



2012 Crash Overview

The Fatality Analysis Reporting System (FARS) and
The National Automotive Sampling System (NASS)
General Estimates System (GES)

NCSA Webinar
February 25, 2014



2012 Overall Statistics

- *33,561 people were killed in motor vehicle crashes*
 - Increase of 3.3% (or 1,082) over 2011 fatalities
 - First increase in fatalities since 2005
- *An additional 2,362,000 people were injured in crashes*
 - Increase of 6.5% (or 145,000) over people injured in 2011

Crashes by Severity

	2011	2012	Change	% Change
Fatal Crashes	29,867	30,800	+933	+3.1%
Non-Fatal Crashes	5,308,000	5,584,000	+276,000	+5.2%
Injury Crashes*	1,530,000	1,634,000	+104,000	+6.8%
Property-Damage -Only Crashes	3,778,000	3,950,000	+172,000	+4.6%
Total Crashes	5,338,000	5,615,000	+277,000	+5.2%

Sources: FARS, NASS GES

* Statistically significant.

Recent Changes in Fatalities And Injured People

	Fatalities	Change to 2012	% Change
2012	33,561	--	--
2011 (1-year change)	32,479	+1,082	+3.3%
2008 (5-year period)	37,423	-3,862	-10%
2003 (10-year period)	42,884	-9,323	-22%

	Injured People	Change to 2012	% Change
2012	2,362,000	--	--
2011 (1-year change)	2,217,000	+145,000	+6.5%
2008 (5-year period)	2,346,000	+16,000	+0.7%
2003 (10-year period)	2,889,000	-527,000	-18%

Source: FARS, NASS GES

Recent Changes in Fatality And Injury Rate

	Fatality Rate	Change to 2012	% Change
2012	1.13	--	--
2011 (1-year change)	1.10	+0.03	+2.7%
2008 (5-year period)	1.26	-0.13	-10.3%
2003 (10-year period)	1.48	-0.35	-23.6%

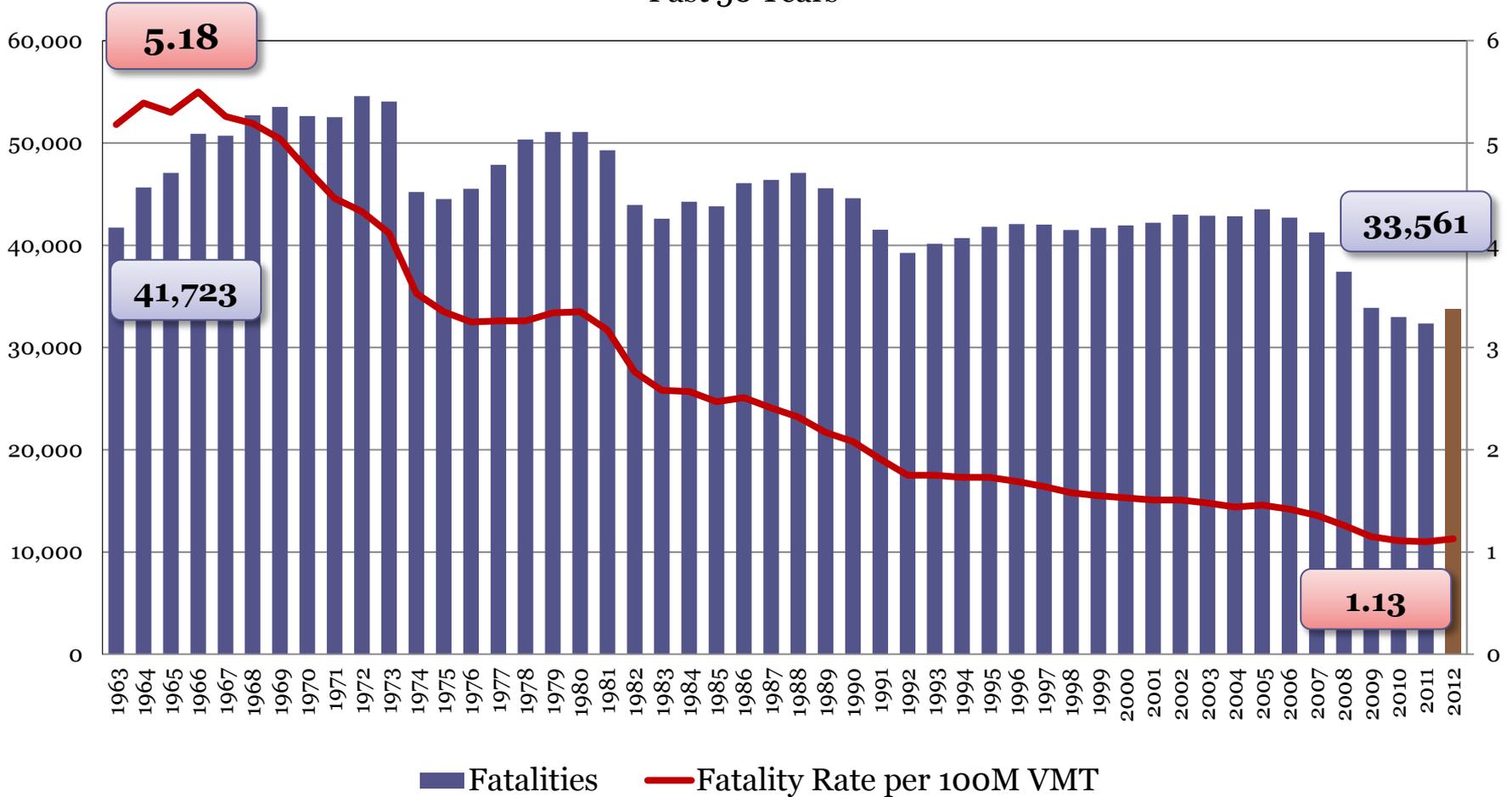
	Injury Rate	Change to 2012	% Change
2012	80	--	--
2011 (1-year change)	75	+5	+6.7%
2008 (5-year period)	79	+1	+1.3%
2003 (10-year period)	100	-20	-20%

Source: FARS, NASS GES

Historical Perspective

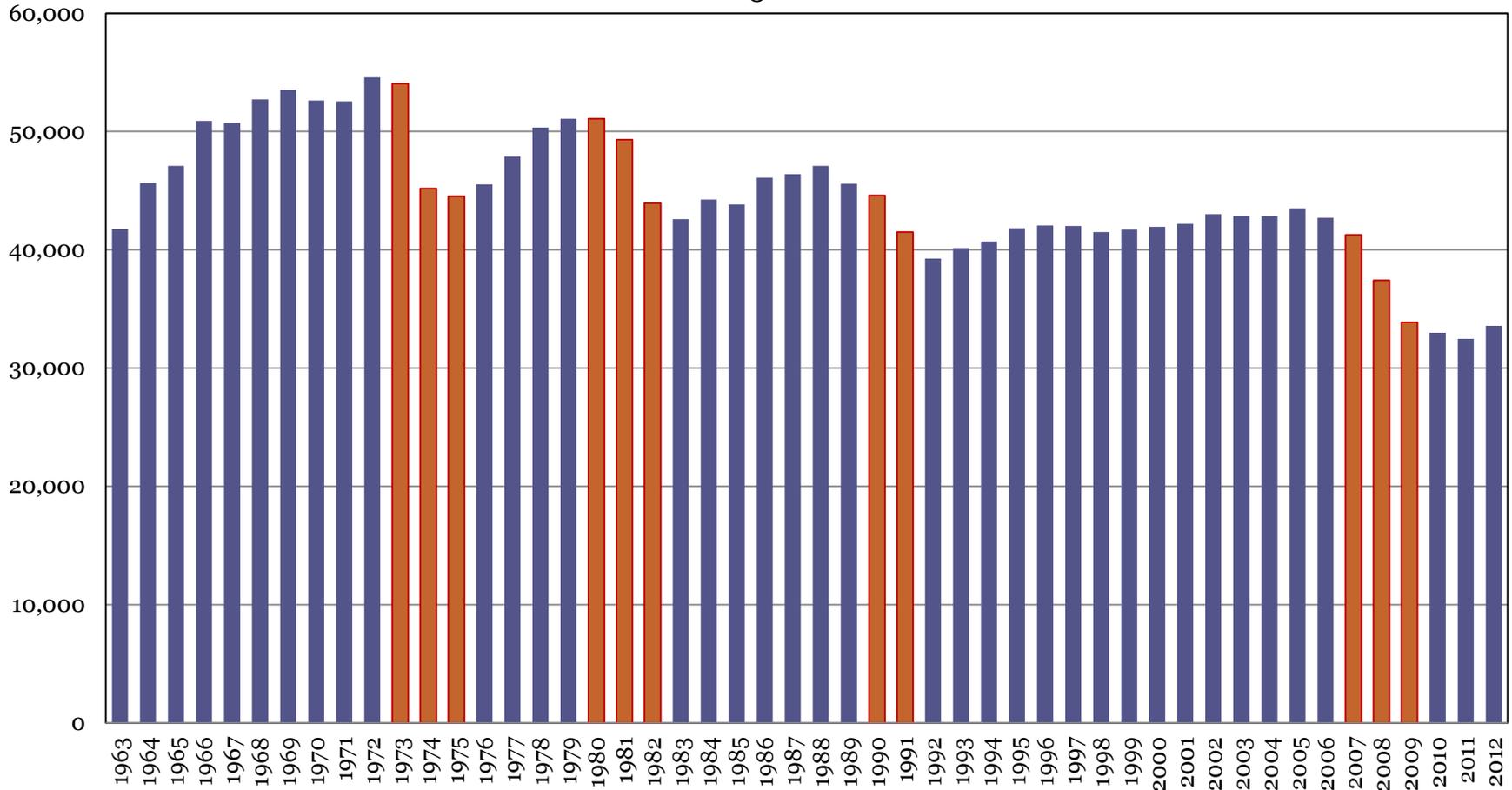
Fatalities and Fatality Rate, By Year

Past 50 Years

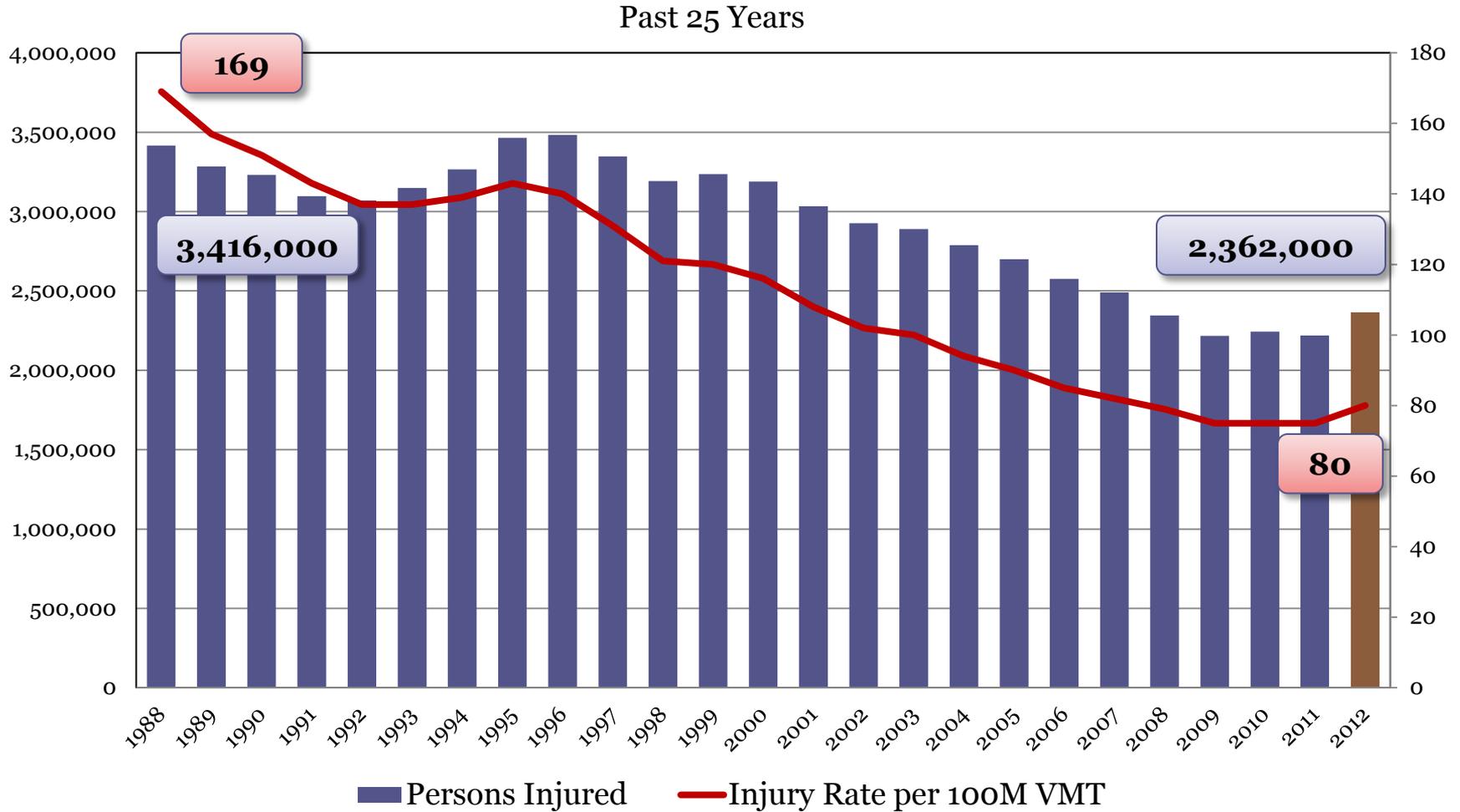


Recessions and Recoveries, Fatalities by Year

Past 50 Years

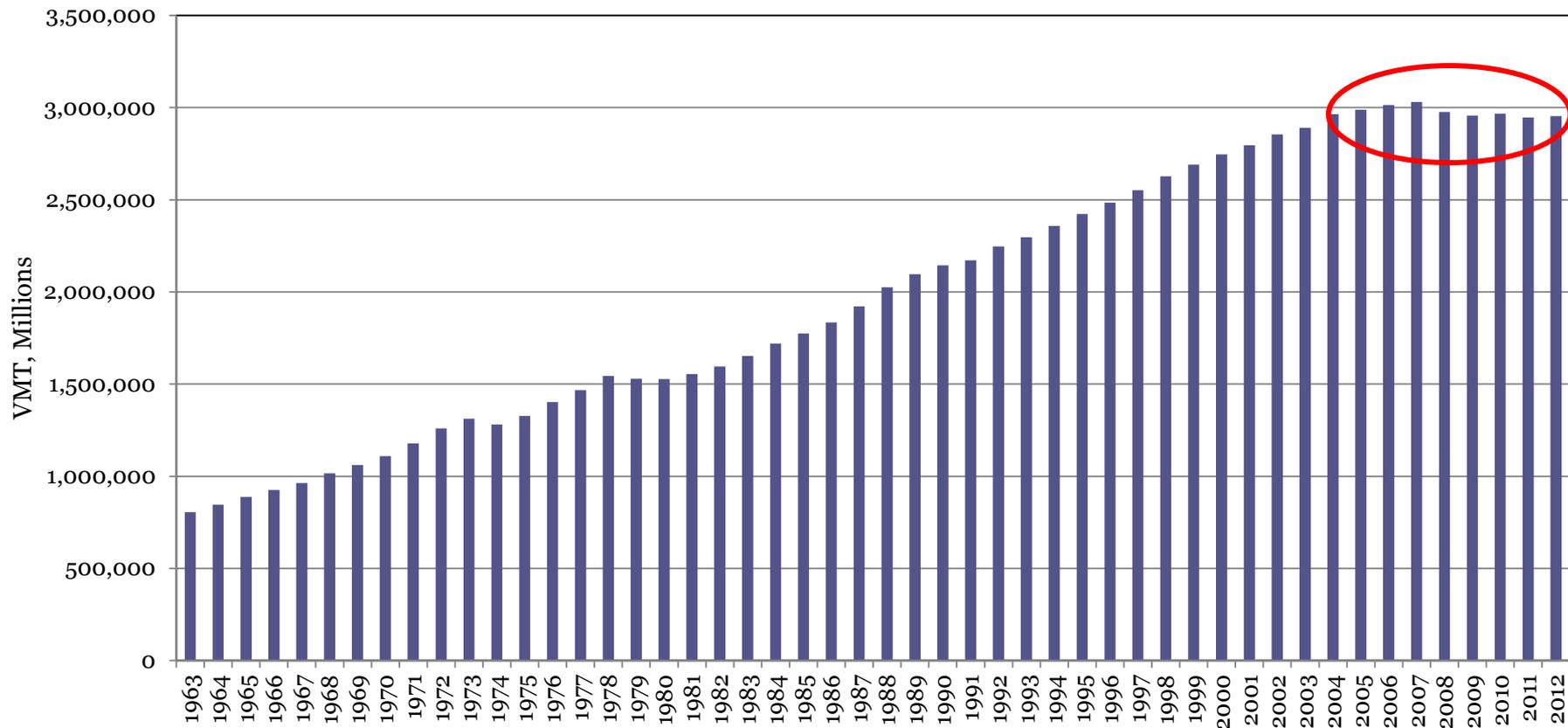


People Injured and Injury Rate, by Year



Vehicle Miles Traveled, By Year

Past 50 Years



Where are the increases?

Changes by Quarter of The Year

- *72% of the increase in 2012 occurred in the first quarter (778/1,082)*
 - 52% of first-quarter increase was in motorcyclist and non-occupant fatalities (405/778)
 - Potential contributor could be that 2012 was the warmest first quarter on record

Fatalities by Person Type

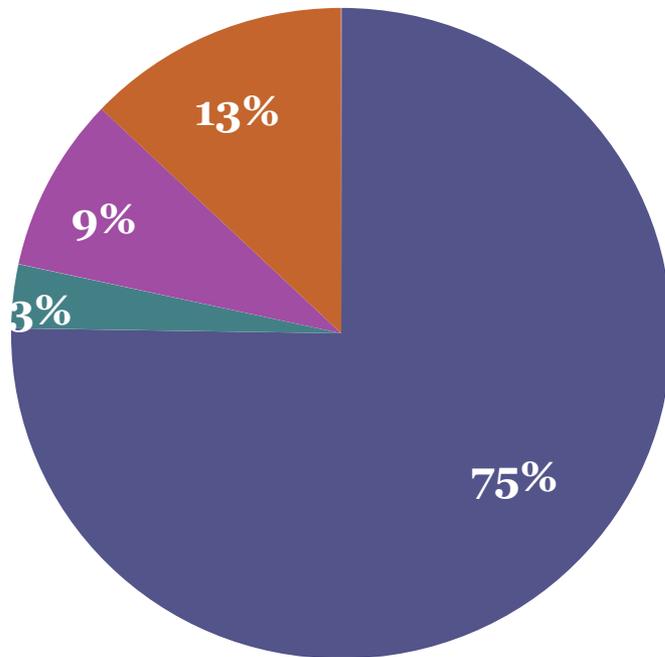
Description	2011	2012	Change	% Change
Total*	32,479	33,561	+1,082	+3.3%
Occupants and Motorcyclists Killed				
Passenger Vehicles	21,316	21,667	+351	+1.6%
Passenger Cars	12,014	12,271	+257	+2.1%
Light Trucks	9,302	9,396	+94	+1.0%
Large Trucks	640	697	+57	+8.9%
Motorcycles	4,630	4,957	+327	+7.1%
Non-occupants Killed				
Pedestrians	4,457	4,743	+286	+6.4%
Pedalcyclists	682	726	+44	+6.5%
Other/Unknown	200	223	+23	---

Source: FARS 2011[Final], 2012 Annual Report File [ARF]

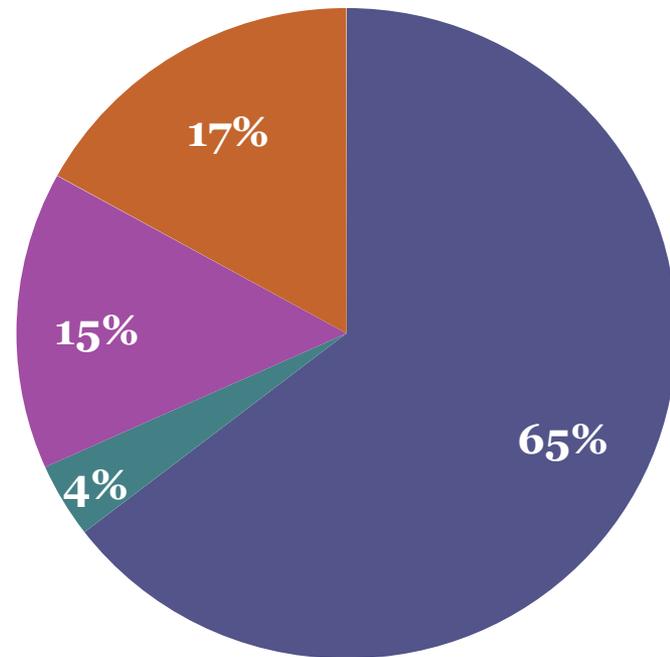
* Total includes occupants of buses and other/unknown vehicles not shown in table

Change in Composition Of Fatalities

2003



2012



- Passenger Vehicle Occupants
- Large Trucks, buses & other vehicle occupants
- Motorcyclists
- Peds, bicyclists & other non-occupants

Trend of Fatalities by Person Type

	2003	2012	% Change
Passenger Vehicle Occupants	32,271	21,667	-33%
Large Trucks, Buses and Other Vehicle Occupants	1,356	1,245	-8%
Motorcyclists	3,714	4,957	+33%
Pedestrians, Cyclists and Other Nonoccupants	5,543	5,692	+3%
Total	42,884	33,561	-22%

People Injured by Person Type

Description	2011	2012	Change	% Change
Total*	2,217,000	2,362,000	+145,000	+6.5%
Occupants and Motorcyclists Injured				
Passenger Vehicles	1,968,000	2,090,000	+122,000	+6.2%
Passenger Cars	1,240,000	1,328,000	+88,000	+7.1%
Light Trucks	728,000	762,000	+34,000	+4.7%
Large Trucks	23,000	25,000	+2,000	+8.7%
Motorcycles**	81,000	93,000	+12,000	+15%
Non-occupants Injured				
Pedestrians	69,000	76,000	+7,000	+10%
Pedalcyclists	48,000	49,000	+1,000	+2.1%
Other/Unknown	9,000	10,000	+1,000	---

Source: NASS GES 2011, 2012 Annual Files

* Total includes occupants of buses and other/unknown vehicles not shown in table

** Statistically significant.

Areas of Interest

Restraint Use

- *21,667 passenger vehicle occupants were fatally injured in 2012*
 - 52% were not restrained (same as 2011)
 - 43% were not restrained during daytime crashes (same as 2011)
 - 61% were not restrained during nighttime crashes (down 1% from 2011)

Alcohol-Impaired Driving Fatalities

	2011	2012	Change	% Change
Fatalities* in .08+ crashes	9,865 (30%)	10,322 (31%)	+457	+4.6%
Fatalities in .08-.14 crashes	3,107 (10%)	3,071 (9%)	-36	-1.1%
Fatalities in .15+ crashes	6,758 (21%)	7,251 (22%)	+493	+7.3%

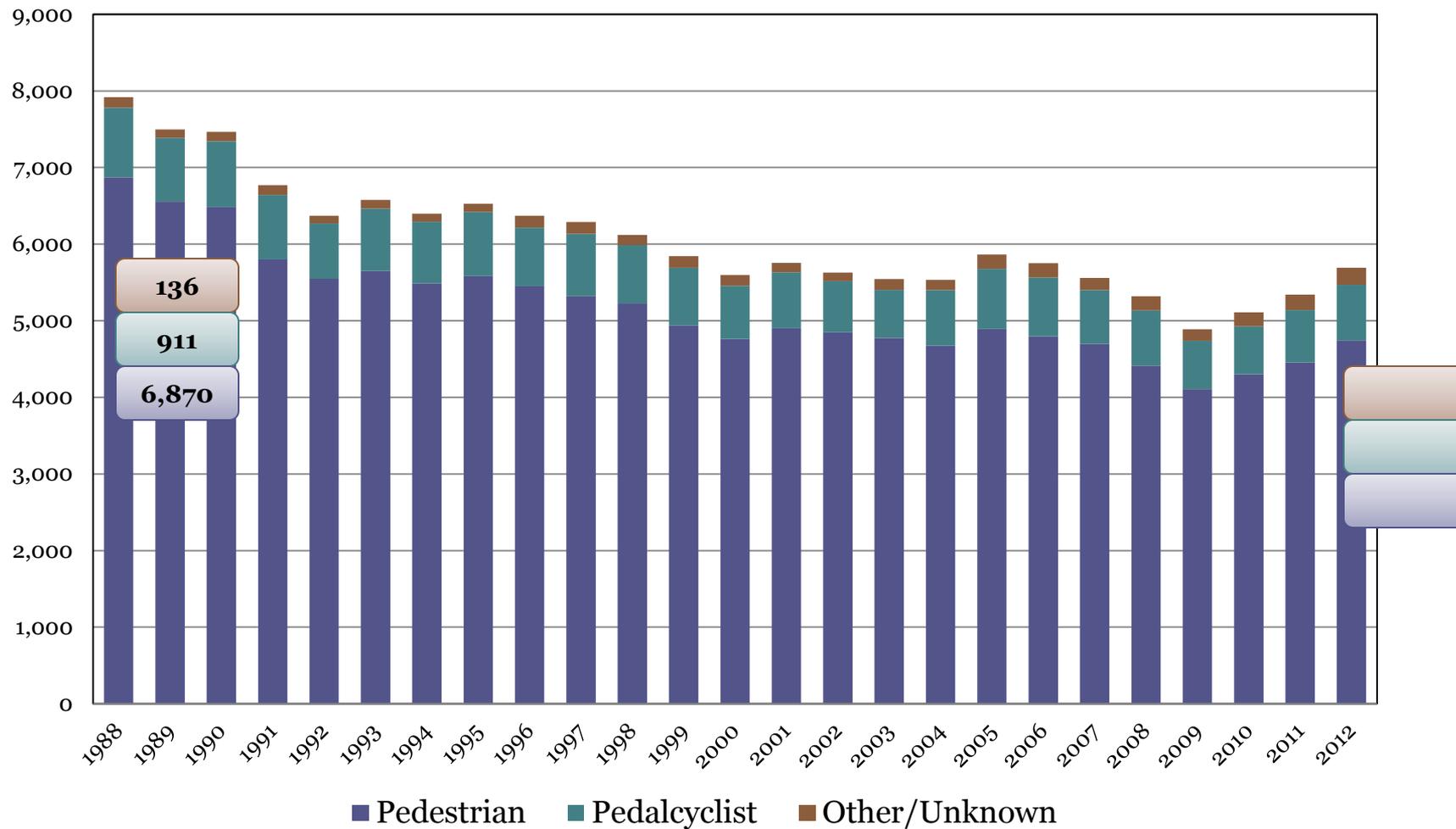
* Blood alcohol concentration in grams per deciliter

Drunk Driver Information

- *7% of drunk drivers in fatal crashes had previous DWI convictions*
- *25% of drunk drivers in fatal crashes had previous license suspensions/revocations*
- *Decrease in drunk motorcycle riders in fatal crashes, from 1,397 to 1,390 (only driver group that decreased)*
- *86% increase in number of drunk drivers of large trucks involved in fatal crashes*

▫ *Based on past 3 years of driving history*

Nonoccupants Killed



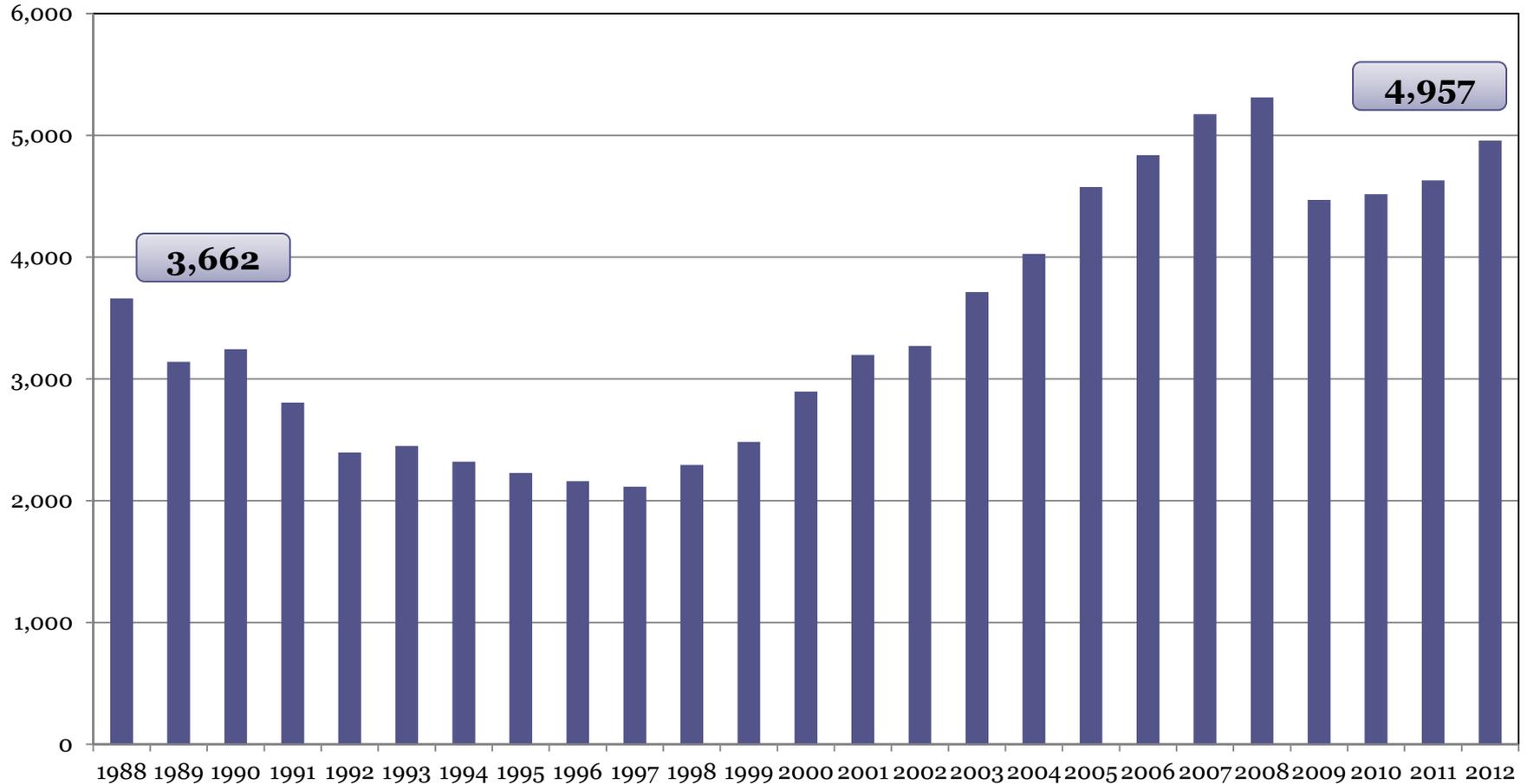
Pedestrian Fatality Demographics

- *36% of the pedestrians killed (16+ years old) had BACs of .08 g/dL or higher*
- *Age group with highest fatalities: 45-54 years old*
 - *Average age for pedestrians killed is 46*
- *73% in urban areas*
- *70% at non-intersections*
- *70% at night*
- *69% are male*

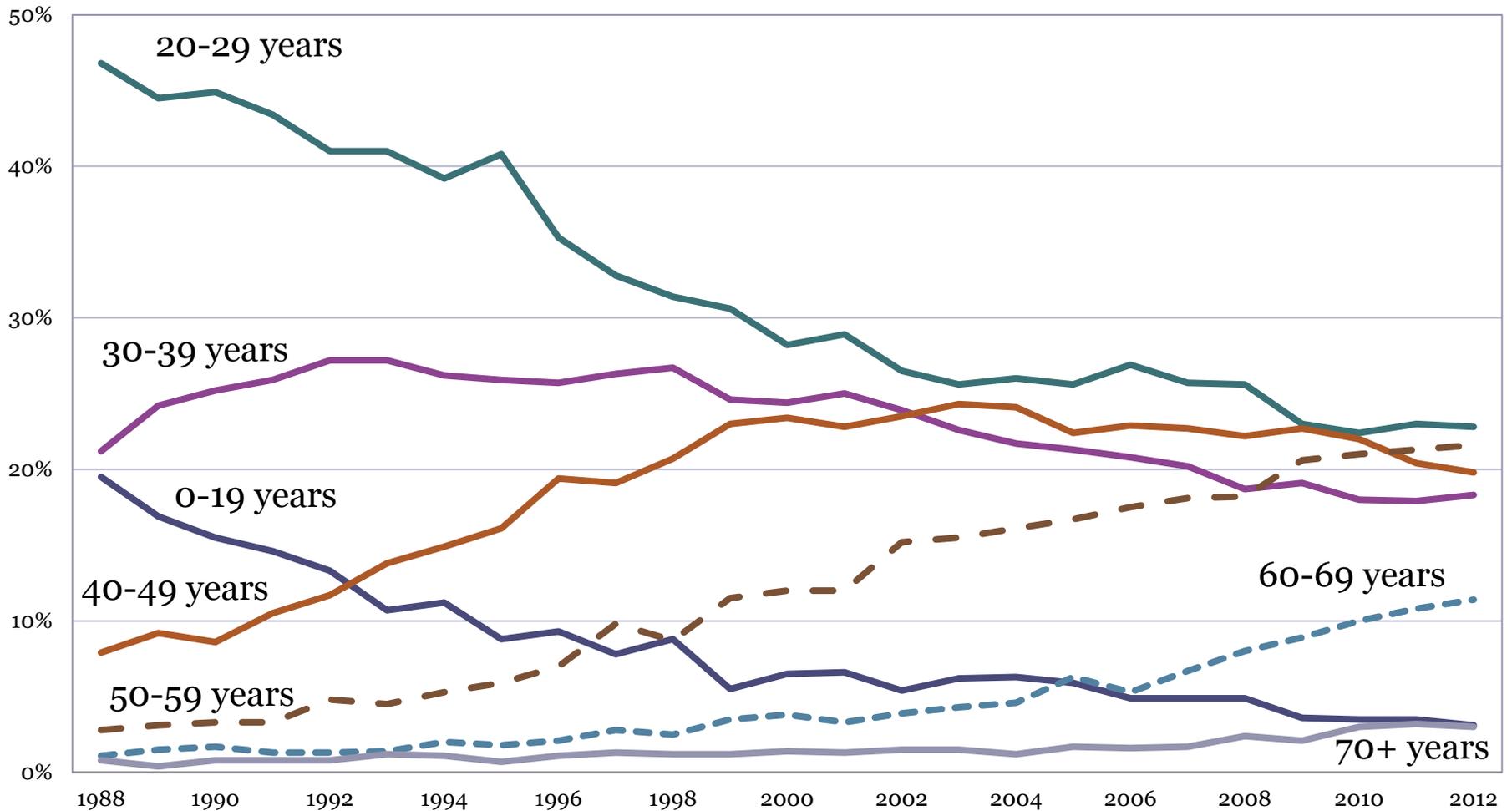
Pedestrian Involvement

- *Older pedestrians accounted for 20% of all peds killed, but only make up 14% of the population.*
- *22% of the children 5-15 years old who died in crashes were pedestrians*
- *19% of pedestrians killed were involved in hit-and-run crashes*

Motorcyclists Killed By Year



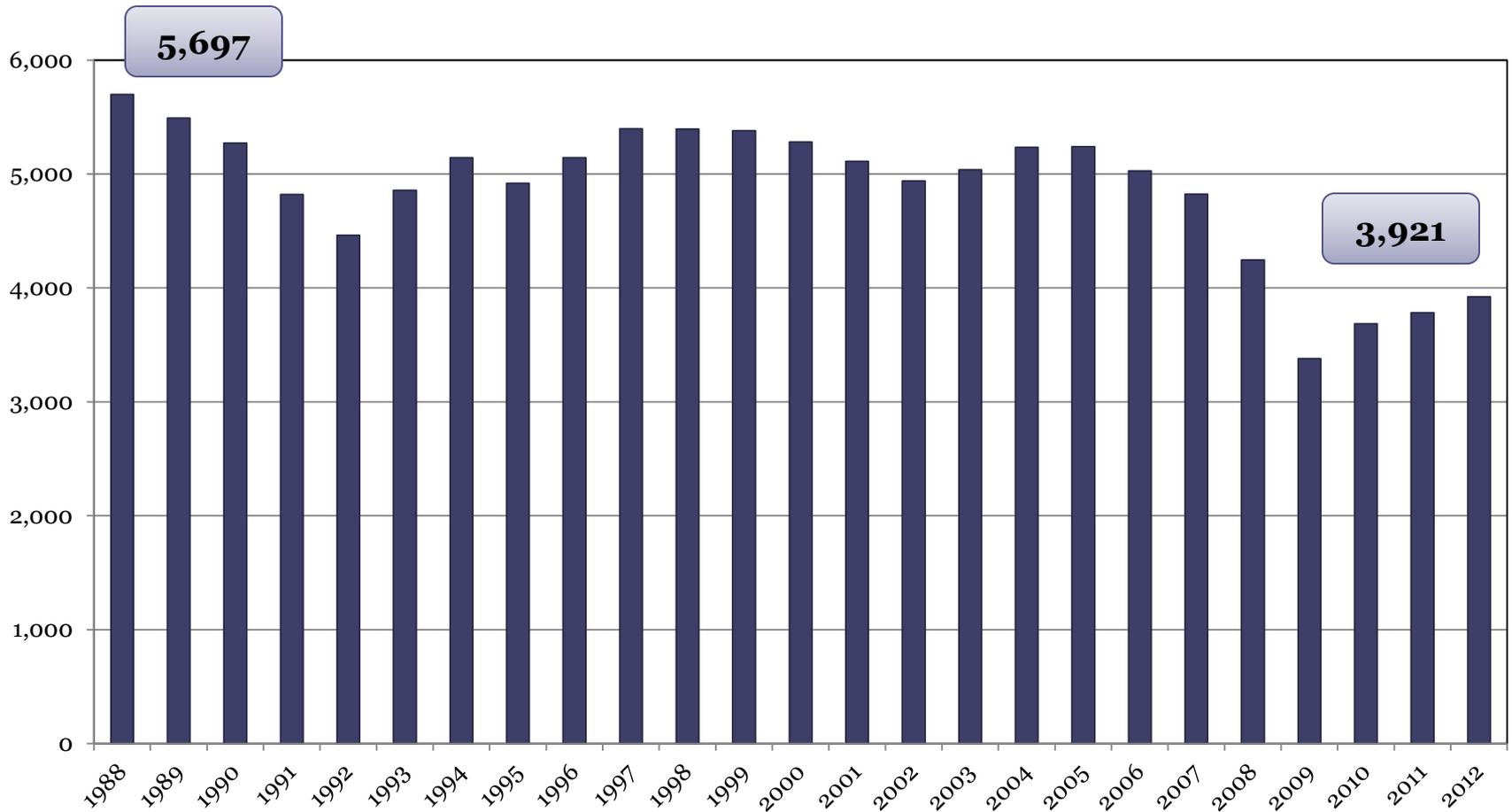
Motorcyclist Fatalities By Age



Motorcycle Fatality Facts

- *44% of motorcyclist fatalities occurred in single-vehicle crashes*
- *10 times as many unhelmeted motorcyclist fatalities in states without universal helmet laws - (1,858 vs. 178)*
- *27% of motorcycle riders in fatal crashes had .08+ BACs*
- *24% of motorcycle riders in fatal crashes were improperly licensed*

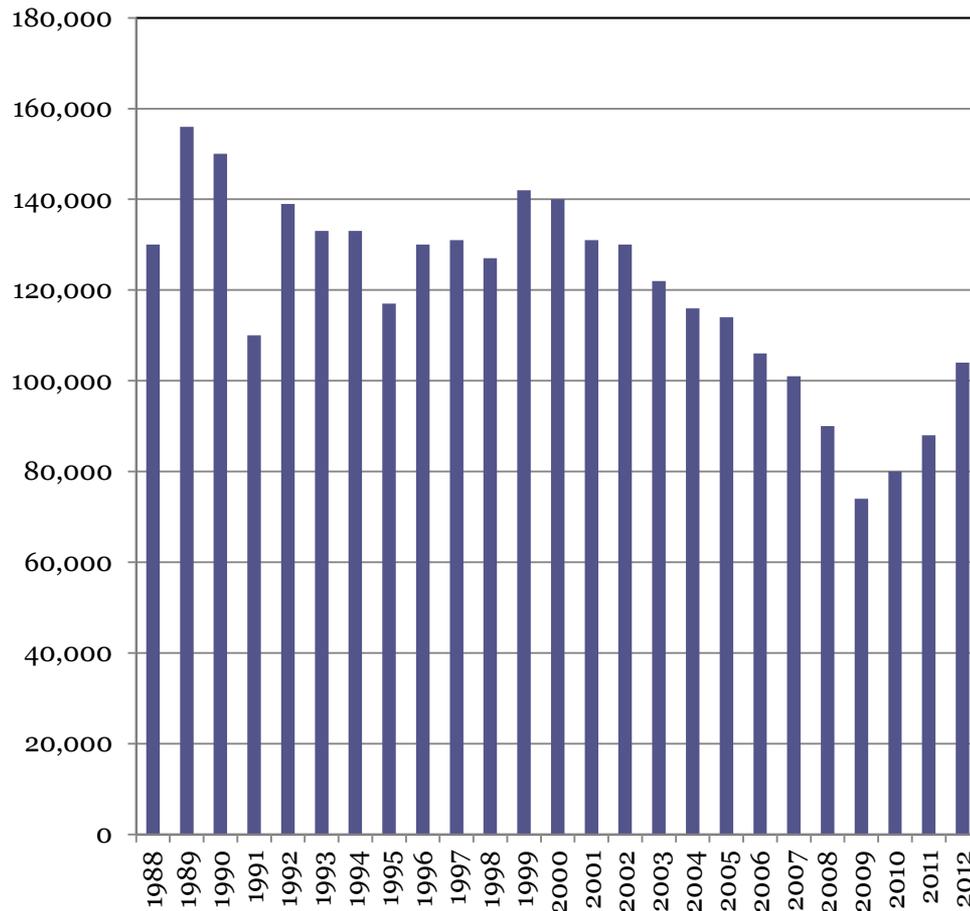
Fatalities in Large-Truck Crashes



Large-Truck Crashes

- *3,921 fatalities in crashes involving large trucks, an increase of 3.7% from 2011*
 - Third consecutive increase (16% increase since low of 3,380 in 2009)
 - Decrease in nonoccupants killed (11%) from 2011
 - 50% restraint use among fatally injured large-truck occupants
- *104,000 people injured in crashes involving large trucks, an increase of 18% from 2011*
 - Third consecutive increase (41% increase from the low of 74,000 in 2009)

People Injured in Large-Truck Crashes



- ▶ *Similar trends with injured people in large-truck crashes*
- ▶ *73% of 2012 injured were in other vehicles*
- ▶ *Recent increase in proportion of injured truck occupants in multivehicle crashes*

Distraction

- *3,328 fatalities in distraction-affected crashes*
 - 1% decrease from 2011
- *421,000 people injured in distraction-affected crashes*
 - 9% increase from 2011
- *Distraction-affected crashes*
 - 10% of fatal crashes
 - 18% of injury crashes
 - 16% of all crashes

More on Distraction

- *8% of female drivers in fatal crashes were distracted (7% of male drivers in fatal crashes were distracted)*
- *Very small increase in the percentage of distracted drivers using cell phones*
- *Drivers under 20 were the most frequently distracted at the time of the crashes (across all crash severity levels)*
- *Distraction varied little by vehicle type (7 to 11% of drivers were distracted)*

FCAM-Relevant Crashes

Crash Type	Rear-End Collision With a Motor Vehicle	
	Number	Percentage
Fatal Crashes	1,827	6% of all fatal crashes
Injury Crashes	518,000	32% of all injury crashes
PDO Crashes	1,327,000	34% of all PDO crashes
Total Crashes	1,847,000	33% of total crashes

State Information

Fatalities by State

- *37 States had increases in overall fatalities*
- *Texas had the greatest increase (344 more than in 2011)*
- *13 States and DC had decreases in overall fatalities*
- *Mississippi had the greatest decrease (48 fewer than in 2011)*

Alcohol-Impaired Driving Fatalities by State

- *32 States had increases in alcohol-impaired fatalities*
- *Texas had the greatest increase (80 more than in 2011)*
- *18 States and DC had decreases in alcohol-impaired fatalities*
- *New Jersey had the greatest decrease (30 fewer than in 2011)*

Key Take-Aways

- *5.6 million crashes in 2012, up 5.2%*
- *33,561 people killed in 2012, up 3.3%*
- *2.4 million people injured in 2012, up 6.5%*
- *Increases are across the board, with notable increases in motorcyclists and pedestrians*
- *Long-term trend in fatalities remains downward*

Hip Pocket Slides

Fatalities by State

State	2011	2012	Change	% Change
Alabama	895	865	-30	-3.4%
Alaska	72	59	-13	-18%
Arizona	826	825	-1	-0.1%
Arkansas	551	552	+1	+0.2%
California	2,816	2,857	+41	+1.5%
Colorado	447	472	+25	+5.6%
Connecticut	221	236	+15	+6.8%
Delaware	99	114	+15	+15%
Dist. of Columbia	27	15	-12	-44%
Florida	2,400	2,424	+24	+1.0%
Georgia	1,226	1,192	-34	-2.8%
Hawaii	100	126	+26	+26%
Idaho	167	184	+17	+10%
Illinois	918	956	+38	+4.1%
Indiana	751	779	+28	+3.7%

Fatalities by State, cont.

State	2011	2012	Change	% Change
Iowa	360	365	+5	+1.4%
Kansas	386	405	+19	+4.9%
Kentucky	720	746	+26	+3.6%
Louisiana	680	722	+42	+6.2%
Maine	136	164	+28	+21%
Maryland	485	505	+20	+4.1%
Massachusetts	374	349	-25	-6.7%
Michigan	889	938	+49	+5.5%
Minnesota	368	395	+27	+7.3%
Mississippi	630	582	-48	-7.6%
Missouri	786	826	+40	+5.1%
Montana	209	205	-4	-1.9%
Nebraska	181	212	+31	+17%
Nevada	246	258	+12	+4.9%
New Hampshire	90	108	+18	+20%

Fatalities by State, cont.

State	2011	2012	Change	% Change
New Jersey	627	589	-38	-6.1%
New Mexico	350	365	+15	+4.3%
New York	1,171	1,168	-3	-0.3%
North Carolina	1,230	1,292	+62	+5.0%
North Dakota	148	170	+22	+15%
Ohio	1,017	1,123	+106	+10%
Oklahoma	696	708	+12	+1.7%
Oregon	331	336	+5	+1.5%
Pennsylvania	1,286	1,310	+24	+1.9%
Rhode Island	66	64	-2	-3.0%
South Carolina	828	863	+35	+4.2%
South Dakota	111	133	+22	+20%
Tennessee	937	1,014	+77	+8.2%
Texas	3,054	3,398	+344	+11%
Utah	243	217	-26	-11%

Fatalities by State, cont.

State	2011	2012	Change	% Change
Vermont	55	77	+22	+40%
Virginia	764	777	+13	+1.7%
Washington	454	444	-10	-2.2%
West Virginia	338	339	+1	+0.3%
Wisconsin	582	615	+33	+5.7%
Wyoming	135	123	-12	-8.9%
National	32,479	33,561	+1,082	+3.3%
Puerto Rico	361	347	-14	-3.9%

Recent Changes in Fatalities By Quarter

	Passenger Vehicle Occupants	Large-Truck Occupants	Motorcyclists	Pedestrians	Bicyclists	Total*
2011 Data						
Quarter 1	4,756	130	582	1,014	114	6,726
Quarter 2	5,275	159	1,506	891	179	8,227
Quarter 3	5,518	190	1,759	1,053	225	8,984
Quarter 4	5,767	161	783	1,499	164	8,542
Total	21,316	640	4,630	4,457	682	32,479
2012 Data						
Quarter 1	5,098	138	748	1,217	150	7,504
Quarter 2	5,405	175	1,649	958	189	8,583
Quarter 3	5,595	198	1,759	1,119	223	9,127
Quarter 4	5,569	186	801	1,449	164	8,347
Total	21,667	697	4,957	4,743	726	33,561
2012 to 2011 Number Change						
Quarter 1	342	8	166	203	36	778
Quarter 2	130	16	143	67	10	356
Quarter 3	77	8	0	66	-2	143
Quarter 4	-198	25	18	-50	0	-195
Total	351	57	327	286	44	1,082
2012 to 2011 Percent Change						
Quarter 1	7.2%	6.2%	28.5%	20.0%	31.6%	11.6%
Quarter 2	2.5%	10.1%	9.5%	7.5%	5.6%	4.3%
Quarter 3	1.4%	4.2%	0.0%	6.3%	-0.9%	1.6%
Quarter 4	-3.4%	15.5%	2.3%	-3.3%	0.0%	-2.3%
Total	1.6%	8.9%	7.1%	6.4%	6.5%	3.3%

* Includes other vehicle occupants and other non-occupants

Source: FARS

Restraint Use for Fatally Injured Passenger Vehicle Occupants

Type	2011		2012		to 2012 Change	
	Number	Percent	Number	Percent	Number	Percent
Fatalities*	21,316	100%	21,667	100%	+351	+1.6%
Restraint Used	10,255	48%	10,478	48%	+223	+2.2%
Restraint Not Used	11,061	52%	11,189	52%	+128	+1.2%
Day	10,999	52%	11,007	51%	+8	+0.1%
Restraint Used	6,280	57%	6,241	57%	-39	-0.6%
Restraint Not Used	4,719	43%	4,766	43%	+47	+1.0%
Night	10,183	48%	10,480	48%	+297	+2.9%
Restraint Used	3,910	38%	4,139	39%	+229	+5.9%
Restraint Not Used	6,273	62%	6,341	61%	+68	+1.1%

Source: FARS 2011 [Final], 2012 [ARF]

Day: 6 am to 5:59 pm; Night: 6 pm to 5:59 am

* Total fatalities include those at unknown time of day

Motorcycle History

- *Fatalities*
 - 4,957 fatalities in 2012
 - Low in 1997 at 2,116
 - High in 2008 at 5,312
 - Dropped in 2009 by 16% and been increasing since then

Large-Truck Occupant Fatalities by Crash Type

