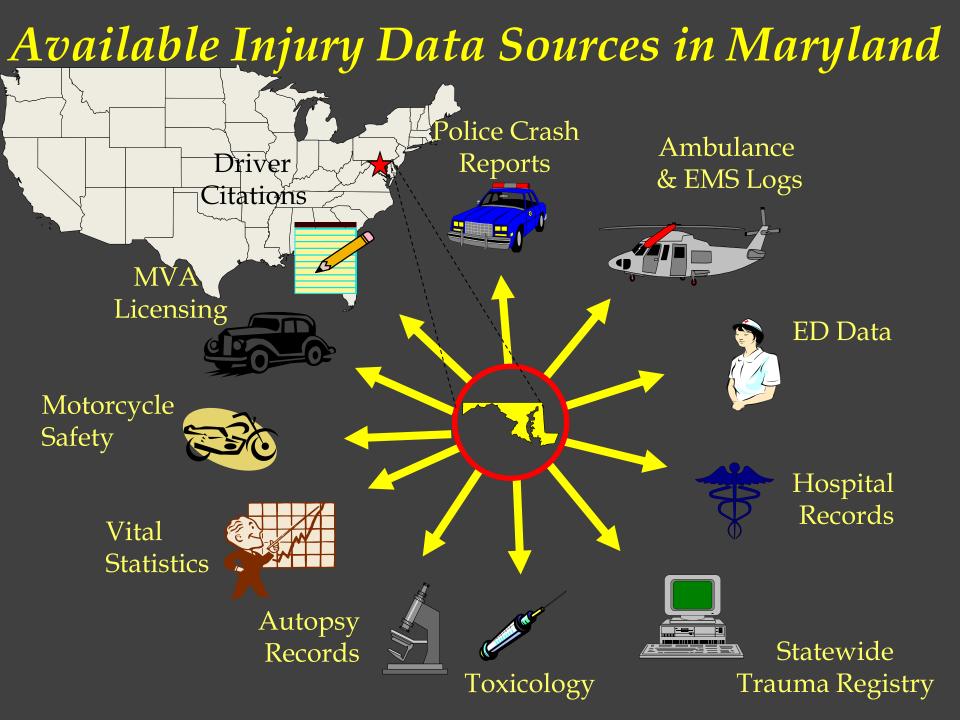


## Maryland Older Driver Crashes, 2007-2011

Cindy Burch, MPH Epidemiologist cburch@som.umaryland.edu Timothy Kerns, MS Epidemiologist tkerns@som.umaryland.edu



Charles "McC." Mathias, Jr., National Study Center for Trauma and Emergency Medical Systems



## Maryland Crash Data 2007 – 2011

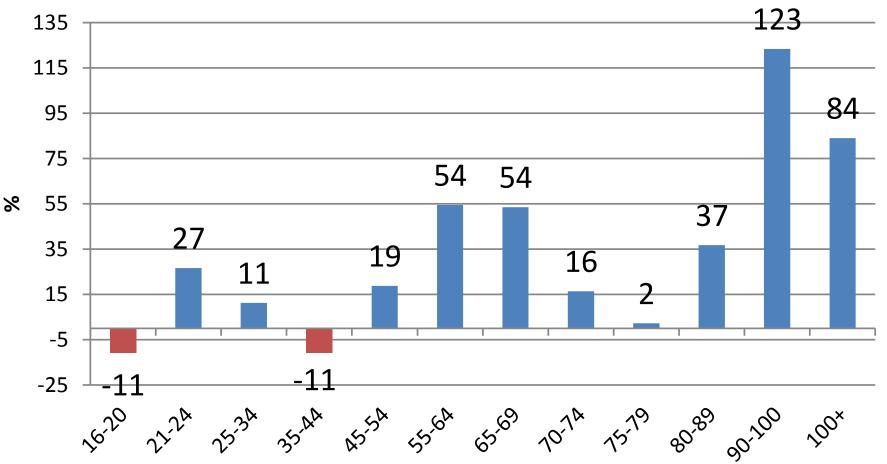
## **Objectives**

- Statewide Older Driver Crash Summary
- Older Driver crash & injury characteristics
- CIREN Case Review

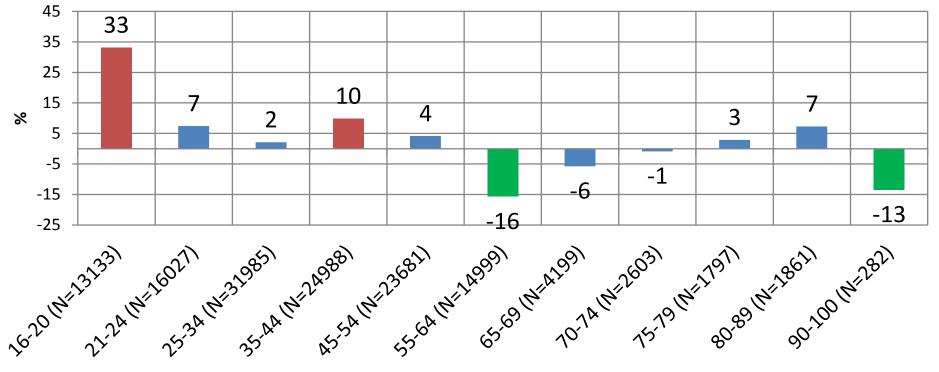
## Statewide Older Driver Crash Summary, 2007-2011



## Licensed Drivers by Age-Percentage of Change 2000-2012



### Percentage of Increase/Decrease of Total Crashes by Age from 2009 to 2011



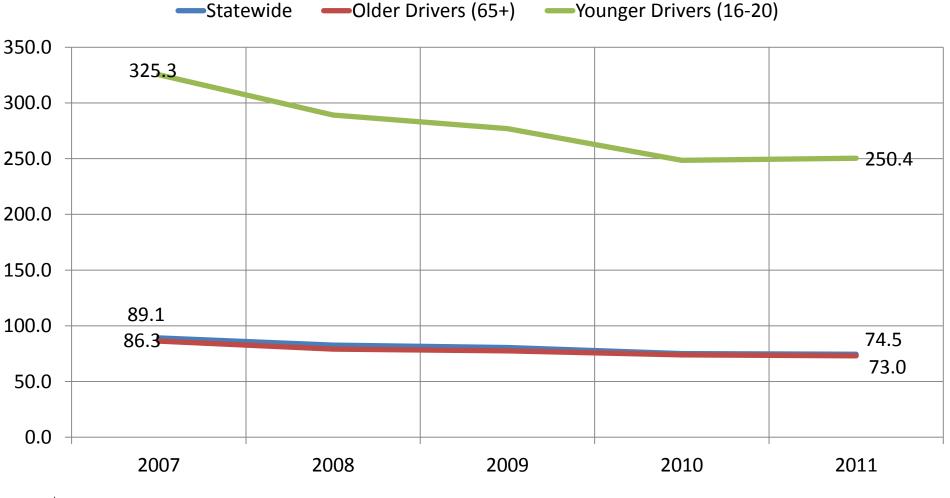
**Driver's Age** 

#### Crash Involvement Rate per 10,000 Licensed Drivers by Driver Age and Year, 2007-2011

-Older Drivers (65+) -Younger Drivers (16-20) **—**Statewide 900.0 839.8 800.0 700.0 636.3 600.0 500.0 400.0 258.0 300.0 197.3 220.4 200.0 175.3 100.0 0.0 2007 2011 2008 2009 2010

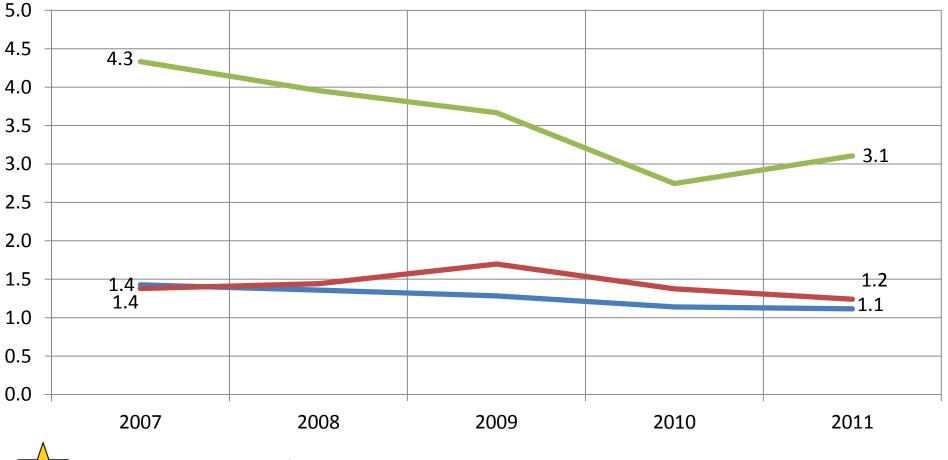
Older Drivers have the lowest crash involvement rate per 10,000 licensed drivers.

### Injury Crash Involvement Rate per 10,000 Licensed Drivers by Driver Age and Year, 2007-2011



The Older Driver injury crash involvement rate is almost the same as the statewide rate.

## Fatal Crash Involvement Rate per 10,000 Licensed Drivers by Driver Age and Year, 2007-2011

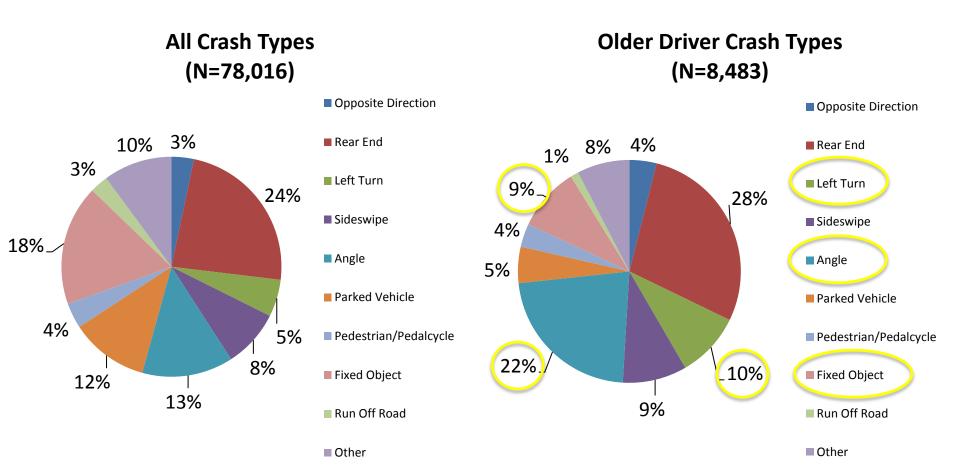


The Younger Driver fatal crash involvement rate has declined over the past 5 years.

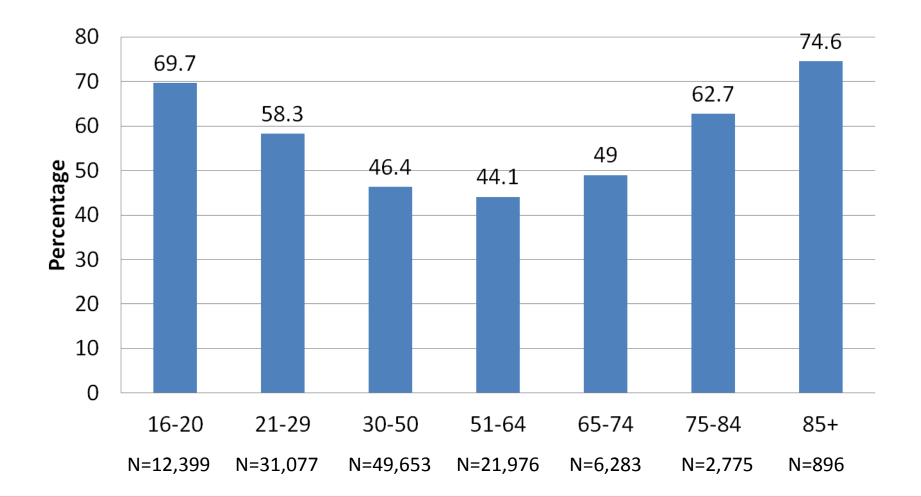
## 2007 & 2011 Comparison of Older Driver Crashes

	Total Crashes
2007	7,357
2011	4,917
% Change (Approx.)	- 33.2%

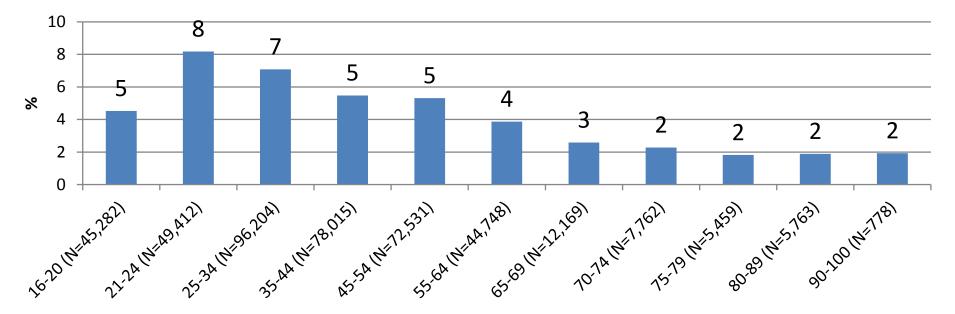
# Average Crash Type Percentages by Age, 2007-2011



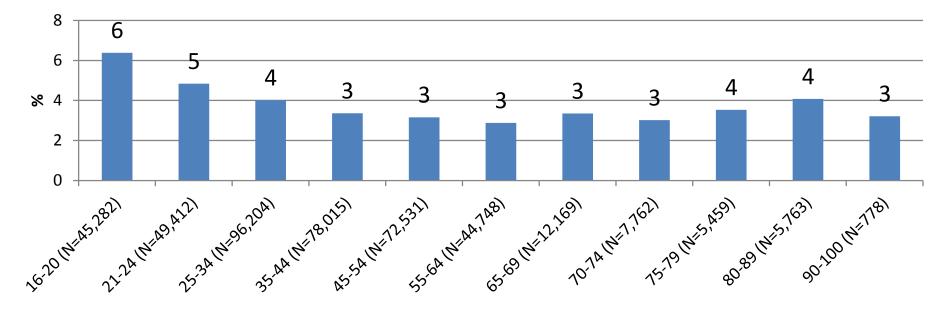
## Percentage of Drivers Reported At-Fault by Age Group, 2011



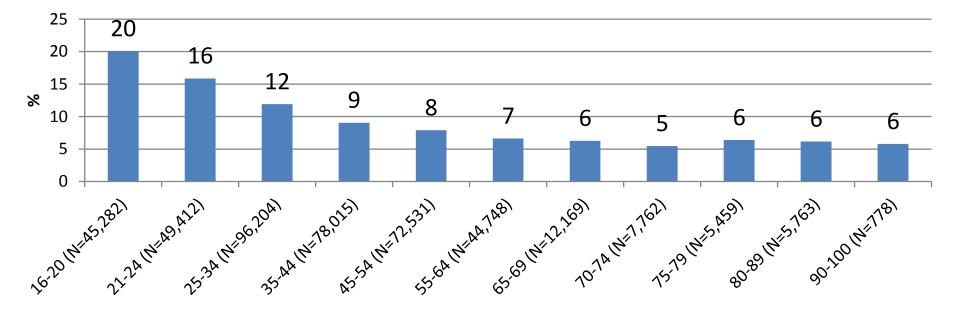
#### Driver Impaired as a Contributing Factor of Crash by Age, 2009-2011



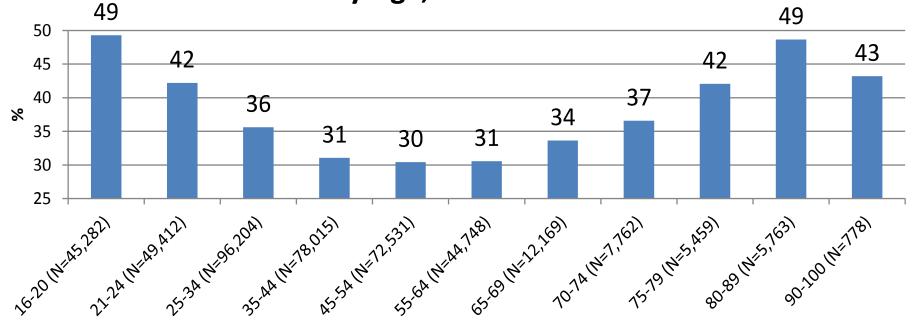
#### Aggressive Driver as a Contributing Factor of Crash by Age, 2009-2011



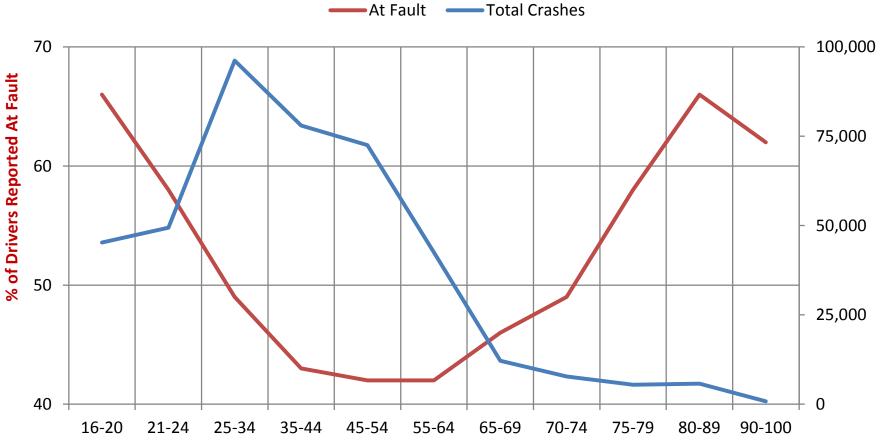
#### Speeding as a Contributing Factor of Crash by Age, 2009-2011



### Inattentive Driver as a Contributing Factor of Crash by Age, 2009-2011

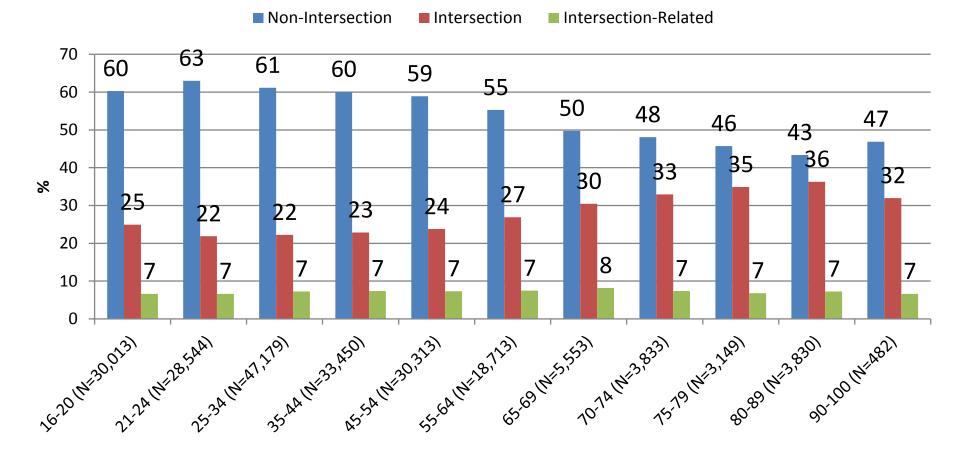


#### Total Crashes v. Reported At Fault by Age, 2009-2011

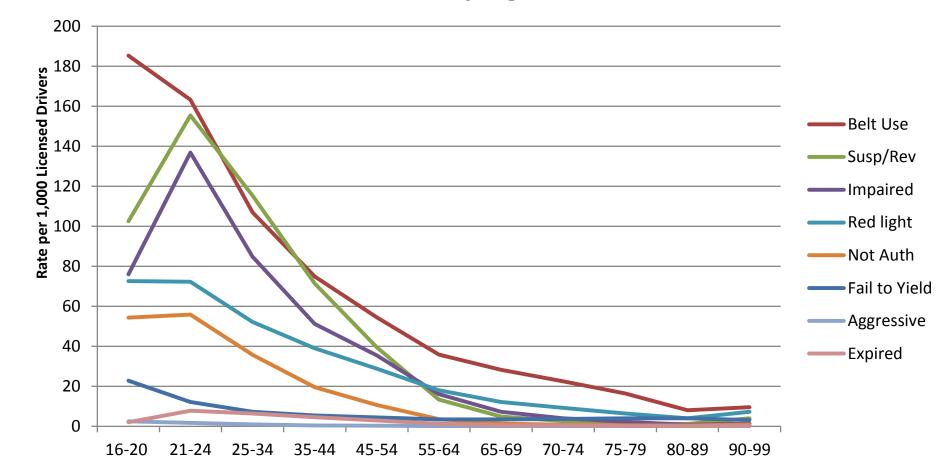


**Total Crashes** 

#### Intersection Type by At-Fault Driver's Age, 2009-2011

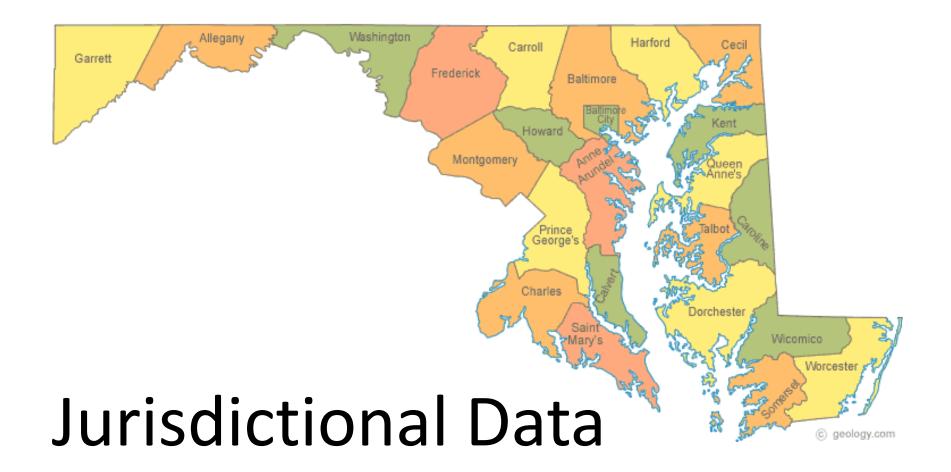


#### Citation Rate by Age, 2009-2011



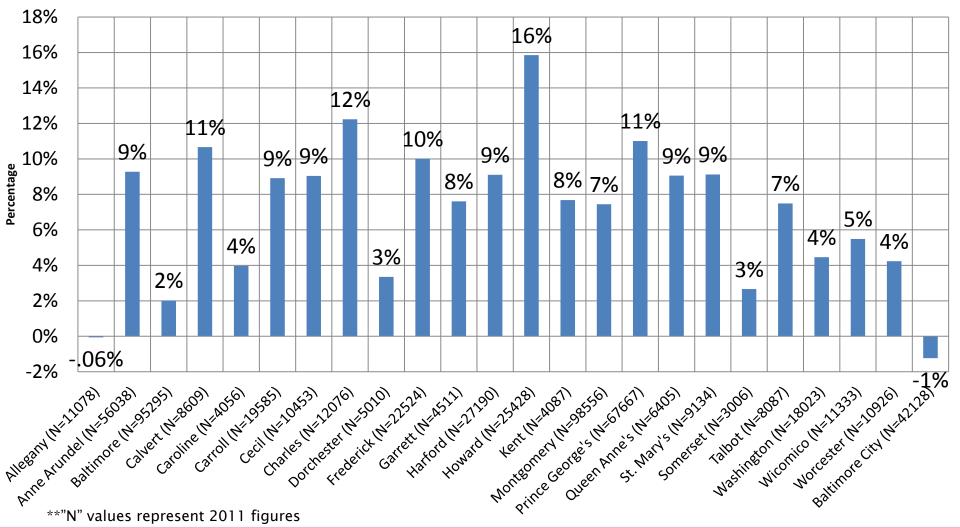
## Older Driver Fatal Crash & Injury Data







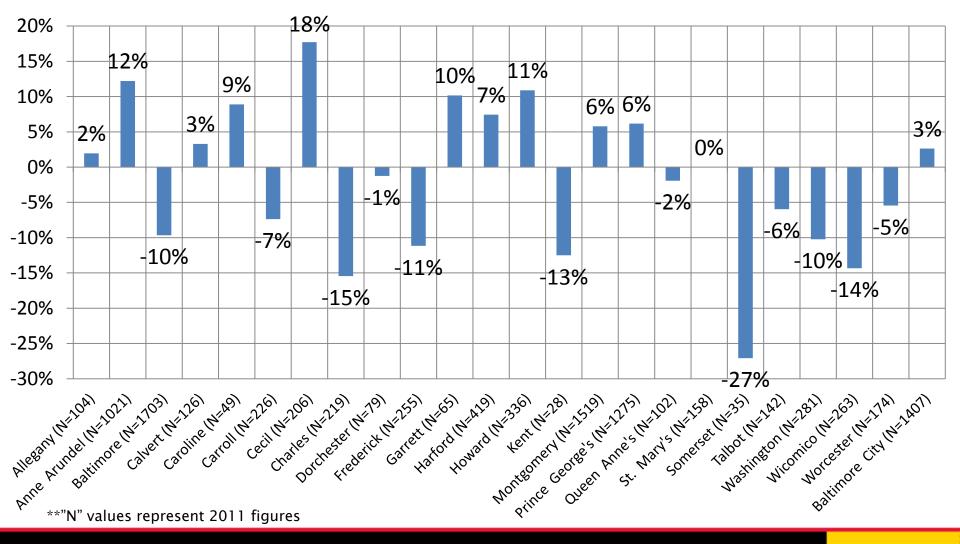
## *Percent Change in Older (65+) Licensed Drivers* by Jurisdiction, 2007 - 2011



#### Older Driver Crash Data, 2007 - 2011

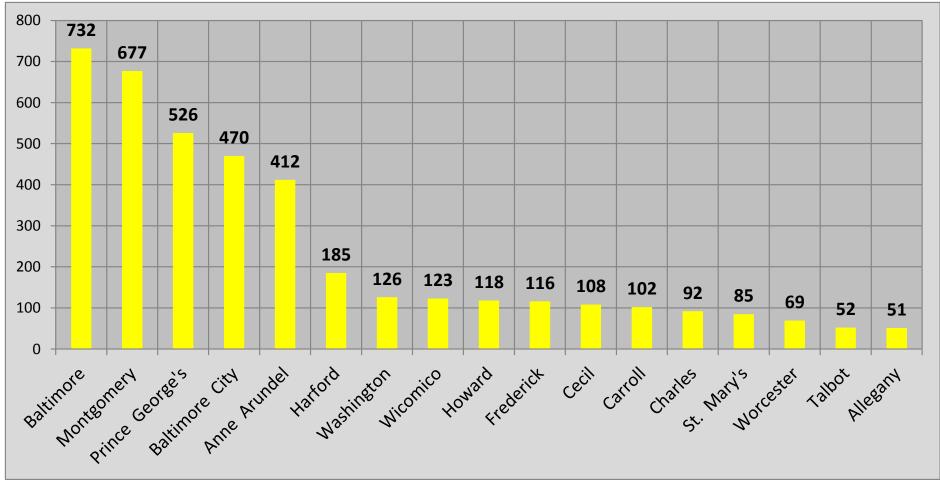


## *Percent Change in Older (65+) Driver Crashes* by Jurisdiction, 2007 - 2011





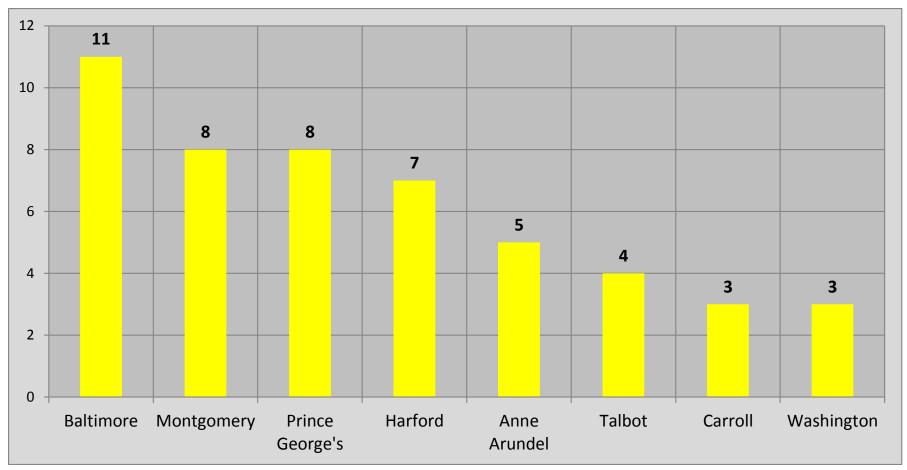
#### Number of Older Driver Injury Crashes by Jurisdiction, 2011 (N=4,244)



\*\*Jurisdictions not listed had less than 50 injury crashes



#### Total Number of Older Driver Fatal Crashes by Jurisdiction, 2011 (N=72)



\*\*Jurisdictions not listed had less than 3 fatal crashes

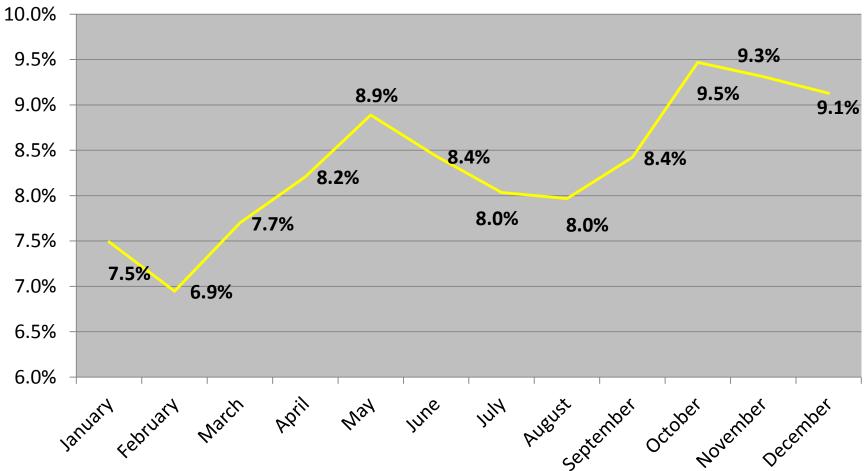


# Monthly Data

#### Older Driver Crash Data, 2007-2011

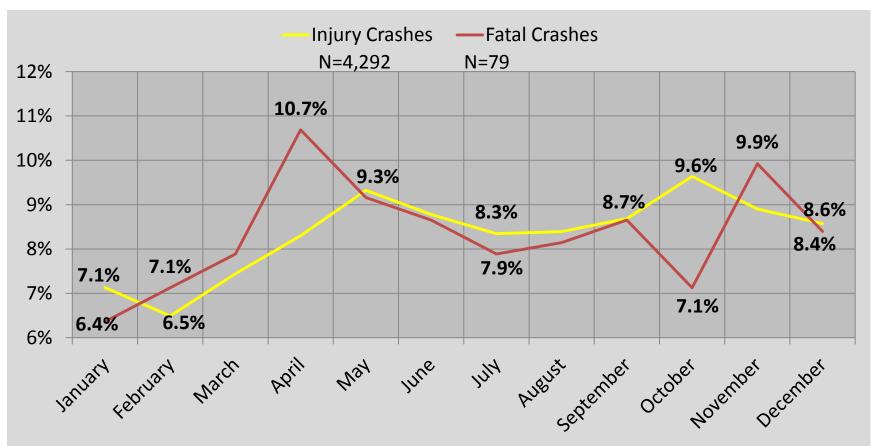


# Average *Older Driver* Crash Percentages by Month 2007-2011 (N=10,083)





Average Older Driver Injury Crash & Fatal Crash Percentages by Month 2007 – 2011





Older Driver fatal crashes occur more frequently in April, October and November, while injury crashes are consistent from May through December.

#### Older Driver Fatal Crash & Injury Data, 2007 - 2011

Fatal v. Injury Crash Percentage - Comparison by Month & Age, 2007 - 2011

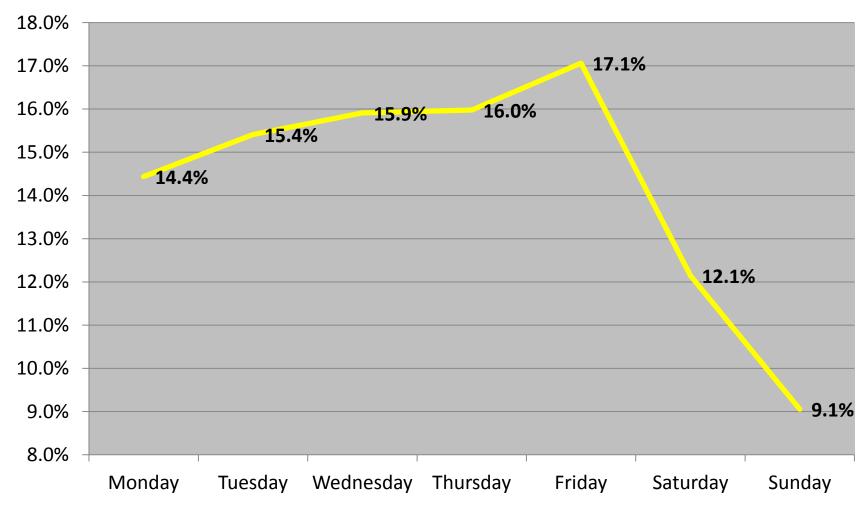




# Day of Week Data

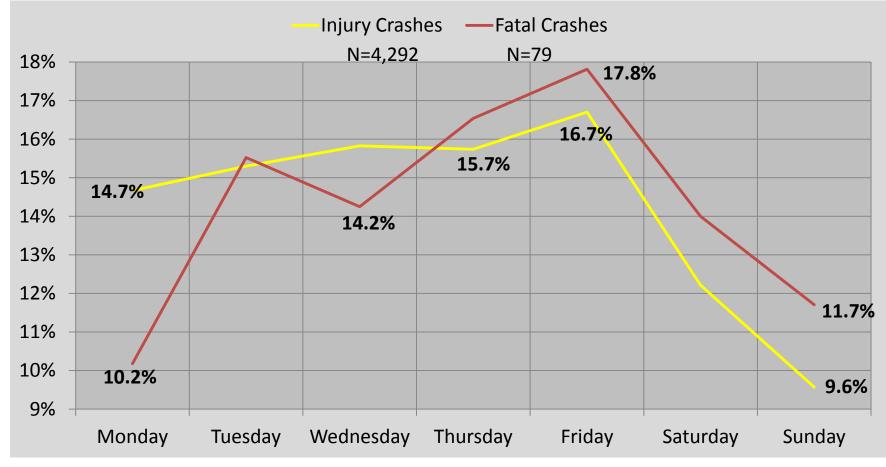


# Average Older Driver Crash Percentages by Day of Week 2007-2011 (N=10,083)





#### Older Driver Injury Crash & Fatal Crash Percentages by Day of Week, 2007 – 2011



All Older Driver crashes, injury and fatal, are less frequent on the weekends.

Older Driver Fatal Crash & Injury Data, 2007 - 2011

Fatal v. Injury Crash Percentage - Comparison by Day & Age, 2007 - 2011

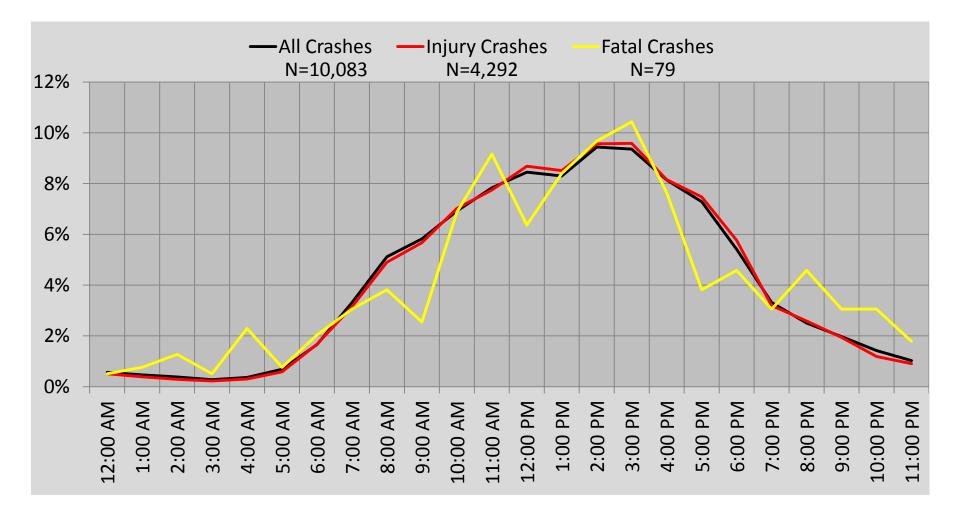




# Time of Day Data



#### Older Driver Injury Crash & Fatal Crash Percentages by Time of Day, 2007 – 2011



Fatal v. Injury Crash Percentage - Comparison by Time of Day & Age, 2007 - 2011

1.
2.
3.
4.
5.
6.

Older Driver Fatal Crash & Injury Data, 2007 - 2011



# Gender

# Data



Crash Totals, Injury Crashes & Fatal Crashes by Driver Gender, 2007-2011

