

# Quick Help Guide Traffic Count Database System (TCDS)





The Traffic Count Database System (TCDS) module is a powerful tool for the traffic engineer or planner to organize an agency's traffic count data. It allows you to upload data from a traffic counter; view graphs, lists and reports of historic traffic count data; search for count data using either the database or the Google map; and print or export data to your desktop.

This guide is for users who are new to the TCDS system. It will provide you with the tools to carry out many common tasks. Any features not discussed in this guide are considered advanced features. If you have further questions, feel free to explore the online help guide or to contact the staff at MS2 for assistance.

# **Table of Contents**

1		Introduction	3
2		Searching	5
3		Map Interactions	9
	3.1	Google Map Look and Feel	10
	3.2	Map Navigation	10
	3.3	Other Map Tools	11
	3.4	Map Tools and Layers	11
4		Reports	16
	4.1	Findings MS2 Reports	16
	4.2	Single Station, Single Day Reports	18
	4.3	Single Station, Multiple Day Reports	24
	4.4	Multiple Station, Multiple Day Reports	25
	4.5	Report Center Reports	26
	4.6	Classic Reports	27
	4.7	Federal Reports (Exports)	28
5		Administrative - Adding Counts	31
	5.1	File Upload (Recommended)	31
	5.2	Legacy File Upload	33
6		Locations - Adding, Editing and Deleting	38
	6.1	Add New Locations	38
	6.2	Edit Existing Locations	40
	6.3	Delete Existing Locations	40



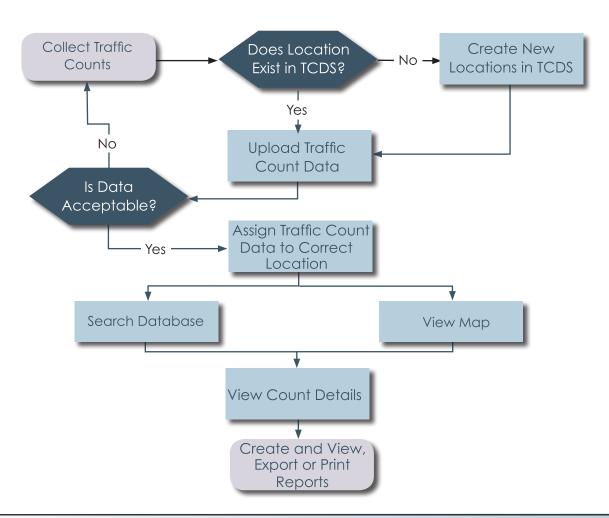
## 1. Introduction

This guide is for users who are new to the TCDS system. It will provide you with the tools to carry out many common tasks. Common TCDS tasks include:

- Searching for existing counts in the database
- Interacting with the map to obtain count information
- Creating reports of count details
- Uploading new counts
- Creating new TCDS Locations

The process of storing count data in TCDS involves **collecting** traffic count data, **uploading** count data, **verifying** count data quality, and **assigning** count data to count locations. This process is illustrated in the following flowchart:

## TCDS PROCESS FLOWCHART



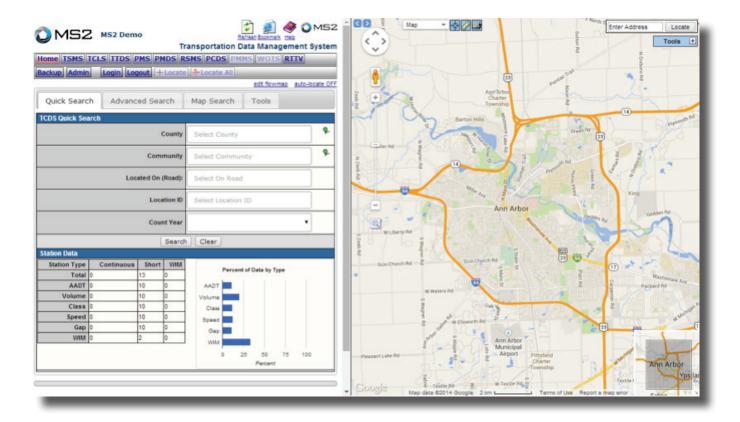


This guide presents a generic agency called "demo" for each example and should only be used as a demonstration of a limited selection of TCDS features and functionality. Your agency's actual modules may have slightly different features and functionality that are tailored to your needs.

Point your browser to your agency's TCDS website. If your agency has turned off public access, you should see a login screen similar to the following:



Log onto your site using your user name and password. If your agency has enabled public access, you can reach the login page by clicking the Login button. After logging in you should see a Home screen similar to the following:





This page will always be your starting point no matter what you wish to do. The TDMS Home button will bring you back to the main search page of the module in which you are working. Take note that this is **not** the browser Home button, but rather the TDMS Home button, found in the toolbar just above your data.

Start at the Home page to perform such TCDS tasks as:

- Adding new Locations
- Uploading counts
- Searching for existing counts
- Editing or deleting existing counts
- Generating reports and graphs

The next section will explain how to find the count data you are interested in by performing searches from the Home page.

# 2. Searching

The TCDS Home page provides Quick Search, Advanced Search, Map Search, and Tools (including Build Search and SQL Query Builder).

These search tools allow you to find the TCDS Stations (also called Locations or Locals) and counts you are interested in from among all the count data your agency has processed with MS2 over the years.

The Quick Search tab provides quick access to a handful of common search criteria that should handle most of your needs, including:

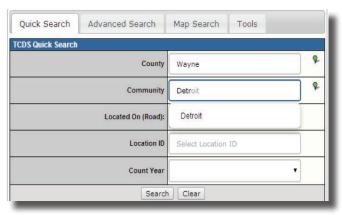
- County
- Community (e.g., City, Township, Village)
- Located On
- Location ID
- Count Year

The Advanced Search tab provides access to the full set of search criteria, if needed.

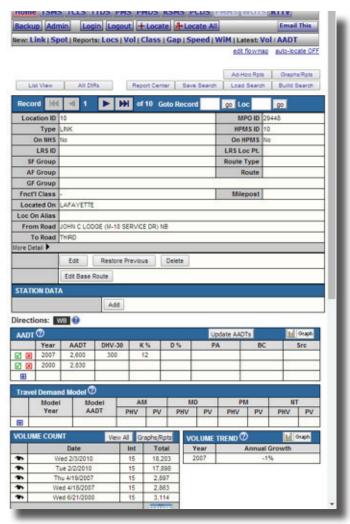
 Go to the TCDS home page. Enter search criteria in the County and Community fields. For your conconvenience, the field performs an on-the-fly lookup as you type so that you can quickly see and select from existing values.



You can include more fields to narrow your search (i.e. Located On for limiting to a specific road), or click the Search button to see the results.



2. Click Search. You will be redirected to the search results Form View, showing the first Location that meets you search criteria.





The upper portion of the Form View page shows you some of the information about the Location itself, such as its ID, County, Community, Functional Class, the road it is llocated on. Click on the More Detail link to view the full set of Location information. You will learn how to enter this information in a later section.

The bottom portion of the page lists all the Counts of various types (Volume, Class, Speed, Gap, etc.) that have been performed at this Location over the years. You will also see any AADT's that have been calculated for that Location. You can click on the eyeball link next to any of these items in order to see more detail.

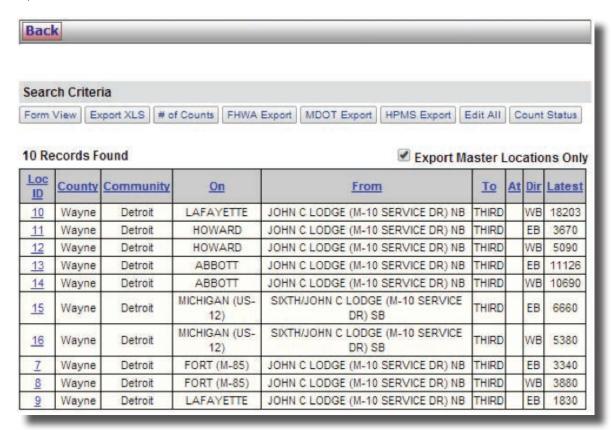
You can view and enter notes or upload files associated with this Location at the bottom of the page.

Notice you are viewing record 1 of 10 that meet the search criteria.

3. Click on the Next Record button to see Records 2, 3, etc.



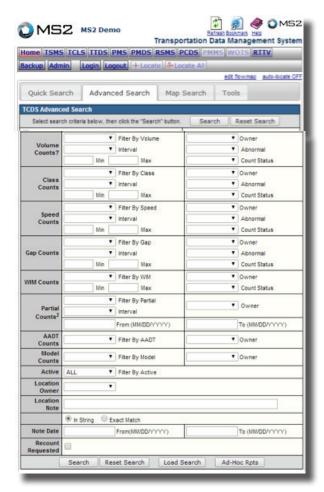
4. Or, Click on the List View button to see all ten records.





- 5. Click the Form View button to return to the individual station search results.
- 6. Now, click the Home button and then click on the Advanced Search tab. This will reveal many additional fields you may use in order to refine your search and find the exact TCDS Location or count you are interested in.







We have discussed criteria such as County and Community and Located On. There are several more factors such as From Road, To Road, Direction, Jurisdiction, and Functional Class that you can enter. You can choose to search only for Permanent Stations or only for WIM Stations.

If you happen know the ID of the Location, enter it in the Location ID field. You can specify "Exact Match", "Starts With", or "Ends With".

You can also enter criteria that relate to the counts themselves rather than to the TCDS Locations. For example, you can enter a date range for counts (e.g., From Date and To Date) in order to find counts within that time period. You can also enter minimum and maximum values for counts. You can search for TCDS Locations that do (or do not) have volume, class, speed, gap, or WIM counts.

- 7. Enter additional search criteria and click the Search button to see how your search results change.
- 8. From the search results page, click the Home button to return to the search page to perform additional searches. Your previous search criteria will be saved for you.
- 9. To clear the search criteria and start fresh, click the Reset Search button. Practice will improve your skill at finding the exact information you want.

The next section will explain how you can a use the map side of your screen to find TCDS information.

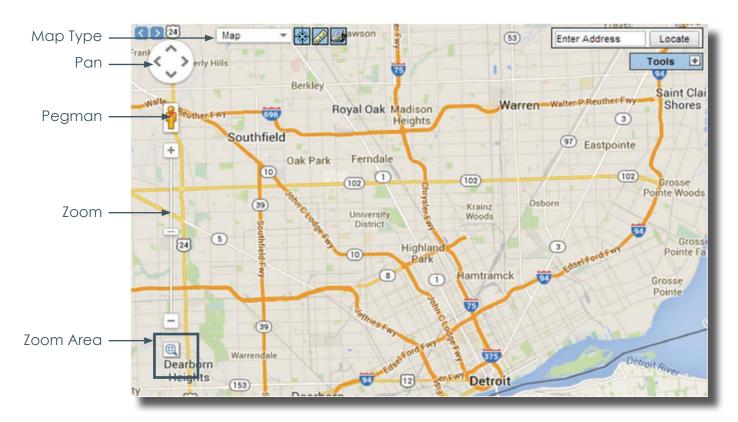
# 3. Map Interactions

The Google Maps<sup>™</sup> interface is already familiar to many users. The Google map integrated into the right side of your TCDS screen provides you with a geographic interface to access your Count information. You can:

- Pan the map from side to side and up and down
- Zoom the map in and out
- Switch between map, satellite, and hybrid views
- Use the Google Street View™ option
- View count locations on the map
- Pull up count location details from the map



Here is how the map portion of your screen appears after you log in:



# 3.1 Google Map Look & Feel

Notice the Map Type dropdown in the upper left corner of the map.

## Map Type

You can select among Map, Satellite, Hybrid, Terrain, Earth, and GIS Only maps. The example above uses the default Map.

# 3.2 Map Navigation

Just below this dropdown are navigational tools that allows you to pan and zoom the map and use "pegman" to switch to Google Street View™.

### **Panning**

Click on the arrows to pan the map up, down, left or right. You can also click and drag the map to pan.



## Zooming

Click on the "+" or "-" buttons to zoom the map in or out. You can also drag the indicator up or down the scale to zoom the map. Additionally, you can double-click (left mouse button) on the map to zoom in one level, centered on where you click. Conversely, double-click (right mouse button) on the map to zoom out one level. Finally, you can zoom in to a particular rectangular area of the map by clicking on the magnifying glass button then clicking and dragging to draw a rectangular zoom area on the map. Release the mouse button to zoom and center the map on the drawn area.

#### Street View

Click and drag pegman to the location on the map that you would like to see Street View. Street View is not available in all areas.

## 3.3 Other Map Tools

To the right of the Map Type dropdown are a few other useful map tools.



#### Reset View

Click to pan and zoom the map back to its default position.

#### Measure

Click to enable the measure tool. Click on the map to start a linear measurement. Click again to add vertices. Double-click to end your measurement and a pop-up will display the approximate distance (in feet, meters, and miles) of the line you have drawn.

## Print

Click to print the current view of the map.

## Locate Address

Type an address into the search box and click on the Locate button to pan and zoom the map to that address.

## 3.4 MS2 Map Tools & Layers

Underneath the Locate Address tool there is a Tools menu.

1. Click the "+" button to reveal the Tools menu options. The options available depend on the modules licenses by your agency.



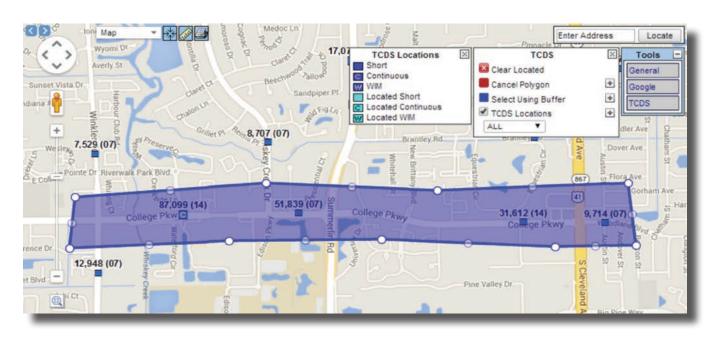
- 2. Click on the TCDS option.
- Click the "+" button to the right of the TCDS Locations option to display the TCDS Locations legend.

#### **TCDS Locations**

Click in the checkbox next to the TCDS Locations option to show all of the TCDS Locations that exist within

the displayed map boundary (this may take a few seconds). TCDS location icons will appear on the map.





Above each TCDS Location is a label that indicates its most recent count, along with the two-digit year of the count in parentheses.

Click on any of the TCDS Locations. A pop-up will appear containing information about that Location. In the example above, there are actually two TCDS Locations at that spot on the map, so the balloon contains information for both of them. To view even more information about a particular Location, click the "View Detail" link. The database side of your screen (left side) will show you the Form View details as if you had performed a database search for that particular Location. To search for both of the Locations in the above example, click the "View All" link.

#### Select by Polygon

Activate the "Select by Polygon" tool by clicking on it in the TCDS menu. While the tool is active, its icon



will be colored red. Using the Select by Polygon tool, create a polygon on the map by:

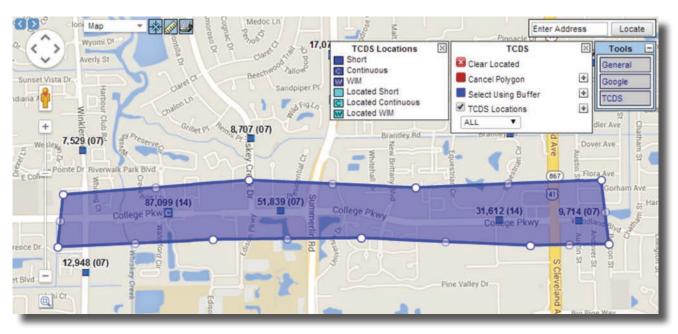
- Clicking on the map to create a starting point for your polygon
- Clicking again to create as many additional points as needed. As you do, a shaded polygon will be created.
- Click on the starting point to close the polygon. The shaded polygon will be completed, and the left side of the screen will load the Build Search page so that you can further refine your search results within the polygon.

## Select by Buffer

This tool operates in a similar manner as the Select by Polygon tool. Using the Select by Buffer tool, create a circular region on the map by:

- Clicking on the map to create the center point of the circular region.
- Move the mouse to your desired radius. As you do, a shaded circle will be created.
- Click to set the radius. A pop-up will display the radius (in feet) that you have specified.
- The shaded circular area will be completed, and the left side of the screen will load the Build Search page so that you can further refine your search results within the circle.
- (Optionally) Reset the radius to a different

value by typing it into the New Radius box





and clicking the Reset Radius button.

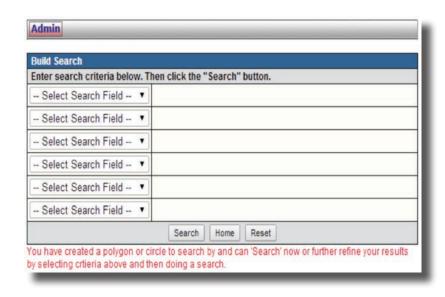


#### **Build Search**

You can either enter additional search criteria to refine your results, or simply click the Search button. This will perform a search for all the TCDS Locations located within the polygon or circle you created.

Locate & Locate All

You may also interact with the map from the database side of your screen. On the Form View page

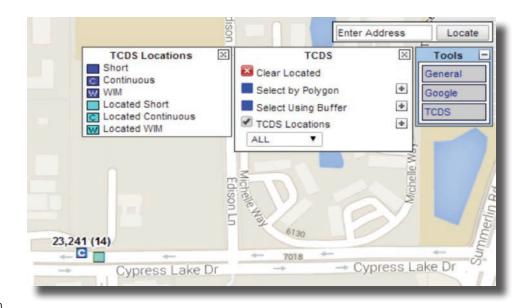


after performing a search, click on the "Locate" button in the toolbar to pan and zoom the map to the current TCDS location.

The located icon will be shown in a different color than the non-located icons.

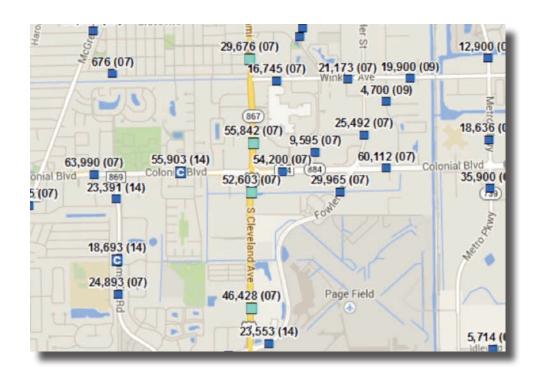






Use the "Locate All" button to zoom and center the map on all of the Location

that are included in your search results. The located icons will be shown in a different color than the non-located icon.





# 4. Reports

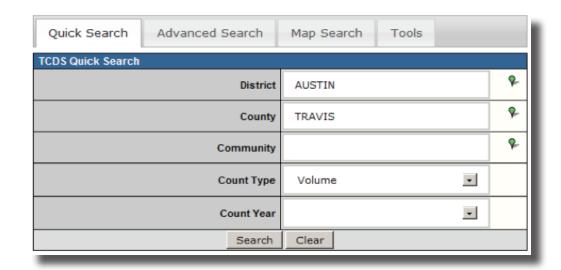
MS2's Transportation Data Management System (TDMS) provides a wide range of report generating capabilities. In the TCDS module, there are four different report categories available to authenticated users (users who have logged into the system with their username and password):

- Single station, single day reports;
- Single station, multiple day reports;
- Multiple station, multiple day reports; and
- Report Center reports.

As the names imply, these reports are either for a single station and single day, a single station and multiple days, or for multiple stations and multiple days. Report Center reports are for multiple stations and multiple days and provide additional report customization features to users. The following section describes how to find each of the report categories, followed by examples of each of the report types.

## 4.1 Finding MS2 Reports

MS2 reports are based upon a "search first" methodology. First, search for the station or stations to be included in the report, then choose the desired report. Using the TCDS Quick Search, we can quickly narrow our search to a particular District, County, Community, Count Type, or Count Year, as shown below. We could also use the Advanced Search, Map Search, or Tools tabs for additional searching features.

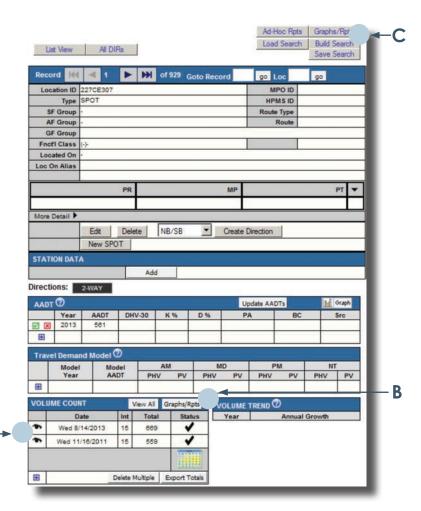


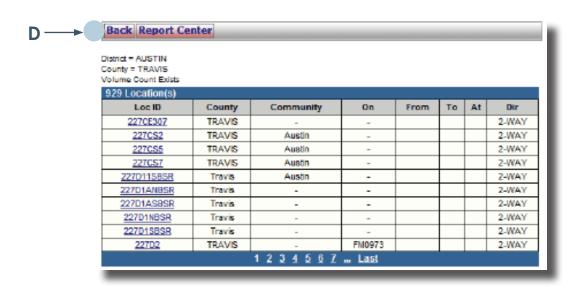
Once we execute our search, the search results page defaults to the Form View, which displays a data form for each station in the results set, one at a time.



In the Form View, we can access all of the report types - single station, single day report (A), single station, multiple day report (B), and multiple station, multiple day (C). The Report Center reports are available via the multiple station, multiple day (C) report page. As shown above, controls at the top of the form allow us to page through search results, jump to a specific record, or jump to a specific Location ID.

To access Report Center reports, go to the multiple station, multiple day page and use the button at the top of the page (D), as shown to the right.

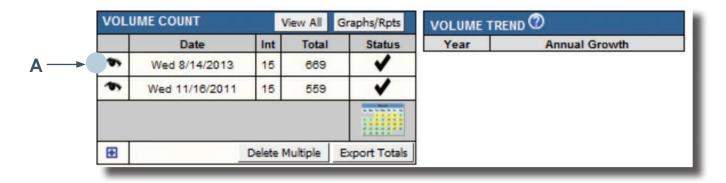






## 4.2 Single Station, Single Day Reports

Single Station, Single Day reports are accessed via the search results "Form View" page. We access Single Station, Single Day reports by clicking on the "eyeball" graphic (A) for the day of data that we want, within the section of data that we want to view. The Volume Count section is shown below.



Different Single Station, Single Day reports will be available depending on the type of data that a station collects. The most common report types are: Volume Count Report, Classification Report, Speed Report, and WIM Report. In some places, a Per-Vehicle Report is also available. In addition to the default tabular report view, several of the reports have additional views available at the bottom of the page including: View Calendar, Bar Graph, Line Graph, tabular options (e.g. Weekly Report, Hourly Volume by Lane), and several MS Excel export options. The next few pages show an example of each of the available Single Station, Single Day report types.



# Volume Count Report LOCATION INFO Location ID 227CE307 Type SPOT Fnct'l Class Located On Direction 2-WAY Community MPO ID HPMS ID Agency Texas DOT COUNT DATA INFO Count Status Accepted Start Date | Wed 8/14/2013 End Date Thu 8/15/2013 5:15:00 AM Start Time 5:15:00 AM End Time 5:15:00 AM Direction

Notes Count Source

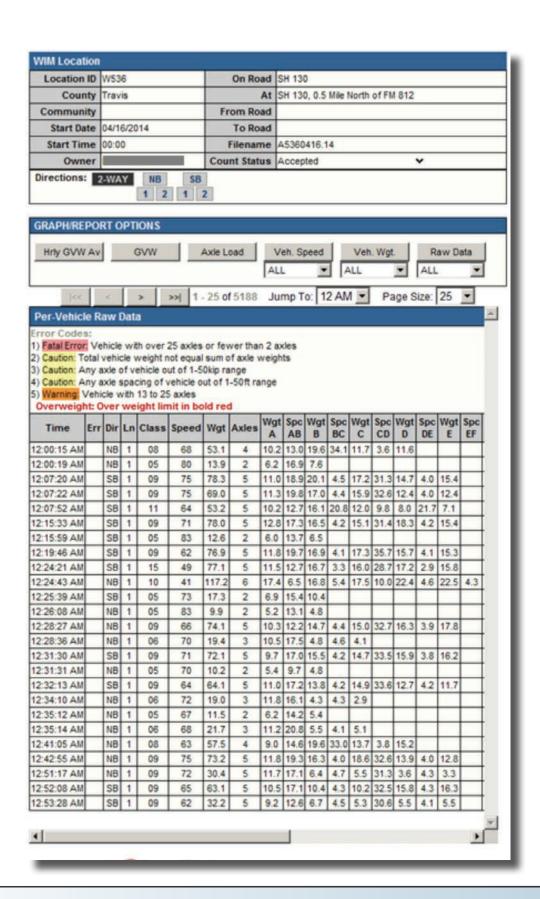
Weather
Study
Speed Limit
Description
Sensor Type Tube
Owner

Filename ACR\_Output.zip

	16	-min	Interv	ral	Hourly
Time	1st	2nd	3rd	4th	Count
0:00-1:00	1	4	0	0	5
1:00-2:00	0	0	1	0	1
2:00-3:00	1	0	0	0	1
3:00-4:00	0	2	0	1	3
4:00-5:00	0	0	2	2	4
5:00-6:00	2	2	2	6	12
6:00-7:00	9	10	12	9	40
7:00-8:00	10	13	7	11	41
8:00-9:00	9	12	8	2	31
9:00-10:00	7	10	6	4	27
10:00-11:00	4	7	4	6	21
11:00-12:00	9	5	11	11	36
12:00-13:00	8	6	7	6	27
13:00-14:00	10	7	7	12	36
14:00-15:00	7	8	13	11	39
15:00-16:00	12	14	11	9	46
16:00-17:00	15	6	19	20	60
17:00-18:00	20	14	14	17	65
18:00-19:00	14	10	18	12	54
19:00-20:00	13	9	11	8	41
20:00-21:00	12	11	5	8	36
21:00-22:00	6	6	3	5	20
22:00-23:00	3	1	6	3	13
23:00-24:00	2	5	2	1	10
Total					669
AADT					652
AM Peak				06	30-07:30
PM Peak				16	30-17:30









Location ID	S131	Located On	US 183	Community	Austin
Counted By	TCDS_Combined		2.2	County	Travis
Start Date	Thu 1/16/2014		3.3 miles south of SH0071	Module	
Start Time	12:00:00 AM	Direction	2-WAY	Agency	Texas DOT
Source	Syst_Combine	Sensor	Tube Class	Owner	
85%tile Speed	60	Count Status	Accepted	Pace Speed	50 - 60
Direction	S: 2-WAY	NB	SB		
		1 2	1 2		

Start Time	0- 29	30- 34	35- 39	40- 44	45- 49	50- 54	55- 59	60- 64	65- 69	70- 74	75- 79	80- 84	85- 89	90- 119		TOTAL
12:00 AM	0	0	0	3	14	55	55	21	4	2	0	0	0	0	0	154
1:00 AM	0	0	1	2	11	35	38	24	4	2	0	0	0	0	0	117
2:00 AM	0	0	0	3	10	27	30	19	2	1	0	0	0	0	0	92
3:00 AM	0	0	0	1	10	42	41	26	5	1	0	0	1	0	0	127
4:00 AM	0	0	0	3	25	74	87	59	12	5	0	0	0	0	0	265
5:00 AM	0	0	1	12	32	189	399	264	51	6	2	1	0	0	0	957
6:00 AM	0	9	29	112	498	791	653	216	36	7	1	0	0	0	0	2352
7:00 AM	0	0	12	107	428	753	617	252	32	6	2	0	1	0	0	2210
8:00 AM	1	1	2	28	177	502	646	336	56	9	2	0	0	0	0	1760
9:00 AM	1	5	4	12	95	333	441	282	39	7	1	0	0	0	0	1220
10:00 AM	1	2	3	18	106	344	421	202	46	8	0	1	1	0	0	1153
11:00 AM	1	4	13	40	104	292	394	244	41	8	1	0	0	0	0	1142
12:00 PM	0	7	4	31	136	338	416	203	52	6	4	0	0	0	0	1197
1:00 PM	2	5	6	24	158	383	415	224	56	7	1	0	0	0	0	1281
2:00 PM	0	3	14	51	178	374	485	277	56	4	1	0	0	0	0	1443
3:00 PM	5	4	17	86	256	490	544	267	59	7	2	0	0	1	0	1738
4:00 PM	3	3	38	226	447	556	576	312	57	6	2	0	0	0	0	2226
5:00 PM	3	15	87	273	569	616	546	230	34	2	3	0	0	0	0	2378
6:00 PM	1	6	71	268	659	597	390	150	19	4	1	0	0	0	0	2166
7:00 PM	1	1	6	34	266	438	403	127	19	1	0	1	0	0	0	1297
8:00 PM	0	0	2	15	108	291	241	78	13	4	2	0	0	1	0	755
9:00 PM	0	1	2	9	89	176	214	88	14	2	0	0	0	0	0	595
10:00 PM	0	0	1	6	53	139	168	77	9	2	1	1	0	0	0	457
11:00 PM	1	0	0	5	35	94	102	40	5	0	0	0	0	0	0	282
TOTAL	20	66	313	1369	4464	7929	8322	4018	721	107	26	4	3	2	0	27364











<u>View</u> Calendar

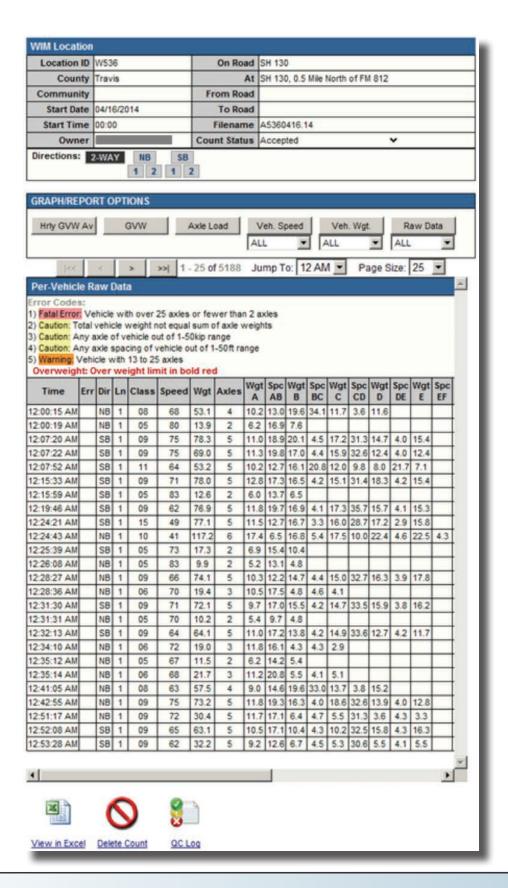
Bar Graph

Line Graph

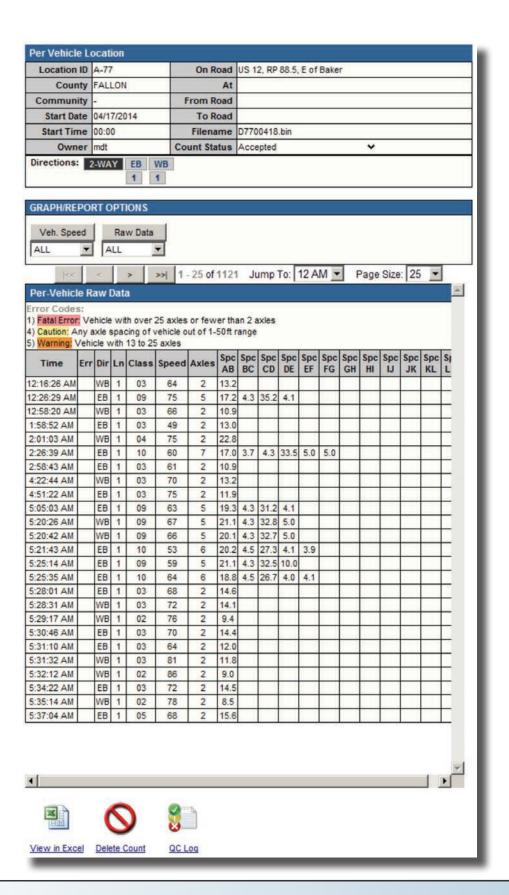
View in Excel

Monthly Report





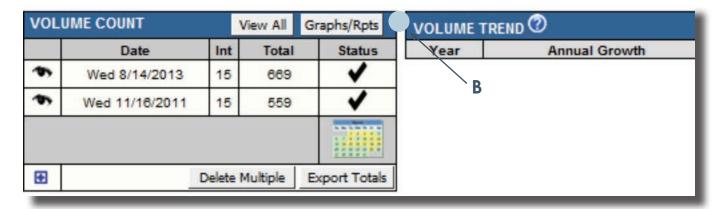




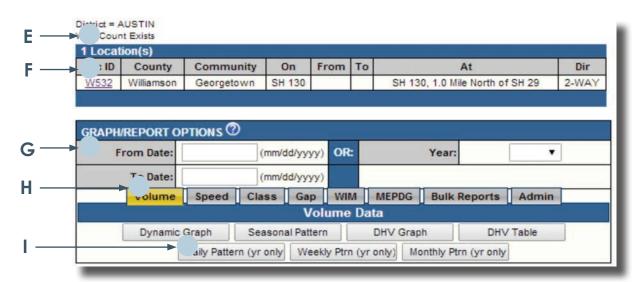


# 4.3 Single Station, Multiple Day Reports

Single Station, Multiple Day reports are accessed via the search results Form View page. We access Single Station, Multiple Day reports by clicking on the "Graphs/Rpts" button (B) within the section of data that we want to view, as shown below.



Different Single Station, Multiple Day reports will be available depending on the type of data that a station collects. The figure below shows an example of the Single Station, Multiple Day report page. At the top of the page is a summary of the search criteria (E), then a data summary of the location that we selected from the search results (F), then a set of Graph/Report Options (G) which allow us to specify either a date range or a year, and then a series of tabs (H) for the different types of data: Volume, Speed, Class, Gap, WIM (Weigh-In-Motion), MEPDG (Mechanistic-Empirical Pavement Design Guide), Bulk Reports, and Admin.



Since we clicked on the "Graphs/Rpts" button in the Volume Count section, the Volume tab is selected. If we had entered from another section of data (e.g. Speed, Classification, etc.), the corresponding tab would be selected. Within each of the report tabs, we then select the type of graph or report that



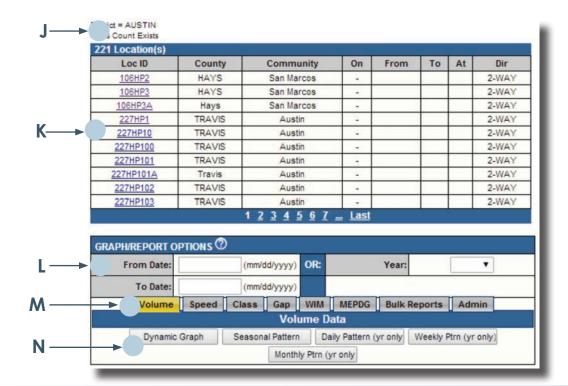
we want to view by clicking on the appropriate button (I). Each tab provides different report options, specific to the type of data that is being shown. For example, the Volume tab shown above has seven report/graph options: Dynamic Graph, Seasonal Pattern, DHV (Daily Hourly Volume) Graph, DHV Table, Daily Pattern\*, Weekly Ptrn\*, and Monthly Ptrn\*. The last three reports (\*) require us to select a Year in the Graph/Report Options area (G).

## 4.4 Multiple Station, Multiple Day Reports

Multiple Station, Multiple Day reports are accessed via the search results Form View page. We access Multiple Station, Multiple Day reports by clicking on the "Graphs/Rpts" button (C) at the top of the search results page, as shown below.



The Multiple Station, Multiple Day reports use a reporting interface that is very similar to the Single Station, Multiple Day reporting interface described in the previous section. The key difference is that the reports generated use data for ALL of the stations that are in the search results. Once again, different Multiple Station, Multiple Day reports will be available depending on the type of data that a station collects. The figure below shows an example of the Multiple Station, Multiple Day report page.

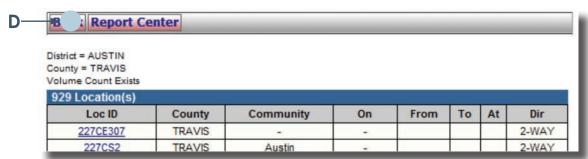




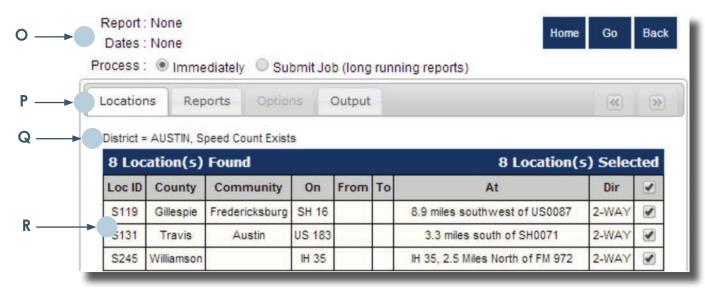
At the top of the page is a summary of the search criteria (J), then a data summary of the locations (10 at a time) that we selected from the search results (K), then a set of Graph/Report Options (L) which allow us to specify either a date range or a year, and then a series of tabs (M) for the different types of data: Volume, Speed, Class, Gap, WIM (Weigh-In-Motion), MEPDG (Mechanistic-Empirical Pavement Design Guide), Bulk Reports, and Admin. The Volume tab is selected by default. Within each of the report tabs, we then select the type of graph or report that we want to view by clicking on the appropriate button (N). Each tab provides a different report options, specific to the type of data that is being shown. For example, the Volume tab shown above has five report/graph options: Dynamic Graph, Seasonal Pattern, Daily Pattern\*, Weekly Ptrn\*, and Monthly Ptrn\*. The last three reports require us to select a Year in the Graph/Report Options area (L).

# 4.5 Report Center Reports

The Report Center is accessed via the "Report Center" link at the top of the Multiple Station, Multiple Days page (D), as shown below.



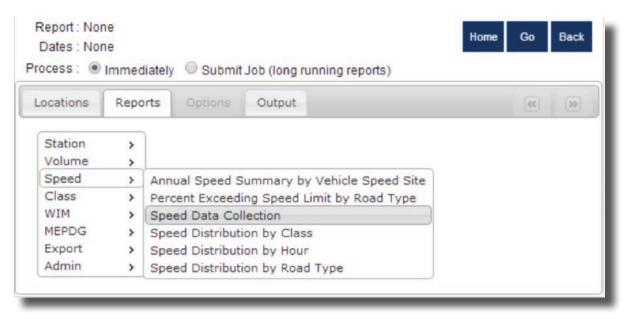
The Report Center interface, shown below, is different from all of the other reporting interfaces and is designed to give users more flexibility in creating reports. Like the Multiple Station, Multiple Day reports, we can run reports against all the stations in the search results, however, Report Center also provides the ability to run reports against user-selected sub-sets of one or more locations within the search reports. The checkboxes on the right allow users to refine which stations are included.





Report Center contains the following sections: At the top of the page is report metadata (O) which updates to show the Report selected, and the Dates selected, if any. This area also provides us with the ability to choose whether to run the report immediately, or to submit long running reports to a queue. Below that is the set of report tabs (P) that we use to build our reports. On the Locations tab, the search criteria are displayed (Q). Below the search criteria are the individual locations (R) included in our search results.

Report Center uses a tabbed layout that steps you through setting up reports. First, we select the locations to include in the report on the Locations tab. Then, on the Report tab, we select which specific report we want to run, as shown below. Next, if required by the report, we use the Options tab to select the options (e.g. Time Span) to apply to the report. Finally, we use the Output tab or the "Go" button to view the report in our browser. Once the report has been generated and is viewable in the Output tab, we have the option to export the output graph/report to a PDF or MS Excel file.



There are over 80 reports available in Report Center and we are constantly adding new reports. Report Center reports cover a wider array of reports under the sub-categories of Station, Volume, Speed, Classification, Weigh-In-Motion (WIM), MEPDG (Mechanistic-Empirical Pavement Design Guide), Export, and some Administrative reports.

# 4.6 Classic Reports

Classic Reports may be generated for Locations, Volume, Class, Gap, Speed, WIM, and the Latest Count or AADT. After conducting a search for the desired Locations, you may create several reports to organize your search results and allow for easy management of data and information for field technicians. If you pulled the count information directly from the map you can still generate a report, but it will only be for the individual location.



1. Search the database without entering any criteria in order to find all Locations. Classic Reports can be accessed from the toolbar near the top of your screen.

New: Link | Spot | Reports: Locs | Vol | Class | Gap | Speed | WiM | Latest: Vol / AADT

If you want a list of the latest Volume Count at all locations, simply click on "Latest: Vol" at the top of the page and the following report will be generated.

	<b>)</b> M⊆ atest						Trans	sportatio	on Data	Management	MS2 System						
D.		S Excel (.tls Approach	Commission in contract of	~	and the last	n seedan	community	_	right sid	e. Set the Page Se Extitude	lup layout to Land	scape when printing. From	To	Latitude From	Longitude From	Latitude To	Longitude To
3	ABBOTT			EB	LINK		Detroit	4/19/2007	1568	42.3297666172644	83.0574046836572	JOHN C LODGE (M-10 SERVICE OR) NB	THEO	42 3294157959242	83.0582652395847	42.3301372523459	B3.0565490847714
4	ASSOTT			we	LINK		Detroit	4/19/2007	3512	42.3297866172644	83.0574046836572	JOHN C LODGE (N-10 SERVICE OR) NB		42.3294107968042		42.3301372523459	
8	Ecorse Rd	AT	Ford St	58	SPOT		Ypelanti			42.2304775	-83.5971999						
7	Ecorse Rd		Glenwood Ave	EB	SPOT		Ypslanti Twp										
	FORT (M-85)			EB	LRK		Detroit	5/9/2007	3893	42.3274809468997	-03.054097084119	JOHN C LODGE (M-10 SERVICE DR) NB	THEO	42.5272423902122	82.0554508451269	42.5277195035871	-83 054343323111
1	FORT (M-85)			we	LINK		Detroit	5/9/2007	4307	42.3274009460097	-83.054897084119	JOHN C LODGE (M-10 SERVICE DR) NB		42.3272423902122		42.3277195035871	-83.054343323111
1	HOWARD			80	LRK	4.	Detroit	4/19/2007	4006	42.3290226971143	E3.0506235062749	JOHN C LODGE (M-10 SERVICE DR) NB	THRO	42.3287176260390	E3.0573317237859	42.3293277680113	B3.0559154486001
2	HOWARD			WB	LNK		Detroit	4/19/2007	5718	42.3290226971543	- 83.0566235862749	JOHN C LODGE (M-10 SERVICE DR) NB	THIRD	42.3287176260396	03.0573317237859	42.3293277660113	B3.0559154496061
0	LAFAYETTE			WB	LINK	8	Detroit	4/19/2007	2007	42.3263279170521	83.0556428432465	JOHN C LODGE (M-10) SERVICE DR) NB	7HR0	42.3280536228163	- 83.0562930489763	42.3298009623877	83.0550275987210
	LAFAYETTE			83	LINK	8	Detroit	4/19/2007	2092	42.3283270170521	- 83.0556428432465	JOHN C LODGE (M-10 SERVICE DR) NB	THEO	42.3280636228163	- 83 0562930489783	42.3286009623877	a3.0550275987211
	MICHGAN (US-12)			to	LINK	4	Detroit	9/12/2007	7319	42.3316294261958	E3.0599551627007	SOCTHUCHIN C LODGE (M-10 SERVICE DR) SIR				42.3318814792837	83.0577450680721
J	MICHIGAN						ACCUSED 1					SEXTRIJOHN C LODGE					

Choosing the Latest: AADT or any of the other reports in the toolbar produce similar reports. Remember that each report will only include information for locations in your search results. If you wish to include a larger or smaller scope of locations you must conduct a new search with different criteria.

All reports will be opened in a separate browser window. You can print the report from the browser or open it in Excel for insertion into a project report, or presentation. View the report in Microsoft Excel by clicking the "View Report in MS Excel (.xls)" link.

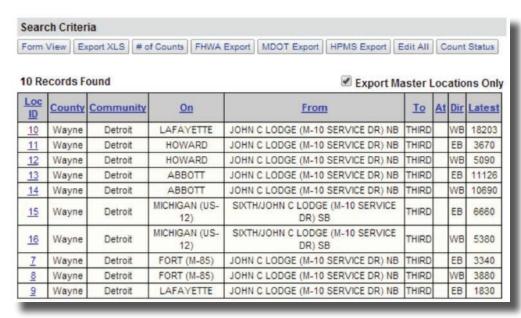
Note that you may see a warning message when opening the file in Excel since it is actually an html file saved to the .xls extension. To prevent this message from showing up in the future for this file, simply save the file as an .xls file once opened.

# 4.7 Federal Reports (Exports)

List View

On the search results Form View page, click the List View button. Notice the buttons at the top of the List View page (e.g., Export XLS, # of Counts, FHWA Export, HPMS Export, etc.) as shown below.



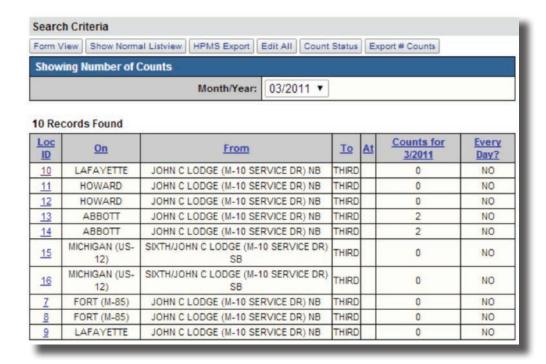


These buttons allow you to view or export information for locations and counts in a variety of standard formats.

#### # of Counts

Changes the List View columns to include the number of counts by location and whether there are counts for every day of the selected month/year.

Use the "Export # Counts" button to save this table as an .XLSX file to your computer.



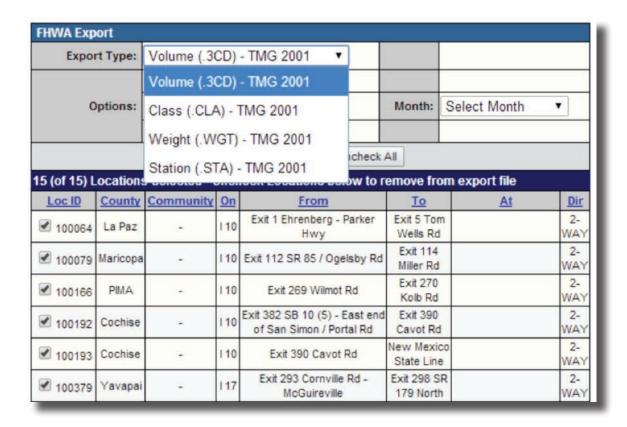


## **Export XLS**

Exports the table to an .XLS file to your computer with some additional fields.

#### **FHWA Export**

Exports the locations in FHWA TMAS and LTPP standard formats – Volume (3 Card), Class (C Card), Weight (W Card), and Station (S Card) – for the selected month and year. (Note that the Weight reports are per vehicle and can take a long time to download the large size file generated by the report).



## **HPMS** Export

Exports a spreadsheet with HPMS reporting fields for use with the annual HPMS submission for the selected year of data.



# 5. Administrative – Adding Counts

Use the Admin page to import Count files, review their QC status, and assign them to Locations. Click



the Admin button in the toolbar to open the Admin page.

Only authorized users have access to the Admin page. If you do not see an Admin button in the toolbar, talk to your Site Manager about obtaining authorization.

There are two versions of the file upload process, the Legacy File Upload and a newer File Upload process. Both will be shown here, although you will only have access to one of them.

# 5.1 File Upload (Recommended)

On the Admin page, there are a number of tabs across the top of the screen. Click on the TCDS tab if you are not already there. The File Upload interface should look something like the following screenshot. If your interface looks very different from this, skip to the next section in this document (5.2 Legacy File



Upload).

You can import one or more Count files from a number of different sources using this interface.

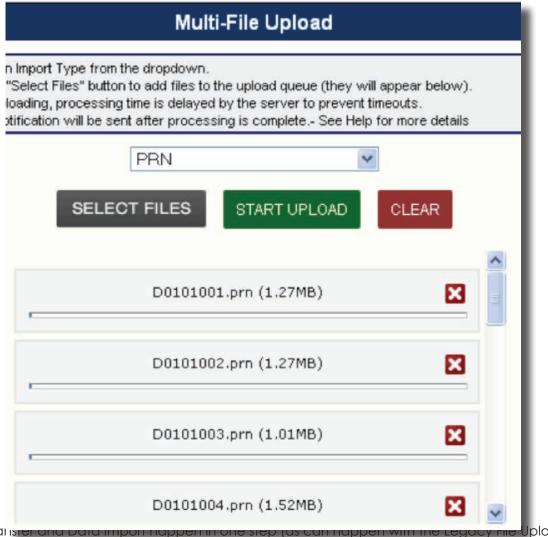
#### Overview

This upload application separates the traditional import process into two steps:

- 1. File Transfer: Transfers each file from your remote computer to our server.
- 2. Data Import: Add each file to a queue for processing on our server at a later time.

This is the recommended upload method for any number of files. Users uploading many files at one time should find this method advantageous, as it eliminates the potential for the process to timeout when





both File Trans oload).

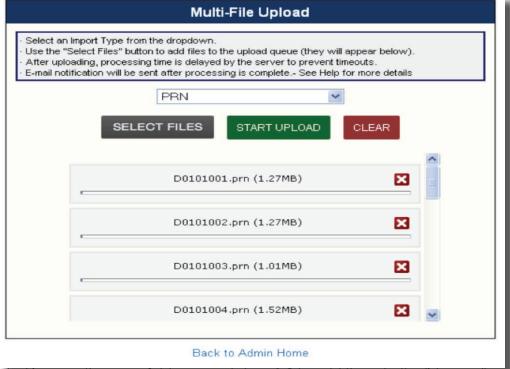
## File Type

Begin by selecting a file type for uploading from the drop-down menu. If more than one file type will be uploaded, select "Multiple File Types," but be aware that only the file types listed in the Import Type drop-down will be available to select after upload as well.

## Select Files

- 1. Use the "Select Files" button to open a dialog box and navigate to the location of the data files.
- 2. Highlight the files using the mouse and click "open" to add them to the queue.
- 3. The list of files to upload will appear below the buttons, as shown in the screenshot below. In the event that incorrect files are selected into the queue, click the red button next to a file name to remove it before upload.





If files are located in more than one folder, repeat steps 1-3 to add them to the list as well.

## Start Upload

When finished adding files to the queue, simply click "Start Upload." The files will begin to upload one by one until finished.

- If a single file type is selected (most common), when files have finished uploading an alert box will appear which shows you the total number of files that were uploaded. The files will then be added to the server's processing queue and the data import will be processed in the order it was received. When the data import processing is complete, a system-generated email will be sent to the user account that you used to upload the files.
- If "Multiple File Types" is selected (less common), the page will automatically redirect to the Upload Manager page where the user must specify a file type for each file prior to processing.
   To check the status of uploaded files, go to the Upload Manager page.

NOTE: Processing times will vary depending on the number of users uploading files, and the number of files uploaded.

For the most recent version of this help section, please visit the online File Upload help page.

# 5.2 Legacy File Upload

The Legacy File Upload application performs the import processes in a single step:



- 1. File Transfer: Transfers each file from your remote computer to our server.
- 2. Data Import: Processes each file on our server immediately.

This is not the preferred upload method for count files. Users uploading many files at one time may have problems with this method, as it has the potential for the process to timeout when both File Transfer and Data Import happen in one step.

On the Admin page there are a number of tabs across the top of the screen. Click on the TCDS tab if you are not already there. The Legacy File Upload interface should look something like the following screenshot.

		Import Count D	ata	
PRN Single File Multiple Files	JAMAR PerVeh (txt) Please Use Multi-file Upload link below.	Diamond Single File Multiple Files	HiStar Single File Multiple Files	TMWin Vehicle Count Axie Count Per Vehicle
ODOT Single File Multiple Files	Datalink Single File	XLS Template <sup>1</sup> Single File Multiple Files	Wavetronix Single File	Wavetronix HD Single File
GDOT Class (csv) Single File Multiple Files	GDOT Class (mdb) Single File	MORPC (xls) Single File	VIAS Vol Single File Multiple Files	VIAS PerVeh Single File Multiple Files
WIM ECM Single File Multiple Files	Diamond PerVeh Single File Multiple Files	FHWA Single File Multiple Files	VDOT Peek Single File Multiple Files	RTMS Single File Multiple Files
Smartway Single File Multiple Files	Centurion PerVeh Single File Multiple Files	Centurion Volume Single File Multiple Files	Centurion Class Single File Multiple Files	MDOT Short Count (dbf) Single File Multiple Files
Diamond BIN Single File Multiple Files	Navteq Volume Single File Multiple Files	ECM Stat Single File Multiple Files	Miovision XLS Single File Multiple Files	Jamar Excel Single File Multiple Files
TIRTL Single File Multiple Files	DV03 Excel Single File Multiple Files	Dynamic WIM Single File		Seimens i2 Single File
MarcNX CSV Single File	ird Single File			
		load with Batch	Import Process	

You can import Counts from a number of different sources. In this example we will import a PRN file and assign it to a TCDS Location. Click on the "Single File" link under PRN. Your screen should look like the image to the right.

Click the "Choose File" button and select a PRN file from your local machine. Then click the "Import Data" button. The PRN file will be read into the system and your screen will be directed to the import status screen, where you will be able to view a summary of the data





le Name	Station	Start Time	Start Date	End Time	<b>End Date</b>	Interval	Dir	Count Type
101001.prn		12:00:00 AM	01/01/06	12:00:00 AM	01/01/06	15	0001	VOLUME
101001.prn		12:00:00 AM	01/01/06	12:00:00 AM	01/01/06	15	0002	VOLUME
101001.prn		12:00:00 AM	01/01/06	12:00:00 AM	01/01/06	15	0003	VOLUME
101001.prn		12:00:00 AM	01/01/06	12:00:00 AM	01/01/06	15	0004	VOLUME
			a sea com a		2012022	S422	2005	1.001.000
Do you Yes -			emporary P	RN count file		compute		VOLUME
Po you Yes - 1. 2. 3. 4.	Click the "Open" to A window Click "Co	delete the to	Files" buttor our are promp flash open/cl ew the import	RN count file i below ted to downlo osed ted counts	s on your	compute		VOLUME
Yes - 1. 2. 3. 4.	Click the "Open" to A window Click "Co	"Delete PRN the file that you w will quickly ntinue" to view	Files" buttor our are promp flash open/cl ew the import	RN count file  a below ted to downlo osed ted counts counts	s on your	compute		VOLUME

that was read.

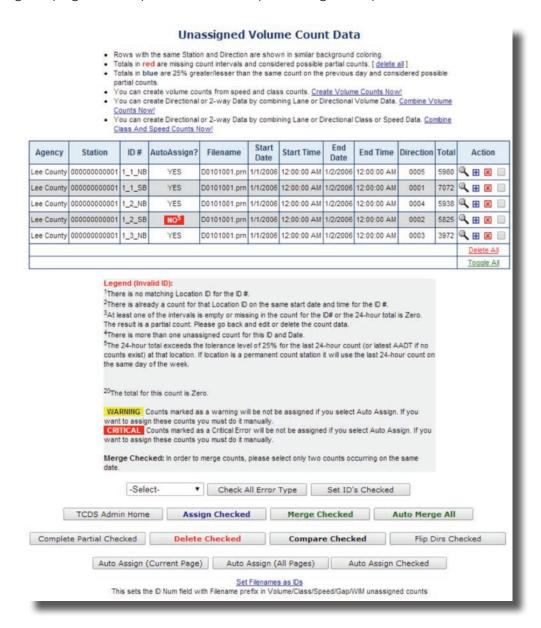
As you can see, the current example includes one days of 15-minute interval Counts, starting for January 1, 2006. Notice that the Station column is blank since the counts have not yet been assigned to a location in TCDS. If the information appears correct, you can click the "Continue" button in order to assign the newly imported Counts to a TCDS Location. However, if you do not wish to assign the Counts immediately, you can leave them in an "unassigned" state and return to process them further at a later time.

To go back at a later time to view them or assign them, simply return to the Admin page and click "View Unassigned" for individual count types, or click "View ALL Unassigned" for all count types, or click "View NEW Assign List (Beta!)" to use a newer assign interface.

	Ma	anage Imported D	ata	
	Volume / Sp	oeed / Class / Weig	gh-In-Motion	
	Viev	v NEW Assign List (I	Betal)	
	Vo	lume / Speed / Cla	ass	
	Vie	Delete All Delete Partial	(5)	
Volume Count	Speed	Classification	Gap	Weight-In- Motion
View Unassigned (5) Delete All Delete Partial Update IDs	View Unassigned (0) Delete All Delete Partial	View Unassigned (0) Delete All Delete Partial	View Unassigned (0) Delete All Delete Partial	View Unassigned (0)
	Qu	ality Control Option	ons	
		Configure Groups		
	Po	ower Admin Optio	ns	
		Update Owner ID		
View U	nassigned - View	data that has not ye	t been assigned to le	ocations.



Whether you click Continue after importing or click View Unassigned at a later time, you will be directed to the Unassigned page, where you can continue processing the imported data.



The TCDS system was able to match up the Count with existing TCDS Location 00000000001, so the AutoAssign column reads "YES". Auto assigning will use any existing Location ID's that match the corresponding file ID(s) and automatically assign the Counts to that Location. The Auto-Assign column must say "Yes" for Auto-Assign to work. If it says "No" in this column, note the superscript for each ID # and refer to the legend at the bottom of the ge for a description of the cause that prevents auto assignment. You may have to manually assign each count if auto assigning is unavailable.



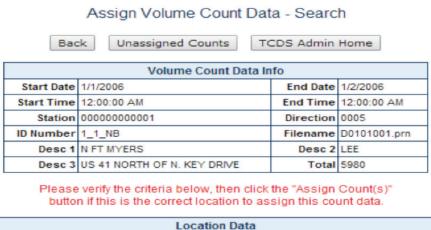
If you have several count files associated with a single location, you can use the "Assign Checked" option to assign all counts to one location simultaneously. Note that this option only works for counts at the same location. If you try to check multiple counts that are at different locations, you cannot use this feature.

From this page, you may also view to verify the quality of a count, or delete one or all of the uploaded counts. If necessary, multiple counts may be merged or compared once uploaded. The "Total" column may also indicate a warning about the imported count data. An explanation of these warnings is located at the top of the page.

Manually assigning the counts allows you to use search fields for the correct intersection or choose the specific location directly on the map interface to assign the count. The map feature is optional and must be activated to use.



- 1. Click the icon to go to the Assign Data search page
- 2. Choose the appropriate search fields and click "Search"



	Location Data		
Record   ◀ 1 ▶	► ▶▶  of 1		
Assign Count(s)	Search for Another Location		
Location ID:	1_1_NB	MPO ID:	
Type:	SPOT	HPMS ID:	
Fnct'l Class:	-		
Located On:	US-41 (SR 45)	PR#	MP
At:	NORTH OF NORTH KEY DR		
Direction:	1		
Community:	-		

3. Confirm the location or edit the information and click "Assign Count(s)".

You may use the map to locate a count. Click on the "Search for Another Location" button. Then, on the search page, click "Show Google<sup>TM</sup> Map" button at the bottom of the page. This will display a small Google<sup>TM</sup> map at the bottom of the search page. Click on the map where the count is located. The Location ID will be automatically entered in the search field. A bubble will appear listing the possible



IDs for that location. If there are multiple directions at a location, you must choose the appropriate direction and click "Use This ID" link to fill in the correct "Location ID". Continue with Step 2 and Step 3 to finish the assigning process. After the count file has been assigned, you will be forwarded back to the Unassigned Counts page. Continue this process until all counts have been assigned.

	SEARCH FOR LOCATION	
County	ALL ▼	
Community	ALL •	
Туре	ALL ▼	
Location ID		
Located On		
Route	ALL ▼	
Crossroad		
From Road		
To Road		
	Search ation does not exist for this count, please go to the ge to create the location before assigning this count.	
	a the Google Map below. Click a marker to auto paches/directions on one location, select the pro- link in the popup bubble.  Show Google Map	
	Show Google Map	

# 6. Locations-Adding, Editing, Deleting

Before you can assign a Count to a TCDS location, the TCDS location must exist in the system. If the location does not exist in the system, you can create it. Not all users have the authorization to create locations. Speak to your administrator or site manager if your account's security level does not allow you to create new Locations.

#### 6.1 Add New Locations

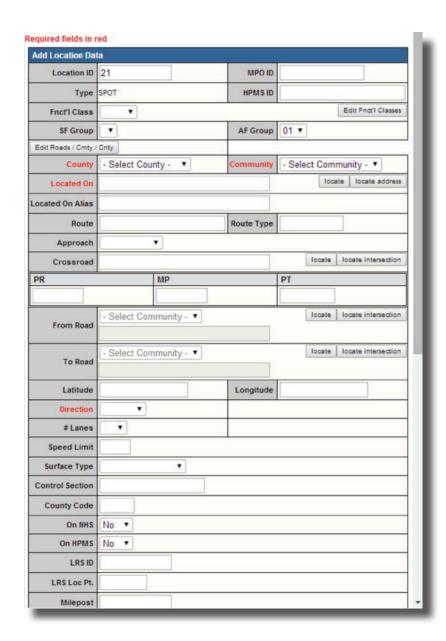
TCDS Locations are created from the Search results page. Conduct a search to reach the search results page. Notice the "New Spot" and "New Link" buttons. Spots are Locations that represent a single point





on the map, such as an intersection, while Links are Locations that extend between two points.

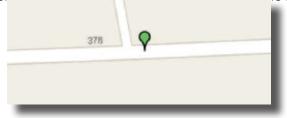
Click the New Spot button. You will be directed to a new page where you can fill in the information for the new Location. Required fields are labeled in red. A Location ID is created automatically. If you already have a Location ID that you want this Location to use, then enter that location ID into the box





instead.

Set the latitude and longitude of the location by zooming and panning the map to the appropriate spot and clicking on the map. A small green pushpin will indicate where the new Location will be situated. If it is not quite correct, click and drag the pin with the mouse to move it to the correct spot.



Click the Submit button when you are finished to add the new location to the database. Counts can now be assigned to the new Location.

# 6.2 Edit Existing Locations

Editing existing Locations is very similar to creating new ones. Search for the Location you wish to edit.



Notice the Edit button near the bottom of the screen.

Click the Edit button and you will be allowed to change the information for the Location. As with creating new Locations, you can change the physical location of the Location by moving the green pushpin on the map.

# 6.3 Delete Existing Locations

The Delete button is located in the same area as the Edit button. Click the Delete button and you will be asked to confirm that you wish to delete the Location and all Counts that have been assigned to it. You cannot undo a deletion.

