

*Some Insight into the Recent
Increases in
Motorcyclist Fatalities*

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2007 Data Shows...

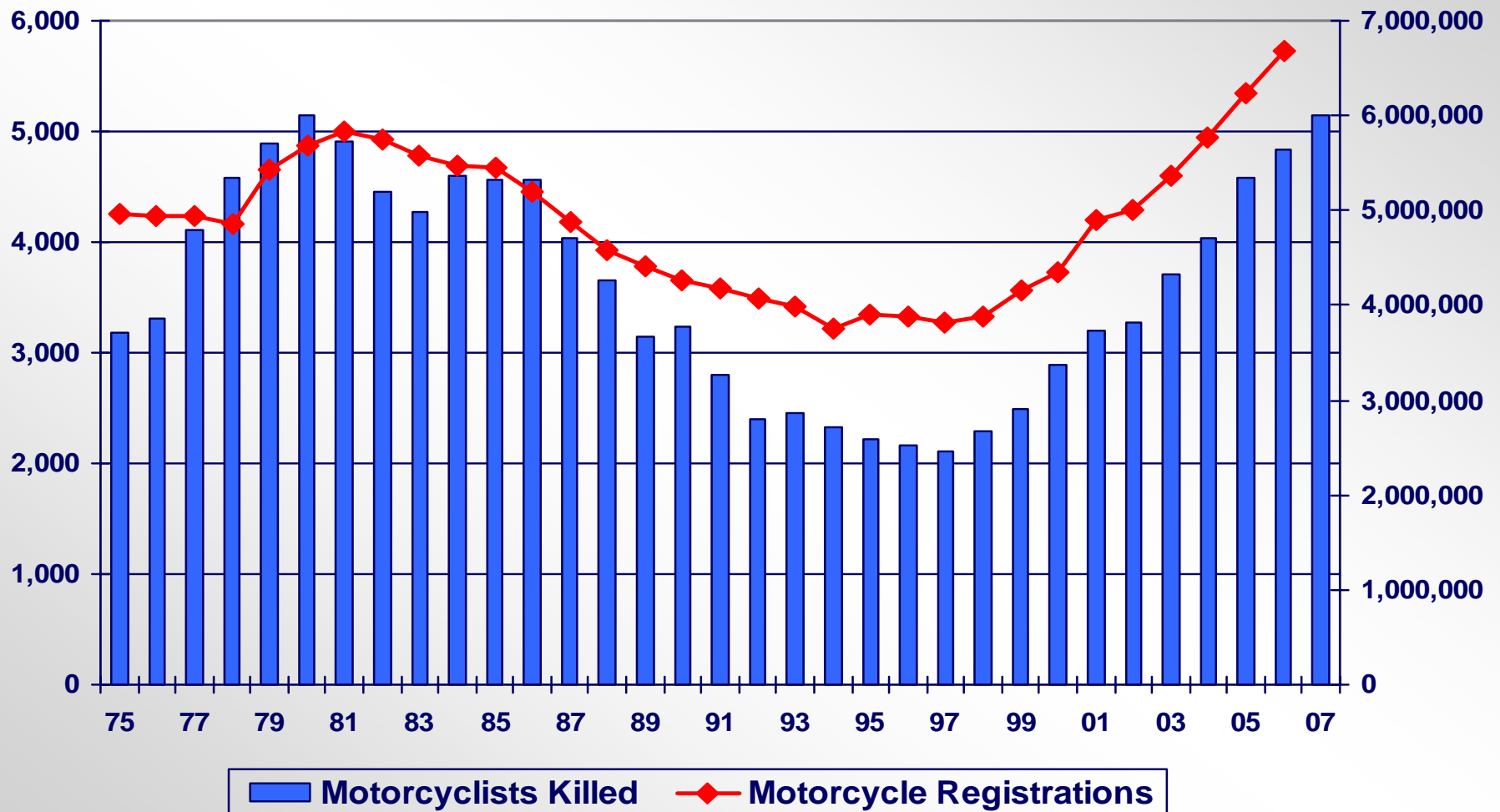
- **Motorcyclist fatalities *increased* for the *10th* year in a row**
- **Accounted for 13 percent of total fatalities**
- **Highest number since 1975**
 - **Previous highest in 1980 - 5,144**

Motorcycle Registration and Vehicle Miles Traveled by Year

Year	Registered Motorcycles		Vehicle Miles Traveled (millions)	
	Number	Percent Increase	Number	Percent Increase
1998	3,879,450	-----	10,283	-----
1999	4,152,433	+7.0%	10,584	+2.9%
2000	4,346,068	+4.7%	10,469	-1.1%
2001	4,903,056	+13%	9,639	-7.9%
2002	5,004,156	+2.1%	9,552	-0.9%
2003	5,370,035	+7.3%	9,577	+0.3%
2004	5,767,934	+7.4%	10,122	+5.7%
2005	6,227,146	+8.0%	10,454	+3.3%
2006	6,686,147	+7.3%	12,401	+18.6%
2007	N/A	-----	N/A	-----
1998-2006 Change	+2,806,697	+72%	+2,118	+21%

Motorcycle Registration and VMT data for 2007 not available at this time **Source: FHWA**

Motorcyclists Killed and Motorcycle Registrations, by Year



2007 Motorcycle Registrations - N/A

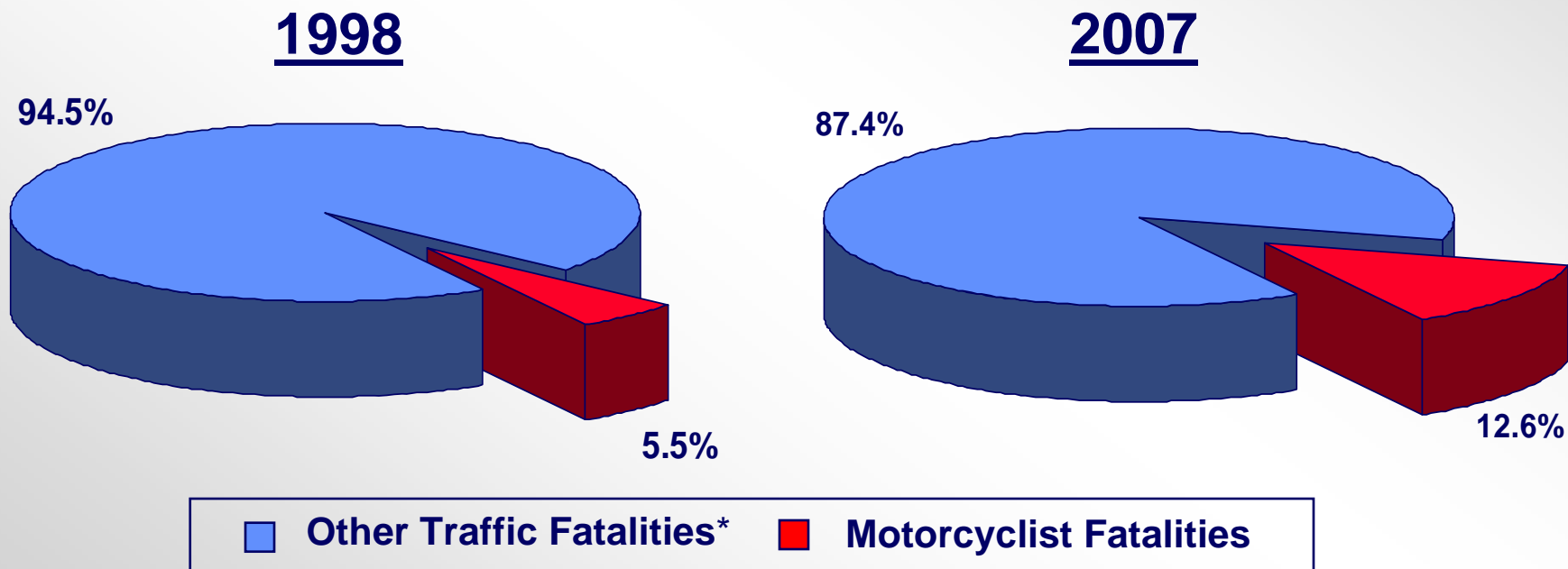
Source: FARS

SMSA Business Meeting

August 15, 2008

Proportion of Total Fatalities, by Role and Year

Motorcyclist fatalities **increased** to **12.6** percent of all motor vehicle traffic crash fatalities compared to **5.5** percent in 1998



* Passenger Vehicle Occupants, Other occupants, and Nonoccupants

Source: FARS

SMSA Business Meeting

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Total vs. Motorcyclist Fatalities by Year, 1998-2007

Year	Overall Fatalities		Motorcyclists			
	Total	Change in Total	Fatalities	Change in Fatalities	Percent Change	Percent of Total Fatalities
1998	41,501	---	2,294	---	---	5.5%
1999	41,717	+216	2,483	+189	+8.2%	6.0%
2000	41,945	+228	2,897	+414	+7.0%	6.9%
2001	42,196	+251	3,197	+300	+10%	7.6%
2002	43,005	+809	3,270	+73	+2.3%	7.6%
2003	42,884	-121	3,714	+444	+14%	8.7%
2004	42,836	-48	4,028	+314	+8.5%	9.4%
2005	43,510	+674	4,576	+548	+14%	10.5%
2006	42,708	-802	4,837	+261	+5.7%	11.3%
2007	41,059	-1,649	5,154	+317	+6.6%	12.6%
Total Cumulative Change		-442		+2,860		

Source: FARS

Motor Vehicle Crash Fatalities by Person Type and Year

Year	Person Type				Total
	Passenger Vehicle Occupants*	Motorcyclists	Nonoccupants**	Other Occupants***	
1998	31,899	2,294	6,119	1,189	41,501
1999	32,127	2,483	5,842	1,265	41,717
2000	32,225	2,897	5,597	1,226	41,945
2001	32,043	3,197	5,756	1,200	42,196
2002	32,843	3,270	5,630	1,262	43,005
2003	32,271	3,714	5,543	1,356	42,884
2004	31,866	4,028	5,532	1,410	42,836
2005	31,549	4,576	5,846	1,539	43,510
2006	30,686	4,837	5,752	1,433	42,708
2007	28,933	5,154	5,504	1,468	41,059

* Include occupants of passenger cars, vans, SUVs, pickups, and other light trucks
 ** Include pedestrians, pedalcyclists, and other/unknown nonoccupants
 *** Include occupants of large trucks, buses, and other/unknown vehicle types

Source: FARS

2007 Data Shows ...

- ***Motorcyclist fatalities and motorcycle registrations have both been on the rise since 1998***
- ***However, in most of these years the rate of increase in motorcyclist fatalities has been higher than the rate of increase in motorcycle registrations (as reflected in the rate increase)***

Motorcyclist Fatality Rates, by Year

Rate	Calendar Year									
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Motorcyclists Killed	2,294	2,483	2,897	3,197	3,270	3,714	4,028	4,576	4,837	5,154
/100M Motorcycle Miles Traveled	22.31	23.46	27.67	33.17	34.23	38.78	39.79	43.77	39.00	N/A
/100K Registered Motorcycles	59.13	59.80	66.66	65.20	65.35	69.16	69.83	73.48	72.34	N/A
Source: FARS, FHWA										

Motorcycle Registration and VMT data for 2007 not available at this time

Where the Increases Are

- **10-Year Trend by Age Group Shows**
 - ◆ **71-percent increase in under-30 group**
 - ◆ **70-percent increase in 30-39 age group**
 - ◆ **234-percent increase in 40+ age group**
 - **380-percent increase in 50+ age group**
- **10-Year Trend by Engine Size Shows**
 - ◆ **9-percent increase in under-500 cc engine size**
 - ◆ **118-percent increase in 501-1,000 cc engine size**
 - ◆ **134-percent increase in 1,001-1,500 cc engine size**

Increases in Fatalities on Larger (1,001-1,500 cc) Motorcycles

- **10-Year Trend by Age Group Shows**
 - ◆ 36-percent increase in under-30 group
 - ◆ 29-percent increase in 30-39 age group
 - ◆ More than 220-percent increase in 40+ age group
 - **392-percent increase in 50+ age group**
- **Trends since 1997 by Age Group Show**
 - ◆ Of the 1,045-fatality increase on larger motorcycles, 932 (89%) were among riders age 40 and older
 - ◆ Of the 1,777-fatality increase among riders age 40 and older, 932 (52%) were on larger motorcycles

Last 10-Year Data Shows ...

- ◆ *Mean age of motorcyclist killed is increasing*
- ◆ *Mean engine size of motorcycle involved in a fatal crash is increasing*

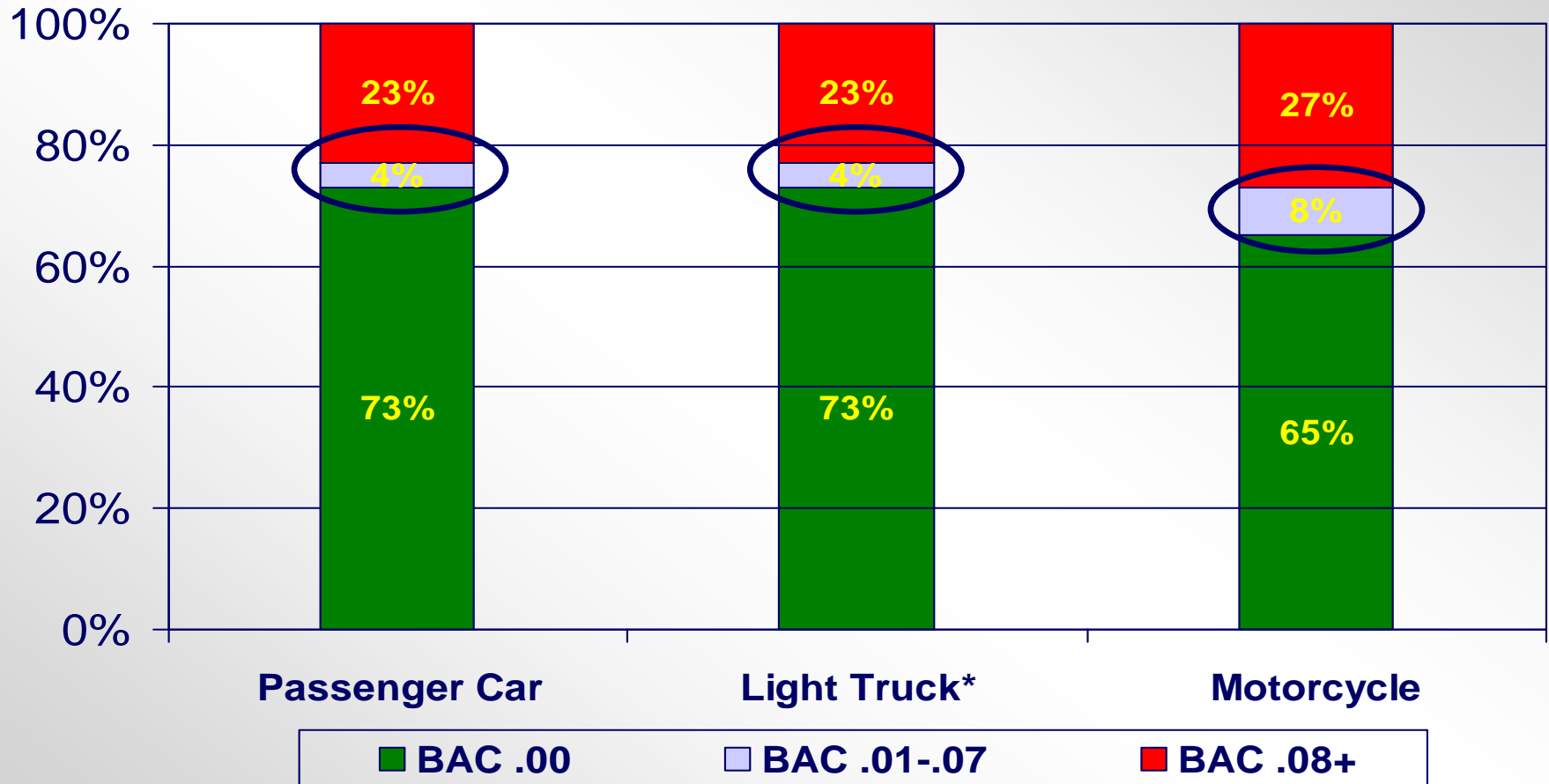
Mean Age of Motorcyclist Killed and Mean Engine Size Involved in Fatal Crashes

Year	Mean Age (yrs.)	Mean Engine Size (cc)
1998	34.6	902
1999	36.5	927
2000	36.8	961
2001	36.3	957
2002	37.9	1,002
2003	38.0	1,014
2004	38.0	1,015
2005	38.8	1,018
2006	38.8	1,030
2007	39.5	1,036

Source: FARS

Alcohol Involvement in Fatal Motorcycle Crashes

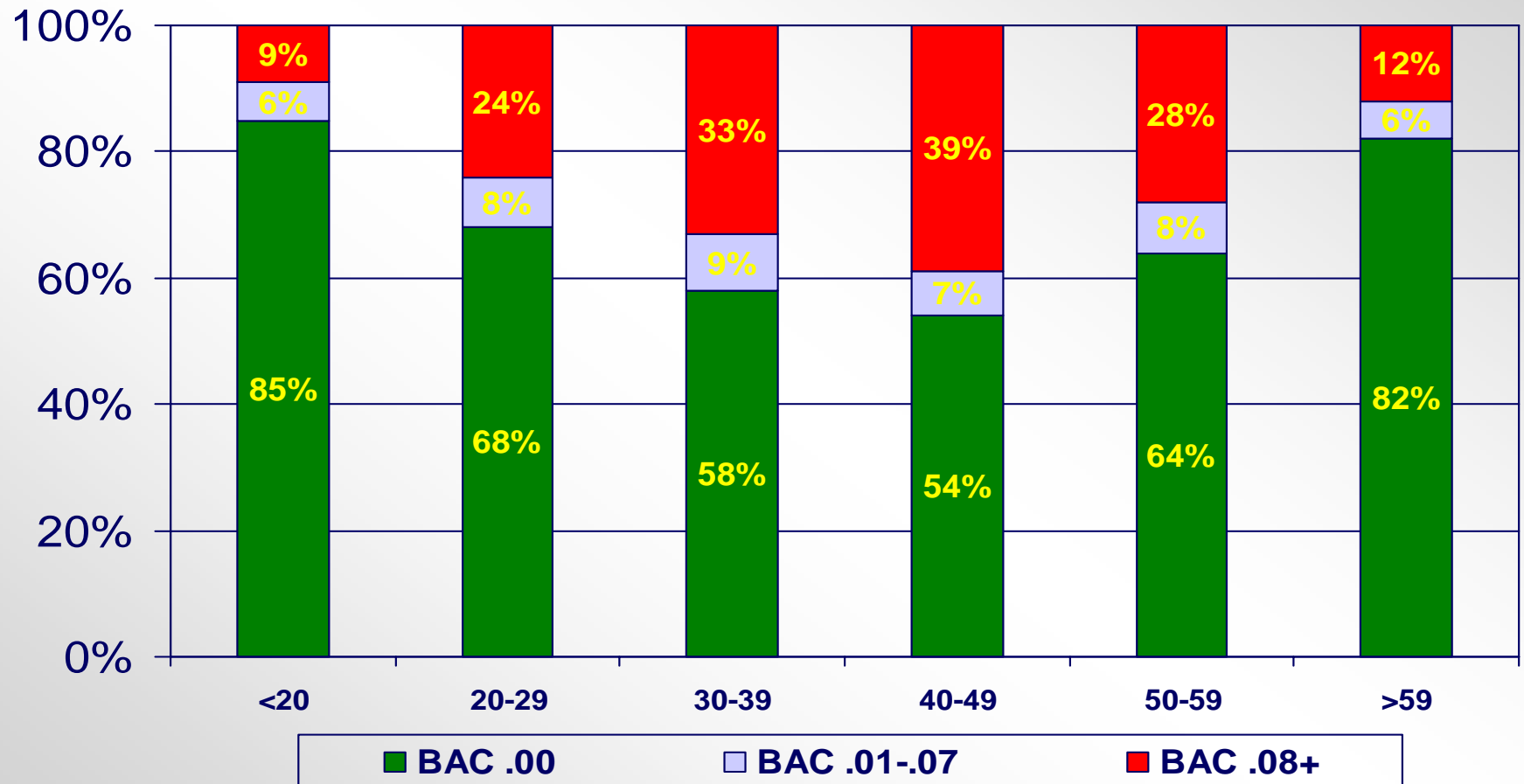
Comparison of Driver/Rider Alcohol Involvement in Fatal Crashes by Vehicle Type



*Includes SUVs, Vans, and Pickups

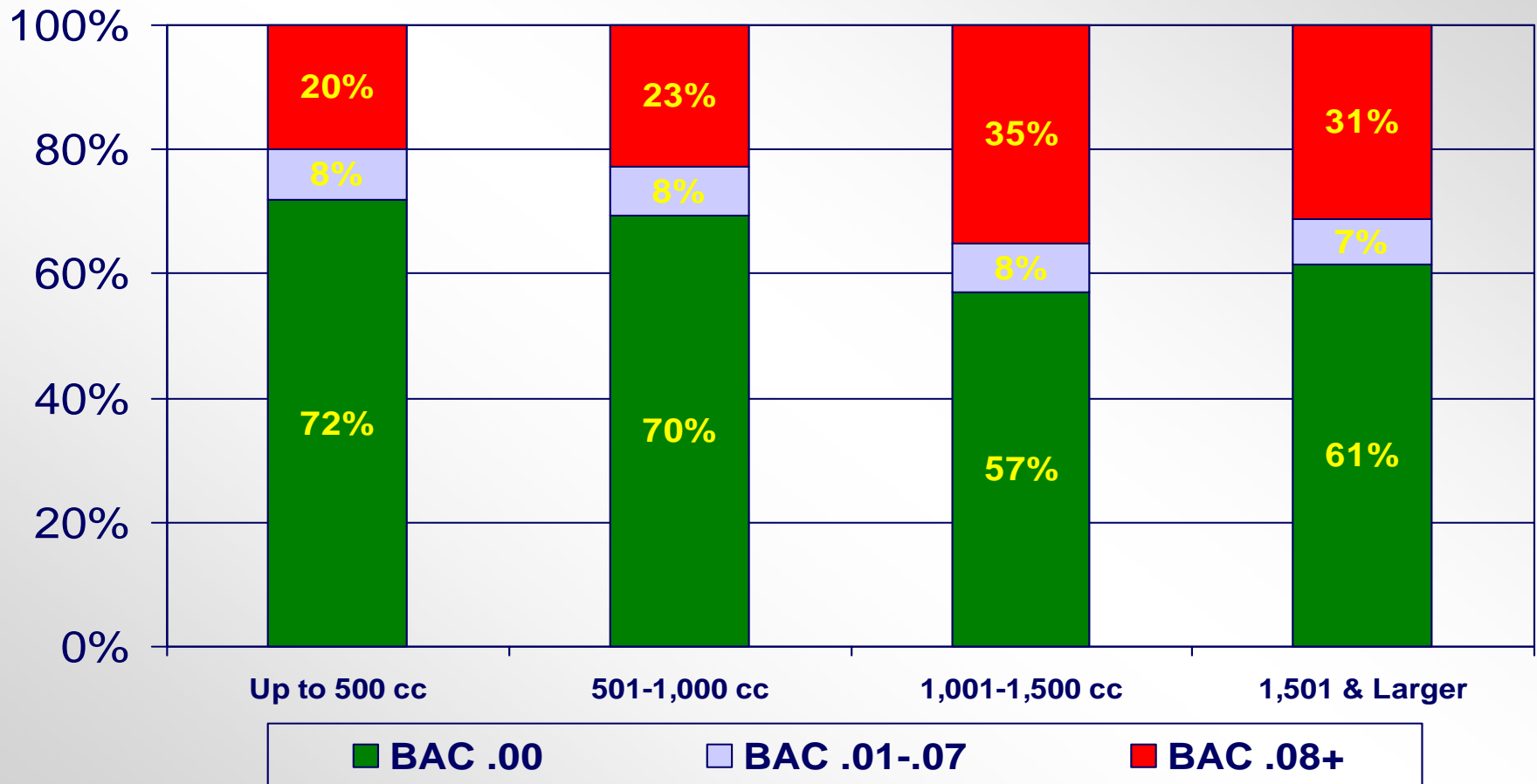
Source: 2007 FARS

Motorcycle Riders Killed by Alcohol Level and Age Group



Source: 2007 FARS

Motorcycle Riders Killed by Alcohol Level and Engine Size

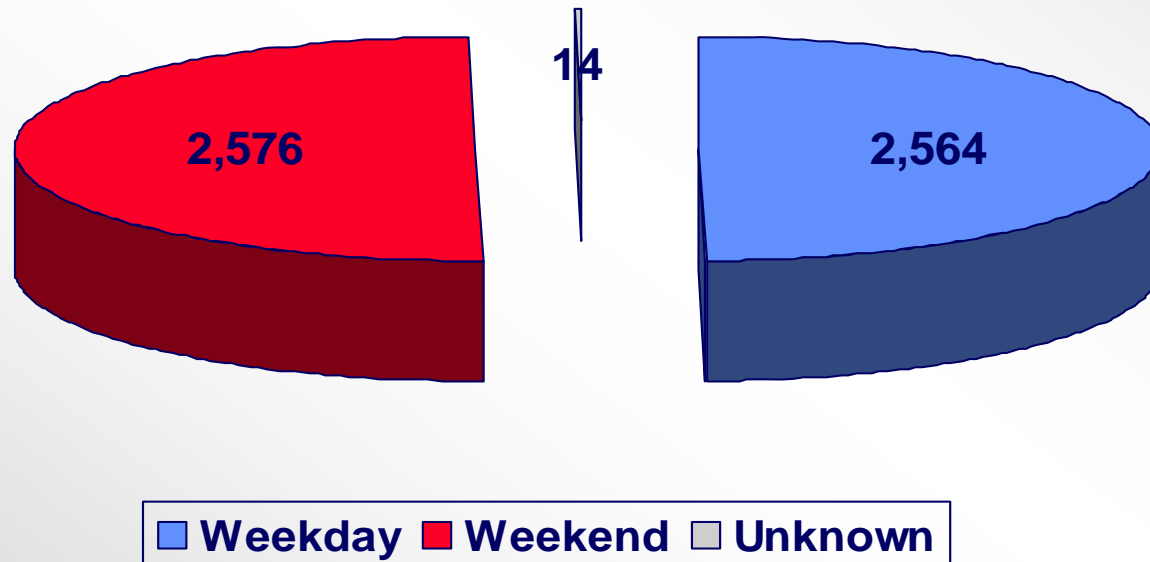


Source: 2007 FARS

Motorcyclist Fatalities by Day of Week

Motorcyclist Fatalities by Day of Week

Based on the number of hours, there were nearly **twice** as many motorcyclist fatalities during **weekends** than during weekdays (19.8 versus 11.0)

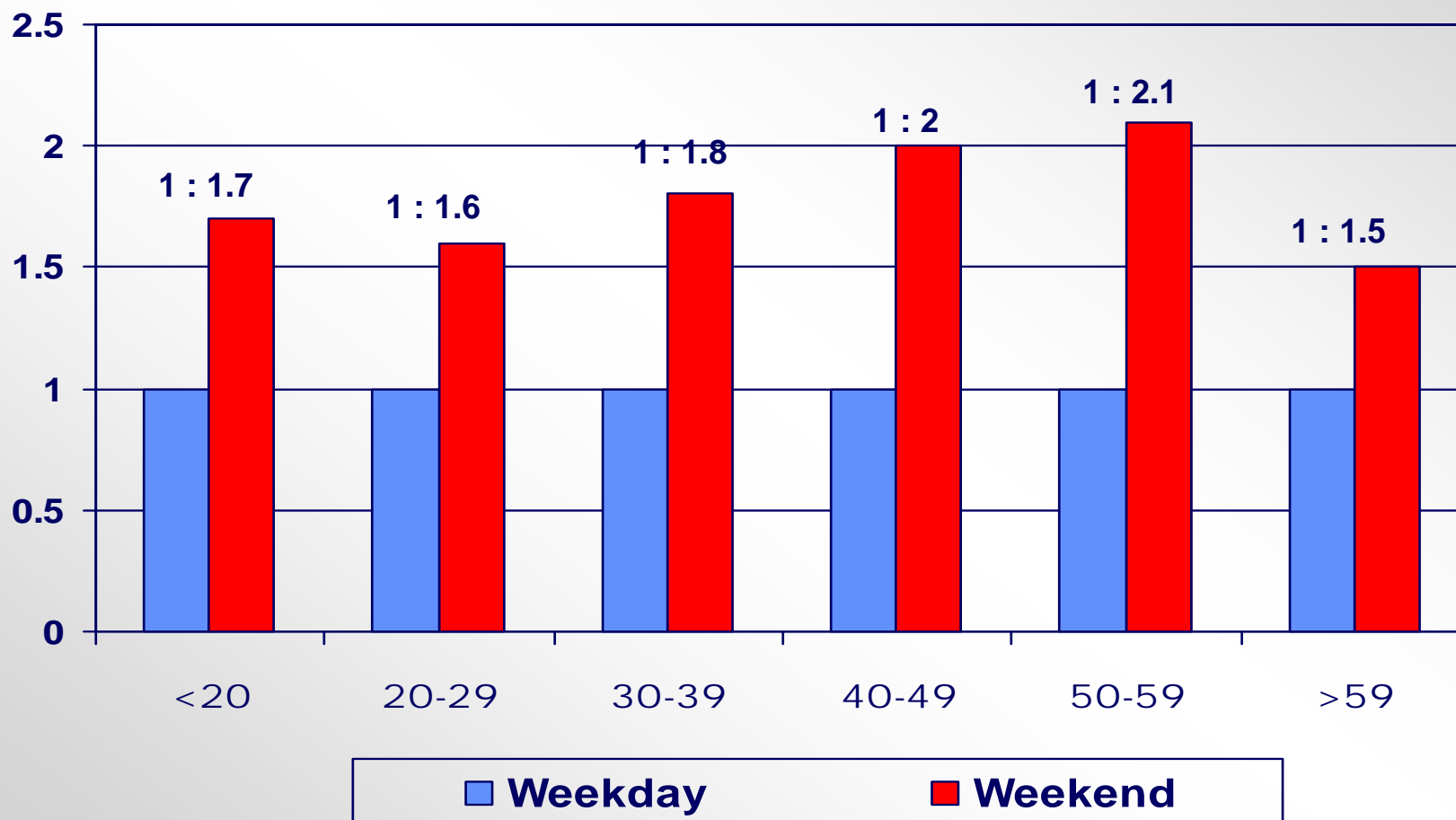


Weekday = 6 a.m. **Monday** through 5:59 p.m. **Friday**

Weekend = 6 p.m. **Friday** through 5:59 a.m. **Monday**

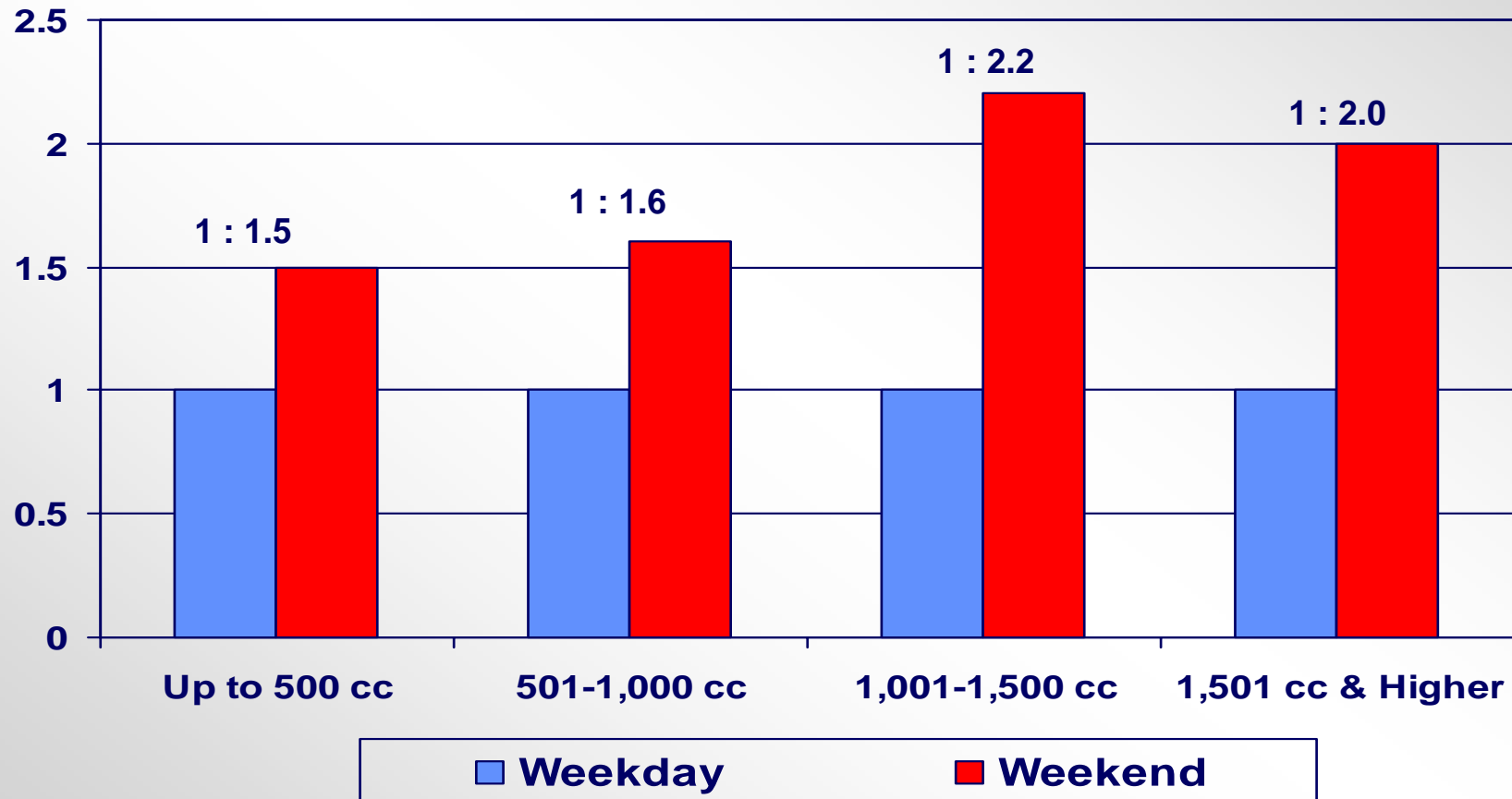
Source: 2007 FARS

Motorcyclist Fatalities by Age Group and Day of Week



Source: 2007 FARS

Motorcyclist Fatalities by Engine Size and Day of Week



Source: 2007 FARS

- **Fatal crash data shows**
 - ◆ **Increasing age of motorcyclists**
 - **Increases in 40-and-older age group**
 - ◆ **Increasing size of motorcycles involved**
 - **Increases in larger motorcycles**
- **Fatality rate data shows**
 - ◆ **Overall increase in rate by vehicle miles traveled and registered vehicles**
 - ◆ **Large increases in 40-and-older age group**

Questions about the data in this presentation may be sent by e-mail to:

ncsaweb@nhtsa.dot.gov

or

made by phone to:

800-934-8517