

Traffic Crashes in Southwest Minnesota

Toward Zero Deaths Workshop

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April 23, 2010



Traffic Crashes in Southwest Minnesota

What Do We Know?

Let's Look at the Data!



Motor Vehicle Crashes = Leading Cause of Death (Ages 1-34)

- 93% of deaths are a result of driver behavior
- 34% are due to road factors
- 12% are a result of the driver's vehicle
- Combination of these factors contribute to crashes.





Data = Understanding the Problem

- **Who** is being severely injured or killed?
- **When** do the crashes happen?
- **Which** driving behaviors are contributing to crashes?
- **What** types of crashes occur?
- **Where** are the crashes taking place?
- **What** is the economic impact?
- **How** can we prevent these tragedies?



TZD Key Principles

Use the data as your foundation
to guide initiatives

Avoid pre-determined solutions
in search of a problem

How Does Minnesota Compare?

- Seat Belt Use Rate: 2009

Minnesota: 90%

U.S: 84%

- State Ranking for Seat Belt Use

In 2009, MN ranked 16 out of the United States

- Alcohol-Impaired Fatality Rate: 2008

(per 100 million vehicle miles traveled)

Minnesota: 0.23

U.S: 0.40

- Motor Vehicle Fatality Rate: 2008

(per 100 million vehicle miles traveled)

Minnesota: 0.79

U.S: 1.25

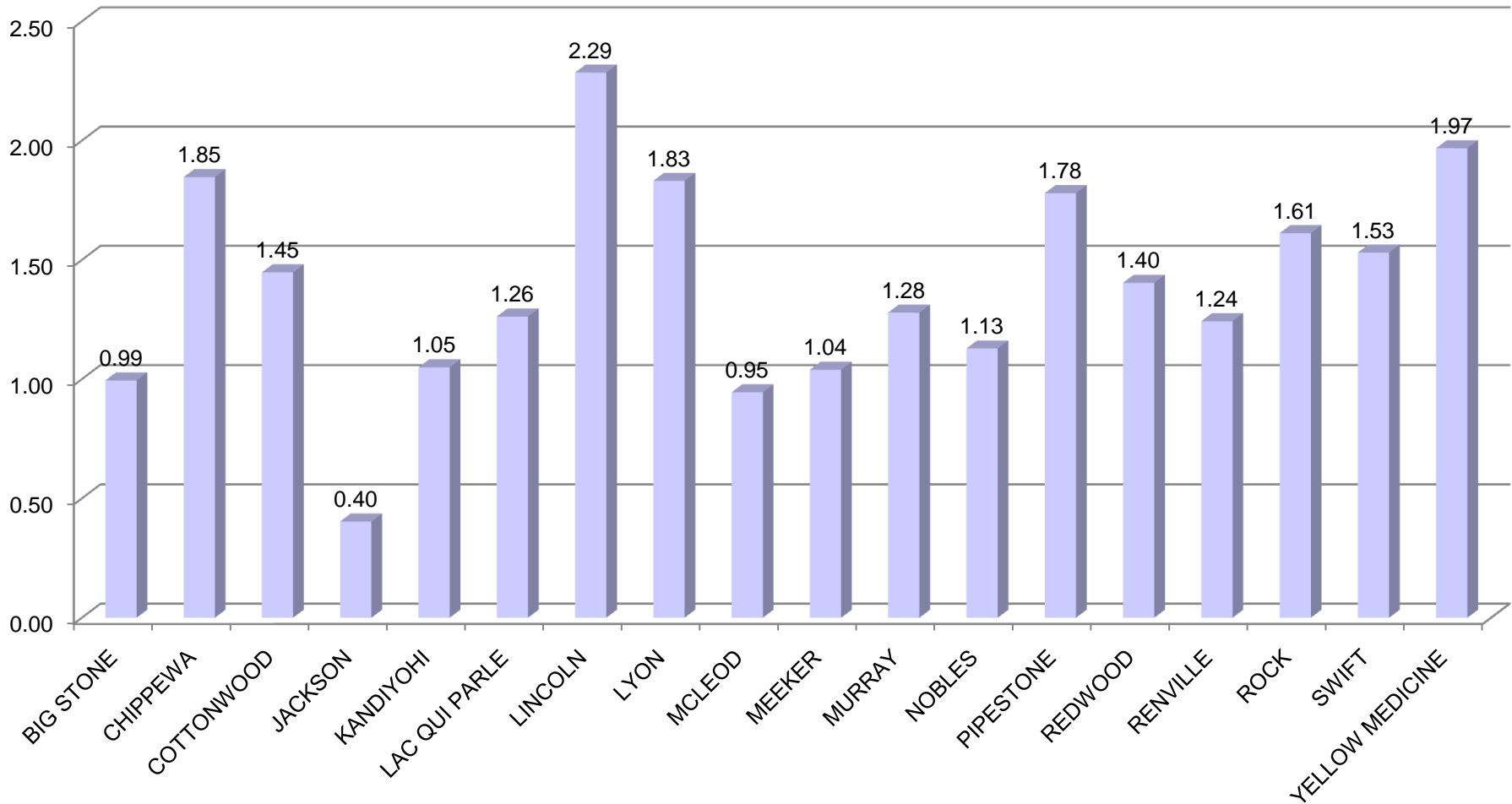
SW 2006-2009 Crash Data Summary

Year	Total Crashes	PDO Crashes	Injury Crashes	Severe Injuries	Fatals
2006	3,760	2,485	1,229	144	50
2007	3,524	2,307	1,172	138	47
2008	3,450	2,287	1,128	124	40
*2009	3,450	2,281	1,124	137	55

*all 2009 data throughout presentation are preliminary

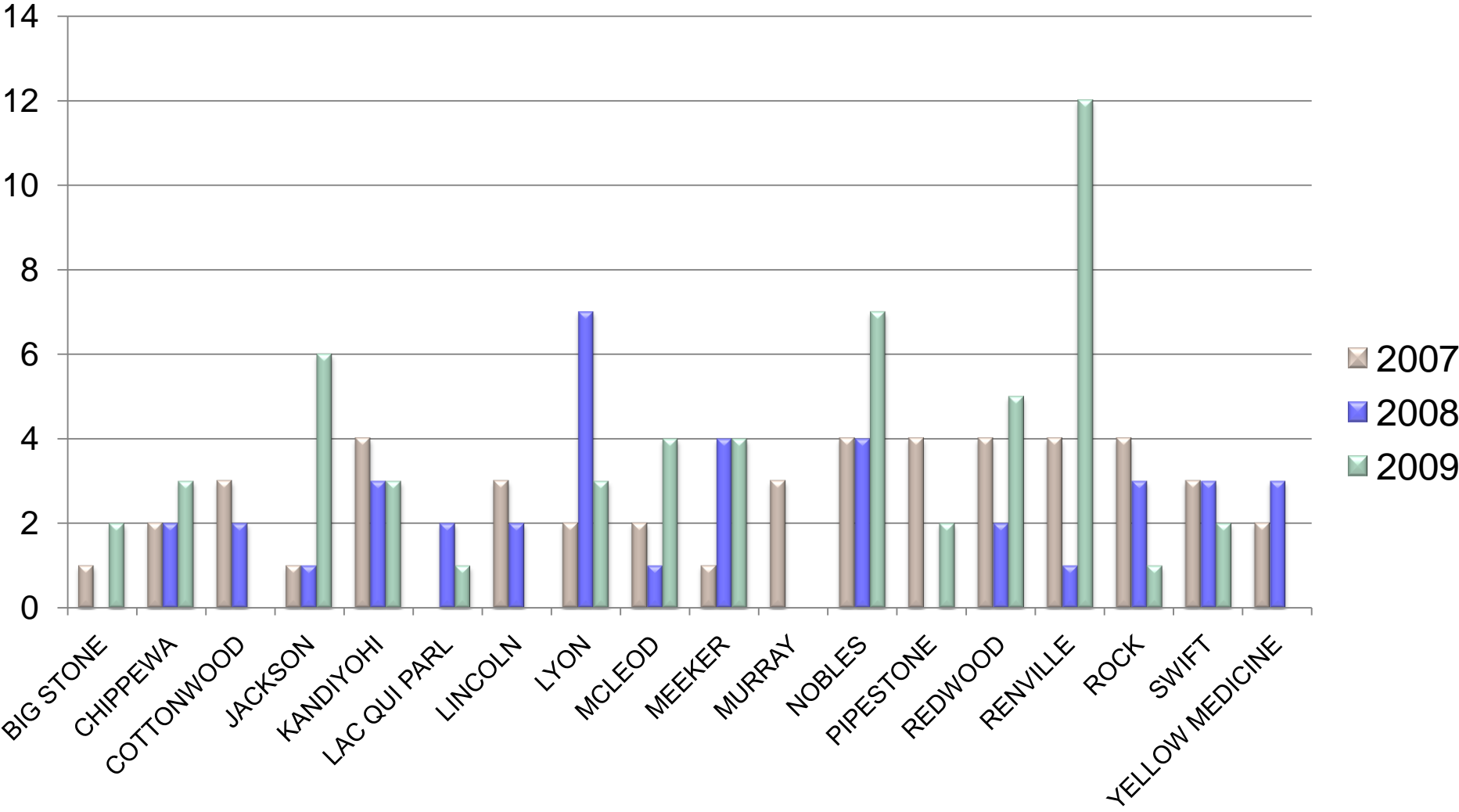
SW 2006-2008

Region Fatality Rates per 100M Vehicle Miles Traveled by County



SW 2007 - 2009

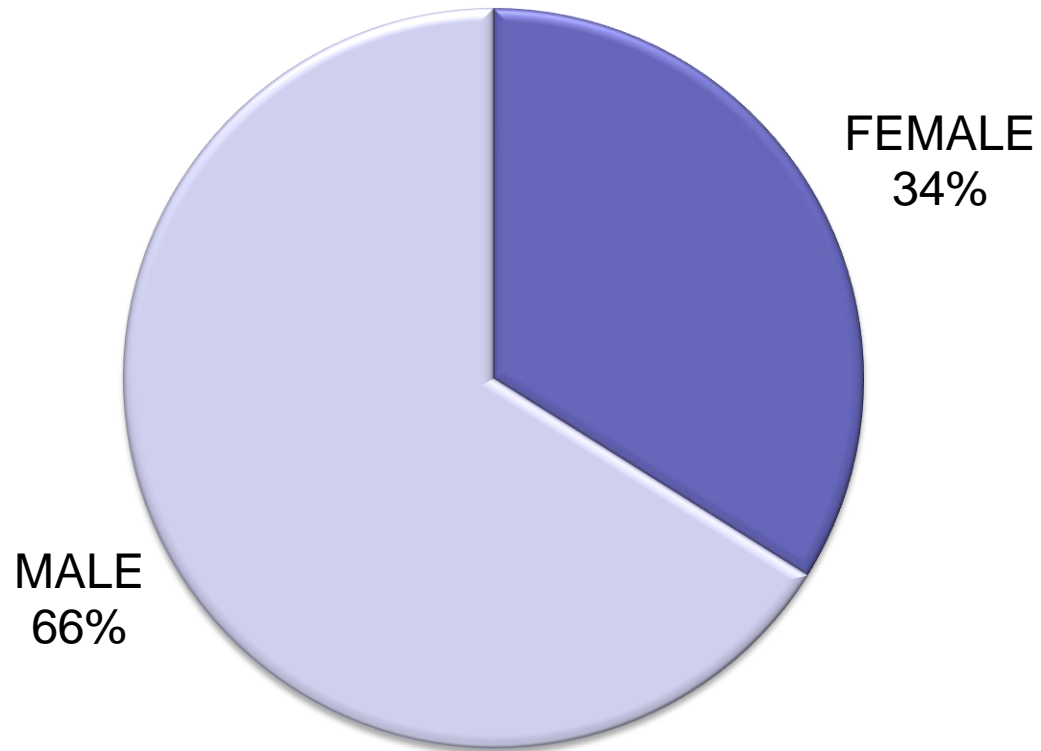
Region Fatalities By County



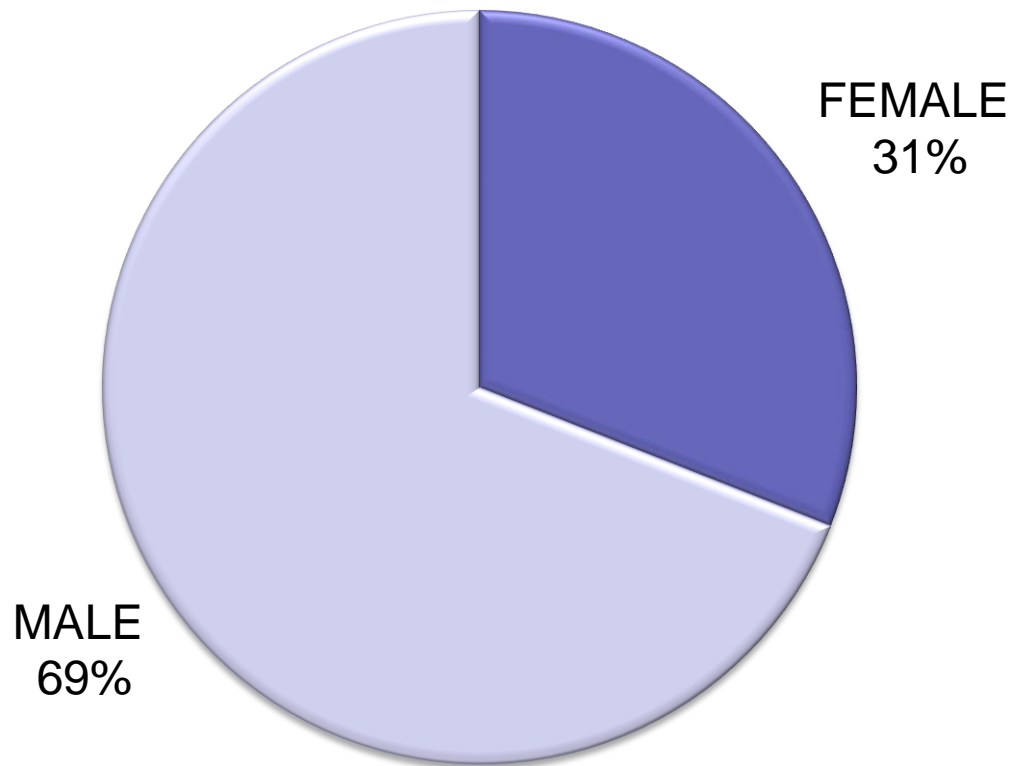
Who is being severely injured or killed?



SW 2007 - 2009 Severe Injuries by Gender

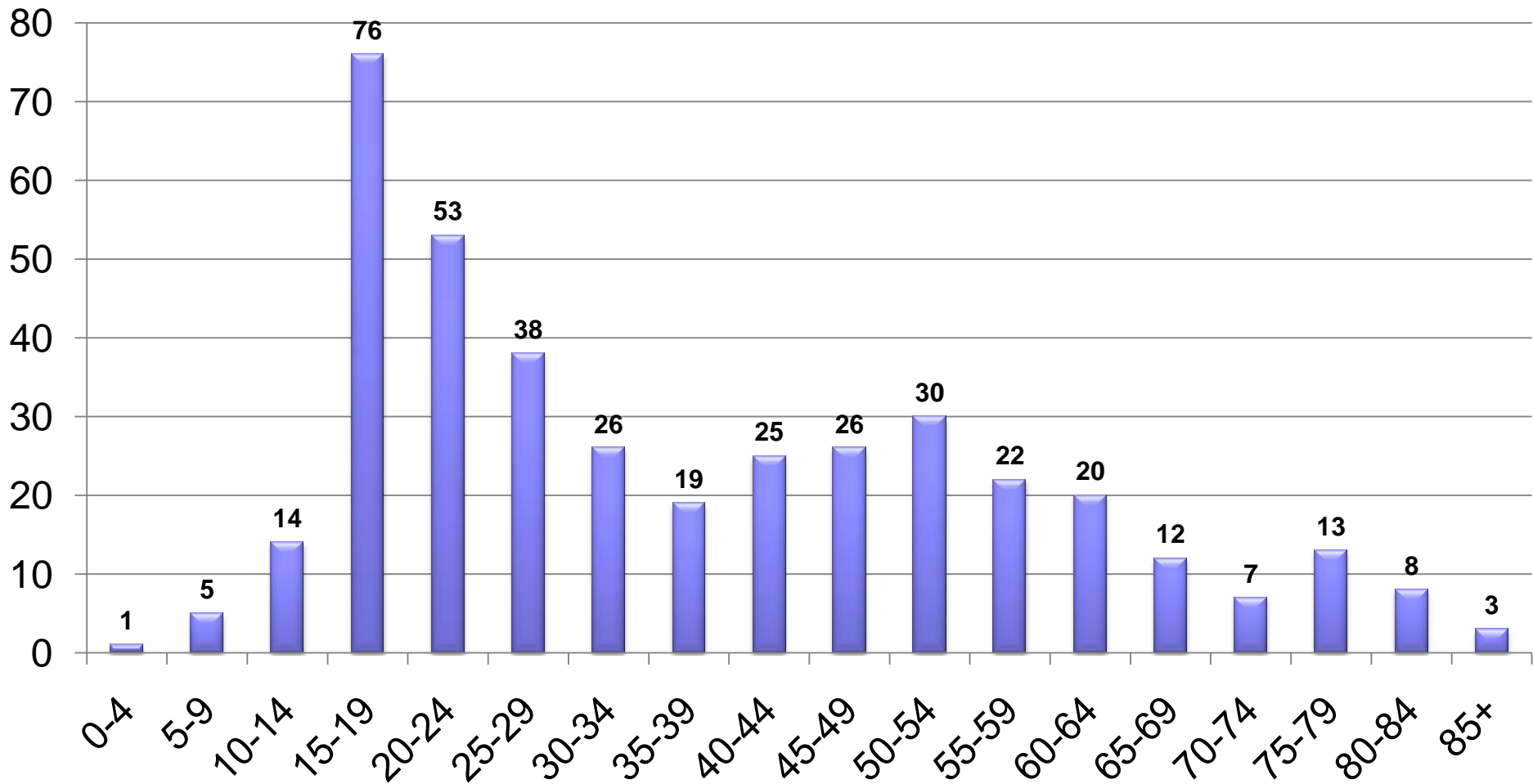


SW 2007 – 2009 Fatalities by Gender



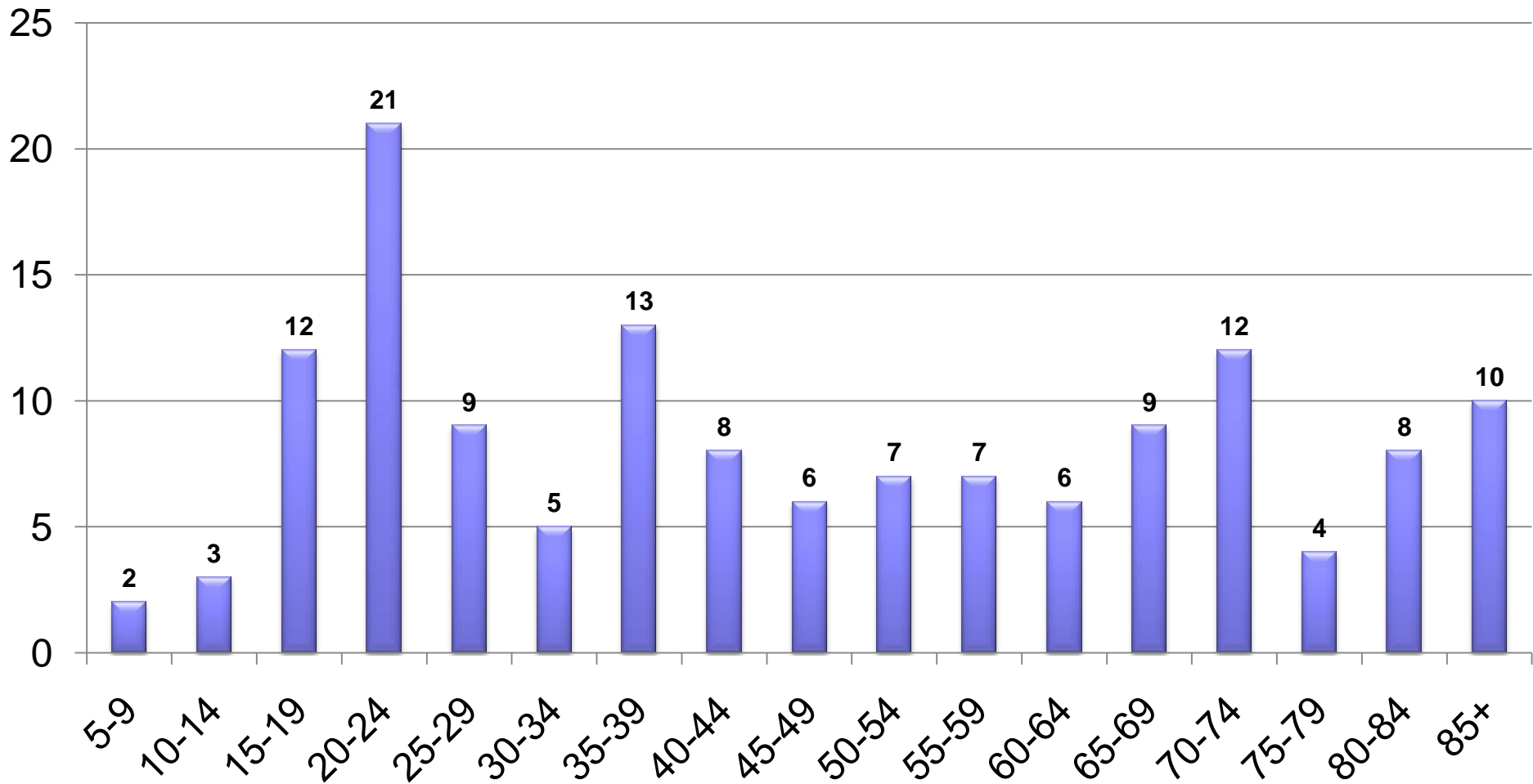
SW 2007-2009

Severe Injuries by Age



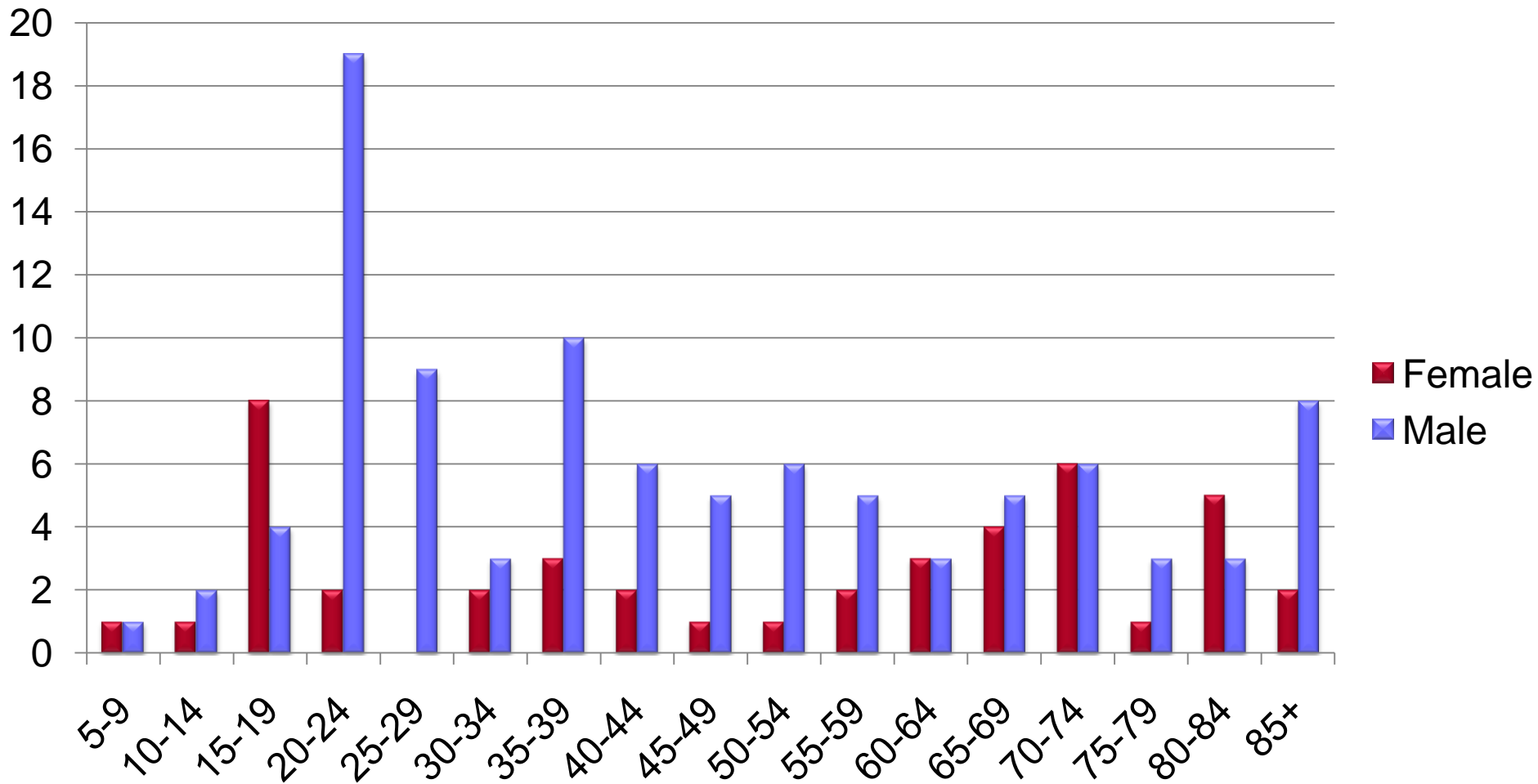
SW 2007-2009

Fatalities by Age



SW 2007 - 2009

Fatalities by Age and Gender



When do fatal and severe crashes happen?

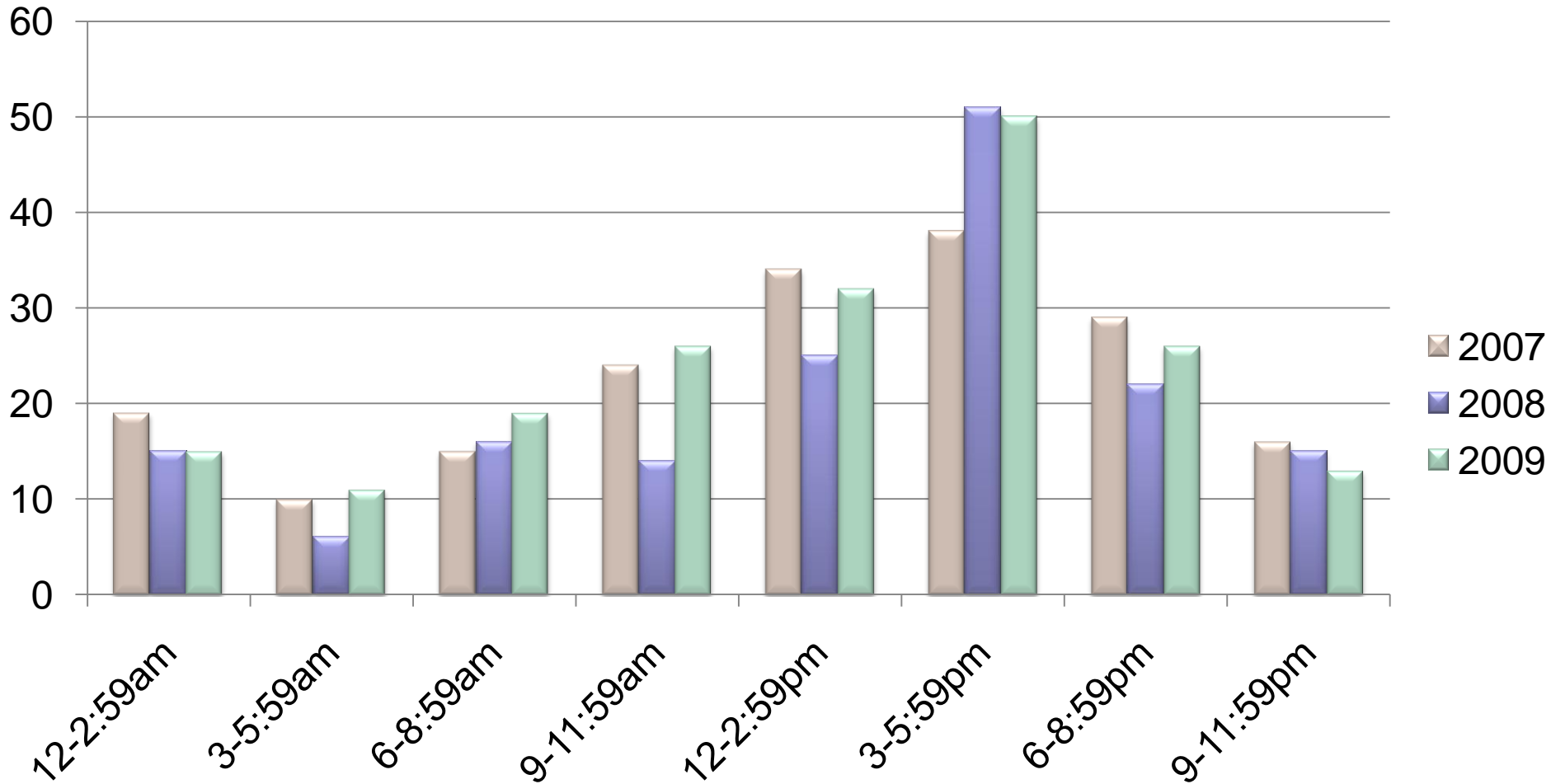
-Time of day

-Month



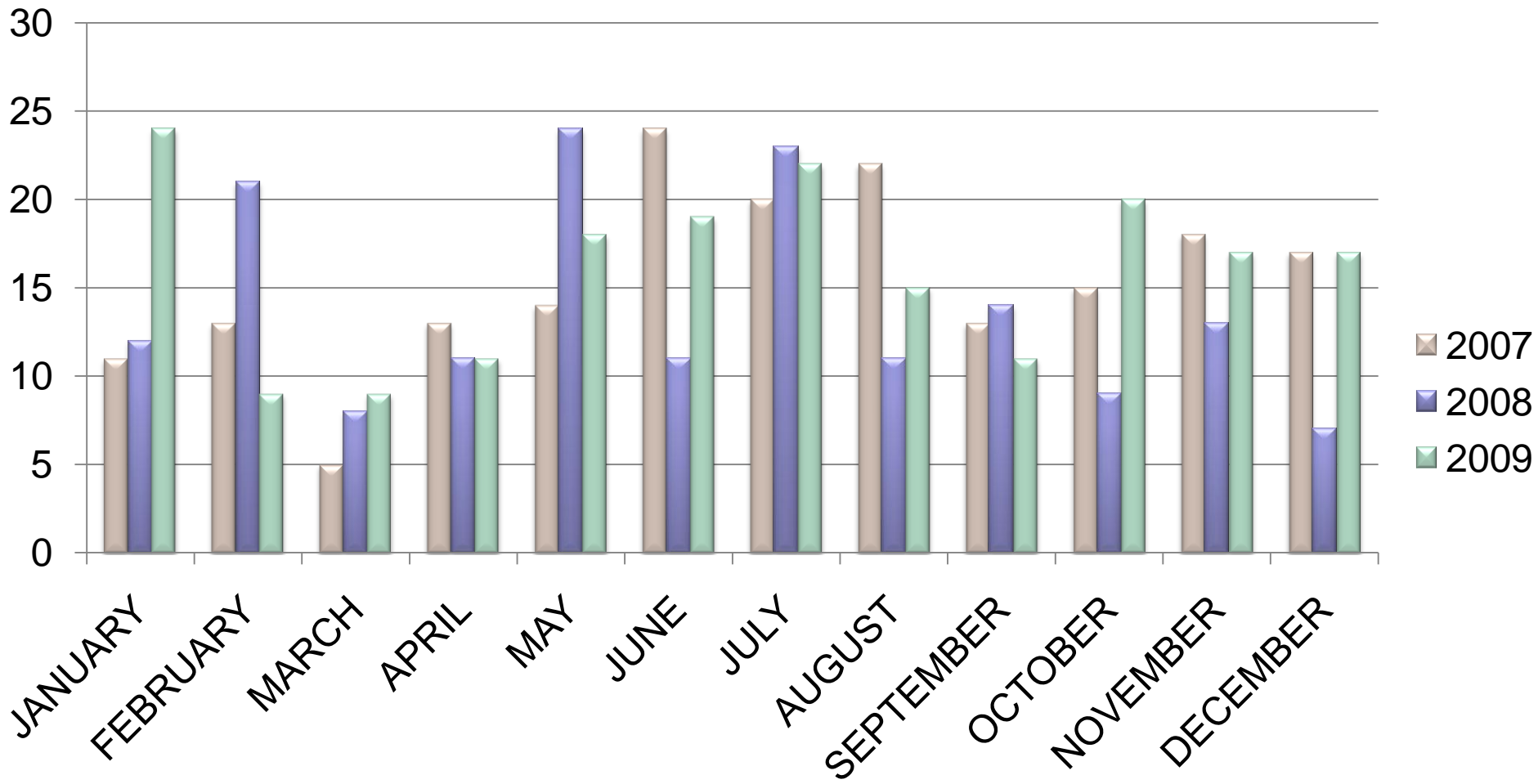
SW 2007 - 2009

Fatalities and Severe Injuries by Time of Day



SW 2007 - 2009

Fatalities and Severe Injuries by Month



Which driver behaviors are contributing to crashes?



SW 2009

Single Vehicle Crashes

Contributing Factors by Percent Within Age Group

CONTRIBUTING FACTOR	AGE						
	15-19	20-24	25-29	30-34	35-64	65-79	80+
ILLEGAL/UNSAFE SPEED	18.2	25.2	25.1	23.7	16.5	5.8	19.1
OVERCORRECTING	14.7	9.5	8.0	8.4	8.0	11.6	9.5
DRIVER INATTENTION/DISTRACTION	8.4	14.8	12.0	8.4	12.5	13.0	9.5
DRIVER INEXPERIENCE	14.5	2.8	0.0	1.5	0.7	0.0	0.0
CHEMICAL IMPAIRMENT*	4.7	10.4	10.3	10.7	7.6	7.3	0.0
SKIDDING	13.2	10.4	12.0	13.0	13.4	8.7	14.3

*Chemical impairment based on officer's perception of possible alcohol involvement as noted on crash report.

SW 2009

Multiple Vehicle Crashes

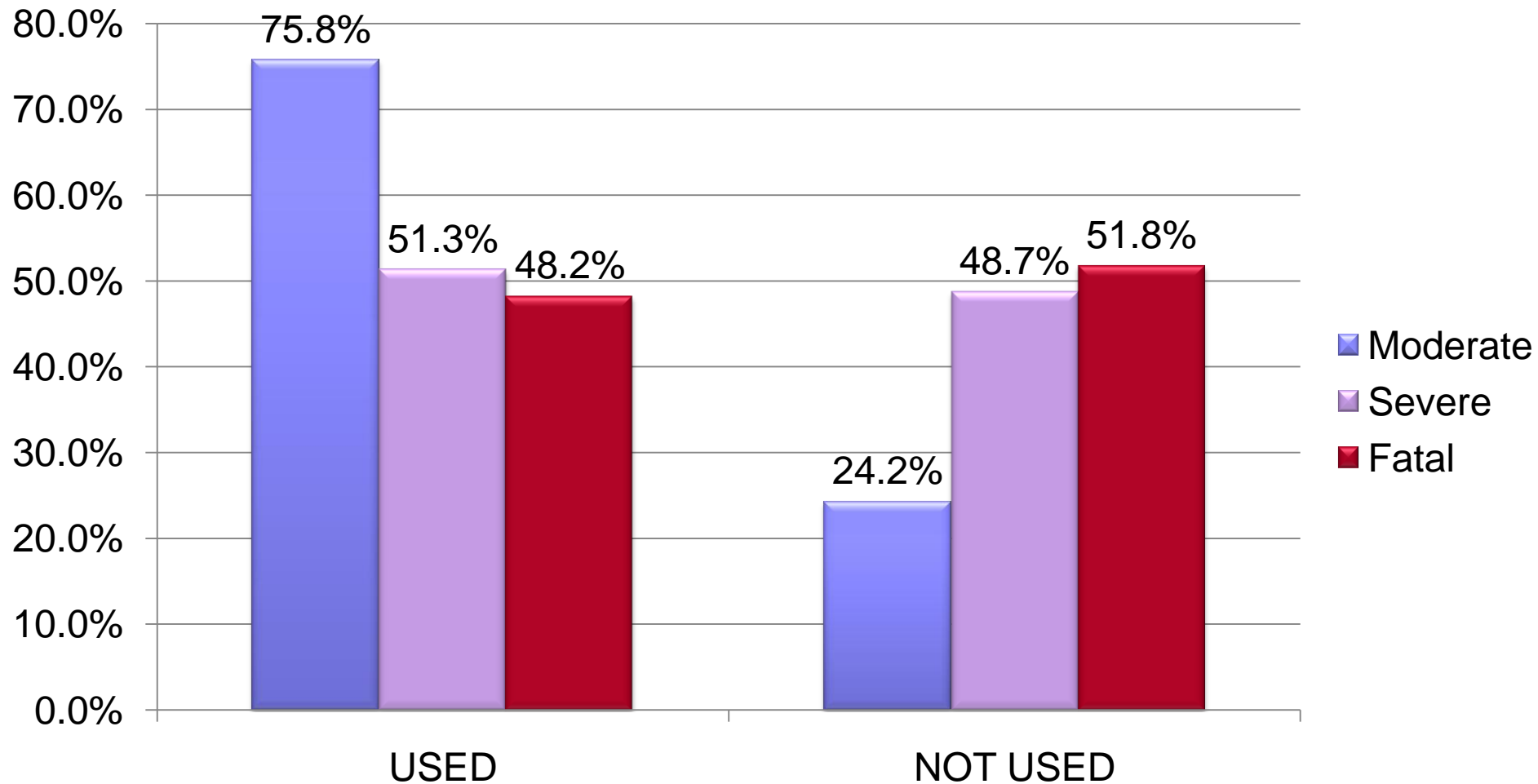
Contributing Factors by Percent Within Age Group

CONTRIBUTING FACTOR	AGE						
	15-19	20-24	25-29	30-34	35-64	65-79	80+
FAILURE TO YIELD RIGHT OF WAY	23.3	20.3	27.4	23.0	24.4	35.2	44.4
ILLEGAL/UNSAFE SPEED	7.2	7.9	5.8	6.3	4.1	2.7	0.6
FOLLOWING TOO CLOSE	7.0	5.4	4.3	6.3	5.4	2.3	1.3
DISREGARD OF TRAFFIC CONTROL	2.9	1.7	3.3	1.7	3.1	2.7	5.0
DRIVER INATTENTION/DISTRACTION	20.1	22.0	17.0	17.2	21.4	20.1	12.5
UNSAFE BACKING	1.3	4.4	2.5	4.0	4.4	5.3	3.8
CHEMICAL IMPAIRMENT*	0.8	2.0	2.2	3.5	1.6	0.0	0.0

*Chemical impairment based on officer's perception of possible alcohol involvement as noted on crash report

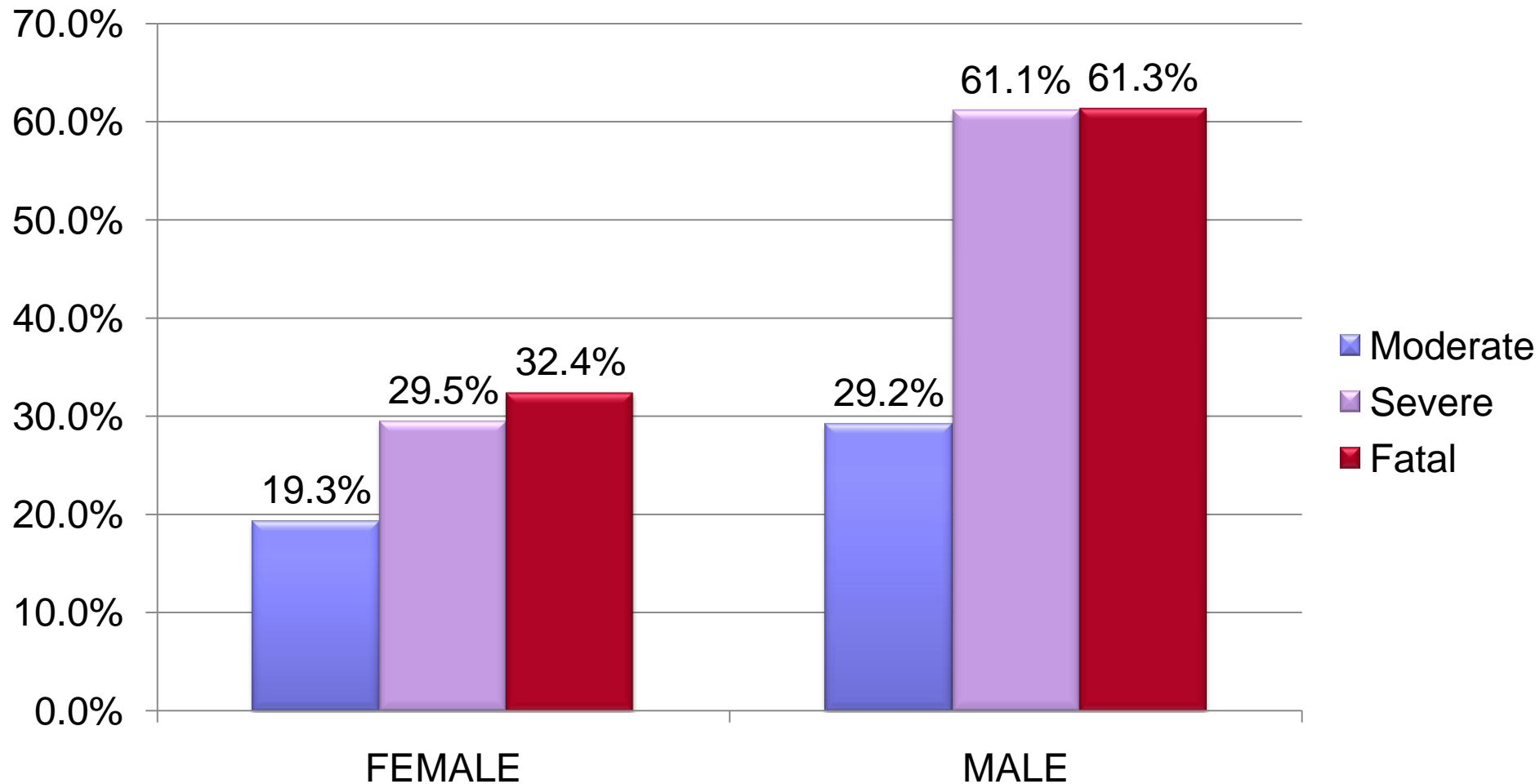
SW 2007-2009

Impact of Seat Belt Use on Injury Level



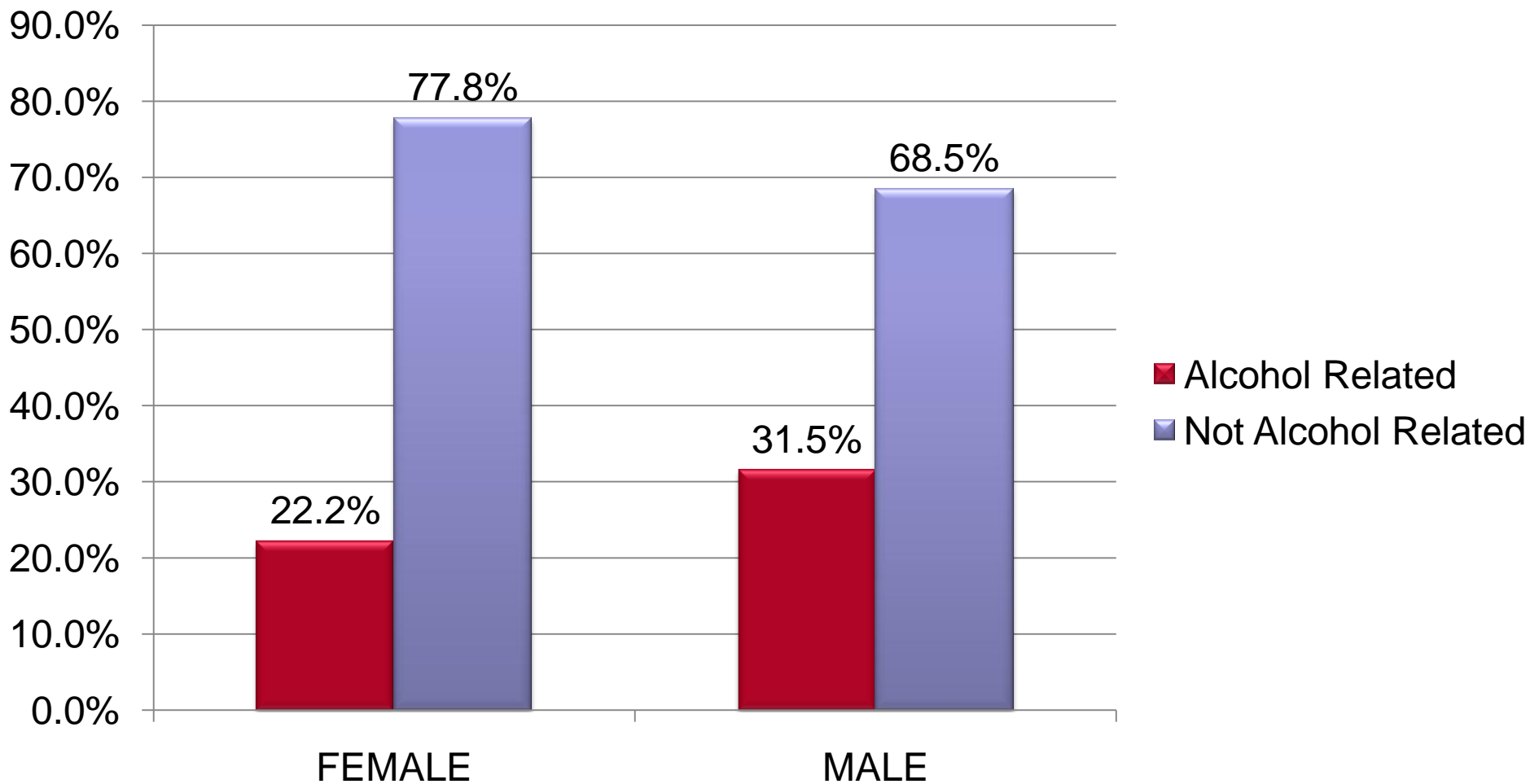
SW 2007-2009

Injury Level by Gender (percentage not wearing belts)



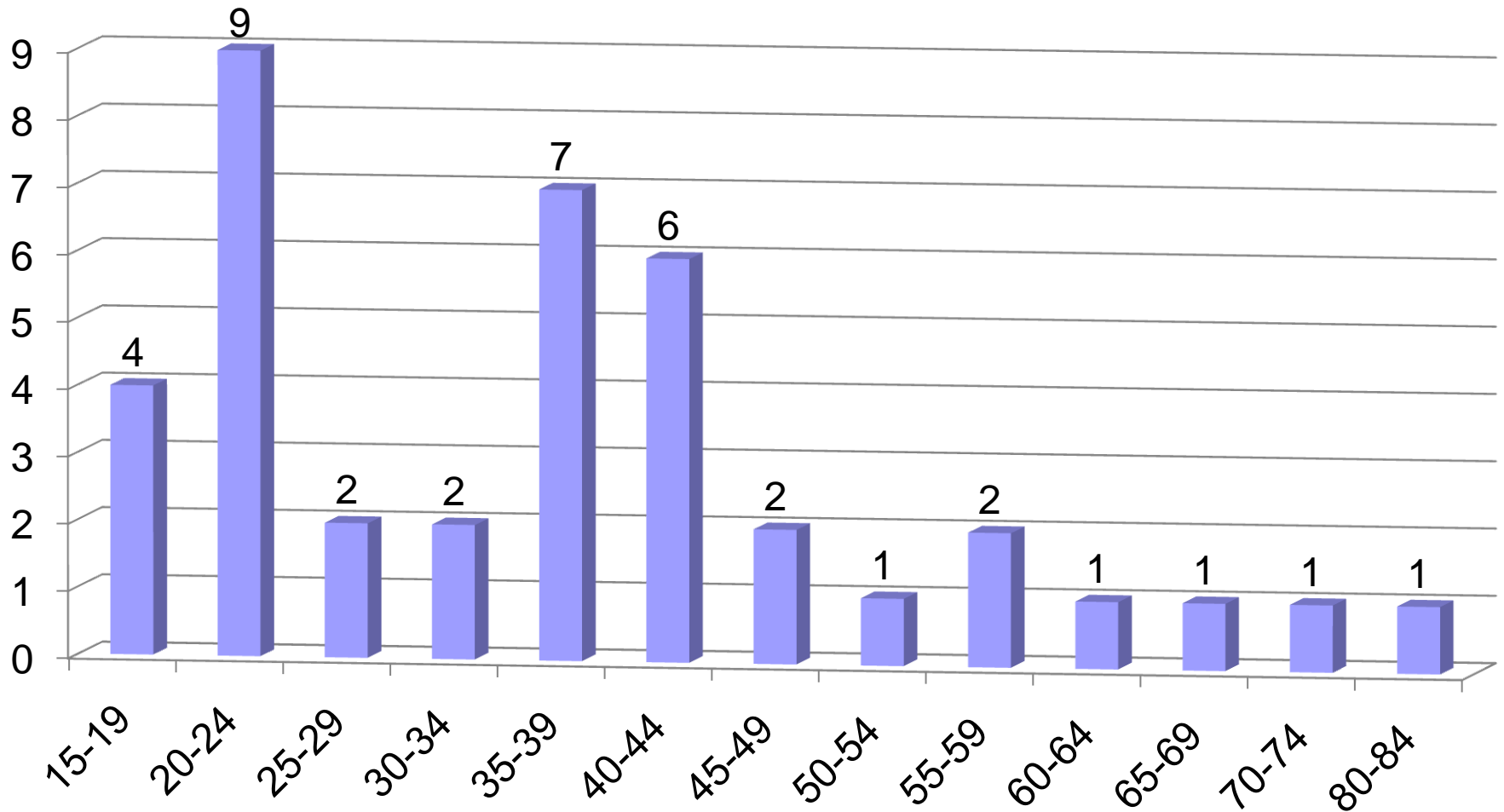
SW 2006-2008

Alcohol-Related Fatalities by Gender



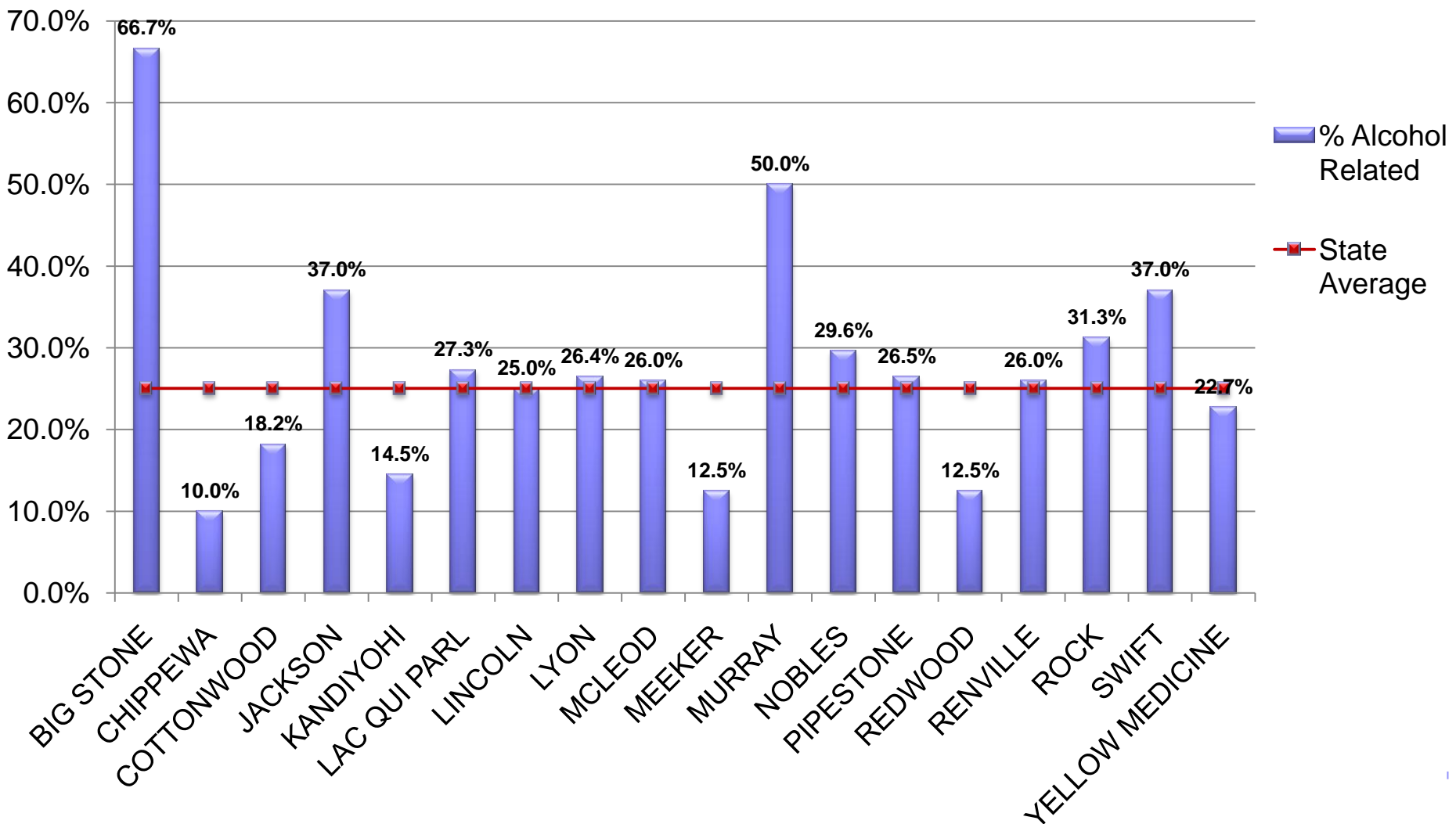
SW 2006-2008

Alcohol-Related Fatalities by Age



SW 2006-2008

Percentage of Fatalities and Severe Injuries Alcohol Related

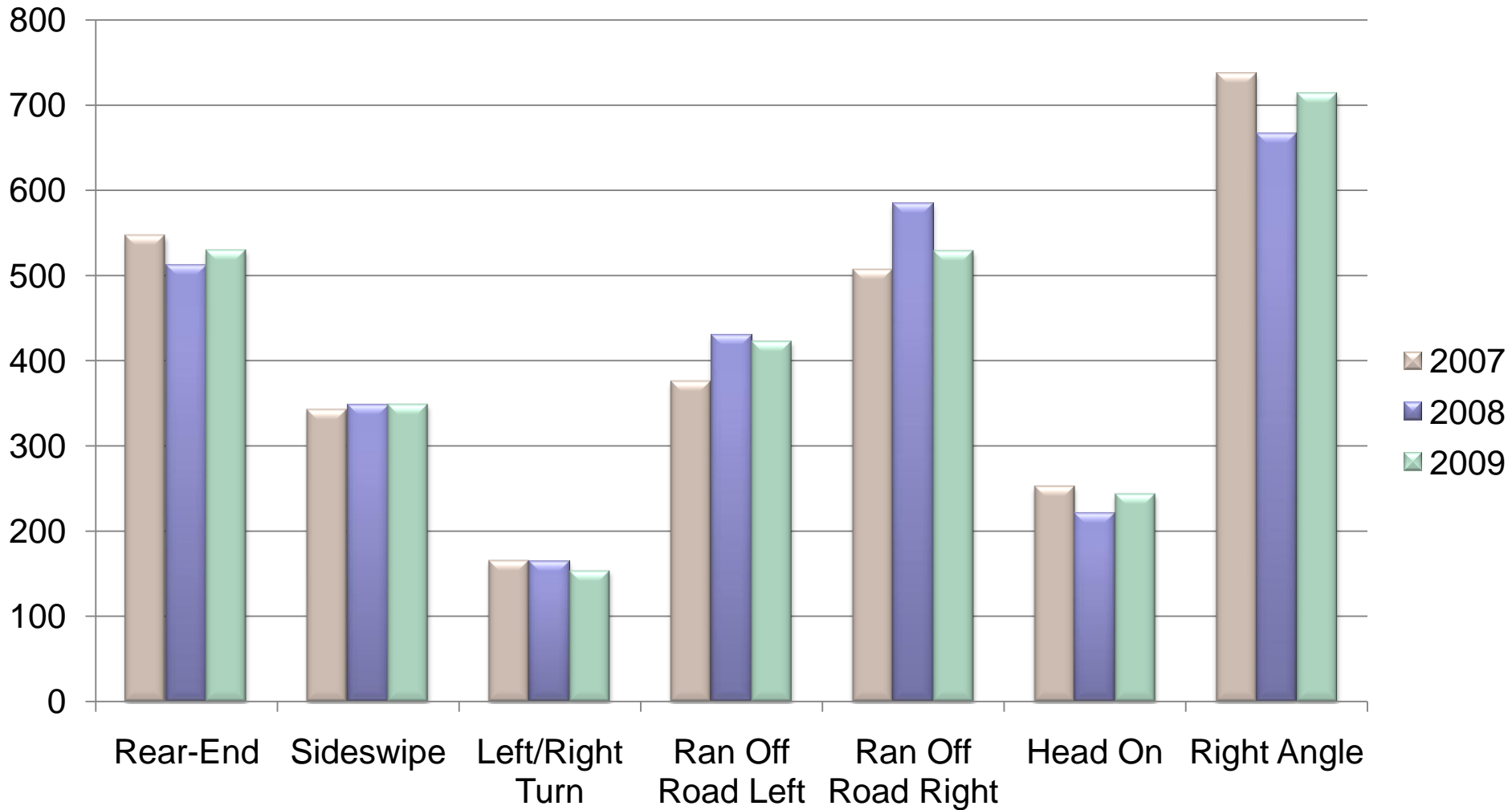


What types of crashes occur?



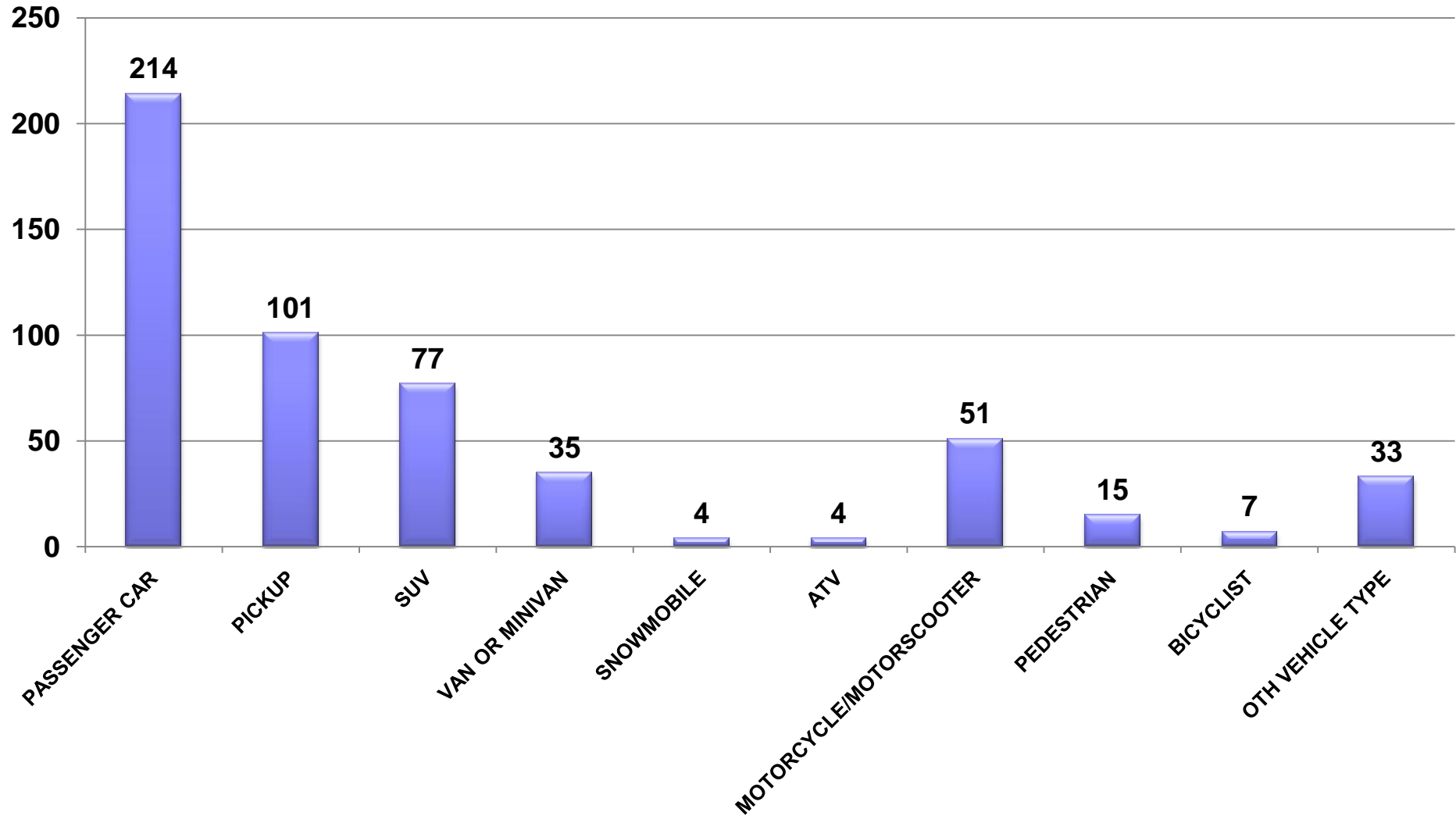
SW 2007-2009

Type of Crash



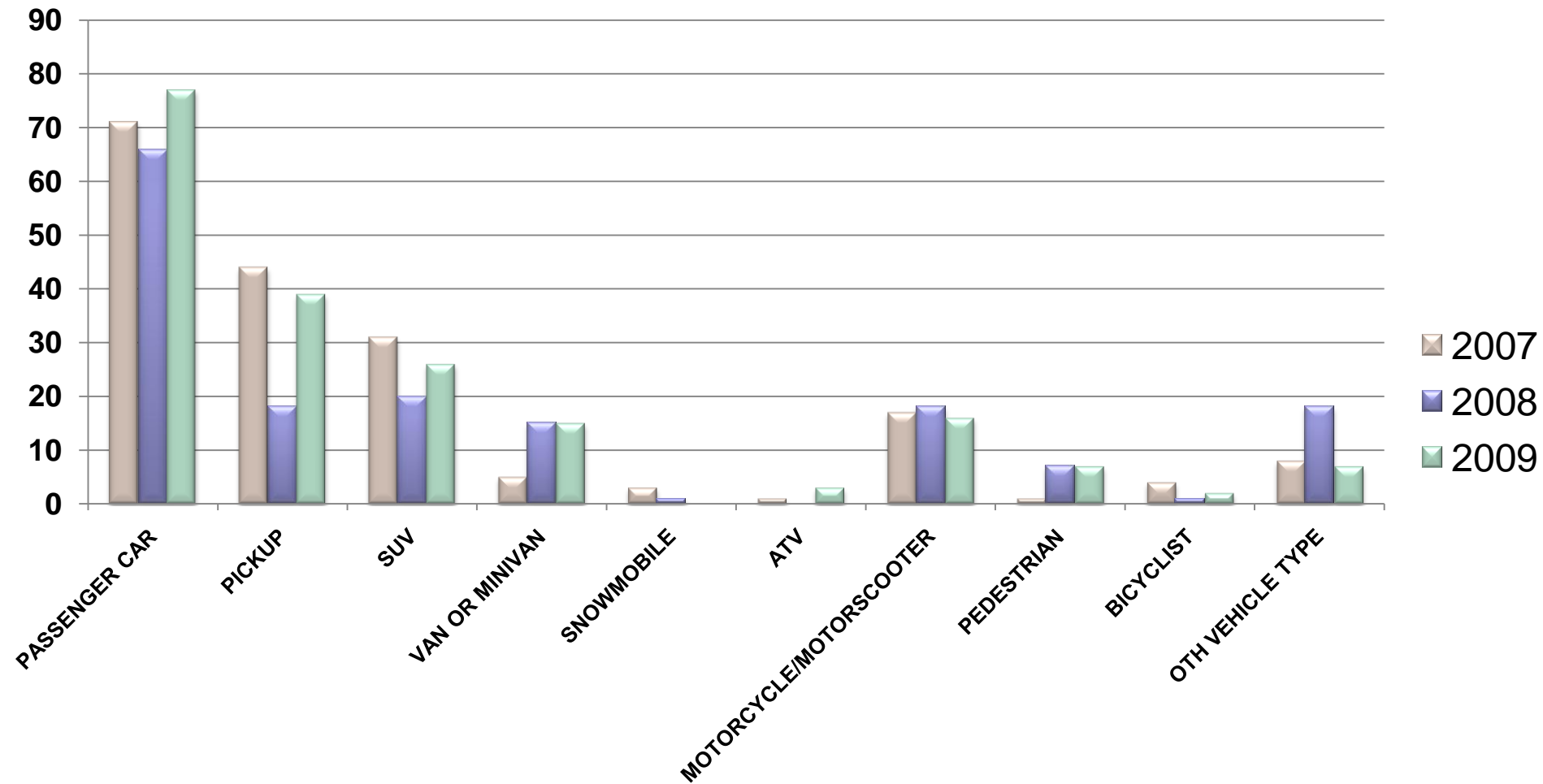
SW 2007 – 2009

Fatalities and Severe Injuries by Type of Vehicle

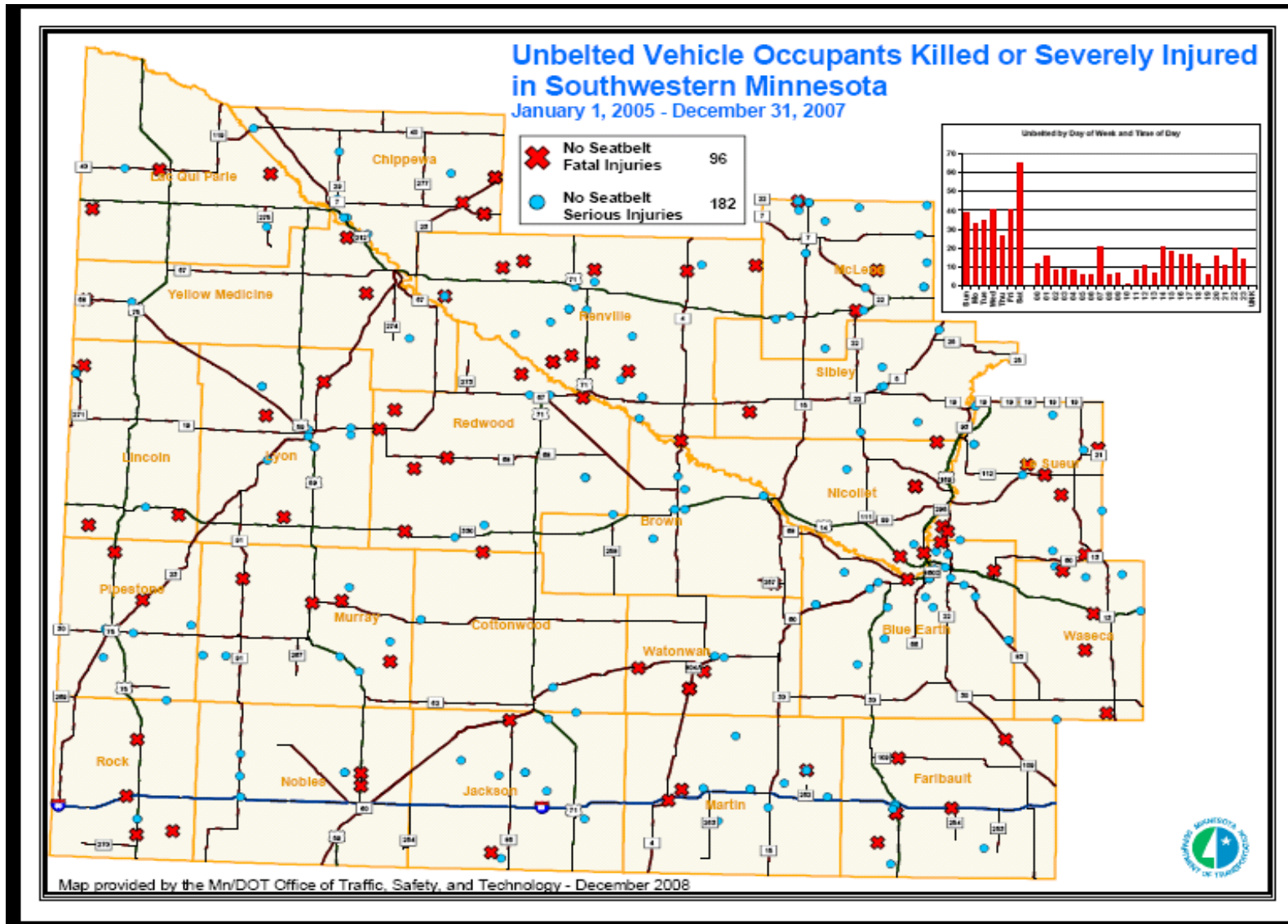


SW 2007 – 2009

Fatalities and Severe Injuries by Type of Vehicle



Where are the crashes taking place?



Economic Cost of Motor Vehicle Crashes*

- Wage and productivity losses
- Medical expenses
- Administrative expenses
 - Insurance, property damage, legal
- Motor vehicle damage
- Employers' uninsured costs
 - Time lost, hiring/training replacements, OT



*National Safety Council

Economic Cost of the Unbelted SW 2007 – 2009

Severity	Unbelted	Economic Cost
Killed	58	\$70,340,000
Severely Injured	130	\$8,424,300
Total	188	\$78,764,300

How can we prevent these tragedies?



SW TZD - Key Themes

- Fatalities have generally decreased in Southwest in recent years, but increased in 2009.
- Overall, most fatal and severe crashes occur during the “good weather” months
- Two-thirds of persons killed and severely injured were males, mostly young (15 – 24 years-old)
- Speeding is a major factor in single vehicle crashes – particularly from 15 to 34 years-old.
- Male motor vehicle occupants are more likely to be unbelted than female motor vehicle occupants
- 3 times as many male alcohol-related fatalities than female
- Unbelted fatalities and severe injuries cost the region nearly 80 million dollars 2007 – 2009



Behavioral Targets

- Focus on:
 - Speed Awareness
 - Seat belts
 - Alcohol-related issues
 - Attentive Driving
 - Summer months; 3pm-6pm
- Who needs to get the message?
 - Mostly young males



TZD Vision and Mission

Vision – To reduce fatalities and serious injuries on Minnesota's roads to zero.

Mission – To create a culture for which traffic fatalities and serious injuries are no longer acceptable through the integrated application of education, engineering, enforcement, and emergency medical and trauma services. These efforts will be driven by data, best practices, and research.



Supporting the 4 E's

- Data and Evaluation
- Research and Innovative Practices
- Strong Traffic Safety Policies
- Judicial Support



Suggestions for Strengthening SW TZD Partnership

- Define TZD Regional operating structure
- Address data-driven priority traffic safety issues
- Define SW TZD goals and strategies based on data specific to Region
- Build up participation in Regional efforts
- Plan for evaluation/assessment of Regional efforts
- Develop mechanism for administrative support
- Glean lessons learned from state-wide TZD and Region TZD experiences

Thank you.

Office of Traffic Safety

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