The user should contact NCSA using the email link provided on the homepage. Using the standard template provided on the website in Area 13: Contact NCSA Link ensures quick delivery of the email to our team to respond to your inquiry.

Table of Content

1. Introduction .................................................................................................................. 4
   1.1 What is FIRST? ........................................................................................................ 4
   1.2 System Requirements ............................................................................................ 4

2. How to Use FIRST ........................................................................................................ 4
   2.1 Building Your Query ............................................................................................... 4
       FIRST Homepage .................................................................................................... 4
       Area 1: FIRST Query Tool Description ................................................................... 6
       Area 2: Help and Home .......................................................................................... 7
       Area 3: Select a Topic ............................................................................................. 7
       Area 4: Sample Queries Section ............................................................................ 7
       Area 5: Topic Related Publication Section ............................................................ 8
       Area 6: Select Fatality and/or Injury Panel ............................................................... 9
       Area 7: Select Time Frame Panel ........................................................................... 10
       Area 8: Select State or Region Panel ...................................................................... 10
       Area 9: Filter Your Selection (FYS) Panel ............................................................... 12
       Area 10: Select Vehicle Make and Model Panel .................................................... 18
   2.2 Building Your Reports (BYR) ................................................................................. 19
       Area 11: Build Your Reports (BYR) Panel ............................................................... 19
       2.2.1 Build a Table Report ....................................................................................... 19
       Area 12: Current Criteria Section ............................................................................ 21
       2.2.1.1 Mapping the Data in a Table Report ................................................................. 24
       2.2.1.2 Exporting Data in a Table Report .................................................................. 29
       2.2.1.3 Download Case Listing of Crash Records ..................................................... 29
       2.2.2 Build a Univariate Graph ................................................................................ 29
       2.2.3 Build a Panel Graph ....................................................................................... 31
   2.3 Contact Us, Website Compatibility Message, Version, and Download Your Data Links
       32
       Area 13: Contact NCSA Link .................................................................................... 32
       Area 14: Website Compatibility Message .................................................................. 33
       Area 15: Version and Release Date .......................................................................... 33
       Area 16: Download Your Data Links ........................................................................ 33

3. FIRST Error Messages ................................................................................................ 34
   3.1 SAS System Process Error Message ....................................................................... 34
   3.2 SAS System Down for Maintenance ....................................................................... 34
List of Figures

Figure 1 – FIRST Splash/Welcome Screen Information ............................................. 4
Figure 2 – Screenshot of FIRST Screen Showing Vehicles Topic ............................... 5
Figure 3 – FIRST Query Tool Description ................................................................. 7
Figure 4 - Help and Home Link Icons ...................................................................... 7
Figure 5 – Select a Topic ............................................................................................ 7
Figure 6 – Sample Queries Section ......................................................................... 8
Figure 7 – Topic Related Publications Section ......................................................... 9
Figure 8 – Select Fatality and/or Injury ..................................................................... 9
Figure 9 – Additional Select Fatality and/or Injury for Some Topics ....................... 10
Figure 10 – Select Time Frame – Time Frame Tab .................................................. 10
Figure 11 – Select Time Frame – Years Tab ............................................................... 10
Figure 12 – Select State or Region ............................................................................ 11
Figure 13 – Select State or Region – State & County ............................................... 11
Figure 14 – Select State or Region – City ................................................................. 11
Figure 15 – Select State or Region – Region .............................................................. 12
Figure 16 – Filter Your Selection – Opening/Closing Tables with Data Elements ...... 13
Figure 17 – Filter Your Selection – Search Data Elements ....................................... 14
Figure 18 – Filter Your Selection – Selecting Data Elements and Data Attributes ... 17
Figure 19 – Filter Your Selection: Expanding/Collapsing a Data Attribute Group ... 18
Figure 20 - Select Vehicle Make, Model, and Body Class ........................................ 18
Figure 21 – Build Your Reports Selections ............................................................... 19
Figure 22 – Build Your Reports Panel with Data Element Search and Row and Column Percentage ................................................................. 20
Figure 23 – Alert Message for No Elements in Rows and Columns ....................... 20
Figure 24 – Message for Using both Highest BAC and Person BAC to Build Your Reports ................................................................. 21
Figure 25 – Current Criteria and Submit, Save, Retrieve, and Reset Query Buttons .... 22
Figure 26 – Confirm Save Criteria Dialog Popup ..................................................... 22
Figure 27 – Confirm Retrieve Saved Criteria Popup ................................................ 23
Figure 28 – Retrieve Current Criteria Incorrect File Type Selected Message .......... 23
Figure 29 – Retrieve Current Criteria Corrupted JSON Text File Message ............. 23
Figure 30 – Hyperlinked Data on a Table Report to a Map .................................... 24
Figure 31 – Queried Data Map Initial Instruction Page ........................................... 24
Figure 32 – Menu Icons on the Map ....................................................................... 25
Figure 33 – Printing the Map in Different Formats .................................................. 25
Figure 34 – Open and Close Map Instructions Icon ............................................... 26
Figure 35 – Select the Year to Map and/or Different Boundaries in the Map .......... 26
Figure 36 – Data Points shown on the Map .............................................................. 27
Figure 37 – Visible and Invisible Data Points Counts Display ............................... 27
Figure 38 – Accident Details for a Crash on the Map (1 of 2) ................................. 28
Figure 39 – Accident Details for a Crash on the Map (2 of 2) ................................. 28
List of Tables

Table 1 – Panels, Sections, and Links Displayed on the FIRST Website ........................................... 6
Table 2 – Acronyms Used on this Website ......................................................................................... 36
Table 3 – Terms Used on this Website .............................................................................................. 40
1. Introduction
This User Manual contains all the essential information for the user to be able to use Fatality and Injury Reporting System Tool (FIRST). This manual includes a description of the system functions and capabilities and step-by-step procedures for building your query and generating a SAS report or graph.

1.1 What is FIRST?
Fatality and Injury Reporting System Tool (FIRST) is a data query tool that provides data on traffic fatalities in the United States. The tool also assists with generating trends over multiple years of data as well as using other data systems to provide injury estimates. The new query tool allows users to make topic-specific data queries. The order in which the Topics appear is determined by NCSA. Moreover, the tool enables a unified query system from the SAS data sources which allows users to tabulate query results and save them in different file formats such as excel, PDF, CSV and RTF. The system also allows users to chart and map the data query result.

1.2 System Requirements
 FIRST can be accessed from a variety of PC browsers such as IE, Chrome, Firefox, and Edge. To access the system from chrome, it has to be version 67 or later. For Firefox, the version requirement is 52. Additionally, the system can be accessed from iPhone, Android, and iPad.

2. How to Use FIRST

2.1 Building Your Query
FIRST Homepage
When the FIRST application loads the following splash screen is displayed. Here NCSA communicated anything new and important that needs to be communicated. The User will not be able to proceed to the site without clicking on the “Done”.

![Figure 1 – FIRST Splash/Welcome Screen Information](image)

Figure 1 – FIRST Splash/Welcome Screen Information

Figure 2 is a screenshot of the FIRST homepage without the NHTSA header & footer information. The different areas on the page have been numbered and the explanations are provided in the table that follows.
The first panel (Select Fatality and/or Injury - Area 8) under Topics tabs and Topics information section (Topic’s name – Area 6: Vehicles under Sample Queries section) will be open by default for each Topic. The other panels or sections can be opened or closed by clicking the plus/minus sign on panel or section headers.

The table below explains the above screenshot in greater detail and the steps the user needs to take to customize their query. Each section refers back to the arrow number in Figure 2.

<table>
<thead>
<tr>
<th>Area</th>
<th>Step</th>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>N/A</td>
<td>FIRST Query Tool Description</td>
<td>This section has the application name and a brief description of the tool.</td>
</tr>
<tr>
<td>2</td>
<td>N/A</td>
<td>Help and Home</td>
<td>These two icons link to the Help file and the CDAN homepage.</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>Select a Topic (Topics row)</td>
<td>This row lists all the available Topics based on which users can query the data.</td>
</tr>
<tr>
<td>4</td>
<td>N/A</td>
<td>Sample Queries</td>
<td>Sample queries can be used to build a query. Selecting any query will populate the selections needed to build that query on the site. The user will need to click the Submit button to execute the sample query.</td>
</tr>
<tr>
<td>5</td>
<td>N/A</td>
<td>Topic Related Publication for (Topic)</td>
<td>This section has a brief description of the topic along with the subject-specific link(s) to Crash Stats site</td>
</tr>
</tbody>
</table>
The sections listed in Table 1 are described in more details in the following pages.

**Area 1: FIRST Query Tool Description**
This area (shown in Figure 3), before the Topics tabs, has a general description of the FIRST query tool website.
Users can click the “click here” link at any time to review the splash screen information without reloading the application.

Area 2: Help and Home
Clicking the help icon (Figure 4) will open this user manual that provides instructions on how to use FIRST. Clicking the Home page icon will return the user to CDAN home page where links to NCSA tools, publications and data are provided.

Area 3: Select a Topic
Since the new query tool is Topic-driven, you can make your own queries based on a specific Topic. The first step to building a Topic-specific query is to click one of the Topics in the top row, as shown in the image below (Figure 5), we chose the People topic. (People are selected as a default).

After clicking a Topic, the user will be provided with choices such as fatality/injury type, selecting year, geography, and other elements that help narrow down the query or build the query the way the user wants.

Note: A number of default settings have been set up in the application. This allows the user to click “Submit” at any time in Step 7, Area 12: Current Criteria Section. To see the list of these values that have been setup as default please see the Current Criteria section once you click a Topic.

The query tool allows you to click “Submit” at any time in Step 7, Area 12: Current Criteria Section.

Area 4: Sample Queries Section
Under the Sample Queries section, queries are provided as shown in Figure 6.
The queries are designed to assist the user with building a sample query within the FIRST tool. Once the user clicks any query on the list, the query will be built, and the panels will open to display the values that were used to build that query. The user will then need to click the Submit button or can modify the query before submitting to generate the report. Sample queries under this section may change based on user needs.

User can search a sample query using the Query Number or Query Title. There are two search boxes available in Sample Queries section. The one in the left side is for searching the queries within the Topic and the other one in the right side is for searching the queries across all Topics. User can click Show All button on the panel header to view all sample queries at one glance.

Area 5: Topic Related Publication Section
The Topic Description section provides a brief description of a Topic with a list of Topic-specific links. Clicking the link(s) will take the user to the Crash Stats website (https://crashstats.nhtsa.dot.gov/#/) for any recent and other publications related to that Topic (Figure 7 shows People topic related publications link).
Area 6: Select Fatality and/or Injury Panel
Once the user selects a Topic, the user can then select whether they are counting fatalities, injuries, property damage only (PDO), injury and PDO, or all motor vehicle crashes. Figure 8 show the selections available for Vehicles.

Under People, Drivers, Occupants, Pedestrians, and Pedalcyclists tabs there are additional metrics for generating reports based on # of Killed in Fatal Crashes and Injured in All Vehicle Crashes (see Figure 9).
Area 7: Select Time Frame Panel
The timeframe tab allows the user to determine the year range for the query. Users can simply drag the pins along the bar to select the year range of their choice. Timeframe tab under Select Time Frame is set to the latest five years of available data. Currently, only 15 years of data is available by default.

Users can also click “Years” tab, where they can select a single year or multiple years by pressing the Ctrl key and clicking to select more than one year. Using the “Years” tab (Figure 11) might be useful in building a comparative query such as comparing the data from 2012 and 2014.

Area 8: Select State or Region Panel
This panel as shown in Figure 12 allows user to select State or NHTSA Region for which the user is interested to run a query for. Users cannot select both State and Region simultaneously.
Selecting State will open a dropdown for States. Selecting a State from the dropdown will open the dropdowns for County and City.

Note: Selecting either County or the City will disable the other one.

Clicking on City drop down list as shown in Figure 14 will display cities within that State. Selecting multiple States will not display County drop down.

Users can also select a Region which will open a dropdown for selecting a specific Region. Selecting a Region will close the State dropdowns. The Region dropdown will open by clicking the NHTSA Region again.
States within a specific region will be displayed in front of the region(s) selected. The user can select one or more items from all drop downs and remove them from the list by clicking the “x”.

**Notes:**

The State/Region panel will show for a query that involves only fatalities (e.g., Fatal Crashes); this panel will not be displayed for queries involving injuries, property damage or both fatality and injury.

If no State is specified, the tool will provide data on all states excluding Puerto Rico.

**Area 9: Filter Your Selection (FYS) Panel**

This panel contains different filters for building a more specific query. These filters are based on the count the user is interested in. The counts can be based on data elements and attributes within each table (Crash, Vehicle, and Person). The data elements for each table have been grouped under a specific characteristic for that table. Currently, the system contains the following tables:

- Crash: General Characteristics, Crash: Crash and Roadway Characteristics, Crash: Specific Scenario/Event, Crash: EMS Times
Not all Tables are displayed. Tables are displayed based on the metric type (FARS and GES) selected under “Select Fatality and/or Injury” panel.

For instance, if the user is counting only crashes, then only the Crash level data elements will be showing in this panel. If the user is interested in the count of vehicles, then both the Vehicle and the Crash level data elements will be displaying in two different tables in the panel. The purpose of these filters is to basically narrow down your query. In the screenshot below (Figure 16), Police Pursuit Involved Crash has been checked, which means the user is interested in the count of those crashes that had a police pursuit. Based on what user wants to count, default values have already been set up for different attributes/data elements. The selected values will be highlighted in blue.

Moreover, the plus/minus sign at the end of the dark blue bar is for opening/closing the Filter Your Selection panel. On this panel clicking the double arrow will either “Close All Tables” or “Open All Tables”.

Clicking the minus sign at the end of the light blue bar will close the filters in a specific table such as Crash, Vehicle, and Person. Clicking the double arrowhead once the table is expanded will expand/collapse all the filters in a table.
Search Data Elements

On the FYS panel, there is an area for searching the data elements by typing any word in the search area and pressing the Enter key or the search icon to find the list of the data items that exist in that Topic and for that metric.

See example below when searching for “hour” for People topic under the FYS panel. User can select any values by selecting the data element and continue searching for additional data element to build their reports.

Clicking the reset button will reset all values selected except for the default value for the Topic.

Data Attribute Filter Displays

There are 7 different types of data attribute filter displays. The types for the majority of the filters are presented as either radio button or checkbox selections. There is a fundamental difference between them. in a checkbox, user can select more than one option. Radio buttons, however, provide mutually exclusive selection values.

Radio Button
**Intersection** is a filter, and user can only select one of the selection values. However, if user clicks **Crash Type**, the selection values are going to be presented differently. as seen in the image below, more than one selection value has been selected.

**Check Box**

Currently, there are no filters whose selection values are not **Radio Buttons** or **Check Boxes**. in the example above, a user can toggle the selection value as either “Yes” or “No”.

**Note:** “Involving a Rollover” is used as an example, but the data element is represented as a Radio Button in the tool.

**Textbox-I**

There are two types of textboxes. The first one is Alpha Numeric, meaning it can accept both numbers and letters. Clicking this kind of filter will open a textbox as shown in the image. User will be able to type in numbers or letters.
Textbox-II

In this type of filter, the user can only type a valid 5-digit US zip code. Invalid entry will return an error message. This is a numeric only textbox.

Driver's Zip Code

Range

User will be prompted to enter information in the “From” and “To” fields and error messages will be returned for invalid entries. Currently, there are no filters with Range selection.

Age

From: [ ] To: [ ]

Slider

Clicking this kind of filter will open a slider as shown in the image. The user can see the Minimum and Maximum Range values for that Data Element next to the Data Element Name. As a default, the begin bar will be set to minimum range value and the end bar will be set to maximum range value in the slider.

Crash Time (Hour) (0, 23)

There are two ways to select a desired range:

Method 1: User will be able to drag begin and end bars and then select checkbox next to the slider to select desired range.

Method 2: User will be able to type in numbers in the begin textbox and end textbox and then select checkbox next to the slider to select desired range. If the user enters any values outside the minimum and maximum range, entries will not be accepted.

By unselecting the checkbox, the slider will set to default and will unselect the selection.

As shown in Figure 18, clicking a data element name will open up and close the data attributes for filtering your data. Clicking or selecting a data element attribute value once will select the data attribute and clicking it a second time after selected will unselect the attribute selected.
Once a data attribute is selected, the data element filter heading will turn blue.

**Data Attribute Grouping**

Data Attributes have been grouped together under a category. Clicking the category selects all attributes under the group. Clicking the plus sign will expand the Data Attribute and allow user to select one or more data attributes. Once a Data Attribute is expanded, it can be collapsed by clicking the minus sign in front of the Data Attributes as shown in
Area 10: Select Vehicle Make and Model Panel

In this panel (Figure 20) that is currently available for only FARS data for Fatal and Killed metrics under Vehicles, Drivers, and Occupant topics, the user can select Vehicle Model Year, Vehicle Make, Vehicle Model, and Vehicle Body Class to filter their reports.

Notes:
The vehicle information includes what is available in the FARS data sets.
Selecting Model Year will not display all models available for that year. It displays the data that is available in FARS only.

### 2.2 Building Your Reports (BYR)

Different reporting capabilities are available under Build Your reports panel.

**Area 11: Build Your Reports (BYR) Panel**

In addition to building Tables, you can build Univariate Graph and Panel Graph (Figure 21).

![Figure 21 – Build Your Reports Selections](image)

#### 2.2.1 Build a Table Report

In the “Build Your Reports” panel, the user can build a table of their choice in terms of what they want in Rows and Columns. Users are limited to selecting two (2) data elements filters for the Column of the Table and up to three (3) data element filters for the Rows of the Table.

Users can simply drag a filter from the left and drop it either in the Rows section or Columns section. The data element filtered will disappear from the left menu once it is dragged to either Rows or Columns. Similarly, User can remove a data element filter from Rows or Columns section by dragging it back to Data Elements section or by clicking Cancel (X) symbol next to the filter. If a search has been performed, dragging or clicking (X) the data element back to the Data Elements column will refresh the column to its original state.
Figure 22 – Build Your Reports Panel with Data Element Search and Row and Column Percentage

Areas marked as “a”, “b” and “c” are used as follows:

a. There are two functionalities in this area:
   - The arrow is used to sort the data elements on the left-hand side alphabetically.
   - The “Search Data Elements” box is used to search the data elements listed. Typing any text will display the data elements found in this column.

b. Row Percentage: If the user is interested in knowing about the percentages for the figures in Rows, the user can simply check mark the “Row Percentage” before hitting “Submit”.

c. Column Percentage: If the user is interested in knowing about the percentages for the figures in columns, the user can simply check mark the “Column Percentage” before hitting “Submit”.

If the user clicks “Submit” without any element in Rows or Columns, the system will display an alert message prompting the user to drag at least one element to Rows and one to Columns.

Figure 23 – Alert Message for No Elements in Rows and Columns

Person BAC and Highest BAC Usage Limitation in Build Your Reports panel:
For Drivers, Pedestrians, and Pedacyclist where alcohol level is tested and available, Highest BAC and Person BAC cannot be used together to build tables. If the user selects either data element under Filter Your Table then the other one will be hidden in the Data Element box to select from. However, if the user does filter on any of these values and attempts to filter on both of these data elements in either Rows or Columns then the following message (shown in Figure 24) is displayed under Rows and Columns of the Build Your Reports section.

![Figure 24](image)

**Figure 24 – Message for Using both Highest BAC and Person BAC to Build Your Reports**

By dragging either Person BAC or Highest BAC from the Rows or Columns back to Data Element box. The message disappears, and the user can build their table using only one or the other.

**Note:** Row Percentage and Column Percentage are deactivated and cannot be selected for Person BAC and Highest BAC.

**Area 12: Current Criteria Section**

The Current Criteria section is used to Submit, Save, Retrieve and Reset the query that you created to build a report or build a graph.

**Submit Button**

The last step in the query process is the Current Criteria section. This section keeps track of the user’s query selections made in Steps 2 through Steps 8. For instance, Figure 25 shows that the user has selected Pedalcyclists (Topic), Estimated Pedalcyclist Involved in Property-Damage-Only (PDO) Motor Vehicle Crashes (Property Damage), 2014-2018 (Timeframe), Rows (Crash Date-Year), Columns (Crash Date-Month), and Person Type (Pedalcyclist).
Clicking Submit will take all the selections made by the user and generate a SAS report accordingly.

**Note:** When you start the application, the following defaults have been setup in the tool for Pedalcyclists:

- **Topics:** Pedalcyclists
- **Select Fatality and/or Injury:** Pedalcyclists Killed in Fatal Crashes
- **Time Frame:** the latest five years such as 2016-2020
- **State:** None, USA
- **Regions:** None, all regions
- **Data Elements:** Person Type (Pedalcyclists)
- **Build Your Reports:** Crash Date (Year) set for Rows and Crash Date (Month) set for Columns

**Save Button**

The user will be able to save their criteria on their PC for future retrieval. Clicking the Save button will prompt the user with the dialog box shown in Figure 26. Clicking No or click the X on the pop-up will cancel the Save request.

By clicking Yes, the user acknowledges and gives permission for the current criteria file to be saved in their PC as a JSON formatted text file. The file is saved to the Download directory by default as FIRSTCriteria.txt. The user can select any other names but must ensure the file extension is not changed from .txt for future retrieval.

**Retrieve Button**

Clicking the Retrieve button will allow user to retrieve a previously saved Current Criteria and will display the dialog popup shown in Figure 27.
Figure 27 – Confirm Retrieve Saved Criteria Popup

By clicking Yes, the user will be able to save their current criteria before loading criteria that was previously saved before.

By clicking No or the X on the pop-up, the user will be able to select the previously saved criteria file from their PC. The system will open their local file system and the user can navigate to the directory that they saved their criteria before. Selecting a JSON file with a .txt extension will import the criteria and reset the values accordingly to restore the user selections.

If the user selects any other file type except for .txt file that the system does not recognize the message in Figure 28 is displayed.

Figure 28 – Retrieve Current Criteria Incorrect File Type Selected Message

However, if the user selects a file with .txt extension that is not a JSON file or the content of the file has been changed or corrupted, the Figure 29 will be displayed.

Figure 29 – Retrieve Current Criteria Corrupted JSON Text File Message

Reset Button
Clicking the Reset button under Current Criteria will cancel any selections made by the user and change the status of the query to the default setting for Crashes topic.

### 2.2.1.1 Mapping the Data in a Table Report

The site provides map data once a Table report is constructed. Once the user is able to refine their selection criteria and after clicking the Submit button under Current Criteria section, the table data report is displayed in the new tab will have a hyperlink (see Figure 30).

![Figure 30 – Hyperlinked Data on a Table Report to a Map](image)

Clicking on any of the hyperlinked numeric data shown in Figure 30 will display the initial instructions that explains the function of the major icons (see Figure 31) as an example.

![Figure 31 – Queried Data Map Initial Instruction Page](image)
FIRST data mapping that was available in Crashes topic reports only has been expanded to include the following features:

- Mapping of the data has been added to all other topics except for: People, Drivers, and Occupants.
- Here is a brief overview of the each of the icon on the left-hand size of the map:

![Menu Icons on the Map](image)

**Figure 32 – Menu Icons on the Map**

- The first two icons for the zooming in and out can be performed by clicking the + or – icon on the map view.

- The third icon allows the user to enter and search for a mailing address to pinpoint the areas interested.

- The fourth icon is printing the map in different formats (PDF, PNG, GIF, SVG, or others).

![Printing the Map in Different Formats](image)

**Figure 33 – Printing the Map in Different Formats**
The fifth icon is used to display the instruction for the last three icons and how to use the map’s features:

![Open and Close Map Instructions Icon](image)

The fifth icon allows the user to setup a preferred base (Streets, Hybrid, Gray, or OSM).

The seventh icon is to view which year of data you want mapped and the different boundaries that are currently available (State, State and County, NHTSA Region, and Zip Code) to be added to the map.

![Select the Year to Map and/or Different Boundaries in the Map](image)

- Clicking the eye in front of the year shows or hides the data point mapped. The figure below the mapped points for the year 2020 once clicked:
Clicking this toggle shows the data points on the map.

In addition, by clicking on any data point on the map, the user will be able to view specific accident data for the point selected.
Figure 38 – Accident Details for a Crash on the Map (1 of 2)

In this window (Figure 38), the user will be able to view the Region information on the first page and clicking on the next will provide (Figure 39) the number of vehicles involved and make and model of each vehicle as well. User will be able to a panorama view of the current location of the accident not how the location may have looked like when the accident occurred.

Figure 39 – Accident Details for a Crash on the Map (2 of 2)
2.2.1.2 Exporting Data in a Table Report

Once a SAS table report is generated by clicking the Submit button, a new browser window opens up with the requested SAS crash report. At the bottom of the report, as shown in Figure 40, the user will be able to export the queried data.

![Figure 40 – Exporting Data to PDF, RTF, or Excel (CSV)](image)

Users can save the data in different file formats such as PDF, RTF, or Excel (CSV).

2.2.1.3 Download Case Listing of Crash Records

Once a SAS table report is generated for one-year FARS data by clicking the Submit button, a new browser window opens up with the requested SAS crash report. At the bottom of the report, as shown in Figure 41, the user will be able to download the one-year FARS queried data.

![Figure 41 – Download Case Listing of Crash Records](image)

2.2.2 Build a Univariate Graph

Clicking the Univariate Graph button under the Build Your Reports panel, will display Figure 42. You can drag any value from the Data Elements section to Univariate Graph value column to construct a
Univariate Graph. Similarly, User can remove a data element filter from Univariate Graph value column by dragging it back to Data Elements section or by clicking Cancel (X) symbol next to the filter.

![Univariate Graph](image)

**Figure 42 – Univariate Graph Under Build Your Reports Panel**

The user will be able to use the other panels to filter their selections for the Univariate Graph similar to building a Table report as described above.

By clicking the Submit button under the Current Criteria section, the Univariate Graph shown in Figure 43 is displayed in a new tab.
2.2.3 Build a Panel Graph

Selecting the Panel Graph button will display the content in Figure 44.

You can drag any values from the Data Elements section to Classification Value Selection and Analysis Value Selection columns to construct a Panel Graph. Similarly, User can remove a data element filter from Classification Value Selection or Analysis Value Selection columns by dragging it back to Data Elements section or by clicking Cancel (X) symbol next to the filter. Then you can click the Submit button.
under the Current Criteria section to create the Graph in a new tab. Figure 45 shows an example of a Panel Graph.

![Panel Graph Example](image)

**Figure 45 – Panel Graph Report Example**

The user will be able to use the other panels to filter their selections for the Panel Graph similar to building a Table report as described under the Build Your Report for creating a Table report.

### 2.3 Contact Us, Website Compatibility Message, Version, and Download Your Data Links

The user should contact NCSA using the email link provided on the homepage using the standard template provided on the website ensures quick delivery of the email to NCSA team to respond to your inquiry.

**Area 13: Contact NCSA Link**

At the bottom of the website before the NHTSA footer (shown in Figure 46), there is an email ([NCSARequests@dot.gov](mailto:NCSARequests@dot.gov)) for the user to provide feedback and request any additional information that they may need.

![Contact NCSA Link](image)

**Figure 46 – Contact Us, Website Compatibility Message, Version, and Download Your Data Links**

By clicking the [NCSARequests@dot.gov](mailto:NCSARequests@dot.gov) email link the following email message (Figure 47) is displayed. The user can send their request or comments to the email address per the instructions provided in the email.
Area 14: Website Compatibility Message
This area includes a message for site compatibility and best viewed in Microsoft Edge and Google Chrome.

Area 15: Version and Release Date
Software version number and Release date link in this area (Figure 46) will open up a new page. On this page, all enhancement and fixes to the site since the website has been deployed publicly are listed.

Area 16: Download Your Data Links
In this area, see Figure 46, the user can download FARS, GES, and CRSS data for any year they desire by clicking the data source they need.
Once the user gets to the download site, they can download any file from the NCSA FTP site (shown in Figure 48) by clicking the year the data is needed for.

### 3. FIRST Error Messages

The user may encounter the following error messages when using the FIRST query tool:

#### 3.1 SAS System Process Error Message

The following error message (Figure 49) appears when an error occurs with the SAS system.

![SAS System Error Message Page](image)

However, if there are any issues with the query string that was built for generating the SAS report, the following message in Figure 50 is displayed.

![Error Caused by SAS Query String Construct Failure (Current Criteria)](image)

Please report these errors by sending an email to NCSARequests@dot.gov.

#### 3.2 SAS System Down for Maintenance

When regularly scheduled maintenance in addition to query updates are performed on the SAS server, the page shown in Figure 51 is displayed.

![SAS Reporting System is Down for Maintenance](image)
These maintenances should last from half hour to an hour for updates. Major system (hardware or software) upgrade may take longer to complete. The user can revisit the site when the site maintenance is completed.

### 3.3 FIRST Query Tool Website Down for Maintenance

The following page in Figure 52 will be displayed to deploy enhancement or resolve issues with existing functionality of the site. Major system (hardware or software) upgrade may take longer to complete. The user can revisit the site when the site maintenance is completed.

![Figure 52 – FIRST Query Tool Website is Down for Maintenance Page](image)

These maintenances should last from half hour to an hour for updates. Major upgrade may take longer to complete. The user can revisit the site when the site maintenance is completed.

### 3.4 FIRST Query Tool Application Error Message

For any reason the query tool encounters an issue while retrieving the home page or clicking on a functionality, the following page in Figure 53 or Figure 54 is displayed.

![Figure 53 – FIRST Query Tool Application Error Message Page](image)

![Figure 54 – FIRST Query Tool Application Error Alert](image)

Please report these errors by sending an email to NCSARequests@dot.gov.

### 3.5 Website Hangs or Becomes Unresponsive

In case, the website becomes unresponsive and appears to be hung, click on the Reset button under Current Criteria section or refresh the browser page.
4. Acronyms

This table contains commonly used DOT and FARS acronyms used on this website.

<table>
<thead>
<tr>
<th>ACRONYM</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAC</td>
<td>Blood Alcohol Concentration</td>
</tr>
<tr>
<td>BTS</td>
<td>Bureau of Transportation Statistics</td>
</tr>
<tr>
<td>CDL</td>
<td>Commercial Driver’s License</td>
</tr>
<tr>
<td>CDS</td>
<td>Crashworthiness Data System</td>
</tr>
<tr>
<td>CODES</td>
<td>Crash Outcome Data Evaluation System</td>
</tr>
<tr>
<td>CRSS</td>
<td>Crash Reporting Sampling System</td>
</tr>
<tr>
<td>DOT</td>
<td>Department of Transportation</td>
</tr>
<tr>
<td>EMS</td>
<td>Emergency Medical Service</td>
</tr>
<tr>
<td>FARS</td>
<td>Fatality Analysis Reporting System</td>
</tr>
<tr>
<td>FHWA</td>
<td>Federal Highway Administration</td>
</tr>
<tr>
<td>FIRST</td>
<td>Fatality and Injury Reporting System Tool</td>
</tr>
<tr>
<td>GES</td>
<td>General Estimates System</td>
</tr>
<tr>
<td>GVWR</td>
<td>Gross Vehicle Weight Rating</td>
</tr>
<tr>
<td>ITS</td>
<td>Intelligent Transportation System</td>
</tr>
<tr>
<td>LTVs</td>
<td>Light Trucks and Vans</td>
</tr>
<tr>
<td>MUTCD</td>
<td>Manual of Uniform Traffic Control Devices</td>
</tr>
<tr>
<td>N/A</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>NASS</td>
<td>National Automotive Sampling System</td>
</tr>
<tr>
<td>NCSA</td>
<td>National Center for Statistics and Analysis</td>
</tr>
<tr>
<td>NHTSA</td>
<td>National Highway Traffic Safety Administration</td>
</tr>
<tr>
<td>PAR</td>
<td>Police Accident Report</td>
</tr>
<tr>
<td>PCR</td>
<td>Police Crash Report</td>
</tr>
<tr>
<td>PCs</td>
<td>Passenger Cars</td>
</tr>
<tr>
<td>PSAs</td>
<td>Public Service Announcements</td>
</tr>
<tr>
<td>PSUs</td>
<td>Primary Sampling Units</td>
</tr>
<tr>
<td>VIN</td>
<td>Vehicle Identification Number</td>
</tr>
</tbody>
</table>

Table 2 – Acronyms Used on this Website

5. Terms

This table below contains commonly used terms and their descriptions.

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol Involvement</td>
<td>NHTSA Defines A Fatal Crash as Alcohol-related or Alcohol-involved If Either A Driver or A Nonmotorist (usually A Pedestrian) Had A Measurable or Estimated Blood Alcohol Concentration (BAC) of 0.01 Grams Per Deciliter (g/dl) or Above. NHTSA Defines A Nonfatal Crash as Alcohol-related or Alcohol-involved If Police Indicate On The Police Accident Report That There Is Evidence of Alcohol Present. the Code Does Not Necessarily Mean That A Driver or Nonoccupant Was Tested for Alcohol.</td>
</tr>
<tr>
<td>Alcohol-Impaired Driving Crashes</td>
<td>Crashes That Involve At Least One Driver or Motorcycle Rider (operator) with A Blood Alcohol Concentration (BAC) of .08 Grams Per Deciliter</td>
</tr>
<tr>
<td>Term</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Alcohol-Impaired Driving Fatalities</td>
<td>All Fatalities in Crashes Involving A Driver or Motorcycle Rider (operator) with A Blood Alcohol Concentration (BAC) of .08 Grams Per Deciliter (g/dL) or Higher.</td>
</tr>
<tr>
<td>Angled Collision</td>
<td>Collisions Which Are Not Head-on, Rear-end, Rear-to-rear, or Sideswipe.</td>
</tr>
<tr>
<td>Blood Alcohol Concentration</td>
<td>the BAC Is Measured as A Percentage by Weight of Alcohol in the Blood (grams/deciliter). A Positive BAC Level (0.01 G/dl And Higher) Indicates That Alcohol Was Consumed by the Person Tested. A BAC Level of 0.10 G/dl or More Indicates That the Person Was Intoxicated.</td>
</tr>
<tr>
<td>Body Type</td>
<td>Detailed Type of Motor Vehicle Within A Vehicle Type.</td>
</tr>
<tr>
<td>Bus</td>
<td>Large Motor Vehicles Used to Carry More Than Ten Passengers, Including School Buses, Inter-city Buses, And Transit Buses.</td>
</tr>
<tr>
<td>Collectors</td>
<td>in Rural Areas, Routes Serving Intra-county, Rather Than Statewide Travel. in Urban Areas, Streets Providing Direct Access to Neighborhoods as Well as Direct Access to Arterials.</td>
</tr>
<tr>
<td>Combination Truck</td>
<td>A Truck Tractor Not Pulling A Trailer; A Tractor Pulling At Least One Full or Semi-trailer; or A Single-unit Truck Pulling At Least One Trailer.</td>
</tr>
<tr>
<td>Crash</td>
<td>an Event That Produces Injury And/or Property Damage, Involves A Motor Vehicle in Transport, And Occurs on A Trafficway while The Vehicle Is Still in Motion After Running off the Trafficway.</td>
</tr>
<tr>
<td>Crash Type</td>
<td>Single-vehicle or Multiple-vehicle Crash.</td>
</tr>
<tr>
<td>Day</td>
<td>From 6 A.m. to 5:59 P.m.</td>
</tr>
<tr>
<td>Driver</td>
<td>An Occupant of a Vehicle Who Is in Physical Control of a Motor Vehicle in Transport, or for an Out-of-control Vehicle, an Occupant Who Was in Control Until Control Was Lost.</td>
</tr>
<tr>
<td>Ejection</td>
<td>Refers to Occupants Being Totally or Partially Thrown from the Vehicle as A Result of an Impact or Rollover.</td>
</tr>
<tr>
<td>Fatal Crash</td>
<td>A Police-reported Crash Involving A Motor Vehicle in Transport on A Trafficway in Which At Least One Person Dies Within 30 Days of the Crash.</td>
</tr>
<tr>
<td>First Harmful Event</td>
<td>the First Event During A Crash That Caused Injury or Property Damage.</td>
</tr>
<tr>
<td>Fixed Object</td>
<td>Stationary Structures or Substantial Vegetation Attached to the Terrain.</td>
</tr>
<tr>
<td>Gross Vehicle Weight Rating (GVWR)</td>
<td>the Maximum Rated Capacity of a Vehicle, Including the Weight of the Base Vehicle, All Added Equipment, Driver and Passengers, and All Cargo Loaded into or on the Vehicle. Actual Weight May Be Less Than or Greater Than GVWR.</td>
</tr>
<tr>
<td>Head-on Collision</td>
<td>Refers to a Collision Where the Front End of One Vehicle Collides with the Front End of Another Vehicle While the Two Vehicles Are Traveling in Opposite Directions.</td>
</tr>
<tr>
<td>Initial Impact Point</td>
<td>the First Impact Point That Produced Personal Injury or Property Damage, Regardless of First or Most Harmful Event.</td>
</tr>
<tr>
<td>Injury Crash</td>
<td>A Police-reported Crash That Involves A Motor Vehicle in Transport on a Trafficway in Which No One Died But At least One Person Was Reported to Have: (1) an Incapacitating Injury; (2) a Visible but Not Incapacitating</td>
</tr>
<tr>
<td>Term</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Injury</td>
<td>Injury; (3) a Possible, Not Visible Injury; or (4) an Injury of Unknown Severity.</td>
</tr>
<tr>
<td>Injury Severity</td>
<td>the Police-reported Injury Severity of the Person (i.e., Occupant, Pedestrian, or Pedalcyclist).</td>
</tr>
<tr>
<td>Interstates</td>
<td>Limited Access Divided Facilities of at Least Four Lanes Designated by the Federal Highway Administration as Part of the Interstate System.</td>
</tr>
<tr>
<td>Jackknife</td>
<td>Jackknife Can Occur at Any Time During the Crash Sequence. in This Report, Jackknifing Is Restricted to Truck Tractors Pulling a Trailing Unit in Which the Trailing Unit and the Pulling Vehicle Rotate with Respect to Each Other.</td>
</tr>
<tr>
<td>Junction</td>
<td>Area Formed by the Connection of Two Roadways, Including Intersections, Interchange Areas, and Entrance/exit Ramps.</td>
</tr>
<tr>
<td>Land Use</td>
<td>the Crash Location (urban or Rural).</td>
</tr>
<tr>
<td>Large Trucks</td>
<td>Trucks Over 10,000 Pounds Gross Vehicle Weight Rating, Including Single Unit Trucks and Truck Tractors.</td>
</tr>
<tr>
<td>Light Trucks</td>
<td>Trucks of 10,000 Pounds Gross Vehicle Weight Rating or Less, Including Pickups, Vans, Truck-based Station Wagons, and Utility Vehicles.</td>
</tr>
<tr>
<td>Local Streets and Roads</td>
<td>Streets Whose Primary Purpose Is Feeding Higher Order Systems, Providing Direct Access with Little or No Through Traffic.</td>
</tr>
<tr>
<td>Manner of Collision</td>
<td>A Classification for Crashes in Which the First Harmful Event Was a Collision Between Two Motor Vehicles in Transport.</td>
</tr>
<tr>
<td>Minor Arterials</td>
<td>Streets and Highways Linking Cities and Larger Towns in Rural Areas in Distributing Trips to Small Geographic Areas in Urban Areas (not Penetrating Identifiable Neighborhoods).</td>
</tr>
<tr>
<td>Most Harmful Event</td>
<td>the Event During a Crash for a Particular Vehicle That Is Judged to Have Produced the Greatest Personal Injury or Property Damage.</td>
</tr>
<tr>
<td>Motor Vehicle in Transport</td>
<td>A Motor Vehicle in Motion on the Trafficway or Any Other Motor Vehicle on the Roadway, Including Stalled, Disabled, or Abandoned Vehicles.</td>
</tr>
<tr>
<td>Motorcycle</td>
<td>A Two- or Three-wheeled Motor Vehicle Designed to Transport One or Two People, Including Motor scooters, Minibikes, and Mopeds.</td>
</tr>
<tr>
<td>Motorcycle Rider</td>
<td>Operator of a Motorcycle.</td>
</tr>
<tr>
<td>Motorcyclists</td>
<td>Any Combined Reference to the “motorcycle Rider” as Well as the “passenger”. “Passenger” is Any Person Who Is Not in Control of the Motorcycle.</td>
</tr>
<tr>
<td>N/A</td>
<td>Not Applicable.</td>
</tr>
<tr>
<td>Night</td>
<td>From 6 P.m. to 5:59 a.m.</td>
</tr>
<tr>
<td>Noncollision</td>
<td>A Class of Crash in Which the First Harmful Event Does Not Involve a Collision with a Fixed Object, Nonfixed Object, or a Motor Vehicle. This Includes Overtturn, Fire/explosion, Falls from a Vehicle, and Injuries in a Vehicle.</td>
</tr>
<tr>
<td>Nonmotorist Location</td>
<td>the Location of Nonmotorists at Time of Impact. Intersection Locations Are Coded Only If Nonmotorists Were Struck in the Area Formed by a Junction of Two or More Trafficways. Non-intersection Location May Include Nonmotorists Struck on a Junction of a Driveway/alley Access and</td>
</tr>
<tr>
<td>Term</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>a</strong> Named Trafficway. Nonmotorists Who Are Occupants of Motor Vehicles Not in Transport Are Coded with Respect to the Location of the Vehicle.</td>
<td></td>
</tr>
<tr>
<td><strong>Objects Not Fixed</strong></td>
<td>Objects That Are Movable or Moving but Are Not Motor Vehicles. Includes Pedestrians, Pedalcyclists, Animals, or Trains (e.g., Spilled Cargo in Roadway).</td>
</tr>
<tr>
<td><strong>Other Freeways and Expressways</strong></td>
<td>All Urban Principal Arterial with Limited Control of Access Not on the Interstate System.</td>
</tr>
<tr>
<td><strong>Other Principal Arterials</strong></td>
<td>Major Streets or Highways, Many with Multi-lane or Freeway Design, Serving High-volume Traffic Corridor Movements That Connect Major Generators of Travel.</td>
</tr>
<tr>
<td><strong>Other Vehicle</strong></td>
<td>Consists of the Following Types of Vehicles: 1. Large Limousine (more Than Four Side Doors or Stretched Chassis) 2. Three-wheel Automobile or Automobile Derivative 3. Van-based Motorhome 4. Light-truck-based Motorhome (chassis Mounted) 5. Large-truck-based Motorhome 6. ATV (all Terrain Vehicle, Including Dune/swamp Buggy) and ATC (all Terrain Cycle) 7. Snowmobile 8. Farm Equipment Other Than Trucks 9. Construction Equipment Other Than Trucks (includes Graders) 10. Other Type Vehicle (includes Go-cart, Fork Lift, City Streetsweeper).</td>
</tr>
<tr>
<td><strong>Passenger</strong></td>
<td>Any Occupant of a Motor Vehicle Who Is Not a Driver.</td>
</tr>
<tr>
<td><strong>Passenger Car</strong></td>
<td>Motor Vehicles Used Primarily for Carrying Passengers, Including Convertibles, Sedans, and Station Wagons.</td>
</tr>
<tr>
<td><strong>Pedalcyclist</strong></td>
<td>A Person on a Vehicle That Is Powered Solely by Pedals.</td>
</tr>
<tr>
<td><strong>Pedestrian</strong></td>
<td>Any Person Not in or Upon a Motor Vehicle or Other Vehicle.</td>
</tr>
<tr>
<td><strong>Property-Damage-Only Crash</strong></td>
<td>A Police-reported Crash Involving a Motor Vehicle in Transport on a Trafficway in Which No One Involved in the Crash Suffered Any Injuries.</td>
</tr>
<tr>
<td><strong>Rear-end Collision</strong></td>
<td>A Collision in Which One Vehicle Collides with the Rear of Another Vehicle.</td>
</tr>
<tr>
<td><strong>Restraint Use</strong></td>
<td>the Occupant's Use of Available Vehicle Restraints Including Lap Belt, Shoulder Belt, or Automatic Belt.</td>
</tr>
<tr>
<td><strong>Roadway</strong></td>
<td>That Part of a Trafficway Designed, Improved, and ordinarily Used for Motor Vehicle Travel.</td>
</tr>
<tr>
<td><strong>Roadway Function Class</strong></td>
<td>the Classification Describing the Character of Service the Street or Highway Is Intended to Provide.</td>
</tr>
<tr>
<td><strong>Rollover</strong></td>
<td>Rollover Is Defined as Any Vehicle Rotation of 90 Degrees or More About Any True Longitudinal or Lateral Axis. Includes Rollovers Occurring as a First Harmful Event or Subsequent Event.</td>
</tr>
<tr>
<td><strong>School Bus-Related Crash</strong></td>
<td>Any Crash in Which a Vehicle, Regardless of Body Design, Used as a School Bus Is Directly or Indirectly Involved, such as a Crash Involving School Children Alighting from a Vehicle.</td>
</tr>
<tr>
<td><strong>Seating Position</strong></td>
<td>the Location of the Occupants in the Vehicle. More Than One Can Be Assigned the Same Seat Position; However, This Is Allowed Only When a Person Is Sitting on Someone's Lap.</td>
</tr>
<tr>
<td><strong>Sideswipe</strong></td>
<td>A Collision in Which the Sides of Both Vehicles Sustain Minimal Engagements.</td>
</tr>
<tr>
<td><strong>Single-Unit Truck</strong></td>
<td>A Medium or Heavy Truck in Which the Engine, Cab, Drive Train, and Cargo Area Are All on One Chassis.</td>
</tr>
<tr>
<td>Term</td>
<td>Description</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Trafficway</td>
<td>Any Road, Street, or Highway Open to the Public as a Matter of Right or Custom for Moving Persons or Property from One Place to Another.</td>
</tr>
<tr>
<td>Unknown</td>
<td>Data Either Not Available or Not Known.</td>
</tr>
<tr>
<td>Vehicle Type</td>
<td>A Series of Motor Vehicle Body Types That Have Been Grouped Together Because of Their Design Similarities. the Principal Vehicle Types Used in This Report Are Passenger Car, Light Truck, Large Truck, Motorcycle, Bus, and Other Vehicle.</td>
</tr>
<tr>
<td>Weekday</td>
<td>From 6 AM Monday to 5:59 PM Friday.</td>
</tr>
<tr>
<td>Weekend</td>
<td>From 6 PM Friday to 5:59 AM Monday.</td>
</tr>
</tbody>
</table>

Table 3 – Terms Used on this Website