

2005 Projections

Motor Vehicle Traffic Crash Fatalities and Injuries

Based on

The Fatality Analysis Reporting System (FARS) and

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

DOT HS 810 583

April 20, 2006





The 2005 Projections

The numbers from these 2005 projections are subject to change when the data from the full Year 2005 Annual Assessment is released this summer.

2005 projections are compared to fatalities and injuries from the 2004 Annual Report.
Sources of the data are indicated in the listing on slide 27.



2



The 2005 Projections

The 2005 "PROJECTIONS" contained in this report are based on statistical procedures which use "PARTIAL" year FARS and NASS GES files.





Overall Statistics

- The number of persons killed in motor vehicle traffic crashes is projected to increase by about 1 percent, after two years of decline.
- ➤ The number of persons injured in motor vehicle traffic crashes is projected to decline by 4 percent.





Overall Statistics

| | Year | | % | |
|----------------------|-----------|----------------|--------|--|
| | 2004 | 2005 Projected | Change | |
| Persons Killed | 42,636 | 43,200 | +1.3% | |
| Persons Injured | 2,788,000 | 2,675,000 | -4.1% | |
| | | | | |
| Fatal Crashes | 38,253 | 38,963 | +1.9% | |
| Nonfatal Crashes | 6,143,000 | 5,897,000 | -4.0% | |
| Injury Crashes | 1,862,000 | 1,802,000 | -3.2% | |
| Property-Damage-Only | 4,281,000 | 4,095,000 | -4.3% | |

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

Sources: FARS, NASS GES





2005 Projections Show

- ➤ The fatality rate per 100 million vehicle miles traveled (VMT) is projected to increase.
- ➤ The injury rate per 100 million VMT is projected to decline.





Exposure Data

| Evposuro Mossuro | Y | % Chango | |
|------------------------|-------------|---------------|----------|
| Exposure Measure | 2004 | 2005 | % Change |
| Vehicle Miles Traveled | 2,962,513 M | 2,964,381 M* | +0.1% |
| Registered Vehicles | 237,961,465 | 242,721,000** | +2.0% |
| Population*** | 293,656,842 | 296,410,404 | +0.9% |

^{*}FHWA January 2006 Traffic Volume Trends.

M-Millions



^{**}Based on NHTSA projections.

^{***}July 1 Census Bureau estimates, release date December 22, 2005.



Motor Vehicle Crash Fatality and Injury Rates

| Poto | Ye | Year | | |
|---------------------|-------|----------------|----------|--|
| Rate | 2004 | 2005 Projected | % Change | |
| Persons Killed | | | | |
| /100M VMT | 1.44 | 1.46* | +1.4% | |
| /100K Reg. Vehicles | 17.92 | 17.80** | -0.7% | |
| /100K Population*** | 14.52 | 14.57 | +0.3% | |
| Persons Injured | | | | |
| /100M VMT | 94 | 90* | -4.3% | |
| /100K Reg. Vehicles | 1,172 | 1,102** | -6.0% | |
| /100K Population*** | 950 | 903 | -4.9% | |

^{*}Based on January 2006 FHWA Traffic Volume Trends

**Based on NHTSA's Projections

***July, 1 estimates – Dec 22, 2005 release Sources: FARS, NASS GES, FHWA, and Census Bureau



8



2005 Projections Show

- The estimate of people killed in alcohol-related crashes is projected to increase
- ➤ This increase follows a decline seen for the previous two years
- The alcohol-related fatality percentage is projected to remain the same (39 percent)





Persons Killed, by Highest BAC in Crash

| Highest BAC in Crash | | Year | | |
|-----------------------------------|--------|----------------|--------|--|
| nighest bac ili Crasii | 2004 | 2005 Projected | Change | |
| Alcohol-Related Fatalities | 16,694 | 16,972 | +1.7% | |
| Fatality Rate / 100 M VMT | 0.56 | 0.57 | | |
| % All Fatalities | 39% | 39% | | |
| BAC = .0107 | 2,285 | 2,418 | +5.8% | |
| BAC = .08 or higher | 14,409 | 14,553 | +1.0% | |

Source: FARS, FHWA





Persons Killed in Motor Vehicle Crashes, by Role

- Increase in occupant fatalities by 0.6 percent
 - Increase in driver fatalities
 - Decline in passenger fatalities
- Motorcyclist fatalities are projected to increase for the eighth year in a row
 - > More than 100 percent increase since 1997
- Increase in nonoccupant fatalities by 1.1 percent
 - > Increase will come from pedestrians
 - Slight decline for pedalcyclists



11



Persons Killed in Motor Vehicle Crashes, by Role

| Dolo | Y | Year Change W Change | | |
|------------------|--------|----------------------|--------|----------|
| Role | 2004 | 2005 Projected | Change | % Change |
| Occupants | 33,134 | 33,329 | +195 | +0.6% |
| Drivers | 23,063 | 23,611 | +548 | +2.4% |
| Passengers | 9,991 | 9,648 | -343 | -3.4% |
| Unknown Occupant | 80 | 70 | -10 | -13% |
| Motorcyclists | 4,008 | 4,315 | +307 | +7.7% |
| Nonoccupants | 5,494 | 5,556 | +62 | +1.1% |
| Pedestrians | 4,641 | 4,674 | +33 | +0.7% |
| Pedalcyclists | 725 | 720 | -5 | -0.7% |
| Other* | 128 | 162 | +34 | +27% |
| TOTAL | 42,636 | 43,200 | +564 | +1.3% |

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





Persons Injured in Motor Vehicle Crashes, by Role

Changes in Injuries by Role for 2005:

- Decline in occupant injuries by 4.4 percent
- Increase in motorcyclist injuries by 2.6 percent
- Increase in pedalcyclist injuries by 9.8 percent





Persons Injured in Motor Vehicle Crashes, by Role

| Polo | Y | Year | | |
|-------------------------|-----------|----------------|----------|--|
| Role | 2004 | 2005 Projected | % Change | |
| Occupants | 2,594,000 | 2,480,000 | -4.4% | |
| Drivers | 1,782,000 | 1,734,000 | -2.7% | |
| Passengers | 811,000 | 745,000 | -8.1% | |
| Motorcyclists | 76,000 | 78,000 | +2.6% | |
| Nonoccupants | 118,000 | 117,000 | -0.8% | |
| Pedestrians | 68,000 | 65,000 | -4.4% | |
| Pedalcyclists | 41,000 | 45,000 | +9.8% | |
| Other/Unknown Occupants | 9,000 | 8,000 | -11% | |
| TOTAL* | 2,788,000 | 2,675,000 | -4.1% | |

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



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Release April 20, 2006

Source: NASS GES



- Passenger vehicle occupant fatalities are projected to increase
 - Decline for passenger cars
 - > Increase in light trucks
- Restraint use by fatally injured passenger vehicle occupants is expected to remain the same





Occupants Killed in Motor people saving people Vehicle Crashes, by Vehicle Type

| Vahiala Typa | , | Year | Change | % Change | |
|--------------------------|--------|----------------|--------|----------|--|
| Vehicle Type | 2004 | 2005 Projected | Change | % Change | |
| Total Passenger Vehicles | 31,693 | 31,884 | +191 | +0.6% | |
| Passenger Cars | 19,091 | 18,746 | -345 | -1.8% | |
| Light Trucks | 12,602 | 13,138 | +536 | +4.3% | |
| Large Trucks | 761 | 794 | +33 | +4.3% | |
| Other Vehicles* | 556 | 527 | -29 | -5.2% | |
| Unknown** | 124 | 125 | +1 | | |
| TOTAL | 33,134 | 33,329 | +195 | +0.6% | |

^{*}Includes vehicle occupants killed in buses and other vehicle types.

Source: FARS



^{**}Unknowns in 2005 have been distributed to reflect the proportion of unknowns reported in 2004. Many of the unknown vehicle types in the 2005 Early Projection file will be resolved in the 2005 Annual Report file.



Occupants Injured in Motor Vehicle Crashes, by Vehicle Type

| Vahiala Typa | Year | | % Chango | |
|--------------------------|-----------|----------------|----------|--|
| Vehicle Type | 2004 | 2005 Projected | % Change | |
| Total Passenger Vehicles | 2,543,000 | 2,432,000 | -4.4% | |
| Passenger Cars | 1,643,000 | 1,558,000 | -5.2% | |
| Light Trucks | 900,000 | 874,000 | -2.9% | |
| Large Trucks | 27,000 | 26,000 | -3.7% | |
| Other Vehicles* | 24,000 | 21,000 | -13% | |
| TOTAL** | 2,594,000 | 2,480,000 | -4.4% | |

^{*}Includes vehicle occupants injured in buses and other vehicle types.

^{**}Totals may not add due to rounding. Percentages computed after rounding.



Release April 20, 2006

Source: NASS GES



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

| Restraint Use | Y | ⁄ear |
|--------------------|----------|----------------|
| Restraint Use | 2004 | 2005 Projected |
| Restraint Used* | 45% | 45% |
| Restraint Not Used | 55% | 55% |

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

Source: FARS

18





Persons Killed in Large-Truck Crashes

- Persons killed in large-truck crashes are projected to increase slightly.
- Persons injured in large-truck crashes are projected to decline.





Persons Killed in Large-Truck Crashes, by Type

| Tuno | Y | Year | | |
|-------------------------|-------|----------------|----------|--|
| Type | 2004 | 2005 Projected | % Change | |
| Truck Occupants | 761 | 794 | +4.3% | |
| Single Vehicle | 466 | 487 | +4.5% | |
| Multiple Vehicle | 295 | 307 | +4.1% | |
| Other Vehicle Occupants | 4,006 | 3,984 | -0.5% | |
| Nonoccupants | 423 | 449 | +6.1% | |
| Total | 5,190 | 5,226 | +0.7% | |

Source: FARS





Persons Injured in Large-Truck Crashes, by Type

| Type | Y | Year | | |
|-------------------------|---------|----------------|--------|--|
| Type | 2004 | 2005 Projected | Change | |
| Truck Occupants | 27,000 | 26,000 | -3.7% | |
| Single Vehicle | 13,000 | 11,000 | -15% | |
| Multiple Vehicle | 14,000 | 15,000 | +7.1% | |
| Other Vehicle Occupants | 85,000 | 78,000 | -8.2% | |
| Nonoccupants | 4,000 | 3,000 | -25% | |
| Total* | 116,000 | 107,000 | -7.8% | |

^{*}Totals may not add due to rounding. Percentages computed after rounding.



Release April 20, 2006

Source: NASS GES



Long-Term Trends

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





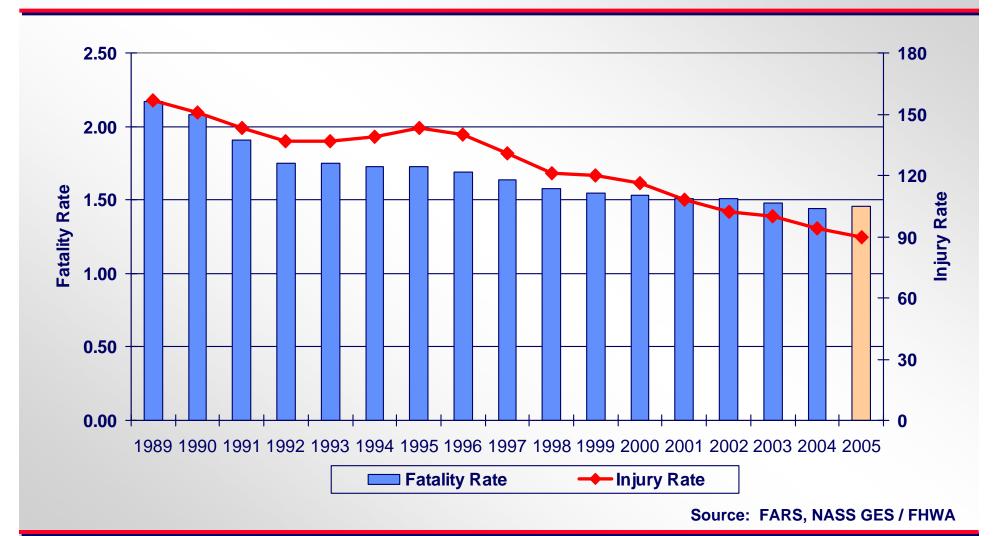
Number of Persons Killed in Motor Vehicle Crashes, by Year







Fatality and Injury Rates per 100 Million VMT, by Year

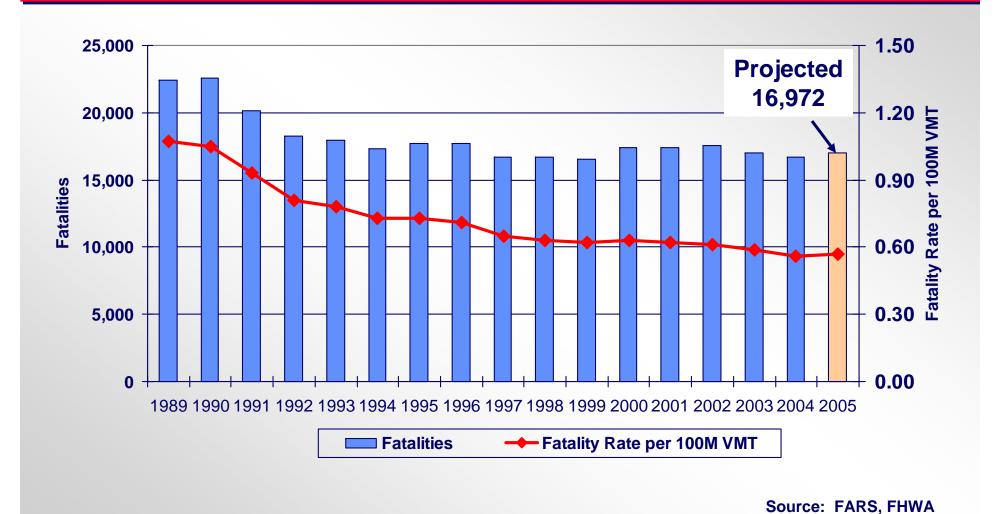


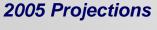


2005 Projections



Alcohol-Related Fatalities and Fatality Rate, by Year

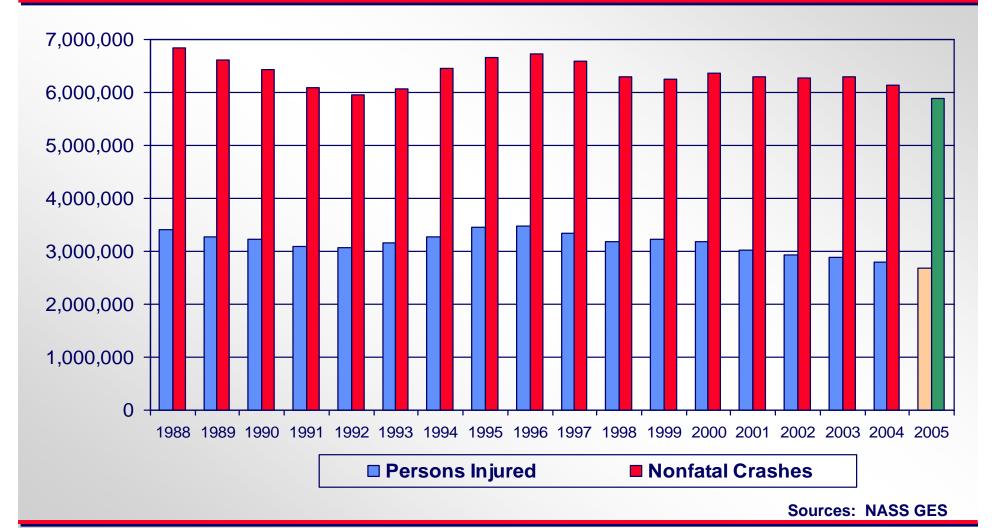




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Nonfatal Crashes and Persons Injured, by Year





2005 Projections



Data Sources

- Crash Data
 - Fatality Analysis Reporting System (FARS)
 - 2004 Annual Report File
 - 2005 Early Projection File
 - NASS General Estimates System (GES)
 - ° 2004 Annual File
 - 2005 7-Month File
- Exposure Data
 - ♦ Vehicle Miles of Travel (VMT) Federal Highway Administration (FHWA)
 - 2004 Annual Highway Statistics
 - 2005 January 2006 Traffic Volume Trends Report
 - ◆ Population Estimates (based on 2000 Census)
 - ° Census Bureau, July 1 estimates released on Dec. 22, 2005
 - Registered Vehicles
 - R.L. Polk & Company and FHWA
 - NHTSA's Projection for 2005





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

ncsaweb@nhtsa.dot.gov

or made by phone to: 800-934-8517

