New York State
Department of Transportation
Accident Location Information System
ALIS
Query–Reporting–Analysis
Attribute Query
Creating an Attribute Query

If you have been entitled with the “QRA” role for the ALIS application, this will be the Home screen when you log in. To create an Attribute query, Click on the “Perform Analysis” Tab at the top of the screen.
The “Perform Analysis” Tab contains two buttons. The “Load Existing Query” button allows you to load the query parameters from a query you have previously created and saved. To use that function, you will first need to create a new Query. **Click on the “Create New Query” button.**
Selecting an Attribute Query

A dialogue box appears with a dropdown menu for selecting the type of query you would like to create. The Attribute query is selected by default. Expand the drop down menu to see the other query type options.

Default Query Type

Expand the drop down Menu by clicking the triangle.

After selecting a query type, Click on “Create New Query” to open the “New Attribute Query” Parameter Form.
Enter a date range for your query by typing in the date or click on the Calendar icon to pick the date.

Choose a buffer Distance to apply to your selected Streets.

Choose a method to define your study area.
When your ALIS account was created, a Default study area was assigned. Default study areas can be the State, a County, or an MPO Region.

Defining a Study Area is an important step that limits the size of your query and increases the performance of the application. Even when a single street is selected within a study area, the application still retrieves all the crashes within the study area as part of the analysis process. A well defined study area will speed up your query.

To define your study area, choose from the “Add from Map Selection” or “Select from Boundaries” radio button.
When the “Add from Map Selection” radio button is selected, the user has two options to construct a study area polygon using the Map toolbars.

Map Toolbars
The “Feature Selection” tab of the Map Toolbar provides a dropdown menu to select the type of feature you want to select on the map. Click the dropdown menu to view the available options.

Select one of the Boundary layers from the list.
Next, select an “Action” from the drop down menu below the Feature Type.

“New” creates a new selection and deletes any existing selection.

“Add” appends a selection to any existing selection. Use this to add multiple non-contiguous City/Towns.

“Remove” will delete any selected feature type from your study area. Use this option if you want to exclude results from a village that is within the boundary of a town. (This creates a donut shaped study area).
Add From Map Selection

Selection Tools

Click to activate one of the selection tools.

Select by Point  Select by Polyline  Select by Polygon  Select by Rectangle

DeActivate Selection tool  Clear Selection

Practice activating a tool and make a selection. Use the “Clear Selection” button after each selection to start over.
After Making a selection, click the “Append Selected Polygon on the Map to Study Area” button.
Defining a Study Area

Select From Boundaries

The second option for defining a study area, “Select From Boundaries”, allows the user to select a pre-defined study area from a set of drop down menus.

Select a Boundary Type

The “Boundary Names” box will be populated with all the boundary names of the selected boundary type.

After selecting a Boundary from the list (Multiple selections are enabled), click on the “Append to Study Area” button.
After defining a study area, the next step is to choose how to select streets. If your query involves a specific street, set of streets or specific segments of streets, then choose the “By Street Selection” method by clicking on the “Next” button at the bottom of the dialogue box.
To select all streets of a specific Jurisdiction, click on the shaded grey, “By Jurisdiction” bar to display the Jurisdiction drop down menu.

Shaded Grey Bar to select by jurisdiction.

Jurisdiction Drop down menu
After selecting a Jurisdiction, click on the “Add to Street Selection” button.

Click “Next to Continue.”
Selecting Streets from the Map

There are Four options for selecting specific streets or street segments.

**Option 1**—Select streets from the map using the Feature Selection Tool bar. After selecting streets on the map, click the “Add Selected Streets From the Map” button.
Option 2 – This option allows you to select streets using the Interstate, State, or County route number. To select a route that spans multiple counties, select the “All” option in the county drop down menu. Click “Add Route to Street Selection” button after making a selection. Multiple routes can be added by making a new selection and clicking the “Add Route to Street Selection” button again.

Note: All Street selections will be clipped to the study area boundary.

This area shows what Streets have been added to your selection. Use the “Flash” and “Zoom To” buttons to confirm you have added the correct segments.
After making a street selection, click the “Show Selection Buffer” button to see the complete area that will be used in the query.
The “Show Selection Buffer” button is available for any of the options for selecting streets. The button changes to allow the user to “Hide Selection Buffer”.

Selected Street segments are in blue surrounded by the Dark Green Outline which represents the Area to be used for analysis.
**Option 3**—This option allows you to enter a street name. Enter the County and Muni from the drop down menus to narrow the search results for Street Name. Type at least 3 characters of the street name or type the Route number and click the “Find Street” button.
After clicking on the “Find Street” button, a dialogue box appears with the search results of all the valid streets that met your criteria.

Click the blue “Select” button to fill the On Street/Route text box.
After selecting a street from the “Find Street” search results, the “Select Streets Using From & To Range” option is activated. Define the limits of the segment by adding the “From” and “To” Streets using the “Find” button for each. Click the “Add to Street Selection” button to add this segment to your query. Repeat for additional segments.

Click “Add To Street Selection” to add all of Arsenal St to your query.

To add just a segment of this road do not click this button. Proceed to the “Select Streets Using From & To Range” option below.
The fourth option for selecting streets uses the “Build a Path” tool to “Define a Corridor.”
Click the blue flag once to Activate the “build a Path” Tool. Click on the map to place the begin point and click again to place the end point.

Note: If you need to pan the map between placing the begin and end points, DO NOT click on the map. Use the “Pan” buttons surrounding the compass icon on the upper left corner or use the Arrow keys on your keyboard.

After a “Path” has been created (Purple line), you can change the line by clicking on the map to create a new end point. The “Path” will be redrawn.

Click the Red Highlighted “Add Selected Path from the Map” button when finished.
To add another segment of road, activate the Build a Path tool again by clicking the blue flag and repeat the process.

Note: The Build a Path Tool will only add one side of a divided highway at a time. To include both sides of a divided highway, build one path in the primary direction and add it, and then build the second path for the reverse direction. The build a path tool is sensitive to the direction of travel so the begin and end points must coincide with the direction of traffic flow. This applies to One Way streets as well.

Click “Next” when Finished adding paths.
The Accident Parameters tab allows you to select the specific attributes of the crashes that you want to see in your results. Each “Box” contains all the values for that particular attribute.

If no selection is made, your results will contain crashes with all values for that attribute.
Selecting Vehicle Parameters

![Image of a software interface for selecting vehicle parameters]

- **Vehicle Type**
  - 0: OTHER
  - 1: MOTORCYCLE
  - 2: CAR/VAN/PICKUP

- **Vehicle Body Type**
  - 01: LIMITED USE VEHICLE - SEDAN
  - 02: LIMITED USE MCY-A
  - 03: LIMITED USE MCY-B

- **Pre-Accident Action**
  - 01: GOING STRAIGHT AHEAD
  - 02: MAKING RIGHT TURN
  - 03: MAKING LEFT TURN

- **Vehicle Direction Of Travel**
  - 1: NORTH
  - 2: NORTH-EAST
  - 3: EAST

- **Truck/Bus Classification**
  - ??: INVALID CODE
  - A: TRANSIT BUS
  - B: OVER-THE-ROAD COACH

- **Vehicle Registration**
  - 01: VANPool
  - 02: WORLD UNIVERSITY GAMES
  - 03: JEWISH WAR VETERANS

- **Contributing Factors**
  - 01: NONE
  - 02: ALCOHOL INVOLVEMENT
  - 03: BACKING UNSAFELY

- **Second Event**
  - 01: COLLISION WITH MOTOR VEHICLE
  - 02: COLLISION WITH PEDESTRIAN
  - 03: COLLISION WITH BICYCLIST

- **Check any of the following to limit the query**
  - [ ] Citation issued for the vehicle
  - [ ] Vehicle Towed
  - [ ] Vehicle is a school bus
  - [ ] Vehicles with male driver
  - [ ] Vehicles with female driver
  - [ ] Commercial vehicles
  - [ ] Hazardous cargo

- **Enter the following value**
  - [ ] Driver Age

- [ ] Cancel [ ] Back [ ] Next

- [ ] Show Current Study Area [ ] Zoom to Current Study Area [ ] Flash Current Study Area
The last step in an Attribute query is to enter a name for the query, schedule it to run either now or in the future, and click save. Saving the query parameters allows the user to return at any time and make adjustments to the query and rerun it. Scheduling the queries puts the query in a queue for the analysis engine. This allows the application to execute the queries more efficiently and also allows users to schedule large queries to run during off peak network times.