

## ***Estimates of Motor Vehicle Traffic Crash Fatalities and People Injured***

***Based on***

***The Fatality Analysis Reporting System (FARS)  
and***

***The National Automotive Sampling System (NASS)  
General Estimates System (GES)***

***DOT HS 810 755***

***May 25, 2007***

# ***The 2006 Projections***

***The numbers from these 2006 projections are subject to change when the data from the full Year 2006 Annual Assessment is released this summer.***

***2006 projections are compared to fatality counts and people injured from the 2005 Annual Report. Sources of the data are indicated in the listing on slide 27.***

# ***The 2006 Projections***

***The 2006 “**PROJECTIONS**” contained in this report are based on statistical procedures which use “**PARTIAL**” year FARS and NASS GES files.***

- *The number of people killed in motor vehicle traffic crashes is projected to **decline slightly**.*
- *The estimate of people injured in motor vehicle traffic crashes is projected to **decline** by 6 percent.*
- *The estimated number of nonfatal crashes are projected **below 6 million for the first time** (if these projected numbers are to hold when full year data are available later)*

# Overall Statistics

	<i>Year</i>		<i>% Change</i>
	<i>2005</i>	<i>2006 Projected</i>	
<i>People Killed</i>	<b>43,443</b>	<b>43,300</b>	<b>-0.3%</b>
<i>People Injured</i>	<b>2,699,000</b>	<b>2,536,000</b>	<b>-6.0%</b>
<i>Fatal Crashes</i>			
<i>Fatal Crashes</i>	<b>39,189</b>	<b>39,182</b>	<b>-0.0%</b>
<i>Nonfatal Crashes</i>			
<i>Nonfatal Crashes</i>	<b>6,120,000</b>	<b>5,891,000</b>	<b>-3.7%</b>
<i>Injury Crashes</i>			
<i>Injury Crashes</i>	<b>1,816,000</b>	<b>1,710,000</b>	<b>-5.8%</b>
<i>Property-Damage-Only</i>			
<i>Property-Damage-Only</i>	<b>4,304,000</b>	<b>4,181,000</b>	<b>-2.9%</b>

*Note: Totals may not add due to rounding. Percentages computed after rounding.*

*Sources: FARS, NASS GES*

# **2006 Projections Show**

- **The fatality rate per 100 million vehicle miles traveled (VMT) is projected to *remain almost the same.***
  - **Based on FHWA's current estimate of VMT (increase of just 0.3% from 2005)**
- **The injury rate per 100 million VMT is projected to *decline.***

# Motor Vehicle Crash Fatality and Injury Rates

Rate	Year		% Change
	2005	2006 Projected	
<b>People Killed</b>			
/100M VMT	1.45	1.44*	-0.7%
/100K Reg. Vehicles	17.69	17.20**	-2.8%
/100K Population***	14.65	14.46	-1.3%
<b>People Injured</b>			
/100M VMT	90	85*	-5.6%
/100K Reg. Vehicles	1,099	1,007**	-8.4%
/100K Population***	910	847	-6.9%

\*Based on January 2007 FHWA Traffic Volume Trends

\*\*\*July, 1 estimates – Dec 22, 2006 release

\*\*Based on NHTSA projection for registered vehicles

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

<i>Exposure Measure</i>	<i>Year</i>		<i>% Change</i>
	<i>2005</i>	<i>2006</i>	
<i>Vehicle Miles Traveled</i>	2,989,807 M	2,997,660 M*	+0.3%
<i>Registered Vehicles</i>	245,641,663	251,806,000**	+2.5%
<i>Population***</i>	296,507,061	299,398,484	+1.0%

\* FHWA January 2007 Traffic Volume Trends.

\*\* Based on NHTSA projection for registered vehicles.

\*\*\* July 1 Census Bureau estimates, release date December 22, 2006.

M-Millions



# ***People Killed in Motor Vehicle Crashes, by Role***

- ***Occupant fatalities are projected to **decline** by about 1 percent***
- ***Motorcycle rider fatalities are projected to **increase** for the ninth year in a row***
  - ***More than **125 percent** increase since 1997***
- ***Nonoccupant fatalities are projected to **decline** by about 2 percent***

# People Killed in Motor Vehicle Crashes, by Role

Role	Year		Change	% Change
	2005	2006 Projected		
Occupants*	33,041	32,756	-285	-0.9%
Drivers	23,240	23,277	+37	+0.2%
Passengers	9,718	9,379	-339	-3.5%
Motorcycle Riders	4,553	4,798	+245	+5.4%
Nonoccupants	5,849	5,746	-103	-1.8%
Pedestrians	4,881	4,768	-113	-2.3%
Pedalcyclists	784	789	+5	+0.6%
Other**	184	189	+5	+2.7%
<b>TOTAL</b>	<b>43,443</b>	<b>43,300</b>	<b>-143</b>	<b>-0.3%</b>

\* Includes unknown occupants

\*\* Includes occupants of motor vehicles not in transport and of non-motor vehicle transport devices. Source: FARS

# ***Estimate of People Injured in Motor Vehicle Crashes, by Role***

## ***Changes in People Injured by Role for 2006:***

- ***Decline*** in occupants injured by about 6 percent
- Motorcyclists injured ***remained the same***
- ***Decline*** in nonoccupants injured by about 8 percent

# ***Estimate of People Injured in Motor Vehicle Crashes, by Role***

<b>Role</b>	<b>Year</b>		<b>% Change</b>
	<b>2005</b>	<b>2006 Projected</b>	
<b>Occupants</b>	<b>2,494,000</b>	<b>2,339,000</b>	<b>-6.2%</b>
<b>Drivers</b>	<b>1,743,000</b>	<b>1,626,000</b>	<b>-6.7%</b>
<b>Passengers</b>	<b>750,000</b>	<b>713,000</b>	<b>-4.9%</b>
<b>Motorcycle Riders</b>	<b>87,000</b>	<b>87,000</b>	<b>0.0%</b>
<b>Nonoccupants</b>	<b>118,000</b>	<b>109,000</b>	<b>-7.6%</b>
<b>Pedestrians</b>	<b>64,000</b>	<b>58,000</b>	<b>-9.4%</b>
<b>Pedalcyclists</b>	<b>45,000</b>	<b>45,000</b>	<b>0.0%</b>
<b>Other/Unknown Occupants</b>	<b>8,000</b>	<b>7,000</b>	<b>-13%</b>
<b>TOTAL*</b>	<b>2,699,000</b>	<b>2,535,000</b>	<b>-6.1%</b>

*\*Totals may not add due to rounding. Percentages computed after rounding.*

*Source: NASS GES*

# ***Occupants Killed and Injured in Motor Vehicle Crashes, by Vehicle Type***

- ***Passenger vehicle occupant fatalities are projected to **decline*****
- ***Passenger vehicle occupants injured are projected to **decline*****

# Occupants Killed in Motor Vehicle Crashes, by Vehicle Type

Vehicle Type	Year		Change	% Change
	2005	2006 Projected		
Total Passenger Vehicles	31,415	30,850	-565	-1.8%
Passenger Cars	18,440	17,941	-499	-2.7%
Light Trucks	12,975	12,909	-66	-0.5%
Large Trucks	803	798	-5	-0.6%
Other Vehicles*	545	515	-30	-5.5%
Unknown**	278	593	+315	+113%
<b>TOTAL</b>	<b>33,041</b>	<b>32,756</b>	<b>-285</b>	<b>-0.9%</b>

\*Includes vehicle occupants killed in buses and other vehicle types.

\*\*Many of the unknown vehicle types in the 2006 Early Projection file will be resolved in the 2006 Annual Report file.

Source: FARS

# Occupants Injured in Motor Vehicle Crashes, by Vehicle Type

<i>Vehicle Type</i>	<i>Year</i>		<i>% Change</i>
	<i>2005</i>	<i>2006 Projected</i>	
<b>Total Passenger Vehicles</b>	<b>2,446,000</b>	<b>2,291,000</b>	<b>-6.3%</b>
<b>Passenger Cars</b>	<b>1,573,000</b>	<b>1,457,000</b>	<b>-7.4%</b>
<b>Light Trucks</b>	<b>872,000</b>	<b>834,000</b>	<b>-4.4%</b>
<b>Large Trucks</b>	<b>27,000</b>	<b>27,000</b>	<b>0.0%</b>
<b>Other Vehicles*</b>	<b>21,000</b>	<b>21,000</b>	<b>0.0%</b>
<b>TOTAL**</b>	<b>2,494,000</b>	<b>2,339,000</b>	<b>-6.2%</b>

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

*\*\*Totals may not add due to rounding. Percentages computed after rounding.*

*Source: NASS GES*

# ***Passenger Vehicle Occupant Fatalities (All Ages), by Restraint Use***

- ***Restraint use by fatally injured passenger vehicle occupants is expected to remain the same***

<b><i>Restraint Use</i></b>	<b><i>Year</i></b>	
	<b><i>2005</i></b>	<b><i>2006 Projected</i></b>
<b><i>Restraint Used*</i></b>	<b><i>45%</i></b>	<b><i>45%</i></b>
<b><i>Restraint Not Used</i></b>	<b><i>55%</i></b>	<b><i>55%</i></b>

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

**Source: FARS**



# ***People Killed in Large-Truck Crashes***

- ***Fatalities in large-truck crashes are projected to **decline** by about 4 percent.***
- ***People injured in large-truck crashes are projected to **decline**.***

# ***People Killed in Large-Truck Crashes, by Type***

<b><i>Type</i></b>	<b><i>Year</i></b>		<b><i>% Change</i></b>
	<b><i>2005</i></b>	<b><i>2006 Projected</i></b>	
<b>Truck Occupants</b>	<b>803</b>	<b>798</b>	<b>-0.6%</b>
<b>Single-vehicle</b>	<b>480</b>	<b>503</b>	<b>+4.8%</b>
<b>Multivehicle</b>	<b>323</b>	<b>295</b>	<b>-8.7%</b>
<b>Other Vehicle Occupants</b>	<b>3,944</b>	<b>3,791</b>	<b>-3.9%</b>
<b>Nonoccupants</b>	<b>465</b>	<b>429</b>	<b>-7.7%</b>
<b>Total</b>	<b>5,212</b>	<b>5,018</b>	<b>-3.7%</b>

Source: FARS

# ***People Injured in Large-Truck Crashes, by Type***

<b>Type</b>	<b>Year</b>		<b>% Change</b>
	<b>2005</b>	<b>2006 Projected</b>	
<b>Truck Occupants</b>	<b>27,000</b>	<b>27,000</b>	<b>0.0%</b>
<b>Single-vehicle</b>	<b>10,000</b>	<b>13,000</b>	<b>+30%</b>
<b>Multivehicle</b>	<b>17,000</b>	<b>14,000</b>	<b>-18%</b>
<b>Other Vehicle Occupants</b>	<b>84,000</b>	<b>84,000</b>	<b>0.0%</b>
<b>Nonoccupants</b>	<b>2,000</b>	<b>2,000</b>	<b>0.0%</b>
<b>Total*</b>	<b>114,000</b>	<b>113,000</b>	<b>-0.9%</b>

*\*Totals may not add due to rounding. Percentages computed after rounding.*

*Source: NASS GES*

# ***People Killed in Alcohol-Related Crashes***

- ***The estimate of people killed in alcohol-related crashes is projected to **increase** by about 2 percent***
  - ***Highest level killed since 1992***
  
- ***Fatalities in crashes involving at least one driver, pedestrian or pedalcyclist with a BAC of .08+ are projected to **increase** by about 3 percent.***
  
- ***The alcohol-related fatality percentage is projected to **increase*****
  - ***From 40 percent to 41 percent***

*Note: The number of alcohol-related fatalities for the 2005 Annual Report File (ARF) is being revised due to State-reporting problems in Blood Alcohol Concentration (BAC) values that were discovered in the process of building the final file for 2005.*

# **People Killed, by Highest Estimated BAC in Crash**

<b>Highest BAC in Crash</b>	<b>Year</b>		<b>% Change</b>
	<b>2005*</b>	<b>2006 Projected</b>	
<b>Alcohol-Related Fatalities</b>	17,525	17,941	+2.4%
<b>Fatality Rate / 100 M VMT</b>	0.59	0.60	
<b>% All Fatalities</b>	40%	41%	
<b>.01 ≤ BAC ≤ .07 g/dL</b>	2,428	2,362	-2.7%
<b>BAC ≥ .08 g/dL</b>	15,097	15,579	+3.2%
<b>BAC ≥ .08 Fatalities/100M VMT</b>	0.50	0.52	
<b>BAC ≥ .08 g/dL**</b>	13,613	13,990	+2.8%

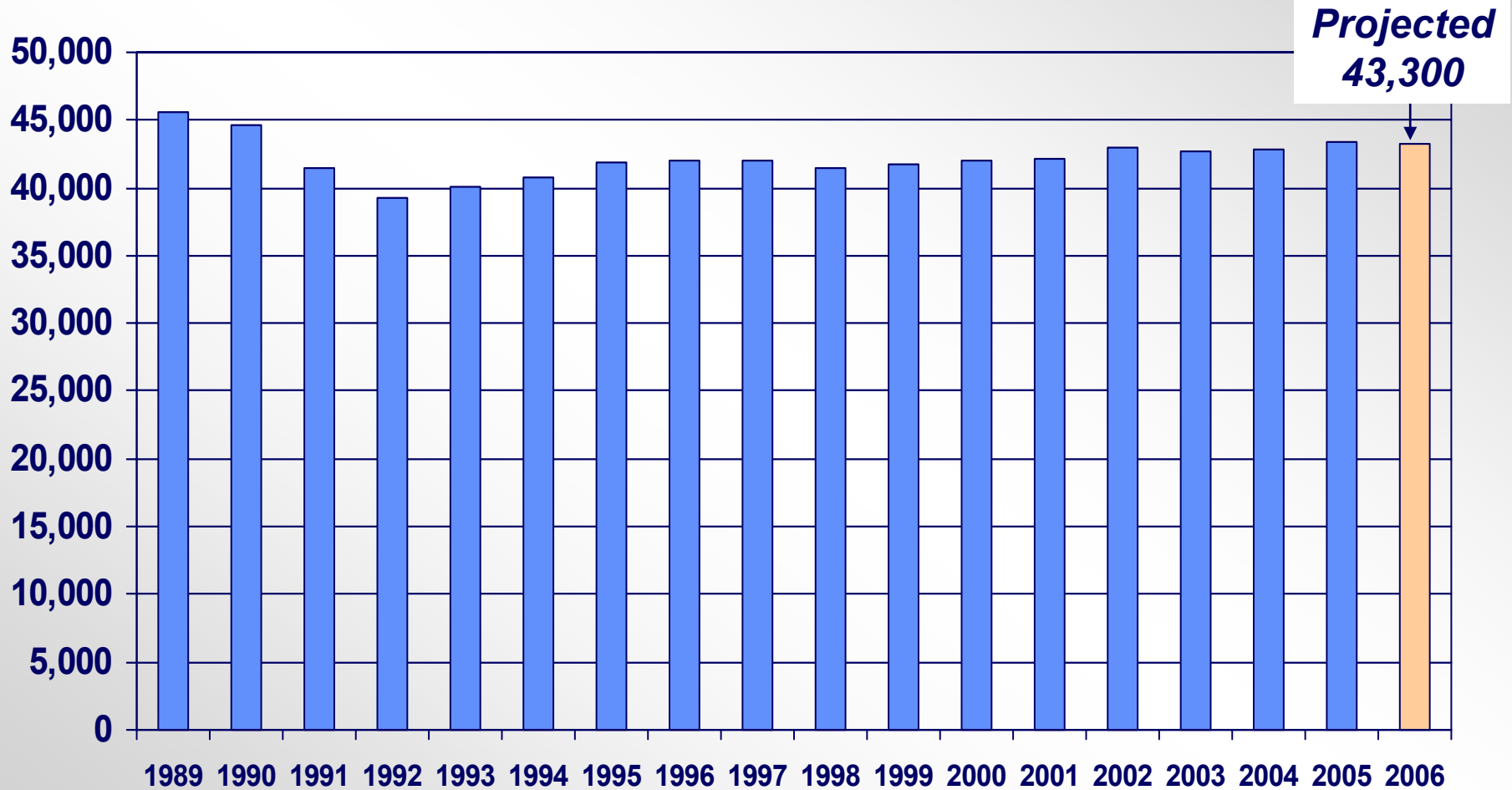
Source: FARS, FHWA

\* **Revised Numbers** -- Due to State-reporting problems in Blood Alcohol Concentration (BAC) values that were discovered in the 2005 ARF file during production of the 2005 Final file.

\*\* In crashes based on highest driver/motorcycle operator BAC in the crash

- 1. People Killed by Year***
- 2. Fatality and Injury Rates by Year***
- 3. Alcohol-Related Fatalities and Fatality Rate by Year***
- 4. Nonfatal Crashes and People Injured by Year***

# Number of People Killed in Motor Vehicle Crashes, by Year

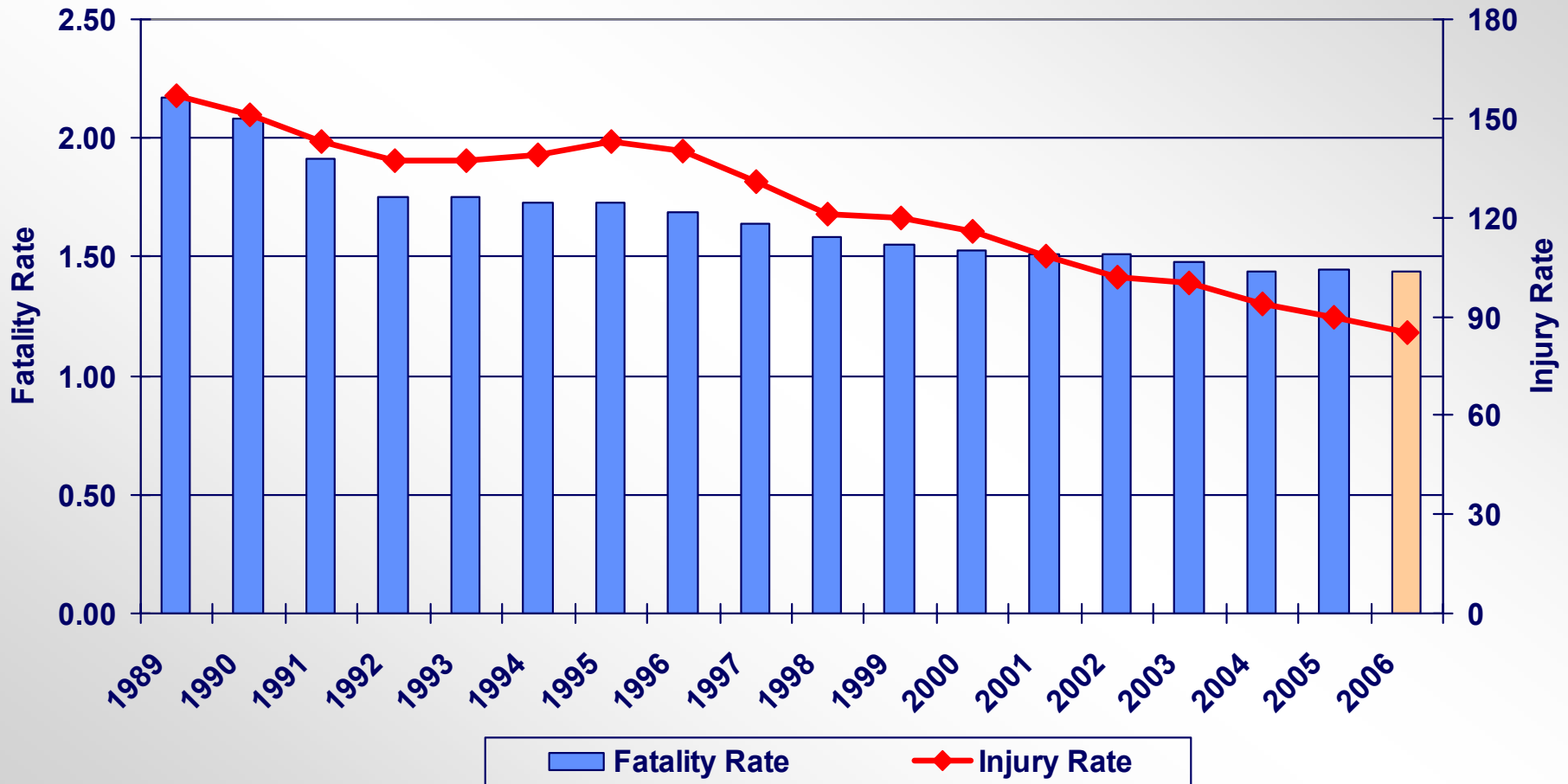


Source: FARS

2006 Projections

Release May 25, 2007

# Fatality and Injury Rates per 100 Million VMT, by Year



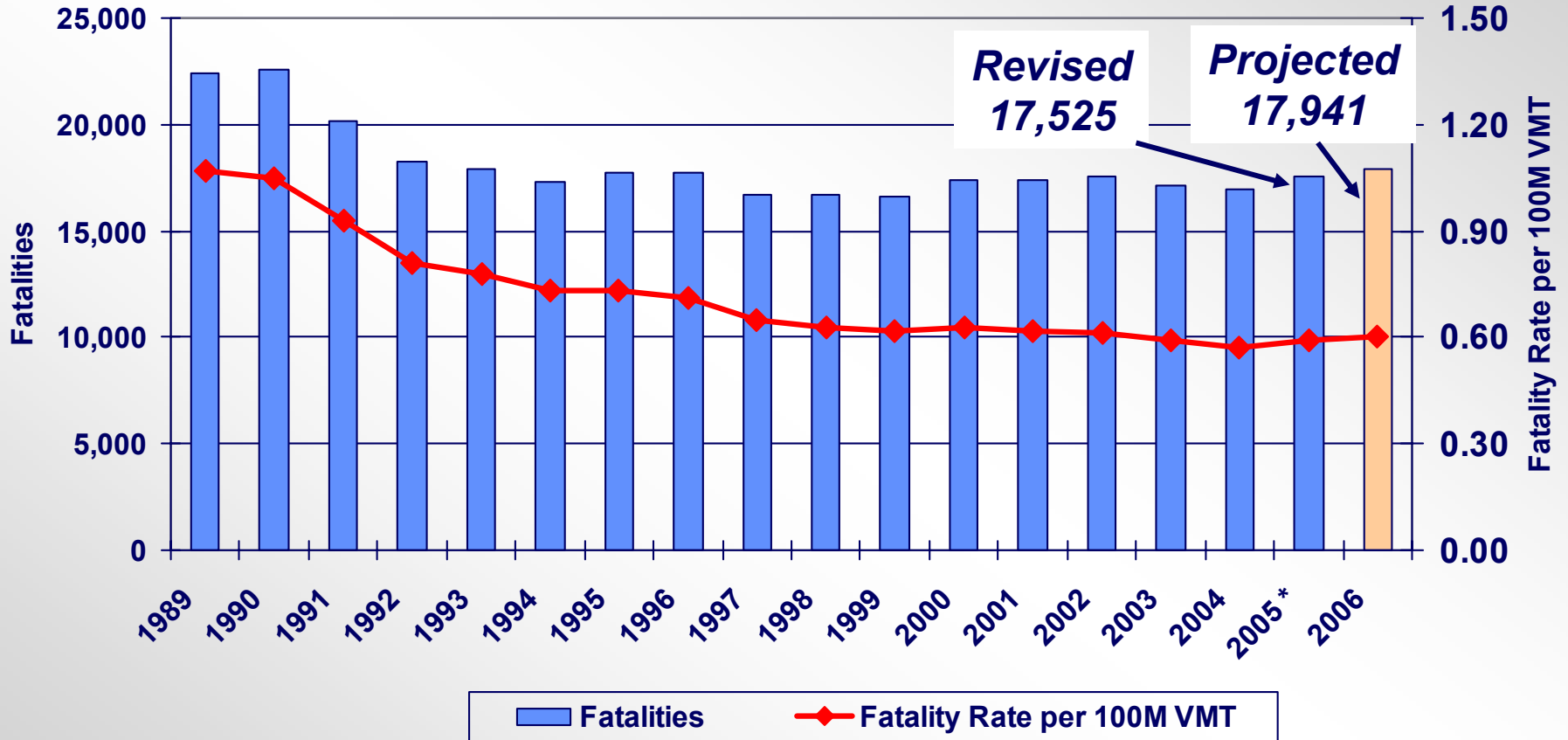
Source: FARS, NASS GES / FHWA

2006 Projections

Release May 25, 2007



# Alcohol-Related Fatalities and Fatality Rate, by Year



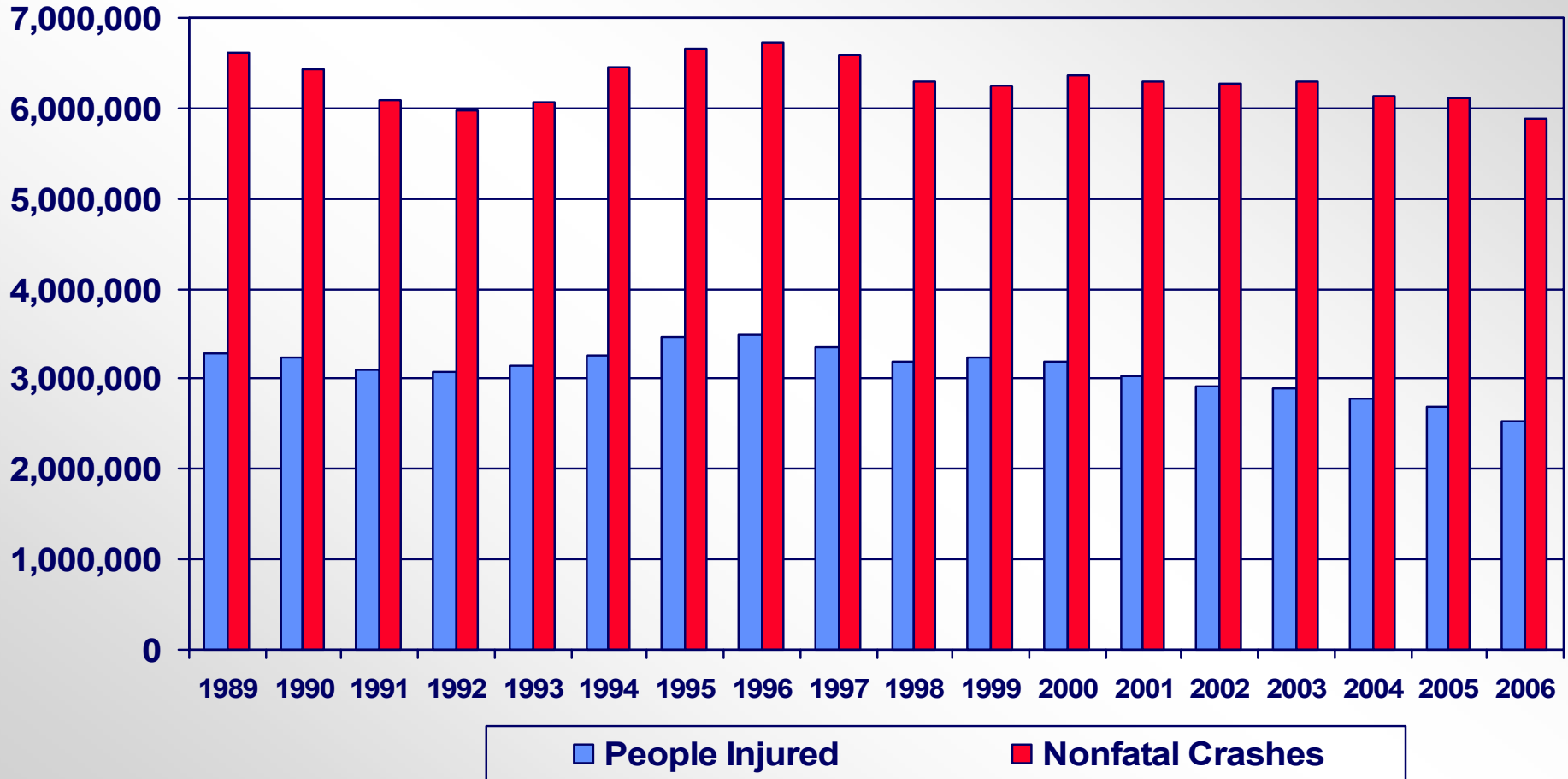
\* Revised Numbers -- Due to State-reporting problems in Blood Alcohol Concentration (BAC) values that were discovered in the 2005 ARF file during production of the 2005 Final file.

Source: FARS, FHWA

2006 Projections

Release May 25, 2007

# Nonfatal Crashes and People Injured, by Year



Sources: NASS GES

2006 Projections

Release May 25, 2007

- **Crash Data**
  - ◆ **Fatality Analysis Reporting System (FARS)**
    - **2004 and prior years – Final File**
    - **2005 - Annual Report File**
    - **2006 - Early Projection File**
  - ◆ **NASS General Estimates System (GES )**
    - **2005 and prior years - Annual File**
    - **2006 - 9-Month File**
- **Exposure Data**
  - ◆ **Vehicle Miles of Travel (VMT) - Federal Highway Administration (FHWA)**
    - **2005 and prior years - Annual Highway Statistics**
    - **2006 - January 2007 Traffic Volume Trends Report**
  - ◆ **Population Estimates (based on 2000 Census)**
    - **Census Bureau, July 1 estimates released on Dec. 22, 2006**
  - ◆ **Registered Vehicles**
    - **R.L. Polk & Company and FHWA**
    - **NHTSA's Projection for 2006**

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

***[ncsaweb@nhtsa.dot.gov](mailto:ncsaweb@nhtsa.dot.gov)***

***or***

***made by phone to:  
800-934-8517***