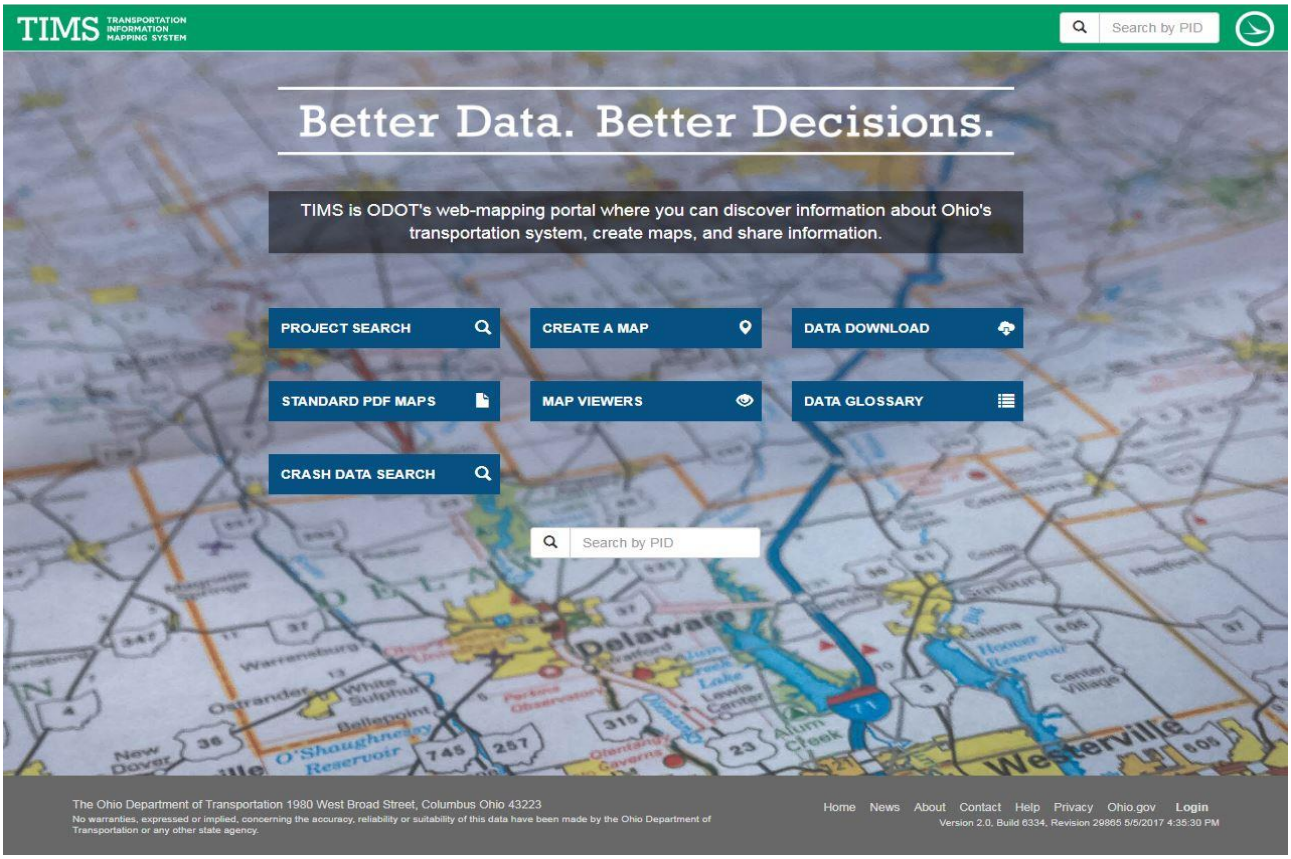
TIMS Transportation Information Mapping System

Version 2.0

TIMS User Guide for Desktop



April 9, 2018

Copyright and Technical Support

TIMS User Guide for Desktop and Tablet

Technical Support

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Feedback

Please email your comments and suggestions about TIMS and its documentation to:

- tims@dot.state.oh.us

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Preface

Who is this guide for?

This User Guide is for people who use the Transportation Information Mapping System (TIMS) on a desktop computer. These are individuals who need to access Ohio Department of Transportation information, view that information in maps or tables, and download or share the data with others. Potential users include:

- Executive Management
- Local Government Officials
- Engineering Departments
- Planning Departments
- Financial Departments
- Operations Personnel
- Facilities Personnel
- Communications Personnel
- Construction Managers
- Rail Commission
- External Consultants

Why read this guide?

This guide provides step-by-step instructions for accessing the various web pages of TIMS to gather the information you need for the job at hand. The type of information available to you includes:

- Project details
- Project funding and schedules
- Construction plans and specs
- Roadway characteristics
- Routes
- Traffic Counts
- Crash and Safety data
- Transit data
- Facilities and assets data
- Land use and zoning data
- Permits
- Bridges and culverts
- Demographics data
- Environmental data
- Aerial imagery
- And more!

How is this guide organized?

The guide is organized for ease of use. Each section corresponds to a major section of the TIMS website, which is accessed by a large button on the TIMS home page.

- Project Search
- Create a Map
- Data Download
- Standard PDF Maps
- Map Viewers
- Data Glossary
- Crash Data Search

Within each section, we provide a list of useful tasks you can perform and step-by-step instructions for successfully completing each task. We also provide screenshots to illustrate what the web pages look like to guide you through each task.

Section 1. Getting Started with TIMS

The Transportation Information and Mapping System (TIMS) is a web-based application used to access Ohio Department of Transportation information. TIMS runs in your web-browser.

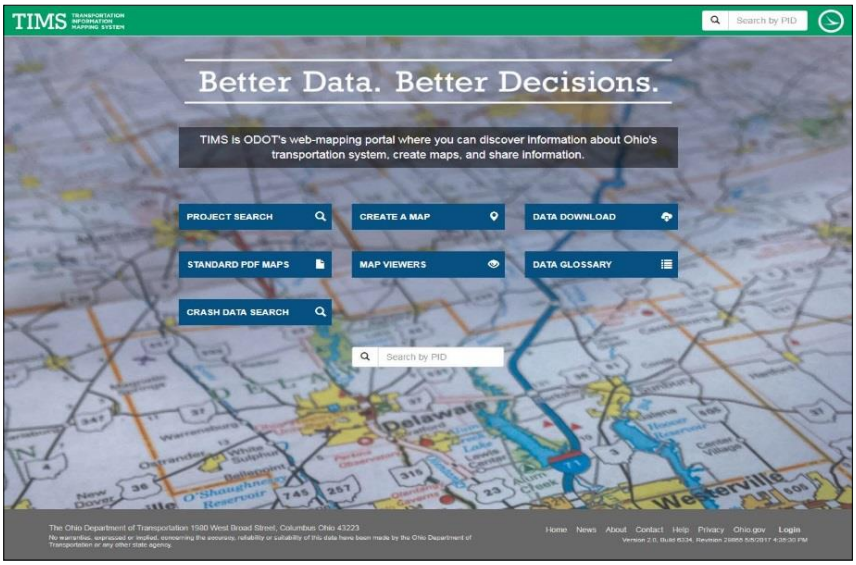
All sections in this guide refer to the version of TIMS developed for desktop computers.

1.1 Startup TIMS

1. To start the TIMS application, open your browser.
2. Enter the URL: https://gis.dot.state.oh.us/tims **Note:** *Bookmark this link for future reference.*
3. The Home page opens as shown in the next task.

1.2 Get familiar with the Home page

1. When you start up TIMS, the following **Home** page appears in your browser:



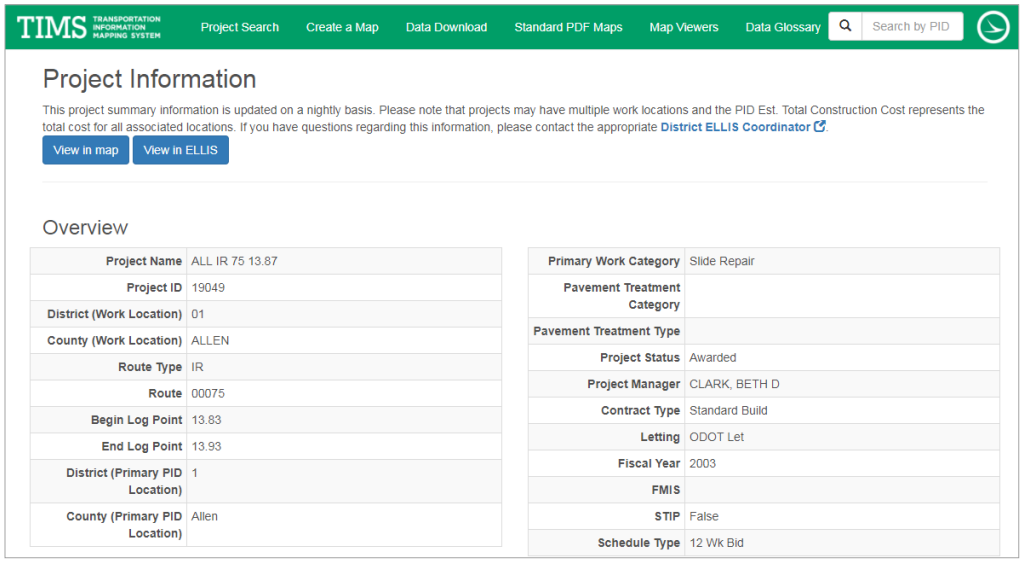
2. Each of the blue buttons takes you to a new Web page that deals with a different aspect of transportation information.

Button	Purpose
Project Search	Search for transportation project information
Create a Map	View and search ODOT transportation data to create custom maps
Data Download	Download complete datasets to excel, KML, SHP, FGDB
Standard PDF Maps	Generate maps with specific layouts and formats
Map Viewers	Access interactive maps by content focus (for example, Construction)
Data Glossary	Search for and view dataset and field descriptions stored in the database
Crash Data Search	Safety crash analysis tool for pre-qualified individuals

Note: *When you hover over each of the blue buttons, a helpful tool tip appears telling you what the button does.*

3. The **Search by PID** field appears in the title bar on every TIMS webpage. It lets you search for information by Project ID (PID).

4. Enter a specific PID and press the magnifying glass icon or press the **Enter** or **Return** key. A **Project Information** page will appear for that project. For details about searching for projects, see **Project Search**.



1.3 Access standard links

1. The menu of standard links across the bottom of every web page takes you to these pages:

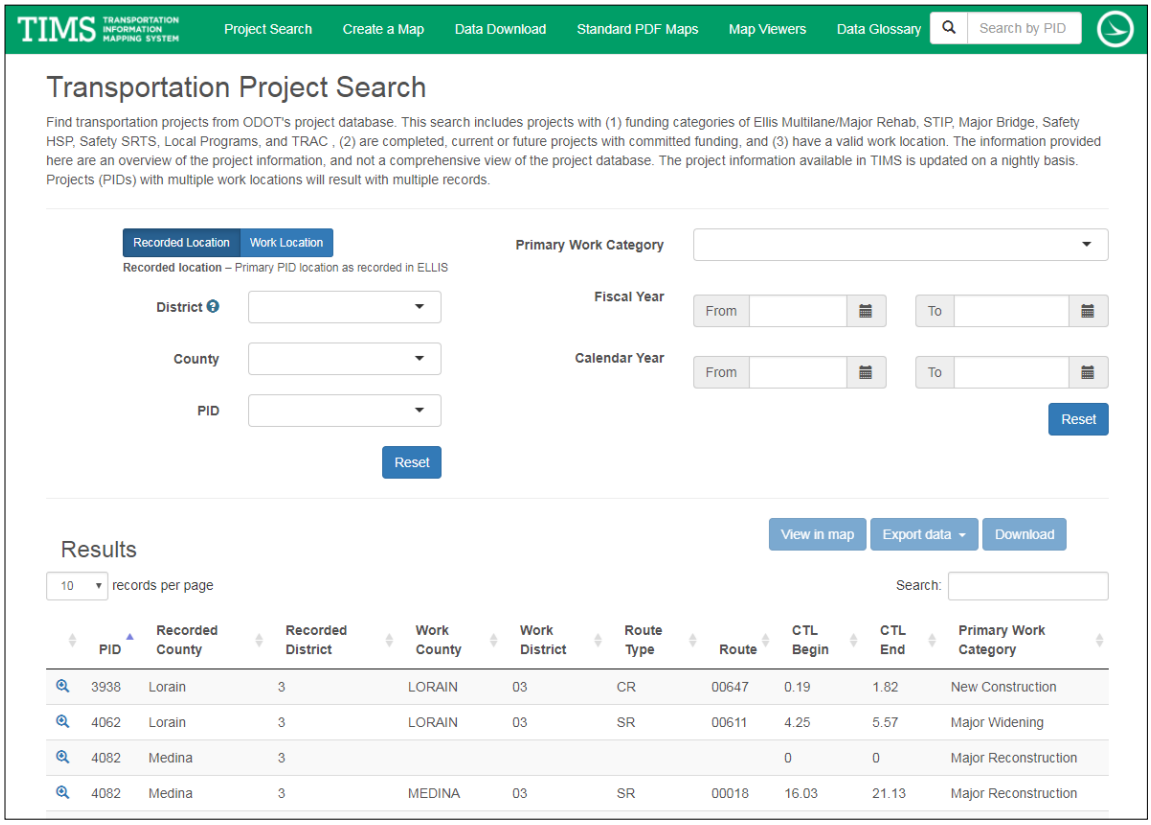
Link	Action
Home	Returns you to the TIMS **Home** page
News	Provides up to date news up TIMS updates
Help	Opens a PDF version of the *TIMS User Guide for Desktop and Tablets* in a new browser window or tab
About	Provides information about all supported browsers for TIMS
Contact	Provides contact information for the Ohio Department of Transportation if you have any problems with the TIMS application
Privacy	Opens a page with the privacy notice
Ohio.gov	Takes you to the **Ohio.gov** website
Login	Provides a login screen for the TIMS Administrator to log in to perform administrative functions or access the Crash Data Search Page

Section 2. Project Search

The **Project Search** section of the TIMS website lets you search for transportation project information.

2.1 Display the Project Search page.

1. From the **Home** page, press the **Project Search** button. The **Project Search** page appears.



2.2 Enter search criteria in user input area

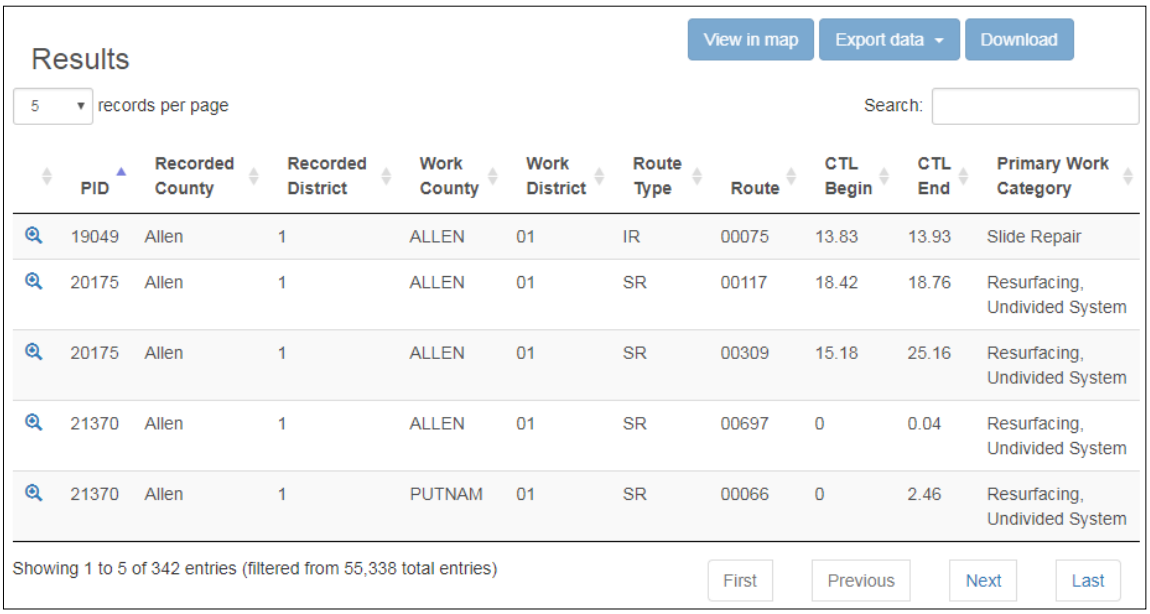
1. From the top of the **Transportation Project Search** page, enter your search criteria.
   - **Recorded / Work Location**: **Recorded Locations** allows filtering by the County and District as recorded in the Ellis Project Database**. Work Locations** allows filtering by the County and District where the actual work was performed for a given PID.
   - **District:** Pull-down list of districts in numeric order, where **District 13** represents statewide projects. **Note:** *District 13 is only valid when* ***Recorded Location*** *is selected.*
   - **County:** Pull-down list of counties in alphabetical order. If you already selected a district, you will see only the counties in that district.
   - **PID:** Type the entire Project ID number or select it from the pull-down list. If you already selected a district or county, you will see only those projects in that district or county.
   - **Primary Work Category:** Alphabetical list of work categories.

- **Fiscal Year:** To narrow the project search by fiscal year, select the date range (***From*** *and* ***To years***). Type the year or press the **Calendar** button and select a year. **Remember:** *The* ***To year*** *must come AFTER the* ***From year.***
- **Calendar Year:** To narrow the project search by calendar year, select the date range (***From*** *and* ***To years***). Type the year or press the **Calendar** button and select a year.
  Note: *If you make any mistakes and want to clear your selections, press* ***Reset****.*

2. As you enter the search criteria, TIMS begins searching the database for data that meets that criteria and a revolving icon typically appears. Once the search completes, the results appear at the bottom of the page in the results table. The next section describes the search results in greater detail.

2.3 View project search results as records in a table

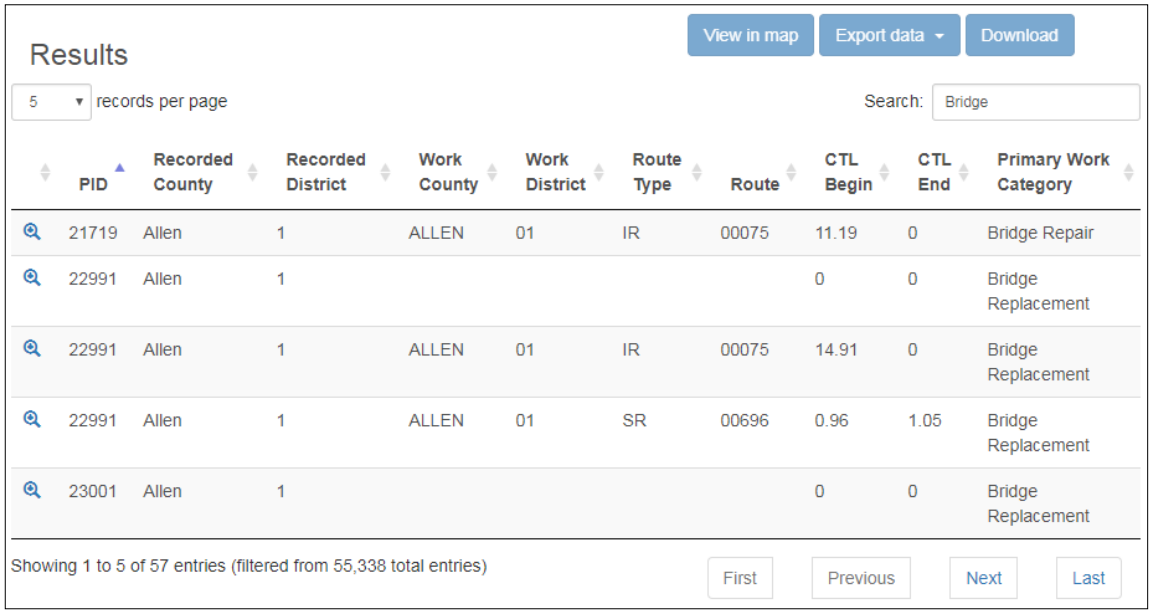
1. After you select search criteria, the results appear in the Results window below the map. In this example, **District 1 and Allen County** are the search criteria:



2. The result records are organized into pages. The **top-left corner** of the results window indicates how many records appear on each page. In this example, 5 records appear per page. Change the value to see more or less records.
3. The **bottom-left corner** of the results window shows you how many records you are viewing. In this example, you are viewing records **1 –5 of 342, filtered from 55,338 total entries**.
4. The **bottom-right** corner of the results window contains buttons that let you move between pages of the **Results** table.
   - **First:** Display the first page of results.
   - **Previous:** Display the previous page of results.
   - **Next:** Display the next page of results.
   - **Last:** Display the last page of results.

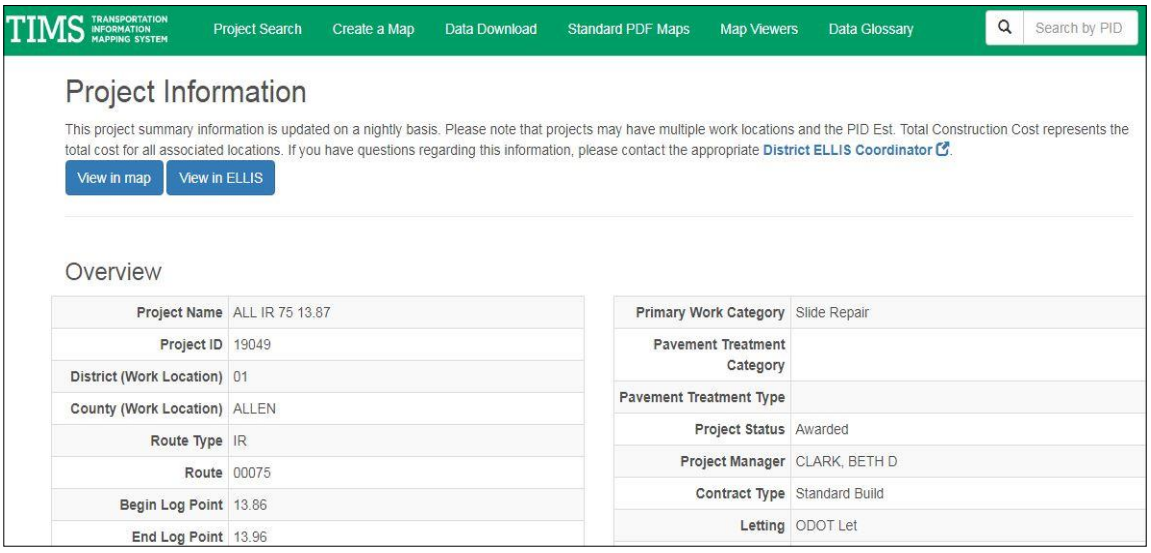
2.4 Search through the results

1. If the number of results is large, consider using the **Search** field in the **top-right corner** of the **Results** table. This lets you narrow the results records in the table by typing a few characters of text that you want to search for in each record. As you type, the search begins.
2. For example, to further narrow the results of projects in Allen County by all work done on bridges (maintenance, repair, replacement), type **Bridge** in the results **Search** field. The results are now limited to records for Allen County that contain **Bridge** in any of the columns. This reduced the number of results to 57.



2.5 View details of a record

1. Once you find a record of interest in the **Results** table, you can view its details.
2. Identify the record of interest and press the **Details** button on the far-left side of the record.  The **Project Information** page appears.



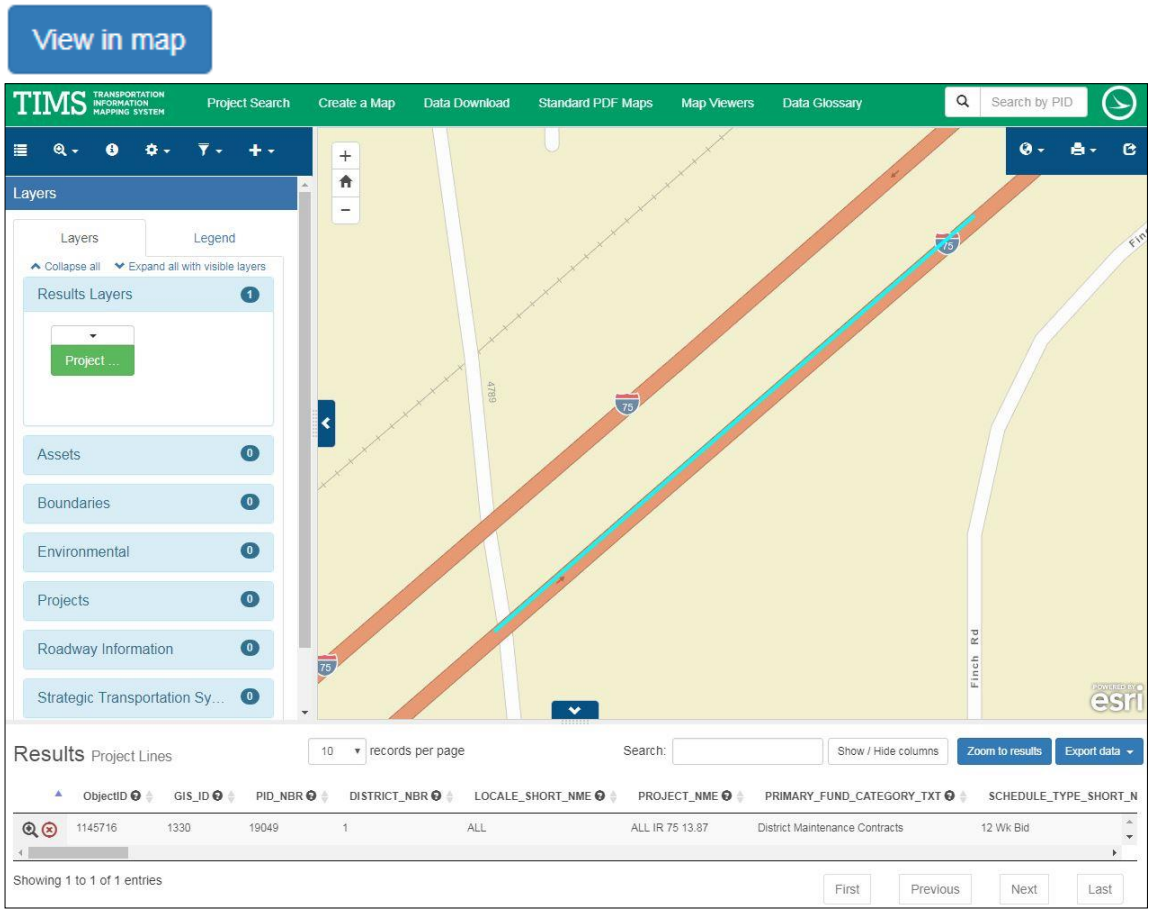
- This page contains a summary of information about the project. This information is updated on a nightly basis.
- Projects may have multiple work locations and the **PID Est. Total Construction Cost** represents the total cost for ALL associated locations.
- Some of the information on the page may have links to other documents. This symbol designates a link: 

3. Scroll down to review all the information associated with the project. The information is grouped into categories for ease of reading:
   - Overview
   - Dates & Numbers
   - Bridge Information
   - Additional Information

   Note: *To print the project details, use your browser's **Print** feature.*

2.6 View project search results as a layer on the map.

1. If you want to view the search results on a map, from the **Project Information** page, press the **View in map** button. The **Create a Map** page appears.



2. The page has several areas:
   - **Toolbar:** Blue bar at the top left containing different tools for performing tasks on the map.
   - **Tool Area:** Area under the toolbar that contains user input fields for the selected tool. The layers tool is selected by default.
   - **Map Area:** Displays the map with the results.
   - **Results:** Table along the bottom that contains results from the tool.
3. For details on how to interact with the toolbar, map, tool area, and results, see **Create a Map**.

2.7 View project in search results in ELLIS

1. If you want to view further details of the search result, from the **Project Information page**, press the **View in ELLIS** button. The **ELLIS PROJ** page opens in a new tab.

2. **ELLIS PROJ** is a web-based application that provides project information such as agencies involved, location information, and current cost estimates.
3. At the top of the screen there are buttons which allow you to access: Project information, schedule data, and CMS (Construction Management System) data. Additionally, some projects may provide data on bridges, construction contracts, detailed funding information, and roadway segments. To access this information, select the buttons at the top of the screen:

Section 3. Create a Map

The **Create a Map** section of the TIMS website deals with viewing and searching ODOT transportation data and creating custom maps for visual analysis. This is a great part of the website for those of you who like to see your data on maps.

Note: *This section of the User Guide is large because of the wide variety of actions you can take when creating, viewing, and working with custom maps. It's broken into the following subsections to allow you to jump to your required topic:*

3.1 View the Map

1. From the **Home** page, press the **Create a Map** button. The **Create a Map** page appears.

3.1.1 Get familiar with the interface

1. Menu items with down arrows (b, d, e, f, g, and h) have pull-down menus with more items.
   Note: *You can hover over any of the items on the menu bar for a friendly tool tip.*

   a. **Set visible layers:** Specify which layers you want to appear on the map. For details, see **Show and hide map layers**.
   b. **Find locations:** Find specific map locations based on address, lat/long, log point, or area. Then view the attributes. For details, see **Find, Identify, Measure, and Bookmark Information**.
   c. **Identify features:** Select any feature on the map to view its attributes. For details, see **Find, Identify, Measure, and Bookmark Information**.

d. **Tools:** Use a number of tools to gather information about data on the map. For details, refer to any of these tasks: **Find, Identify, Measure, and Bookmark Information**, **ODOT PathWeb,** or **Map Channel**.

e. **Filter data**: View a subset of your visible layers. For details, see **Filter Data on the Map**.

f. **Add data:** Import additional information to the map. For details, see **Add Data to Map**.

g. **Set basemap:** Specify what map will be your basemap. For details, see **Select basemap for a new map**.

h. **Print map:** Print the full extent of the visible map. For details, see **Print the map**.

i. **Share map with friends:** Email a URL to others that points to the current map. For details, see **Share the map with others**.

j. **Hide window panes:** The toolbar and results table can be collapsed or expanded by pressing the arrow buttons.  For details see Hide Tool Bar and Results Table.

2. Interactive map and controls are located in the top left corner of the map panel. For details on how to zoom in and out, see the corresponding tasks under **Navigate Around the Map**.

Zoom in by increments.

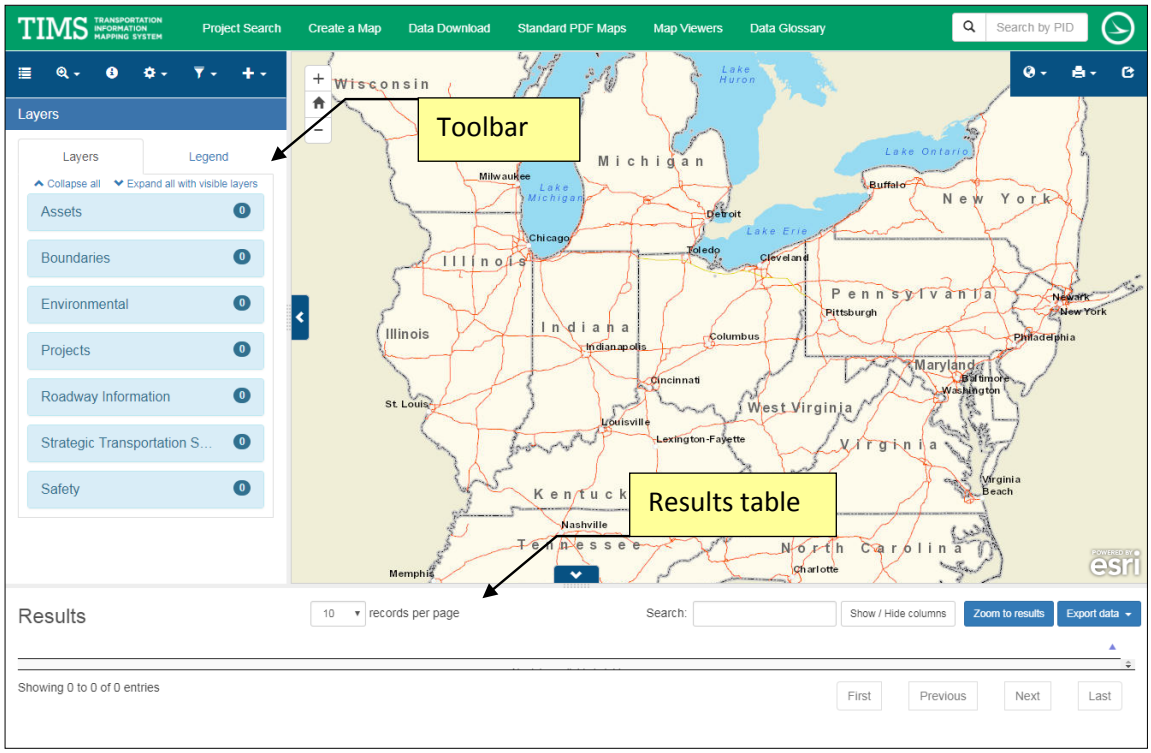
Return to original map extent.

Zoom out by increments.

3. The tool area, below the toolbar to the left of the map, is where you interact with any tool you have selected. For example, if you selected the **Measure** tool, the tool area would show pull-down lists allowing you to select your units of measure for distance, area, and latitude and longitude. The **Set Visible Layers** tool will be active by default when you open the **Create a Map** page. For details on how to interact with various **Tools**, see the individual tasks in this section.

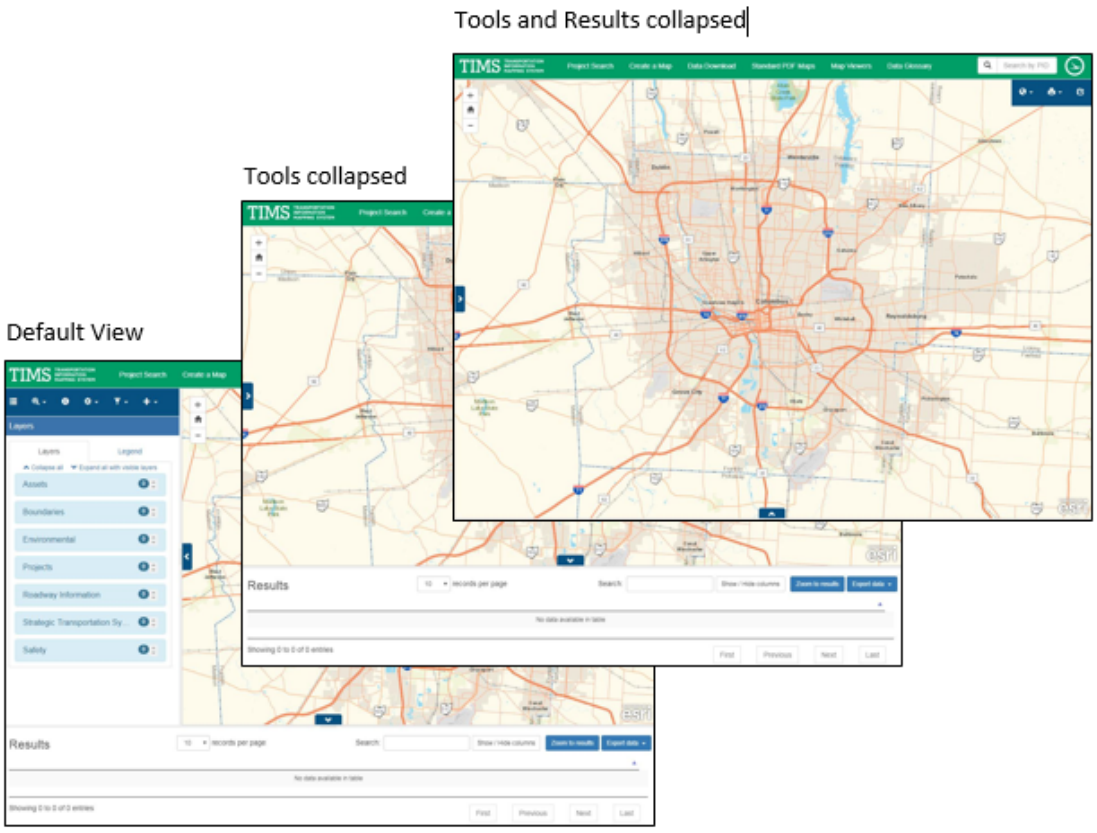
4. The results table, located below the map, is where you see the records returned from a **Find** or **Filter** tool. For example, if you looked up a location by address, you would see the information about that location in the results area. For details on how to work with the **Results table**, see **Work with the Results**.

5. The tool bar and the results table can be hidden by pressing the arrow buttons. Press the button to expand a collapsed panel. For details see Hide Tool Bar and Results Table.



3.1.2 Hide Tool Bar and Results Table

1. You can adjust the overall size of the map by hiding the tools and results. From the map toolbar, select Collapse Side / Bottom Panel buttons. 
2. After the tool bar or results tables have been hidden, you can bring them back by selecting the Expand Side / Bottom Panel buttons. 

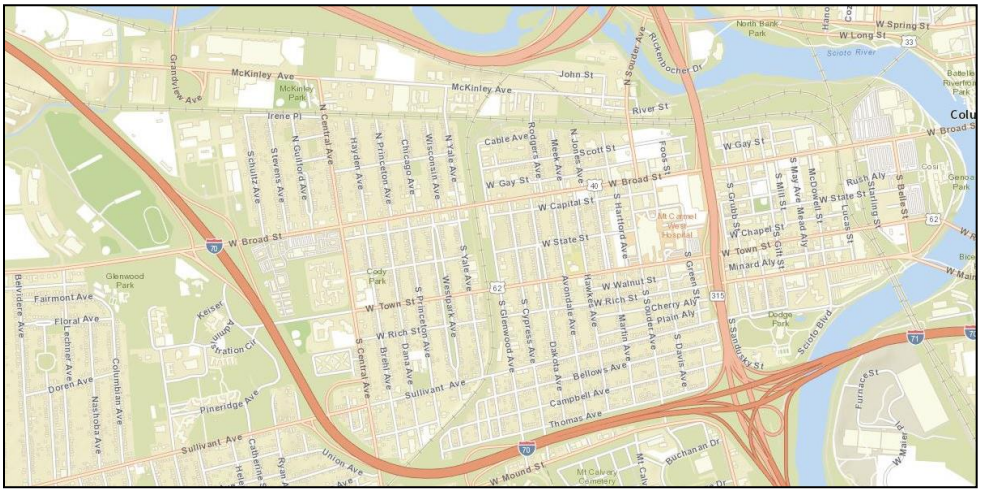


3.1.3 Select a basemap

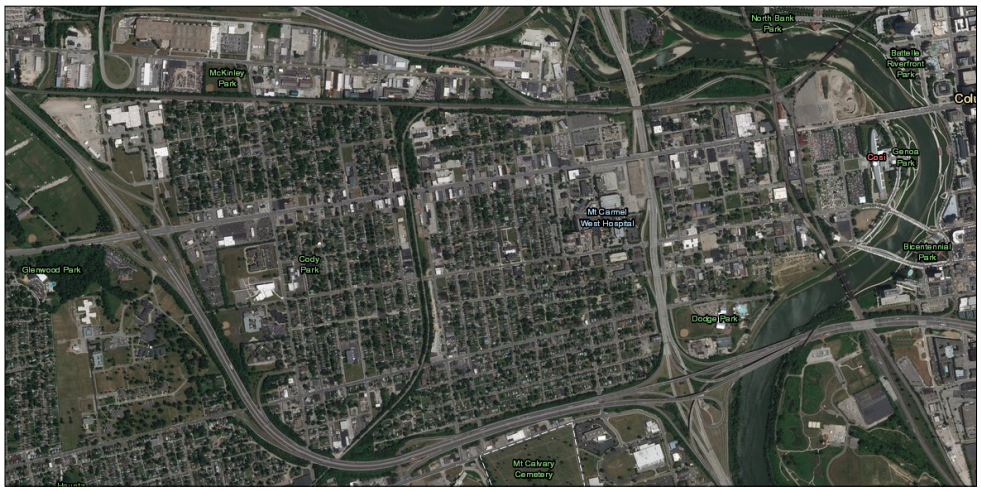
1. The basemap is the aerial photography or imagery that is the basis for the map. Other vector layers are drawn on top of it. From the map toolbar on the **Create a Map** page, select **Set basemap.**

2. From the resulting pull-down list, select any of the following menu items:

- **Streets**: Esri Streets map

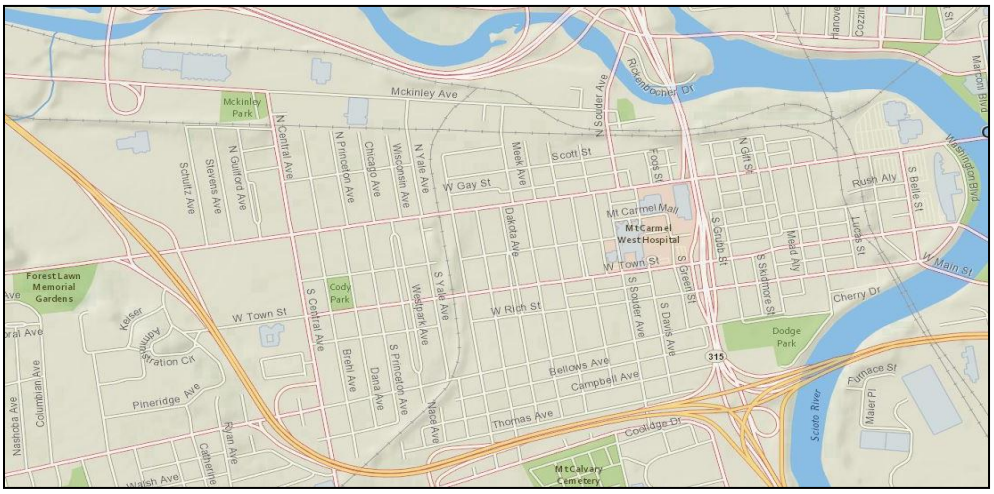


- **Hybrid:** Aerial photography with labels for major features

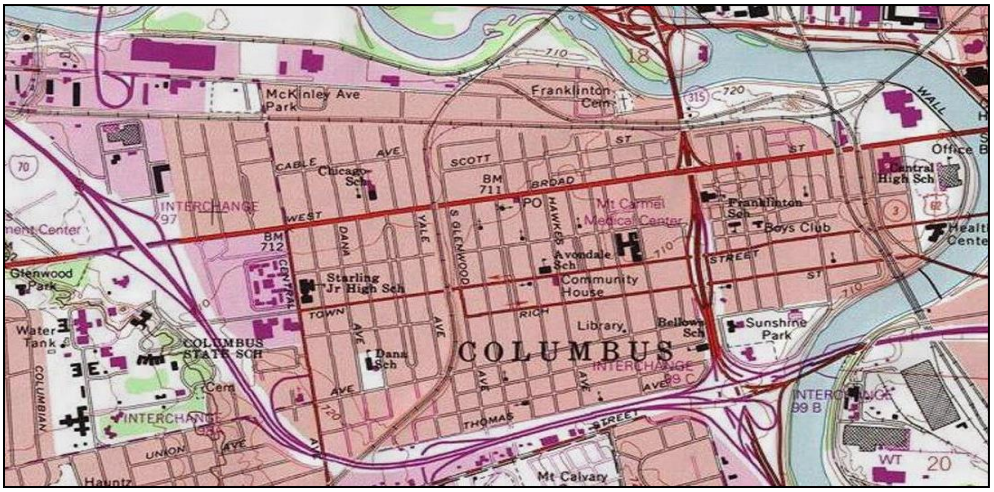


- **Dark Grey:** Dark gray version of the topographic map

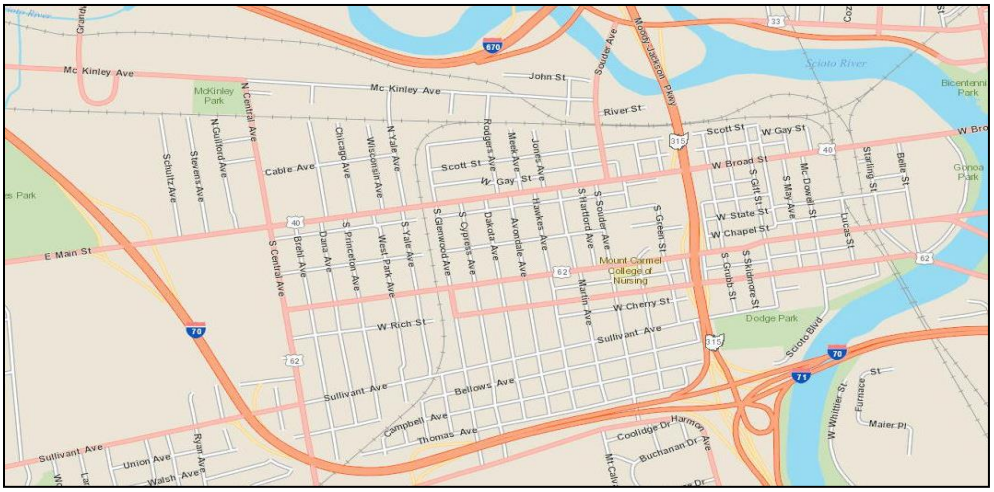
- **National geographic:** National Geographic streets map



- **USA Topo:** Topographic map from the United States Geographical Service



- **ODOT Basemap:** Basemap created by ODOT



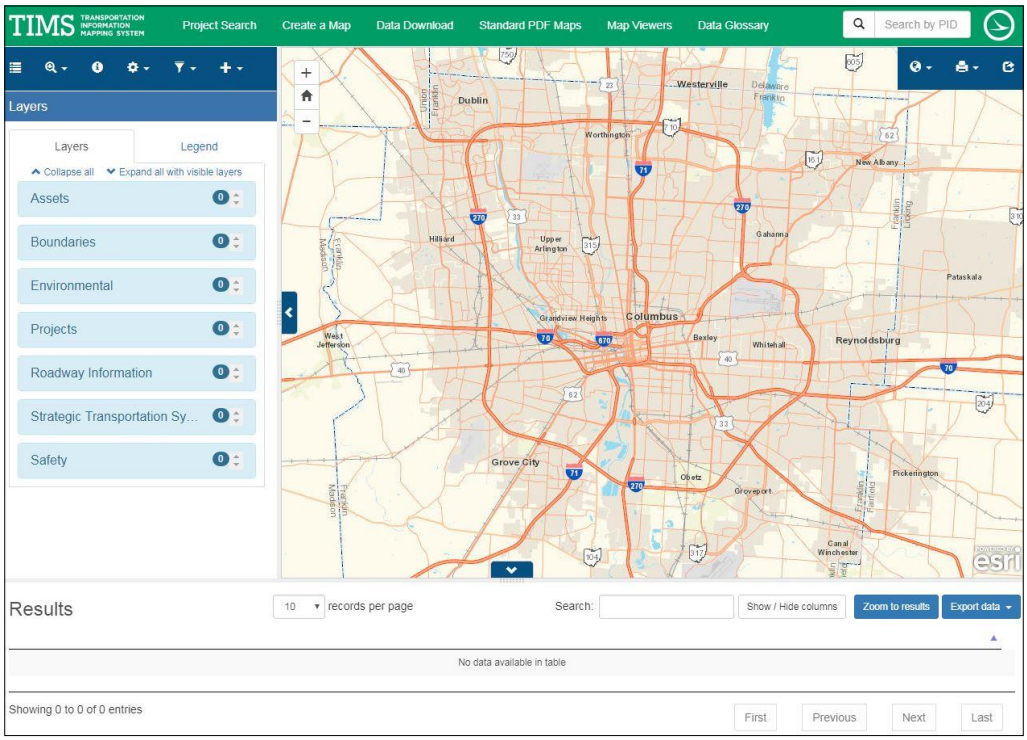
- **OSIP 1:** Ohio State Imagery Program 1 map

- **OSIP 2:** Ohio State Imagery Program 2 map (high-resolution imagery and elevation data). May not be available for all areas of Ohio

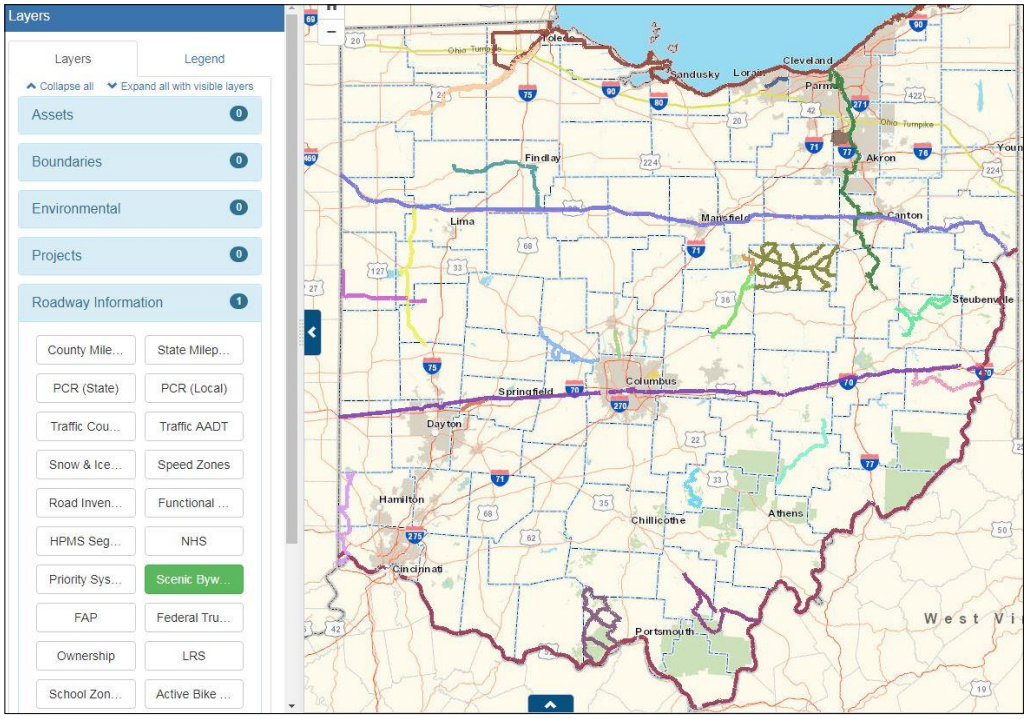
- **OSIP best available:** Best available Ohio State Imagery Program map based on your current viewing location

3.1.4 Show and hide map layers

1. Layers are turned on and off with the **Set visible layers** tool.  This tool is enabled in the tool area by default. **Note:** *The list of available map layers has been set by the TIMS System Administrator.*



2. Map layers are grouped within the **Layers** tab. Once you select a group, it expands revealing the list of layers in that grouping.



3. Click to select one or more layers and they appear on both the map and the legend. In this example, the user expanded **Road Information** and decided to display the **Scenic Byways** layer. To collapse the list of layers within any group, click on the name of the group.

   Note: *Some layers will not appear on the map until you are zoomed in to a closer extent.*

4. Click on the Legend tab to see symbol descriptions for the layers that are currently turned on. The legend automatically updates as layers are turned on and off.

3.2 Navigate around the map

When all the necessary layers are visible on the map, you will probably want to move around the map to view different areas of interest.

3.2.1 Pan around the map

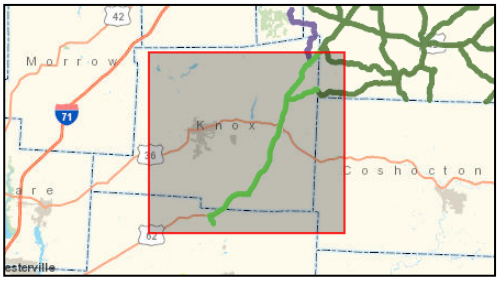
The amount of map that is visible to you may not contain the information you need to see. You can pan (move) to see other areas of the map using any of these methods:

1. Click and drag the mouse to pan in any direction.
2. Click on the map, then use the keyboard to slowly move up, down, left, or right.

3.2.2 Zoom into a rectangular region

There may be times when you want to zoom into a rectangular region of the map to better view information of interest. To do so, follow these steps:

1. Imagine a box around the region of the map you want to zoom into.
2. Press the **Shift** key as you left-click one corner of the box, hold down the mouse button, and drag the mouse diagonally. A box appears as you drag.



3. When the box contains the region you want to zoom into, let go of the mouse.
4. The map will zoom into the area you outlined and center it on the map.
   Note: *If you are zooming way in, the map may take a while to refresh. Please be patient.*

3.2.3 Zoom in incrementally

1. To zoom in by increments and see more on the map, use any of these methods:

   - **Map control:** Press the **Zoom In** button. 
   - **Mouse:** Double-click to zoom in.
   - **Mouse Wheel:** Roll your mouse wheel forward to zoom in.
   - **Mouse Pad:** Press the **Shift** key and drag the mouse to zoom in.

3.2.4 Zoom out incrementally or completely

1. To zoom out by increments use any of these methods:

   - **Map Control:** Press the **Zoom Out** button. 
   - **Mouse Wheel**: Roll mouse wheel backward to zoom out.
   - **Mouse Pad**: Pres **Shift** + **Ctrl** keys and drag the mouse to zoom out.

2. To zoom out to the max viewing area, press the **Home** button. 

3.2.5 Center

1. To center the map on a particular feature, press the **Shift** key and click a location on the map.

3.3 Find, Identify, Draw, Measure, and Bookmark Information

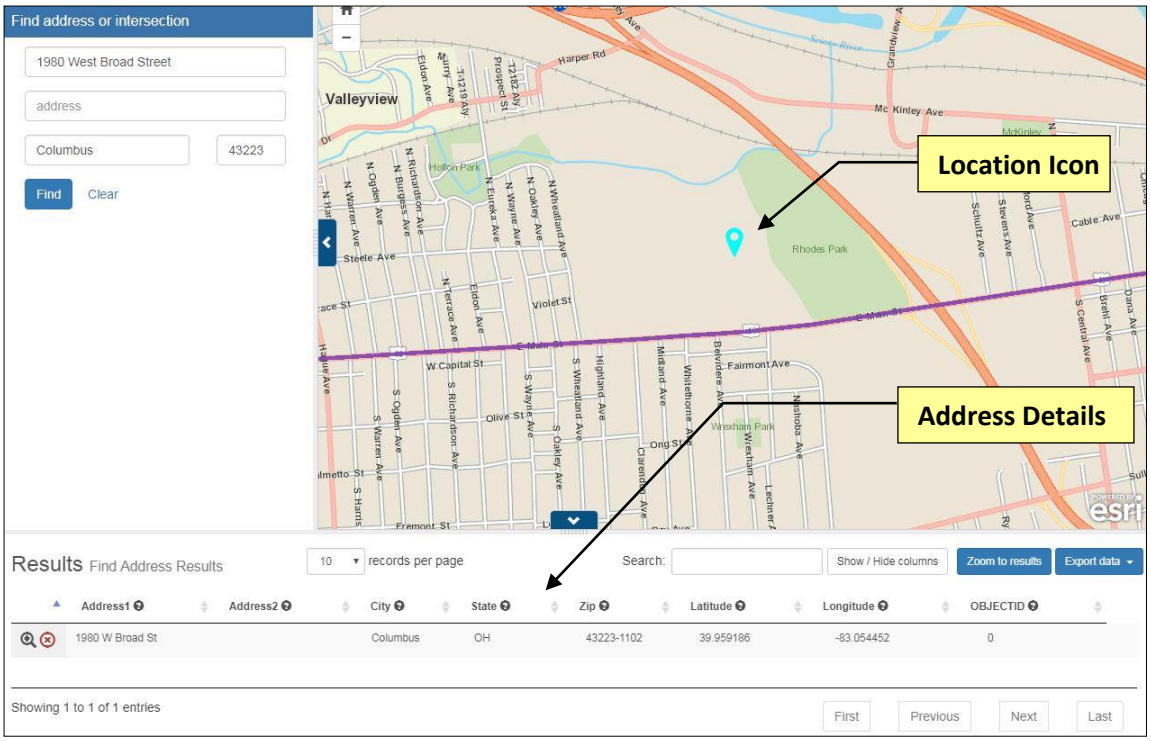
This subsection looks at the various analytical operations you can perform.

3.3.1 Find a location by address

You can quickly discover information about an address and find it on the map.

1. To zoom to a specific location, click the **Find location** tool  and choose **Find address or intersection.**
2. The **Find address or intersection** user input fields appear in the tool area.

3. Enter a street address and the city or zip code. Then press the **Find** button. Alternately, enter the names of 2 intersecting streets (For example, *N High & W Broad)* and the city or zip code. **Note:** *Tool is restricted to Ohio*.
4. The map zooms into the location and a small icon appears there. The full details of the address appear as a row in the **Results** table.

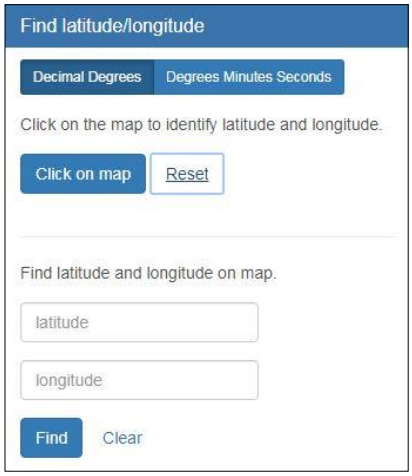


5. Press **Clear** to clear the address fields in case you want to enter another address.

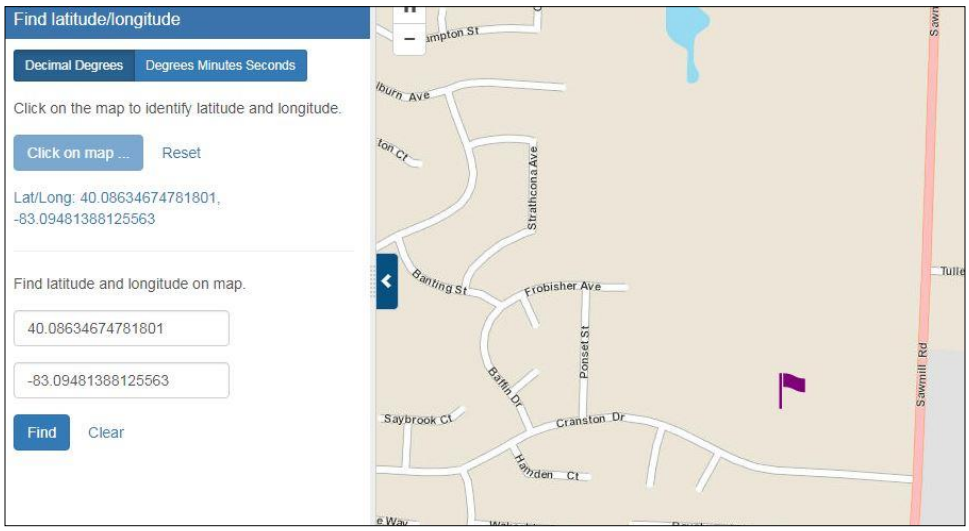
3.3.2 Identify the latitude and longitude of a map location

You can identify the latitude and longitude of any location on the map formatted in Decimal Degrees or Degrees Minutes Seconds.

1. To identify the coordinates of any location on the map, click the **Find locations** tool  and select **Find latitude/longitude.**
2. The **Find latitude/longitude** user input fields appear in the tool interface.



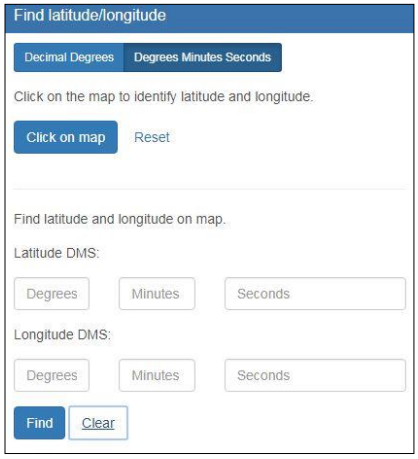
3. Choose either **Decimal Degrees** or **Degrees Minutes Seconds**, then press the **Click on map** button and the click anywhere in the map. This example shows **Decimal Degrees** selected.
4. A small flag appears at that location. The latitude and longitude of the location appear beneath the button in the chosen format.
   - **Decimal Degrees Lat/Long: 40.08634674781801, -83.09481388125563**
   - **Degrees Minutes Seconds: 40° 5' 10.848292144845573", -83° 5' 41.329972520276215"**
5. Click **Reset** to remove the flag.



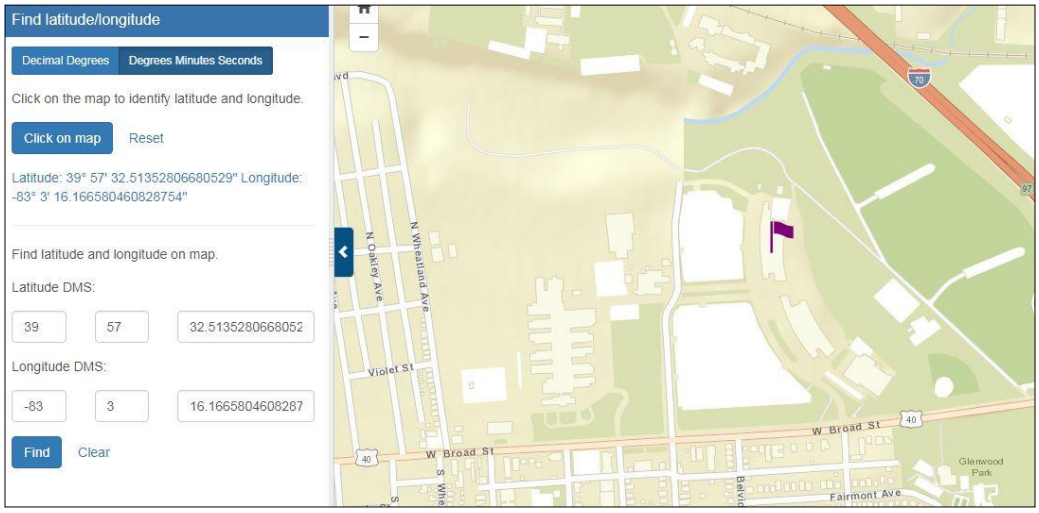
3.3.3 Zoom into a particular latitude and longitude

You can quickly find a location on a map associated with a particular latitude and longitude, and then zoom into it.

1. If you have latitude/longitude coordinates and want to find that location on the map, click **Find locations** tool  and choose **Find latitude/longitude**.



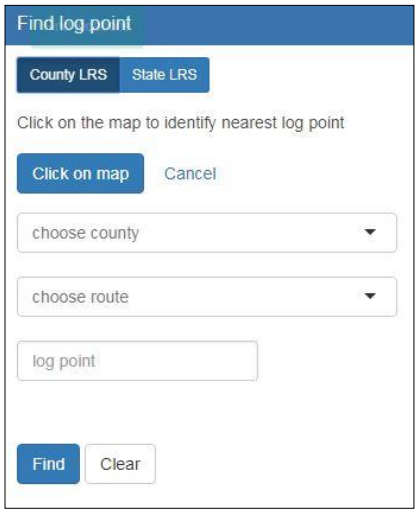
2. The **Find latitude/longitude** user input fields appear in the tool area.
3. Select **Decimal Degrees** or **Degrees Minutes Seconds**, then enter the coordinates in the appropriate format. This example shows **Degrees Minutes Seconds**.



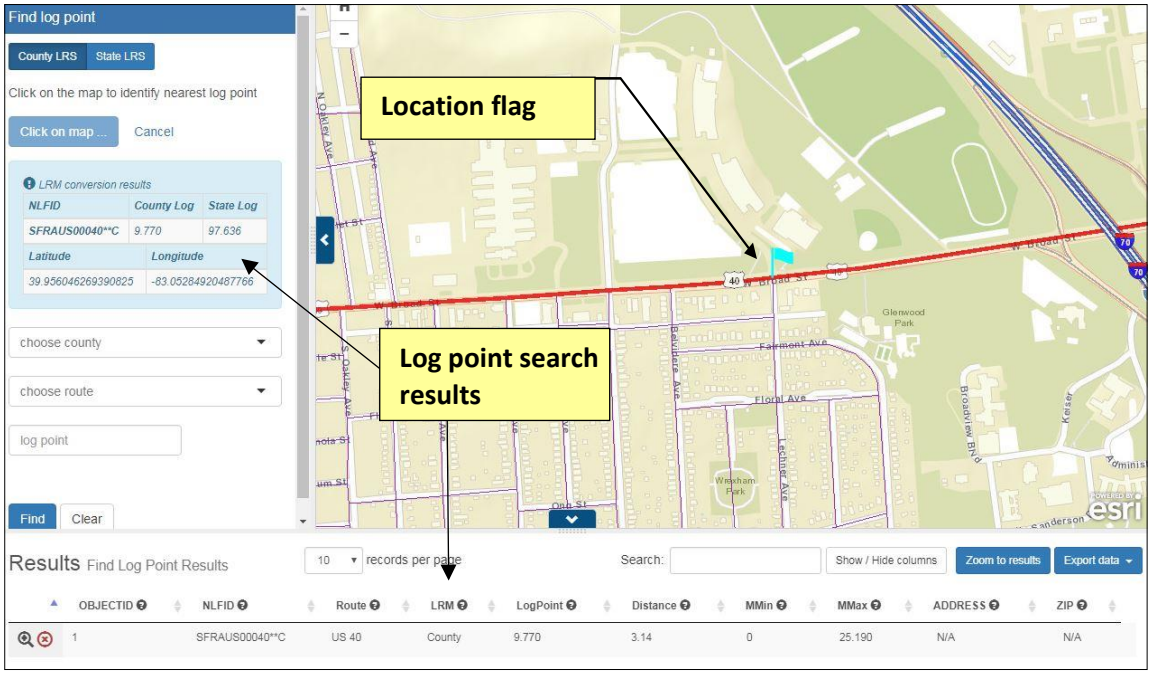
4. Press **Find**. The map will zoom and center to that location on the map, and a flag will appear.
5. Press **Clear** to remove the flag and reset the input fields.

3.3.4 Determine the route measure (log point) at a particular location

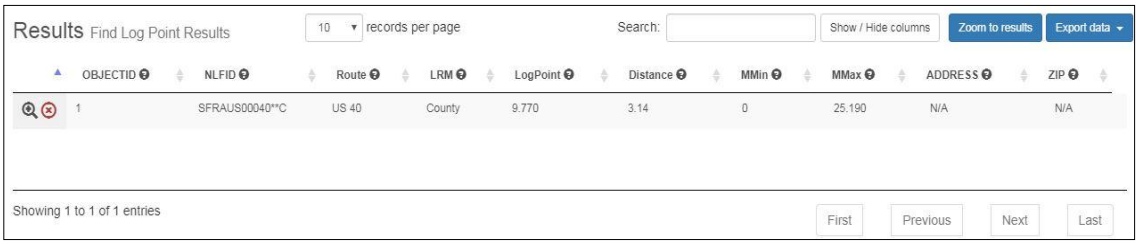
1. To find the route and measure of a specific location on the map, click the **Find locations** tool  and choose **Find log point.**
2. The **Find log point** user input fields appear in the tool interface.



3. Though not necessary, it can be helpful to display the appropriate road layers on the map and adequately zoom into the area of interest.
4. Press the **Click on map** button and then click a road centerline on the map.
5. A small flag appears at the selected location and the results will be displayed in the tool area



6. View the **Results** table for details of the route and measure.



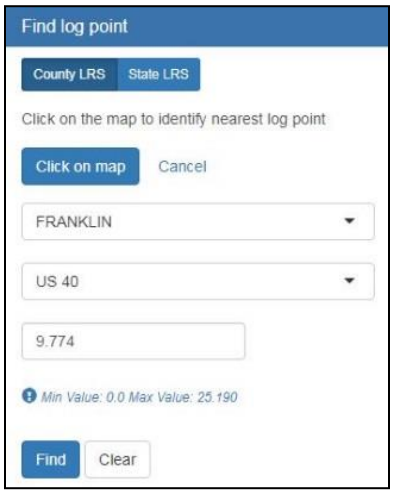
7. Click **Clear** to remove the flag and results.
8. Click Cancel to deactivate the **Click on** map tool.

3.3.5 Show the map location of a particular route and measure

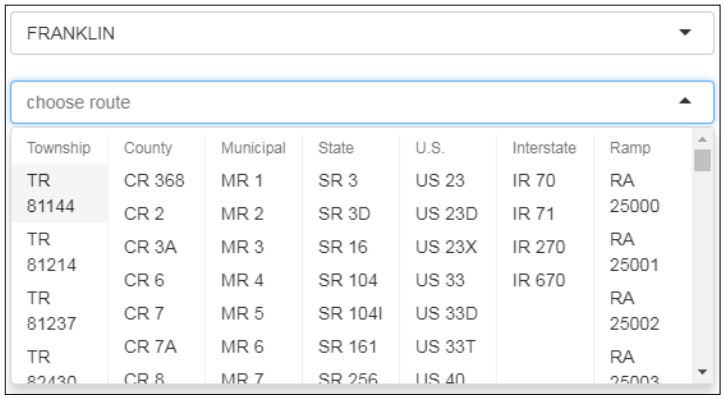
1. If you know the route and measure of a feature, you quickly find that location on the map.

   From the map toolbar, click the **Find locations** tool  and choose **Find log point**.

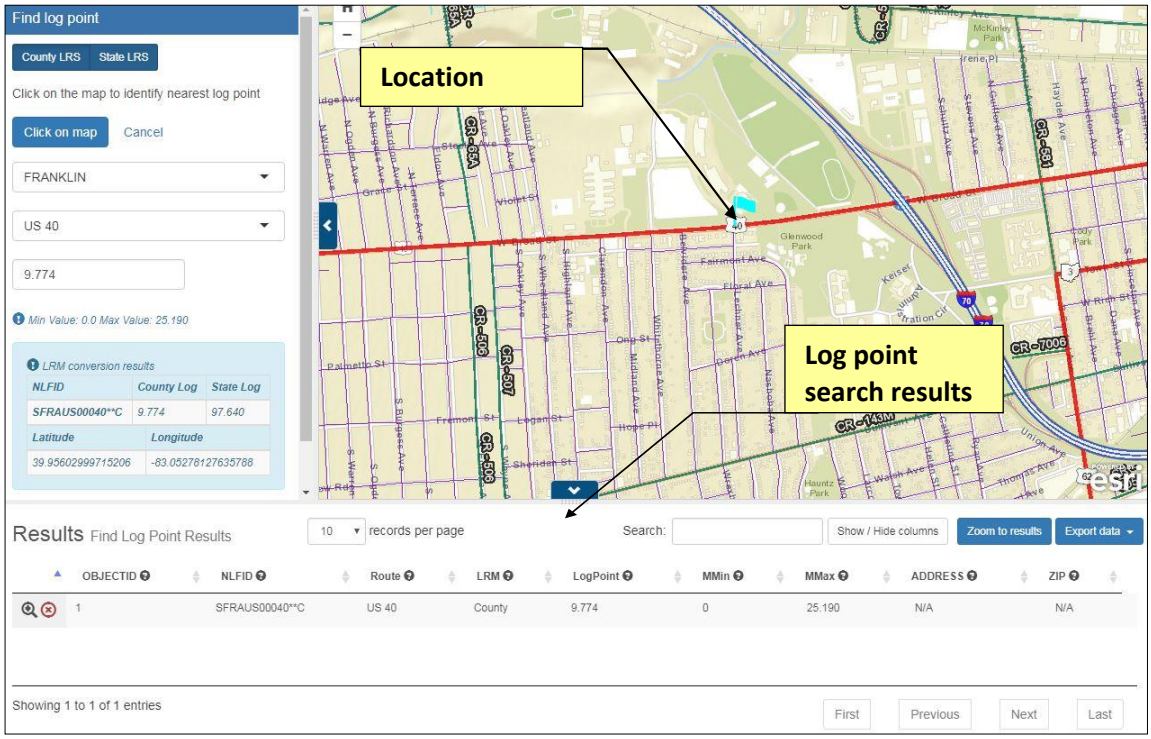
2. The **Find log point** user input fields appear in the tool area.



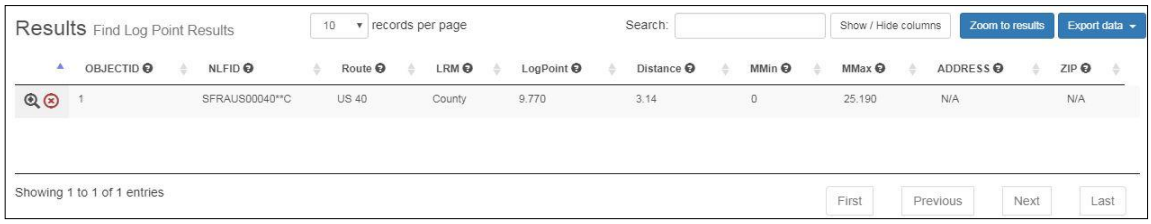
3. Select either the **County LRS** or the **State LRS** buttons (**County LRS** will be default). County LRS will search for a County Log Point where State LRS will allow you to search for a State Log Point.
4. If you selected County LRS, Select the **County** and **Route**. Only routes in the selected county are shown in the drop-down list. If you selected State LRS, simply select the statewide route. You can expand the tool area for a clearer view of the possible routes.



5. Type a valid **log point**, within the minimum and maximum value according to the helpful tip displayed below the user input fields.
6. Press **Find.** A flag appears and the map will zoom and center to the specified location. In this example, the selections were: Franklin County, US 40, log point 9.774.



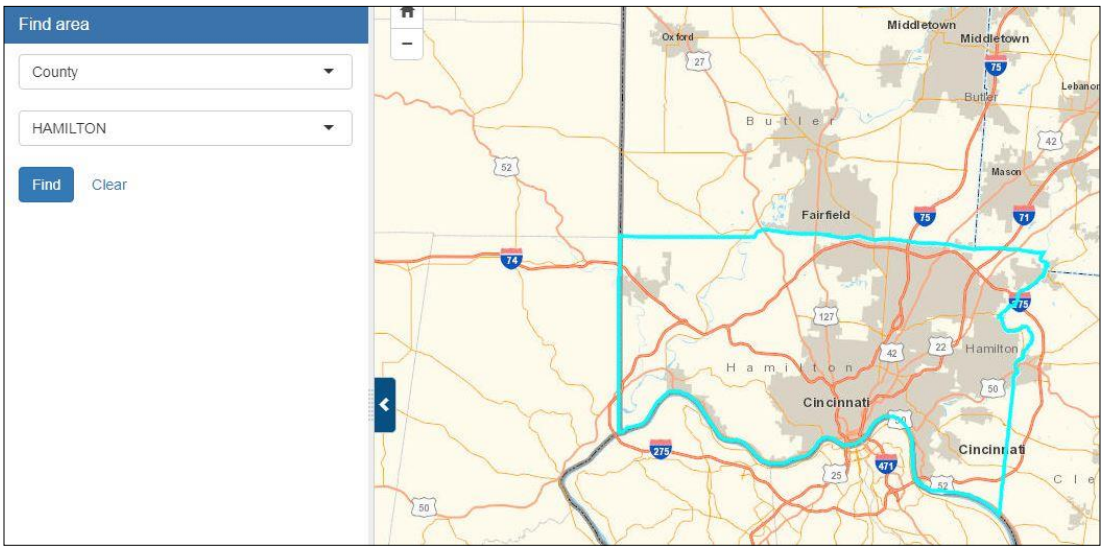
7. View the **Results** table to see the details of the location.
8. Click **Clear** to remove the location flag and enter another location for new results.



3.3.6 Find a particular area of the map

1. To zoom to a specific geographic area, click the **Find locations** tool  and choose **Find area**.
2. Pick the area type from the first drop-down list. Then select a specific item from the second drop-down list. The following areas are available:
   - **County**
   - **MPO** (Metropolitan Planning Organization)
   - **District**
   - **Urban Areas**

3. Once you make your choice, press **Find** and the map automatically zooms in and highlights your area of interest. In this example, **Hamilton** County was selected.



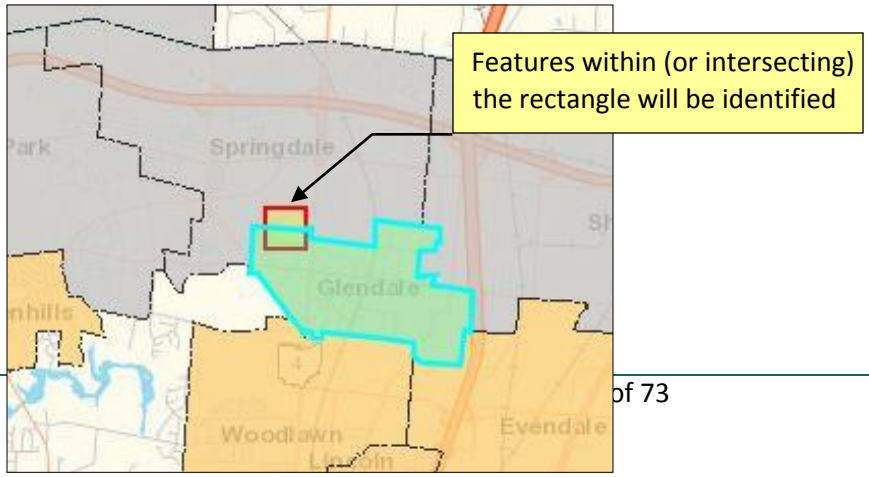
4. Click **Clear** to remove the highlight from the map.

3.3.7 View (identify) attributes of any layer feature on the map

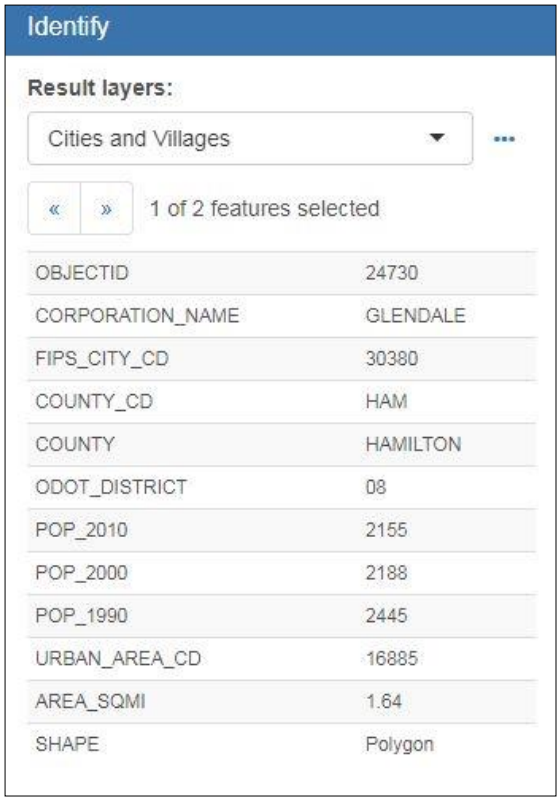
You can learn about features on the map by identifying them.

1. To identify individual features of the layers turned on in the map, click the **Identify features** tool.  The **tool** appears in the tool interface.

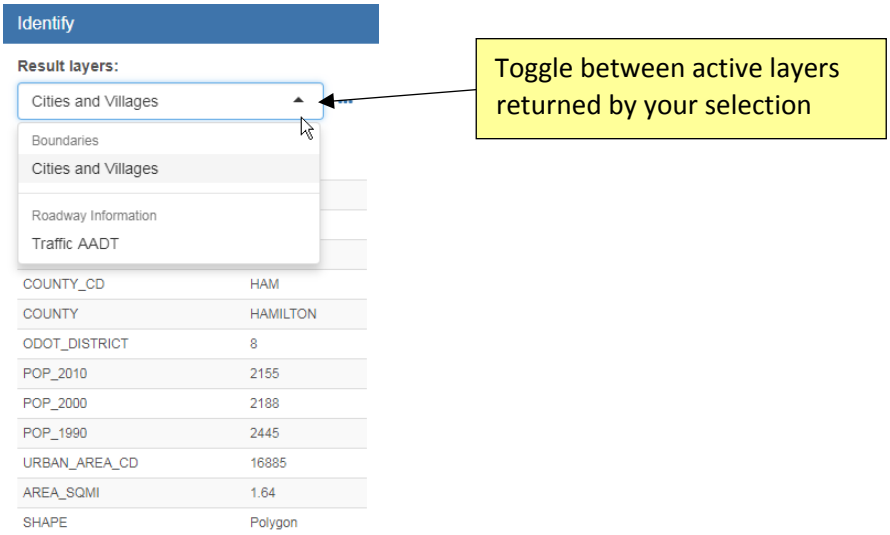
2. Click on any feature on the map that you want to identify.
3. A red rectangle appears at the location and all features in that rectangle are identified in the tool area.



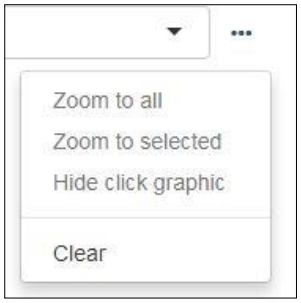
4. The **Result layers** appear in the tool area with information about the feature(s) at the location you selected. In this example, the features associated with the **Cities and Villages** layer at the selected location are shown. If multiple features were selected, you can cycle through them using the arrow buttons. 



5. If features are selected from more than one layer, you can click the drop down menu to select the layer you are interested in.

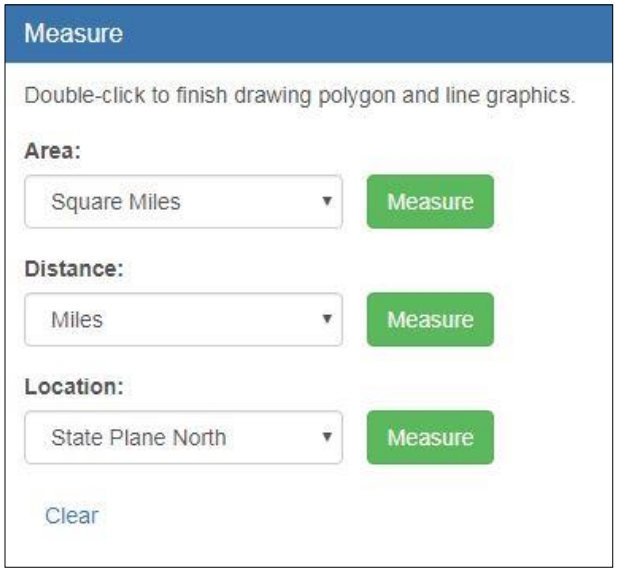


6. To zoom to the selected feature(s), click the **More** button  and choose **Zoom to all** or **Zoom to selected**. Additionally, you can hide the red rectangle using the **Hide click graphic**.
7. To clear the results, click **Clear** from the **More** button drop-down list.

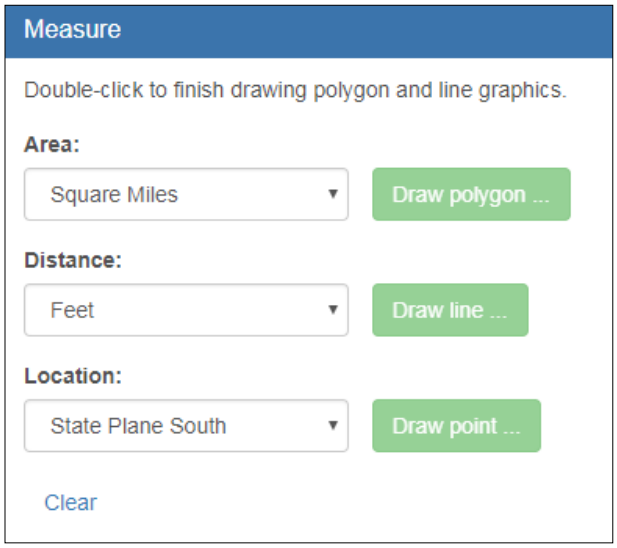


3.3.8 Take measurements

1. Use the Measure tool to find the area, distance, or State Plane coordinate of a location.
2. From the map toolbar, click **Tools**  and choose **Measure.**
3. The **Measure** user input fields appear in the tool area with the following input fields:
   - **Area.** Allows you measure the area inside a closed shape, as well as the perimeter around it.
   - **Distance.** Allows you measure the length of any continuous line (single start point and end point) or polyline (start point, many points in between, and end point)
   - **Location.** Allows you determine the coordinates of any point on the map.



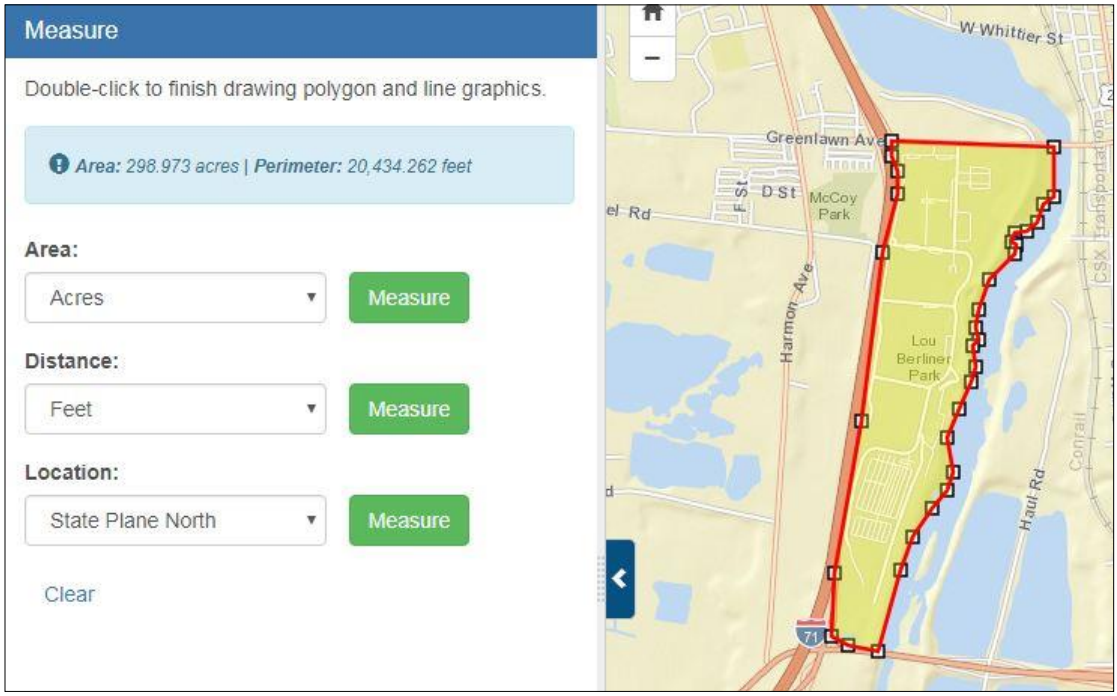
Using the pull-down lists, enter the units of measure you want to use for area, distance, or location. **Note:** *If you change the units of measure AFTER drawing a shape, the unit measures will automatically be recalculated and displayed.*



Select a unit of measure from the appropriate drop-down list and click the corresponding **Measure** button. The button label changes to indicate what action to take on the map.

- **Area:**

  (1) Left-click the starting point.
  (2) Left-click other points that define the perimeter of the shape until you get close to the starting point again (as you draw your polygon, the "Perimeter:" readout will dynamical display the length of the active shape's perimeter).
  (3) Double-click to close the shape and complete your measurement
  (4) Press **Clear** to remove the measurement.

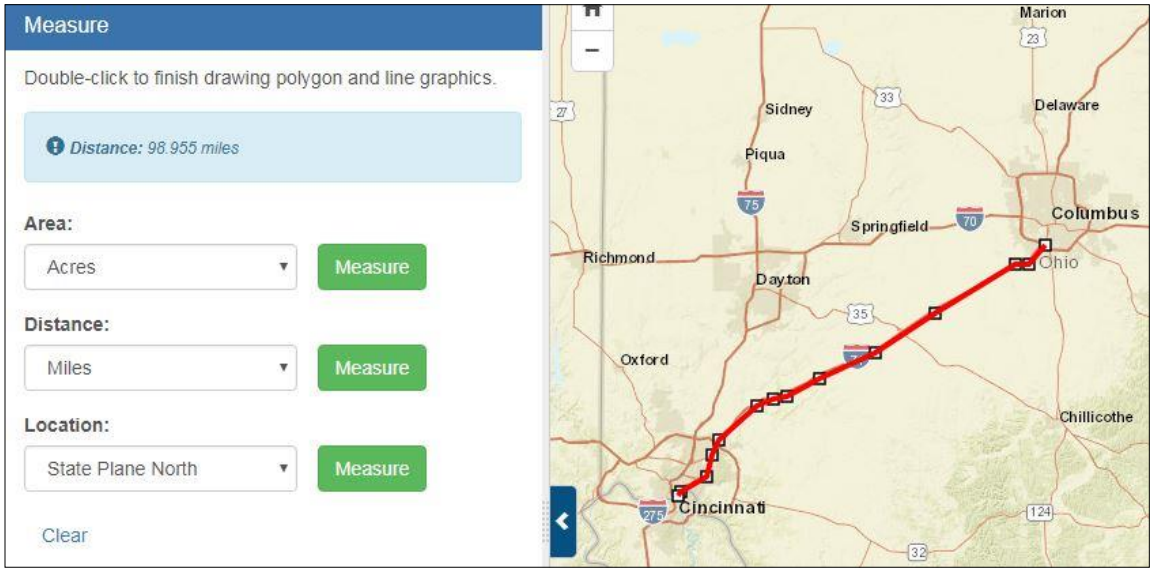


- **Distance:**

  (1) Left-click the starting point.

  (2) Left-click any other points that define the shape of the line (as you draw the line, the length of the drawing will dynamically display in the "Distance:" readout)

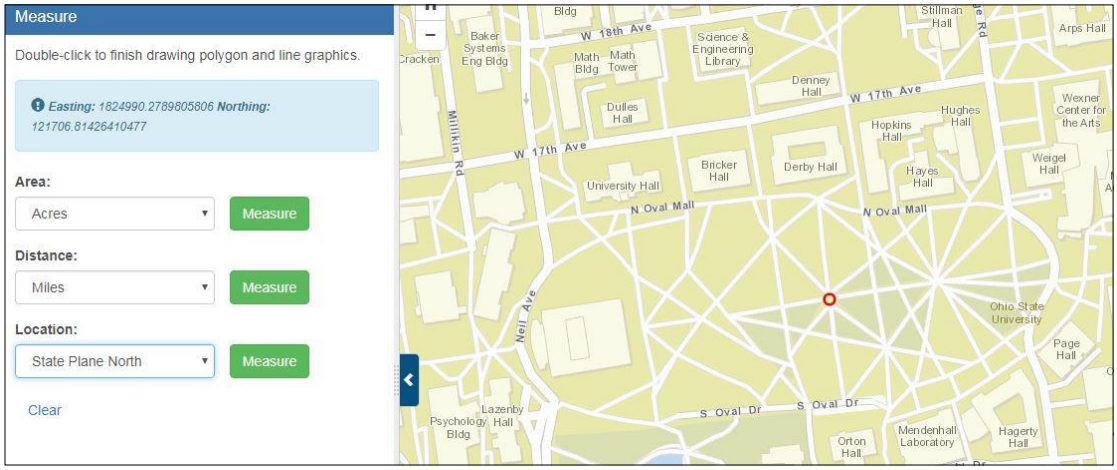
  (3) Double-click to finish and complete your measurement



- **Location:**

  (1) Left-click the point whose location you are determining.

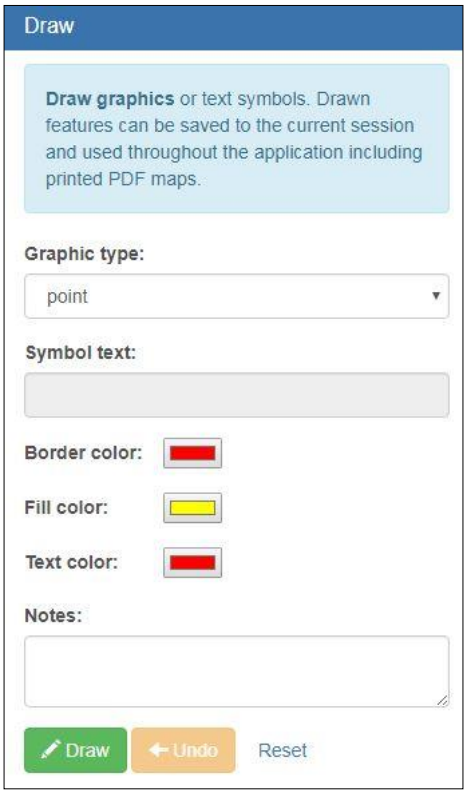
  (2) A red circle appears where you clicked with the location information in the readout above the dropdowns


Measure
Double-click to finish drawing polygon and line graphics.
Easting: 1824990.2789805806 Northing: 121706.81426410477
Area:
Acres
Measure
Distance:
Miles
Measure
Location:
State Plane North
Measure
Clear
W 18th Ave
W 17th Ave
N Oval Mall
S Oval Dr
Neil Ave
Millikin Rd
Baker Systems Eng Bldg
Math Bldg
Math Tower
Science & Engineering Library
Denney Hall
Dulles Hall
Hopkins Hall
Hughes Hall
Wexner Center for the Arts
Bricker Hall
Derby Hall
Hayes Hall
Weigel Hall
University Hall
Stillman Hall
Arps Hall
Ohio State University
Page Hall
Lazenby Hall
Psychology Bldg
Orton Hall
Mendenhall Laboratory
Hagerty Hall

3.3.9 Draw Tool

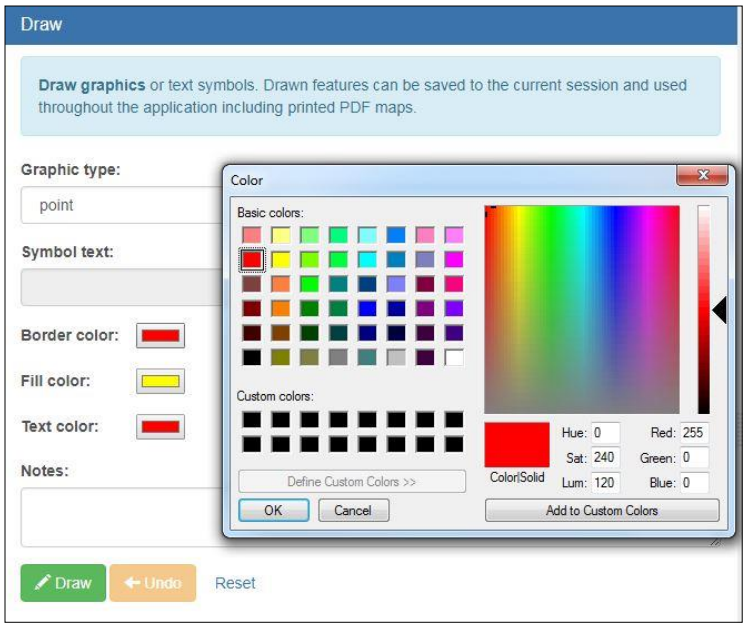
After adding data to your map, you might want to also add text or draw shapes on the map. You can add additional information to your map using the **Draw tool.**

1. To add text or draw shapes on the map, click **Tools**  and choose **Draw.**
2. The **Draw** tool interface appears in the side panel.

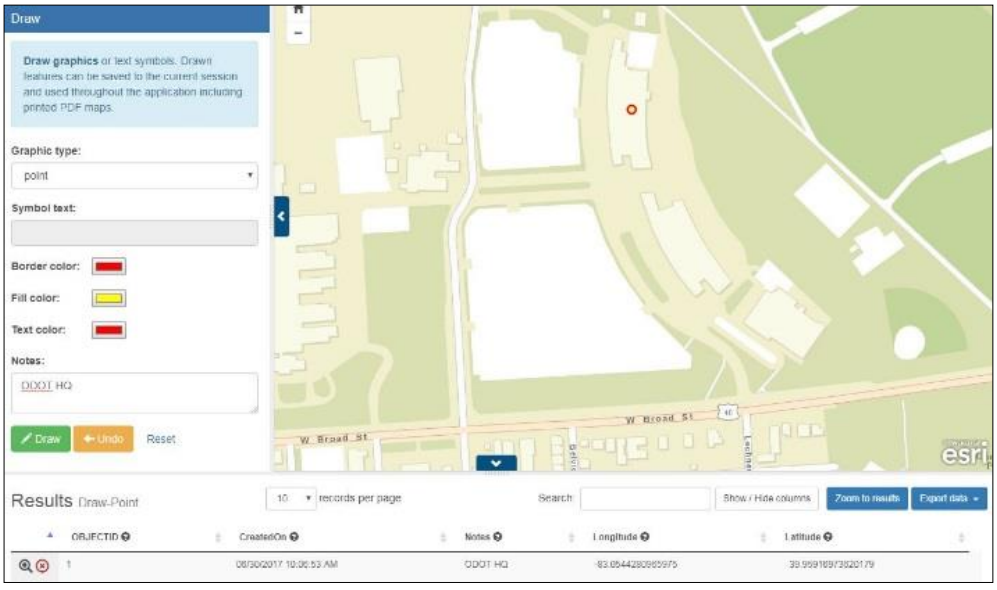


3. Select the type of feature you would like to draw on the map.
   - **Point**
   - **Line**
   - **Polygon**
   - **Text** *(If text is selected, enter the text you want to display in the **Symbol Text** box.)*

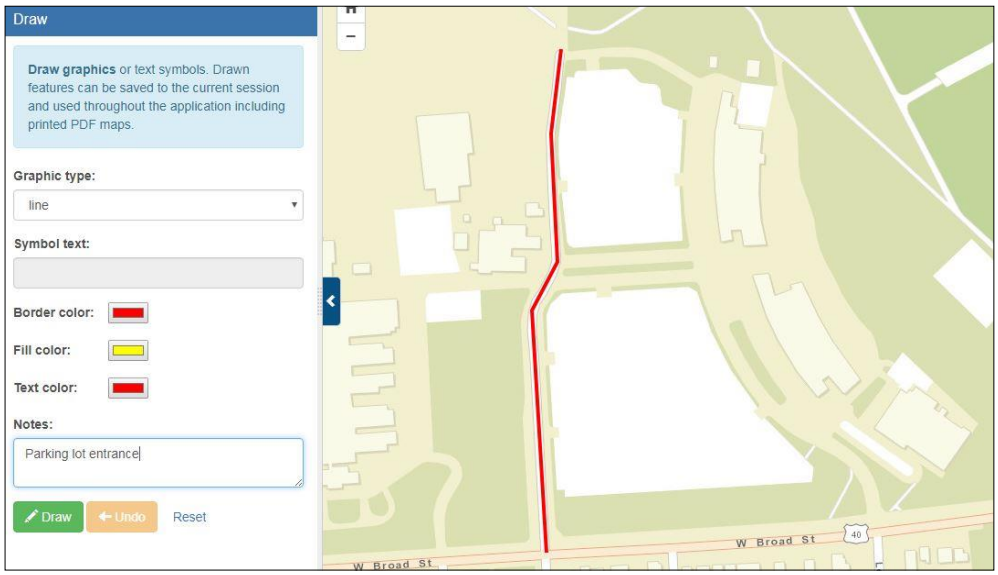
4. Select the border, fill, or text color you are interested in drawing. A color selector will pop up and allow you to select a color. **Note:** *the color selector will vary depending on what browser you are using. This example shows the color selector in Google Chrome. Internet Explorer uses HEX Codes.*



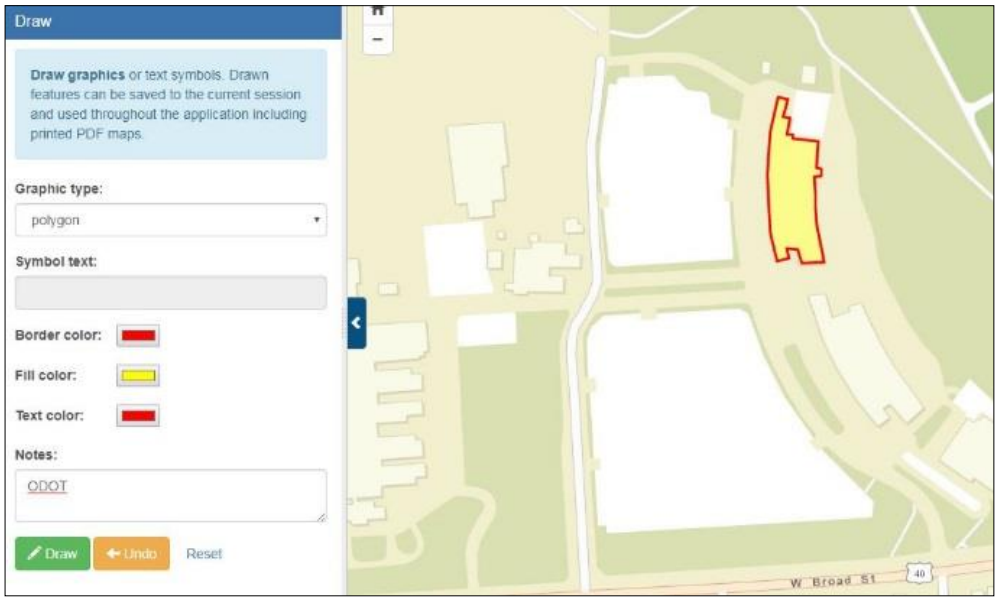
5. You can also add any notes in the **Notes** section. Notes added here will display in the results table for that drawing once the drawing is made.
6. Click **Draw** to begin drawing your shape or adding your text. Below are examples of how to draw each type:
   - **Point:** To draw a point, simply click on the location for which you would like to draw the point. In this example, the shape is drawn as a small red circle with yellow fill.



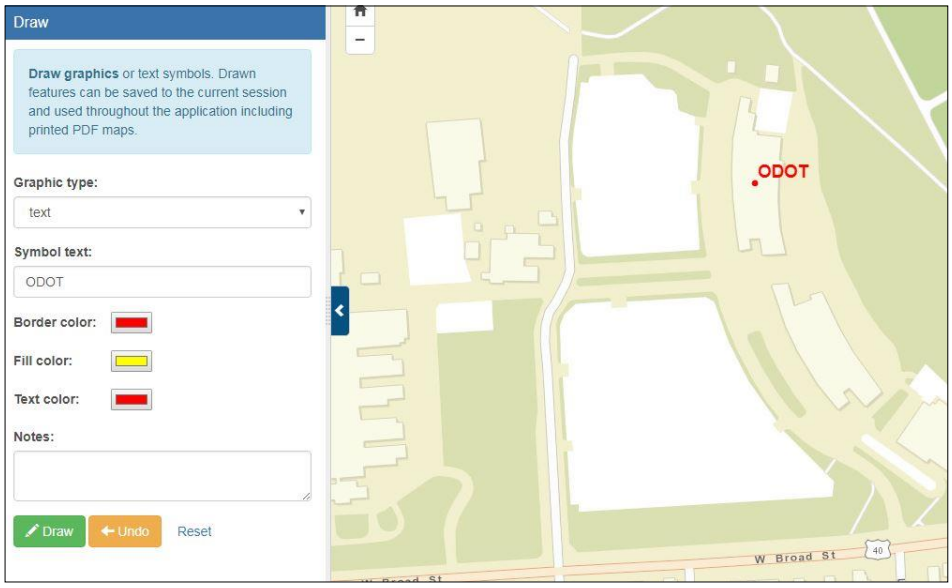
- **Line:** To draw a line, click on the map where you would like to begin your drawing. Drag your mouse and click to continue your drawing. To complete the drawing, double click. In this example, the drawing appears on the map as a red line.



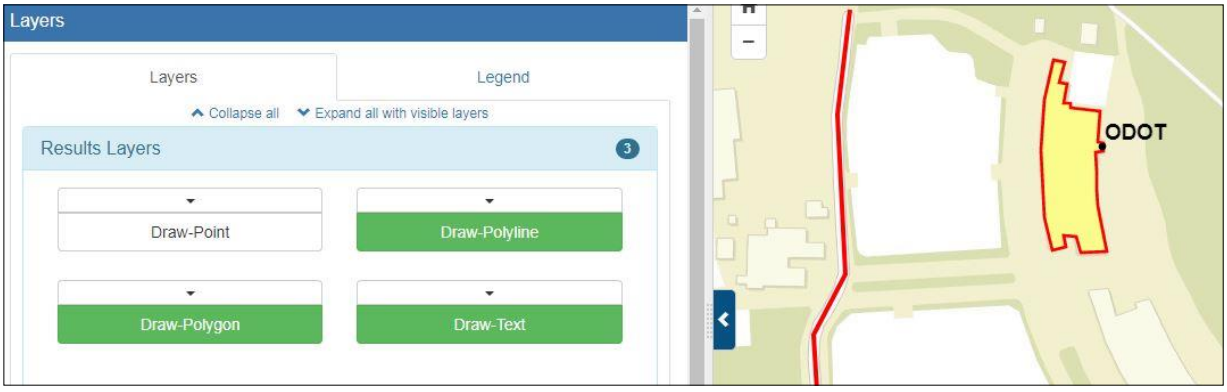
- **Polygon:** To draw a polygon, click on the map where you would like to begin your drawing. Drag your mouse and click to continue drawing the perimeter of your shape. To complete the drawing, double click. In this example, the drawing appears on the map as red outline with yellow fill.



- **Text:** To add text on the map, your text must first be entered in the **Symbol Text** box. After clicking **Draw,** click on the map where you would like to place the text. A point will draw where you click, and the text will be displayed to the upper right of the point. In this example, the text "Sample Text" was displayed in red.



7. You can draw as many shapes as you wish. All shapes of similar type will be stored in a layer for each type of drawing (point, line, polygon, or text). You can toggle this layer the same way you toggle any other layer in **Create a Map**. In this example, the point layer is turned off, but the other three drawings are turned on. You also have the ability to utilize other tools in TIMS to query this layer including the ability to view and export the features from the results table.

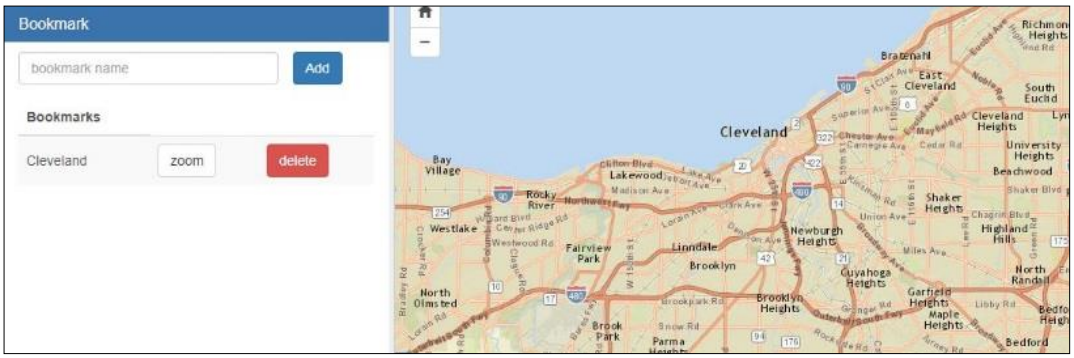


8. If you change the color for a type of drawing (point, line, polygon or text) after features have been drawn, the previous feature colors will also be changed.

3.3.10 Make and use bookmarks

1. To save a shortcut to a region on the map you consistently work with, you can create a bookmark.
2. Pan and zoom to the exact region you want to bookmark.
3. From the map toolbar, click **Tools**  and choose **Bookmarks**.
4. The **Bookmarks** user input fields appear in the tool interface.

5. Type a name for the bookmarked region and press **Add**. The name now appears in the list of bookmarks. See **Cleveland** in the example below.



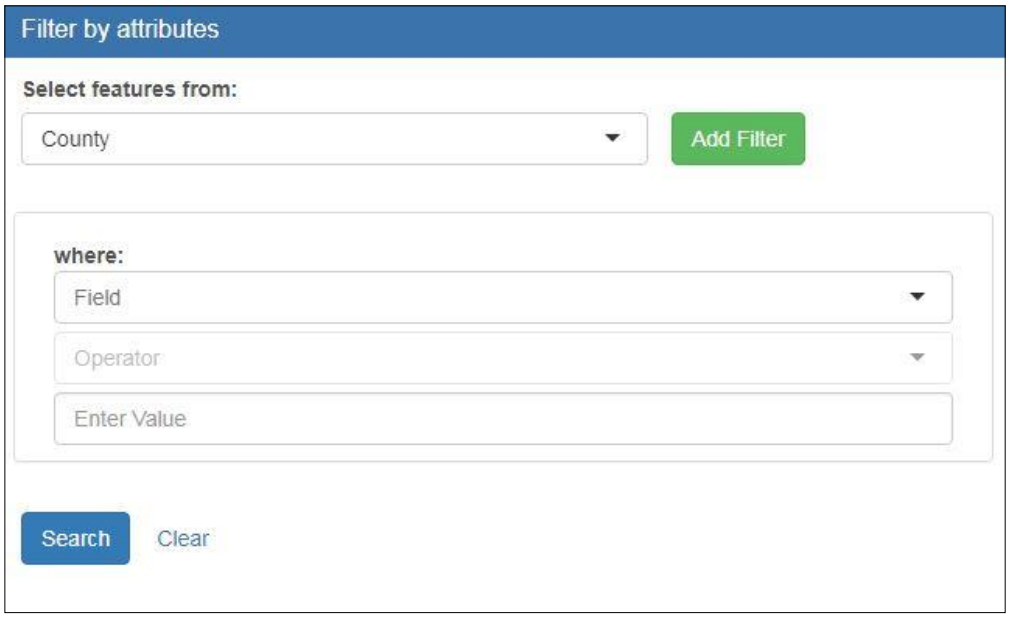
6. In the future, no matter where you are on the map, you can click **Tools,** choose **Bookmarks**, scroll through the list of bookmarks, and press **Zoom**. The bookmarked region will automatically appear on the map. **Note:** *Bookmarks are saved in your browser. If you clear your browser history, the bookmarks in* ***Create a Map*** *will disappear.*
7. If you no longer want to use the bookmark, press **Delete**.

3.4 Filter Data on the Map

You can search the layers turned on in the map to identify a subset of features by attribute or area.
Note: *Before you begin, make sure you have the appropriate layers displayed on the map.*

3.4.1 Search by attribute

1. To search features by a particular characteristic, click the **Filter data** tool and choose **Filter by attributes.**
2. The **Filter by attributes** tool interface appears.



3. Next, use the pull-down lists to specify the criteria for the search:
   - **Select features from:** *layer* (The list of *layers* comes from visible layers on the map.)
   - **Where:** *attribute operator value* (The lists for *operator* and *value* vary, based on the attribute you select.)

   For example, if you are trying to find the county whose county seat is Akron, you would enter the following information:
   - Select features from: **County**
   - Where: **County Seat *is* Akron**

   Note: *If you make a mistake selecting the criteria, press **Clear** to make the search fields blank again.*
4. Once you specify the criteria, press **Search**.
5. The map automatically zooms to the search results. In this example, **Summit County** is highlighted in because its county seat is Akron.
6. The **Results** table lists the results.
7. Click the **Zoom to feature** icon for any row in the table to zoom to the location of its associated feature on the map. **Note:** *You can also click **Zoom to results** to see the locations of all the features on the map, or select **Export Data** to convert the table to a specific format to download the data to your computer, or **Search** for information in the table. For details, see* ***Work with the Results.***

3.4.2 Search by geography

1. To find features within a specific geographic area, click the **Filter data** tool  and choose **Filter by geography.**
2. The **Filter by geography** tool interface appears.

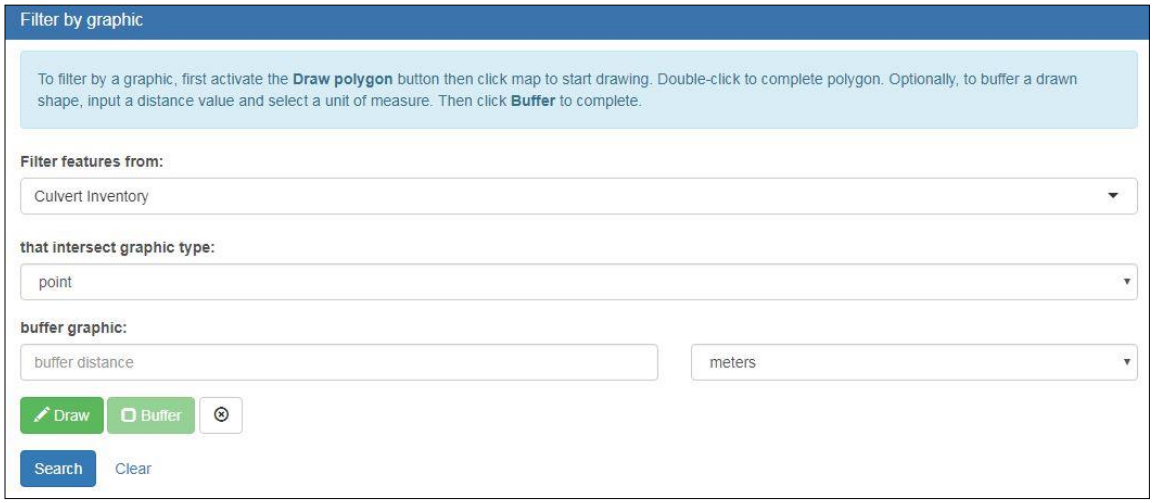
3. Use the pull-down lists to specify the criteria for the search:
   - **Filter features from:** *layer.* This is the list of *layers* that comes from visible layers on the map.) **Note:** *Make sure the layer you select is the one with the features you are interested in.*
   - **That intersect:** *type of geographic area*: County, MPO, District, or Urban area.
   - **Feature:** Specify the name of the geographic area from the pull-down list. **Note:** *This list varies depending on the type of geographic area you selected.*

   For example, if you are trying to locate all ODOT Facilities in Allen County, you would enter the following information:
   - Filter features from **ODOT Facilities**
   - Feature from **County**
   - Choose feature: **Allen**

   Note: *If you make a mistake selecting the criteria, press **Clear** to make the search fields blank again.*
4. Once you specify the criteria, press **Search**.
5. The map automatically zooms into the search results. In this example, **Allen** County is highlighted and **ODOT Facilities** within the county are shown in the **Results** table.
6. Click the **Zoom to feature**  icon for any row in the table to zoom to the location of its associated feature on the map. **Note:** *You can also click **Zoom to results** to see the locations of all the features on the map, or select **Export Data** to convert the table to a specific format to download the data to your computer, or **Search** for information in the table. For details, see* ***Work with the Results.***

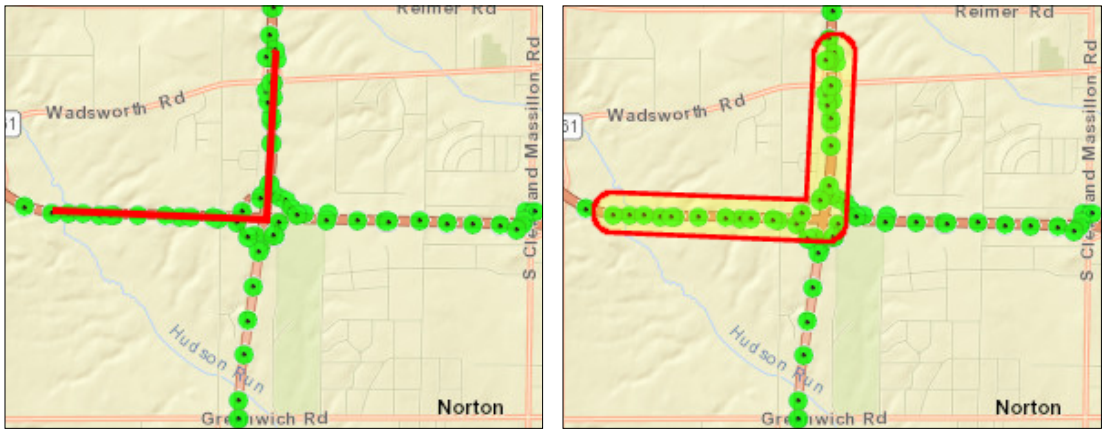
3.4.3 Search by graphic

1. To search for features within a custom area, click the **Filter data** tool  and choose **Filter by graphic.**
2. The **Filter by graphic** tool interface appears.

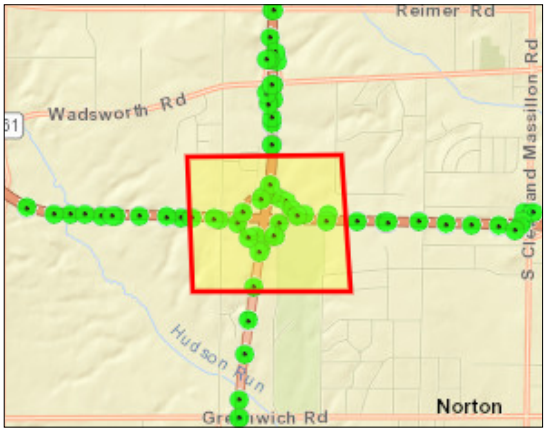


3. Use the drop down lists to specify the following information:
   - **Filter features from:** This is the list of layers that are visible on the map.
   - **That intersect graphic type:** The type of graphic you are interested in drawing to apply your filter. Options available here are:
     - **Point:** Feature consisting of a single location on the map. The point option is typically used to apply a buffer distance, creating a larger circular area.
     - **Line:** Line feature drawn on the map. Line feature could be used, for example, to trace a corridor or route of interest. Once the line is drawn, a buffer distance can be applied to the shape to capture all features that fall within a distance of the line.
     - **Polygon:** Polygon shapes can be drawn on the map to filter features that fall within the drawn area. Buffer distances can also be applied to a polygon shape.
4. Once the criteria is specified, press **Draw** to draw your shape on the map. In this example, three methods for finding **Culvert** features near an intersection are shown.
   - To draw a **Point** feature, simply click on a location on the map. A red circle graphic appears where you click. If you would like to create a buffer, enter the **buffer distance** and click the **Buffer** button. The graphic will expand on the map to encompass the distance provided.

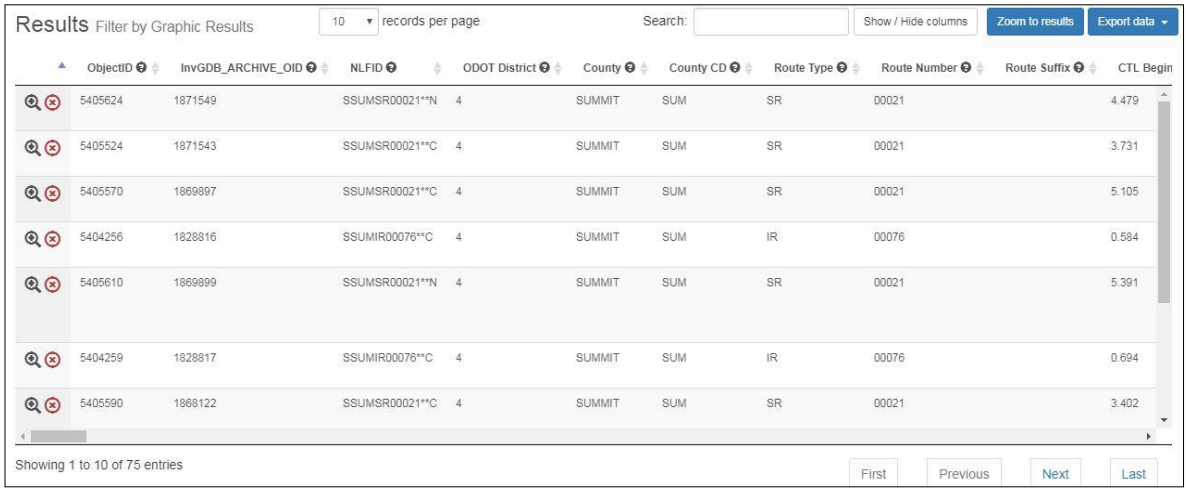
- To draw a **Line** feature, begin by clicking on a starting location. Now draw the line and click again to add as many vertices to the line as you would like. Double click on the ending location to complete the line. If you would like to create a buffer, enter the **buffer distance** and click the **Buffer** button. The graphic will expand on the map to encompass the distance provided.



- To draw a **Polygon** feature, begin by clicking on the starting location. Continue to drag and click to draw the perimeter. Double click to complete the shape. Buffers can also be applied to polygons.

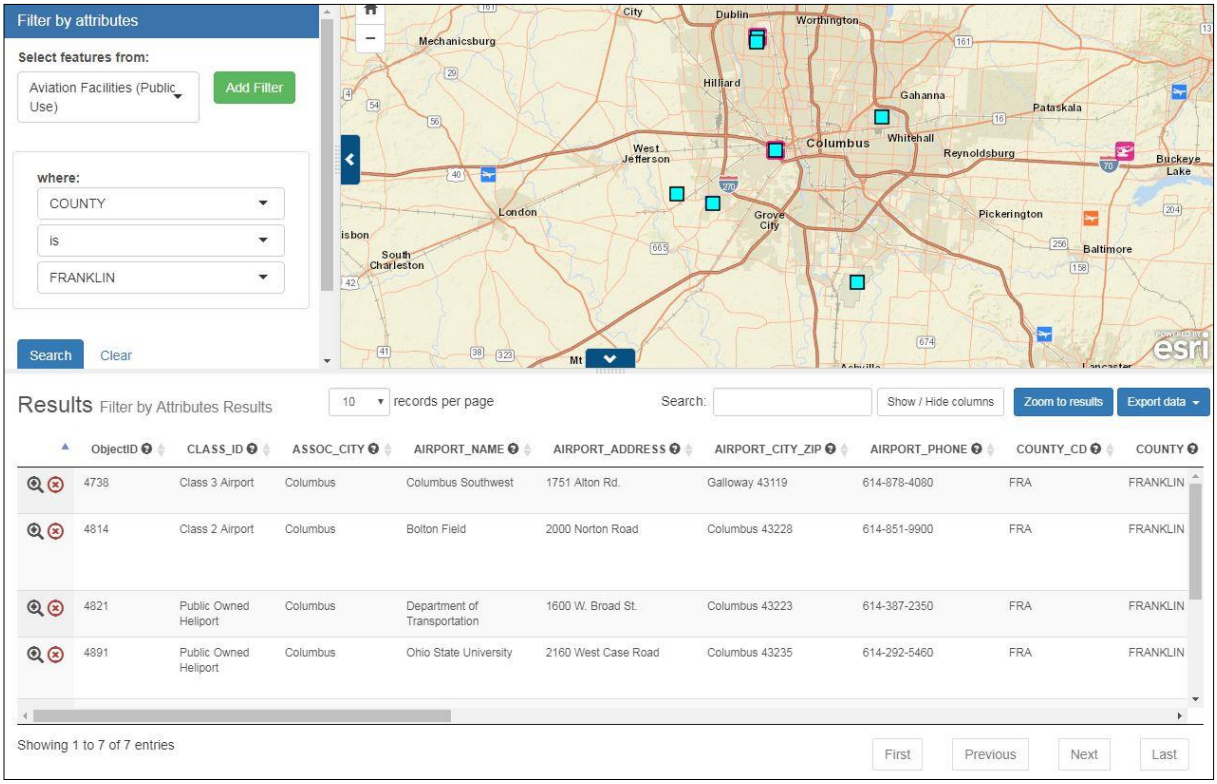


5. Once your shape is complete, click the **Search** button.
6. The **Results** table populates with the features found within the graphic.



3.5 Work with the Results

Once you create a map and operate on it with various tools, **Results** layers are created. The data in these layers appears in the **Results** table. There are several tools used to view and work with those results. In the examples below, the **Results** table is populated by using the **Filter by** attributes tool to find **Aviation Facilities** in **Franklin** County.



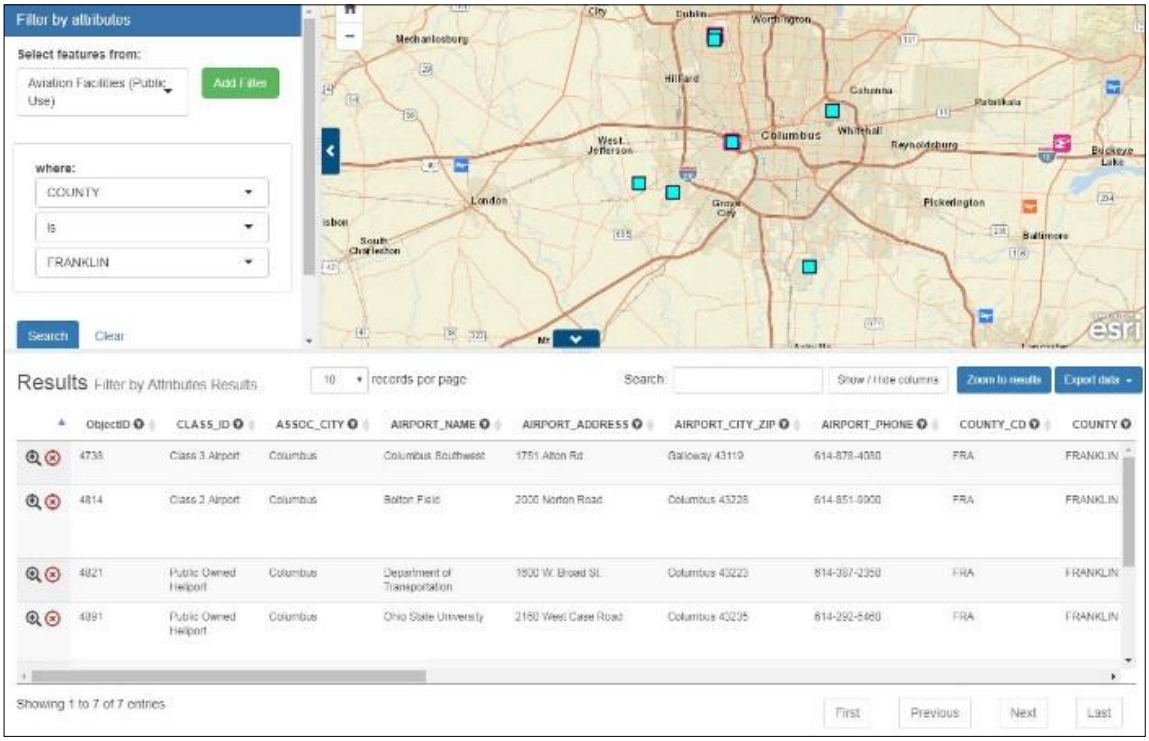
3.5.1 Move through the pages of the Results table

1. The results of the **Filter** operation are stored in a map layer called **Filter by Attributes Results**. The **Results** table displays the data for individual features in that layer.
2. The rows in the table can be quite long. Use the horizontal scroll bar at the bottom of the table to see all the columns in the row.
3. The top of the results table indicates how many records appear on each page. In this example, 10 records appear per page. Change the value if you need to see more or less records.
4. The bottom-left corner of the table shows you how many records you are viewing. In this example, you are showing records 1 to 7 of 7 entries.
5. The bottom-right corner of the results contain buttons that let you move between pages of the **Results** table.
    - **First:** Display the first page of results.
    - **Previous:** Display the previous page of results.
    - **Next:** Display the next page of results.
    - **Last:** Display the last page of results.

6. If the number of results is large (unlike this example), you can use the **Search** field on the top of the **Results** table. This lets you find a subset of records in the table by typing a few characters of text that you want to search for in each record. As you type, the search begins.

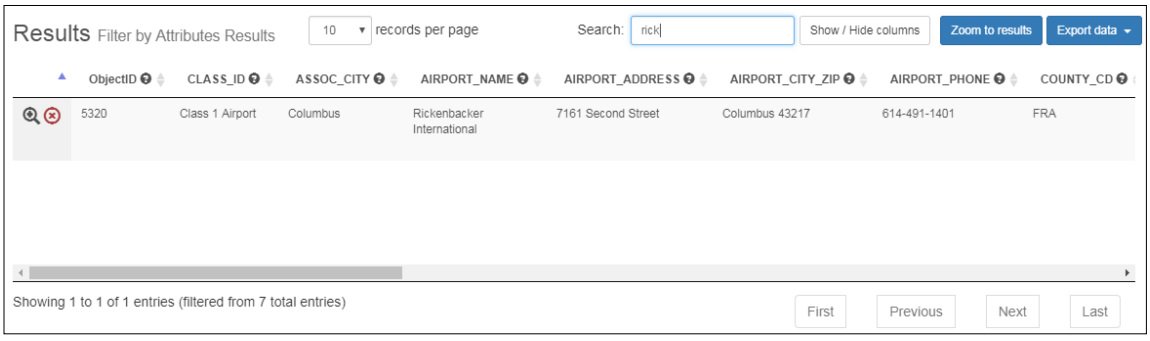
3.5.2 Zoom to all results

1. Use the **Zoom to results** button to view all of the records in the **Results** table in the map. In this example, clicking **Zoom to results** ensures that all 7 **Aviation facilities** in **Franklin** County are shown on the map.



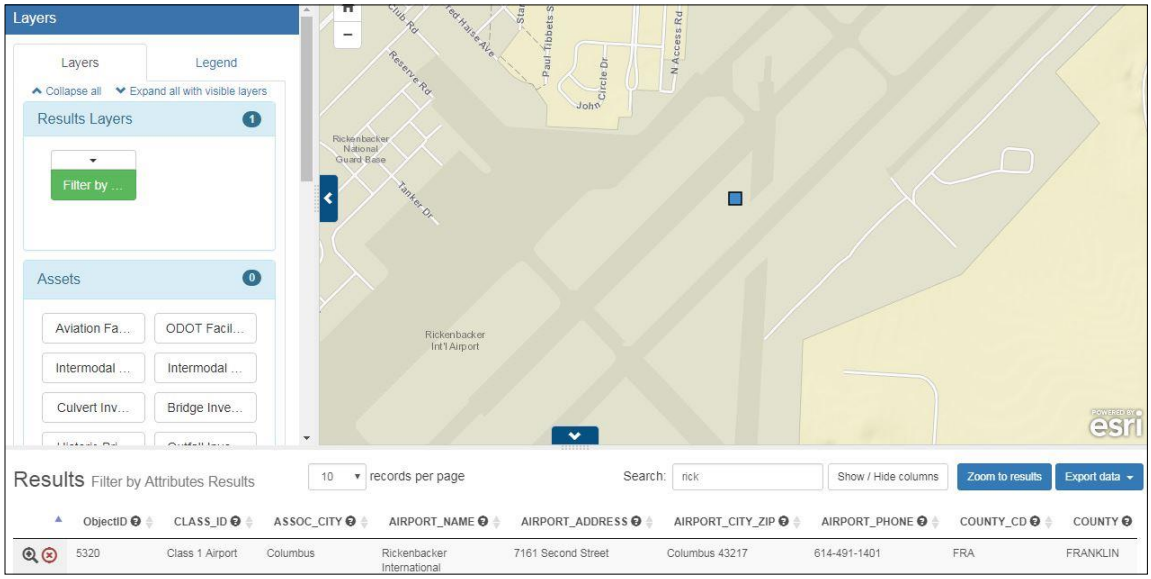
3.5.3 Search through results

1. To find a specific value within the **Results** table, use the **Search** box in the top-right section of the table.
2. The system performs the search as you type, so you may not have to type the entire value.
3. In this example, **Rickenbacker** airport was found in the **Results** table by typing the beginning of the name ("*rick*") in the **Search** box.



3.5.4 Zoom to individual record

1. Click the **Zoom to feature** icon  in the far-left column of the record.
2. The map immediately zooms and centers to the location of the feature identified by the record.

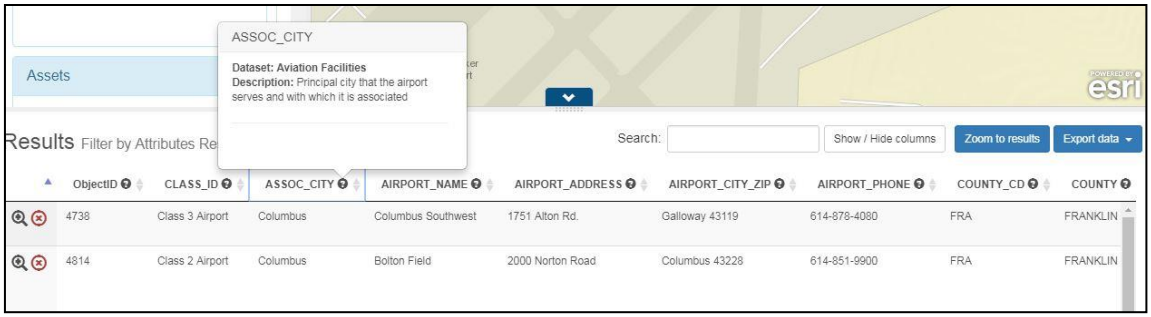


3.5.5 Remove individual records from results table

1. To remove a record from the Results table, click on the **Remove feature from selection** button  in the far left column.

3.5.6 View Field Definitions in Results Table

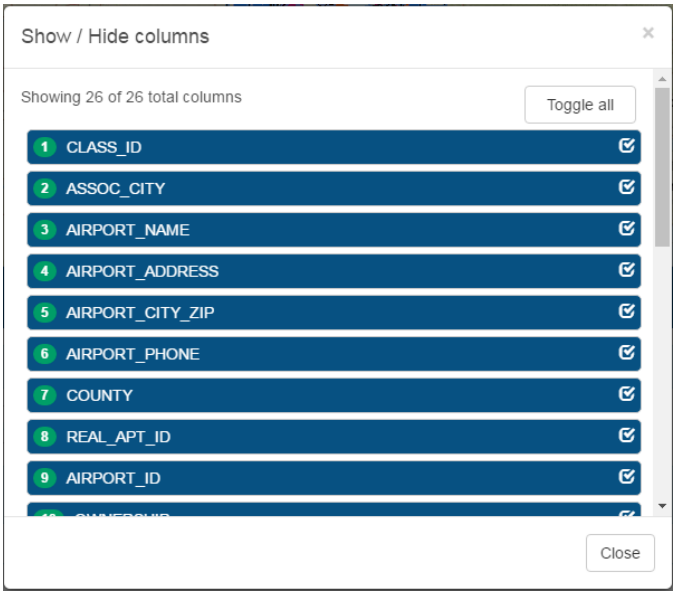
1. Click the icon  next to a field name to quickly access the field definitions without having to navigate to the [Data Glossary] page. **Note:** *The popup will contain all instances in which the field name occurs in the **Data Glossary**.*



3.5.7 Show/Hide Fields in Results Table

1. To change the columns shown in the table, select the **Show/Hide columns** button.

2. The **Show/Hide columns** pop-up window opens, listing every field available for that layer.



3. De-select any field you wish to hide or use the **Toggle** all button to turn all fields off or on.

   Note: *If an export is performed, ALL fields will export to the resulting output regardless of which fields are enabled.*

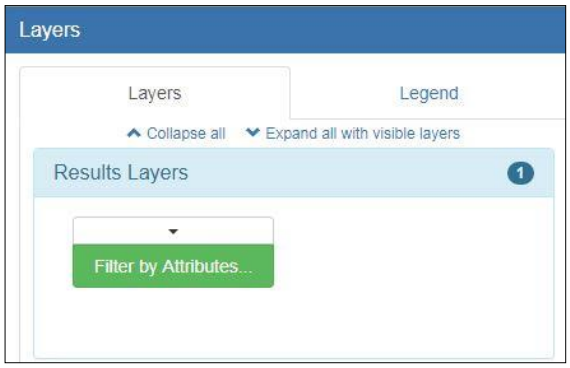
3.5.8 Export and download the Results layer

1. To export records from the **Results** table, click the **Export data** button and select the format:
   - **Excel**
   - **KMZ/KML**
   - **Shapefile**
   - **Geodatabase**
2. A rotating icon replaces the **Export data** button while the data is prepared. Once complete, the button changes to **Download.**

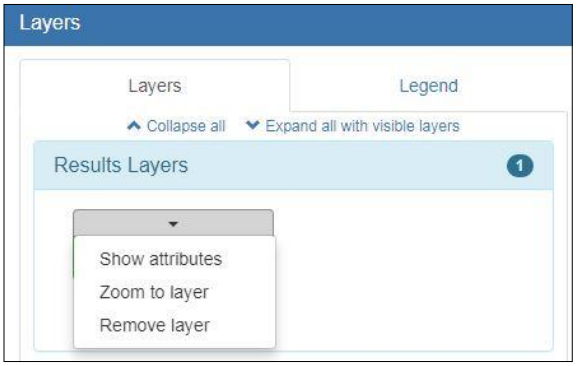
3. Click the Download button, and the formatted data is then downloaded according to your browser settings.
   - Some browsers prompt you for a folder location, while others automatically download.
   - The downloaded file uses the same name as the **Results** layer (without any blank spaces), with the appropriate extension. For example, if you wanted to export the results from the **Filter Results** layer to an Excel spreadsheet, those exported results would be stored in a file called **Filter_by_Attributes.xls**.

3.5.9 Remove the Results layer from the map

1. Results tables are represented as **Results Layers** in the **Set visible layers** tool. To see the list of **Results Layers**, go to the map toolbar and click **Set visible layers on map**.
2. Select to expand the **Results Layers** layer grouping.

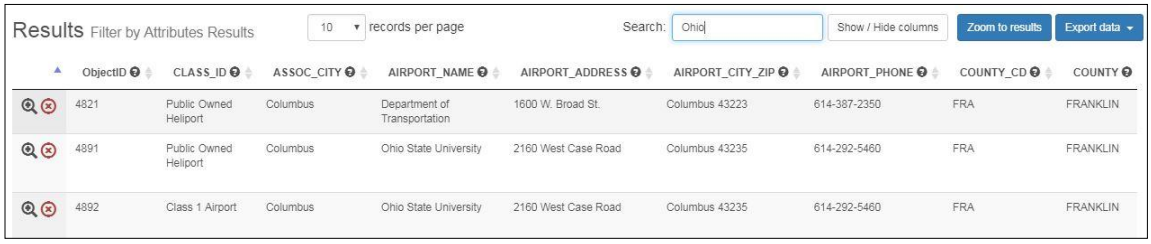


3. You will now see any **Results layers** you produced.
4. To remove a layer, click the down-arrow above the name of the **Results** l**ayer**.
5. From the pop-up menu, select **Remove layer**. The layer is no longer part of the map.



3.5.10 Show attributes of a Results layer

1. To re-open the **Results** table for a **Results layer,** click the arrow above the layer name to access the drop-down menu. Select **Show attributes.**
2. The attributes will now appear in the **Results** table at the bottom of the web page.



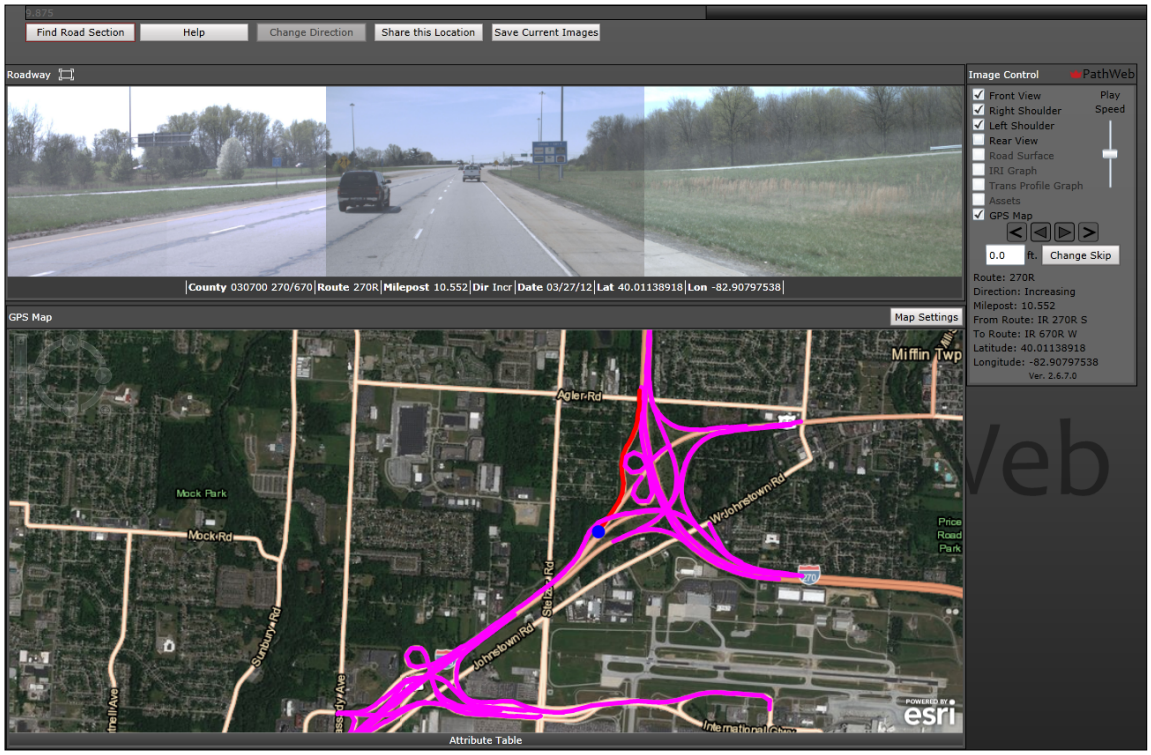
3.6 View Additional Imagery on the Map

There may be times you need to see more detailed imagery than is available with your basemap and map layers. **PathWeb** and **Map Channe**l are available for this purpose.

3.6.1 View ODOT PathWeb imagery associated with location

ODOT Path Web lets you see photographs of roadway and pavement conditions, as well as peripheral assets associated with the area of the map you are viewing.

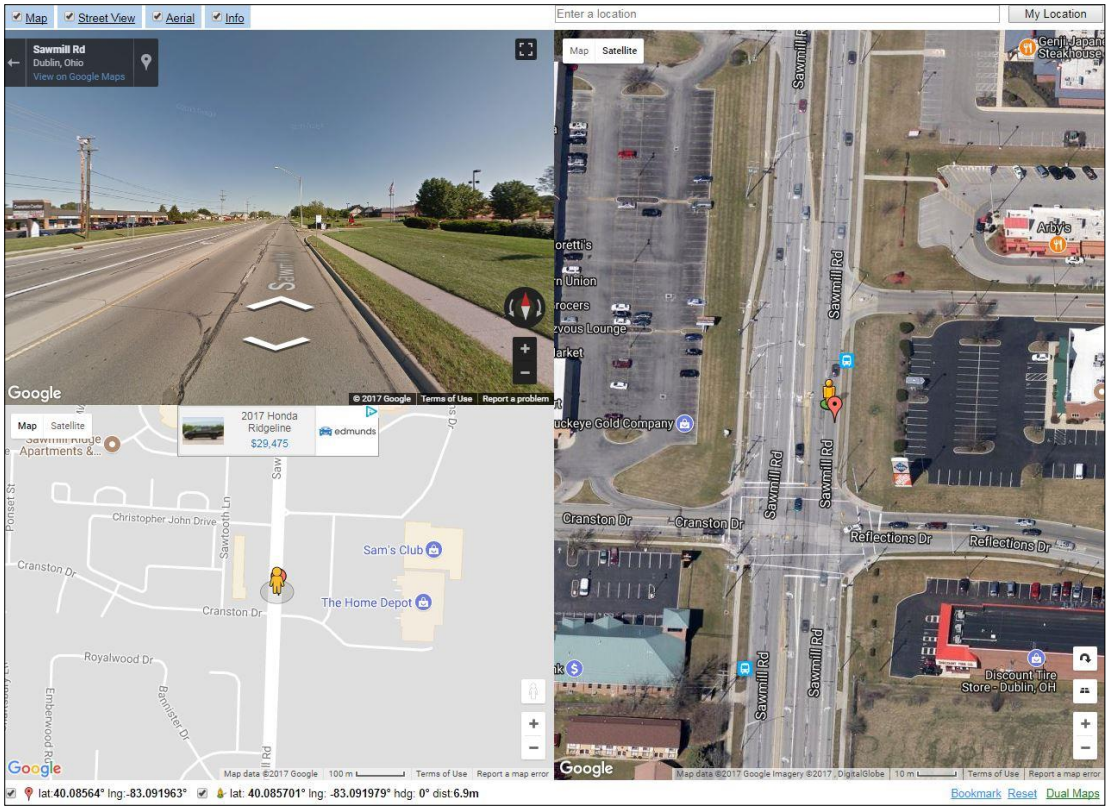
1. Pan and zoom into the area of interest on the map. You need to zoom in far enough to clearly see the lines that represent a road.
2. From the map toolbar, click **Tools**  and choose **ODOT PathWeb**.
3. Click directly on the road you want to view.
4. **ODOT PathWeb** opens in a new browser window or tab. **Note:** *Make sure your popup blocker is disabled for this website, otherwise the ODOT PathWeb site will not open.*



3.6.2 View Map Channel imagery associated with a location

Sometimes you need additional visual information when viewing a map. Map Channel lets you see a Google Street View, Google Map View, and Bing Birdseye View of the current map location. In addition, you can get geospatial information as well.

1. To see the additional information, zoom into the area of interest on the map.
2. From the toolbar, click **Tools**  and choose **Map Channel**.
3. Click any location on the map.
4. Map Channel opens in a new browser window or tab.



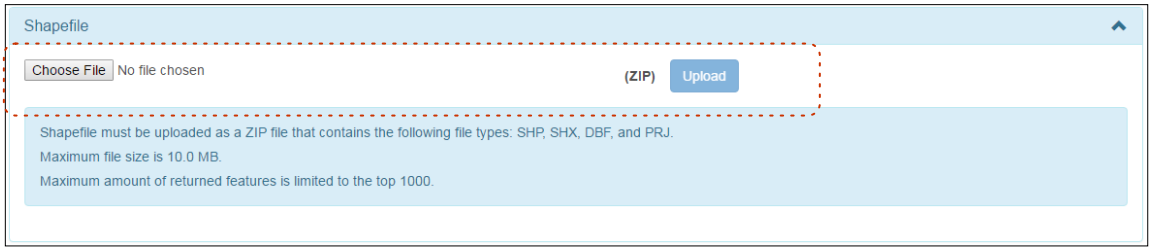
5. Depending on the checkboxes selected in the top-left corner, you will see anywhere from one to four items associated with the location you clicked on the map:
   - **Map:** Gives you the standard Google Streets map.
   - **Street View:** Gives you a Google Street view of the location.
   - **Bird's Eye:** Gives you the Bing aerial photo view of the location.
   - **Info:** Provides geospatial information about the location such as latitude, longitude, zoom factor, and more.

3.7 Add Data to Map

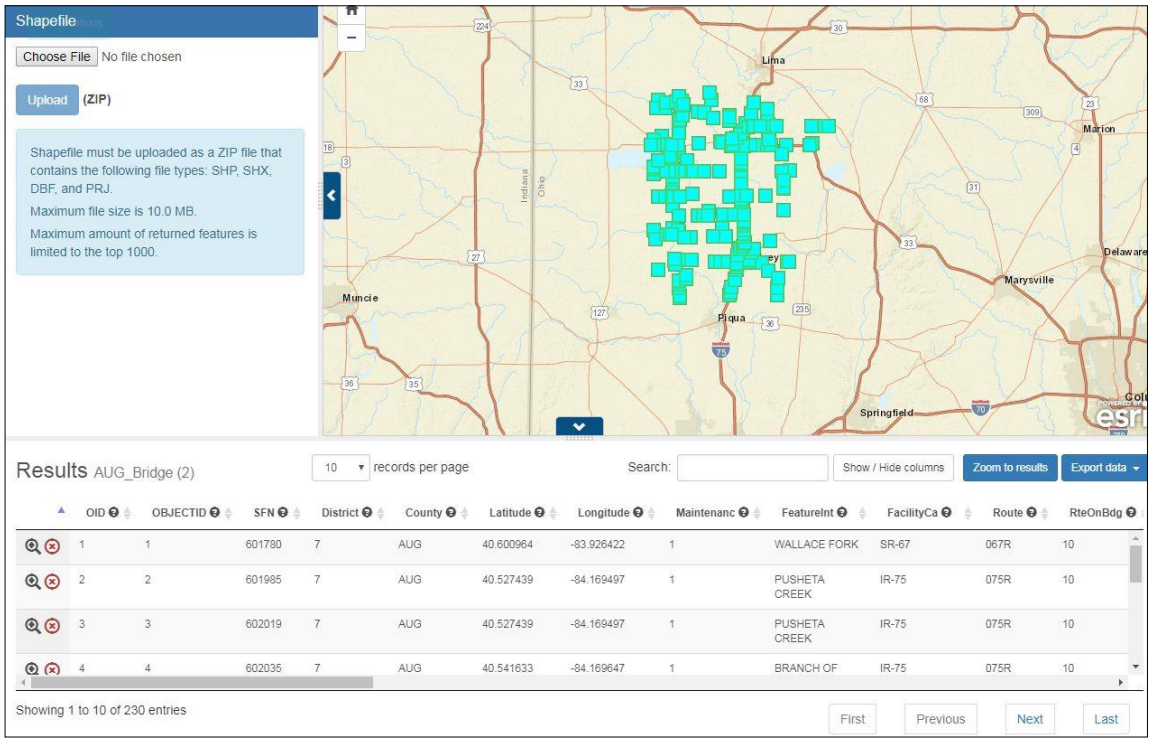
Sometimes your map needs more than just imagery (basemap and layers) to provide adequate information. In this case, you can add other data to the map, such as shapefiles, KML tracks, LRS events, latitude/longitude, geocode addresses, and reverse geocode lat/longs.

3.7.1 Add shapefile

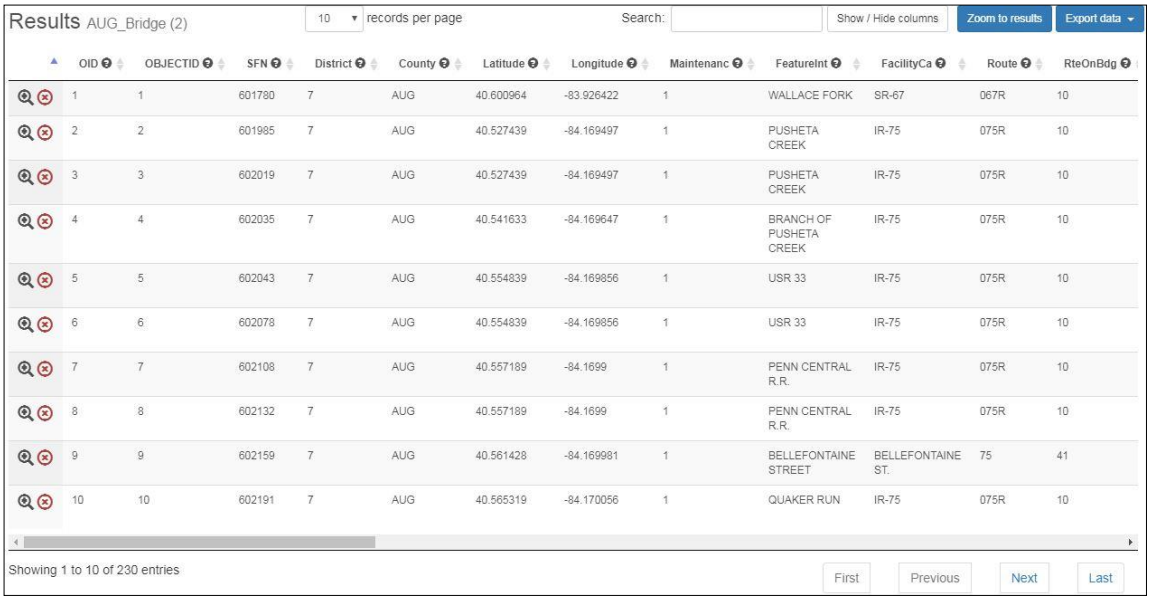
1. From the map toolbar, click **Add data to map**  and select **Shapefile.**
2. The **Shapefile** tool interface appears.



3. Click **Choose File** to display the **Open** dialog.
4. Navigate to a shapefile of your choice, select it, and click **Open**.
   Note: *The shapefile you select must be a ZIP file that contains the following file types:* ***.shp****,* ***.shx****,* ***.dbf****, and* ***.prj****. The selected file cannot exceed 10 MB in size.*
5. Press the **Upload** button to view the selected shapefile as a **Results** layer on the map. In this example, the shapefile puts blue rectangles on the map to identify all bridges in AUG and SHE counties. **Note:** *If the data in the shapefile is associated with a different area of the map than you have displayed, as soon as you upload the file, the map will pan and zoom to the correct area.*



6. If you want to hide the shapefile layer, go to the map toolbar and click **Select visible layers on map**. Scroll down and expand the **Results Layers** grouping. Select the layer to turn it off so it is no longer appears on the map.
7. The records representing the features in the shapefile appear in the **Results** table. Here is an example of the table showing the list of bridges from the shapefile. **Note:** *Only the top 1000 features appear in the **Results** table.*



8. Click on the **Zoom To**  icon for any row in the table to zoom to the location of its associated feature on the map. **Note:** *You can also click **Zoom to results** to see the locations of all the features on the map, or select **Export Data** to convert the table to a specific format and download the data to your computer, or **Search** for information in the table. For details, see* ***Work with the Results.***

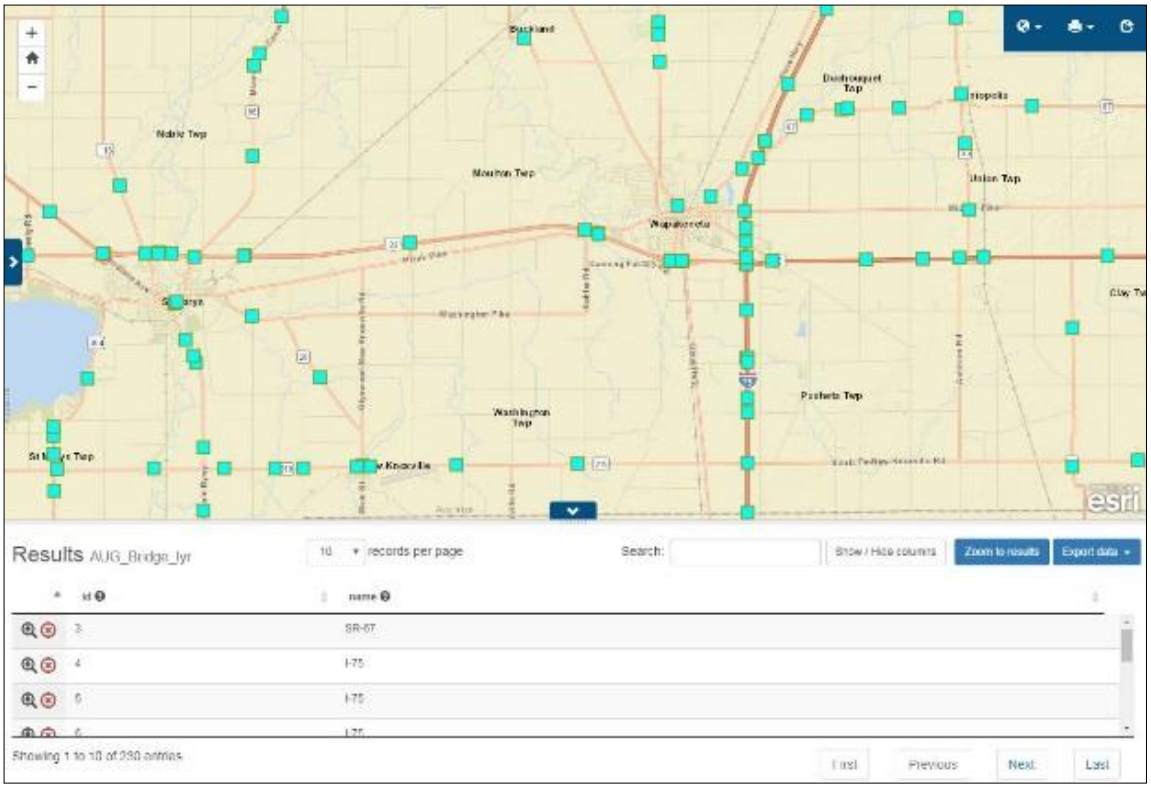
3.7.2 Add KMZ/KML

1. From the map toolbar, click **Add data to map**  and select **KMZ/KML.**
2. The **KMZ/KML** tool interface appears.

3. Click **Choose File** to display the **Open** dialog.
4. Navigate to a **.kml** or **.kmz** file your choice, select it, and click **Open**. **Note:** *The file you select must be available on a publicly accessible URL and cannot exceed 5 MB in size.*
5. Press the **Upload** button to view the selected file as a **Results** layer on the map.

- In this example (below), the **.kml** file puts boxes on the map that represent bridges in AUG County. **Note:** *If the data in the **.kml** or **.kmz** file is associated with a different area of the map than you have displayed, as soon as you upload the file, the map will pan and zoom to the correct area.*
- If you want to hide the KML/KMZ layer, go to the map toolbar and click **Set visible layers**, expand the **Results Layers** grouping. Select the layer to turn it off so it is no longer appears on the map.

6. The records representing the features in the KML/KMZ file appear in the **Results** table. Here is an example of the table showing the list of AUG bridge deficiencies from the **.kml** file. **Note:** *If you selected a multi-layer **.kml** file, only the last processed layer will appear in the **Results** table. However, you can find the other layers if you go to the map toolbar, click **Set visible layers**, then expand the **Results Layers** grouping. There you can toggle the visibility of each layer and show its attributes in the **Results** table.*

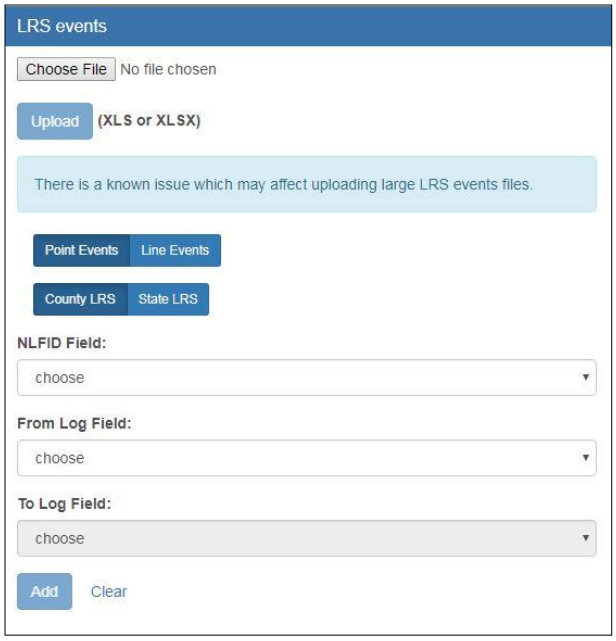


Note: *Only the top 1000 features appear in the **Results** table.*

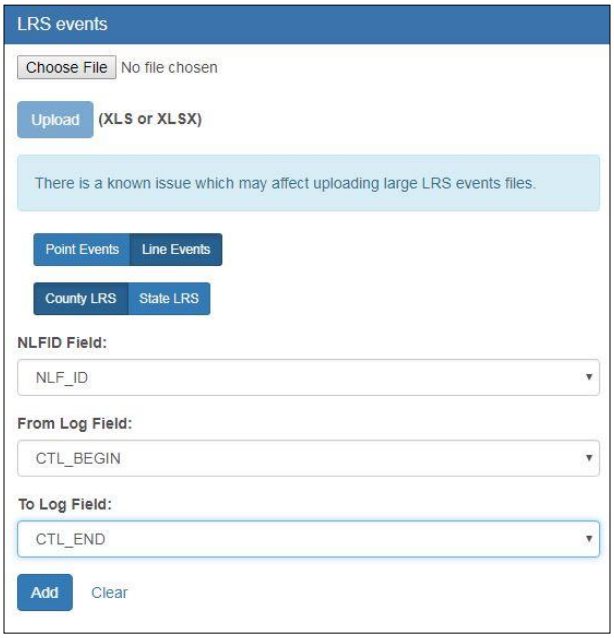
7. Click the **Zoom to feature**  icon for any row in the table to zoom to the location of its associated feature on the map. **Note:** *You can also click **Zoom to results** to see the locations of all the features on the map, or select **Export Data** to convert the table to a specific format, and **Download** to download the data to your computer, or **Search** for information in the table. For details, see* ***Work with the Results.***

3.7.3 Add LRS events

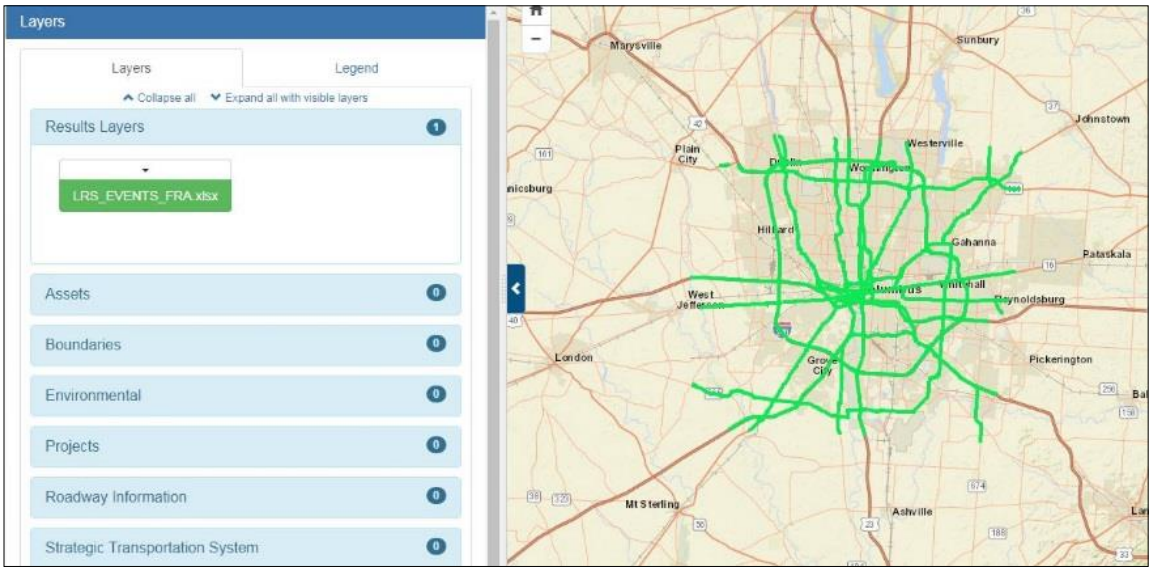
1. If you have an **.xls** or **.xlsx** file containing LRS events (NLFID and measure), use **Add LRS events**.
2. From the map toolbar, click **Add data to map**  and select **LRS events.**
3. The **LRS events** tool interface appears.



4. Click **Choose File** to display the **Open** dialog.
5. Navigate to the **.xls** or **.xlsx** file of your choice containing LRS events, select it, and click **Open**.
6. Press the **Upload** button to upload the selected LRS events file.
7. Next, specify the type of LRS data you are interested in adding to the map and columns in the file that contain that data.



8. Select the appropriate button to indicate the type of LRS data you want to add to the map. The selected button turns dark blue; the unselected button remains a lighter blue.
   - **Point Events.** Add events (features) to the map that will appear as points.
   - **Line Events.** Add events (features) to the map that will appear as lines. This button is selected in the example.
   - **County LRS.** Measure values will be determined relative to county boundaries. This button is selected in the example.
   - **State LRS**. Measure values will be determined relative to state boundaries.
9. Select values from the pull-down lists to specify the columns in the LRS file where specific data is stored.
   - **NLFID Field.** This is the column that contains the unique event identifier for each event.
   - **From Log Field.** This is the column that contains the location where measure begins for each event. This field IS required for both point and line events.
   - **To Log Field.** This is the column that contains the location where the measure ends for each event. This field is required for line events only.
10. Press **Add** to view the LRS events as a **Results** layer on the map. **Note:** This may take a while, depending on how many events there are, so be patient. You may also want to zoom in further.
    - In this example, the **.xls** file puts green lines on the map that represent LRS events in Franklin County. **Note:** *If the data in the **.xls** or **.xlsx** file is associated with a different area of the map than you have displayed, as soon as you upload the file, the map will pan and zoom to the correct area.*
    - If you want to hide the layer, go to the map toolbar and click **Set visible layers,** then select the **Results Layers** grouping. Select the layer to turn it off so it is no longer appears on the map.

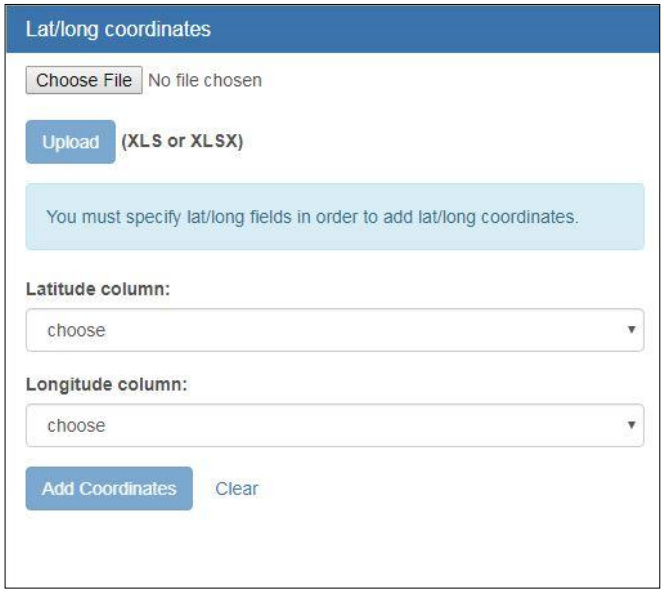


11. The records representing the events appear in the **Results** table. Here is an example of the table showing the list stations and measures.
12. Click the **Zoom To**  icon for any row in the table to zoom to the location on the map with the specified NLFID and measure. **Note:** *You can also click **Zoom to results** to see the locations*

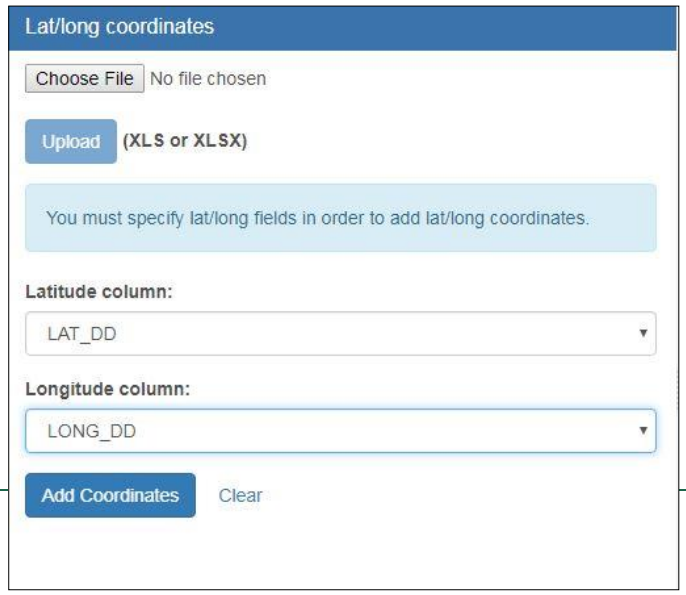
*of all the features on the map, or select **Export Data** to convert the table to a specific format to download the data to your computer, or **Search** for information in the table. For details, see* ***Work with the Results.***

3.7.4 Add lat/long coordinates

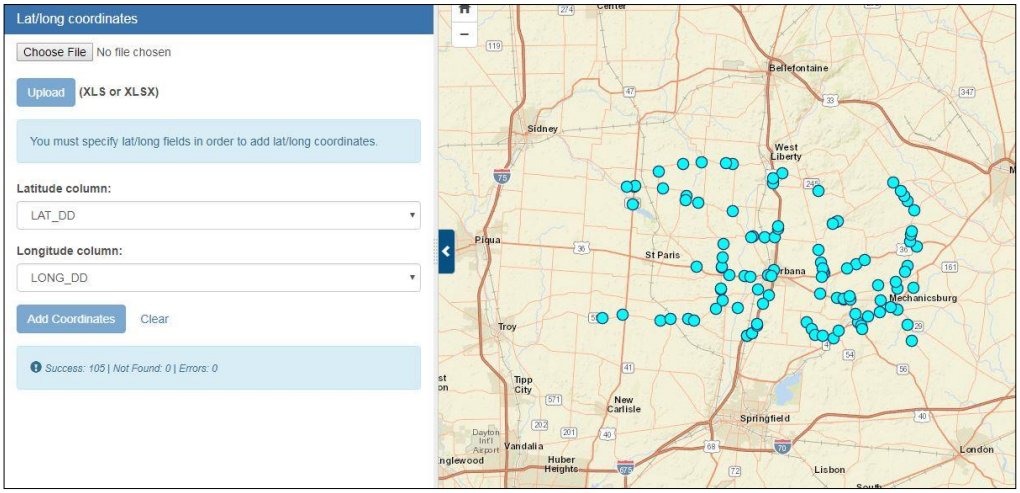
1. If you have an **.xls** or **.xlsx** file containing latitudes and longitudes, use **Add Lat/long coordinates**.
2. From the map toolbar, click **Add data to map**  and select **Lat/Long coordinates.**
3. The **Lat/Long coordinates** tool interface appears.



4. Click **Choose File** to display the **Open** dialog.
5. Navigate to the **.xls** or **.xlsx** file of your choice containing coordinates, select it, and click **Open**.
6. Press the **Upload** button.
7. Next, use the pull-down lists to specify the columns in the selected file containing latitude and longitude information.

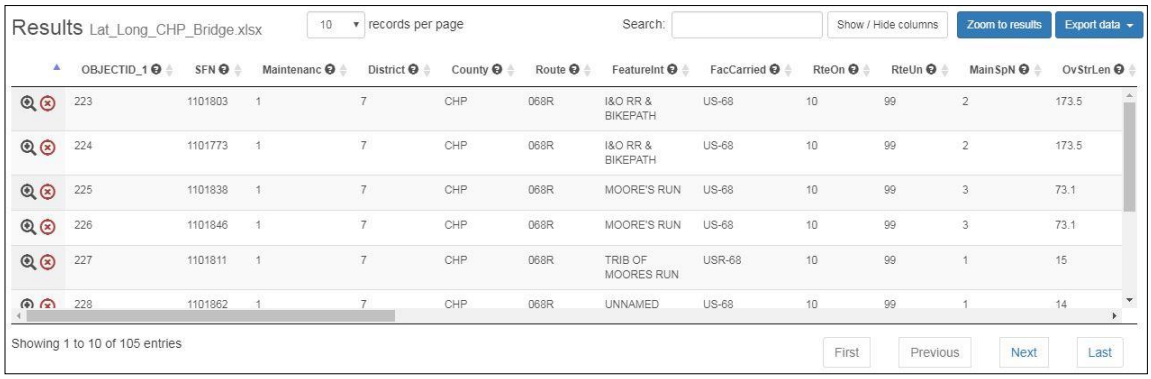


8. Press **Add Coordinates** to view points with known latitudes and longitudes as a **Results** layer on the map.



- In this example, the **.xlsx** file puts blue points on the map to indicate features where GPS coordinates are known. **Note:** *If the data in the **.xls** or **.xlsx** file is associated with a different area of the map than you have displayed, as soon as you upload the file, the map will pan and zoom to the correct area.*
- If you want to hide the **Results** layer, go to the map toolbar and click **Set visible layers**, then expand the **Results Layers** grouping. Select the layer to turn it off so it is no longer appears on the map.

9. The records representing the features with known coordinates appear in the **Results** table. Here is an example of the table showing the list of features with known longitudes and latitudes.



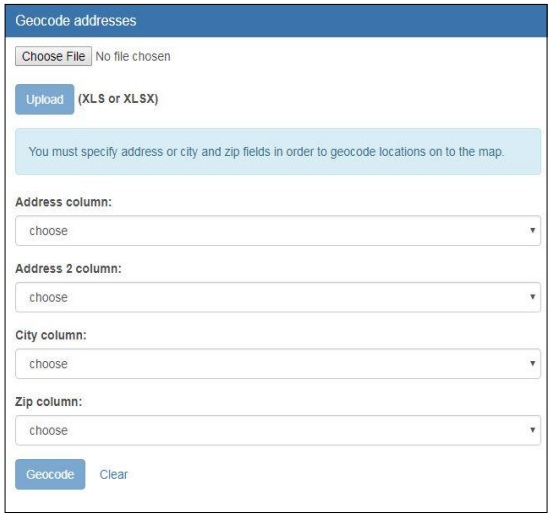
Note: *Only the top 1000 features appear in the **Results** table.*

10. Click the **Zoom To**  icon for any row in the table to zoom to the location on the map with that latitude and longitude. **Note:** You can also click **Zoom to results** to see the locations of all the features on the map, or select **Export Data** to convert the table to a specific format, to download the data to your computer, or **Search** for information in the table. For details, see **Work with the Results.**

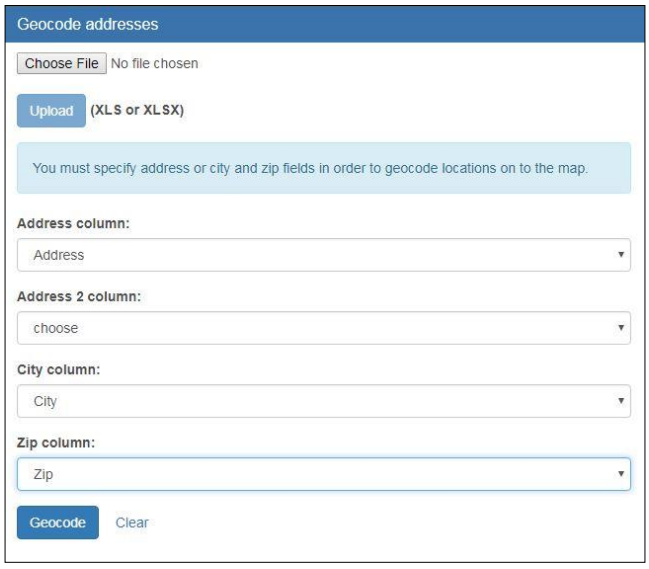
3.7.5 Add geocoded addresses

There are times when you need to see addresses associated with features on the map. If you already have an **.xls** or **.xlsx** file containing addresses, use **Add geocode addresses**.

1. From the map toolbar, click **Add data to map**  and select **Geocode addresses.**
2. The **Geocode addresses** tool interface appears. Click **Choose File** to display the **Open** dialog.



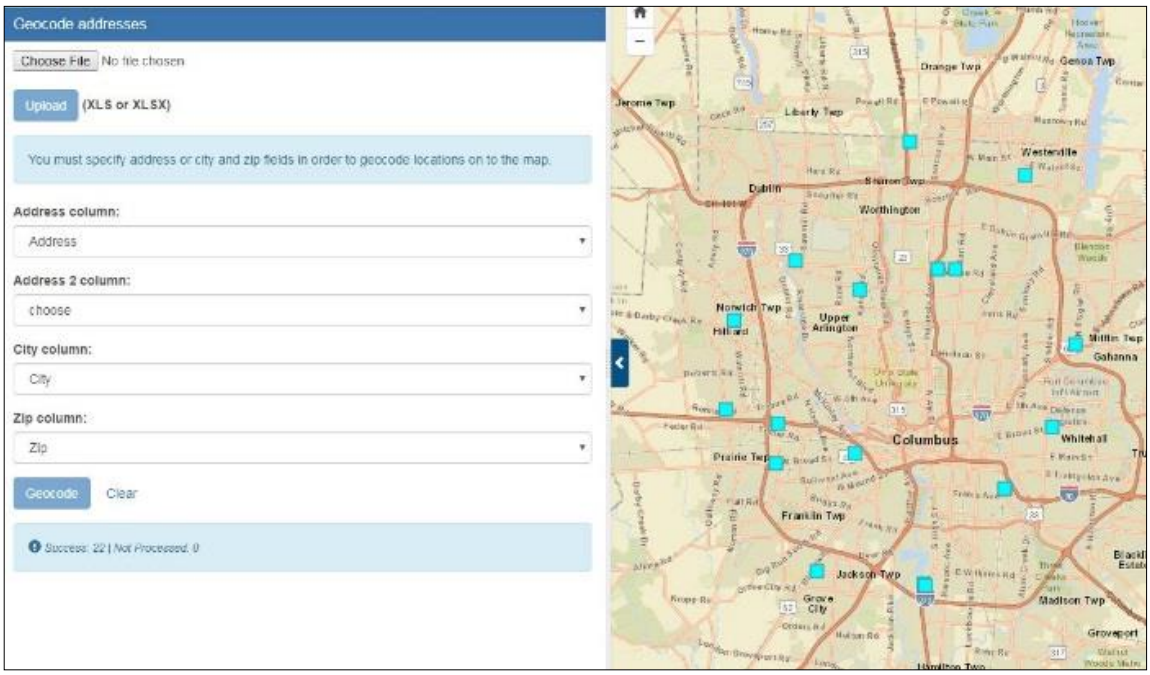
3. Navigate to the **.xls** or **.xlsx** file of your choice containing address information, select it, and click **Open**.
4. Press the **Upload** button.
5. Next, use the pull-down lists to specify the columns in the selected file containing the address information and press **Geocode**.



   - If the Excel file does not have a column with secondary address information, you can leave that field blank (noted as "**choose**" in the example).

6. Press **Geocode** to view the point features with known addresses as a **Results** layer on the map.

- In this example, the **.xlsx** file places blue squares on the map to represent features with known addresses. **Note:** *If the data in the **.xls** or **.xlsx** file is associated with a different area of the map than you have displayed, as soon as you upload the file, the map will pan and zoom to the correct area.*



7. If you want to hide the **Results** layer, go to the map toolbar and click **Set visible layers**, then expand the **Results Layers** grouping. Select the layer to turn it off so it is no longer appears on the map.
8. The records representing the points on the map with known addresses appear in the **Results** table. Here is an example of the table showing the list of addresses.

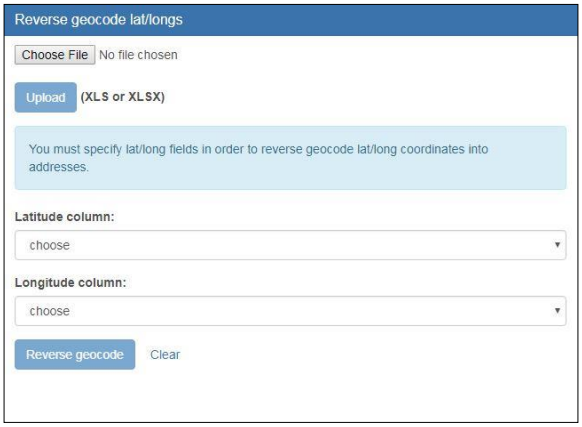
Note: *Only the top 1000 features appear in the **Results** table.*

9. You can click the **Zoom To**  icon for any row in the table to zoom to the location of its associated feature on the map, or click **Zoom to results** to see the locations of all the features on the map, or select **Export Data** to convert the table to a specific format to download the data to your computer, or **Search** for information in the table. For details, see **Work with the Results.**

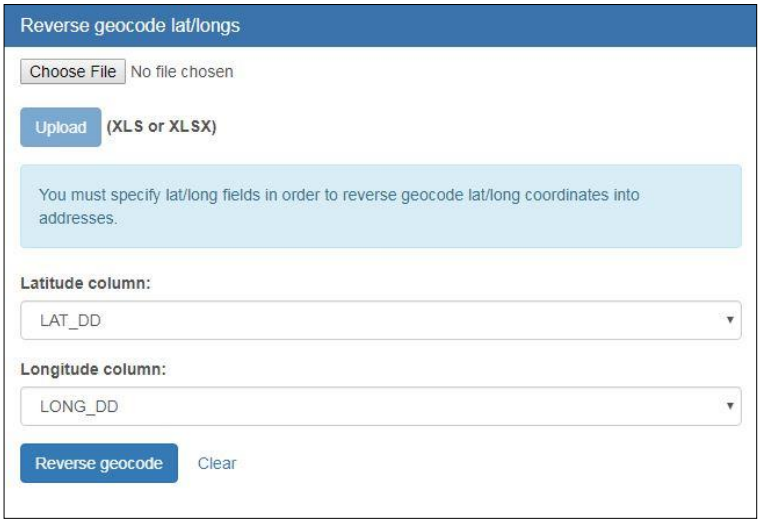
3.7.6 Add reverse geocoded lat/longs

There are times when you need to see addresses associated with features on the map, but only have an **.xls** or **.xlsx** file containing latitudes and longitudes. This is when you should use **Add reverse geocode lat/longs**.

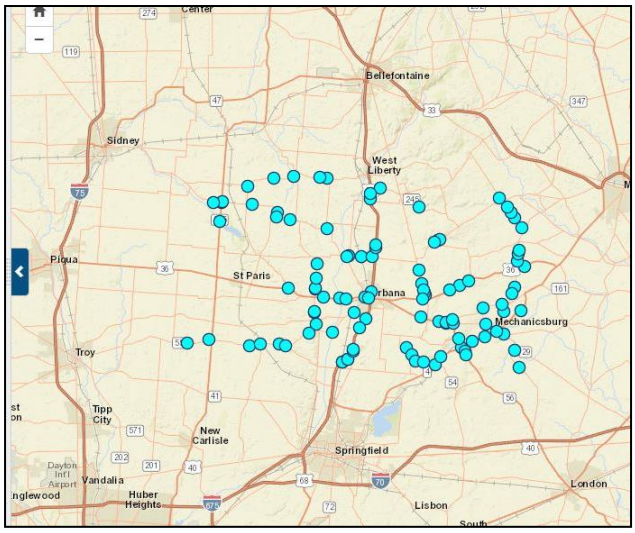
1. From the map toolbar, click **Add data to map**  and select **Reverse geocode lat/longs.**
2. The **Reverse geocode lat/long coordinates** tool interface appears.



3. Click **Choose File** to display the **Open** dialog.
4. Navigate to the **.xls** or **.xlsx** file of your choice containing latitude and longitude information, select it, and click **Open**.
5. Press the **Upload** button.
6. Next, use the pull-down lists to specify the columns in the selected file containing the latitude and longitude information and press **Reverse** g**eocode**.



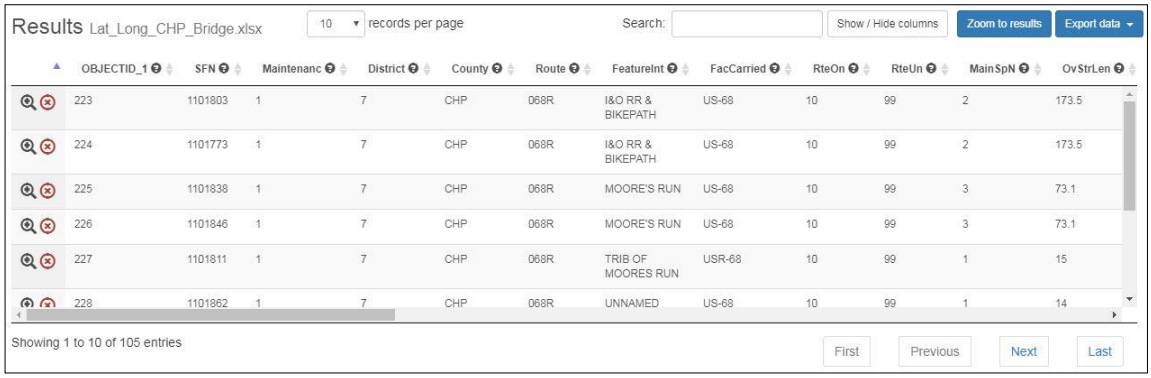
7. Press **Reverse geocode** to view points with known addresses associated with their GPS coordinates as a **Results** layer on the map



   - In this example, the **.xlsx** file puts aqua points on the map representing features with addresses associated with their latitudes and longitudes. **Note:** *If the data in the **.xls** or **.xlsx** file is associated with a different area of the map than you have displayed, as soon as you upload the file, the map will pan and zoom to the correct area.*

8. If you want to hide the **Results** layer, go to the map toolbar and click **Set visible layers**, then expand the **Results Layers** grouping. Select the layer to turn it off so it is no longer appears on the map.

9. The records representing the points on the map appear in the **Results** table. Here is an example of the table showing the list of addresses.



Note: *Only the top 1000 features appear in the **Results** table.*

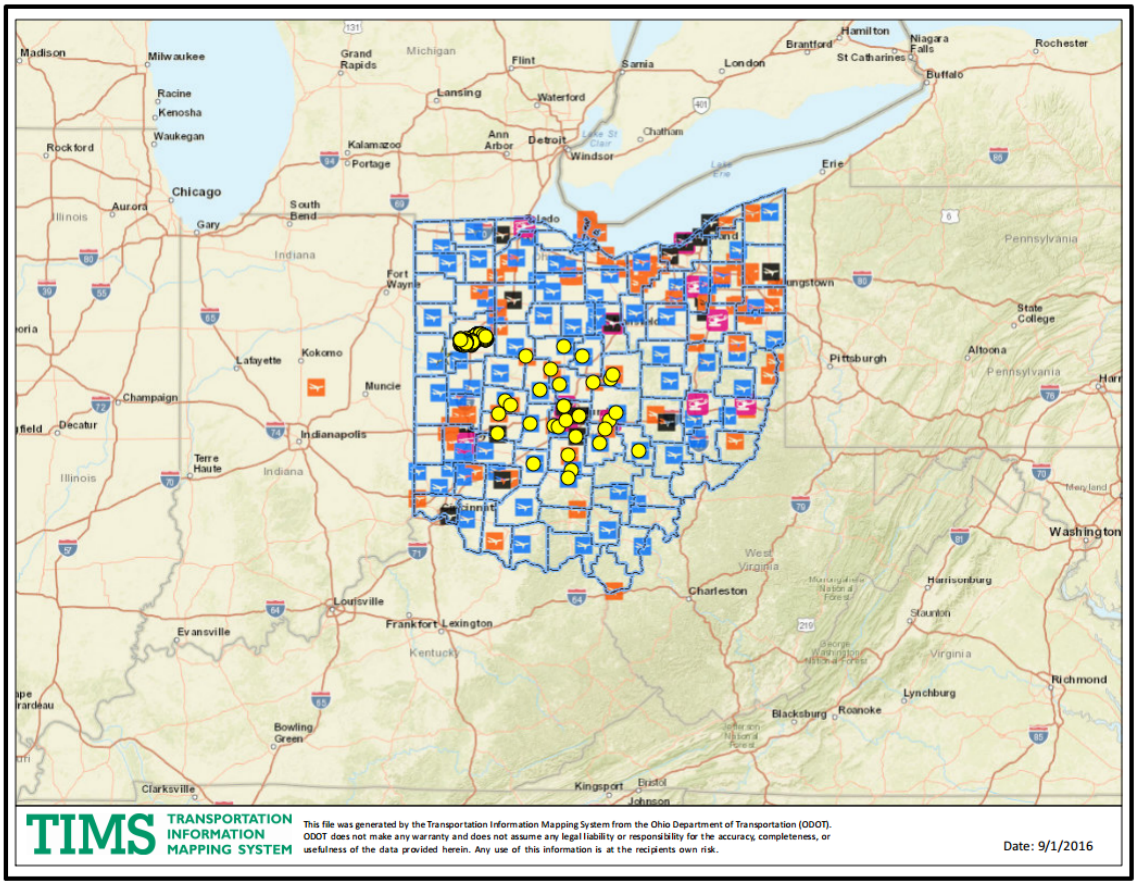
10. Click the **Zoom To**  icon for any row in the table to zoom to the location of its associated feature on the map. **Note:** You can also click **Zoom to results** to see the locations of all the features on the map, or select **Export Data** to convert the table to a specific format to download the data to your computer, or **Search** for information in the table. For details, see **Work with the Results.**

3.8 Print and Share the Map

Other people may need to see your map. You can print the map for them or share it electronically.

3.8.1 Print the map

1. Zoom in to the area of the map you are interested in printing.
2. From the map toolbar, press the **Print map**  button.
3. Select the size you would like to print: **8.5 x 11**, **11 x 17**, or **17 x 22**.
4. A PDF map pops up in another browser tab or window. Notice the map only displays features currently visible when you pressed **Print map**. It also has a title and a scale. **Note:** *If the PDF map does not appear, you may have pop-ups disabled; check your browser settings and make sure popups are allowed for the TIMS website.*



5. You can now print the displayed map by using the **Print** function in your browser.

3.8.2 Share the map with others

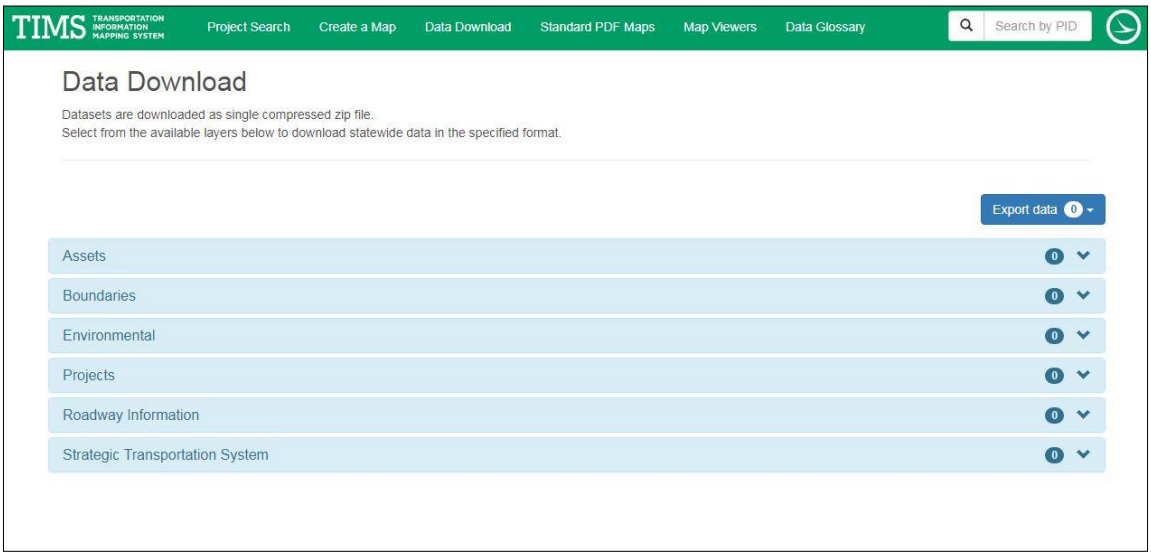
1. Zoom in to the area of the map you are interested in sharing.
2. From the map toolbar, press the **Share map with your friends** button.
3. The Share tool interface appears.

   - The **URL** is the link to the map.
   - If you want to verify that the URL is valid, click **Verify**. The URL opens in a new browser tab or window.
   - If you accidentally delete the URL, press **Update** to ensure the link represents the displayed map.
4. Copy and paste the link into an email and send the email to those whom you want to see the map.
5. When the email recipients click the link, **TIMS** will start up in the browser and the map will open in the **Create a Map** page. Shared map links may be opened on desktop or mobile browsers. **Note:** *The basemap that others see will be the default basemap set up by the TIMS Administrator, which may or may not be the basemap you used.*

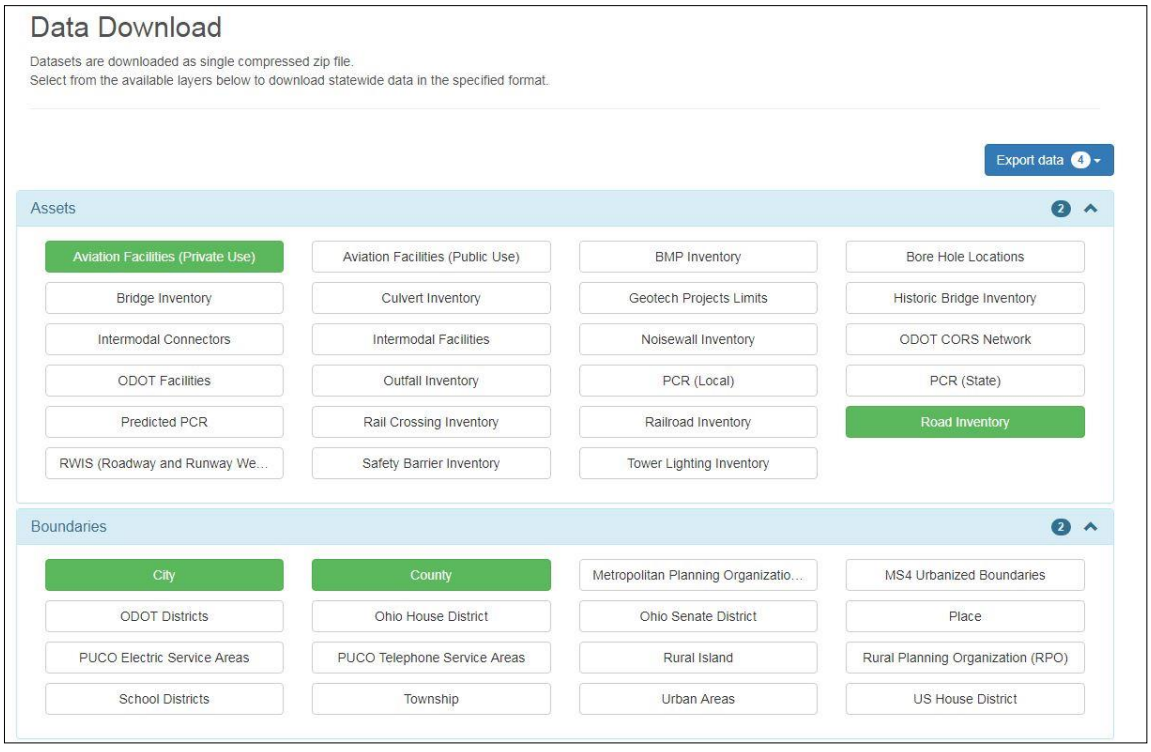
Section 4. Data Download

The **Data Download** section of the TIMS website lets you download entire datasets without interacting with the map.

1. From the **Home** page, select the **Data Download** button.
2. The **Data Download** page appears.



3. Next, select the layer or layers whose data you want to export. Click the down-arrow to expand each layer grouping and select the layers you are interested in. **Note:** *These are the same layers displayed in* ***Create a Map****.*



4. Press **Export data**.
5. From the resulting pull-down menu, select the format you prefer for export:
   - **To Excel**
   - **To KMZ/KML**
   - **To Shapefile**
   - **To Geodatabase**
6. Upon completion of download, a zip file containing the selected files should appear in your browser. **Note**: *Depending on your browser, the data may be automatically downloaded to a designated folder or you may be prompted for the folder where you want to download it.*

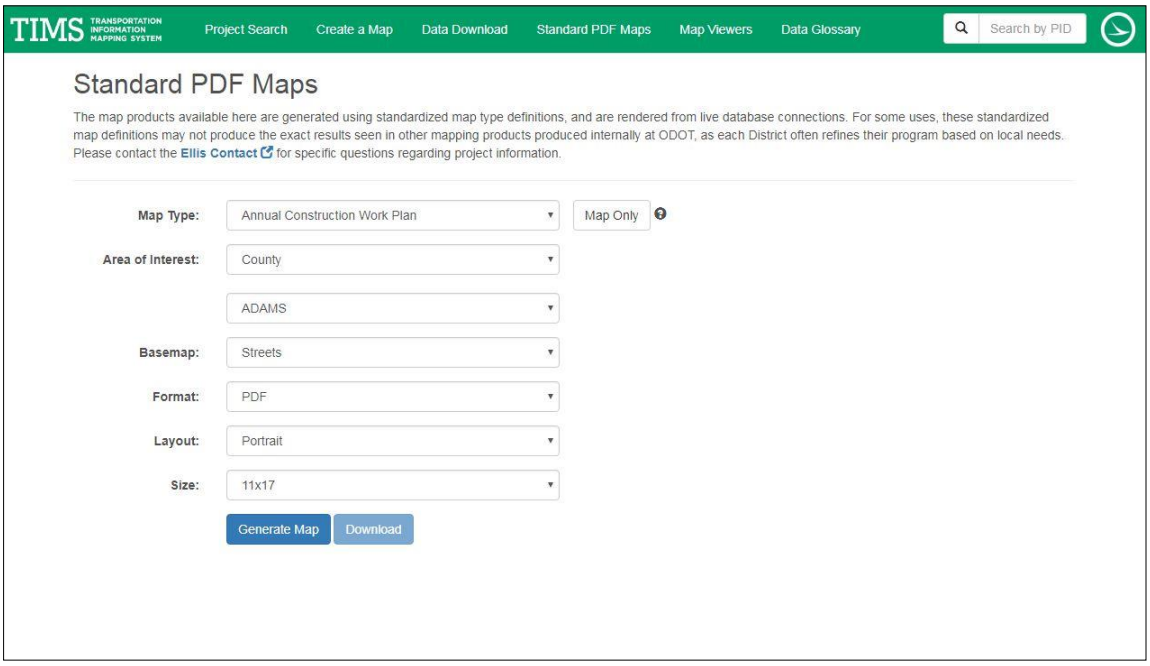
Section 5. Standard PDF Maps

The **Standard PDF Maps** section of the TIMS website lets you generate maps with specific layouts and formats.

IMPORTANT! The PDF maps are generated using standardized map type definitions, and they are rendered from live database connections. For some uses, these standardized map definitions may not produce the exact results seen in other maps produced internally at ODOT, as each District often refines their program based on local needs.

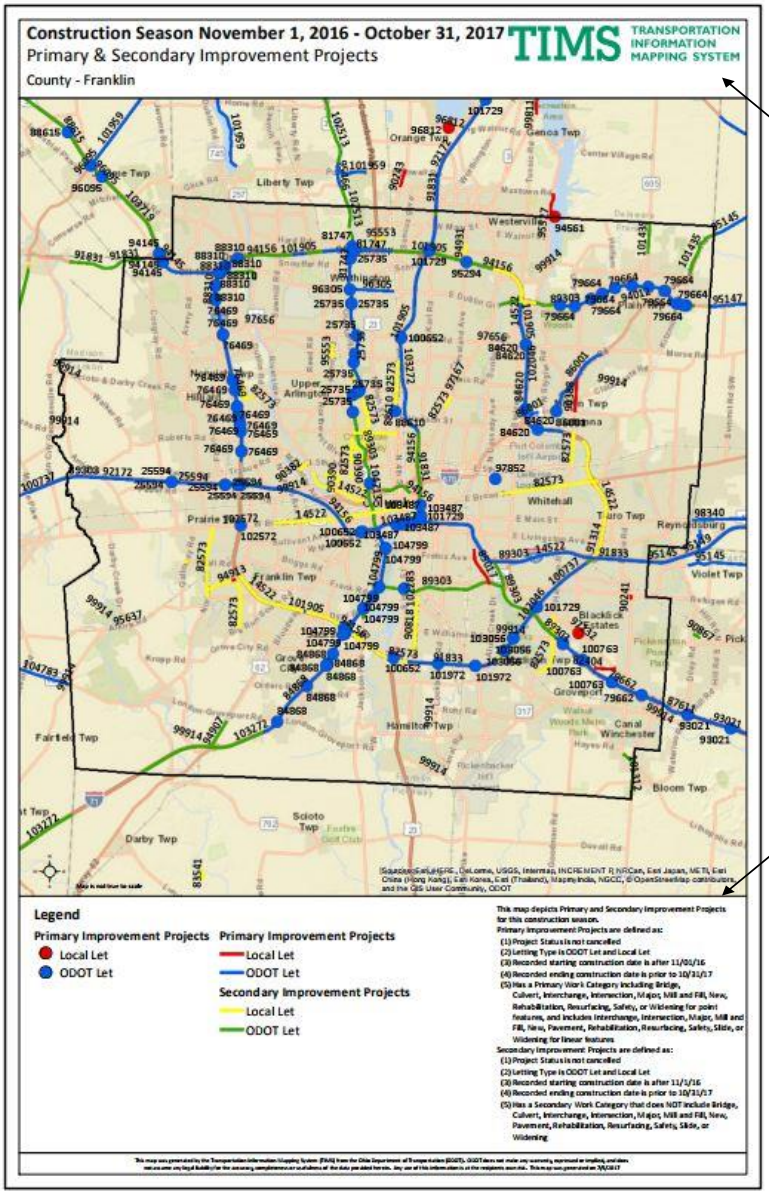
5.1 Define and generate a PDF map

1. From the **Home** page, press the **Standard PDF Maps** button.
2. The **Standard PDF Maps** page appears.



3. Specify the criteria for the maps' generation and appearance:
   - **Map Type:** Annual Construction Work Plan, Construction Season, Fiscal Year Project Map, Functional Classification, Multi-Year Work Plan, and STIP Map. **Note:** *Press **Map Only** if you want to generate a map that has no layout elements on it (title, legend, scale, etc.).*
   - **Area of Interest:** County, ODOT District, MPO, City, or Urban area. Once you select the type of area, select its value from the field beneath.
   - **Basemap:** Streets, Hybrid, Topo, National Geographic, Gray, or Dark Gray.
   - **Format:** PDF, JPG, or PNG
   - **Layout:** Portrait
   - **Size:** 11x17, 17x22, or 34x44

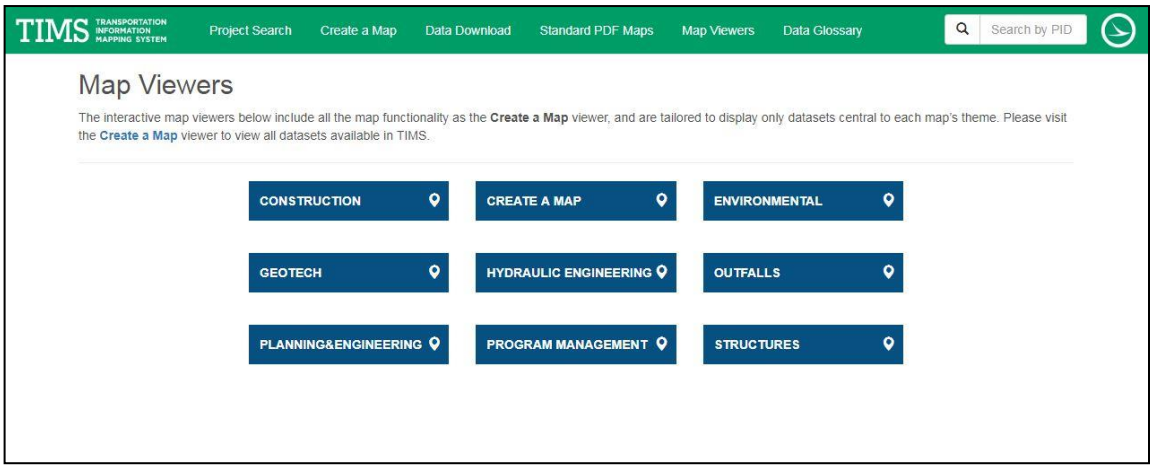
4. Once you make your selections, press **Generate Map**. A revolving circle appears over the **Download** button. When it stops revolving, the map is ready to download.
5. Press the **Download** button to save the PDF map to your computer. **Note:** *Depending on your browser, the data may be automatically downloaded to a designated folder or you may be prompted for the folder where you want to download it. The default name for the map can be somewhat cryptic, so you may want to rename it.*
6. Here is an example of a Construction Season in Franklin County with a Streets basemap.
   Note: *If you selected **Map Only**, the title, legend, and notes will not appear.*



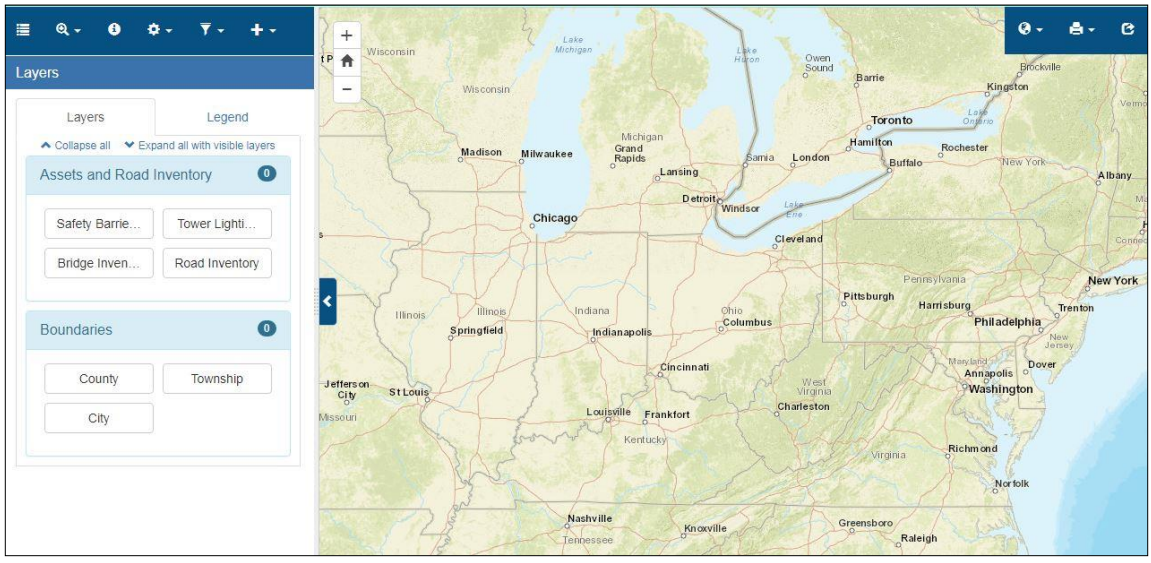
Section 6. Map Viewers

The **Map Viewers** section of the TIMS website lets you access interactive maps by content focus.

1. From the Home page, press the **Map Viewers** button.
2. The **Map Viewers** page appears.



3. Each button represents a different map theme. The buttons you see vary depending on what map themes the TIMS Administrator has set up for you. Each button you press takes you to a different map page where the map displays only the datasets associated with the map's theme. For example, if you pressed **Construction**, a map appears with layers associated with construction theme.



4. You can now use any of the tools in the blue toolbar and view the results on the map and in the **Results** table. For details, see: Create a Map. All instructions about viewing, measuring, searching, filtering, exporting, downloading, printing, and sharing apply.

Section 7. Data Glossary

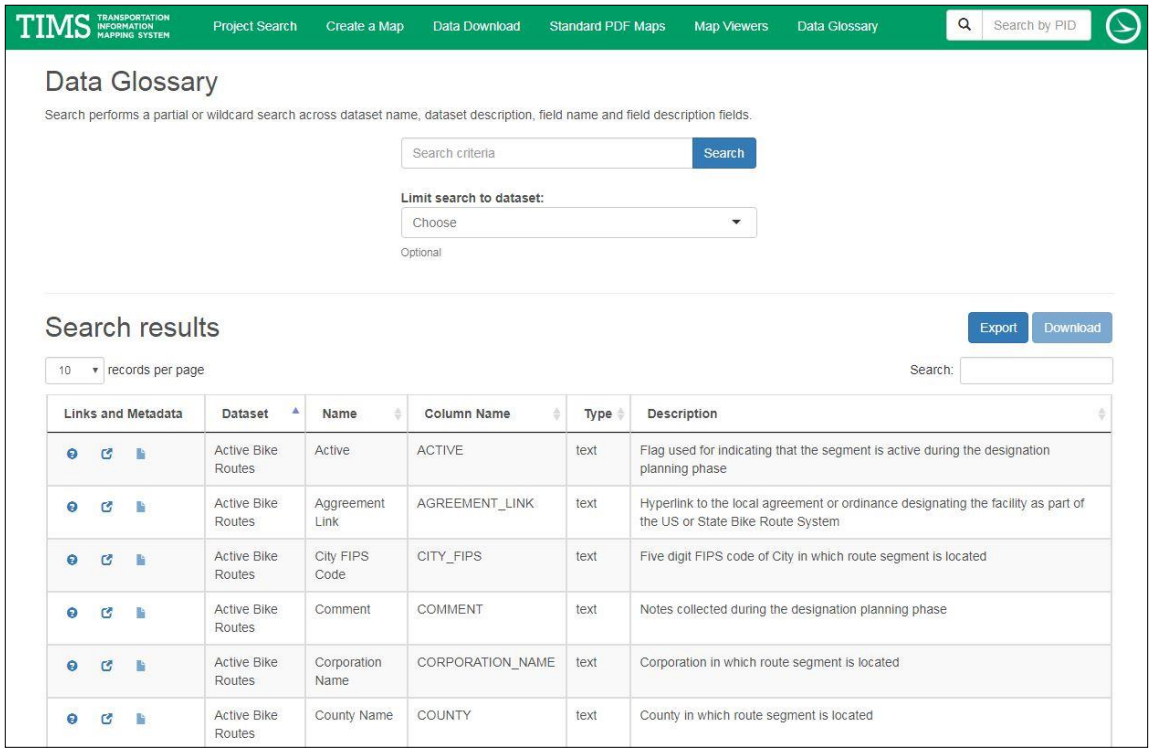
This section of the TIMS website lets you search for information in the dataset name, dataset description, field name and field description columns of all tables in the database.

This is useful in several situations:

- **Data discovery.** You are trying to find out what data is available pertaining to a particular subject. For example, you might want to find out all the fields across all the datasets that contain "**traffic**" in the either the field name or field description.
- **Explanation.** You need an explanation of dataset or field descriptions. For example, what does the field "**AADT**" represent?
- **Additional information.** You can find additional links and metadata that have to do with a particular dataset or field.

7.1 Search the Data Glossary

1. From the **Home** page, press the **Data Glossary** button.
2. The **Data Glossary** page appears.



3. The search field at the top of the screen allows you to enter a value that might be found in the **Name**, **Column Name**, **Type**, **or Description** columns of the database.
4. You can enter an exact value or a partial value in the search field. For example, suppose you know there are some columns that store land cover information, but you do not know their names, and

you do not know what dataset they are in. You could type **Land Cover** in the search field and press **Search**. The results would appear as follows:

5. In this example, the search saved you a lot of time, because you did not have to scroll through 1,969 entries! **Note:** *Rather than searching through the entire database, you can also limit your search to a particular dataset if you know it. For example, you could have limited the previous search to* ***National Landcover Database*** *dataset, in which case, the results would have been the same, but the search would have taken less time.*
6. The icons on the far left side of each record in the table do the following:
   - Hover over the icon to learn the purpose of the dataset referenced in the record.
   - Click this link to go to a URL with related information. This link is enabled if a link to related information exists.
   - Click to view a related document. This link is enabled if metadata for the dataset exists.

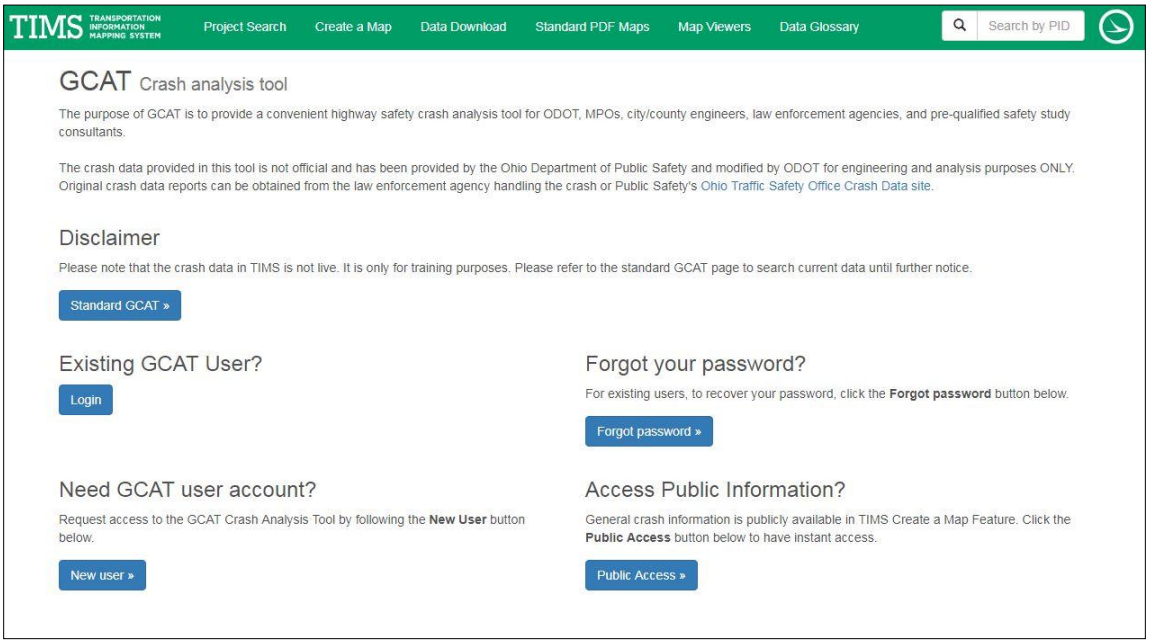
7.2 Export and download the search results

1. To save the search results into an Excel spreadsheet, press the **Export** button.
2. While the spreadsheet is generating, a revolving circle appears over the **Download** button. Once complete, the **Download** button is enabled.
3. Press the **Download** button to save the spreadsheet to your computer. **Note**: *Depending on your browser, the data may be automatically downloaded to a designated folder or you may be prompted for the folder where you want to download it.*

Section 8. Crash Data Search

The **Crash Data Search** section of TIMS is a tool for qualified users which allows for quick analysis of vehicular accidents. Non-qualified users have access to similar data through the **Create a Map** function.

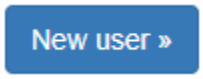
1. From the home page, push the **Crash Data Search** button.
2. The **Crash Data Search** page appears. **Note**: *This page will only display if you have not logged in during your current session.*



3. If you are an existing GCAT User, press the **Login** button to login to GCAT.

4. If you are an existing GCAT user but have forgotten your password, press the **Forgot password** button to be directed to the MYODOT page.

5. To request GCAT access, press the **New user** button for information on applying for access.



6. Press the **Public Access** button to be directed to the public crash layer in Create A Map.

*For more information regarding the Crash Data Search page, please contact the ODOT's Office of Program Management for training opportunities and reference guides.