

FARS Encyclopedia Mapping Features

Introduction:

This document describes the new mapping tool features in the FARS Encyclopedia. Users can create pin maps and intensity maps from custom queries using the FARS database. Pin maps may be created showing locations of fatal crashes for any custom query in the Query FARS Data section. Intensity maps can be created for custom univariate tables based on State and County geographic boundaries.

In the FARS Data Tables section, users may plot crash locations in the following FARS Data Tables:

Chapter	Subchapter	Report
Crashes	Time	Fatal Crashes by Time of Day and Day of Week
Vehicles	All Vehicles	Vehicles Involved in Fatal Crashes by Vehicle Type, Rollover Occurrence
People	All Victims	Persons Killed, by Age
People	All Victims	Persons Killed in Construction/Maintenance Zones
People	Occupants	Vehicle Occupants Killed, by Vehicle Type and Most Harmful Event
People	Restraints	Passenger Vehicle Occupants Killed, by Age and Restraint Use
People	Motorcyclists	Motorcyclists Killed, by Time of Day and Day of Week
People	Motorcyclists	Motorcyclists Killed, by Person Type and Helmet Use
People	Pedestrians	Pedestrians Killed, by Time of Day and Day of Week
States	Crashes and All Victims	Person Killed, by STATE and Age Group
States ^(*)	Fatalities and Fatality Rates	Fatalities and Fatality Rates by STATE, 1994 - 2009

(*) For the Fatalities and Fatality Rates report, intensity maps are displayed by user selections on column heading (calendar year) links.

This document describes the use of the map features. **Users must first create data tables or listing in the *FARS Data Tables* or the *Query FARS Data* tools.** Refer to the following exercise documents for instructions on creating custom tabular results and listings:

- If you would like additional training on using this query system, try some of the exercises below.
 - [Univariate Report Exercises](#)
 - [Cross Tab Report Exercises](#)
 - [Case Listing Report Exercise](#)
- If you would like to see the final reports, click links below.
 - [Univariate Tabulation Reports](#)
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(Available only for Univariate tabulation report by State or by County.)

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I.A.1. and I.A.2. Query Tool - Creating a Pin Map from Cross or Univariate Tabulation.

Select the hyperlink count in a Cross or Univariate Tabulation report to display the locations of the crashes represented by the cell. In this Cross Tabulation example, by clicking the count in the cell that represents Tuesday and Noon to 2:59pm a map will be displayed with pin markings at the locations for the 17 crashes that occurred in 2007 in Florida during the selected time block.

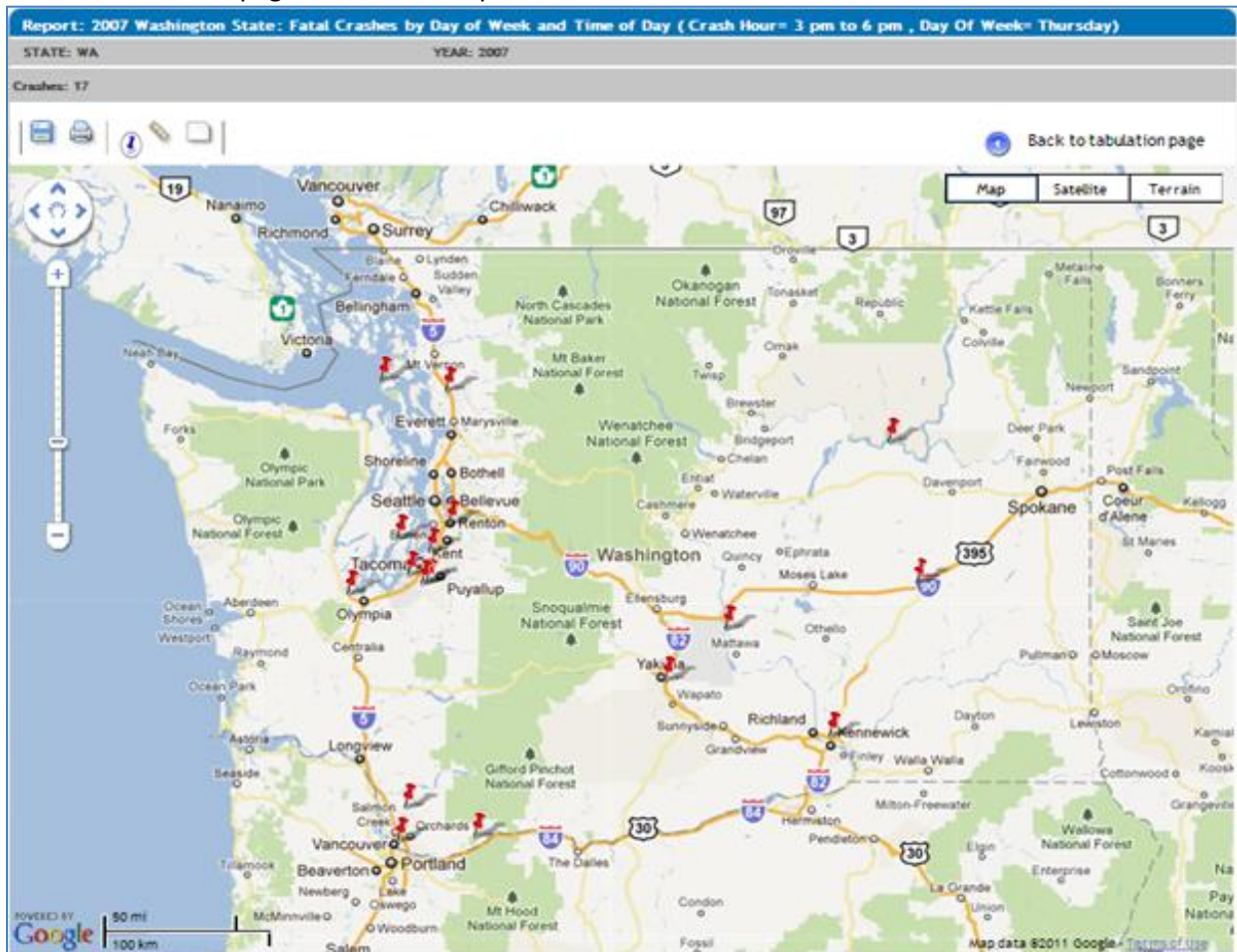
Report: 2007 Washington State: Fatal Crashes by Day of Week and Time of Day

STATE: WA YEAR: 2007 COUNT: Number of Crashes

OUTPUT OPTIONS: EXPORT (CSV) View Cases

Crash Hour	Day Of Week							Total
	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
3 am to 6 am	14	2	3	2	4	4	6	37
6 am to 9 am	2	2	6	2	4	3	4	40
9 am to Noon	2	2	6	8	10	2	3	54
Noon to 3 pm	6	10	13	3	7	10	3	68
3 pm to 6 pm	13	21	11	14	17	13	17	106
6 pm to 9 pm	17	12	8	12	11	17	14	93
9 pm to Midnight	11	2	6	6	3	16	2	60
Midnight to 3 am	18	2	2	6	11	2	23	78
Unknown	0	0	0	0	0	1	0	1
TOTAL	97	70	64	60	74	64	84	534

The map containing the selected crash locations will display. To return to the tabulation, select the link "Back to tabulation page" above the map.



I.A.3. Query Tool - Creating a Pin Map from Case Listing Report.

Select the **Map It!** button in a Case Listing report to display crash locations.

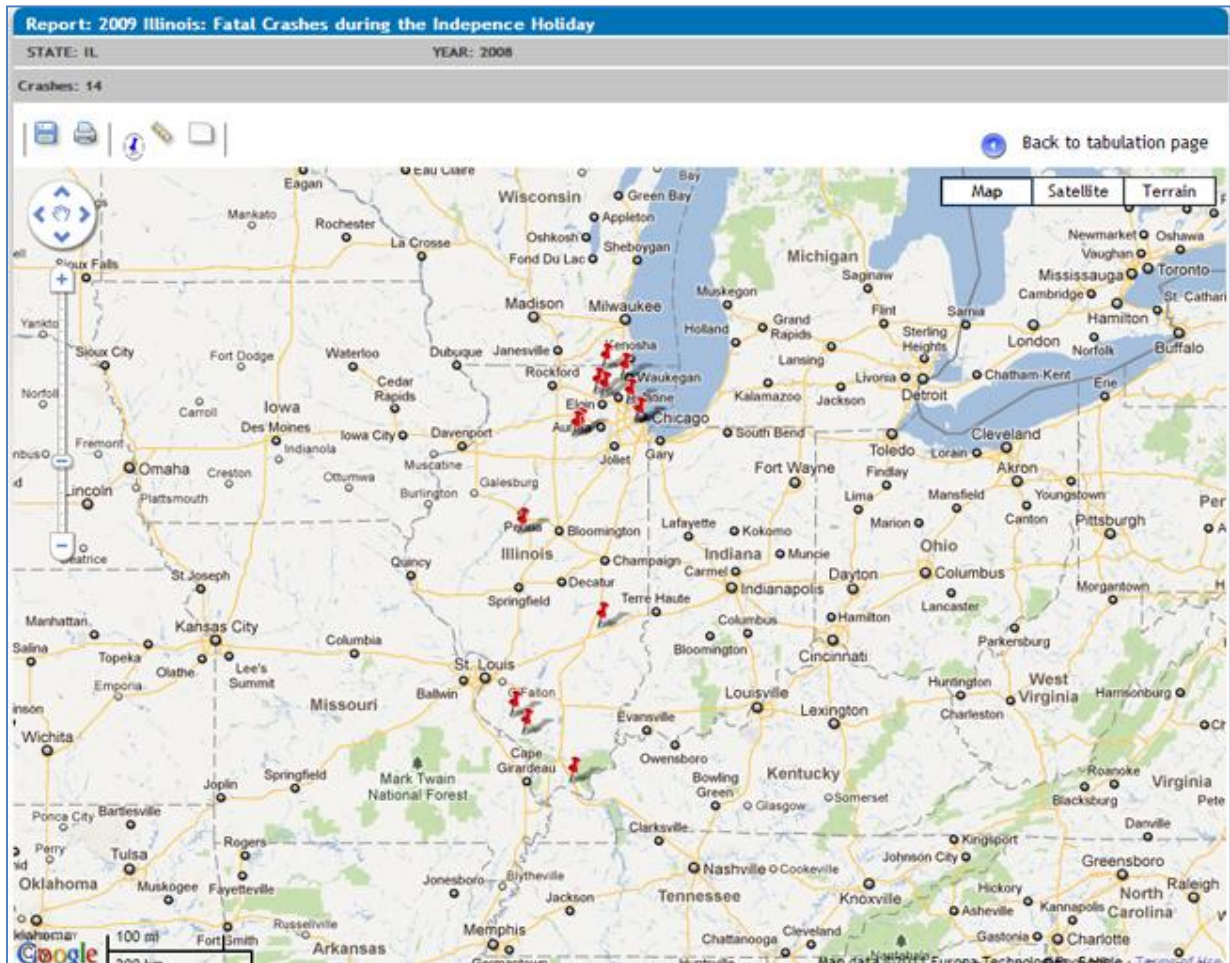
Report: 2009 Illinois: Fatal Crashes during the Independence Holiday

Map It!

OUTPUT OPTIONS:


Obs.	State	Case Number	County	Crash Hour	Day Of Week	First Harmful Event
1	17	400	35	21	7	34
2	17	402	179	1	1	34
3	17	404	127	23	6	32
4	17	450	31	18	5	12
5	17	461	93	22	6	12
6	17	462	99	2	6	42
7	17	465	77	19	6	30
8	17	466	97	0	7	42
9	17	467	97	12	7	12
10	17	468	157	22	1	34
11	17	470	31	0	2	30
12	17	482	31	6	1	29
13	17	514	31	19	5	12
14	17	629	89	13	7	8


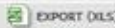


The map containing the selected crash locations will display.



I.B.1. Query Tool - Creating an Intensity Map from Univariate Tabulation.

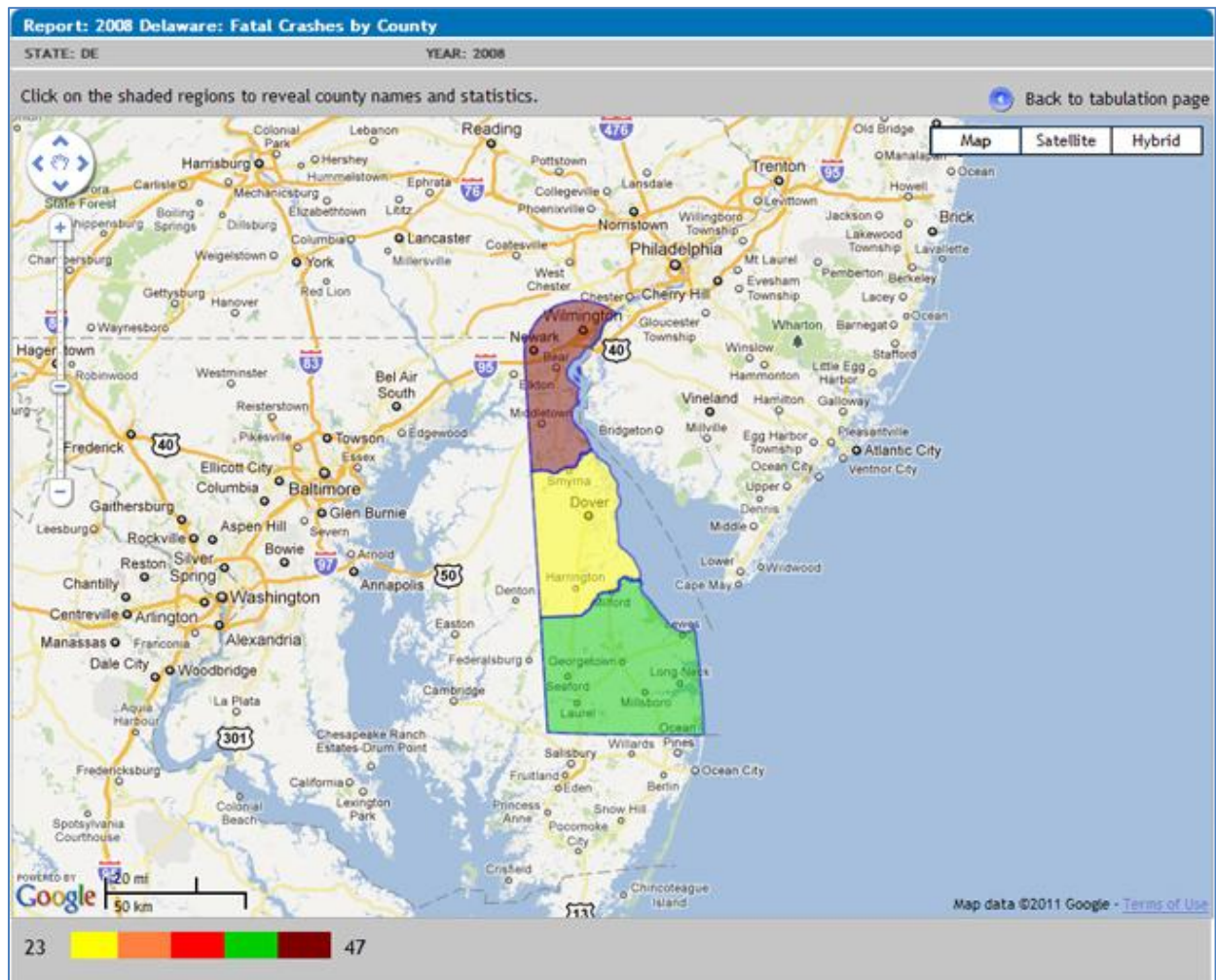
(Available only for Univariate tabulation report by State or by County.)

Univariate Tabulations includes an additional option to display *Intensity* maps for reports summarized by State or by County boundaries. Select the  button to display the *Intensity* map. In this example, the Univariate is a tabulation of fatal crashes by County.

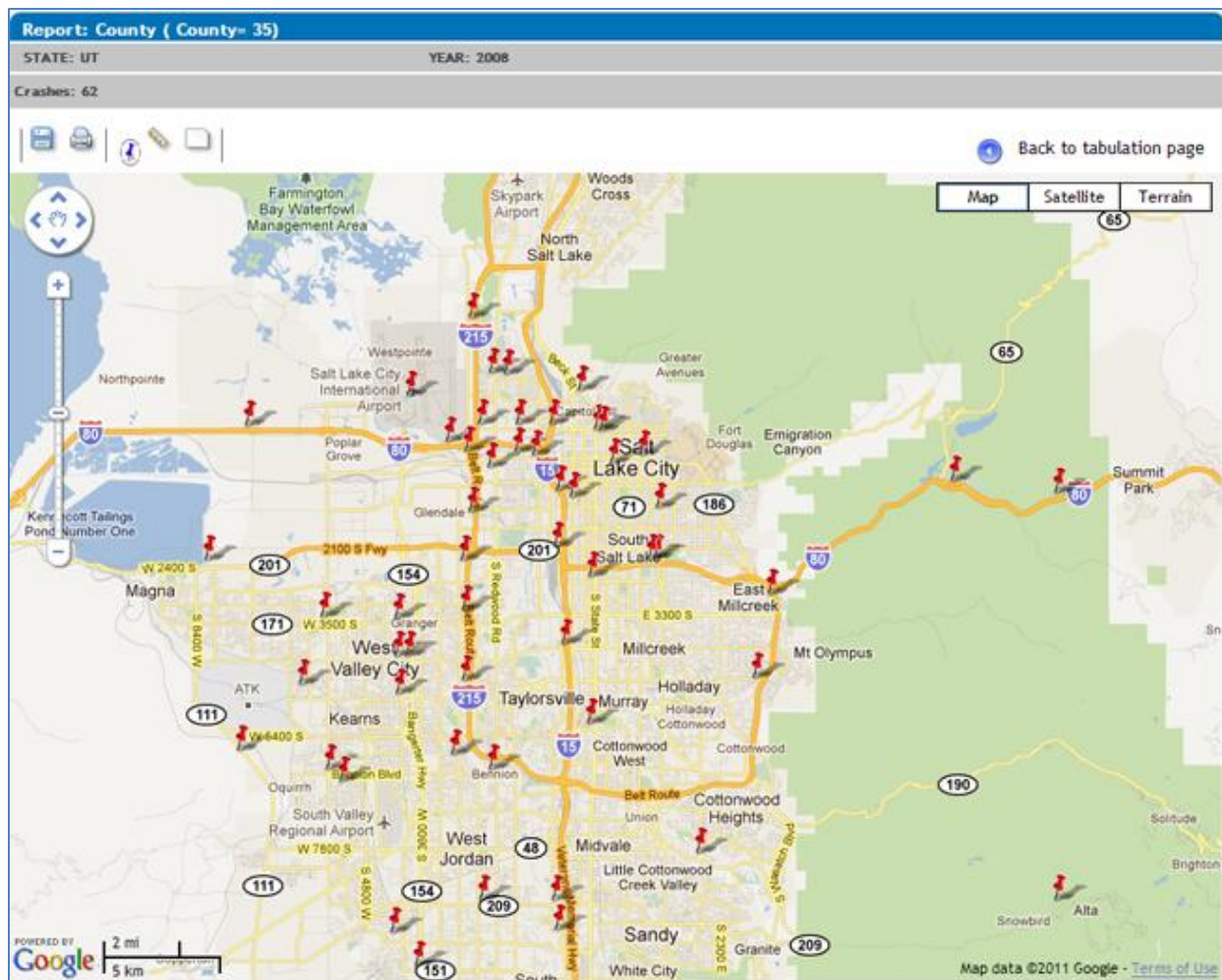
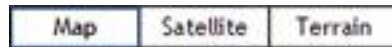
Report: 2008 Delaware: Fatal Crashes by County		
STATE: DE	YEAR: 2008	COUNT: Number of Crashes
OUTPUT OPTIONS:    		
County	Total	
KENT (1)	23	
NEW CASTLE (3)	47	
SUSSEX (5)	35	
TOTAL	105	

Search Criteria:
Year 2008
State (10)

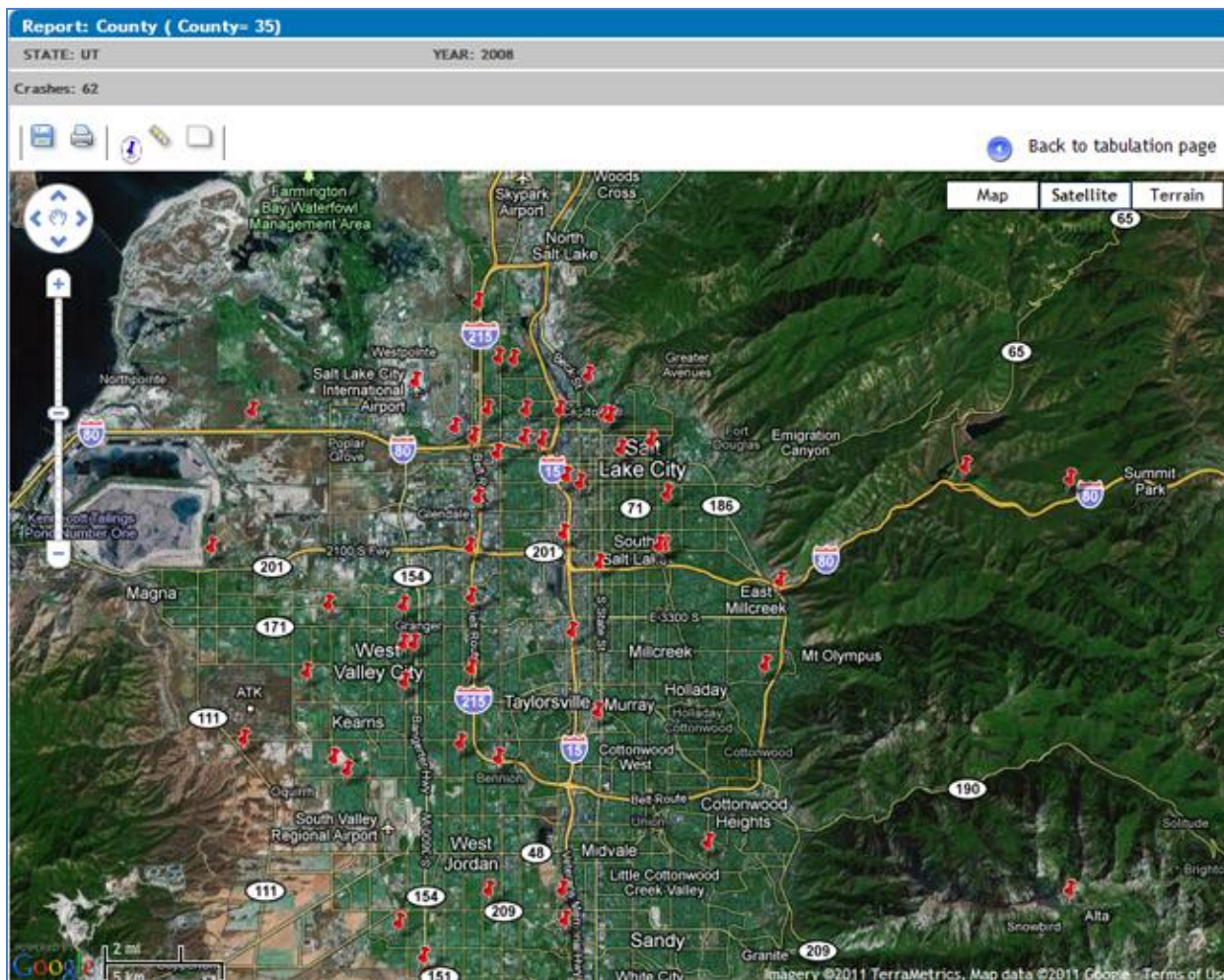
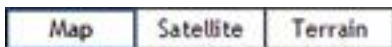
The *Intensity* map will display. The darker colors represent Counties with higher number of fatal crashes.



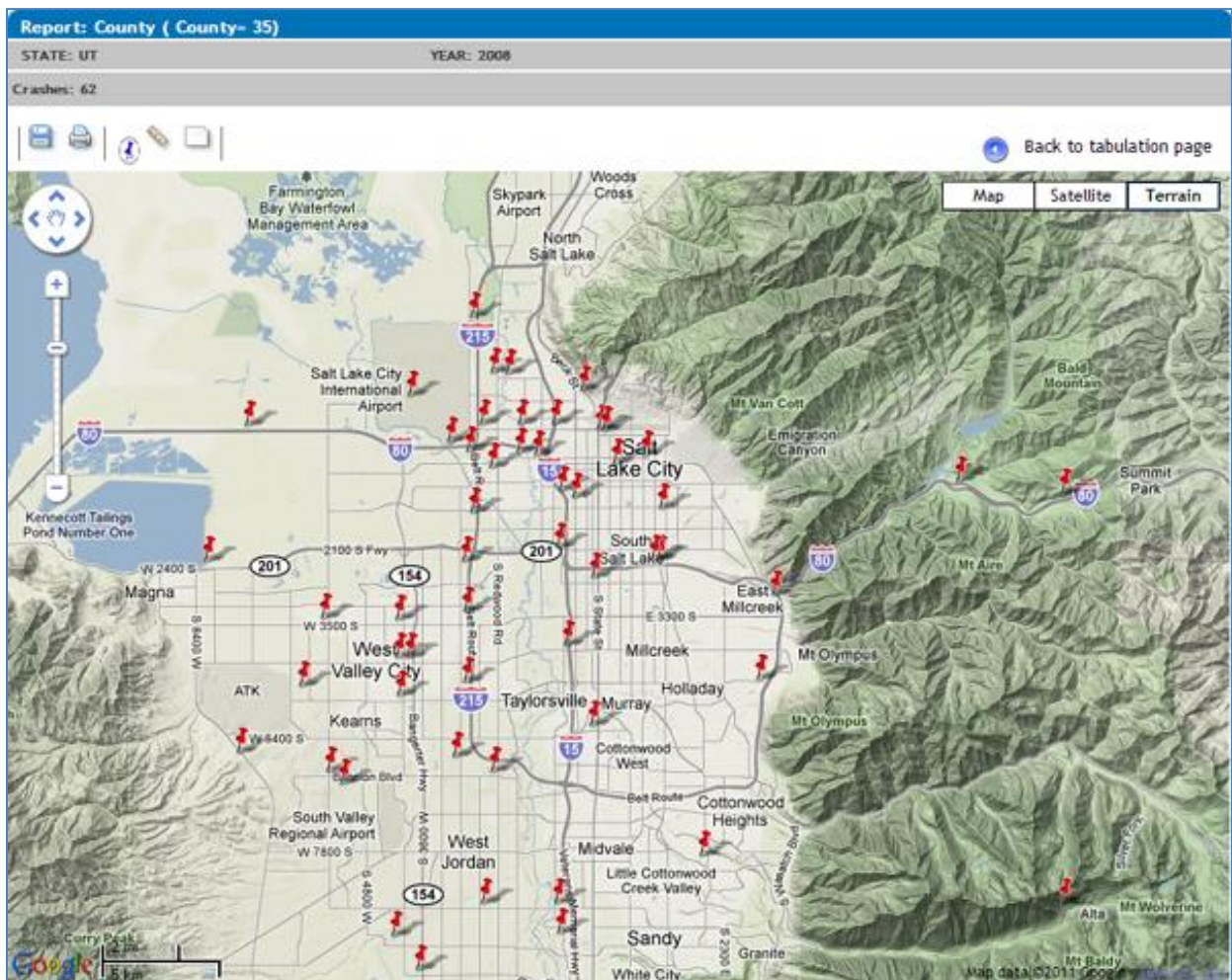
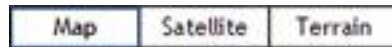
II.A. Views: "Map" - Show Street Map



II.B. Views: "Satellite" - Show Street Map with Satellite Imagery



II.C. Views: "Terrain" - Show Street Map with Terrain



III.A. and II.B. Tools: Pan, Zoom.



◀ Pan (◀ west; ▲ north; ▶ east; ▼ south;
 ◉ Return to the last result.)



◀ Zoom In



◀ Drag to Zoom



◀ Zoom Out

III.C. Tools: Measure Distance by Line.

Report: 2008 Georgia: Fatal Crashes on Interstate Roadways (State= Georgia)

STATE: GA YEAR: 2008

Crashes: 179, Number of pins: 167. (Location coordinates of - 12 crashes are not reported to FARS.)

1. Select the "Measure Distance by Line" tool.

2. Position cursor at start point of measurement and select - left mouse click. Green marker will appear. (Do NOT click on top of a crash pin. See "Case Display".)

3. Position cursor at end point of measurement and select - left mouse click. Green marker will appear. (Do NOT click on top of a crash pin. See "Case Display".)

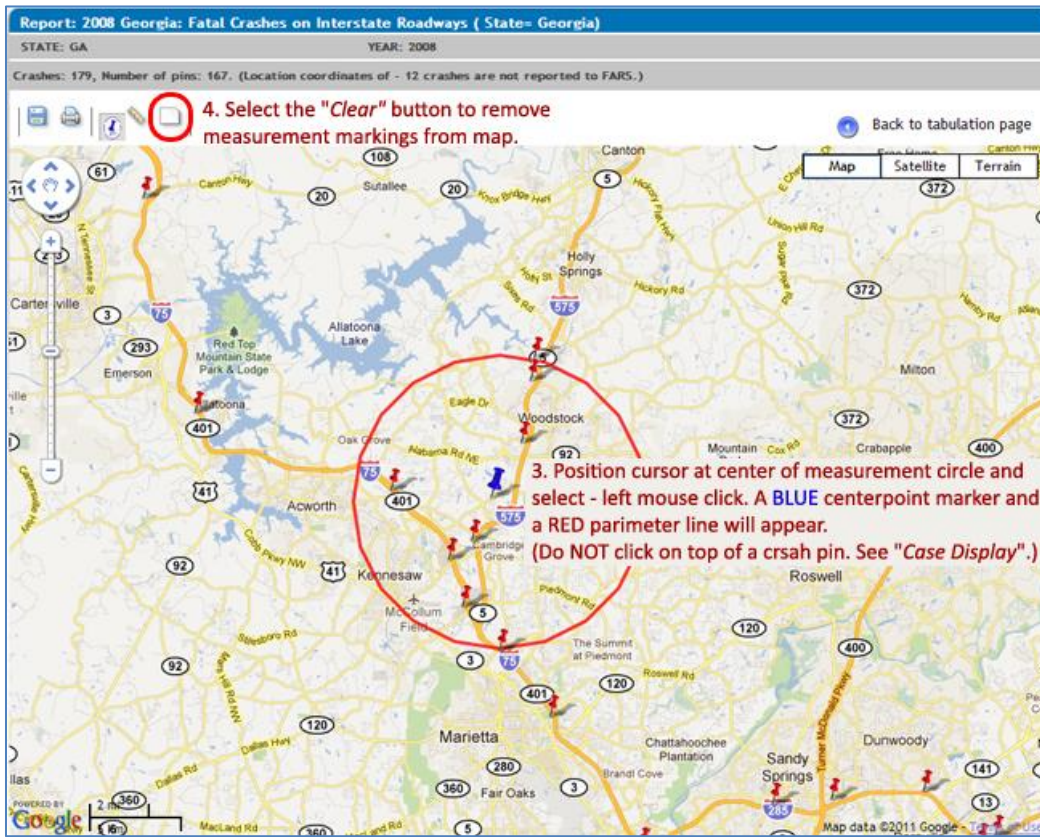
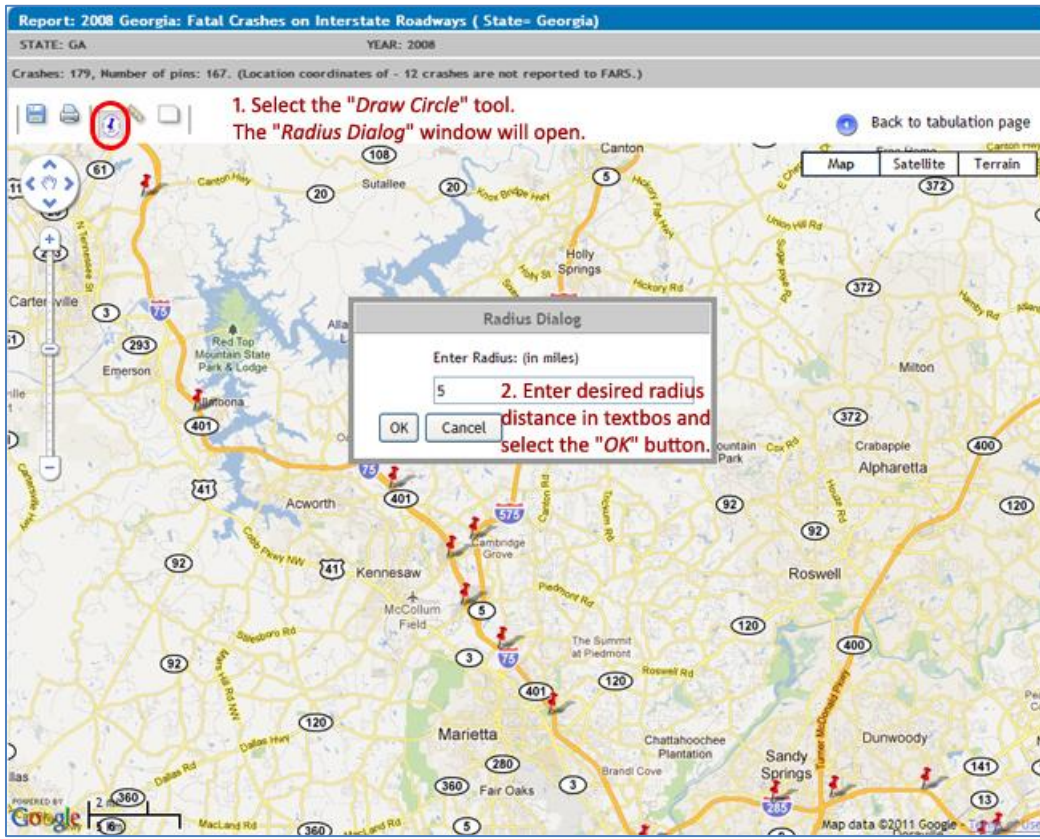
4. Hover cursor over green end point pin to display call out with distance reading.

5. Select the Clear button to remove measurement markings from map.

Distance : 1.8 Mi, 2.9 Km

Map data ©2011 Google - Terms of Use

III.C. Tools: Draw Circle Measure Tool.



III.D. Tools: Save.



Select the Save tool to save the map. All un-cleared measurement marking will be saved with map image.

III.E. Tools: Print.



Select the Print tool to save the map. All un-cleared measurement marking will be printed with map image.

IV. Case Display

Report: 2008 Georgia: Fatal Crashes on Interstate Roadways (State= Georgia)
 STATE: GA YEAR: 2008
 Crashes: 179, Number of pins: 167. (Location coordinates of - 12 crashes are not reported to FARS.)

Click an item below to view more information:

- Accident: 0899 | State: Georgia | Date: 08/26/2008
- Vehicle_1 | UnitType: Motor Vehicle In-Transport (Inside or Outside the Trafficway)
- Driver_V1 | Driver Presence: Driver-Operated Vehicle
- Person_1_V1 | Person Type: Driver of a Motor Vehicle In-Transport | Injury Severity: Fatal**
- Person_2_V1 | Person Type: Driver of a Motor Vehicle In-Transport | Injury Severity: Fatal

2. Hover cursor over a case record. As you hover highlighting (aqua) will appear over a case record. Select - left-mouse click - to open the case form.

1. Position cursor over a crash pin and select - left-mouse click.

2008 Fatality Analysis Reporting System PERSON LEVEL

U.S. Department of Transportation
 National Highway Traffic Safety Administration

STATE NUMBER (GSA Codes)	13	CONSECUTIVE NUMBER	899	VEHICLE NUMBER	1	PERSON NUMBER	1
NON-OCCUPANT STRIKING VEHICLE NUMBER	00	NON-OCCUPANT LOCATION				00	
Assigned Vehicle Number, Except: 00 - Not Applicable - Occupants of Motor Vehicle in Transport or Not In-Transport (Including Parked/Stopped Off Roadway/Working/In Motion Outside Trafficway)				00 - Not Applicable - Occupant of Motor Vehicle In-Transport or Not In-Transport (Including Parked/Stopped Off Roadway/Working/In Motion Outside Trafficway)			
AGE				POLICE REPORTED ALCOHOL INVOLVEMENT			
Actual Value Except 00-Up to One Year 97-Ninety-Seven Years+ 99-Unknown				0 - No (Alcohol Not Involved) 8-Not Reported 1-Yes (Alcohol Involved) 9-Unknown (Police Reported)			
SEX				METHOD OF ALCOHOL DETERMINATION (By Police)			
1-Male 2-Female 9 - Unknown				1-Evidential Test (Breath, Blood, Urine) 5-Observed 2-Preliminary Breath Test (PBT) 8-Other (e.g., Saliva test) 3-Behavioral 9-Not Reported 4-Passive Alcohol Sensor (PAS)			
PERSON TYPE				ALCOHOL TEST TYPE			
MOTORISTS 01-Driver of Motor Vehicle In-Transport 02-Passenger of Motor Vehicle In-Transport 09-Unknown Occupant Type in a Motor Vehicle In-Transport				01			
NON-MOTORISTS 03-Occupant of a Motor Vehicle Not In-Transport 04-Occupant of a Non-Motor Vehicle Transport Device Non-Occupants 05-Pedestrian 06-Bicyclist 07-Other Cyclist 08-Persons on Personal Conveyances 10-Persons In/On Buildings 19-Unknown Type of Non-Motorist				ALCOHOL TEST RESULTS			
01				09			

SCROLL TO END OF RECORD