**AM Peak** *(Time period for performance measures):* A period of time on weekday mornings in which transportation systems experience an increased number of users as many people commute from their places of residence to work. In the t-HUB tool, the AM Peak Period is defined as 6:00 am to 9:00 am.

**Areal Unit:** A unit of measure used to describe an area or space. For example, the t-HUB interactive tool allows you to conduct analyses using either block groups or census tracts as areal units.

**Block Group:** A block group is an areal unit defined by the U.S. Census Bureau. Approximately 1,500 residents live within each block group. Block groups are the smallest areal unit available in the t-HUB analysis tool.

**Buffer Distance:** The user-defined buffer distance determines which populations and areas have access to transit stops. If an area lies within the buffer distance of a transit stop, the population living in that area has access to transit. Otherwise, it does not. As a rule of thumb, a ¼ mile is a typical buffer distance for a local service and a ½ mile is a typical buffer distance for an express service. These distances equate to 5 minute and 10 minute walks, respectively, for the average able-bodied person.

The t-HUB analysis tools conduct analyses using areal units (block groups and census tracts). If any part of an areal unit is within the buffer distance, the entire unit area is treated as having access to transit. For example, in the figure below, the populations in tracts 1 and 3 are defined as having access to transit while the population in tract 2 is not.
Census Tract: A census tract is an areal unit defined by the U.S. Census Bureau. Approximately 4,000 residents live within each census tract. Census tracts are the largest areal unit available in the t-HUB analysis tool.

Demographic Spatial Unit: Refer to entry for “Areal Unit”

Executive Order 12898 (on Environmental Justice): An executive order signed by President Bill Clinton in 1994 requiring all federal agencies to identify and mitigate any negative impacts of federal actions that disproportionately burden minority and low-income communities.

Express Route: Express routes are routes designed with fewer stops and shorter travel times than local routes. These routes are often geared towards commuters traveling between the suburbs and central business districts.

General Transit Feed Specification (GTFS): GTFS is a common format for storing information on the schedules, networks, and geographies of transit systems. GTFS is a set of comma-delimited text files whose data can be associated using shared route, trip, stop, and service ids. The figure below shows the GTFS files and information used within the t-HUB tools.

For further details on GTFS, please visit https://developers.google.com/transit/gtfs/

Headway: The interval of time between transit vehicles operating on the same route. The t-HUB tool uses scheduled headway data as reported by the system operator.

Limited English Proficiency (Population): People who are not fluent in English and therefore have limited comprehension of speaking and/or writing in the English language. The t-HUB tool approximates limited English proficiency populations (or LEP populations) using American Community Survey 5-year data. If a person identifies as being proficient in a
language other than English but speaks English less than “very well,” they are categorized as having limited English proficiency.

Load Factor: A relative measure of vehicle crowding calculated as the ratio of riders to capacity. For example, if 30 people are riding a bus with a capacity of 40 passengers, the load factor is 0.75. The t-HUB tool uses passenger count data (reported by the system operator) and an assumed vehicle capacity of 40 passengers to calculate load factors.

Local Route: Local routes provide a high density of transit service within specific neighborhoods and communities. Vehicles on local routes stop more frequently than express routes at the cost of longer travel times. Local routes are most often used to provide service within central business districts and neighborhoods or as a way to connect people to more express services.

Low Income (Population): People living at or below 150% of the poverty thresholds established by the U.S. Census Bureau. An areal unit (block group, census tract, etc) is designated as low income if the proportion of low income individuals living within the areal unit exceeds the service area’s average proportion of low income individuals per areal unit.

For more detailed information on how the U.S. Census Bureau measures poverty and establishes poverty thresholds, please visit https://www.census.gov/hhes/www/poverty/about/overview/measure.html

To download current or historic poverty thresholds, please visit https://www.census.gov/hhes/www/poverty/data/threshld/

Low Income Route: Routes on which 33% of revenue miles service low income designated areal units. (see “Low Income” for further information)

Mean: The mean is a measure of central tendency, or average. The mean value ($\bar{x}$) of set of a data ($X$) is the sum of the values in the data set divided by the number of values in the data set ($n$), as shown in the equation below.

$$\bar{x} = \frac{1}{n} \sum x$$

Metadata: Information on the source of data, including where and when the data originated.

Midday (Time period for performance measures): The period of time on weekdays between the AM and PM peak periods. In the t-HUB tool, the Midday Period is defined as 9:00 am to 4:00 pm.

Minority (Population): People who identify as a race other than White and/or identify as Hispanic in the Census Bureau’s American Community Survey. An areal unit (block group,
census tract, etc) is designated as minority if the proportion of the population identifying as minority within the areal unit exceeds the proportion of the population identifying as minority for the entire service area.

**Minority Route:** Routes on which 33% of revenue miles service minority designated areal units. *(see “Minority” for further information)*

**Off-Peak** *(Time period for performance measures):* A period of time on weekdays after the PM Peak period ends and before AM Peak period begins on the following day. In the t-HUB tool, the Midday Period is defined as 7:00 pm to 6:00 am.

**On-time Percentage:** The percentage of vehicles on a route departing within 5 minutes of the scheduled departure time. This calculation does not consider early departures.

**Outlier:** An outlier is a value within a data set that lies far from the mean value. Within the t-HUB interactive tool, an outlier is a subroute with a value that lies outside of the user set distance from the mean subroute value. Users may choose to define the distance from the mean value in terms of a percent difference or standard deviations. t-HUB also offers the option of selecting all subroutes with greater than 33% revenue miles for demographic analyses.

**Performance Measure:** Data and information that measure the quality of transit services and infrastructure.

**PM Peak** *(Time period for performance measures):* A period of time on weekday evenings in which transportation systems experience an increased number of users as many people commute from their work to places of residence. In the t-HUB tool, the PM Peak Period is defined as 4:00 pm to 7:00 pm.

**Raw Data:** The “Export Raw Data” tool exports the data generated in the t-HUB interactive analysis as a *.csv file.

**Revenue Mile:** Any distance traveled by a transit vehicle where it is expected to serve the general public and generate revenue. This does not include deadhead miles (miles where a vehicle is switching routes, returning to the depot, etc.) or miles where the vehicle has been chartered for private use.

**Service Area:** The full area, including all areal units (block groups, census tracts, etc.), with access to a transit system.

**Standard Deviation:** A measure of variation within a set of data. The equation for calculating the standard deviation of data set $X$ of size $n$ with mean value $\bar{x}$ is shown below:
Stop Amenities: The proportion of stops with fixed shelters.

Subroute: The transit routes designed and designated by transit service providers often have multiple branches. Vehicles can only service one branch of a route at a time meaning that individual trips along a route may have different configuration of stops. Subroutes are a t-HUB generated designation for unique trips within a route. Subroutes have a unique configuration of stops and operate in a single direction for a specified day of the week and time of day.

Subroute ID: Unique IDs assigned to subroutes. Subroute IDs are built by concatenating the following information about the subroute: system name, route name, day of week, time of day, head sign key, and direction. The head sign key is an internally generated number linked to the text running on the head sign of vehicles operating on the subroute.

Subroute Name: Names come from the head signs of vehicles operating on the subroute.

Title VI of the Civil Rights Act of 1964: Title VI states that “No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance” The Federal Transit Administration has published several circulars regarding the application of Title VI to transit agencies receiving federal funds.

For more information see, http://thub.uconn.edu/title_vi_resources/

Transit Opportunity Index (TOI): A comprehensive measure of transit accessibility which addresses spatial, temporal, and trip connectivity aspects of access.

For further information on the calculation of TOI, please see this https://thub-web.engr.uconn.edu/docs/TRB_Poster_AccessMapping.pdf.