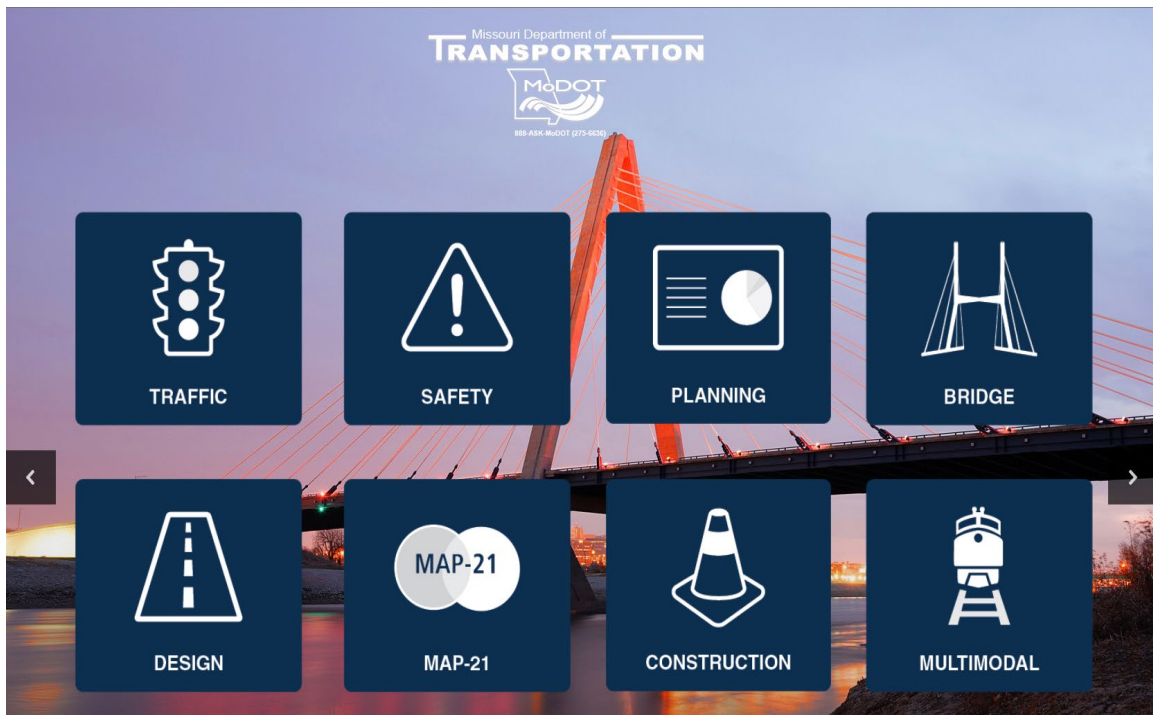


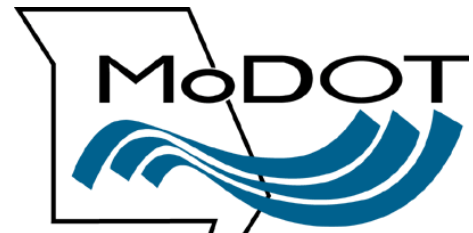
Data Zone Training Manual

Age of Controller Map



REVISED
July 2016

TRANSPORTATION PLANNING
105 West Capitol Avenue
P.O. Box 270
Jefferson City, MO 65102



Contact Numbers

Following is a list of contact numbers if you have questions regarding the material covered in this manual.

TMS HELP DESK:

Valerie Minnick	(573) 526-8055
Deann Wieberg	(573) 522-8464

AFTER HOURS CONTACT:

Information Systems Help Desk	(573) 751-5000
-------------------------------	----------------

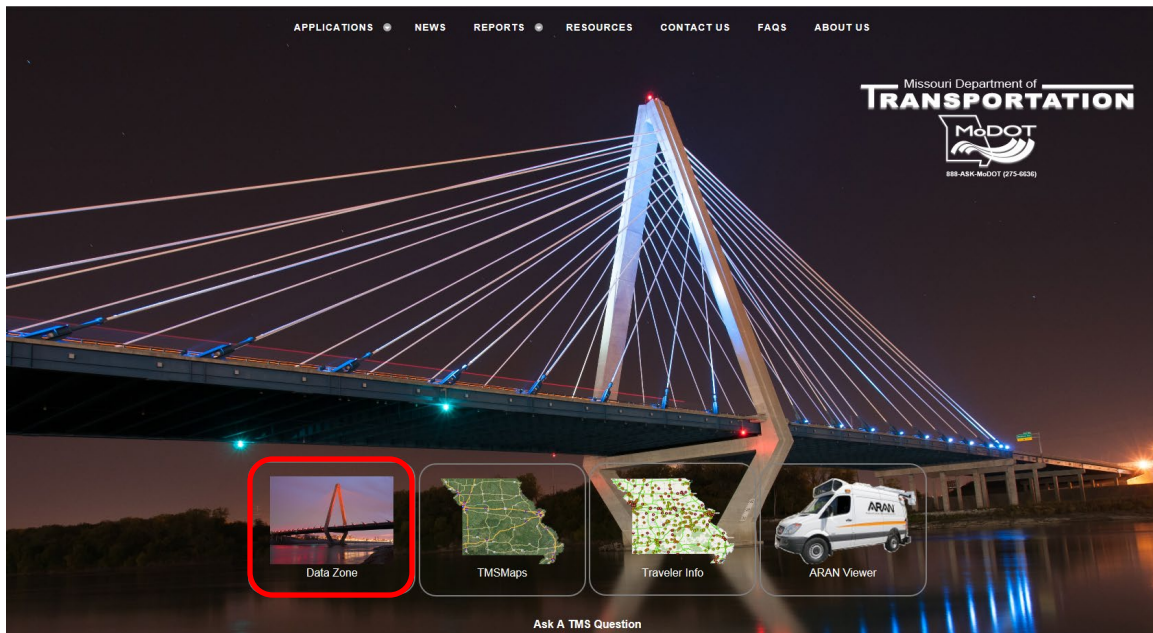
FAX:

Transportation Planning	(573) 526-8052
-------------------------	----------------

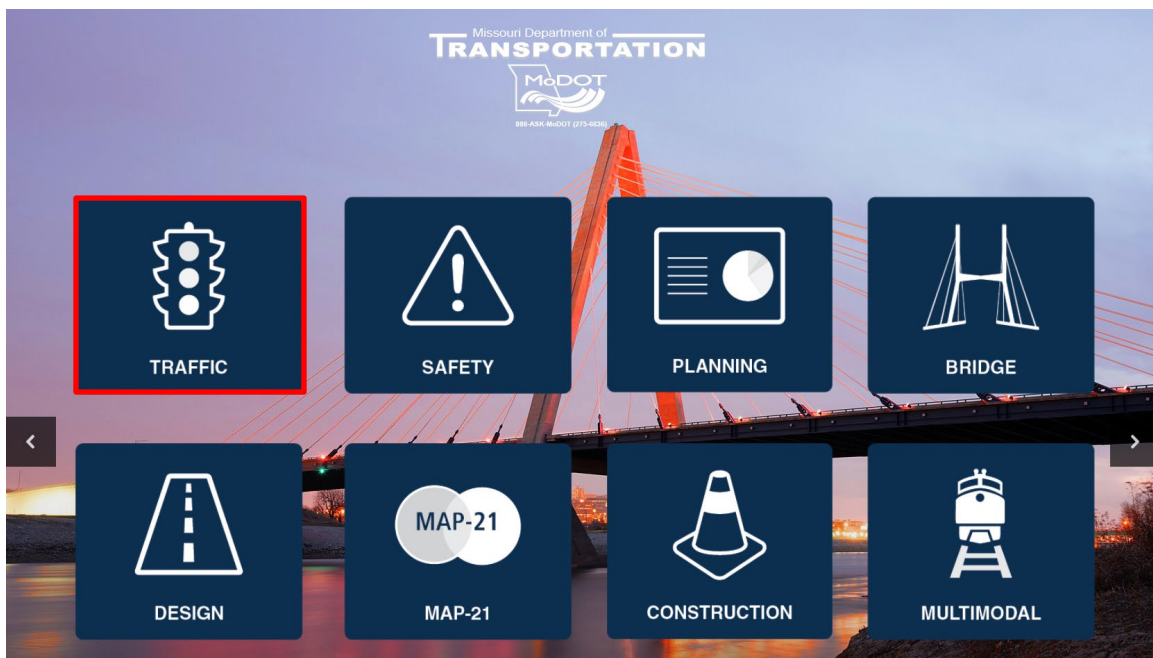
Table of Contents

Signals by Age and Call Report Volume Map	7
Zoom Methods.....	7
Icons.....	8
Legend.....	8
Call Reports	9
ARAN Viewer	14
Play/Pause Buttons	15
Scrub Bar	16
Data	16
Change the Data Elements.....	17
Hide Data.....	18
Change Years/Directions	18
Job Number	19
Fit to Window	19
Inset Map.....	20
IRI Graph	21
Export Data	22
Print.....	23
Hide Other Years/Dirs	23
Free Form	24
Map Button.....	25

From the TMS Homepage, select the "Data Zone" icon.

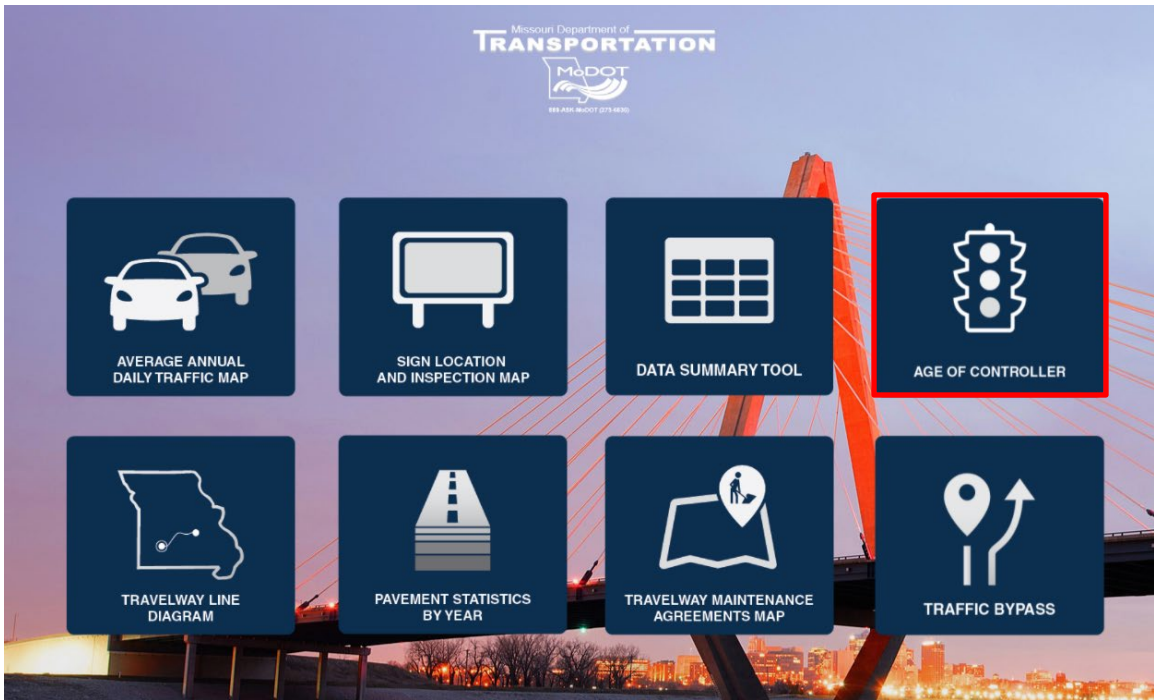


The following page will be displayed.



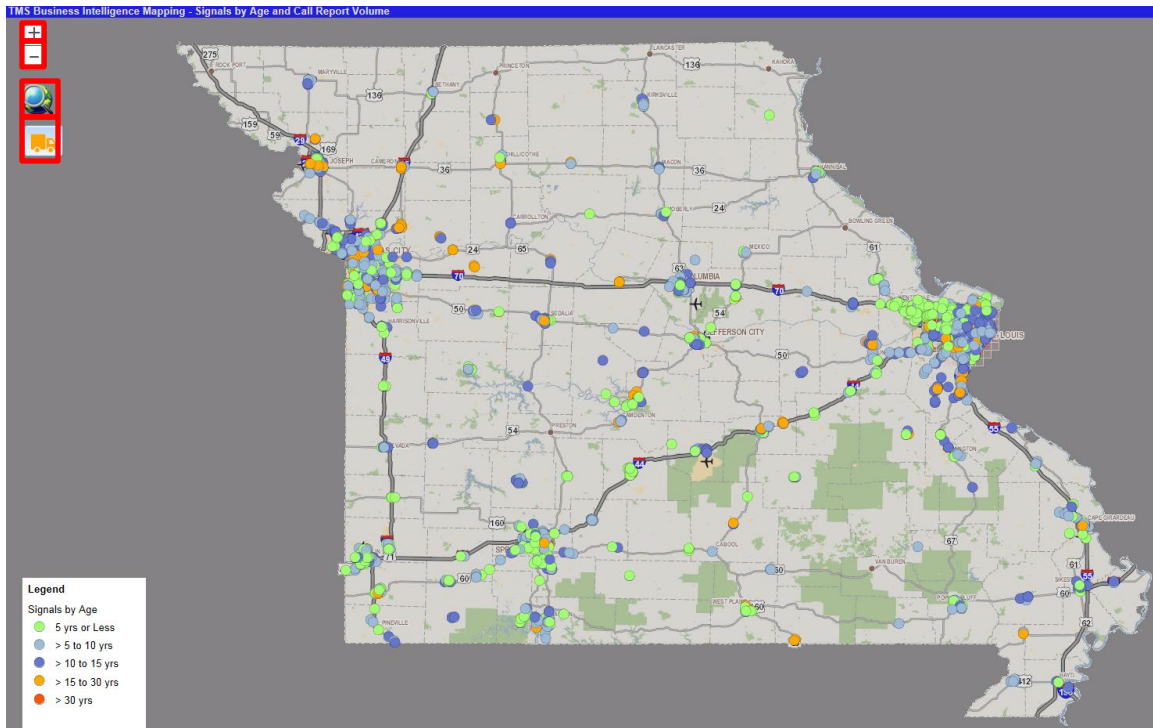
There are several mapping tools and resources available for use categorized by business area.

- Click the "Traffic" icon.



- Click the “Age of Controller” icon. This will flow to the “Age of Controller” map.

Age of Controller and Call Report Volume Map



This map will display all the traffic signals within the state.

Zoom Methods

The following methods can be used when zooming into a particular area:

- Shift Key – click and drag a box around the area
- Mouse roller

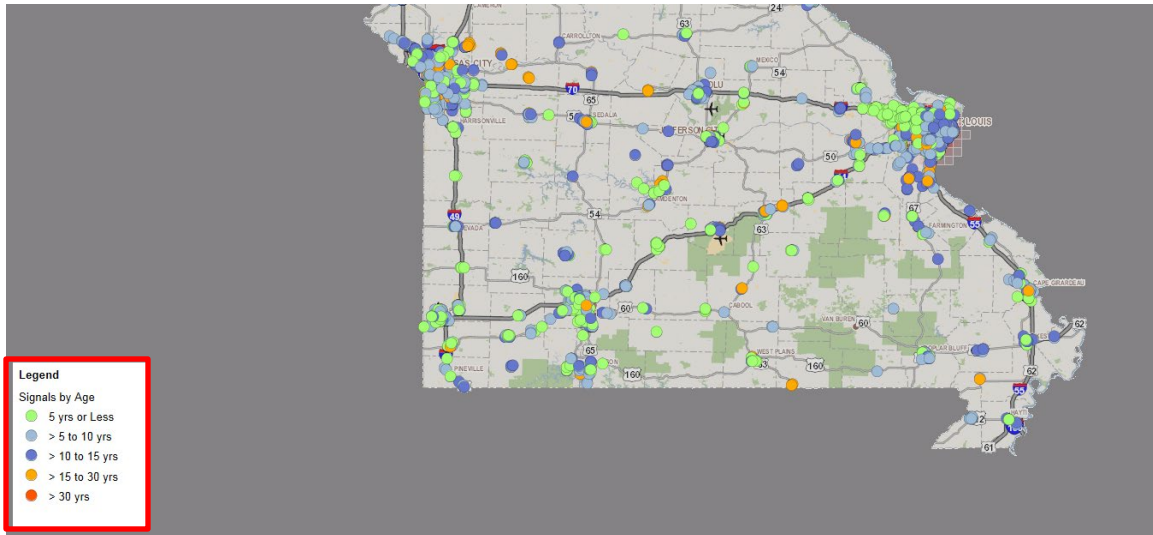


Icons



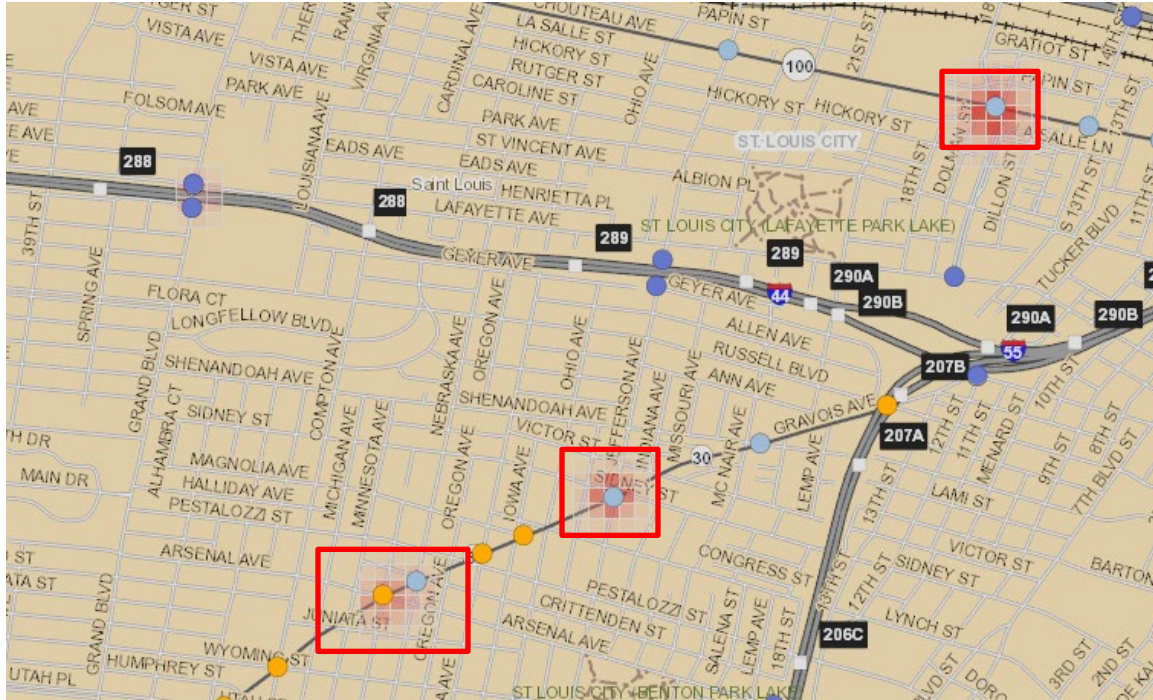
Legend

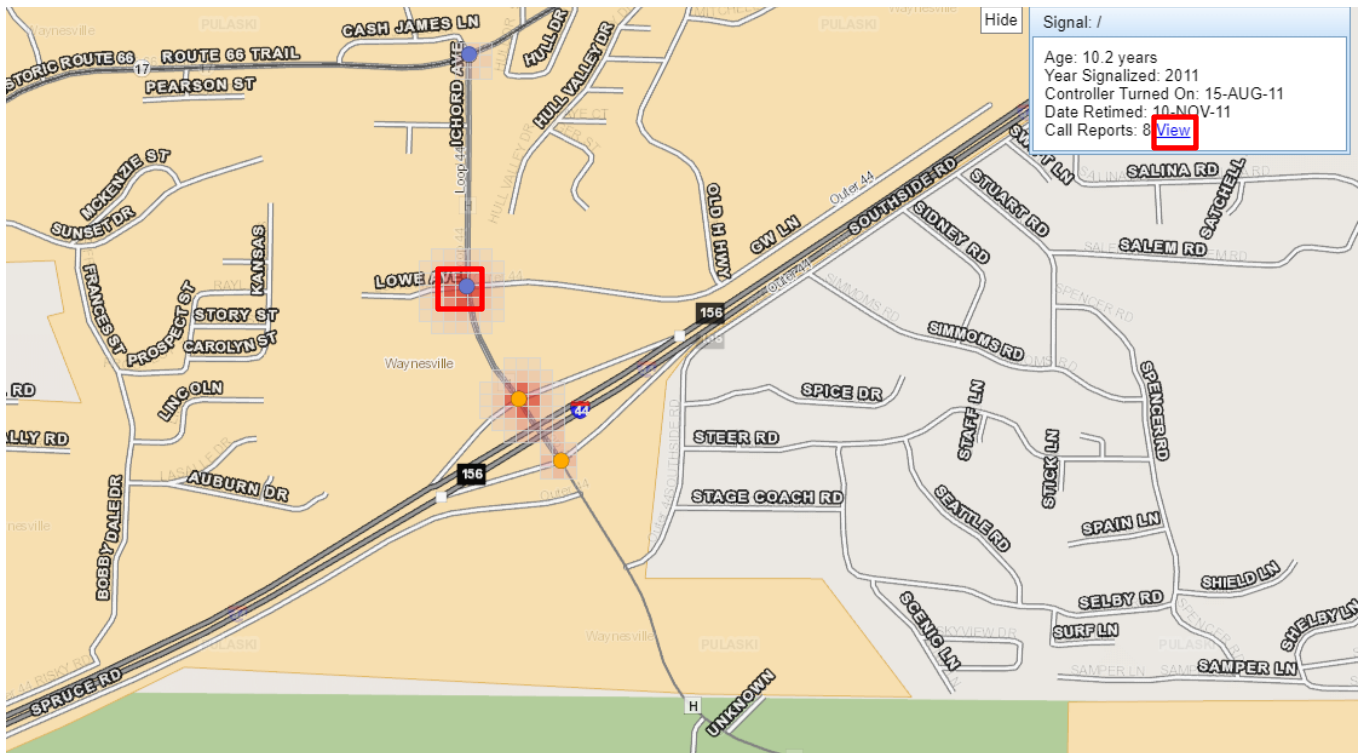
In the bottom left-hand corner is a legend. The color of the dots indicate the signals age.



Call Reports

Zooming into a particular area, you will notice red boxes behind the signal dot. These boxes are call reports that are assigned to the signal for issues that have been reported. To display the call report, click on the signal dot and in the upper right-hand corner a dialog box will appear with the incident report.

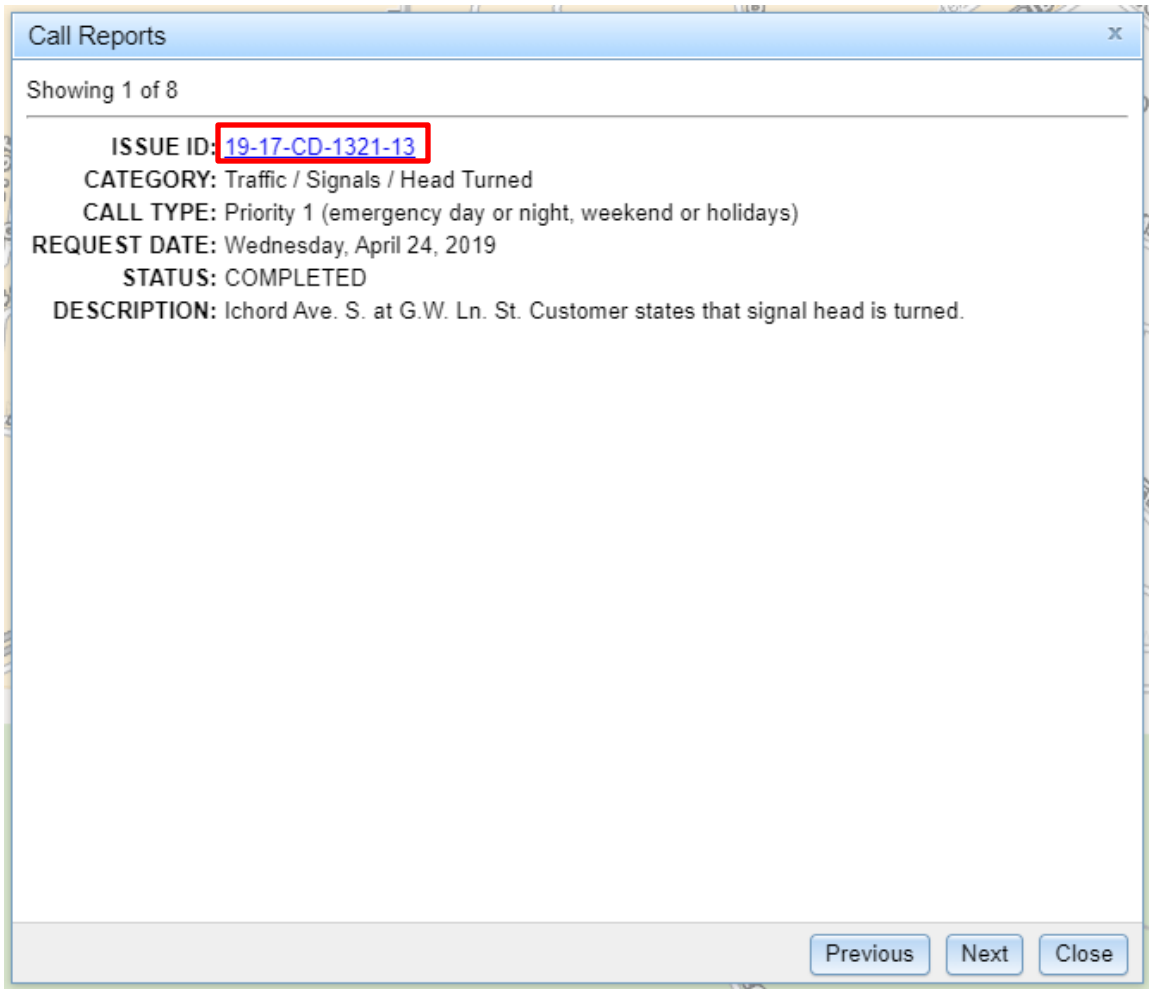




- Click on a signal dot – (see one outlined in red).
- In the upper right-hand corner, the signal information is displayed – “Age”, “Year Signalized”, “Controller Turned On”, “Date Retimed” and “Call Reports”.

For this signal, there are eight call reports attached.

- Click on the “View” hyperlink.



- Click on the "Issue ID" hyperlink. The incident report will be displayed.

Customer Service Center: Issue Details: Report # 19-17-CD-1321-13

[Edit Document](#)
[Create New Report](#)
[Exit No Save](#)
[Send To Assigned](#)
[Cancel Call Report](#)
[Reopen Closed Report](#)

[Print](#)

[Email link to this Call Report](#) [Go To: \(Top\) \(Topic\) \(Location\) \(Customers\) \(Signal\) \(Arrival\) \(Actions\) \(Additional Info\)](#)

Compliment/Positive Customer Comment **Repress Reminders:**
(CS Rep responsible for ensuring completion)

Request logged by: Roselle Palma on 4/24/2019 6:08:47 PM

Request Date: 4/24/2019 05:59 PM **Number of Anonymous Calls Received on This Topic:** 0

Status: COMPLETED

Problem (in customer's words): Ichord Ave. S. at G.W. Ln. St.
Customer states that signal head is turned.

Topic [Go To: \(Top\) \(Topic\) \(Location\) \(Customers\) \(Signal\) \(Arrival\) \(Actions\) \(Additional Info\)](#)

Topic: Traffic **Type of Call:** Priority 1 (emergency day or night, weekend or holidays) **Call From:** PHONE CALL
SubCategory: Signals **Type:** Head Turned Media
 Legislative
 No Funding

Location and Assignment Information [Go To: \(Top\) \(Topic\) \(Location\) \(Customers\) \(Signal\) \(Arrival\) \(Actions\) \(Additional Info\)](#)

Do Not Require Fields

District: CD **County:** PULASKI
Route: CST ICHORD AVE S **Direction:**
 N S E W
Location: at LOWE AVE **Dept:** TH - TRAFFIC & HIGHWAY SAFETY
Org Code: TRAFFIC SIGNAL REPAIR - SOUTHERN COUNTIES (7D76) CD [Text Org](#) **Target Date:** 4/24/2019

Note: A text is sent to org automatically when "Finish and Send" is used.

Assign To: VIRGIL.HELTON@MODOT.MO.GOV
SHAWN.BUSCHJOST@MODOT.MO.GOV
JASON.MORFF@MODOT.MO.GOV
CDSIGNALSOUTH@MODOT.MO.GOV
RYAN.SEALOCK@MODOT.MO.GOV

CC: PRESTON.KRAMER@MODOT.MO.GOV
TRENT.BROOKS@MODOT.MO.GOV
ROBERT.LYNCH@MODOT.MO.GOV
MICHAEL.SCHUPP@MODOT.MO.GOV
SUSAN.SUMMERS-HARMON@MODOT.MO.GOV

[View Assignment Log](#)

Specific Info: Signal #14005 - CST ICHORD AVE S at LOWE AVE

Customers - 0 Anonymous [Go To: \(Top\) \(Topic\) \(Location\) \(Customers\) \(Signal\) \(Arrival\) \(Actions\) \(Additional Info\)](#)

Add Call Back Date	Name	Company	Phone	Email	Call Back Needed	1st Call Back Date	2nd Call Back Date	3rd Call Back Date	Remove
		PULASKI COUNTY PD			N				Remove From Call

Signals [Go To: \(Top\) \(Topic\) \(Location\) \(Customers\) \(Signal\) \(Arrival\) \(Actions\) \(Additional Info\)](#)

Problem Reported

Main Problem: Direction: Indication:

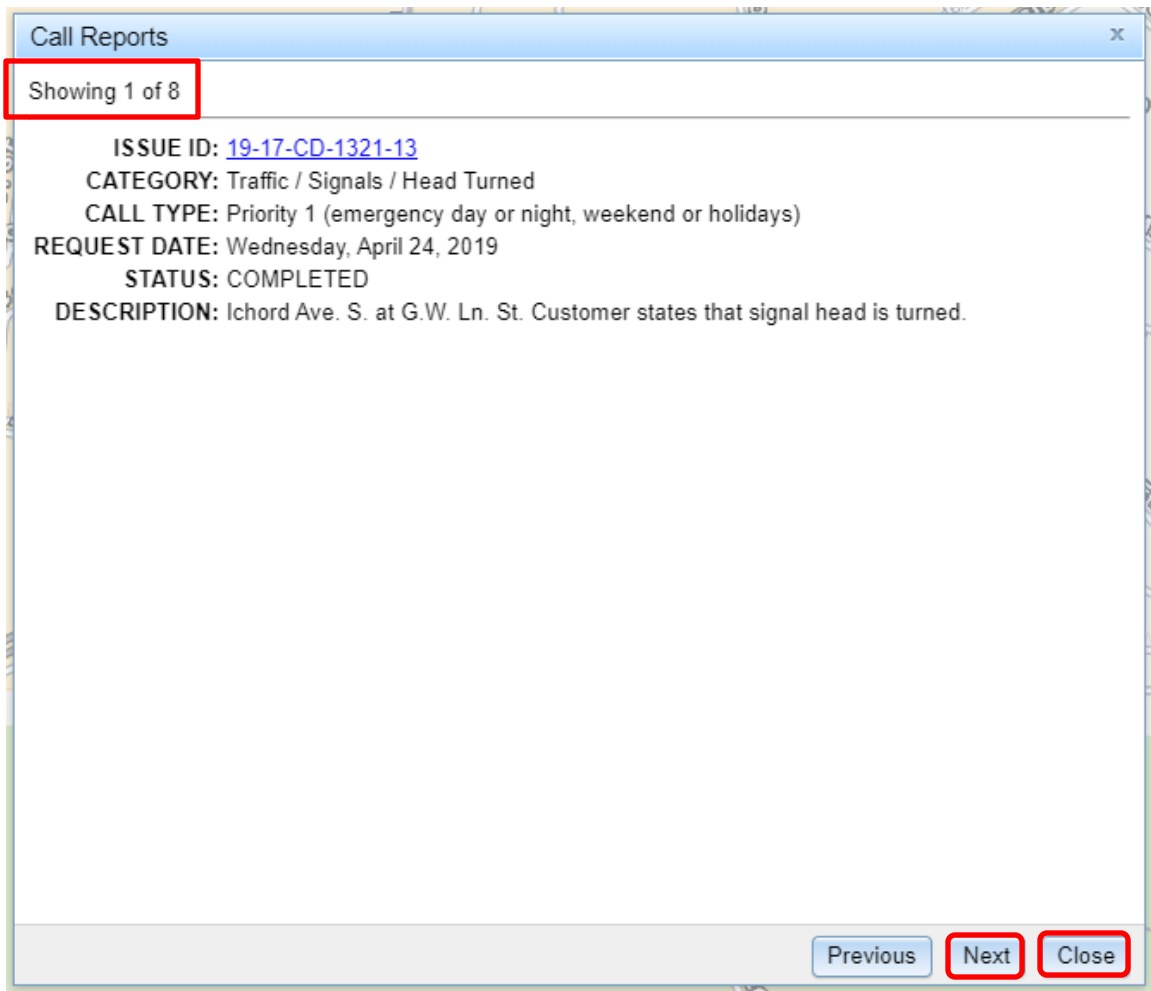
Repaired Item 1

Repaired: Direction: Indication:

Repaired By:

Repaired Item 2

All the information pertaining to the incident for the signal is listed on this report. On the "Call Reports" window, notice that there are eight reports.



- Click the "Next" button. The second call report will be displayed.
- To exit the reports, click the "Close" button.

ARAN Viewer

The ARAN Viewer can be opened from the menu or any of the TMS applications. On the modernized TMS applications, there is a button located on the bottom of the screen that points to the ARAN Viewer.

For example, pull up a travelway in the Traffic Management System, Signal application, and a listing of signals will be displayed. Select a signal, and the "ARAN Viewer" button will become activated.

The screenshot shows the ARAN Viewer interface with a search bar and a table of signal data. The table has the following columns: SIGNAL NUMBER, TRAVELWAY ID, ROUTE, CROSS STREET, COUNTY NAME, LOG, CNTY LOG, OBSERVED DATE, RETIMED DATE, ACCOUNT NUMB, MASTER ACCOUN, YEAR SIGNALIZE, DISTRICT NUMB, DATE TURNED ON, and DAT. The table contains 5 rows of data.

SIGNAL NUMBER	TRAVELWAY ID	ROUTE	CROSS STREET	COUNTY NAME	LOG	CNTY LOG	OBSERVED DATE	RETIMED DATE	ACCOUNT NUMB	MASTER ACCOUN	YEAR SIGNALIZE	DISTRICT NUMB	DATE TURNED ON	DAT
659	7744	BU 50 E	50 WEST RAMP	COLE	0.000	0.000	1/8/2014	5/20/2014	54639605117		1996	4	10/7/2010	10/7
2698	7744	BU 50 E	50 EAST RAMP	COLE	0.094	0.094	6/3/2014	5/20/2014	58413608110		1996	4	10/4/2010	10/4
657	7744	BU 50 E	BUS 50 (MO BULD)	COLE	0.149	0.149	11/8/2013	5/20/2014	52513608113		1993	4	10/6/2010	10/6
13605	7744	BU 50 E	MISSOURI BLVD TO MO179	COLE	0.254	0.254	1/28/2014	5/20/2014	51899128065		2010	4	10/19/2010	10/19
6995	7744	BU 50 E	STONERIDGE HIGHWAY	COLE	0.721	0.721	11/8/2013	5/20/2014	53459095010		2007	4	10/9/2007	10/9

When opening the ARAN Viewer from another application, it will open to the selected location in the previous application. If opening the ARAN Viewer directly from the TMS Homepage, please see "Selecting a New Location" at the end of this document.

The screenshot shows the ARAN Viewer interface with a road view and a data table. The road view shows a gravel road with yellow double lines, surrounded by green trees and grass. The data table has the following columns: Year, Desg, Name, Dir, Tway Id, % Cov, Min Log, and Max Log. The table contains 5 rows of data.

Year	Desg	Name	Dir	Tway Id	% Cov	Min Log	Max Log
2015	RT	M	E	3976	1	5.923	5.963
2014	RT	M	W	3977	1	0.036	0.076
2013	RT	M	E	3976	1	5.917	5.977
2012	RT	M	E	3976	1	5.917	5.964
2011	RT	M	E	3976	1	5.922	5.965

Play/Pause Buttons

The screenshot shows the ARAN Viewer software interface. At the top, there is a header with the MDOT logo and 'ARAN Viewer'. Below the header is a table with columns: Year, Desg, Name, Dir, Tway Id, % Cov, Min Log, and Max Log. The table contains data for years 2011 through 2015. Below the table is a video player showing a road scene with a 'MoDOT' logo in the top left corner. The video player has a progress bar at the bottom with markers for 5.963, 5.963, and 5.963. To the right of the video player is a sidebar with various dropdown menus and a 'Reset to Default' button.

Year	Desg	Name	Dir	Tway Id	% Cov	Min Log	Max Log
2015	RT	M	E	3976	1	5.923	5.963
2014	RT	M	W	3977	1	0.036	0.076
2013	RT	M	E	3976	1	5.917	5.977
2012	RT	M	E	3976	1	5.917	5.964
2011	RT	M	E	3976	1	5.922	5.965

The bottom buttons operate just like a DVD with forward, reverse and stop.

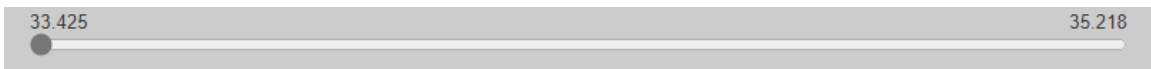


5 mi ▶▶

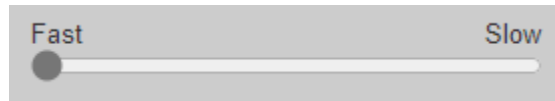
2015 ▼

Scrub Bar

The scrub bar will move along the track as the ARAN truck moves down the road. Alternately, you can drag the scrub bar to the location you want to view in the selected section of roadway.



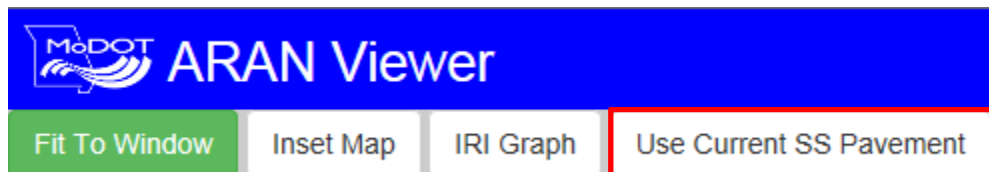
The bar next to the scrub bar is used to set how fast you want the frames to change when playing the video.



Data

On the right-hand side of the video screen, there are 12 drop-down selection boxes that allow you to choose which data elements to view. These will display data from either or both of two sources: the ARAN table and the state of the system pavement table.

It is important to note that there are two options regarding the SS_PAVEMENT data. One option is to view the state of the system data from the same year as the video selected. The other is to view everything using the current state of the system data. This is accomplished by activating the "Use Current SS Pavement" button.



Change the Data Elements

- Select a data type from the drop-down arrow. Multiple changes can be made at one time.

The image displays two screenshots of a data entry form. The left screenshot shows a vertical list of dropdown menus for various fields. The 'FED_CLS_NHS' dropdown is open, showing a list of data types. The 'FED_CLS_STRAHNET' option is highlighted in red. The right screenshot shows the same form, but the 'FED_CLS_NHS' dropdown is now closed, and the value 'STRAHNET' is displayed in the field. The 'FED_CLS_STRAHNET' dropdown is also highlighted in blue.

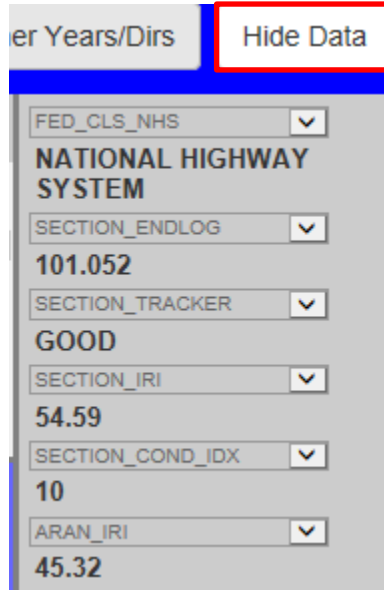
Field	Value
FED_CLS_NHS	NATIONAL HIGHWAY SYSTEM
SECTION_ENDLOG	101.052
SECTION_TRACKER	GOOD
SECTION_IRI	54.59
SECTION_COND_IDX	10
ARAN_IRI	45.32
ARAN_COND_IDX	10
AADT	14513
AADT	14513
AADT	14513
AADT	14513
AADT	14513
FED_CLS_NHS	FED_CLS_STRAHNET
AADT	14513
AADT	14513
AADT	14513
AADT	14513

The ARAN data will change with every image, approximately every 0.02 mile.

Hide Data

If no data is needed, it can be hidden to expand the image window.

- Click the "Hide Data" button.



This will remove the data from the screen. If the data is needed, click the "Show Data" button.

Change Years/Directions

You may want to see previous years' ARAN data; this can be done two ways: (1) by using the year drop-down box next to the pause and play buttons or (2) using the year selection at the top of the screen.

Year	Desg	Name	Dir	Tway Id	% Cov	Min Log	Max Log
2015	IS	70	E	19	100	100.041	105.024
2015	IS	70	W	3506	100	144.973	149.97
2014	IS	70	E	19	100	100.033	105.016

Use the scroll bar located on the right-hand side to find the year or direction of data to view. Divided routes have video in both directions, and all other routes have video in at least one direction.

Job Number

The job number is a set of alphanumeric digits assigned to represent a construction project. The job number shown will be the most recent project completed at that location for the year selected. If a job number is listed, click on it to display the plans for that project.

Fit To Window	Inset Map	IRI Graph	Use Current SS Pavement	Job Number: J5I2169				
Year	Desg	Name	Dir	Tway Id	% Cov	Min Log	Max Log	
2015	IS	70	E	19	100	99.961	104.943	
2015	IS	70	W	3506	100	145.053	150.03	
2014	IS	70	E	19	100	99.973	104.956	
2014	IS	70	W	3506	100	145.054	150.031	
2013	IS	70	F	19	100	99.975	104.955	

Fit to Window

By default, the "Fit to Window" button is active. Click the button to deactivate it, and the image will display full size. Use the scroll bars located on the bottom and right side to adjust the view.

Fit To Window	Inset Map	IRI Graph	Use Current SS Pavement	Job Number: J5D0500A				
2013	IS	70	E	19	100	99.935	104.915	
2013	IS	70	W	3506	100	145.077	150.057	
2012	IS	70	E	19	100	99.935	104.911	
2012	IS	70	W	3506	100	145.077	150.058	
2011	IS	70	E	19	100	99.921	104.906	
2011	IS	70	W	3506	100	145.084	150.062	

Fit To Window	Inset Map	IRI Graph	Use Current SS Pavement	Job Number: J5D0500A			
2013	IS	70	E	19	100	99.935	104.915
2013	IS	70	W	3506	100	145.077	150.057
2012	IS	70	E	19	100	99.935	104.911
2012	IS	70	W	3506	100	145.077	150.058
2011	IS	70	E	19	100	99.921	104.906
2011	IS	70	W	3506	100	145.084	150.062

LOG: 99.961 4:22:17 PM 1AD0E000.1M0

To return the screen to normal, click the "Fit to Window" button again.

Inset Map

Click the "Inset Map" button, and a map will be displayed to the right of the video. This map will show the location of the image and will follow the path of the images while you are driving.

ARAN Viewer

Fit To Window **Inset Map** IRI Graph Use Current SS Pavement

LOG: 3.025 5 1:24:22 PM 58J09000.1M0

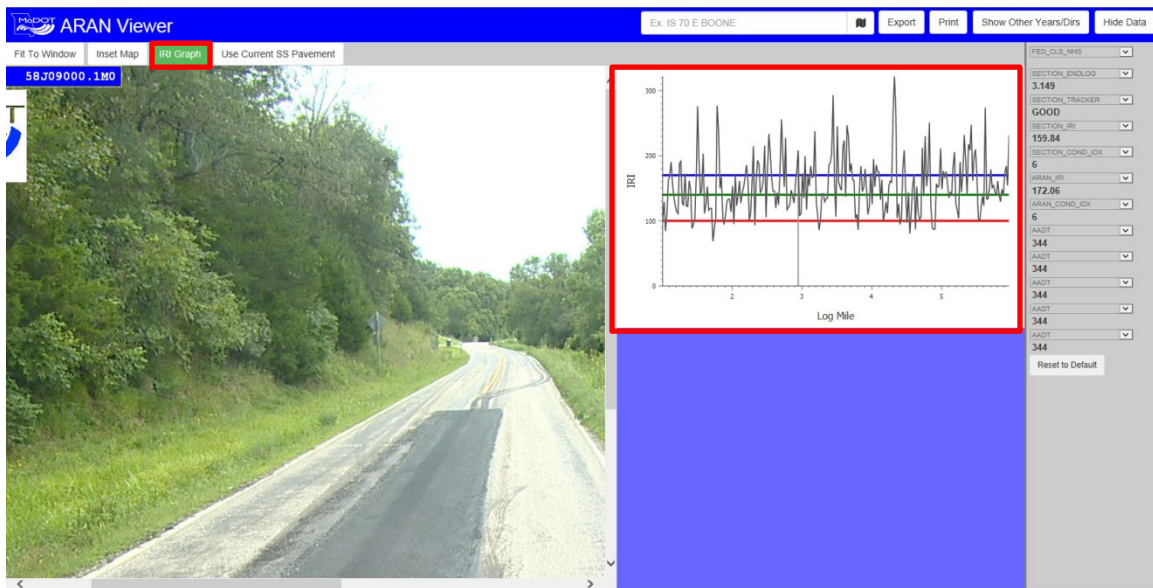
EX: IS 70 E BOONE Export Print Show Other Years/Dirs Show Data

If you are not familiar with the area, use this tool. The map can be used as a secondary tool to follow the ARAN video. As the vehicle is driving down the roadway, the blue dot will follow the same path along the map.

IRI Graph

The IRI (International Roughness Index) Graph is used to tell the smoothness of the road over a tenth of a mile.

- Click the “IRI Graph” button. The graph will be displayed to the right of the video. This graph represents the tenth-mile average of IRI for the section and year selected.



Export Data

There is the ability to export data to either a "movie" or "JPG". The default will be an output type of movie.

Export [X]

You are exporting RT M E from log mile 1.005 to log mile 5.963 for the year 2015.

Name

Email Address

Output Type [v]

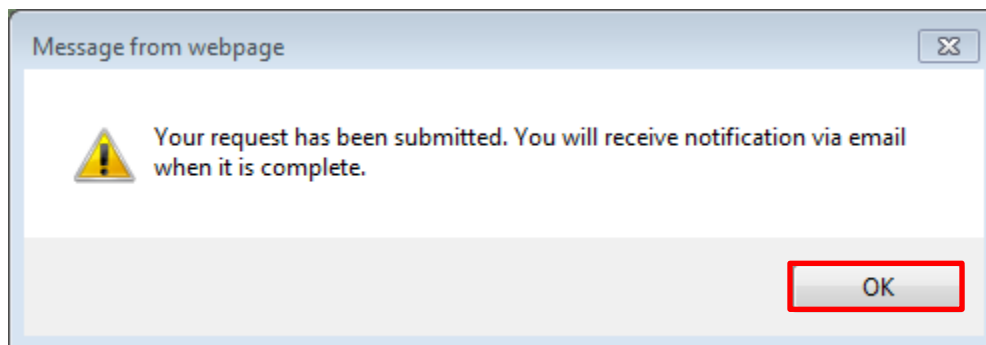
Movie Size* [v]

Frame Rate* [v]

*These settings only apply to an output type of Movie (WMV). If you choose Files (JPG), these settings are ignored.

"Movie Size" and "Frame Rate" are mandatory fields. These fields can be changed with data from the drop-down lists.

- Click the "Submit" button. A notification message will be displayed.



- Click the "OK" button.

Print

In order to print the data that is displayed, do the following:

- Select the location.
- Click the "Print" button.

The picture of the selected roadway will be printed.

Hide Other Years/Dirs

The "Hide Other Years/Dirs" button is used to hide the upper part of the screen which displays the years, designation, and name and direction information.

- Click on the "Hide Other Years/Dirs" button.

The screenshot shows the ARAN Viewer interface. At the top, there is a search bar with "Ex. IS 70 E. BOONE" and buttons for "Export", "Print", "Hide Other Years/Dirs" (highlighted with a red box), and "Hide Data". Below the search bar is a table with columns for "FR To Window", "Inset Map", "IRI Graph", "Use Current SS Pavement", and "Job Number: JSD0500A". The table contains data for years 2013, 2012, 2011, and 2014. Below the table is a map area showing a road network with a blue line indicating the selected location. The map area is partially obscured by a blue banner with the M&DOT logo and the text "LOG 99.961 4-22-17 FR 1A20E000 IHD". On the right side of the interface, there is a sidebar with various dropdown menus and buttons, including "NATIONAL HIGHWAY SYSTEM", "SECTION_ENLGO", "SECTION_TRACKER", "GOOD", "SECTION_IRI", "SECTION_COND_IDX", "7.9", "SECTION_IRI", "179.56", "ARAN_COND_IDX", "8", "AACT", "13230", "AACT", "13230", and "AACT".

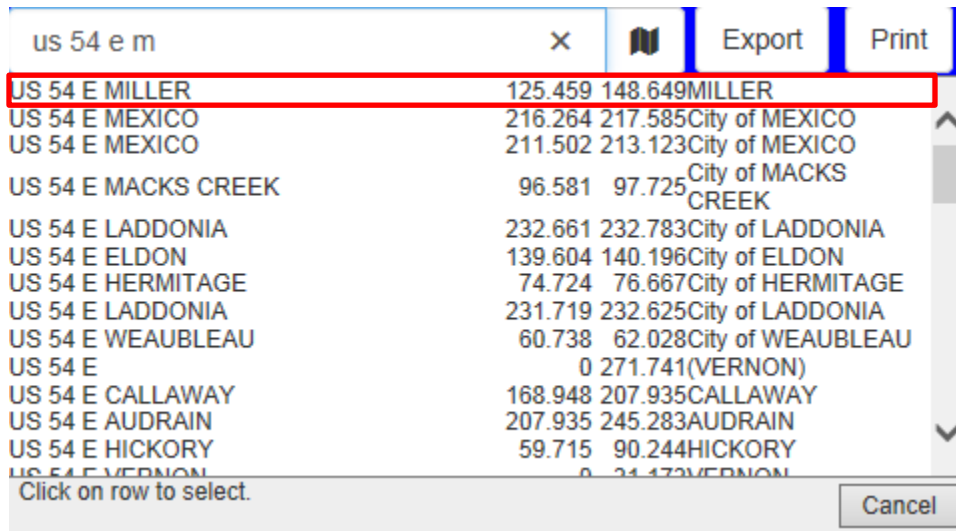
Notice that the upper part of the screen is now hidden. To make data reappear, click the "Show Other Years/Dirs" button.

The screenshot shows the ARAN Viewer interface after clicking the "Hide Other Years/Dirs" button. The top part of the screen is now hidden, and the "Show Other Years/Dirs" button (highlighted with a red box) is visible. The table and map area are still present, but the map area is now fully visible. The sidebar on the right is also visible.

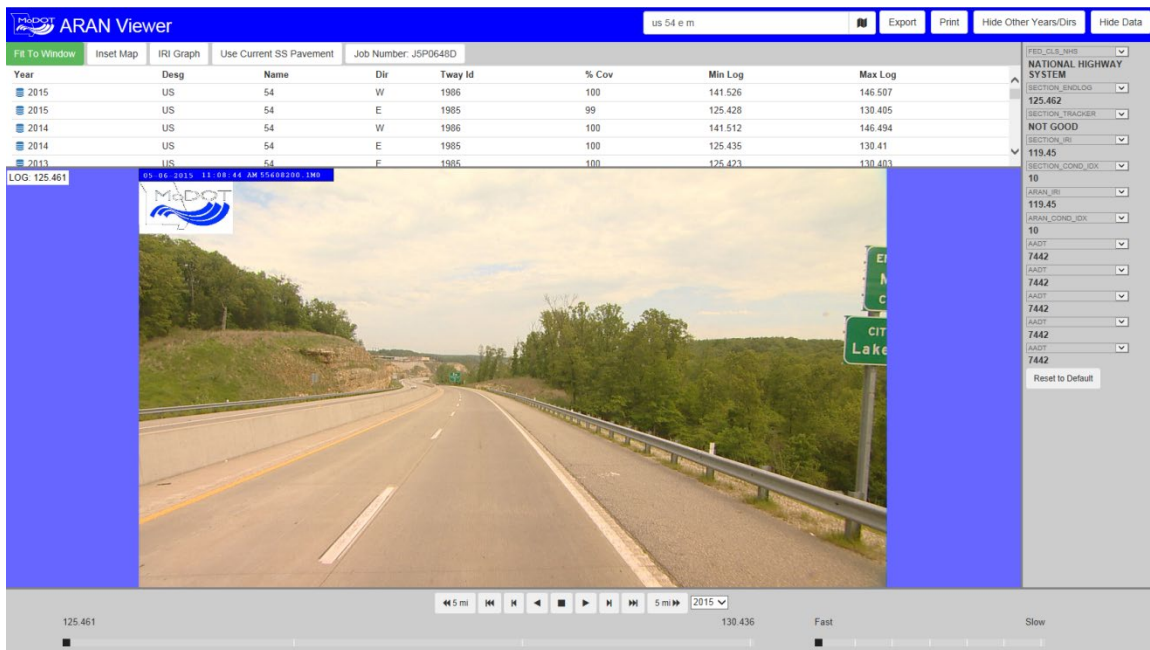
There are two ways to select a location: (1) free form typing or (2) from the map.

Free Form

- In the text box, type the name of the location or the partial name.



- Click the "Enter" button.



Map Button



- Click the icon. A map will be displayed.
- Click on a roadway. If the roadway is not visible, use the “plus” or “minus” button to zoom in or out on the map.
- A listing of the travelways in the area that were selected will be displayed.

Map ✕

The map shows the state of Missouri with major cities and highways. A red box highlights the zoom controls (plus and minus signs) on the left side of the map. The legend at the bottom right shows 'None Selected', 'Cancel', and 'Select' buttons.

None Selected

Map ×

RT M W (3977) Log: 0.043
RT MM N (3549) Log: 0.999
RT MM S (3548) Log: 2.781
RT M E (3976) Log: 5.957
CRD GAGEVILLE RD S (53184) Log: 3.263
CRD ROSS DR W (177035) Log: 0.848
CRD CROSS COUNTRY RD W (177071) Log: 0.235
CRD GAGEVILLE RD N (177069) Log: 2.463
CRD CENTRAL HILL RD S (53148) Log: 0.131
CRD ROSS DR E (53149) Log: 0.369
CRD CROSS COUNTRY RD E (53185) Log: 1.324
CRD CENTRAL HILL RD N (177034) Log: 2.003
PVT UNKNOWN N (966696) Log: 0
PVT UNKNOWN S (966451) Log: 0.19

None Selected

- Select a location.
- Click the "Select" button. This will flow to the new location on the ARAN Viewer.