



# New Mexico Crash Map – User Guide

The New Mexico Crash Map was developed using ESRI's ArcGIS Server for Flex Viewer and API. It was prepared by the [Division of Government Research \(DGR\)](#) at the [University of New Mexico \(UNM\)](#) for the New Mexico Traffic Safety Division (NM TSD), [New Mexico Department of Transportation \(NMDOT\)](#) under contract # C05407.

New Mexico 2010 Crash Map: [http://dgrmap.unm.edu/NM\\_Crash10/](http://dgrmap.unm.edu/NM_Crash10/)

Download the user Guide as PDF (<http://dgrarc.unm.edu/docs/help.pdf>)

For traffic crash data requests and questions, contact the NMDOT Traffic Safety Division at: 505-827-0427 or 505-541-7952 and ask for the Traffic Records Program.

**NOTE:** Much of the content and format of this user guide was graciously provided by UNM's Earth Data Analysis Center (EDAC) and has been used in several projects they have conducted:

- New Mexico Broadband Map (<http://nmbbmapping.org/mapping/>)
- New Mexico Public Schools (<http://psfa.unm.edu/>)

## Web Browser and Software Requirements:

- **Browsers:** Firefox 3.5 or later; Google™ Chrome 4 or later; Internet Explorer 7.0 or later; Safari 3 or later.
- **Required Plugin:** Adobe® Flash® Player 10, a free plug-in from Adobe: <http://get.adobe.com/flashplayer/>

## Basis Usage:

The following tools are provided to assist the user for interactively displaying, viewing and querying crash data. Please note that the easiest way to view data about a crash is to zoom/pan to the area of interest and simply click on the crash location and a popup window will appear. Identify and selection widgets are also available that provide more features and are somewhat more complicated to use (see below).

## NM Crash Map Tools:

- *Header Menu Bar:*
- *Navigation Bar:*
- *Map Switcher Menu Bar:*
- *Map Layers:*
- *Map Legend:*
- *Identify Tools:*
- *Selection:*

### Header Menu Bar

Various tools to access for the map are in the header menu bar. An underlined tool indicates that the tool window is open and active. All the tool windows are resizable and can be minimized or closed.



Resize: Resize the tool window by clicking and dragging the dots shown at the lower right of the window.

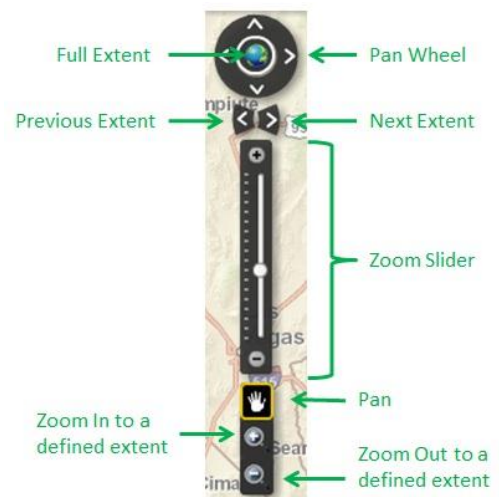
Minimize: The window collapses and docks on the map, as shown ; it can be reopened by clicking on the docked icon

### Navigation Bar

**Full Extent:** Click on the Globe icon shown inside the navigation pan wheel, and the map view returns to the original extent.

**Pan Wheel:** The Navigation Pan Wheel allows the user to move the map to North, East, South, or West by clicking on the arrow.

**Previous Extent:** Click on the Previous Extent icon and the map view goes back to the last-visited extent. This is activated only when the map view is moved from the initial extent.



**Next Extent:** Click on the Next Extent icon and the map view returns to the next extent from the previous extent. This is activated only when the map view is moved from the initial extent.

**Zoom Slider:** Click on the Plus symbol (+) to Zoom In or the Minus symbol (-) to Zoom Out the map view. Also, drag the slider marker up or down to zoom in or out.

**Pan:** Click on the Pan icon to activate the drag-and-drop Pan control (the hand symbol).

**Zoom In and Zoom Out to a Defined Extent:** Click on an icon below the Pan/Hand icon and draw a box on the map. Drawing a box with the Plus symbol (+) zooms in, and with the Minus symbol (-), zooms out.

## Map Switcher Menu Bar

**Streets:** The Streets Map layer is active by default. This base map includes highways, major and minor roads, railways, cities, landmarks, etc. The map also includes building footprints for selected areas.



**Aerial:** The Aerial Map service presents low-resolution satellite imagery for the world and high-resolution imagery for the United States and some areas around the world.

**Topo:** The Topographic Map service includes administrative boundaries, cities, water features, physiographic features, parks, landmarks, highways, roads, railways, airports, and buildings overlaid on land cover and shaded relief imagery.

## Map Layers

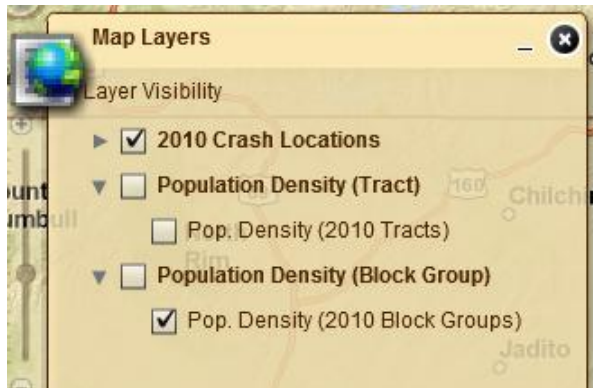
This is a default tool when the Web map is launched.

This tool shows the different layers available to view on the map. You must click on the right pointing triangle to open a list of the various types of crashes that can be displayed on the map or the

additional population data that can also be displayed. Once open, a bottom pointing triangle

will appear. You can choose to display or not to display various types of crashes or population data by clicking the check-boxes. This makes your choice active or not active for the Identify and Selection Tools (see below).





**NOTE:** The visibility of selected crash types, population data and roads (base map) is controlled by the scale of the map as you zoom in or out. Crashes on the Interstates will appear at smaller scales and US Roads, NM Roads, and then local roads with crashes will appear at larger scales as long as the check box is checked.

### Map Legend

This tool displays the map legend for the selected type of crash or population data. The default legend item is total Interstate crashes, also the default layer item. The other map legend items will be displayed when the map layers are turned on in the Map Layers Tool. Crashes are displayed on the map using a graduated symbol method (various sized red dots) with the frequency of crashes grouped by various ranges displayed to the right of the map symbol. The highest frequency group is highlighted with a gold dot in the center to make for easier identification on the map.



### Identify Tools

Use this tool to identify crashes (view crash data) at particular locations or to view population data at selected tracts or block groups. Your active Map Layer Tool selection(check box) are now candidates for quick identification using the Identify tools. The tool allows users to pick features to identify using various geometry based selection methods. Users can choose to Identify by Point,



Identify by Polyline, Identify by Rectangle, or Identify by Polygon. The selected crash locations are displayed with a blue identification marker. Attributes (Items) of the resulting selections are displayed in the Identify Tool and also in a pop-up window (note: there can be multiple crashes at a particular location). Clicking in the Identify Tool data display after the selection will zoom to all selected crashes. There is also a link to Clear the results of your selection (note: click on Identify icon if Clear is not visible) and you can do another identify if necessary. It does take some practice to get familiar with this tool. The Identify and Results icons on the top bar should be used to switch between the available identify tools and the results table.

## Selection

The Selection tool is even more complex than the Identify Tool, but, provides additional functionality. By default, it allows for building a query based on the Fields (attributes/items) of a selected layer. You can build a query statement by choosing from the available Fields and also an appropriate Operator(s) You can also use the Get Unique Values button to help finish your query.

After you push the Select button, your selection(s) will be displayed on the map with blue push-pin symbols (note: you may have to zoom in closer for blue push pins to be visible). A pop-up window will display as you move over an individual selection (blue push pin symbol). The Selection Results icon on the top bar will display a table of your selection(s). You can also export the table of selected crashes using the Export button. You can zoom to an individual record in the table by selecting it. When finished, you can use the Clear button to end your current selection. There are several icons on the top bar that allow for various options, Selecting by Attributes (default), Selecting by Location, and to Display Results. You will have to use either of these to start a new selection.

