	
Honolulu, HI	77,403,365	-	100%	
Hood River, OR				*GTFS available. But no NTD ridership stats. Assumed SLD includes 100% of service.*
Houston-Sugar Land-Baytown, TX	84,408,919	142,654	100%	

Huntington-Ashland, WV-KY-OH	-	789,769	0%	
Huntsville, AL	325,222	-	100%	
Idaho Falls, ID	-	48,067	0%	
Indianapolis-Carmel, IN	8,199,806	-	100%	
Iowa City, IA	-	6,509,641	0%	
Ithaca, NY	-	3,351,817	0%	
Jackson, MI	-	505,934	0%	
Jackson, MS	-	516,721	0%	
Jackson, TN	-	535,903	0%	
Jacksonville, FL	-	10,703,555	0%	
Janesville, WI	-	442,602	0%	
Jefferson City, MO	-	333,713	0%	
Johnson City, TN	-	541,762	0%	
Johnstown, PA	-	1,201,113	0%	
Kalamazoo-Portage, MI	-	2,937,109	0%	
Kankakee-Bradley, IL	-	617,748	0%	
Kansas City, MO-KS	15,474,361	-	100%	
Kennewick-Pasco-Richland, WA	-	3,663,535	0%	
Kingston, NY	-	321,426	0%	
Klamath Falls, OR				*GTFS available. But no NTD ridership stats. Assumed SLD includes 100% of service.*
Knoxville, TN	-	3,454,995	0%	
La Crosse, WI-MN	1,189,841	-	100%	
Lafayette, IN	4,720,438	-	100%	
Lafayette, LA	-	1,460,059	0%	
Lakeland-Winter Haven, FL	1,450,988	466,008	76%	Polk County Transit Services Division - Polk County
Lancaster, PA	-	2,043,029	0%	
Lansing-East Lansing, MI	-	10,884,977	0%	

Laredo, TX	-	3,987,845	0%	
Las Cruces, NM	-	656,590	0%	
Las Vegas-Paradise, NV	66,100,239	-	100%	
Lawrence, KS	-	930,753	0%	
Lawton, OK	-	407,988	0%	
Lebanon, PA	-	308,274	0%	
Lewiston-Auburn, ME	-	224,917	0%	
Lexington-Fayette, KY	6,064,260	-	100%	
Lincoln, NE	-	1,733,188	0%	
Little Rock-North Little Rock-Conway, AR	2,462,990	-	100%	
Logan, UT-ID	-	1,792,273	0%	
Longview, WA	-	444,789	0%	
Los Angeles-Long Beach-Santa Ana, CA	559,824,227	134,626,557	81%	City of Los Angeles Department of Transportation; Long Beach Transit; Santa Monica's Big Blue Bus
Louisville/Jefferson County, KY-IN	15,520,760	-	100%	
Lubbock, TX	-	2,674,171	0%	
Lynchburg, VA	-	2,954,860	0%	
Macon, GA	-	900,264	0%	
Madison, WI	13,588,426	-	100%	
Manchester-Nashua, NH	-	969,853	0%	
Mansfield, OH	-	263,376	0%	
McAllen-Edinburg-Mission, TX	-	81,441	0%	
Medford, OR	1,055,445	-	100%	
Memphis, TN-MS-AR	-	11,472,021	0%	
Merced, CA	-	1,189,281	0%	
Miami-Fort Lauderdale-Pompano Beach, FL	143,468,788	12,200,880	92%	
Milwaukee-Waukesha-West Allis, WI	46,767,776	1,430,430	97%	
Minneapolis-St. Paul-			100%	

Bloomington, MN-WI	87,523,236	-		
Missoula, MT	828,887	338,168	71%	The University of Montana - ASUM Transportation
Mobile, AL	-	1,107,048	0%	
Modesto, CA	3,478,032	-	100%	
Monroe, LA	-	1,193,421	0%	
Montgomery, AL	-	1,298,751	0%	
Morgantown, WV	-	1,155,417	0%	
Mount Vernon-Anacortes, WA	-	508,212	0%	
Muncie, IN	-	1,865,419	0%	
Muskegon-Norton Shores, MI	-	606,178	0%	
Myrtle Beach-North Myrtle Beach-Conway, SC	-	384,585	0%	
Napa, CA	-	747,718	0%	
Naples-Marco Island, FL	-	1,109,710	0%	
Nashville-Davidson--Murfreesboro--Franklin, TN	204,470	10,405,963	2%	Metropolitan Transit Authority
New Haven-Milford, CT	-	8,625,669	0%	
New Orleans-Metairie-Kenner, LA	-	19,358,992	0%	
New York-Northern New Jersey-Long Island, NY-NJ-PA	3,919,867,556	87,689,144	98%	
Niles-Benton Harbor, MI	-	18,904	0%	
North Port-Bradenton-Sarasota, FL	2,551,650	1,403,104	65%	Manatee County Area Transit
Norwich-New London, CT	-	1,133,645	0%	
Odessa, TX	-	399,482	0%	
Oklahoma City, OK	-	2,684,087	0%	
Olympia, WA	4,298,328	-	100%	
Omaha-Council Bluffs, NE-IA	-	4,039,585	0%	
Orlando-Kissimmee-Sanford, FL	-	23,747,795	0%	
Oshkosh-Neenah, WI	-	913,226	0%	
Oxnard-Thousand Oaks-Ventura, CA	185,681	4,353,834	4%	Gold Coast Transit; Ventura Intercity Service Transit Authority

Palm Bay-Melbourne-Titusville, FL	1,418,430	-	100%	
Pensacola-Ferry Pass-Brent, FL	-	1,802,426	0%	
Peoria, IL	-	2,673,759	0%	
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	356,538,501	-	100%	
Phoenix-Mesa-Glendale, AZ	-	75,885,375	0%	
Pittsburgh, PA	66,977,678	1,308,580	98%	
Pittsfield, MA	505,566	-	100%	
Pocatello, ID	-	417,965	0%	
Port St. Lucie, FL	-	129,998	0%	
Portland-South Portland-Biddeford, ME	-	2,740,398	0%	
Portland-Vancouver-Hillsboro, OR-WA	107,463,360	6,496,056	94%	
Poughkeepsie-Newburgh-Middletown, NY	-	1,459,927	0%	
Providence-New Bedford-Fall River, RI-MA	19,819,547	2,520,242	89%	
Pueblo, CO	-	904,693	0%	
Racine, WI	-	1,384,411	0%	
Raleigh-Cary, NC	7,182,060	-	100%	
Rapid City, SD	-	231,150	0%	
Reading, PA	-	2,916,928	0%	
Redding, CA	821,731	-	100%	
Reno-Sparks, NV	8,449,134	-	100%	
Richmond, VA	-	13,841,903	0%	
Riverside-San Bernardino-Ontario, CA	8,131,306	15,010,345	35%	Omnitrans
Roanoke, VA	-	2,539,745	0%	
Rochester, MN	-	1,584,502	0%	
Rochester, NY	16,918,131	-	100%	
Rockford, IL	-	1,748,003	0%	
Rome, GA	-	690,511	0%	
Roseburg, OR				*GTFS available. But no NTD*

				ridership stats. Assumed SLD includes 100% of service.
Sacramento--Arden-Arcade--Roseville, CA	38,876,858	4,031,658	91%	
Saginaw-Saginaw Township North, MI	-	1,031,667	0%	
Salem, OR	4,746,944	-	100%	
Salina, KS				*GTFS available. But no NTD ridership stats. Assumed SLD includes 100% of service.*
Salinas, CA	-	4,399,711	0%	
Salisbury, MD	-	431,797	0%	
Salt Lake City, UT	35,364,620	-	100%	
San Angelo, TX	-	168,647	0%	
San Antonio-New Braunfels, TX	-	43,296,328	0%	
San Diego-Carlsbad-San Marcos, CA	100,277,280	3,601,503	97%	
San Francisco-Oakland-Fremont, CA	423,195,275	26,898,631	94%	
San Jose-Sunnyvale-Santa Clara, CA	-	45,532,563	0%	
San Juan-Caguas-Guaynabo, PR	-	70,952,537	0%	
San Luis Obispo-Paso Robles, CA	552,782	1,032,232	35%	City of San Luis Obispo
Santa Barbara-Santa Maria-Goleta, CA	-	9,563,841	0%	
Santa Cruz-Watsonville, CA	6,026,920	-	100%	
Santa Fe, NM	-	790,373	0%	
Santa Rosa-Petaluma, CA	2,858,142	1,556,384	65%	Sonoma County Transit; City of Petaluma
Savannah, GA	-	3,729,694	0%	
Scranton--Wilkes-Barre, PA	-	3,600,595	0%	
Seattle-Tacoma-Bellevue, WA	135,466,499	47,255,611	74%	Washington State Ferries; Pierce County Transportation Benefit Area Authority
Sebastian-Vero Beach, FL	-	594,128	0%	
Sheboygan, WI	-	452,605	0%	
Sherman-Denison, TX	-	32,375	0%	
Shreveport-Bossier City, LA	-	3,068,875	0%	
Sioux City, IA-NE-SD			0%	

	-	1,157,470		
Sioux Falls, SD	-	927,282	0%	
South Bend-Mishawaka, IN-MI	-	2,662,984	0%	
Spartanburg, SC	-	534,599	0%	
Spokane, WA	11,152,841	-	100%	
Springfield, IL	-	1,644,631	0%	
Springfield, MA	11,882,301	-	100%	
Springfield, MO	-	1,458,164	0%	
Springfield, OH	-	365,904	0%	
St. Cloud, MN	-	2,247,033	0%	
St. Joseph, MO-KS	-	387,287	0%	
St. Louis, MO-IL	52,077,835	2,265,542	96%	
State College, PA	-	7,001,149	0%	
Stockton, CA	4,728,186	797,328	86%	Altamont Commuter Express
Sumter, SC	-	165,928	0%	
Syracuse, NY	-	14,527,502	0%	
Tallahassee, FL	-	4,409,041	0%	
Tampa-St. Petersburg-Clearwater, FL	25,584,253	926,076	97%	
Terre Haute, IN	-	299,876	0%	
Toledo, OH	-	6,984,265	0%	
Topeka, KS	1,550,279	-	100%	
Tucson, AZ		21,575,374	0%	
Tulsa, OK	-	2,688,967	0%	
Tuskegee, AL	-	194,742	0%	
Vallejo-Fairfield, CA	982,682	2,214,557	31%	City of Vallejo Transportation Program
Victoria, TX	-	261,170	0%	
Virginia Beach-Norfolk-Newport News, VA-NC	15,517,047	-	100%	
Visalia-Porterville, CA	-	2,109,045	0%	

Waco, TX	-	636,111	0%
Washington-Arlington-Alexandria, DC-VA-MD-WV	474,383,822	18,205,204	96%
Waterloo-Cedar Falls, IA	-	467,772	0%
Wausau, WI	-	794,121	0%
Wenatchee-East Wenatchee, WA	-	905,853	0%
Wheeling, WV-OH	-	426,338	0%
Wichita, KS	-	2,170,346	0%
Williamsport, PA	-	1,295,620	0%
Wilmington, NC	-	1,424,123	0%
Winston-Salem, NC	-	2,957,172	0%
Worcester, MA	-	3,176,035	0%
Yakima, WA	-	1,349,024	0%
York-Hanover, PA	-	1,410,278	0%
Youngstown-Warren-Boardman, OH-PA	-	1,787,501	0%
Yuba City, CA	-	985,081	0%
Yuma, AZ	-	331,240	0%