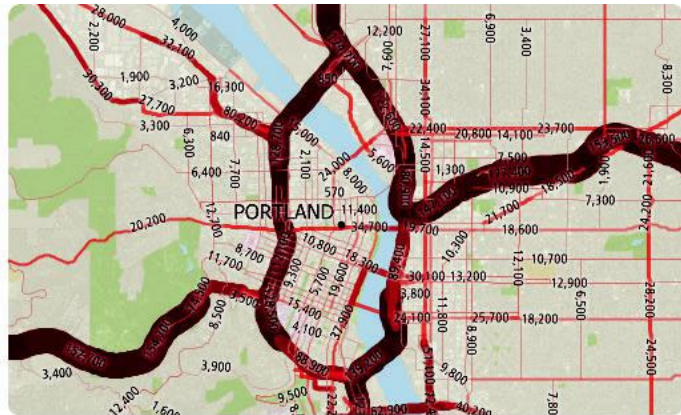


Maptitude Annual Average Daily Traffic (AADT) Data

Annual Average Daily Traffic (AADT) is the total volume of vehicle traffic on a highway or road for a year divided by 365 days. AADT is a useful and simple measurement of how busy a road is.

A line layer for the AADT is downloadable for free to users of the latest version of Mapitude. Don't have the latest version of Mapitude? [Purchase or upgrade to the latest version of Mapitude to use this premium data.](#)



The AADT data is critical for companies that rely on **daytime populations** and activities, such as retailers, shopping centers, and corporate marketing departments, because **traffic counts** are a key factor in analyzing trends, allowing them to tailor their business to better suit their customers.

Annual Average Daily Traffic counts are used:

- to select a new site or facility location, evaluate a site, or design a territory
- to determine funding for highway maintenance and improvement
- to forecast road maintenance needs and expenditure
- to identify the best location for your business based on traffic patterns
- to analyze how traffic may impact store construction
- to analyze the environmental hazards of pollution related to road transport

[Download the AADT Layer](#)
(Most recent version of Mapitude required)

[Buy/Upgrade Mapitude](#)
(Required to download the AADT Layer)


REQUIREMENTS:	Requires the most recent version of Mapitude and USA Country Package.
USING THE LAYER:	You can add the layer to a map by choosing Map > Layers , clicking Add Layer , and choosing CCANNUALAVERAGEDAILYTRAFFIC.CDF from the install folder (typically c:\ccdata\USA 20XX Traffic Count Layer\).
ABOUT THE DOWNLOAD:	The install codes and instructions for downloading are emailed after the shipping confirmation email. Download orders received after 3pm are usually processed the same business day, but may be processed on the next business day, excluding US federal holidays.

How to Start Using the AADT Layer

Our monthly newsletter and website have tips and tricks to help users effectively use the data. We have included some relevant tips below for your reference.




Downloading the free AADT Layer for Maptitude

The AADT map layer for Maptitude is accessible as a free download. In this tech tip we describe how to install the layer and add it to a map.



1. Download the data from the Caliper Store. NOTE, you must have the most recent version of Maptitude in order to download the layers.
2. Once the files are downloaded, click **OK**, then click **Install**, and follow the prompts.
3. To add the layer to a Maptitude map, open the map, choose **Map>Layers** or click  on the Standard Toolbar, and click **Add Layer** in the Layers dialog box.
4. Browse for the folder where the downloaded data are located (e.g., c:\ccdata). Within this folder will be a subfolder, USA 20XX Traffic Count Layer. Choose CCANNUALAVERAGEAILYTRAFFIC.CDF from this folder and click **Open** in the File Open dialog box.
5. Maptitude adds the layer to the map. Close the layers dialog box to see the layer on the map.

Customizing the AADT Layer



The AADT layer comes with a default color theme, size theme, and labels suitable for nationwide mapping. However, you can modify any of these to better display traffic counts for a zoomed in area.

1. Use the Find  (**Edit>Find**) or Zoom  tools to display your area of interest on the map.
2. If you want to hide the Street or Highway/Freeway layer, click  in the Display Manager next to the layer you want to hide.


To Change the Size Theme

1. Make **Average Daily Traffic** the working layer.
2. Choose **Map>Thematic Mapping>Size** or click  on the Standard toolbar to open the Size Theme dialog box and click **Remove**.
3. Again choose **Map>Thematic Mapping>Size** or click  on the Standard toolbar to open the Size Theme dialog box.
4. Choose **Annual Average Daily Traffic (AADT)** from the scroll list and click **Apply**. This will reapply the size theme, but it will be calibrated to the data range of the current visible window.
5. If you would like to make the maximum width larger, change the value in the High Value Size edit box and click **Apply** again (e.g., Change it from 8 to 16 to make the lines twice as wide).
6. Click **OK** when you are done adjusting the sizes.

To Change the Color Theme

1. Make **Average Daily Traffic** the working layer.
2. Choose **Map > Thematic Mapping > Color** or click  on the Standard toolbar to open the Color Theme dialog box. Click **Remove**.
3. Again choose **Map > Thematic Mapping > Color** or click  on the Standard toolbar to open the Color Theme dialog box.
4. Choose **Annual Average Daily Traffic (AADT)** from the **Field** drop-down list.
5. Click the **Styles** tab.
 - Click **Previous** or **Next** to scroll through different palettes.
 - Specify your own start and finish colors using the **From** and **To** drop-down lists.
 - Click **Swap Start and End** to reverse the order of the colors.
 - Change the color of an individual classes by highlighting it in the scroll list, clicking **Style**, choosing a new color from the **Color** drop-down list, and clicking **OK**.
 - Click **Customize** to adjust the ranges for each color, the number of classes, and more.
6. Click **Apply** to see to see your changes and click **OK** when you are done.

To Change the Labels

1. If the labels are not visible, right-click on the **Average Daily Traffic** layer in the Display Manager and choose **Show Labels**.
2. If you would like to modify the labels, click  next to the **Average Daily Traffic** layer to open the Labels dialog box.
3. You can change the position, font, size, and style of the traffic count labels on the **Labels** tab. You can change the background to a frame, a shadow, or a different halo on the **Background** tab. If the labels are too dense, you can reset an autoscale range for the labels on the **Overlaps** tab (e.g., choose a scale that is smaller than the current scale from the Smallest drop-down list).
4. Click **OK** when you are done.

About the Average Daily Traffic Layer

The AADT layer contains several fields of data, some of which are described below.

- **ROUTE NUMBER:** The corresponding route number for any given road; for example, I-95 has a route number of 95, U.S. Route 1 has a route number of 1, etc.
- **TYPE:** The type of sign route; for example, I-95 has the route signing "Interstate," while California State Route 1 (the Pacific Coast Highway) has a signing of "State."
- **FUNCTIONAL CLASSIFICATION:** The Federal Highway Association's functional classification for the given road.
- **ANNUAL AVERAGE DAILY TRAFFIC (AADT):** The Annual Average Daily Traffic of a given road.
- **ANNUAL AVERAGE DAILY TRUCK TRAFFIC (AADTT):** The Annual Average Daily Truck Traffic of a given road.
- **AADTT TRACTOR-TRAILER:** The AADT for only tractor-trailers on a given National Highway System.
- **AADTT SINGLE TRUCK/BUS:** The AADT for only single unit trucks and buses on a given National Highway System.

Tips for Using the Average Daily Traffic Layer

Using the AADT Data with Your Locations

Users who want to know how traffic can impact their locations can use the tools in Maptitude for this type of analysis. One tool that works well for this is the “tagging” tool. With the tagging functionality, a user can get the value of the nearest traffic count, the highest traffic count within a defined radius, a total traffic count within a defined radius, and the distance to the nearest traffic count.

Once you have your data and the AADT data in a map, follow the steps below to tag your locations with the AADT data.

The first step to tagging is to create columns to populate. These can be added as blank columns in your spreadsheet before you import or added to the data in the map. Below are the steps to add the columns in Maptitude:

1. Right click on the layer name that represents your locations and choose **New Dataview**.
2. Choose **Dataview>Table>Modify**.
3. Click **Add Field** four times to add 4 new fields/columns to your data.
4. Click “Field_1” that you added in the Field Name column and rename the field “Near AADT”. Rename the other three fields that you created “High AADT”, “Total AADT” and “Dist to N AADT” (this will be the distance to the nearest AADT). Your field names can be different if you like, but these will be used for describing the steps in this exercise.
5. Choose **Integer (4 bytes)** from the drop-down list in the Type column for the first three fields and choose **Real (8 bytes)** for the “Dist to N AADT” field.
6. Click **OK** and **Yes** to confirm. The fields have now been added to your Dataview. Scroll the Dataview to the far right so that you can see the headings for the new fields.

Tagging with the nearest traffic count:

1. Right-click on the “Near AADT” field heading and choose **Fill** to display the Fill dialog box.
2. Choose the **Tag** option from the radio list.
3. Choose **Average Daily Traffic** from the Using Layer drop-down list, **All Features** from the Selection Set drop-down list, and **Annual Average Daily Traffic (AADT)** from the Tag With drop-down list.
4. Click **OK**. Maptitude fills the field with the traffic count for the nearest link.

Tagging with the highest traffic count within a radius:

1. Right-click on the “High AADT” field heading and choose **Fill** to display the Fill dialog box.
2. Choose the **Aggregate** option from the radio list to display the Aggregate Data dialog box.
3. Choose **Average Daily Traffic** from the Layer drop-down list and **All Features** from the Include drop-down list.
4. Enter a buffer size (this can be any distance and units you want).
5. Choose **High Value of** from the Fill With drop-down list and choose **Annual Average Daily Traffic (AADT)** from the second drop-down list.


6. Click **OK** and click **OK** again. Maptitude fills the field with the highest traffic count within the buffer radius that you chose.

Tagging with the distance to the nearest traffic count:

1. Right-click on the “Dist to N AADT” field heading and choose **Fill** to display the Fill dialog box.
2. Choose the **Tag** option from the radio list.
3. Choose **Average Daily Traffic** from the Using Layer drop-down list, **All Features** from the Selection Set drop-down list, and **Distance to Feature** from the Tag With drop-down list.
4. Click **OK**. Maptitude fills the field with the distance to the nearest link. This value will be reported in the default units for Maptitude (found on the System tab when you choose **Edit>Preferences**).

Finding AADT Data for Highways or Road Systems

Users who are looking to find AADT data for a specific highway or road system can easily isolate their desired road using the selection tools within the **Average Daily Traffic** dataview. For example, if you are trying to isolate and find the AADT for all sections of Interstate 95, you could do the following:

1. In the Display Manager, right click on **Average Daily Traffic** and choose **New Dataview**.
2. Choose **Selection>Select by Condition**.
 - a. To filter the data to show only interstates, choose “[Functional Classification]” from the **Field List** drop-down list, choose “=” from the **Operator List** drop-down list, and choose “Interstate” from the **Values of Type** drop-down list.
 - b. To further filter the interstates to show only those with route number 95, choose “and” from the **Operator List** drop-down list, choose “[Route Number]” from the **Field List** drop-down list, and finally type = **95** at the end of the condition.
3. Now that you have created the condition: *[Functional Classification] = “Interstate” and [Route Number] = 95*, click **OK**. The dataview shows just the features in the Average Daily Traffic layer that are part of Interstate 95.
4. Once you’ve filtered the data, you can choose **Dataview>Statistics>Summary** or click  on the Standard toolbar to see values like mean number of through lanes and maximum AADT over the span of Interstate 95.

Caliper AADT Data

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