COUNTY-WIDE CRASH DATA ANALYSIS SYSTEM

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Purpose

 To support the County needs for improvement of traffic safety in the county roadways

Requirements

- Provide access to crash records
- Analyze all crashes in the County roads
- Identify predominant crash types and high crash locations
- Widely accessible
- Easy to use
- Updated frequently

System Features

- Crash Data Import
- Crash Mapping
- Crash Analysis
- Statistical Reports
- System Administration

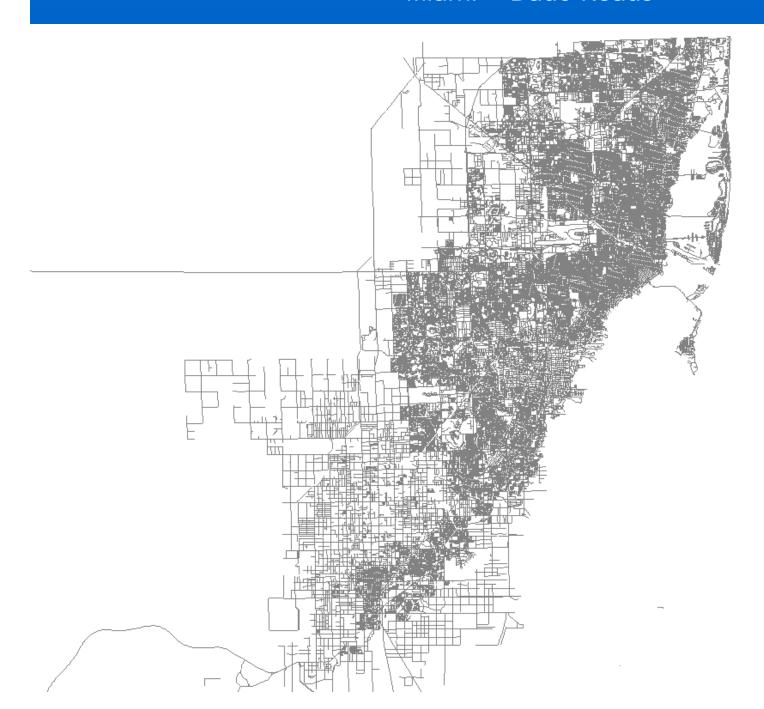
Crash Data Import

- Data Source: Freely available from Florida HSMV
- 50,000 60,000 long form crashes per year
- Data includes digital records and scanned images of police crash reports

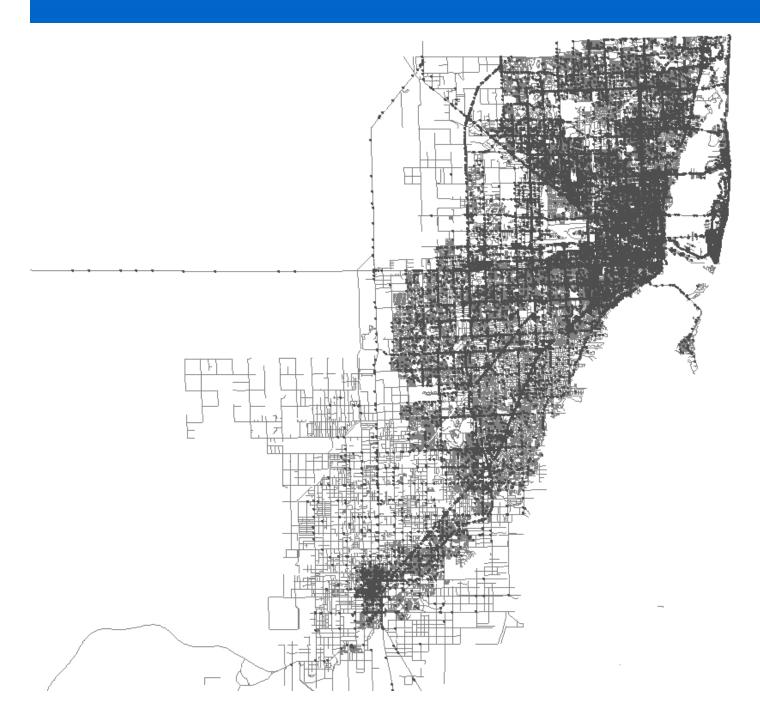
Crash Mapping

- Uses Geographic Information
 Systems (GIS) to map crashes
- Parking lot or private property locations are excluded
- 93 95% match rate
- Uses Miami-Dade GIS road network

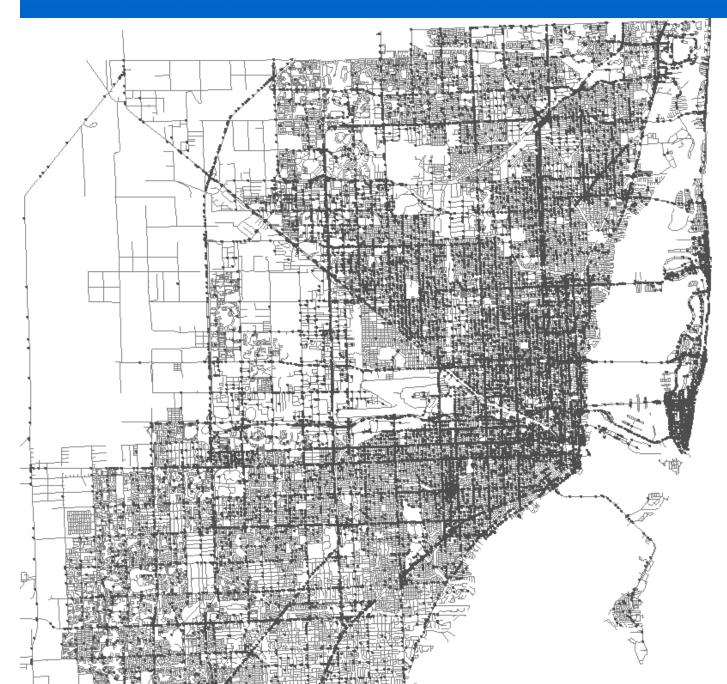
Miami – Dade Roads



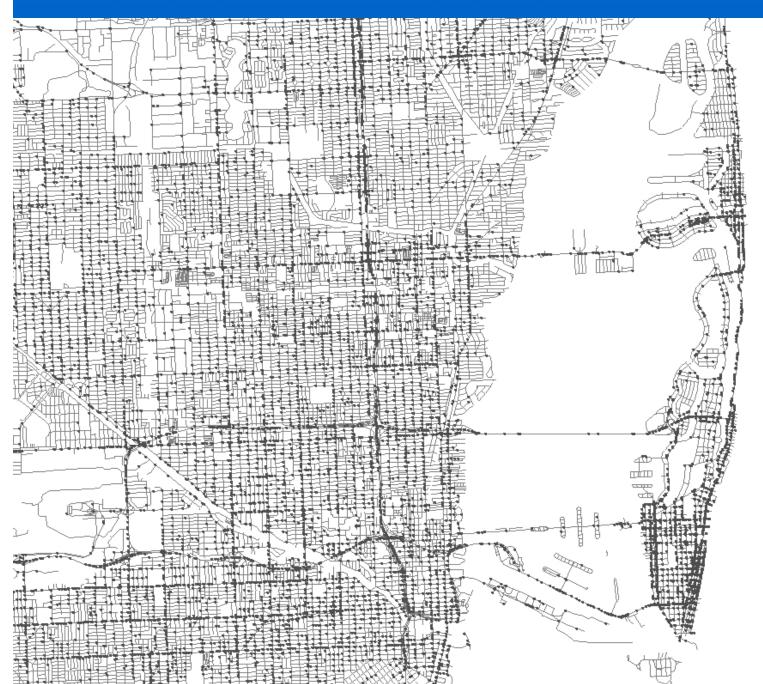
Miami – Dade 2007 Crashes



Miami – Dade 2007 Crashes - Close Up 1



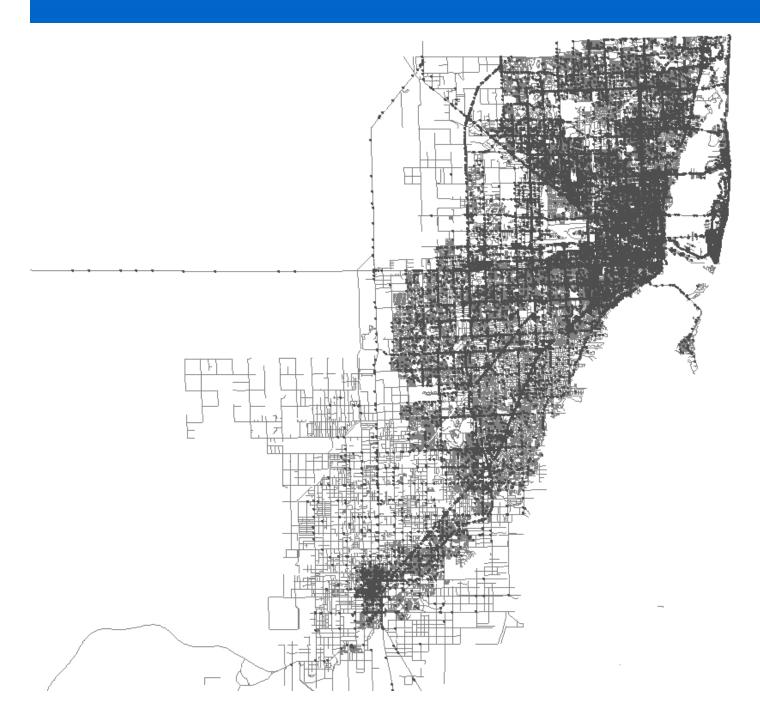
Miami – Dade 2007 Crashes - Close Up 2



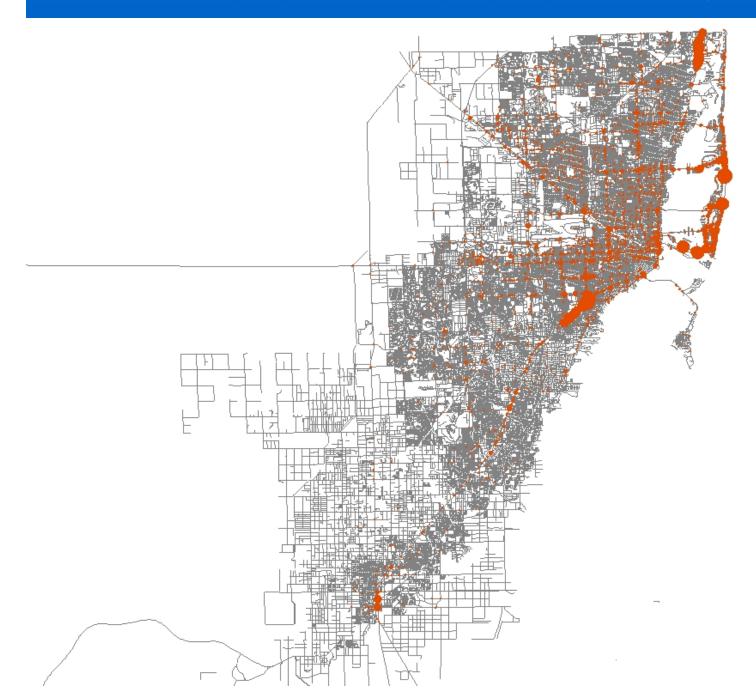
Crash Analysis

- Used to determine problematic areas
- Summarizes crashes by intersections and streets
- Query specific crash types e.g. bicycle or pedestrian crashes
- Intersection analysis by crash type such as rear-end, left turn, side swipe etc.

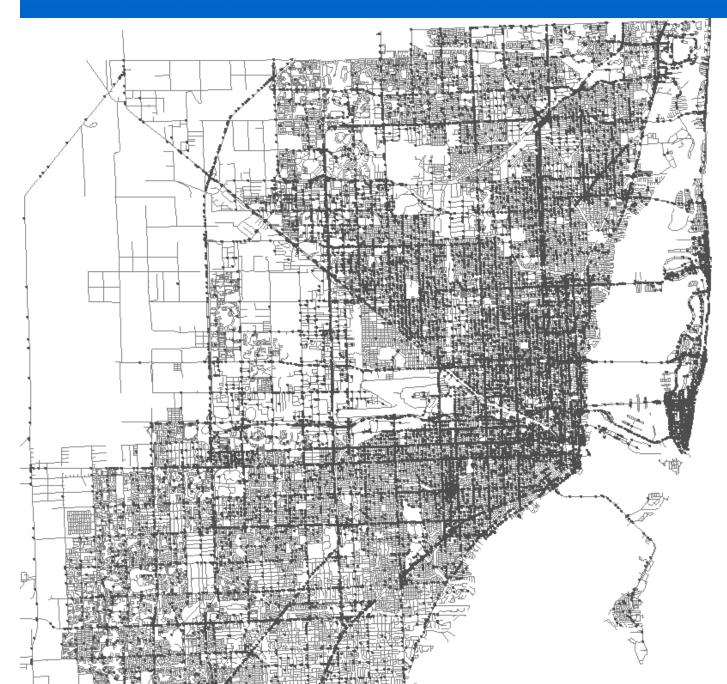
Miami – Dade 2007 Crashes



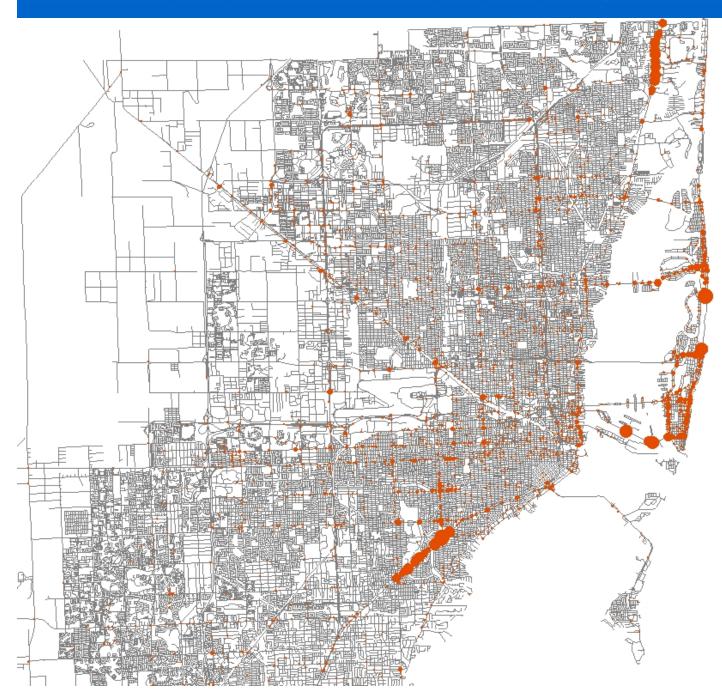
Miami – Dade 2007 Crashes Summarized By Intersection



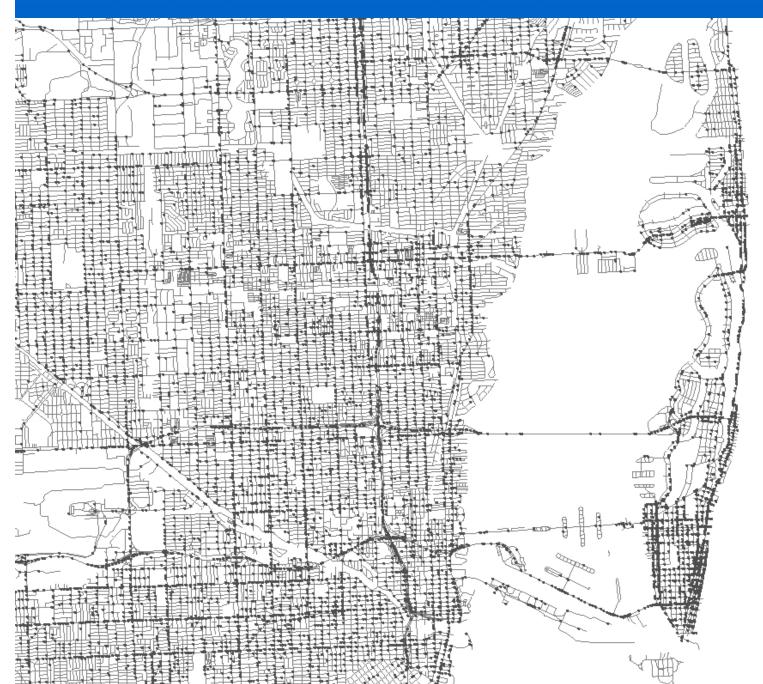
Miami – Dade 2007 Crashes - Close Up 1



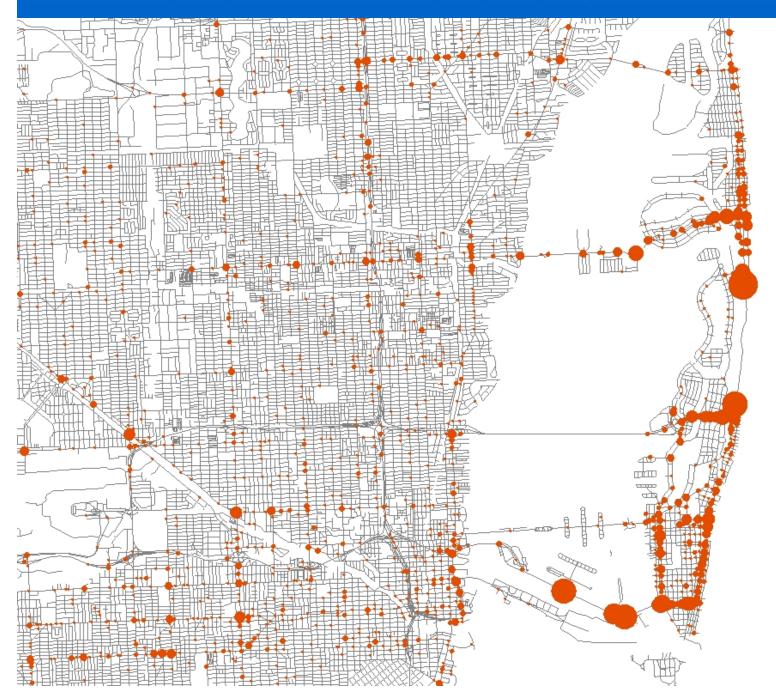
Miami – Dade 2007 Crashes Summarized by Intersection - Close Up 1



Miami – Dade 2007 Crashes - Close Up 2

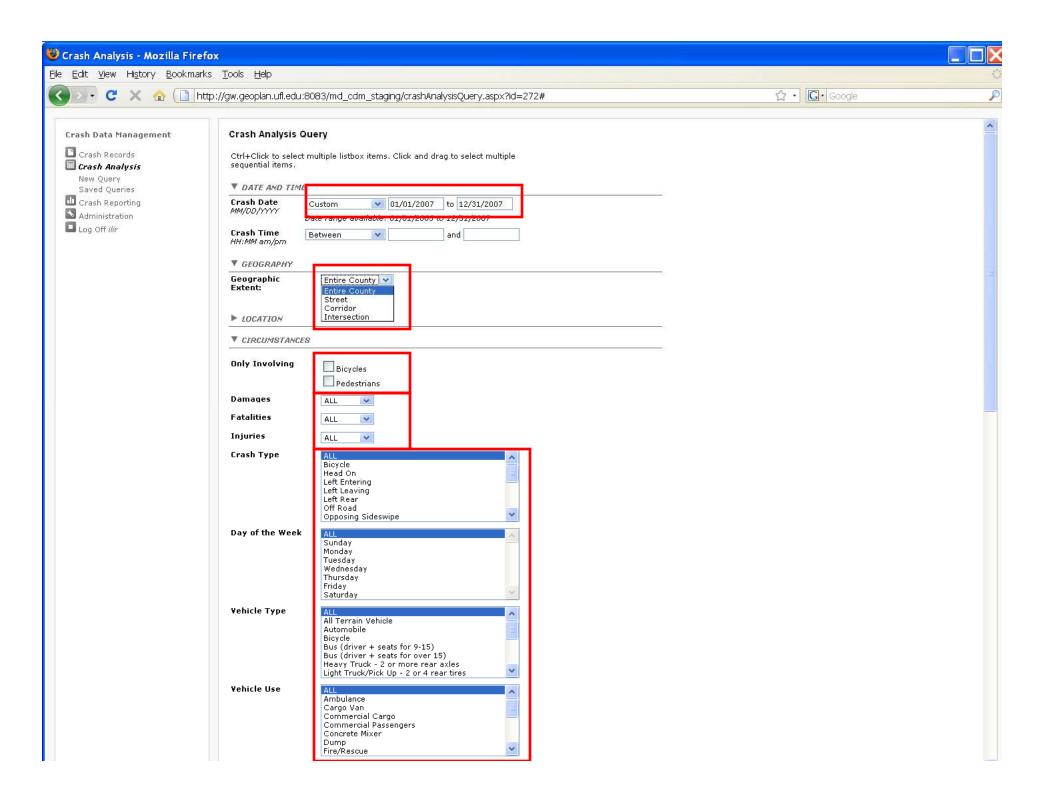


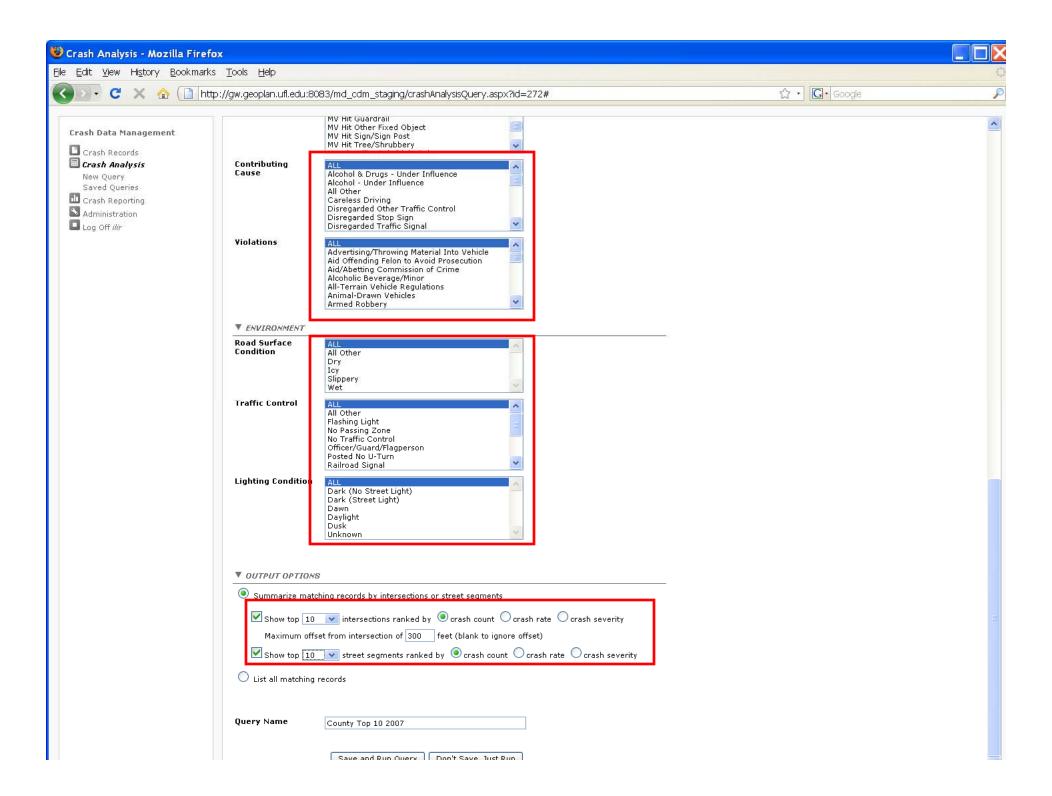
Miami – Dade 2007 Crashes Summarize by Intersection - Close Up 2

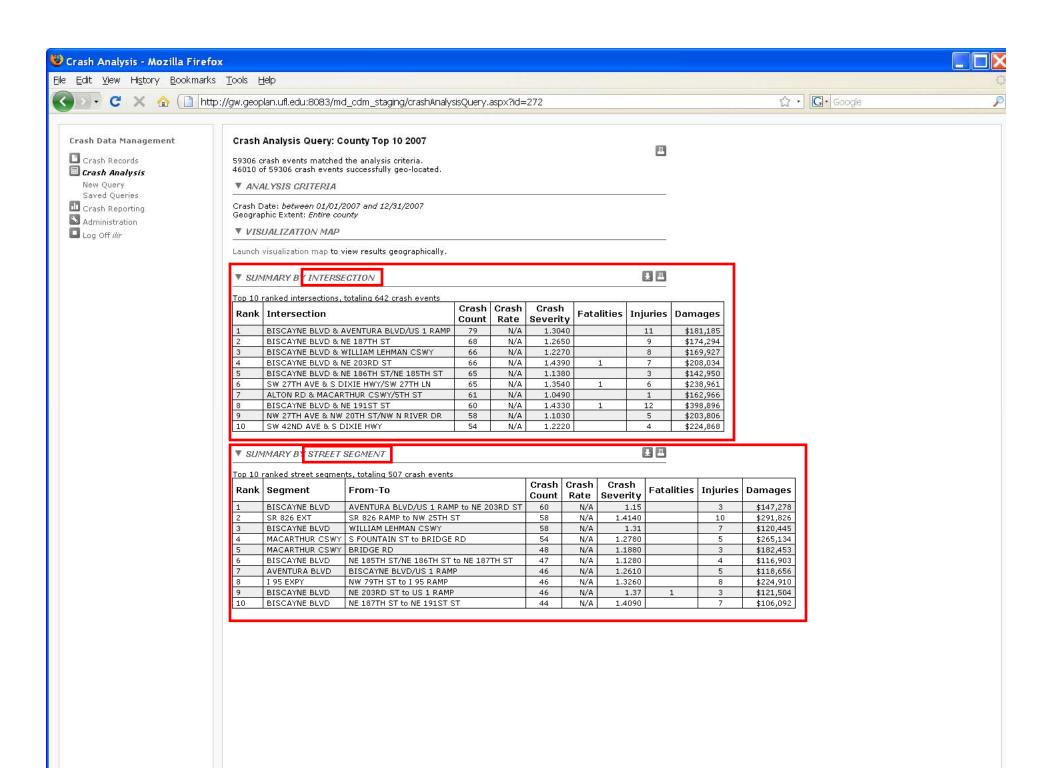


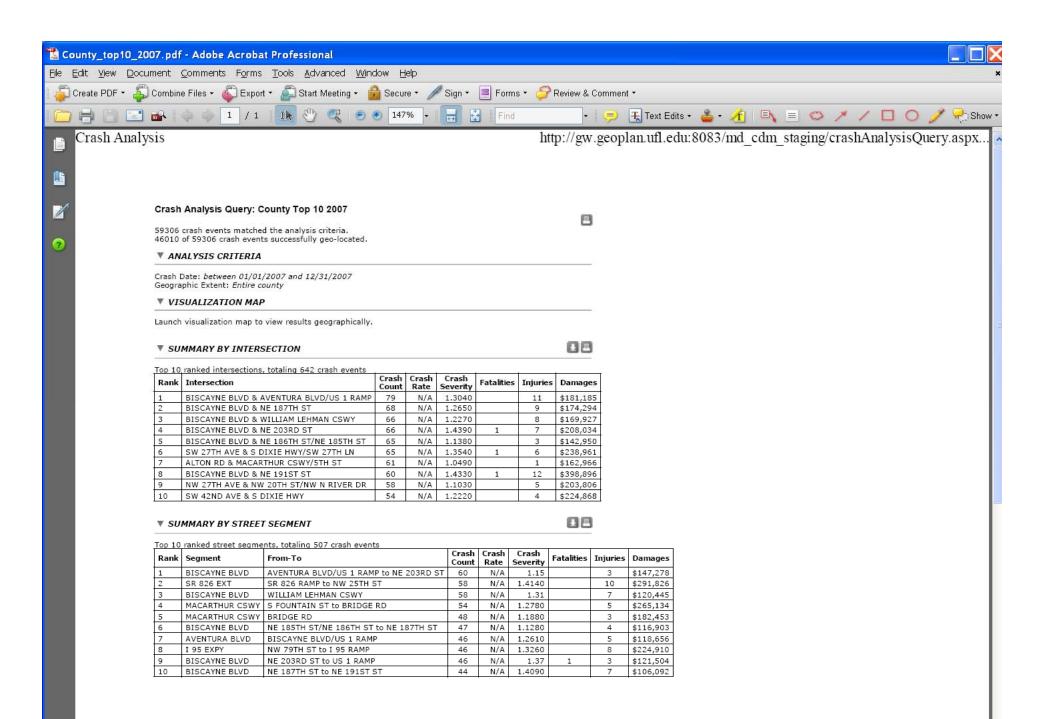
Crash Analysis Options

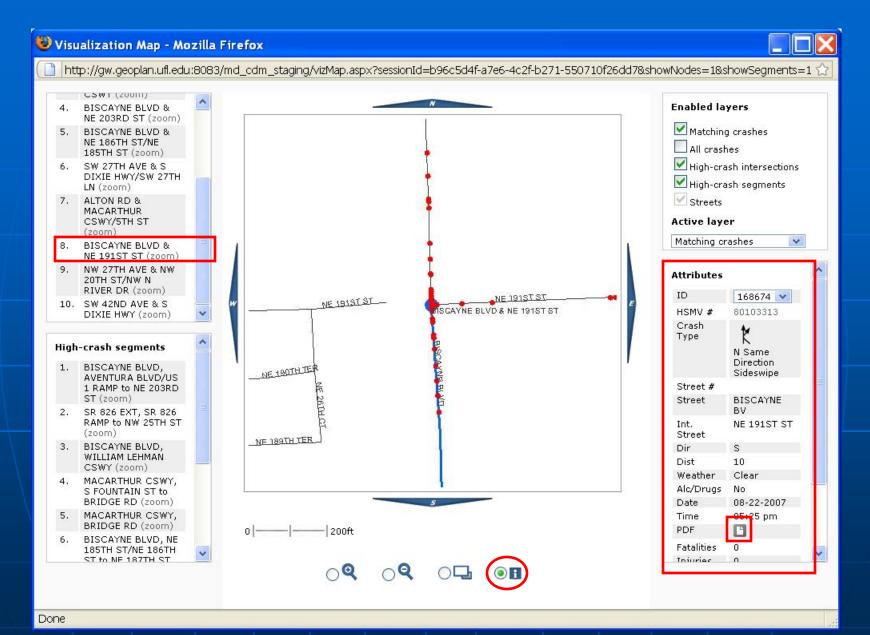
- Data Range
- Geography (City, Street, Intersection)
- Injury Severity
- Damages
- Harmful events
- Contributing Causes
- Lighting Condition
- Traffic Control

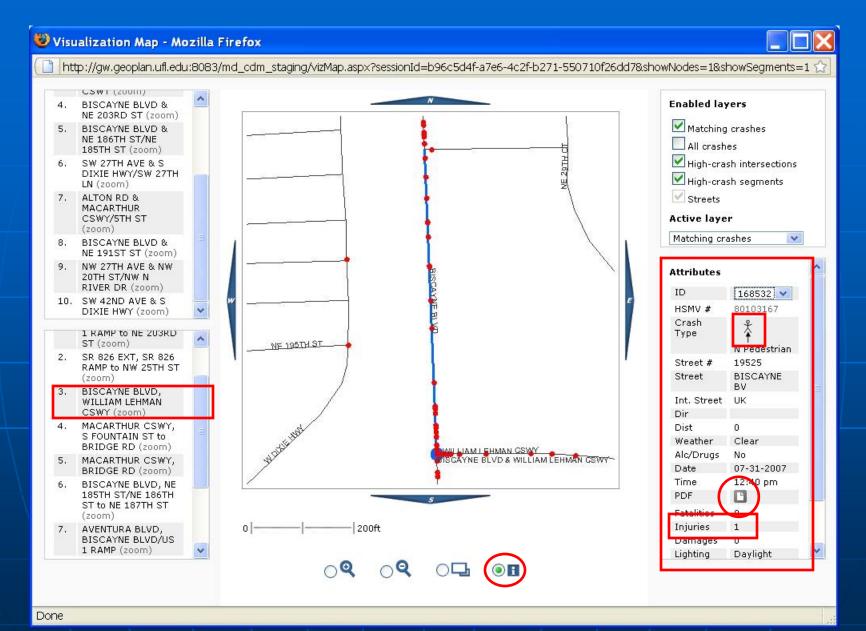


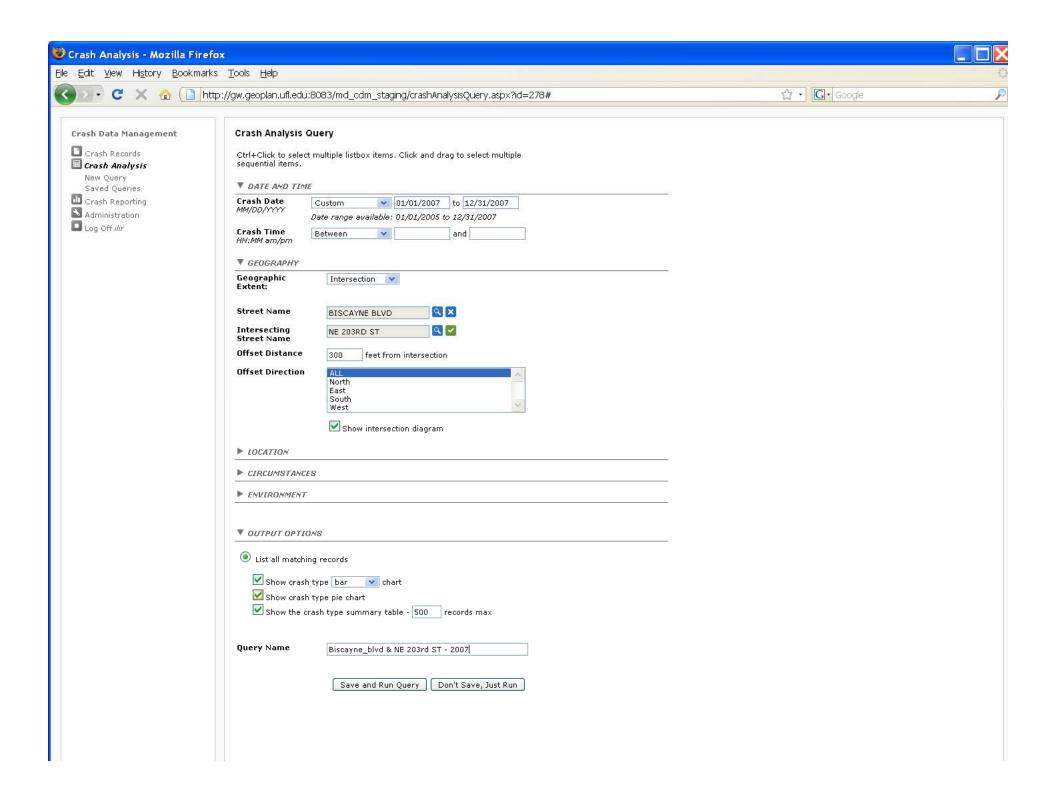


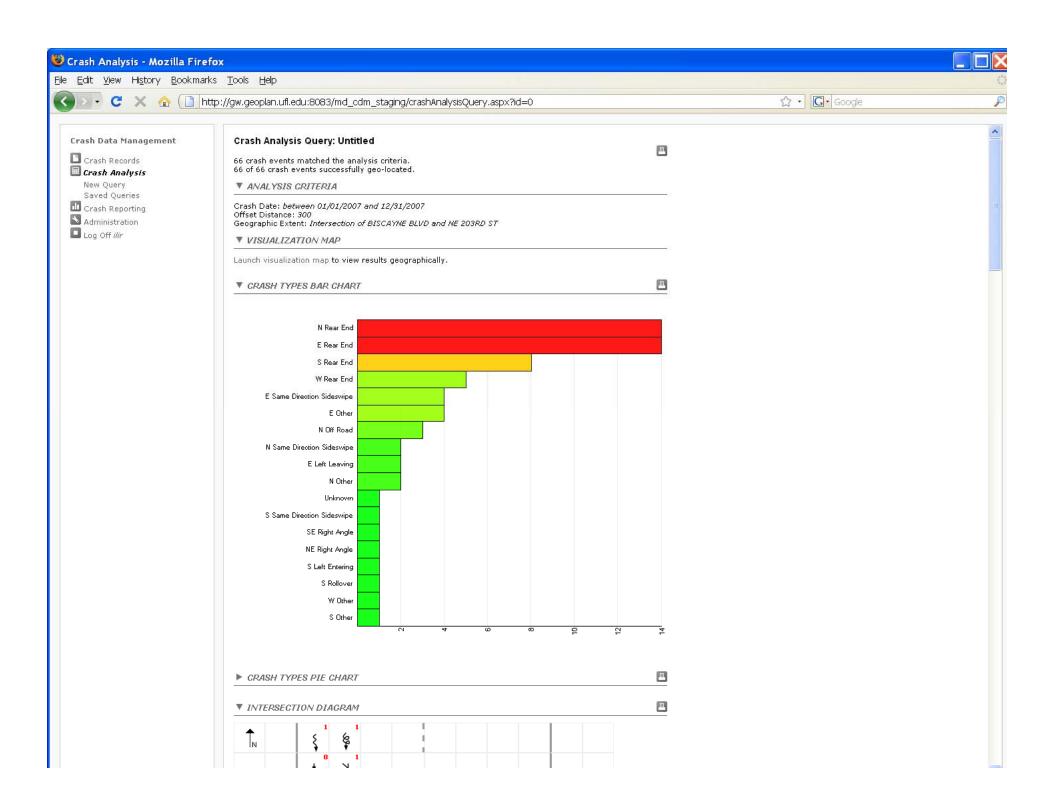


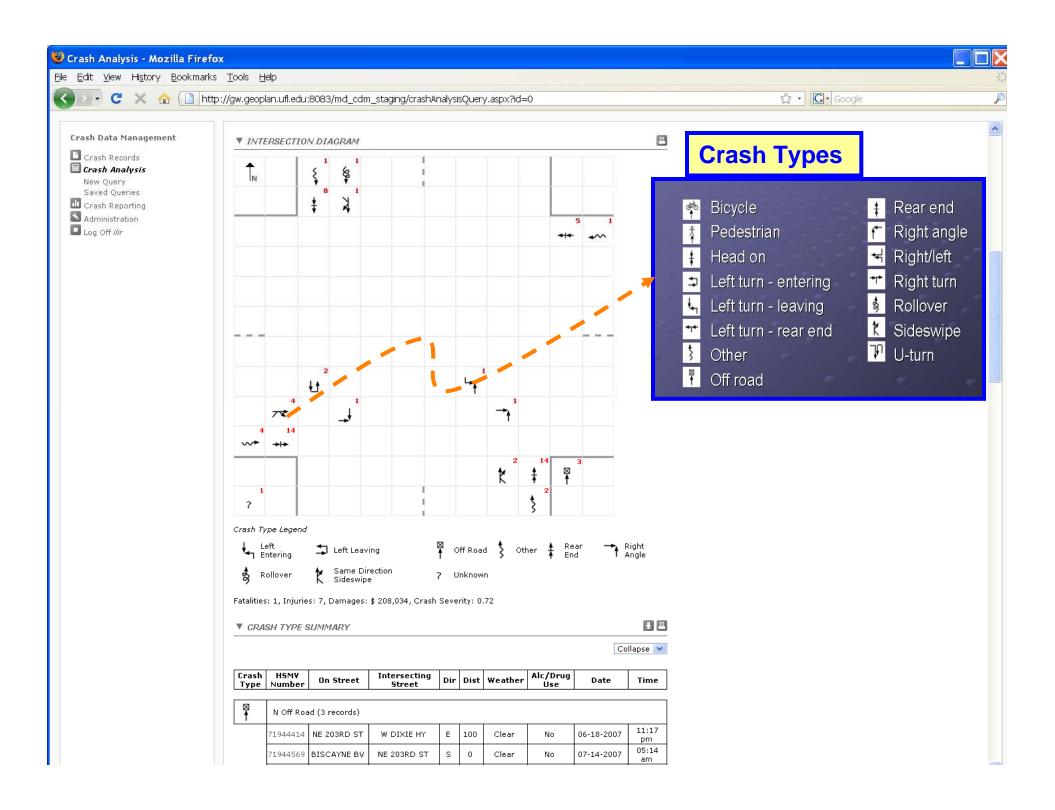


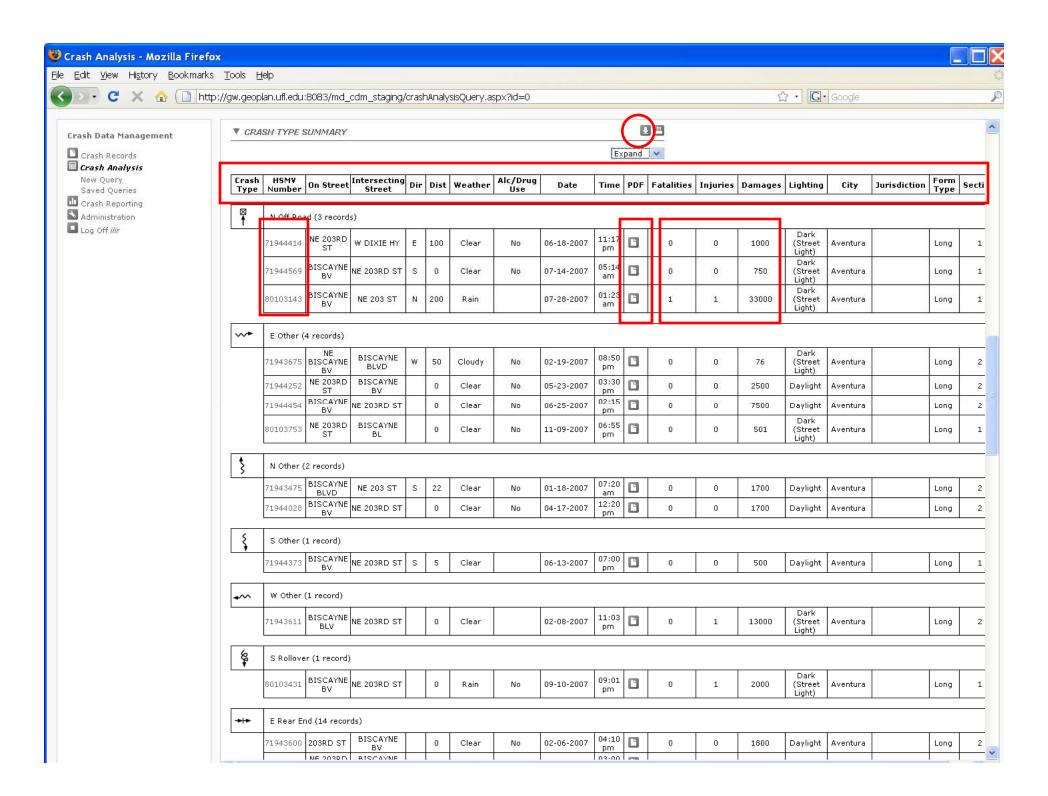


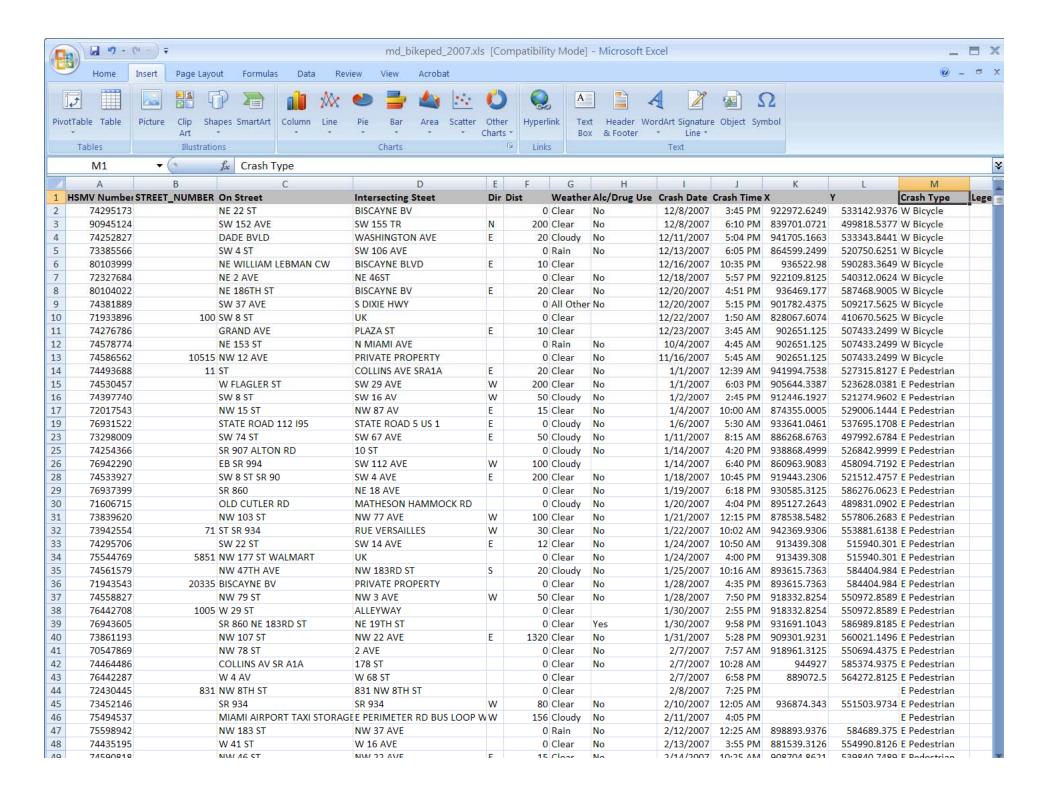




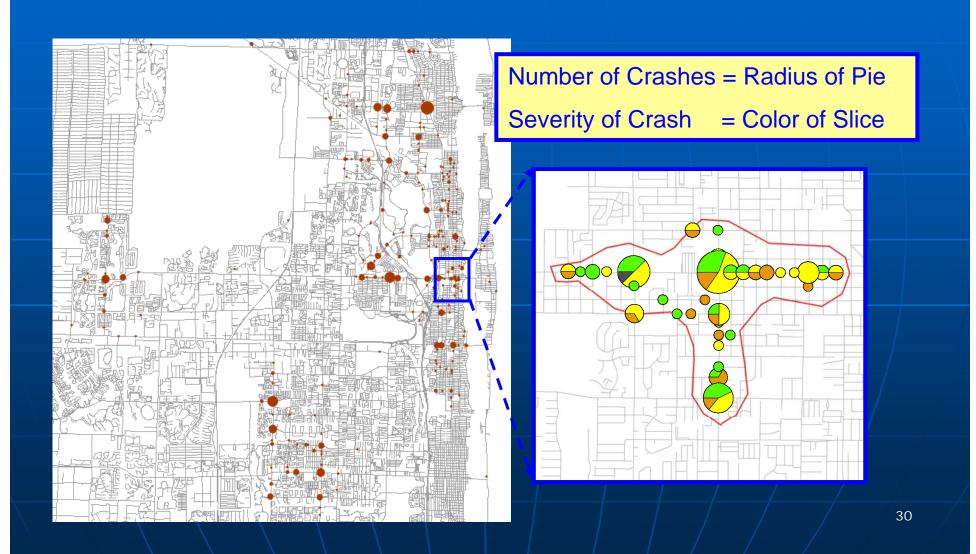








Advanced Analysis in ArcGIS

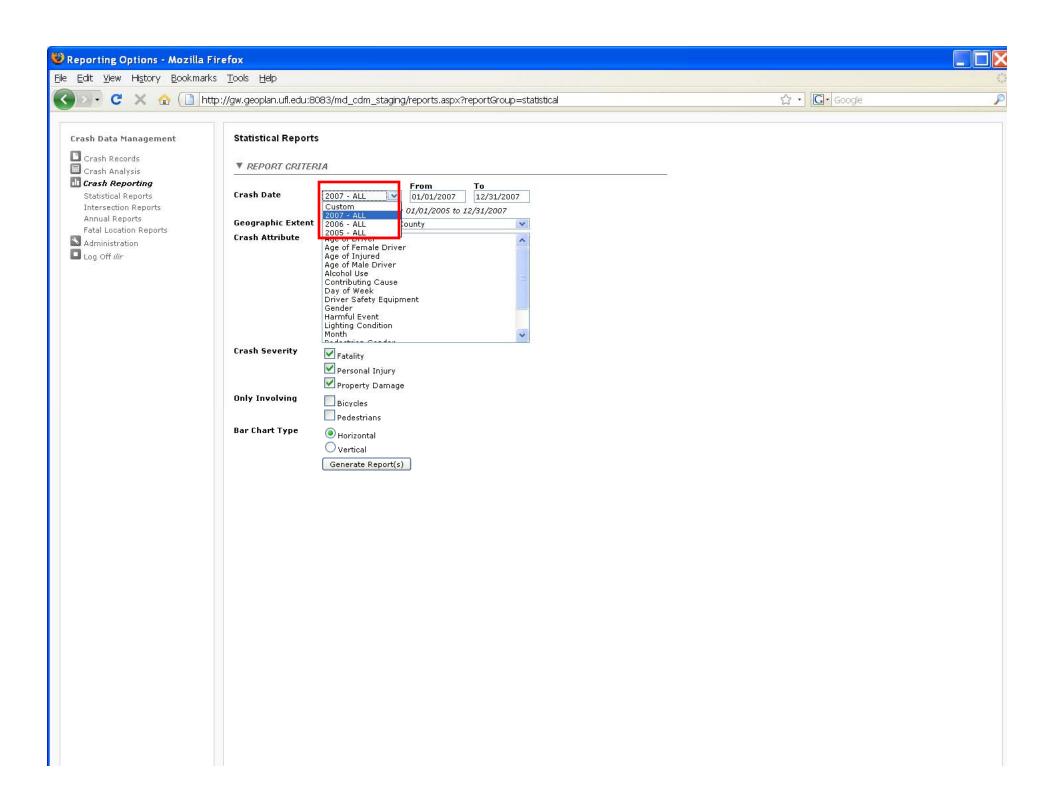


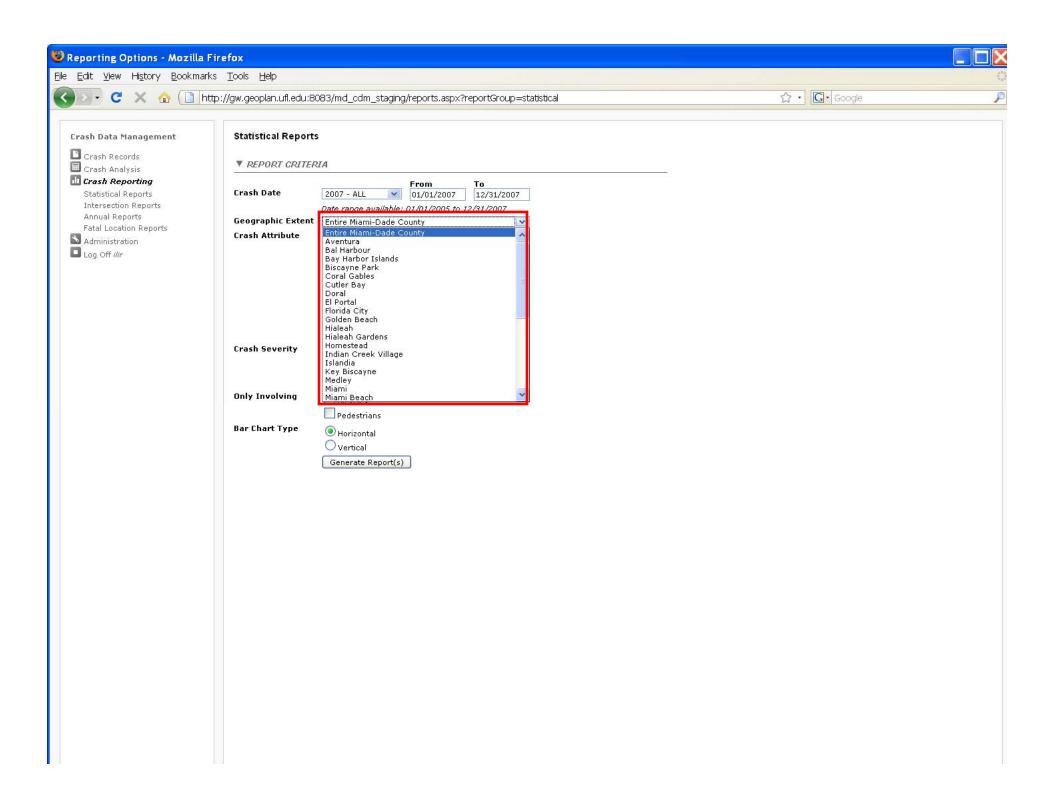
Statistical Reporting

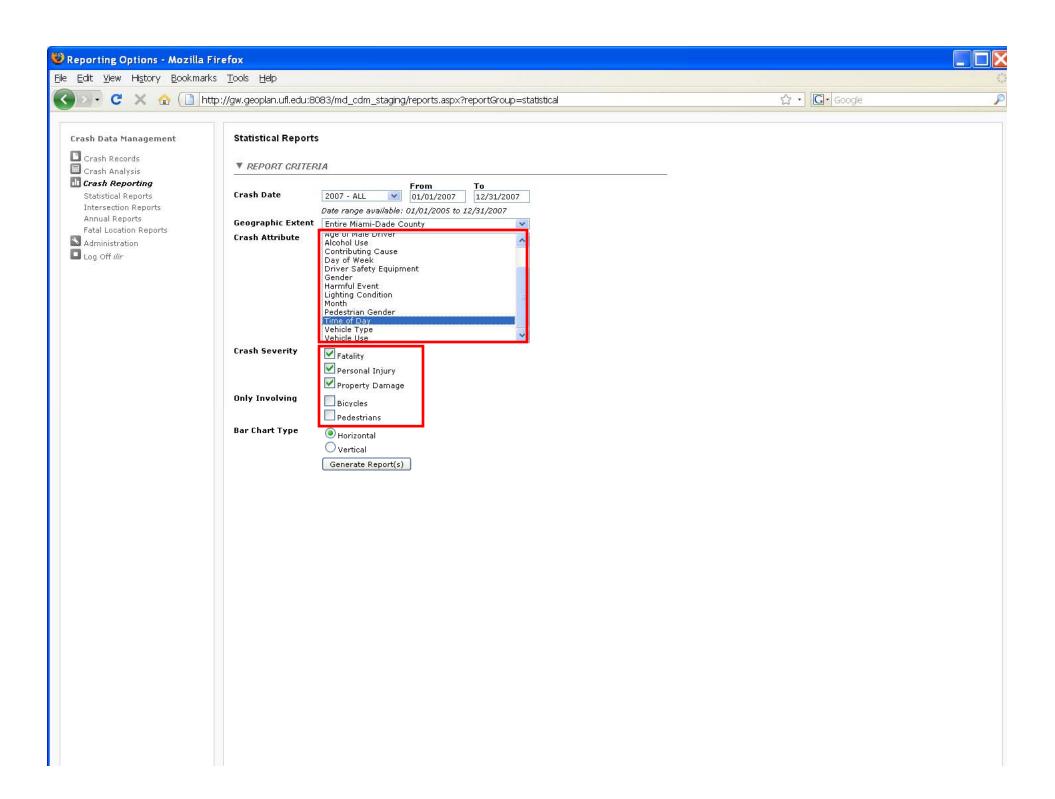
- General Statistics
 - Time of the day
 - Day of the week
 - Alcohol use
 - Contributing cause
 - Harmful event
 - Lighting condition
 - Vehicle type
 - and more...

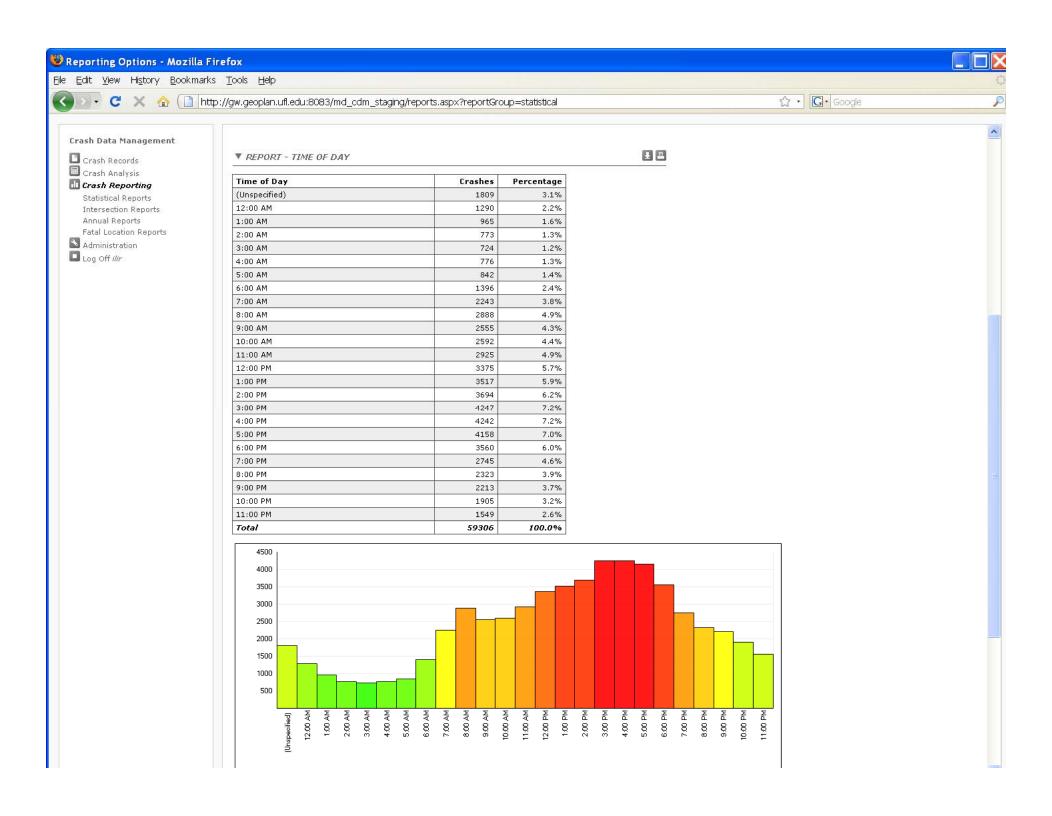
Statistical Reporting

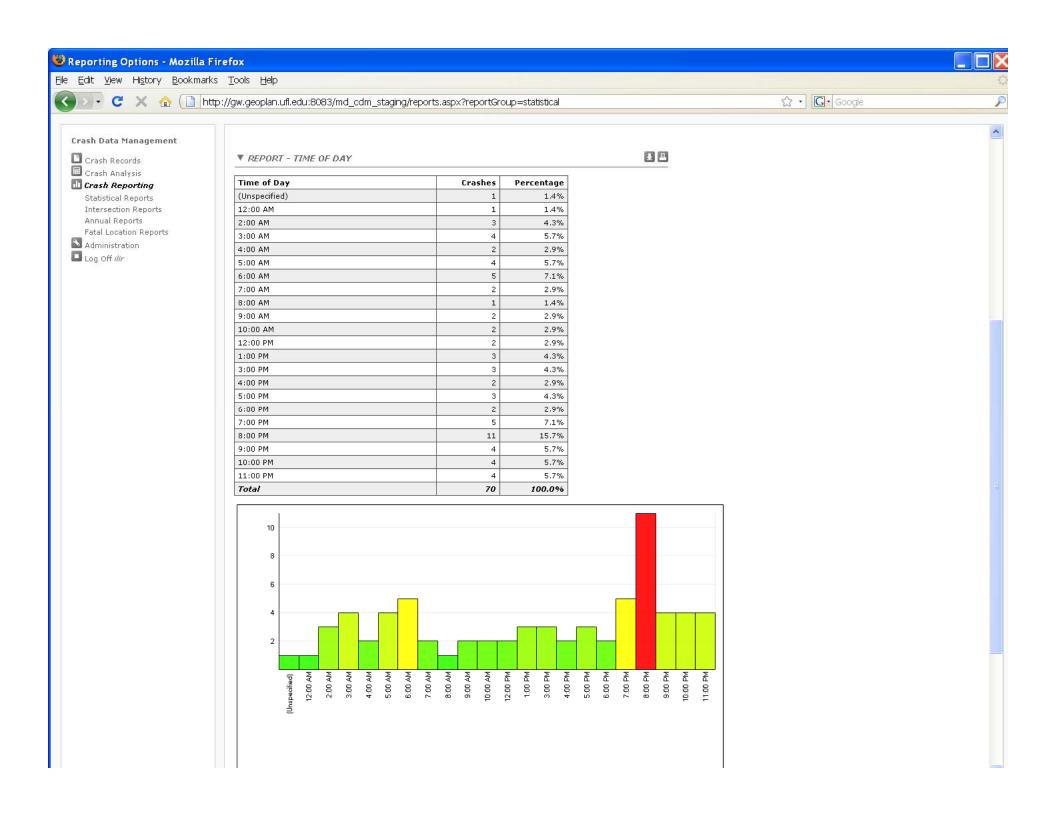
- Intersections Reports
 - Crash County
 - Crash Rate
 - Crash Severity
- Annual Comparative Reports
 - Crashes by Year
 - Fatalities by Year
- Fatal Locations Report
 - Signalized Intersections
 - Non-signalized Intersections











System Hosting and Access

- Will be hosted at Public Works
- Access through the intranet
 - Internet Explorer or other browsers
- Available to any agency that need access to this information
- Law enforcement should be encouraged to use it

Current Status

- Data in the system now: 2005-2007
- Currently processing 2008 available in 4-6 weeks
- Finalizing GIS features
- System 95% complete
- Coming training

Next

- 2009 long form crash data are available on monthly basis
- Short forms may be available second half of 2009
- Support is needed to continuously upload and map the future crash data

Comments/Questions

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