

State Highway Patrol Mapping Tool



TRAINING MANUAL

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Introduction

The Highway Patrol Mapping Tool has recently been updated. It will be easier to use when looking for crash locations. Some of the features consist of easier zooming into a particular location, having the longitude and latitude in the look-up box, and the ability to have the Emergency Reference Markers (ERMs) displayed on the map.

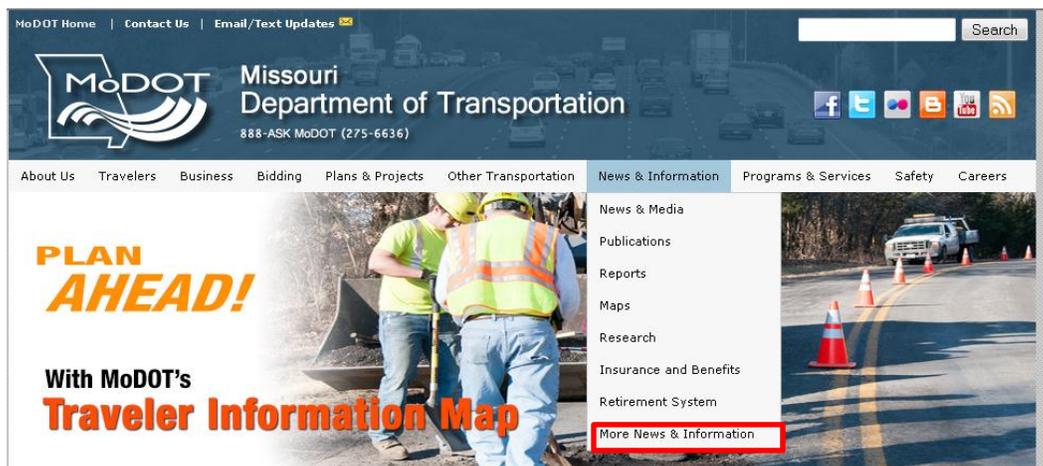
The web pages will appear different but will function in the same way.

Getting Started

To start working with the HP Mapping Tool, you will need to locate the application on the Missouri Department of Transportation Home Page.



- Under News & Information a drop down list will appear
- From the list, choose More News & Information



➤ Scroll through the web page until you get to the General heading

Publications

- 2013 Official State Highway Map
- Highway User Revenue - Local Government Distribution
- *Connections* MoDOT's Employee Newsletter
- Roadside Review
- Annual / Accountability Reports
- Meet MoDOT (1.41mb) **NEW**

Research

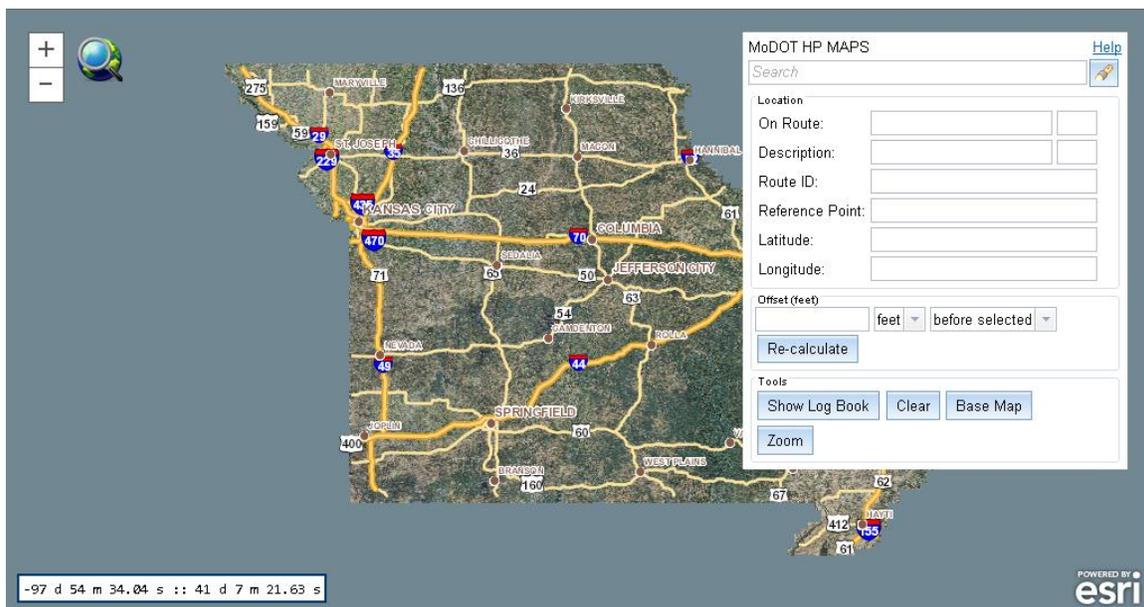
- Research
- Innovative Solutions
- Innovation Library

General

- MoDOT Centennial
- Missouri Pothole Patrol
- Embracing Diversity
- Environmental & Historic Preservation
- Functional Classification Maps
- County Maps
- Human Resources Policy Manual
- MoDOT & Patrol Employees' Retirement System
- Intro page to MoDOT retirement system
- Risk Management Manual
- MoDOT/State Patrol Benefits and Insurance
- **State Highway Patrol Mapping Tool**
- ~~State Highway Patrol Location Book~~
(service for law-enforcement agencies only)
- TEAM Conference
- Traffic Volume Maps
- Transportation Links
- Share Leave FAQ

➤ Under the General heading, choose State Highway Patrol Mapping Tool

The following web page will be displayed.



MoDOT HP MAPS Dialog Box

Search Dialog Box

You can click on any of the travelways or use the Search box to find a travelway. The samples below indicate what text should be entered in the Search box when searching by route, latitude/longitude or travelway ID.

Example: Road name

- Interstate 44: "IS 44"
- US 54 West in Cole County: "US 54 W COLE"
- Route T: "RT T"

Example: Travelways around a latitude/longitude

- Latitude 38.1, Longitude -91.2: "38.1 -91.2"
- Latitude 38.1, Longitude -91.2: "-91.2 38.1"

Example: Travelway ID

- Travelway ID 19: tw 19
- Travelway ID 19: twid 19
- Travelway ID 19: travelway 19

Roadway Name

As you can see from the previous page, there are several ways to enter information into the Search box. To search by roadway name, enter IS 70 into the Search box.

MoDOT HP MAPS [Help](#)

IS 70 

Location

On Route:

Description:

Route ID:

Reference Point:

Latitude:

Longitude:

Offset (feet)

feet before selected

Tools

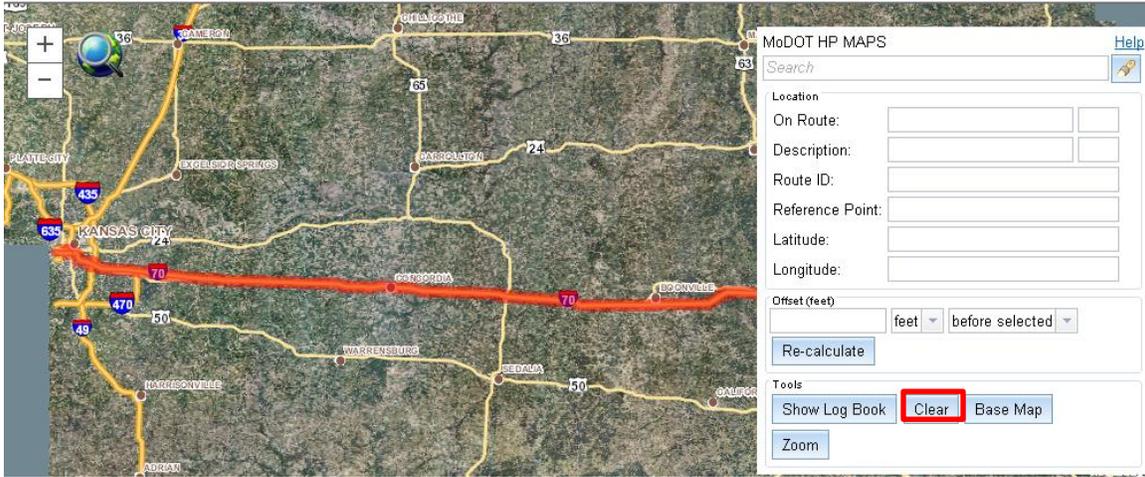
- Type in IS 70 – put a space between the S and the 7 or you will get a listing for ramps
- Press the Enter key on your keyboard

The following dialog box will be displayed.

Choose a Travelway	
Action	Travelway
<input type="button" value="Select"/>	IS 70 E
<input type="button" value="Select"/>	IS 70 W

- Click the Select button next to the travelway you want displayed
- For this example, choose IS 70 E

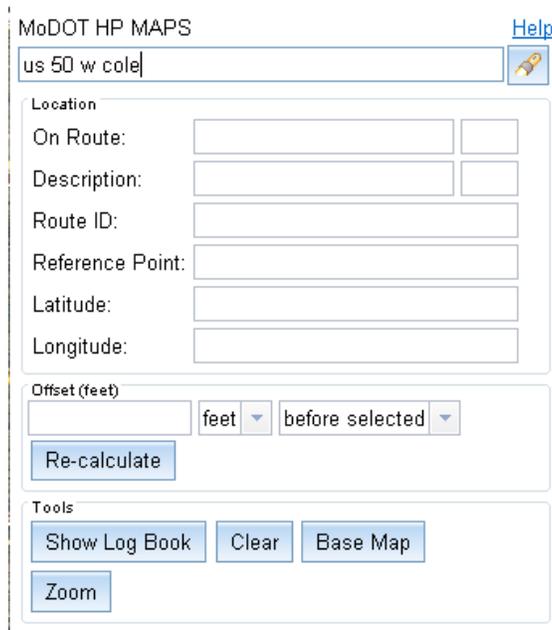
The following results will be displayed.



The entire route of IS 70 is indicated by the red line on the map.

Another way to search for a travelway is to drill down closer to a specific area that you want displayed.

- Click on the Clear button on your Search dialog box to prepare for a new search
- In the Search box, enter US 54 W Cole – make sure there are spaces between the designation, name, direction and county
- Press the Enter key on the keyboard



The following result will be displayed.



As you can see, US 54 W in Cole County is outlined in red.

Here's an example of how to search for a lettered route.

- Click on the Clear button on your Search dialog box
- Enter RT T
- Press the Enter key on your keyboard

The following results will be displayed.

The screenshot shows a web application interface for MoDOT HP MAPS. On the left, a window titled "Choose a Travelway" displays a list of travelways. Each entry consists of a blue "Select" button followed by the travelway name and county. On the right, a larger window titled "MoDOT HP MAPS" shows a search bar with "RT T" entered. Below the search bar is a "Location" section with input fields for "On Route:", "Description:", "Route ID:", "Reference Point:", "Latitude:", and "Longitude:". Below this is an "Offset (feet)" section with a text input, a "feet" dropdown, and a "before selected" dropdown, followed by a "Re-calculate" button. At the bottom of the right window is a "Tools" section with buttons for "Show Log Book", "Clear", "Base Map", and "Zoom". A satellite map is visible at the bottom of the right window, showing a road network with a red dot labeled "WIENNA".

Action	Travelway
Select	RT T E, WILDWOOD, ST. LOUIS Co
Select	RT T E, CALLAWAY Co
Select	RT T E, AUDRAIN Co
Select	RT T E, GRUNDY Co
Select	RT T E, MERCER Co
Select	RT T E, CLINTON Co
Select	RT T E, DOUGLAS Co
Select	RT T E, ST. CLAIR Co
Select	RT T N, GASCONADE Co
Select	RT T N, MARIES Co
Select	RT T N, ST. CHARLES Co
Select	RT T N, COLE Co

As you can see on the Choose a Travelway box, every county with a RT T is displayed. Since there are many RT Ts within the state, the counties have been added for easier look up. You can minimize the list by entering the county name in the Search box.

Choose a Travelway x

Action	Travelway
Select	RT T N, PETTIS Co
Select	RT T S, PETTIS Co

MoDOT HP MAPS [Help](#)

rt t pettis

Location

On Route:

Description:

Route ID:

Reference Point:

Latitude:

Longitude:

Offset (feet)

feet before selected

Tools

Both directions come up for RT T in Pettis County.

- Select the direction you want, and the travelway will be outlined in red in Pettis County



Travelway Near a Longitude and Latitude

You can also search for a location by entering latitude and longitude.

- Click the Clear button on the Search page
- Enter the longitude and latitude in the Search dialog box
 - Latitude 38.7751, Longitude -92.2807: "38.7751 -92.2807"
 - Latitude 38.7751, Longitude -92.2807: "-92.2807 38.7751"
- Press the Enter key on your keyboard

As you can see, you are able to enter the longitude and latitude in any order.

Action	Travelway
Select	RT DD N [BOONE]
Select	RT DD S [BOONE]
Select	RT M E [BOONE]
Select	RT M W [BOONE]
Select	CRD PALIS NICHOLS RD N [BOONE]
Select	CRD PALIS NICHOLS RD S [BOONE]

By picking the longitude and latitude, you can see that six travelways in Boone County are displayed.

- Select the Travelway CRD PALIS NICHOLS RD S in Boone County

The following map will be displayed.



Travelway ID

A third way to search for a location is to search by travelway ID. If you know the travelway ID, just enter it into the system using one of the three ways listed below.

- Click on the Clear button to clear the Search dialog box
- Enter the travelway ID
 - Travelway ID 19: tw 19
 - Travelway ID 19: twid 19
 - Travelway ID 19: travelway 19
- Press the Enter key on your keyboard

The screenshot shows the MoDOT HP MAPS interface. On the left, a window titled "Choose a Travelway" displays a list of travelway options for IS 70 E, each with a "Select" button. On the right, the main interface shows the search input "tw 19" and a "Location" section with fields for "On Route:", "Description:", "Route ID:", "Reference Point:", "Latitude:", and "Longitude:". Below this is an "Offset (feet)" section with a text input, a "feet" dropdown, and a "before selected" dropdown, along with a "Re-calculate" button. At the bottom, a "Tools" section contains buttons for "Show Log Book", "Clear", "Base Map", and "Zoom". A map at the bottom shows a road network with "Muddy Creek" and "Georgetown" labeled.

Action	Travelway
Select	IS 70 E, JACKSON Co
Select	IS 70 E, LAFAYETTE Co
Select	IS 70 E, SALINE Co
Select	IS 70 E, COOPER Co
Select	IS 70 E, BOONE Co
Select	IS 70 E, CALLAWAY Co
Select	IS 70 E, MONTGOMERY Co
Select	IS 70 E, WARREN Co
Select	IS 70 E, ST. CHARLES Co
Select	IS 70 E, ST. LOUIS Co
Select	IS 70 E, ST. LOUIS CITY Co

As you can see, IS 70 E is listed by county. Just select the county you want to work in, and the travelway will be outlined in red for that county. For this example, we are going to select IS 70 E in Cooper County.

- Click the Select button next to IS 70 E, Cooper County



The route for IS 70 E in Cooper County is outlined in red.

NOTE: *In the search box, the travelway information is not case sensitive. This allows you to enter your travelway information in any format (for example, is 70 e or IS 70 E). Also, press the Clear button to perform a new search.*

Choosing an Intersection

Click on an intersecting street to select it, and that will place a yellow dot on the map for that location.

- Scroll through the intersections and bridges in the listing
- Select the intersection – MO 9 S



Log Book			
RP IS35N TO IS35N N		1.041	JACKSON
IS 35 N	WJ	1.041	JACKSON
RP US169S TO IS35N N	WJ	1.05	JACKSON
CST BROADWAY S		1.05	JACKSON
US 169 N	EJ	1.06	JACKSON
RR UNKNOWN S		1.095	JACKSON
RP US169S TO IS35N N	MJ	1.198	JACKSON
CST WYANDOTTE ST S		1.211	JACKSON
RP IS35N TO SIXTH ST E		1.234	JACKSON
CST DELAWARE ST S		1.304	JACKSON
RP SIXTH ST TO IS35N E		1.407	JACKSON
CST WALNUT ST S		1.416	JACKSON
CST GRAND AVE S		1.486	JACKSON
RP IS35N TO MO9N N	MJ	1.499	JACKSON
RP IS35N TO SIXTH ST E		1.499	JACKSON
RP MO9S TO IS35N S	MJ	1.606	JACKSON
CST HEART OF AMERICA BRDG S		1.652	JACKSON
MO 9 S		1.652	JACKSON
MO 9 N		1.659	JACKSON

Buttons: Show ERM, Hide ERM, Hide Log Book

All of the intersections and bridges are listed. As you can see, you will need to use the scroll bar to see all of the intersections and bridges for Jackson County.

Log Book			
IS 35 N	WJ	1.041	JACKSON
RP IS35N TO IS35N N		1.041	JACKSON
RP US169S TO IS35N N	WJ	1.05	JACKSON
CST BROADWAY S		1.05	JACKSON
US 169 N	EJ	1.06	JACKSON
RR UNKNOWN S		1.095	JACKSON
RP US169S TO IS35N N	MJ	1.198	JACKSON
CST WYANDOTTE ST S		1.211	JACKSON
RP IS35N TO SIXTH ST E		1.234	JACKSON
CST DELAWARE ST S		1.304	JACKSON
RP SIXTH ST TO IS35N E		1.407	JACKSON
CST WALNUT ST S		1.416	JACKSON
CST GRAND AVE S		1.486	JACKSON
RP IS35N TO MO9N N	MJ	1.499	JACKSON
RP IS35N TO SIXTH ST E		1.499	JACKSON
RP MO9S TO IS35N S	MJ	1.606	JACKSON
MO 9 S		1.652	JACKSON
CST HEART OF AMERICA BRDG S		1.652	JACKSON
MO 9 N		1.659	JACKSON

You will see a black line underneath the intersection when you hover over it before selecting.

- Click on the intersection
- Click the Hide Log Book button

There will be a yellow dot where IS 70 E crosses MO 9 S.



The MoDOT HP MAPS dialog box will be filled out with the information pertaining to that location.

MoDOT HP MAPS [Help](#)

Search 

Location

On Route:

Description:

Route ID:

Reference Point:

Latitude:

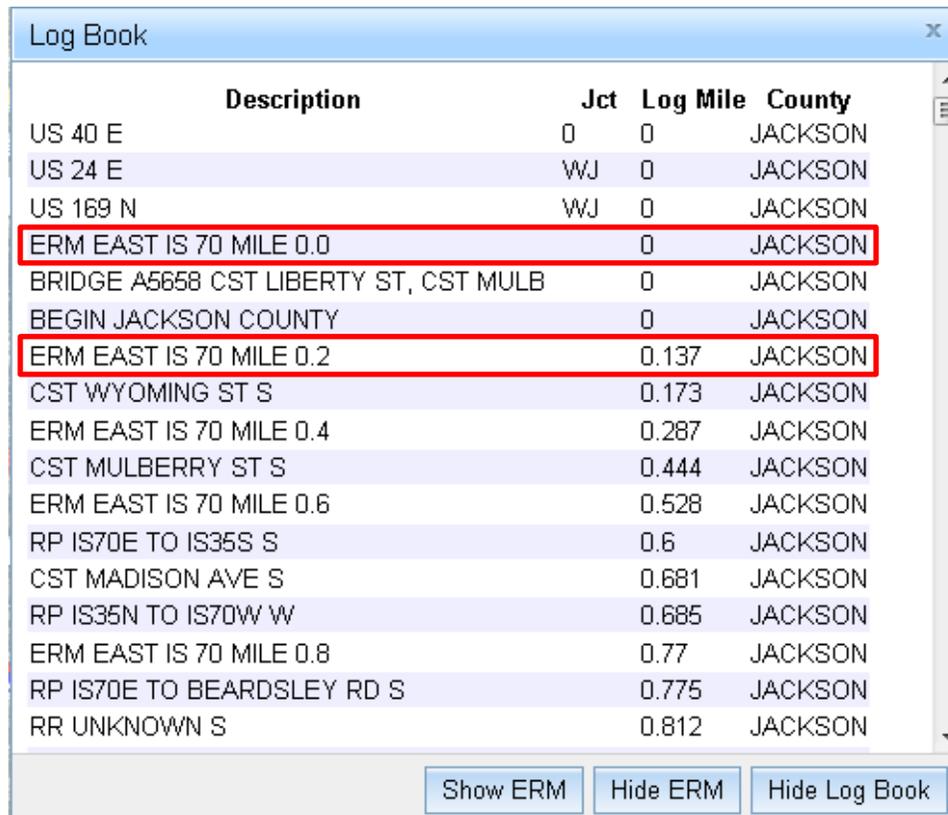
Longitude:

Offset (feet)

Tools

Show ERM

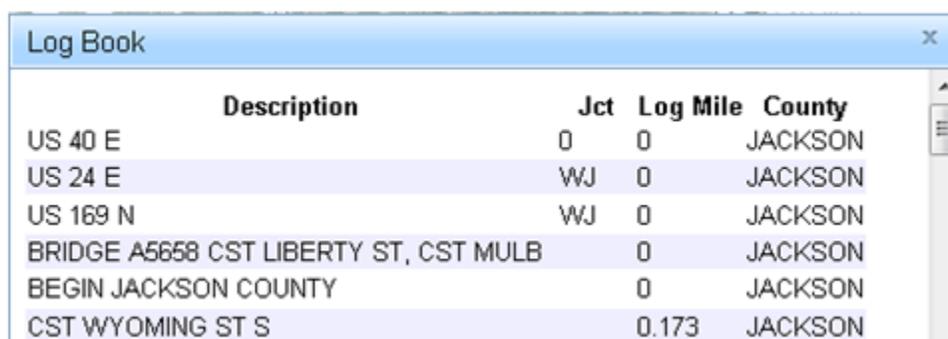
MoDOT has ERMs located on all Interstates and a few US travelways. If you want to see the ERMs for a route, click the “Show ERM” button. Once you have clicked on the button, the ERMs will be listed. ERMs are located every 0.2 mile.



Description	Jct	Log Mile	County
US 40 E	0	0	JACKSON
US 24 E	WJ	0	JACKSON
US 169 N	WJ	0	JACKSON
ERM EAST IS 70 MILE 0.0	0		JACKSON
BRIDGE A5658 CST LIBERTY ST, CST MULB	0		JACKSON
BEGIN JACKSON COUNTY	0		JACKSON
ERM EAST IS 70 MILE 0.2	0.137		JACKSON
CST WYOMING ST S	0.173		JACKSON
ERM EAST IS 70 MILE 0.4	0.287		JACKSON
CST MULBERRY ST S	0.444		JACKSON
ERM EAST IS 70 MILE 0.6	0.528		JACKSON
RP IS70E TO IS35S S	0.6		JACKSON
CST MADISON AVE S	0.681		JACKSON
RP IS35N TO IS70W W	0.685		JACKSON
ERM EAST IS 70 MILE 0.8	0.77		JACKSON
RP IS70E TO BEARDSLEY RD S	0.775		JACKSON
RR UNKNOWN S	0.812		JACKSON

Hide ERM

To turn off the ERMs, just click the Hide ERM button, and they will be removed from the intersecting list.



Description	Jct	Log Mile	County
US 40 E	0	0	JACKSON
US 24 E	WJ	0	JACKSON
US 169 N	WJ	0	JACKSON
BRIDGE A5658 CST LIBERTY ST, CST MULB	0		JACKSON
BEGIN JACKSON COUNTY	0		JACKSON
CST WYOMING ST S	0.173		JACKSON

Offset

A crash may not have occurred directly at an intersection. You can use the Offset dialog box to locate the crash in the correct location.

For example, here is the intersection that was originally located.

MoDOT HP MAPS [Help](#)

Search

Location

On Route: IS 70 E

Description: MO 9 S

Route ID: 19

Reference Point: 1.652

Latitude: 39 d 6 m 23.57 s

Longitude: -94 d 34 m 37.45 s

Offset (feet)

0 feet before selected

Re-calculate

Tools

Show Log Book Clear Base Map

Zoom

For this example, the crash occurred 36 feet after MO 9 S.

- Enter 36 in the Offset box – there will be an option for feet or miles
- In the drop down, box you can choose either “before selected” or “after selected” – choose “after selected”
- Click the Re-calculate button

The new calculations of the crash location are shown below:

MoDOT HP MAPS [Help](#)

Search 

Location

On Route:	IS 70	E
Description:	36 feet after MO 9	S
Route ID:	19	
Reference Point:	1.65	
Latitude:	39 d 6 m 23.57 s	
Longitude:	-94 d 34 m 37.02 s	

Offset (feet)

36 feet after selected

Re-calculate

Tools

Show Log Book Clear Base Map

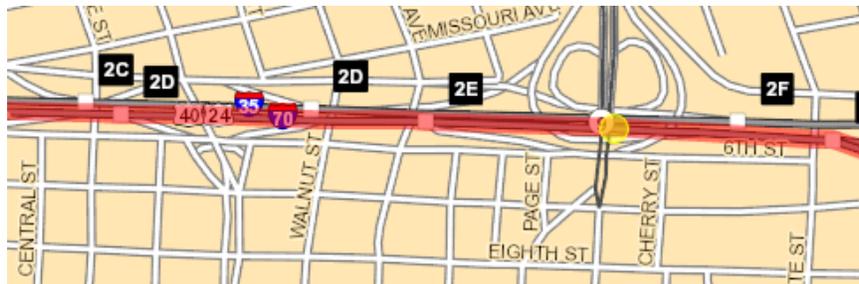
Zoom

Base Map

The Base Map button on the MoDOT HP MAPS window allows you to change the look of the map. The default map shows the roads with aerial photography in the background.



When you click on the Base Map, the aerial photography is turned off.

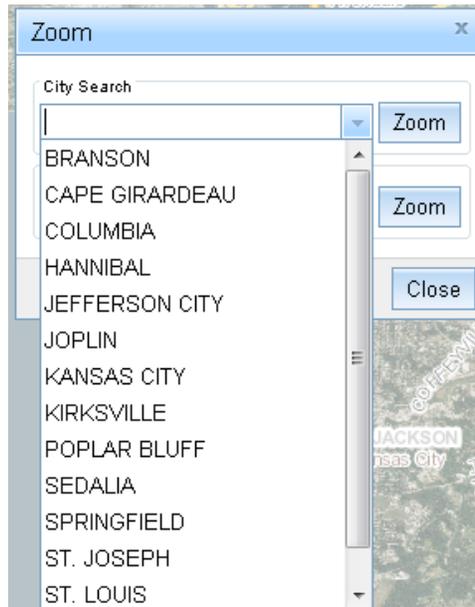


Zoom Button

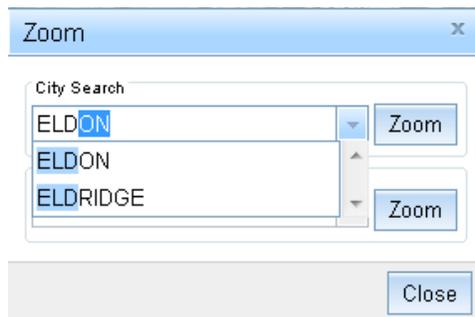
A Zoom button has been added to the main panel. The Zoom button will display two dialog boxes for a “City Search” and “County Search”.

City Search

If you click on the drop down arrow next to the “City Search”, only the most populous cities and a few more key areas around the state are displayed. The reason for the limited number of cities is because there are too many to list in the drop down box.



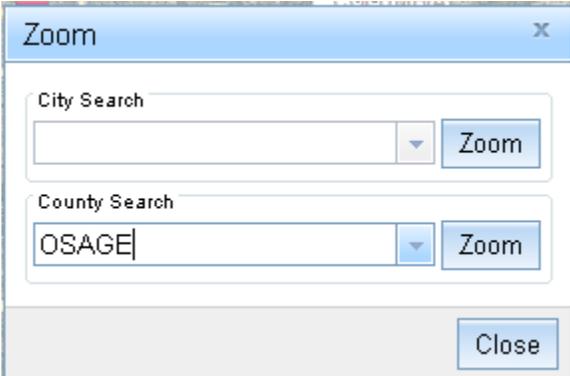
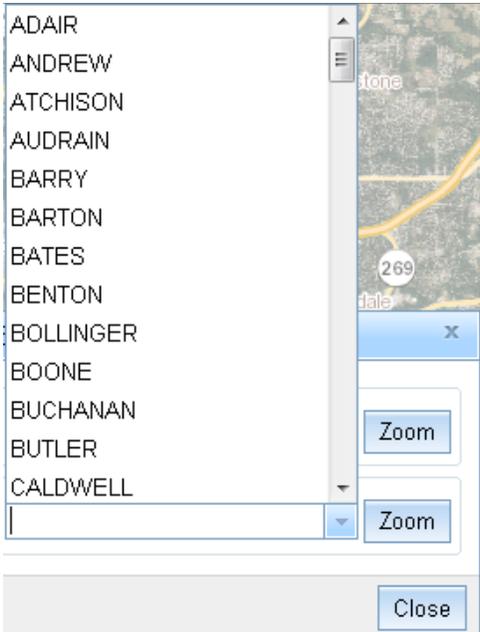
If you begin typing a city, most any city in Missouri (“Eldon”, for instance), it will search for that city and auto-complete the name.



After you have selected your city, click the Zoom button, and you will zoom to that area.

County Search

All counties will be shown when you click the county drop down arrow. You can also type a county name if you choose to do so.



After you have selected your county, click the Zoom button, and you will zoom to that area.

NOTE: To clear the City or County search, just put your cursor at the end of the city or county and hit the Backspace key or highlight the name and hit the Delete key.

Zooming/Moving Map

In order to move the map to get a better view of the crash location, left click your mouse button and down, and a quad arrow  will appear. You can drag the arrow in any direction, and the map will move in the direction that you drag the mouse.

You can zoom to a location in three ways. The first way is to use the zoom in button (+) on the map.



- Click on the plus button, and the map will automatically zoom in to the location
- Click on the minus button, and the map will automatically zoom out of the location

The second way you can zoom into the crash location is by holding down the shift key and drawing a box around the area with your left mouse button.

The third way is to double click to zoom in.



- This button takes you to a state level view.

NOTE: You have to zoom in to a certain level before the exit numbers show up.

Contacts:

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