The **Graph Look Up** page provides tools for developing trip generation data plots and associated statistics from the ITE trip generation database

QUERY

In the top left-hand corner of the GRAPH LOOK UP page is a QUERY button. This is the page where the characteristics of a study site are defined, the types of trips are selected, and data plots and associated statistics are produced.

After a QUERY has been defined, a FILTER button appears to the right of the QUERY button. Guidance on the use of the web app filtering capability is provided later in this FAQ document. In order to return to the QUERY page from the FILTER page, simply press the QUERY button.

The left-hand panel has the following drop-down menus and cells:

DATA SOURCE

The current database consists of all data presented in *Trip Generation Manual* (TGM) 12th Edition. The drop-down menu specifies the data source available under the web app license.

LAND USE CODE

Feature enables the user to enter a numeric value for the TGM land use code, if already known.

LAND USE GROUP

Feature enables the user to select one of the ten general land use type groups.

LAND USE

- After a land use group is selected, a drop-down menu lists its individual land uses from which a selection can be made. The land uses are ordered numerically by their land use code.

- After a land use is selected, a link appears to the right of the land use name in the Data Statistics panel and provides access to a PDF of the land use description and data plots for that land use as presented in TGM 12th Edition.

LAND USE SUBCATEGORY

The land use subcategories available for the selected land use are listed in a drop-down menu. Not all land uses provide subcategories.

SETTING/LOCATION

The settings for which data are available for the selected land use and land use subcategory are listed in a drop-down menu.

INDEPENDENT VARIABLE (IV)

The independent variables available for the selected land use, land use subcategory, and setting/location are listed in a drop-down menu.

TIME PERIOD

The time periods for which data are available for the selected land use, land use subcategory, setting/location, and independent variable are listed in a drop-down menu.

TRIP TYPE

The types of trips (vehicle, person, walk, transit, bicycle, truck) for which data are available for the selected land use, land use subcategory, setting/location, independent variable, and time period are listed in a drop-down menu.

With the selection of the above parameters, a complete data plot is generated. Each data plot corresponds to a specific trip travel mode for a single combination of land use, land use subcategory, setting/location, independent variable, and time period. The standard data plot layout identifies each factor that defines the layout including the trip type. To supplement the trip type designation on the data plot, an image depicting the trip travel mode is included as a lightly shaded watermark on the data plot.

The panel to the right of the data plot lists the statistics presented on the *Trip Generation Manual*, 12th Edition data plots.
A zoomed-in or zoomed-out area can be created by scrolling the mouse roller while the mouse hovers over the data plot. The data plot can also be panned by holding down the left-button on the mouse. Click the RESET ZOOM button to return the data plot to its original scale.The coordinates and year of each data point can also be viewed by hovering over the data points on the graph.
Selection of the PRINT REPORT button in the upper right-hand corner of the page produces a data plot page in the same format and with the same content as found in *Trip Generation Manual*, 12th Edition.

CALCULATE
ITETripGen will calculate and display trip generation for your specific site characteristics. Select a land use, land use subcategory, setting/location, independent variable, time period, and trip type using the drop-down menus on the Graph Look Up page.

Enter the value for the independent variable in the "Enter IV Value to Calculate Trips" cell and Click the "Calculate" button. The range of independent variable values in the database is displayed in a pop-up window.

ITETripGen calculates and displays the number of trips based on the weighted average (and the fitted curve equation if provided) for the selected land use, land use subcategory, setting/location, independent variable, time period, and trip type.

- The calculated trips are displayed in the data plot with a red dashed line for the weighted average rate (and solid red line for the fitted curve equation if provided).

- In order to see the calculated values, hover the mouse over the point that corresponds to the IV value and appropriate line. If this data plot is printed, the independent variable value and any calculated values will be displayed.

- The calculated trips are also presented in the Data Statistics panel to the right of the data plot.

Enter a different value for Independent Variable and the calculated trips display is updated. Select a different time period or trip type and the calculated trips display is updated. Click the RESTORE button or select a different setting/location, land use subcategory, or land use and the app clears the calculated trips from the data plot, from the Data Statistics panel, and from the Print Report data plot.

FILTER

Using the FILTER button, the dataset can be filtered by one or more of the following criteria: region, a range for independent variable values, and a range of years for the data collection date.

REGION

- The regions for which data are available for the selected land use, land use subcategory, setting/location, independent variable, time period, and trip type are presented in a drop-down menu. The data can be filtered to a single region. The choices include the United States, Canada, or any of six regions within the United States. The "Details" link opens a PDF file that lists the states in each region.

- The listed regions for each land use are for the entire land use database before filtering by range of independent variable values or range of years.

RANGE OF IV VALUES

- The range of independent variable values for the selected land use, land use subcategory, setting/location, independent variable, time period, and trip type are presented in a pop-up window when the mouse is clicked within either the "From" or "To" selection. These values represent the range in the entire database for the land use before filtering by region or range of years.

- The selection is made by typing values into both the "From" and "To" boxes.

- If the "From" box is left blank, it is read as the minimum value of the available data range.

- If the "To" box is left blank, it is read as the maximum value of the available data range.

RANGE OF YEARS

- The range of year values for the selected land use, land use subcategory, setting/location, independent variable, time period, and trip type are presented in a pop-up window when the mouse is clicked within either the "From" or "To" selection. These values represent the range in the entire database for the land use before filtering by region or range of independent variable values.

- The selection is made by typing values into both the "From" and "To" boxes.

- If the "From" box is left blank, it is read as the minimum value of the available data range.

- If the "To" box is left blank, it is read as the maximum value of the available data range.

Selection of the UPDATE button produces a revised data plot with the filters applied. Calculations are updated to reflect only the newly selected points. In order to display only the filtered points in the plot, use the "Show Omitted Points" checkbox in the Filtered Data Statistics panel presented to the immediate right of the data plot.

Data plot statistics for the filtered dataset are presented in the bottom half of the right-hand panel.

The user can specify whether to include or exclude the weighted average and fitted curve lines for the filtered data set as well as original data set. The checkboxes at the bottom of the Filtered Data Statistics are the tools to use to select the lines to be displayed.

The lines representing the filtered weighted average and fitted curves are limited to the range of the independent variable values in the filtered data.

After a FILTER has been applied and the checkboxes marked for "Show Filtered Average Rate Line" and "Show Filtered Fitted Curve Line," the user can return to the QUERY menu and enter an independent variable value to CALCULATE and display the calculated values for both the complete and filtered data sets.
A printable version of the filtered data plot can be accessed with the Print Report button at the top right-hand corner of the webpage.

Each filtered data plot includes several features that highlight that the data are different from those used to develop the data plots in *Trip Generation Manual*, 12th Edition:

- The Number of Studies entry in the list of statistics at the top of the data plot page displays the number of study sites in the filtered dataset, compared to the complete dataset.

- A new entry is placed in the center of the page, immediately above the data plot, that states "Data Filtered By" and lists the filter criteria used to develop the data plot.

- The top right-hand corner of the data plot has the statement "Caution – Filtered Data Set."

Click the RESTORE button to clear all filters and any calculated trips from the data plot, from the Data Statistics panel, and from the Print Report data plot.