



Mid Region Council of Governments (MRCOG)

TAQA Application User Guide

Prepared by



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1. TAQA Application Overview

The **Transportation Analysis and Querying Application (TAQA)** makes a range of transportation data easily accessible to member agencies and the public. The goal is to help make informed decisions regarding transportation infrastructure and to assist in the project development process. This user guide will explain how to access transportation data using the app.

2. Accessing the TAQA Application

The TAQA application can be accessed from any modern web browser. Typically, the best browsers to use are Google Chrome, Mozilla Firefox, Microsoft Edge. Use the following URL to launch the application: <https://mrcogmaps.org/taqa>

When the application loads, the user must read the Terms and Conditions, agree to them, and select Ok to use the application.

Welcome to the MRCOG Transportation Analysis and Querying Application (TAQA)

The application supports the ongoing Congestion Management Process and other transportation planning activities undertaken by the Mid-Region Council of Governments.

The traffic volume data contained available in this application have been collected and processed by MRCOG. Travel time data is obtained from INRIX®, a commercially-available travel time dataset that aggregates data from a range of sources. No personal information is requested or recorded in the use of the TAQA tool.

Terms and Conditions

MRCOG offers free use of the transportation data contained in the TAQA. The information contained in the TAQA is for informational purposes only. MRCOG does not warranty or guarantee the information in any manner. MRCOG shall not be responsible for the use or interpretation of the data by any user for any purpose.

To continue, agree to the Terms and Conditions by checking the box below and selecting Ok.

I agree to the above terms and conditions

OK

3. Map Navigation

The TAQA application contains an interactive map that has some basic navigation functions. Along the top left corner of the map, there are a few buttons that can be selected to navigate around the map.



1. Zoom In – select to zoom in one scale.
2. Zoom Out – select to zoom out one scale.
3. Default extent – select to navigate back to the default map extent.
4. Zoom to my location – Zoom to your current computer location. A pop-up window may prompt to allow this.

The mouse can be used to navigate the map as well. The following functions are available:

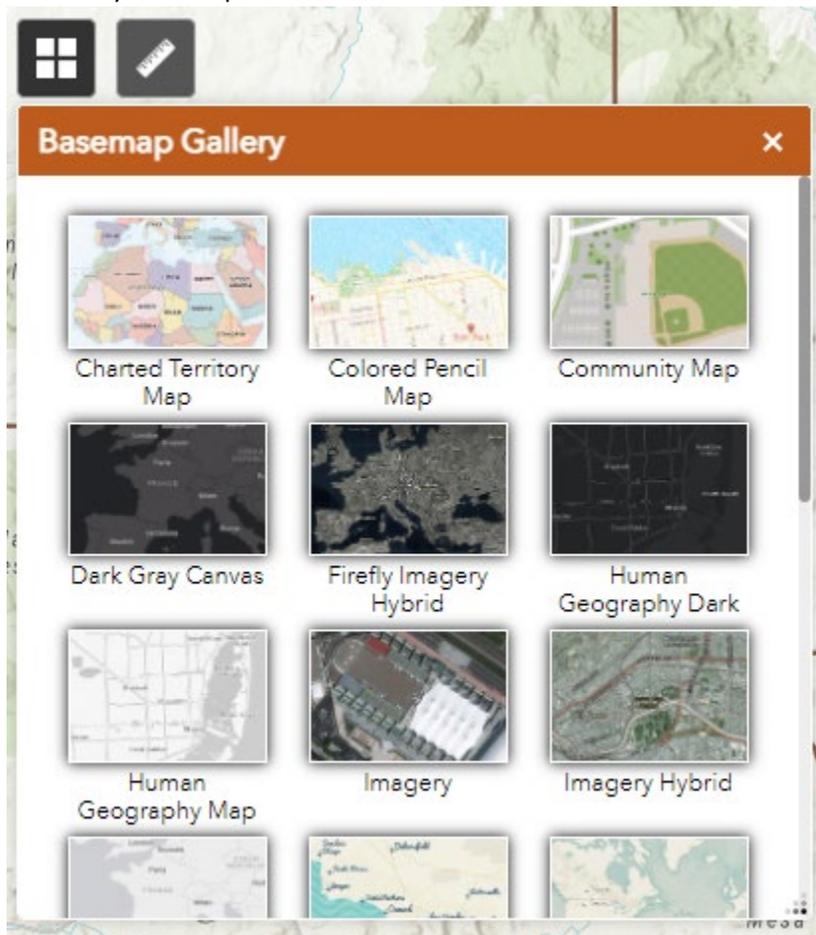
- Left mouse click – Click and hold to drag the map to a new location.
- Mouse wheel - Scroll the mouse wheel forward to zoom in and backward to zoom out. Each wheel click will zoom the map by about 50 percent in width and height.
- Shift and Left mouse click - Hold the Shift key down, then hold the left mouse button down and drag on the map to draw a rectangle. The map will zoom in to the area of the rectangle.
- Double left mouse click - Double-click on the mouse to zoom in or out by about 50 percent in width and height.

4. Application Widgets and Functionality

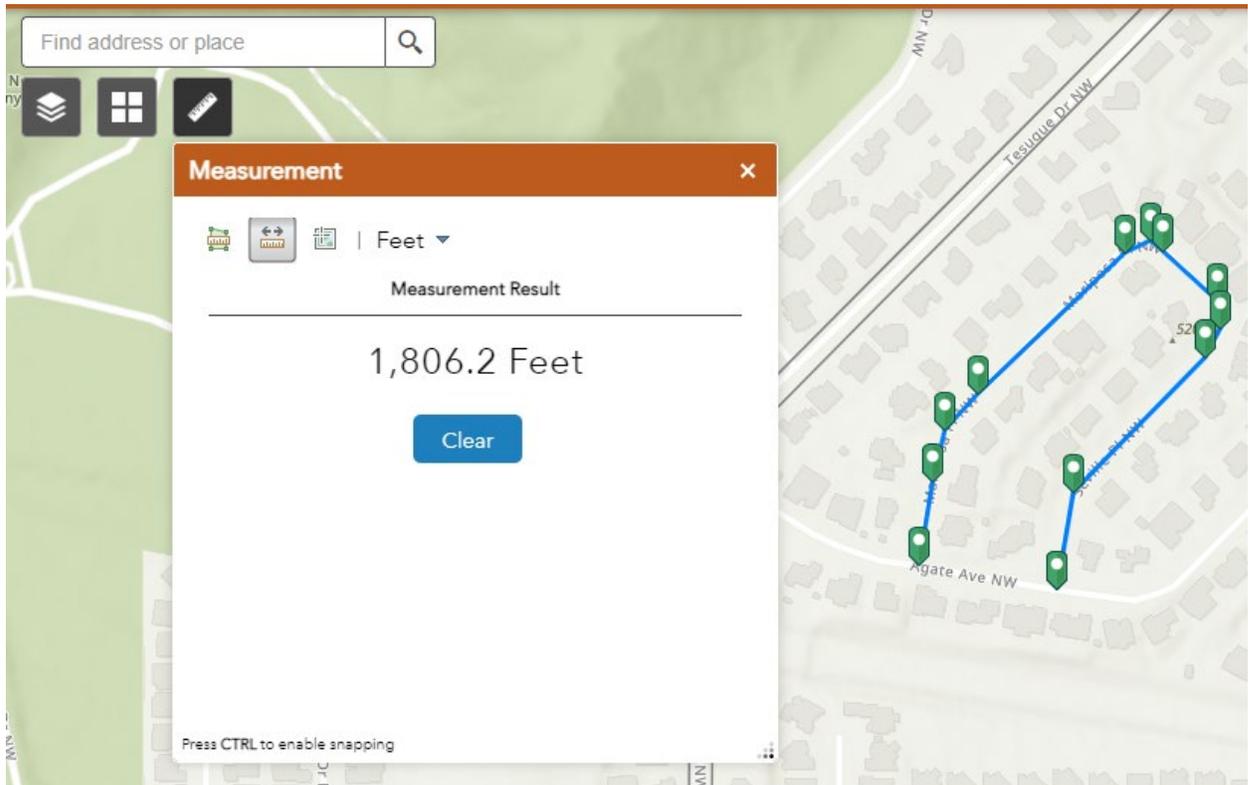
The TAQA app has several useful widgets for interacting with the map and data layers. The following widgets are available:



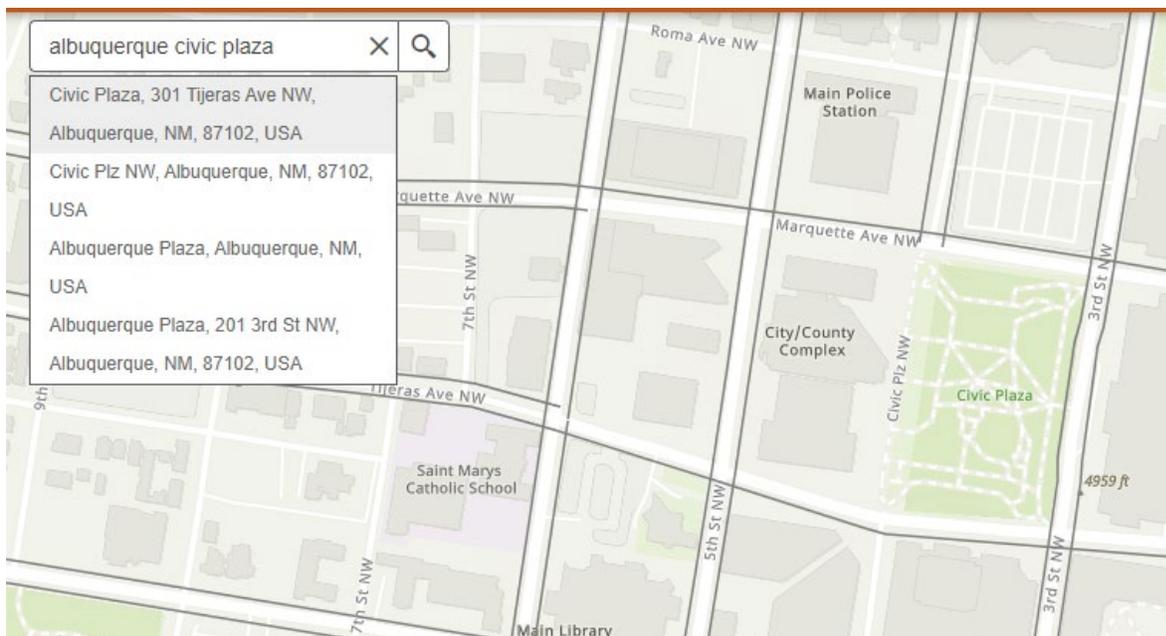
1. Layer List – Displays a list of all the GIS layers available in the application. The layers are described in more detail in a later section.
2. Basemap Gallery – Select a different basemap to display behind the data layers. Left click to select any basemap.

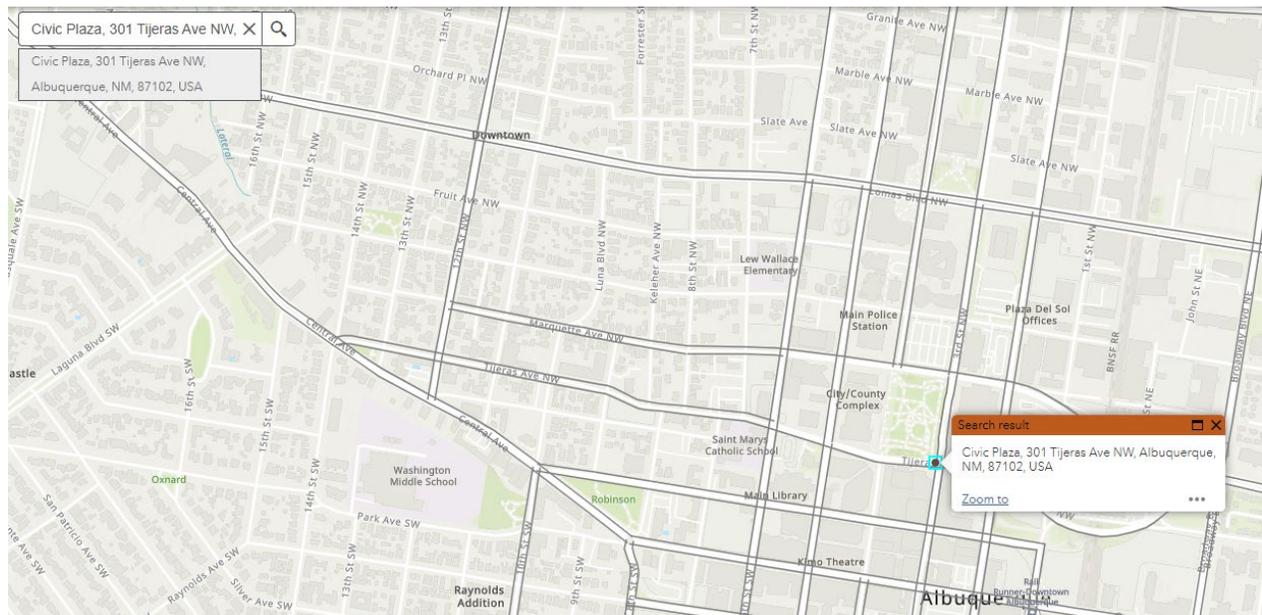


- Measurement – Create temporary linear or area measurements. The user can select different units of measure depending on the type of measurement. Follow the on-screen prompts to draw the measurement.



- Search Bar – Search by an address, road name, intersection or point of interest. A list of results matching the search criteria during typing and after selecting enter will be provided. Left click any of the provided results to navigate to that search result location.





COG ID	Link ID	Functional Class	One Way	Route County	CMP Corridor	From	To	Travel Direction	AWDT	Count Date	Road
1998	19982							E			
10003	100031	Urban Principal Arterial		Sandoval County	UNSER BLVD.	NORTH OF NORTHERN	SOUTH OF 15TH AVE.	N	20028	June 23, 2019	2430
10003	100033	Urban Principal Arterial		Sandoval County	UNSER BLVD.	NORTH OF NORTHERN	SOUTH OF 15TH AVE.	S	20028	June 23, 2019	2430
10004	100041	Urban Principal Arterial		Sandoval County	N.M. 528	NORTH OF CORRALES RD. (NM 448)	.118 MILES NORTH OF CORRAL	N	24022	February 26, 2018	2430
10004	100042	Urban Principal Arterial		Sandoval County	N.M. 528	NORTH OF	1.18 MILES	S	24022	February 26,	2430

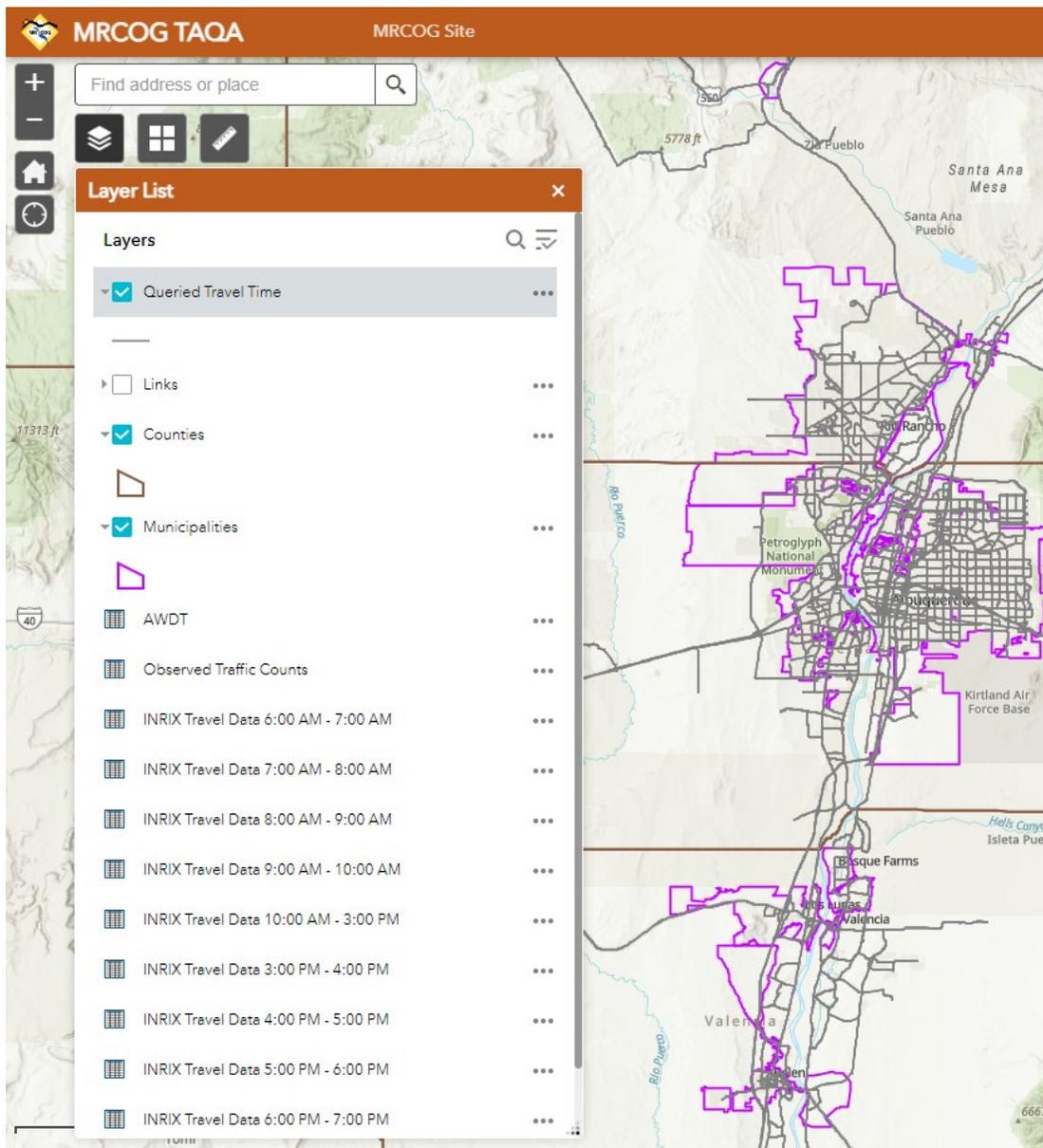
2152 features 0 selected

5. Attribute Table – View attributes about specific records in a map layer or table. Select the black arrow to expand or collapse the attribute table.
 - a. Options: Several options are available for any map layer or table. Export all to CSV can be found from the Options drop-down menu.
 - i. **Note: Please keep in mind that any exports made will contain a snapshot of the Average Speed, Free Flow Speed, Average Travel Time, and TTI values for the selected timeframe.**
 - b. Filter by map extent: This option is set to on by default. This will only show records in the attribute table that are within the map extent. This will only work for a map layer and not for a non-spatial table such as AWDT or Observed Traffic Counts.
 - c. Refresh: Refresh the table and retrieve new records from the database.

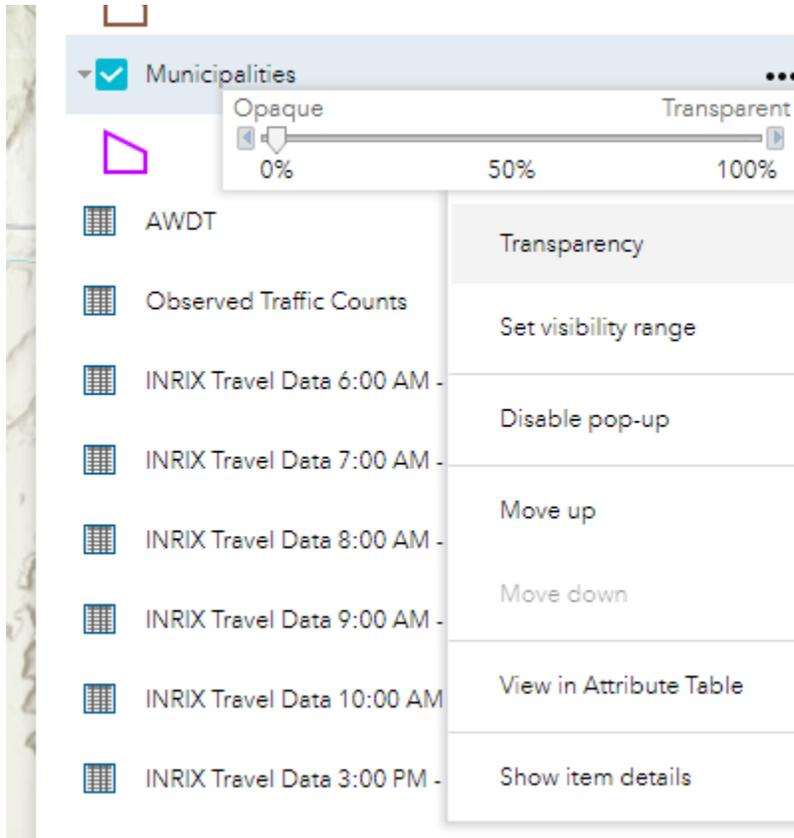
5. GIS Data Layers

This section will describe the GIS data layers available in the TAQA application. These layers available are pre-defined by the GIS administrator and cannot be changed. However, there are some settings available to be changed which will be described. The screenshot below shows all available data layers in the map and describes the functionality.

- The blue checkbox to the left of a layer indicates that it is toggled on in the map. Select the checkbox to toggle it off.
- Select a layer name to display the symbology of the layer. The Links layer will not have any symbology and is designed this way. It is not recommended to turn this layer on and is purely used for creating the Queried Travel Time layer.

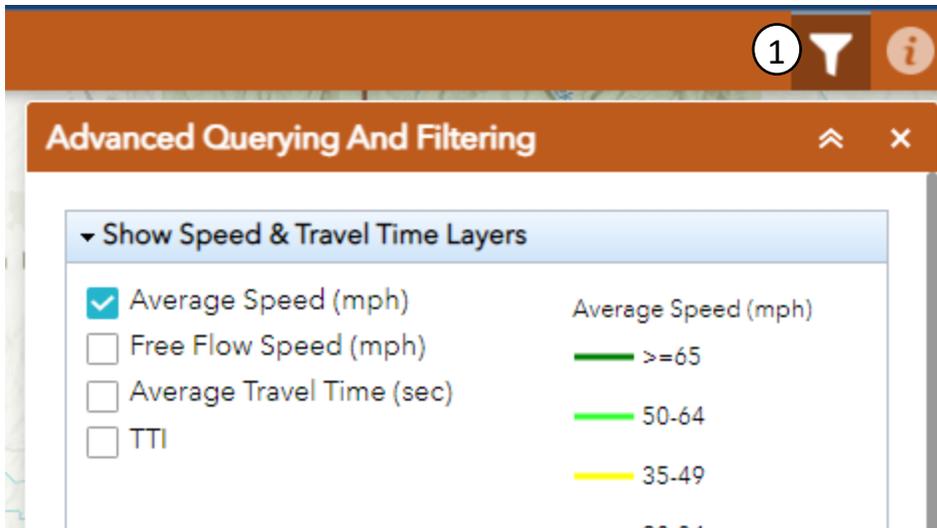


The following properties about a layer can be changed by selecting the ellipsis to the right of each layer name: Transparency, visibility range, disable pop-up. These updates are temporary and will not persist if the application or browser window is refreshed.

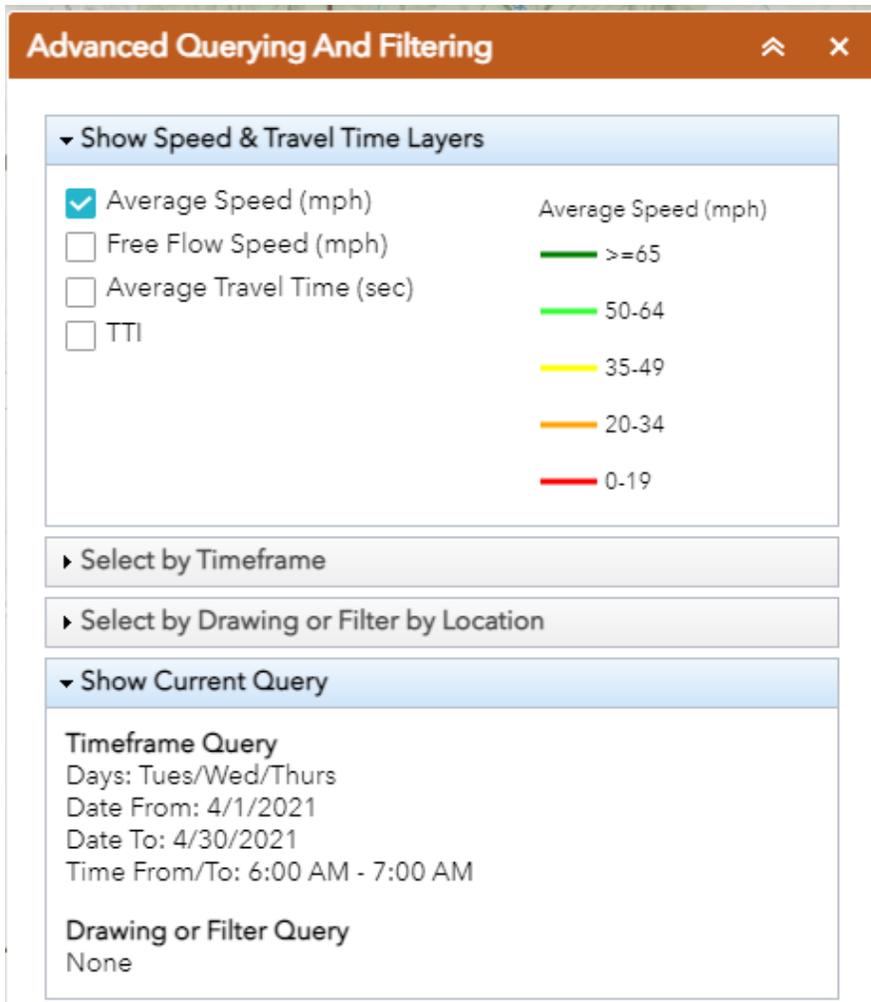


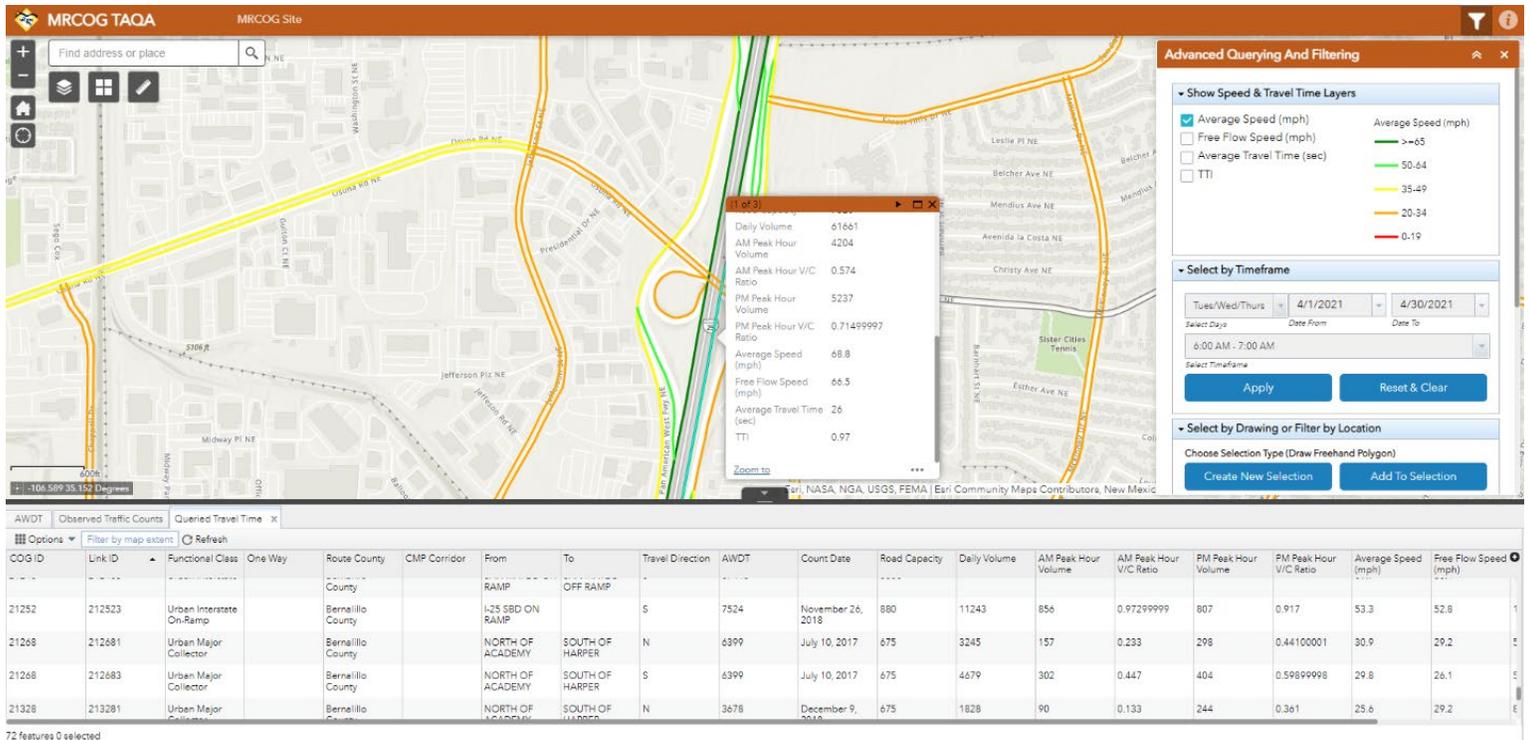
6. [Advanced Querying and Filtering Widget](#)

The Advanced Querying and Filtering Widget provides users with the power to dynamically apply traffic count data (supplied by INRIX) by date/time range to the COG segments. This widget opens by default when the application loads. It can also be closed and re-opened by selecting the button on the next screenshot.



Each section of the widget can be collapsed by selecting the blue section header. This can allow a user to hide certain sections that are not required.





The exact calculated attributes can be viewed either by left-clicking a COG segment on the map to view the pop-up. Scroll down to the bottom of the list of fields to see the Average Speed (mph), Free Flow Speed (mph), Average Travel Time (sec), and TTI. Alternatively, the attribute table is updated automatically when a new timeframe query is applied.

2. Select by Timeframe – This section allows a user to define the timeframe they wish to query for INRIX travel data. A user may update the Days of week, Date From, Date To, and a pre-defined set of timeframes. The Date From and Date To will be restricted to a single calendar year.

There are validation checks on the Date From and Date To options. For example, the user cannot select a Date From that is greater than the Date To. Additionally, the user may enter in their own date without using the calendar picker. However, restrictions still apply to the single calendar year.

- a. Apply – Select the desired timeframes and select Apply to apply the INRIX travel data to the COG segments.
- b. Reset & Clear – Select this button to reset the timeframe drop-down options to their default values and clear the INRIX travel data from the COG segments.

③ Select by Drawing or Filter by Location

Choose Selection Type (Draw Freehand Polygon)

Create New Selection Add To Selection

Delete From Selection Clear Selection

CMP Route Corridors

All CMP Route Corridors

2nd Street

4th Street

Alameda Blvd.

Arenal

Counties

Bernalillo County

Cibola County

Guadalupe County

San Miguel County

Sandoval County

④

Functional Class

Rural Interstate

Rural Interstate Frontage

Rural Interstate Off-Ramp

Rural Interstate On-Ramp

Rural Major Collector

Apply Reset & Clear

⑤ Show Current Query

Timeframe Query
 Days: Tues/Wed/Thurs
 Date From: 4/1/2021
 Date To: 4/30/2021
 Time From/To: 6:00 AM - 7:00 AM

Drawing or Filter Query
 None

3. Select by Drawing or Filter by Location – This section allows a user to select COG segments and apply INRIX calculations directly to them. Additionally, the selected COG segments will show up in the Attribute Table widget and allow for a quick review of the COG segment attributes.
 - a. Select the desired selection option: Create New Selection, Add To Selection, Delete From Selection, Clear Selection.
 - b. The selection type is a freehand polygon. Follow the prompts on the screen to “Press down to start and let go to finish”
 - c. The COG segments that intersect the drawn polygon boundary will be selected

The screenshot displays the MRCOG TAQA application interface. At the top, there is a search bar and navigation icons. The main area is a map of Bernalillo County, New Mexico, with a red selection tool active. To the right, the 'Advanced Querying And Filtering' panel is open, showing options for selecting by timeframe and location. Below the map is a table of traffic count data.

Functional Class	One Way	Route County	CMP Corridor	From	To	Travel Direction	AWDT	Count Date	Road Capacity	Daily Volume	AM Peak Hour Volume	AM Peak Hour V/C Ratio	PM Peak Hour Volume	PM Peak Hour V/C Ratio	Average Speed (mph)	Free Flow Speed (mph)	Average Travel Time (sec)	TTI
Urban Major Collector		Bernalillo County		EAST OF EUBANK	WEST OF MORRIS	E	9267	January 30, 2017	1467	6086	336	0.229	695	0.47400001	31.7	32.9	57	1.04
Urban Major Collector		Bernalillo County		EAST OF EUBANK	WEST OF MORRIS	W	9267	January 30, 2017	1467	5722	577	0.39300001	464	0.31600001	34.3	32.3	52	0.94
Urban Major Collector		Bernalillo County		EAST OF JUAN TABO	WEST OF CHELWOOD DR	E	7865	July 17, 2017	1467	4818	212	0.145	578	0.39399999	30.3	31.1	57	1.03
Urban Major		Bernalillo		EAST OF JUAN	WEST OF	W	7865	July 17, 2017	1467	5535	466	0.31799999	400	0.273	33	32.9	53	1.00

d. Select the activated selection option to disable the selection tool. In the case above, the Add To Selection is enabled and has a lighter blue color to indicate that is it the current selected option.

- Filter by Location – The list of checkboxes allows a user to filter the COG segments displayed on the map. Each of the three checkboxes, CMP Route Corridors, Counties, and Functional Class, are all combination filters. For example, if the user selects the ‘All CMP Route Corridors’ checkbox under the CMP Route Corridors checkboxes and the ‘Bernalillo County’ checkbox under the Counties checkboxes, then only COG segments that belong to a CMP corridor and in Bernalillo County will be displayed.

After selecting the desired location filters, the user must select Apply to apply the filter. The filtered COG segments are displayed on the map and in the attribute table. To remove the selection and/or filter, select the Reset & Clear button.

Advanced Querying And Filtering

Select by Drawing or Filter by Location

Choose Selection Type (Draw Freehand Polygon)

Create New Selection Add To Selection

Delete From Selection Clear Selection

CMP Route Corridors

All CMP Route Corridors

2nd Street

4th Street

Alameda Blvd.

Aranal

Counties

Bernalillo County

Cibola County

Guadalupe County

San Miguel County

Sandoval County

Functional Class

Rural Interstate

Rural Interstate Frontage

Rural Interstate On-Ramp

Rural Major Collector

Apply Reset & Clear

Show Current Query

COG ID	Link ID	Functional Class	One Way	Route County	CMP Corridor	From	To	Travel Direction	AWDT	Count Date	Road Capacity	Daily Volume	AM Peak Hour Volume	AM Peak Hour V/C Ratio	PM Peak Hour Volume	PM Peak Hour V/C Ratio	Average Speed (mph)	Free Flow Speed (mph)
20142	201423	Urban Minor Arterial		Bernalillo County	JEFFERSON	NORTH OF MASTHEAD	SOUTH OF SAN FRANCISCO	S	11162	September 8, 2019	1630	8991	1250	0.76700002	596	0.36700001	31.1	29.2
20143	201431	Urban Minor Arterial		Bernalillo County	JEFFERSON	NORTHWEST OF HEADLINE	SOUTH OF TIBURION	N	14257	November 6, 2017	1630	11057	552	0.33899999	1476	0.90600002	29.9	29.2
20143	201433	Urban Minor Arterial		Bernalillo County	JEFFERSON	NORTHWEST OF HEADLINE	SOUTH OF TIBURION	S	14257	November 6, 2017	1630	10031	1606	0.93500001	634	0.389	27.6	28
20146	201461	Urban Minor Arterial		Bernalillo County	IRVING	EAST OF CARDINAL	NORTH OF CONGRESS	N	14691	February 20, 2017	750	9161	342	0.456	1169	1.58500004	33.5	32.7

225 features 0 selected

5. Show Current Query – This section will show a user their current timeframe selection and any location filters applied. This section is always updated whenever a new timeframe or new location filter is applied. Because it is possible to set a new timeframe or location filter without selecting Apply, this section is intended to help the user track what filters are currently applied.

Advanced Querying And Filtering
⤴ ×

Select Days

Date From

Date To

Select Timeframe

Apply

Reset & Clear

▼ **Select by Drawing or Filter by Location**

Choose Selection Type (Draw Freehand Polygon)

Create New Selection

Add To Selection

Delete From Selection

Clear Selection

CMP Route Corridors

- All CMP Route Corridors
- 2nd Street
- 4th Street
- Alameda Blvd.
- Arenal

Counties

- Bernalillo County
- Cibola County
- Guadalupe County
- San Miguel County
- Sandoval County

Functional Class

- Urban Local
- Urban Major Collector
- Urban Minor Arterial
- Urban Minor Collector
- Urban Principal Arterial

Apply

Reset & Clear

▼ **Show Current Query**

Timeframe Query
Days: Tues/Wed/Thurs
Date From: 4/1/2021
Date To: 4/30/2021
Time From/To: 6:00 AM - 7:00 AM

Drawing or Filter Query
Route Corridors: ALL
Counties: Bernalillo County
Functional Class: Urban Principal Arterial