New York State
Department of Transportation
Accident Location Information System
ALIS
Performing a Spot Query
The spot query is a helpful analysis tool when a user wants to look at crashes occurring just at an Intersection or surrounding a specific point. In New York State, the official definition of an Intersection crash is any crash occurring within 10 meters of the center point of an intersection. As part of the ALIS application, an Intersection Node layer was created from the New York State Streets Data Product. This intersection node layer is used in the location coding of crashes by DMV and for queries in the ALIS application. You can view the ALIS Intersection Nodes by turning on the Intersections layer in the Table of Contents. When the Intersection layer is turned on, you can see that the location of the ALIS intersection is not always at the exact intersection of 2 or more streets in the ESRI base map. Expand the Transportation layer in the table of contents and turn on the “Streets” layer to see the actual ALIS street segments that are used in location coding and analysis (See below).
To create a Spot Query, begin by selecting the “perform Analysis” tab and then click on the “Create New Query” button.

Next, select the “Spot/Intersection/Cluster” option from the Query Type Dropdown menu.
After selecting the query type, click the “Create New Query” button to open the Spot Query parameter form.
The Spot Query Parameter Form defaults to the first tab for entering the specific Spot parameters. The default search radius is set to 33ft for Official Intersection Crashes.

The Date range defaults to the latest 3 year period of complete data as well.

As with the other types of queries, defining your study area will increase performance. Select a method for defining your study area.

For information on using the Statistical Filter, please refer to the document QRA_Statistical_Filter.

To select specific spots within your study area, click the “Next” button. Or, scroll down to reveal the “By Jurisdiction” option.
This option allows the user to select all of the intersections that fall on a street segment with the selected Jurisdiction type. After selecting the jurisdiction and spot type, click the “Add to Spot Selection” button.
If the user chooses the “By Spot Selection” method from the Spot Parameters tab, the spot selection options are shown on the second tab. “Spots” (Intersections or bridges) can be selected in two ways and there is a third option for creating your own “Spot”. The first option here is to select spots from the map.
Selecting Spots on the Map

The toolbar in the upper right hand corner is defaulted to the “Feature Selection” tab. To select spots on the map, choose the type of feature you want to select.

Select “Intersections” as the Feature Type.

The “Feature Selection Action” is set to “New”. This option will clear any previously selected spots and create a “New” selection.
Next, select a tool for drawing on the map. There are two options, Select By Polygon or select by rectangle. Choose the option that is best suited for encompassing the Intersections needed for the query. Click on the tool to activate it.

Note: If it’s not possible to select all the Spots for the query in one polygon or rectangle, additional polygons or rectangles can be drawn after adding the currently selected Spots.
Selecting Spots on the Map

After activating the tool, draw the polygon or rectangle on the map.

After completing the polygon, the temporarily selected spots are shown as blue dots with a dark blue dashed border. If the selection looks correct, return to the Spot selection parameter form.
The “Add Selected Points From the Map” button is highlighted red when a temporary spot selection has been made. Click the Red button to add the spots to your query.
The Spots have now been added to the query. The Spots now appear as blue dots with a solid border on the map, the “Add Selected Points From the Map” button is no longer red, and the group of spots is shown in the Selected spots box at the bottom of the form.
After selecting the specific intersections for a query, the user can select the specific accident parameters to be included in the result set.

Note: By not making any selection, all records will be returned (i.e. no filter is applied). When a selection is made, only crashes with the selected value will be included in the result set. For example, If the user wants all the crashes at the selected intersections, no selection would be made and the user would click the “Next” button to continue to the vehicle parameters tab. If the user is looking for just pedestrian crashes at these intersections, click on “Collision with Pedestrian” in the Accident Type to highlight the value and include it in the query.
The Vehicle parameters tab contains additional vehicle related filters that can be selected to limit the result set of the query.
Saving and Scheduling a Spot Query

Enter a descriptive name for the query and check the box to “Schedule Query To Run”.

To Run the query immediately, click the “Save Query” button or click the radio button to “Set date and Time to Schedule Query” and then Save.