



2000 Annual Assessment

National Center for Statistics & Analysis



Motor Vehicle Traffic Crash Fatality and Injury Estimates for 2000

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



The 2000 Annual Assessment

National Center for Statistics & Analysis



This report contains estimates for motor vehicle traffic crashes in 2000 and the resulting injuries and fatalities. They are compared to estimates from the 1999 Final Files. These Annual Assessment estimates are based on data from the sources indicated in the last slide. Data for 2000 from the Fatality Analysis Reporting System (FARS) will be superceded about June 2002 by the Final 2000 FARS File. Exposure data will be updated by the originating agencies at a later date in 2001.



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Highlights

2000



2000 Data Show ...

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- **Fatality Rates remain at Historic Low**
- **Fatalities Declined among:**

Passenger Vehicle Occupants (-0.7%)

Pedestrians, Pedalcyclists and
other Non-Occupants

(-4.6%)



2000 Data Show ...

National Center for Statistics & Analysis



➤ Fatalities Declined among:

Passenger Vehicle Occupants in Rollover Crashes	(- 2.6%)
Large Truck Crashes	(- 3.1%)
School bus related crashes	(-14%)



2000 Data Show ...

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- **Fatalities declined among**
 - Children ages 0-4 (-3.9%)
 - Children ages 5-15 (-4.6%)
- **Injuries declined among**
 - Children ages 5-15 (-12%)
- **For Young Drivers (ages 16-20)**
 - Fatal Crashes declined (-0.2%)
 - Fatalities in Crashes declined (-1.2%)

➤ Fatalities increased in:

All crashes	(+0.2%)
Alcohol related crashes	(+4.2%)
Motorcycle crashes	(+15%)



2000 Data Show...

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- **Using Safety Belts save lives.**
 - In 2000, **72 percent** of belted passenger vehicle occupants (4 years of age and older) involved in a fatal crash survived compared to **43 percent** of unrestrained occupants.

Previous NHTSA research has shown that driver or a passenger cuts his or her risk of dying in a crash almost in half by buckling up.



2000 Data Show...

National Center for Statistics & Analysis



- **Securing a child in an age appropriate safety seat could save the child's life.**
 - In 2000, of children under 1 year of age who were occupants of a passenger vehicle involved in a fatal crash, **78 percent** of those who were restrained in a child safety seat survived the crash compared to **49 percent** of those who were unrestrained.

Previous NHTSA research has shown that placing your infant child in an age-appropriate child safety seat reduces the child's risk of dying in a motor vehicle crash by as much as two-thirds.



2000 Data Show ...

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- **Driving sober matters.**

- ◆ In 2000, **42 percent** of crashes involving an alcohol impaired or intoxicated driver or non-occupant resulted in an involved person being killed or injured.

Years of data have shown that crashes involving an alcohol impaired or intoxicated driver or non-occupant are about 50 percent more likely to result in an injury or fatality than crashes in which alcohol was not involved.



2000 Data Show ...

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- In 2000, about **1,400** fatalities occurred in crashes involving an alcohol-impaired or intoxicated driver who had at least one previous DWI conviction
 - Accounting for about **8.5 percent** of all alcohol-related fatalities.



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2000 Statistics and Comparisons with 1999 Statistics



Persons Killed and Injured and Number of Crashes

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	Year		% Change
	1999	2000	
Persons Killed	41,717	41,821	+0.2%
Persons Injured	3,236,000	3,189,000	-1.5%
Fatal Crashes			
Fatal Crashes	37,140	37,409	+0.7%
Nonfatal Crashes			
Nonfatal Crashes	6,242,000	6,356,000	+1.8%
Injury Crashes			
Injury Crashes	2,054,000	2,070,000	+0.8%
Property-Damage-Only			
Property-Damage-Only	4,188,000	4,286,000	+2.3%

Unless otherwise noted, changes in Numbers of Injuries and Injury Rates are not statistically significant.

Sources: FARS, NASS GES



People Saving People

Exposure Data

National Center for Statistics & Analysis



Exposure Measure	Year		% Change
	1999	2000	
Vehicle Miles Traveled	2,691,335M	2,693,064M	+0.1%
Registered Vehicles	212,685,000	217,293,000*	+2.2%
Population	272,690,813	274,633,905	+0.7%

*Based on NHTSA's Projections

Sources: R.L. Polk, FHWA, Census Bureau



People Saving People

Fatality and Injury Rates

National Center for Statistics & Analysis



Rate	Year		% Change
	1999	2000	
Persons Killed			
/100M VMT	1.6	1.6	0.0%
/100K Reg. Vehicles	19.6	19.2*	-2.0%
/100K Population	15.3	15.2	-0.7%
Persons Injured			
/100M VMT	120	118	-1.7%
/100K Reg. Vehicles	1,522	1,467*	-3.6%
/100K Population	1,187	1,161	-2.2%

Unless otherwise noted, changes in Numbers of Injuries and Injury Rates are not statistically significant.

*Based on NHTSA's Projections

Sources: FARS, NASS GES, FHWA, and Census Bureau



Vehicle Occupants Killed by Type of Vehicle

National Center for Statistics & Analysis



Type of Vehicle	Year		% Change
	1999	2000	
Passenger Car	20,862	20,492	-1.8%
LTVs	11,265	11,418	+1.4%
Motorcycles	2,483	2,862	+15%
Large Trucks	759	741	-2.3%
Other Vehicles*	414	420	+1.4%
Unknown Body Type	92	316	+243%
TOTAL	35,875	36,249	+1.0%

*Includes vehicle occupant fatalities in buses and other, e.g., farm equipment, construction equipment, etc., vehicle types.

Source: FARS



Vehicle Occupants Injured by Type of Vehicle

National Center for Statistics & Analysis



Type of Vehicle	Year		% Change
	1999	2000	
Passenger Car	2,138,000	2,052,000	-4.0%
LTV's	847,000	887,000	+4.7%
Motorcycles	50,000	58,000	+16%
Large Trucks	33,000	31,000	-6.1%
Other Vehicles*	29,000	28,000	-3.4%
TOTAL	3,097,000	3,055,000	-1.4%

Unless otherwise noted, changes in Numbers of Injuries and Injury Rates are not statistically significant.

*Includes vehicle occupants injured in buses and other vehicle types.

Source: NASS GES



Non-Occupants Killed or Injured, by Role

National Center for Statistics & Analysis



Role	Year		% Change
	1999	2000	
Persons Killed	5,842	5,572	-4.6%
Pedestrians	4,939	4,739	-4.0%
Pedalcyclists	754	690	-8.5%
Others *	149	143	-4.0%
Persons Injured	140,000	134,000	-4.3%
Pedestrians	85,000	78,000	-8.2%
Pedalcyclists	51,000	51,000	0.0%
Others *	3,000	5,000	+67%

Unless otherwise noted, changes in Numbers of Injuries and Injury Rates statistically significant.

Italics signify Statistically Significant Change

*Includes occupants of motor vehicles not in transport and are not occupants and of non-motor vehicle transport devices.

Source: FARS, NASS GES



Passenger Vehicle Occupants (All Ages) involved in Fatal Crashes, by Restraint Use & Survival Status

National Center for Statistics & Analysis



Restraint Use/ Survival Status	Year				% Change in count
	1999		2000		
Restraints Used* / Total	41,459	100%	42,950	100%	+3.6%
Persons Killed	11,127	27%	11,622	27%	+4.4%
Persons Survived	30,332	73%	31,328	73%	+3.2%
Restraint Not Used / Total	33,551	100%	31,657	100%	-5.6%
Persons Killed	18,363	55%	17,672	56%	-3.8%
Persons Survived	15,188	45%	13,985	44%	-8.0%
Restraint Use Unknown / Total	7,687	100%	7,358	100%	-4.3%
Persons Killed	2,637	34%	2,616	36%	-0.8%
Persons Survived	5,050	66%	4,742	64%	-6.1%

* Restraints Used = Use of any type of restraint, e.g., lap belt, lap/shoulder belt, child safety seat, etc.

Source: FARS



Passenger Vehicle Occupants (All Ages) involved in Injury Crashes, by Restraint Use & Injury Status

National Center for Statistics & Analysis



Restraint Use/ Injury Status	Year				% Change in count
	1999		2000		
Restraint Used* / Total	4,369,000	100%	4,465,000	100%	+2.2%
Persons Injured	2,315,000	53%	2,351,000	53%	+1.6%
Persons Not Injured	2,054,000	47%	2,114,000	47%	+2.9%
Restraint Not Used / Total	579,000	100%	511,000	100%	-12%
Persons Injured	411,000	71%	<i>359,000</i>	70%	<i>-13%</i>
Persons Not Injured	167,000	29%	152,000	30%	-9.0%
Unknown Restraint Use / Total	574,000	100%	511,000	100%	-11%
Persons Injured	235,000	41%	<i>199,000</i>	39%	<i>-15%</i>
Persons Not Injured	339,000	59%	311,000	61%	-8.3%

* Restraints Used = Use of any type of restraint, e.g., lap belt, lap/shoulder belt, child safety seat, etc.

Totals may not add due to rounding.

Italics signify Statistically Significant Change

Unless otherwise noted, changes in Numbers of Injuries and Injury Rates are not statistically significant.

Source: NASS GES



Passenger Vehicle Occupants Killed in Rollover Crashes, by Type of Crash and Type of Vehicle

National Center for Statistics & Analysis



Type of Crash and Type of Vehicle	Year		% Change
	1999	2000	
Single Vehicle Crash	8,348	8,141	-2.5%
Passenger Car	3,991	3,838	-3.8%
Van	558	548	-1.8%
SUV	1,546	1,684	+8.9%
Other Light Truck	2,253	2,071	-8.1%
Multi Vehicle Crash	1,792	1,732	-3.3%
Passenger Car	727	664	-8.7%
Van	226	219	-3.1%
SUV	356	365	+2.5%
Other Light Truck	483	484	+0.2%

Source: FARS



Persons Killed and Injured in Alcohol Related Crashes, by Role

National Center for Statistics & Analysis



Role	Year		% Change
	1999	2000	
Persons Killed	15,976	16,653	+4.2%
Drivers	9,787	10,216	+4.4%
Passengers	3,538	3,892	+10%
Non Occupants	2,651	2,545	-4.0%
Persons Injured	308,000	310,000	+0.6%
Drivers	193,000	201,000	+4.1%
Passengers	97,000	98,000	+1.0%
Non Occupants	17,000	12,000	-29%

Unless otherwise noted, changes in Numbers of Injuries and Injury Rates are not statistically significant.

Italics signify Statistically Significant Change
Sources: FARS, NASS GES



Persons Killed by Highest BAC in Crash

National Center for Statistics & Analysis



Highest BAC in Crash	Year		% Change
	1999	2000	
Total Alcohol Related	15,976	16,653	+4.2%
% All Fatalities	38%	40%	
Impaired (0.01 <= BAC <= 0.09)	3,523	3,761	+6.8%
Intoxicated (0.10 <= BAC)	12,453	12,892	+3.5%

Source: FARS



Number of Crashes, by Type of Crash, Alcohol Involvement and Year

National Center for Statistics & Analysis



Type of Crash	Alcohol Involvement					% Change
	Alcohol Involved			Not Alcohol Involved		
	Year		% Change	Year		
	1999	2000		1999	2000	
Fatal Crash	14,264	14,847	+4.1%	22,876	22,562	-1.4%
Injury Crash	201,000	199,000	-1.0%	1,844,000	1,870,000	+1.4%
Property Damage Only	243,000	<i>294,000</i>	<i>+21%</i>	3,954,000	3,993,000	+1.0%
<i>All Crashes</i>	458,000	508,000	+11%	5,821,000	5,886,000	+1.1%

Unless otherwise noted, changes in Numbers of Injuries and Injury Rates are not statistically significant.

Italics signify Statistically Significant Change
Sources: FARS, NASS GES



Drivers in Alcohol-Related Fatal Crashes with Previous Alcohol Convictions

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	Year	
	1999	2000
Drivers who were Alcohol Involved and had previous (within 3 years) Alcohol Conviction(s)	1,277	1,260
Percent of All Alcohol Involved Drivers	9.7%	9.0%
Estimated Number of Fatalities in Crashes in which Drivers were Alcohol Involved and had previous Alcohol Conviction(s)	1,420	1,407

Source: FARS



Persons Killed in Large Truck Crashes, by Type

National Center for Statistics & Analysis



Type	Year		% Change
	1999	2000	
Truck Occupants	759	741	-2.4%
Single Vehicle	480	480	nc
Multiple Vehicle	279	261	-6.5%
Other Vehicle Occupants	4,180	4,060	-2.9%
Non-Occupants	441	410	-7.0%
Total	5,380	5,211	-3.1%

nc = no change

Source: FARS



Persons Injured in Large Truck Crashes, by Type

National Center for Statistics & Analysis



Type	Year		% Change
	1999	2000	
Truck Occupants	33,000	31,000	-6.1%
Single Vehicle	15,000	16,000	+6.7%
Multiple Vehicle	18,000	14,000	-22%
Other Vehicle Occupants	105,000	106,000	+1.0%
Non-Occupants	4,000	3,000	-25%
Total	142,000	140,000	-1.4%

Unless otherwise noted, changes in Numbers of Injuries and Injury Rates are not statistically significant.

Source: NASS GES



Persons Killed or Injured in School Bus Related Crashes, by Role

National Center for Statistics & Analysis



Role	Year		% Change
	1999	2000	
Persons Killed	167	144	-14%
School Bus Drivers	6	8	+33%
School Bus Passengers	4	12	+200%
Others	157	124	-21%
Persons Injured	18,000	20,000	+11%
School Bus Drivers	1,000	2,000	+100%
School Bus Passengers	8,000	8,000	nc
Others	9,000	10,000	+11%

Unless otherwise noted, changes in Numbers of Injuries and Injury Rates are not statistically significant.

Sources: FARS, NASS GES



Children, Ages 0 - 4, Killed or Injured, by Role

National Center for Statistics & Analysis



Role	Year		% Change
	1999	2000	
Killed	735	706	-3.9%
Occupants	557	539	-3.2%
Non Occupants	178	167	-5.1%
Injured	76,000	71,000	-6.6%
Occupants	73,000	67,000	-8.2%
Non Occupants	4,000	3,000	-25%

Unless otherwise noted, changes in Numbers of Injuries and Injury Rates are not statistically significant.

Note: Totals may not add due to rounding.
Source: FARS, NASS GES



Children, Ages 5-15, Killed or Injured, by Role

National Center for Statistics & Analysis



Role	Year		% Change
	1999	2000	
Killed	2,207	2,105	-4.6%
Occupants	1,557	1,533	-1.5%
Non Occupants	650	572	-12.0%
Injured	297,000	261,000	-12%
Occupants	250,000	218,000	-13%
Non Occupants	47,000	43,000	-8.5%

Unless otherwise noted, changes in Numbers of Injuries and Injury Rates are not statistically significant.

Italics signify Statistically Significant Change
Source: FARS, NASS GES



Number of Crashes and Persons Killed in Crashes Involving Young Drivers (Ages 16-20)

National Center for Statistics & Analysis



Crashes or Persons Killed	Year		% Change
	1999	2000	
Crashes	1,745,000	1,683,000	-3.5%
Fatal	7,620	7,607	-0.2%
Injury	588,000	569,000	-3.2%
PDO	1,149,000	1,106,000	-3.7%
Persons Killed	8,920	8,811	-1.2%
Young Drivers	3,484	3,502	+0.5%
Young Passengers*	1,379	1,367	-0.9%
Others	4,057	3,942	-2.8%

*In vehicles with young drivers

Source: FARS, NASS GES



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Motor Vehicle Crash Fatalities by State



Number of Persons Killed in Motor Vehicle Traffic Crashes, By State

National Center for Statistics & Analysis



State	1999	2000	% Change	State	1999	2000	% Change
Alabama	1,138	995	-13%	Florida	2,920	2,999	+2.7%
Alaska	79	103	+30%	Georgia	1,508	1,541	+2.2%
Arizona	1,024	1,036	+1.2%	Hawaii	98	131	+34%
Arkansas	604	652	+7.9%	Idaho	278	276	-0.7%
California	3,559	3,753	+5.5%	Illinois	1,456	1,418	-2.6%
Colorado	626	681	+8.8%	Indiana	1,020	875	-14%
Connecticut	301	342	+14%	Iowa	490	445	-9.2%
Delaware	100	123	+23%	Kansas	540	461	-15%
Dist of Columbia	41	49	+20%	Kentucky	814	820	+0.7%

Source: FARS



Number of Persons Killed in Motor Vehicle Traffic Crashes, By State

National Center for Statistics & Analysis



State	1999	2000	% Change	State	1999	2000	% Change
Louisiana	938	937	-0.1%	Nebraska	295	276	-6.4%
Maine	181	169	-6.6%	Nevada	350	323	-7.7%
Maryland	590	588	-0.3%	New Hampshire	140	126	-10%
Massachusetts	414	433	+4.6%	New Jersey	726	731	+0.7%
Michigan	1,382	1,382	nc	New Mexico	460	430	-6.5%
Minnesota	626	625	-0.2%	New York	1,599	1,458	-8.8%
Mississippi	927	949	+2.4%	North Carolina	1,505	1,472	-2.2%
Missouri	1,094	1,157	+5.8%	North Dakota	119	86	-28%
Montana	220	237	+7.7%	Ohio	1,430	1,351	-5.5%

Source: FARS



Number of Persons Killed in Motor Vehicle Traffic Crashes, By State

National Center for Statistics & Analysis



State	1999	2000	% Change	State	1999	2000	% Change
Oklahoma	741	652	-12%	Utah	360	373	+3.6%
Oregon	414	451	+8.9%	Vermont	90	79	-12%
Pennsylvania	1,549	1,520	-1.9%	Virginia	878	930	+5.9%
Rhode Island	88	80	-9.1%	Washington	637	632	-0.8%
South Carolina	1,065	1,065	nc	West Virginia	395	410	+3.8%
South Dakota	150	173	+15%	Wisconsin	745	799	+7.2%
Tennessee	1,302	1,306	+0.3%	Wyoming	189	152	-20%
Texas	3,522	3,769	+7.0%				

Source: FARS



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A Look at Motorcycle Fatalities



Motorcyclist Fatalities account for most of increase in Fatalities from 1997 to 2000

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Total vs. Motorcyclist Fatalities by Year, 1997-2000

Fatalities	Year			
	1997	1998	1999	2000
Total	42,013	41,501	41,717	41,821
Change	---	-512	+216	+104
Motorcyclists	2,116	2,294	2,483	2,862
Change	---	+178	+189	+379
Percent of all Fatalities	5.0	5.5	6.0	6.8

Source: FARS



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Motorcyclist Fatality Rates are Increasing

National Center for Statistics & Analysis



Motorcyclist Fatality Rates, by Year

Rate	Year			
	1997	1998	1999	2000
Persons Killed	2,116	2,294	2,483	2,862
/100M VMT*	21.0	22.3	23.4	---
/100K Population	0.79	0.85	0.91	1.02
/100K Reg. Vehicles*	55.3	59.1	59.5	---

* Registration and VMT data not available for 2000.

Sources: FARS, FHWA, and Census Bureau



Fatalities increased in all age groups, but was highest for Under 20 and 40 and Over

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Motorcyclists Killed, by Age Group

Age Group	Year		Change	% Change
	1999	2000		
Under 20	137	188	+51	+37%
20-29	761	808	+47	+6.2%
30-39	612	698	+86	+14%
40 and Over	973	1,164	+191	+20%
Unknown	0	4	+4	---
Total	2,483	2,862	+379	+15%

Source: FARS



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60 % of Total Increase occurred in 5 States

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States with Largest Increase in Motorcyclists Killed

State	Year		Change	% Change
	1999	2000		
California	236	276	40	17%
Florida	178	259	81	46%
Illinois	103	126	23	22%
Pennsylvania	111	149	38	34%
Texas	182	227	45	25%
Total	810	1,037	227	28%
Percent of Total US Motorcyclist Fatalities	33%	36%		

Source: FARS



National Center for Statistics & Analysis



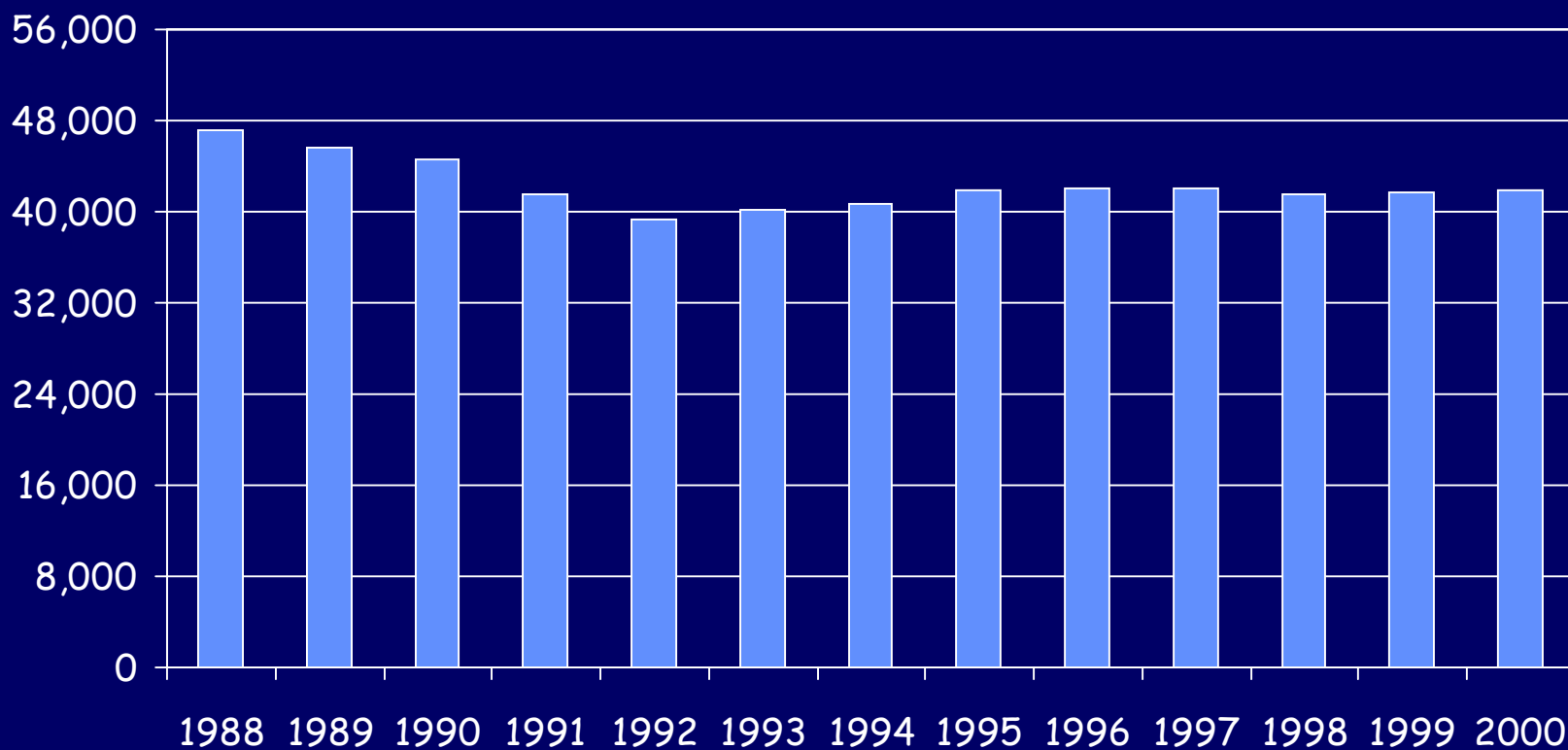
Long Term Trends

1988 - 2000



Persons Killed in Traffic Crashes by Year

National Center for Statistics & Analysis

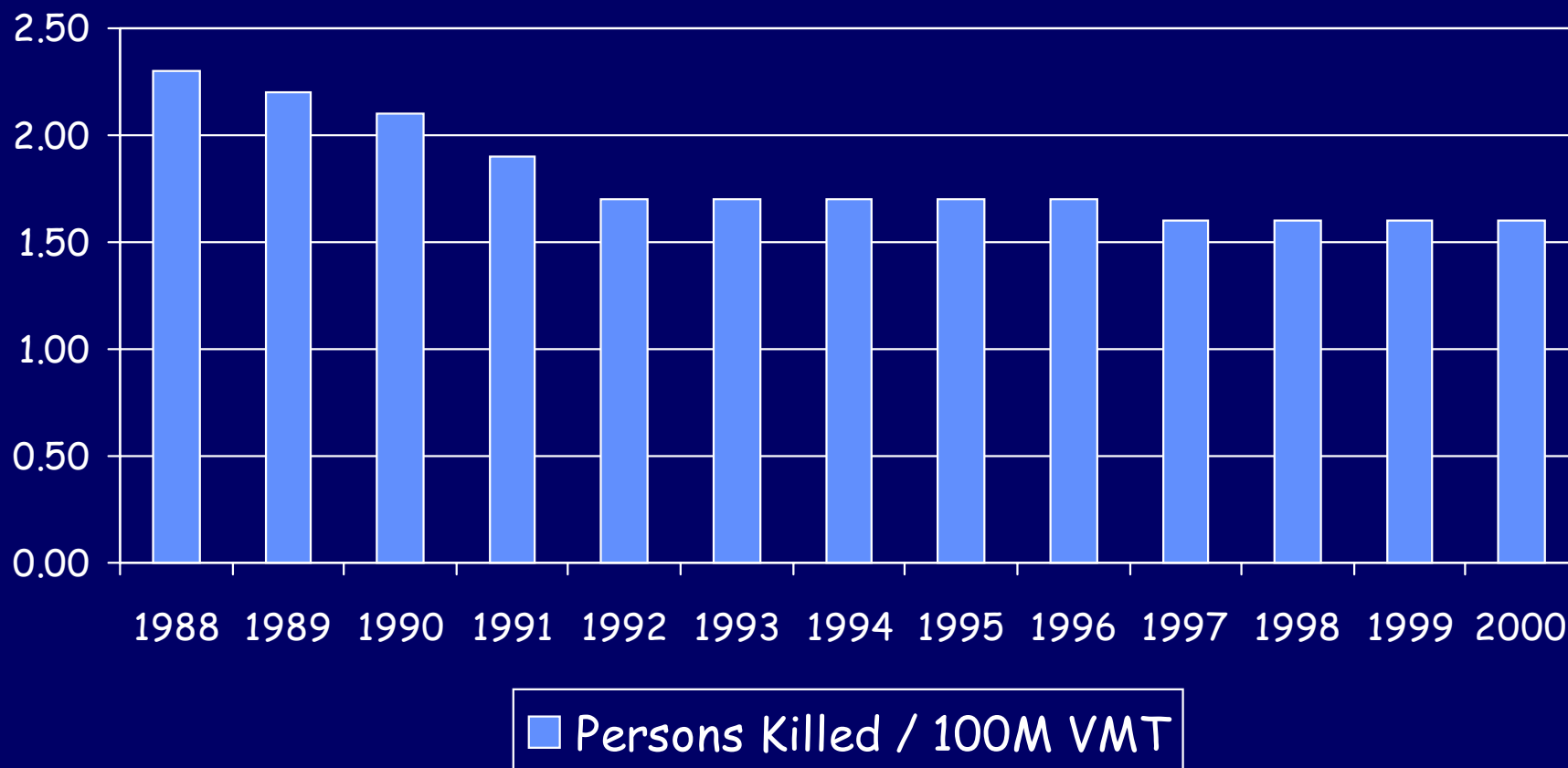


Source: FARS



Crash Fatality Rate by Year

National Center for Statistics & Analysis

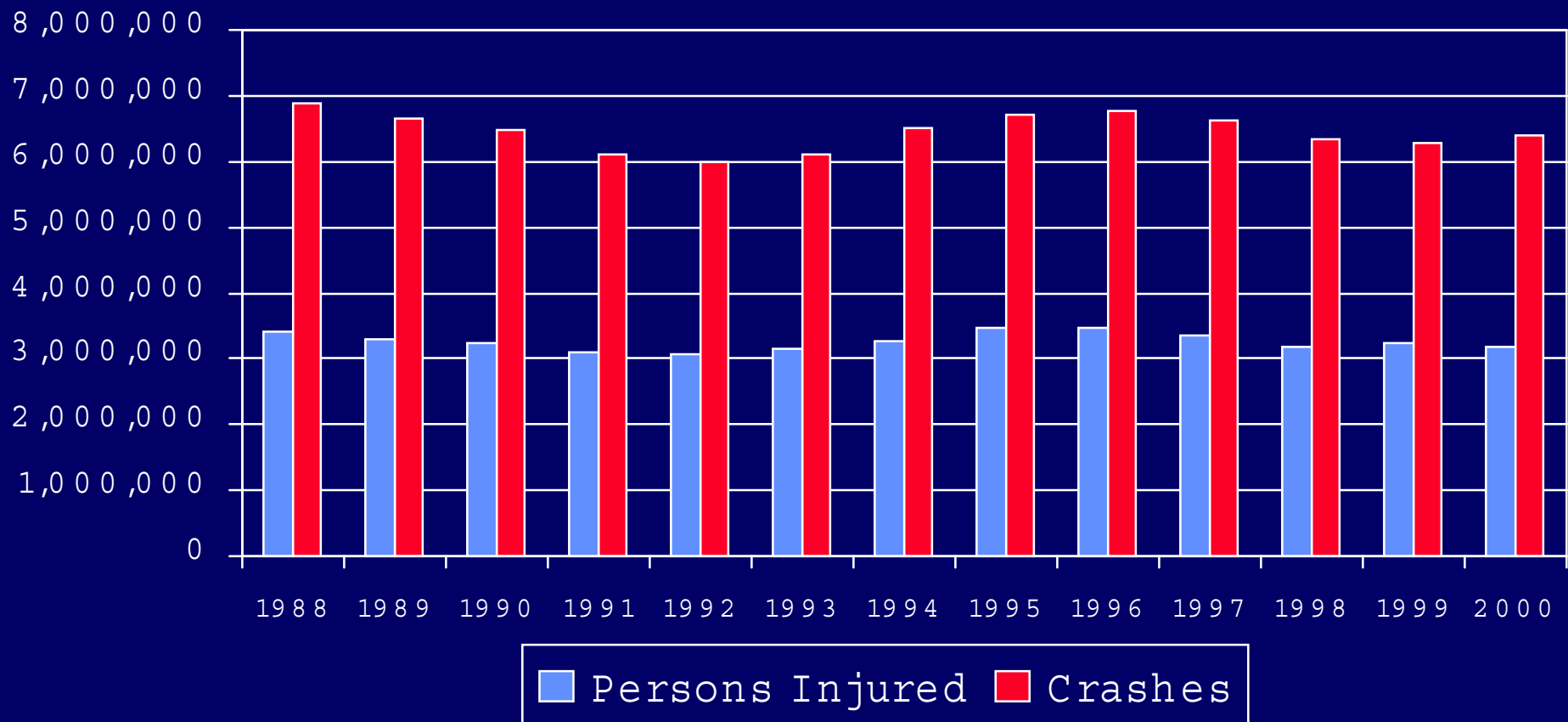


Source: FARS / FHWA VMT



Total Crashes and Persons Injured by Year

National Center for Statistics & Analysis



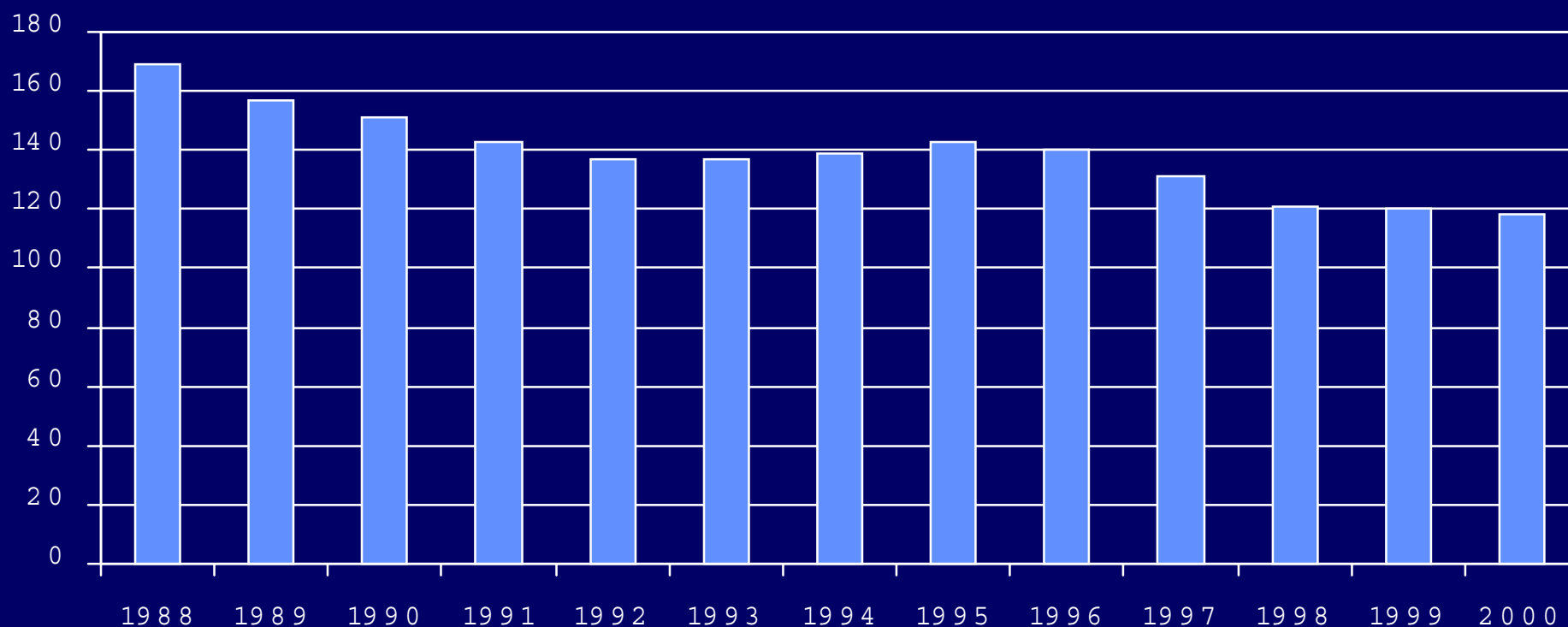
Unless otherwise noted, year-to-year changes in Numbers of Injuries and Injury Rates are not statistically significant.

Sources: NASS GES



Crash Injury Rate by Year

National Center for Statistics & Analysis



■ Persons Injured / 100M VMT

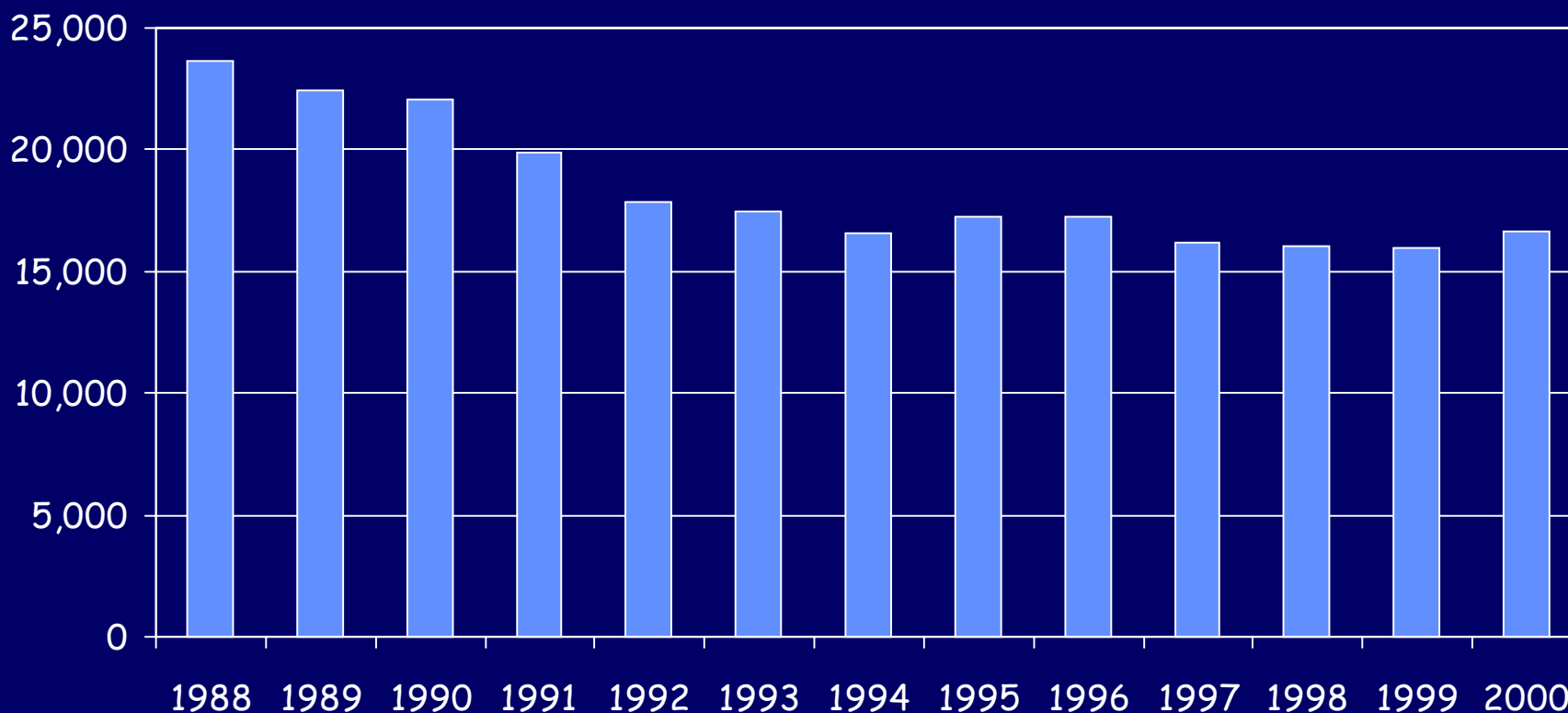
Unless otherwise noted, year-to-year changes in Numbers of Injuries and Injury Rates are not statistically significant.

Sources: NASS GES / FHWA VMT



Persons Killed in Alcohol-Related Traffic Crashes, by Year

National Center for Statistics & Analysis

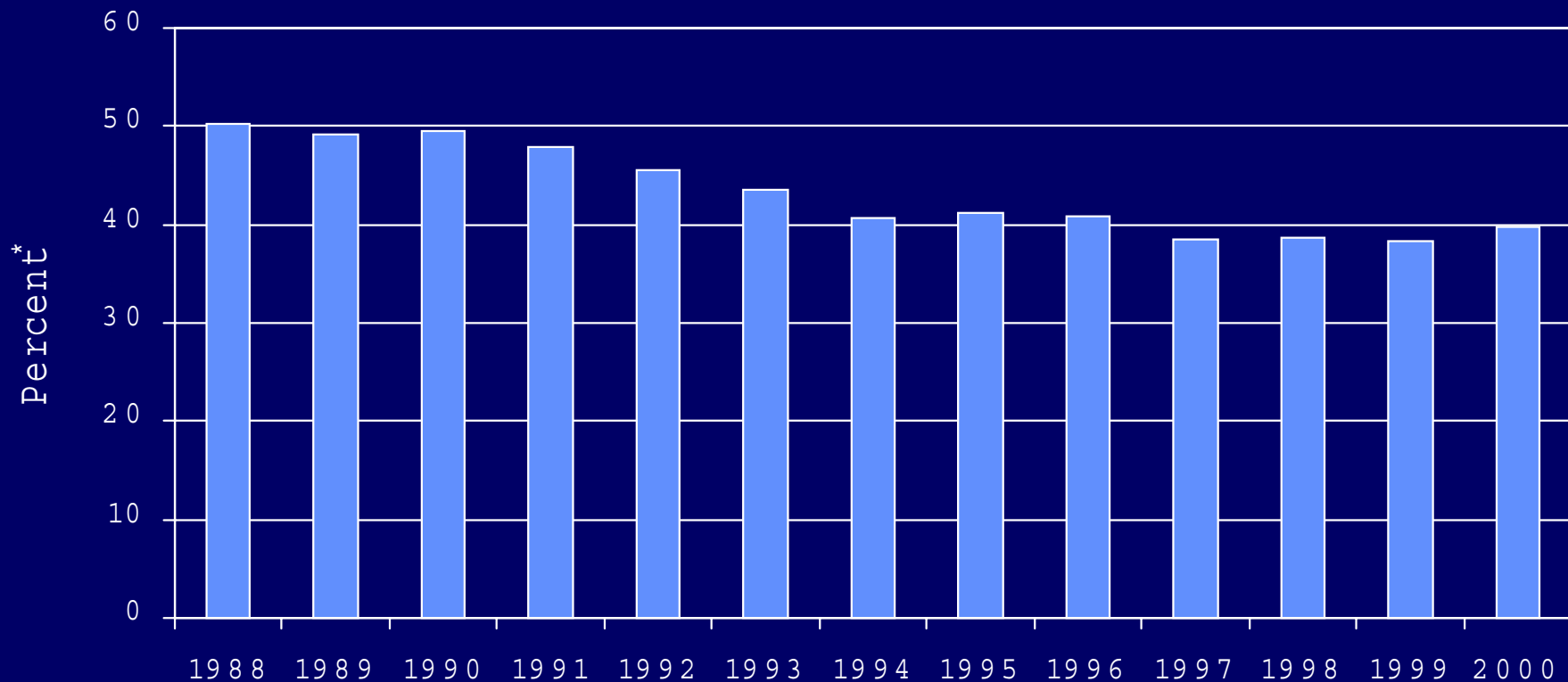


Source: FARS



Percent Alcohol-Related Traffic Crash Fatalities of Total Fatalities, by Year

National Center for Statistics & Analysis



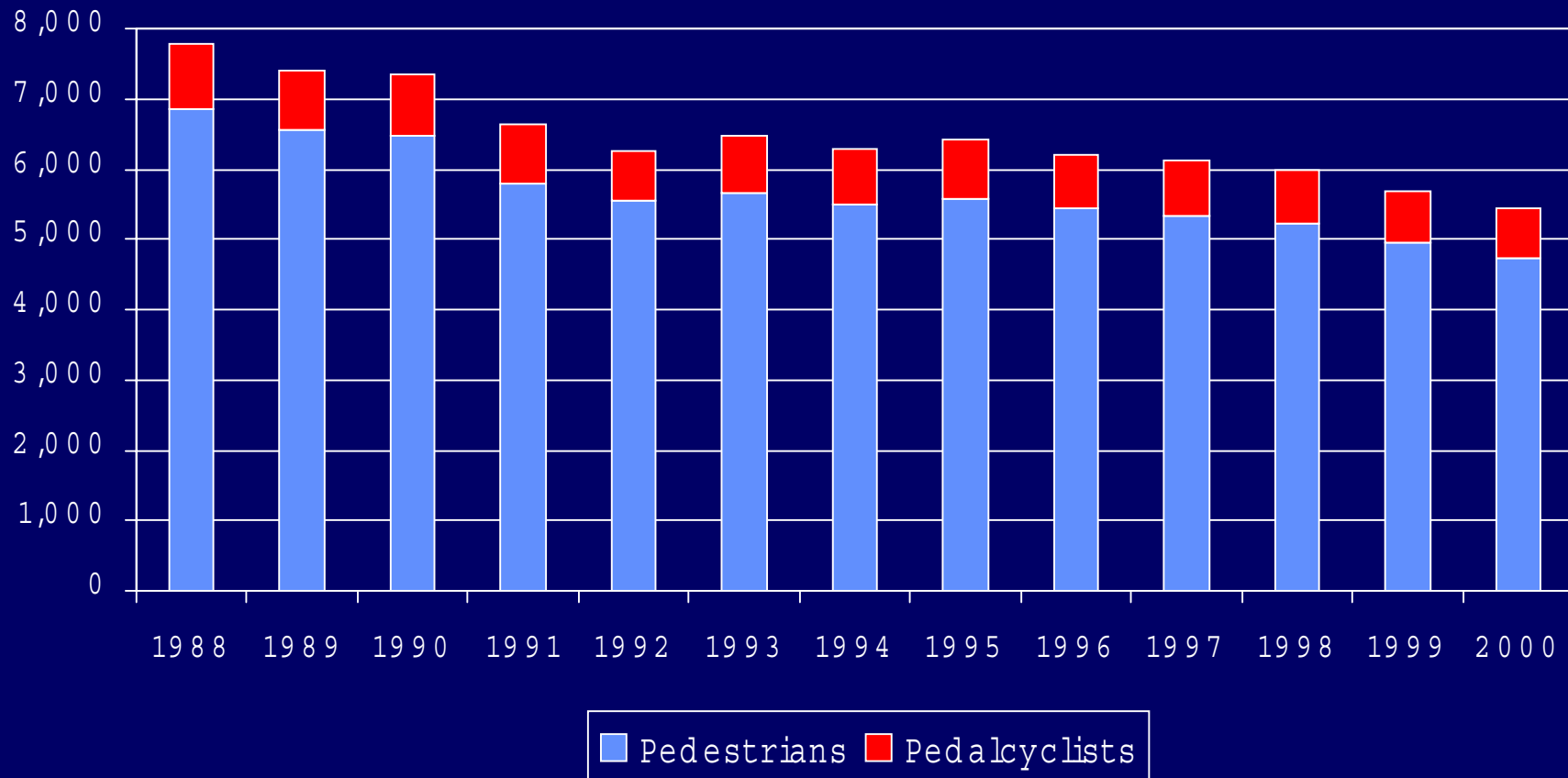
* Rounded to the tenth decimal

Source: FARS



Pedestrians and Pedalcyclists Killed in Traffic Crashes, by Year

National Center for Statistics & Analysis

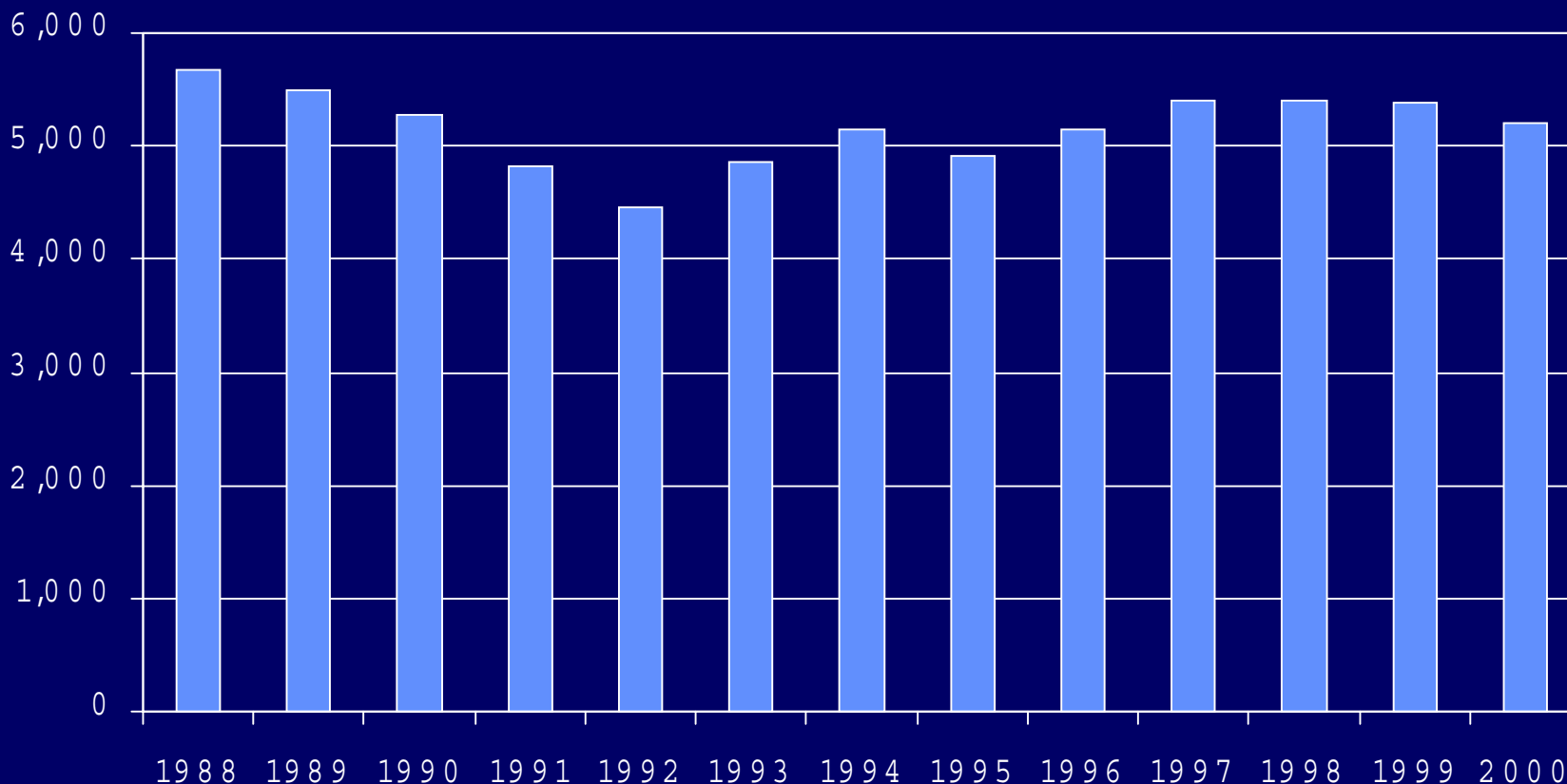


Source: FARS



Persons Killed in Large Truck Crashes, by Year

National Center for Statistics & Analysis

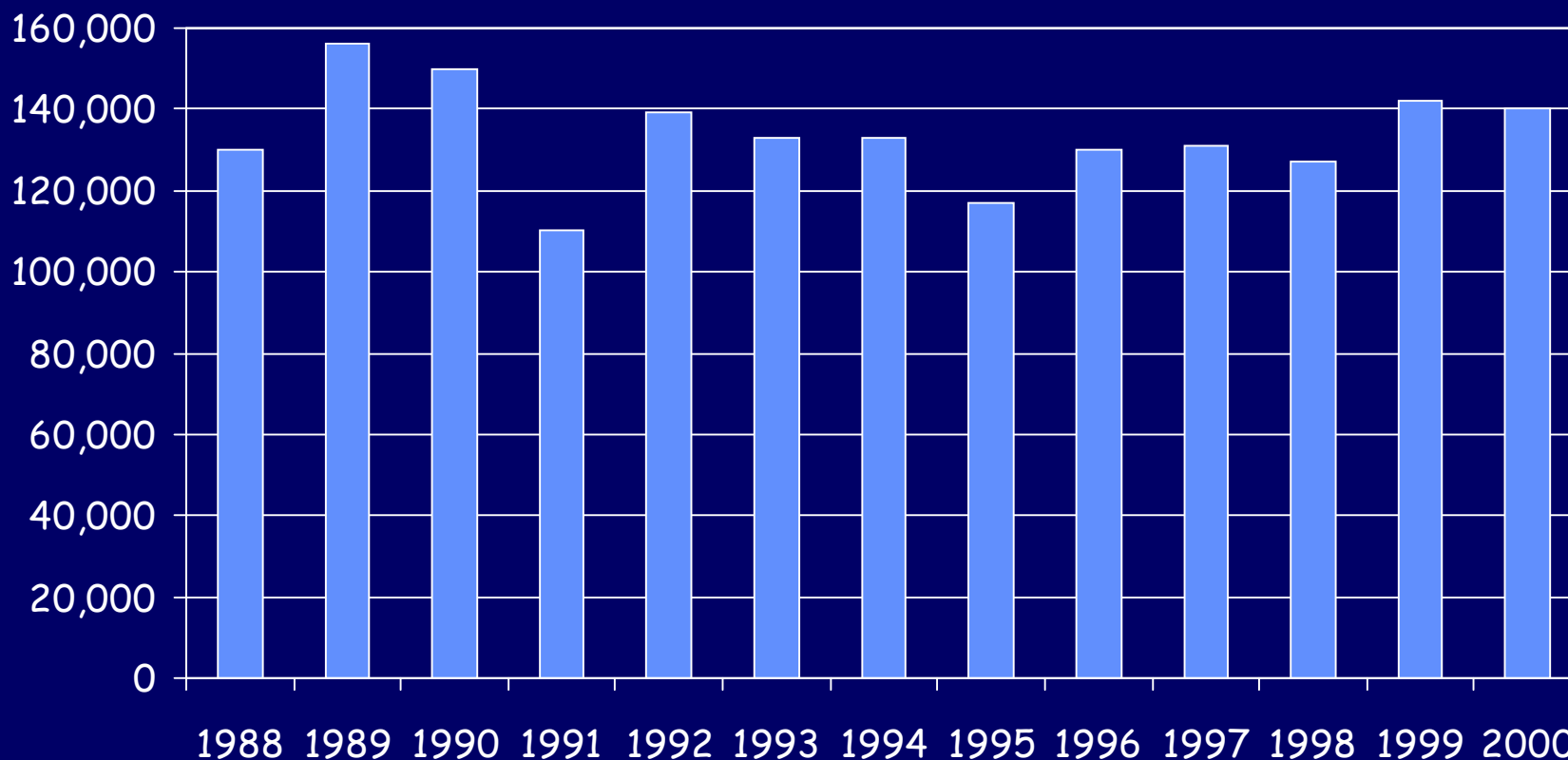


Source: FARS



Persons Injured in Large Truck Crashes, by Year

National Center for Statistics & Analysis



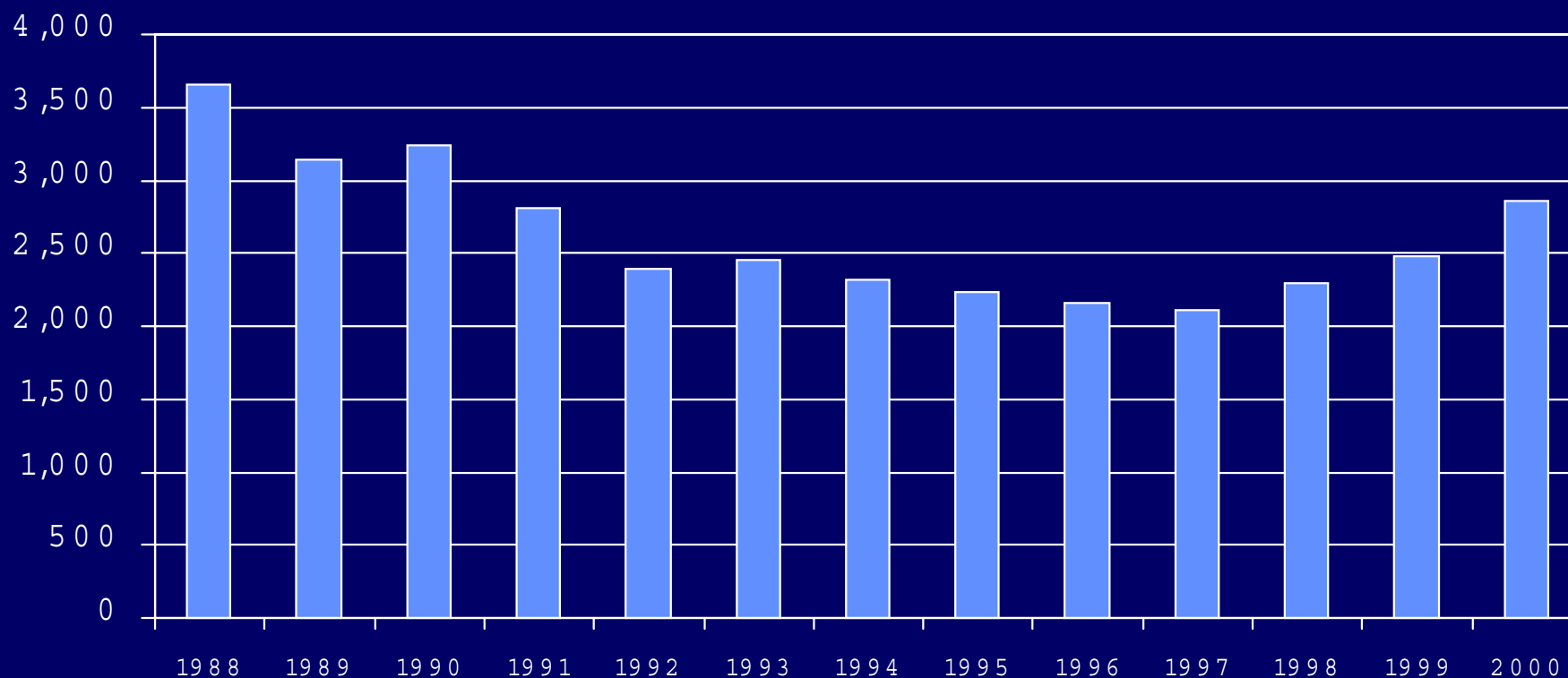
Unless otherwise noted, year-to-year changes in Numbers of Injuries and Injury Rates are not statistically significant.

Source: NASS GES



Motorcyclists Killed by Year

National Center for Statistics & Analysis

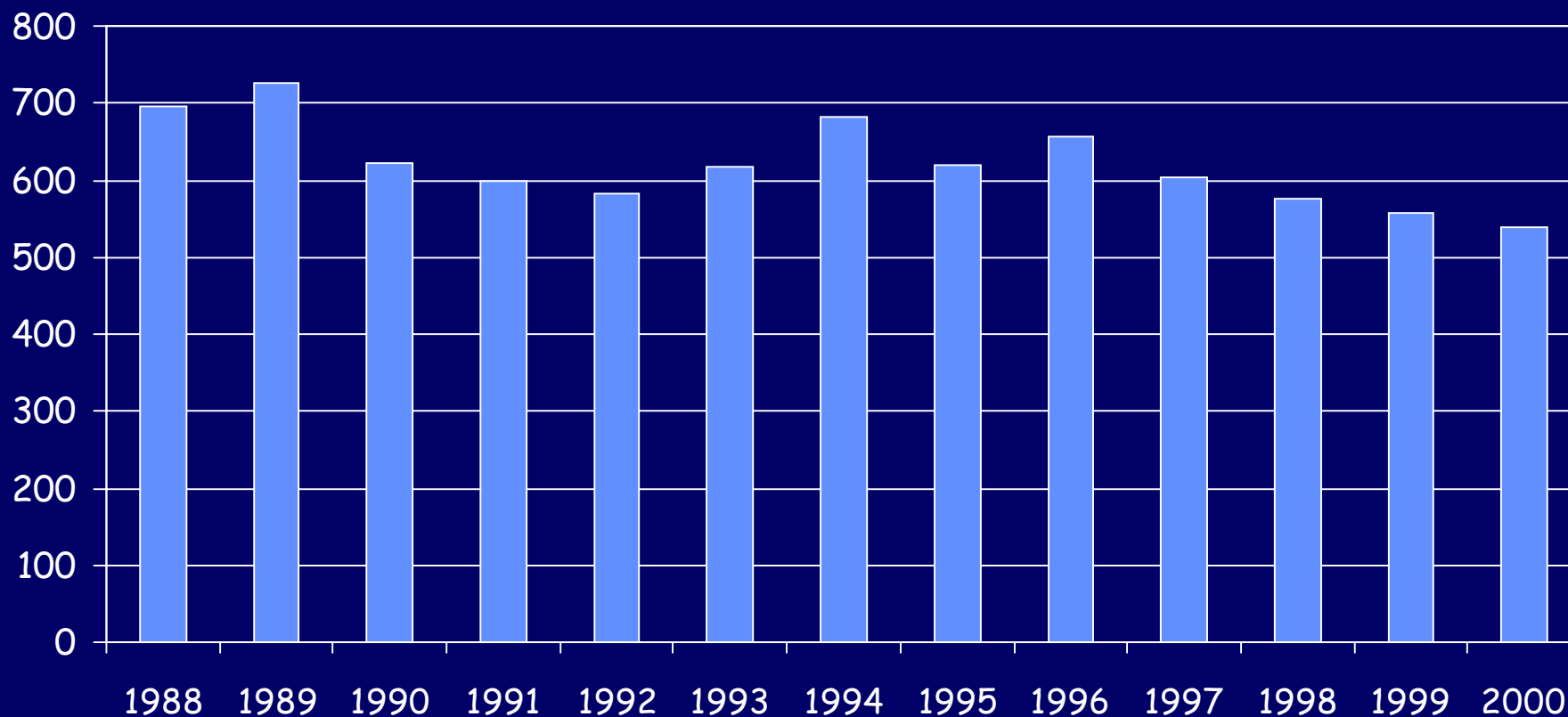


Source: FARS



Child (Under 5) Occupant Fatalities, by Year

National Center for Statistics & Analysis



Source: FARS

- **Crash Data**
 - ◆ Fatality Analysis Reporting System (FARS)
 - 1999 (and prior years) Final File
 - 2000 Annual Report File
 - ◆ NASS General Estimates System (GES)
 - 2000 (and prior years) Annual File
- **Exposure Data**
 - ◆ Vehicle Miles of Travel (VMT)
 - Federal Highway Administration (FHWA)
 - March 2001 Traffic Volume Trends Report
 - ◆ Population Projection (based on 1990 Census)
 - Census Bureau
 - ◆ Registered Vehicles
 - NHTSA's Projection for 2000
 - Based on FHWA Registered Vehicles



*Questions about the data in this
report may be sent
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or

*made by phone to:
1.800.934.8517*