



## 1998 - 2000 State Shoulder Belt Use Survey Results

Forty-eight States, the District of Columbia, and Puerto Rico reported to the National Highway Traffic Safety Administration a statewide estimate of front seat outboard passenger vehicle shoulder belt use for 2000. Table 1 shows these use rates and those reported for 1998 and 1999. Use rates at or above the Department of Transportation's 1999 Performance Plan goal of 85 percent by the end of 2000 were reported by California (88.9 percent), Puerto Rico (87.0 percent), New Mexico (86.6 percent), and Maryland (85.0 percent). The District of Columbia, Hawaii, Michigan, North Carolina, Oregon, and Washington reported use rates greater than 80 percent. The lowest reported use rate was 47.7 percent in North Dakota. States with the highest increase in use rates from 1999 to 2000 were Michigan (from 70.1 percent to 84.5 percent), Alabama (from 57.9 percent to 70.6 percent) and New Jersey (from 63.3 percent to 74.2 percent). Each of these States

introduced a standard enforcement seat belt use law in 2000. Twenty-nine States had increases in rates both from 1998 to 1999 and from 1999 to 2000. The largest increase was in Alabama, from 52.0 percent in 1998 to 57.9 percent in 1999 and to 70.6 percent in 2000. Only four States decreased in both years. The largest decrease was reported by Mississippi – from 58 percent in 1998 to 54.5 percent in 1999 and to 50.4 percent in 2000. Twenty-one States reported use rates at or above 71 percent, the nationwide estimate of overall front seat outboard passenger shoulder belt use in 2000 (Fall 2000 National Occupant Protection Use Survey [NOPUS]). In the Fall 2000 NOPUS, overall shoulder belt use in States with standard enforcement seat belt laws was 77 percent and was 64 percent in States without standard enforcement laws. In 2000, except for Washington, all States reporting use rates 80 percent or above had standard enforcement laws.

**Table 1: State Reported Shoulder Belt Use Rates  
Front Seat Outboard Passengers in Passenger Vehicles, by State and Year**

STATE	Year			STATE	Year		
	1998	1999	2000		1998	1999	2000
ALABAMA <sup>#</sup>	52.0%	57.9%	<b>70.6%</b>	MONTANA	73.1%	74.0%	75.6%
ALASKA	57.0%	60.6%	61.0%	NEBRASKA	65.1%	67.9%	70.5%
ARIZONA	61.5%	71.1%	75.2%	NEVADA	76.2%	79.8%	78.5%
ARKANSAS	52.6%	57.2%	52.4%	NEW HAMPSHIRE	*	*	*
CALIFORNIA <sup>#</sup>	<b>88.6%</b>	<b>89.3%</b>	<b>88.9%</b>	NEW JERSEY <sup>#</sup>	63.0%	63.3%	<b>74.2%</b>
COLORADO	66.0%	65.2%	65.1%	NEW MEXICO <sup>#</sup>	<b>82.6%</b>	<b>88.4%</b>	<b>86.6%</b>
CONNECTICUT <sup>#</sup>	<b>70.1%</b>	<b>72.9%</b>	<b>76.3%</b>	NEW YORK <sup>#</sup>	<b>75.3%</b>	<b>76.1%</b>	<b>77.3%</b>
DELAWARE	62.3%	64.4%	66.1%	NORTH CAROLINA <sup>#</sup>	<b>76.7%</b>	<b>78.1%</b>	<b>80.5%</b>
DISTRICT OF COLUMBIA <sup>#</sup>	<b>79.6%</b>	<b>77.9%</b>	<b>82.6%</b>	NORTH DAKOTA	40.0%	46.7%	47.7%
FLORIDA	57.2%	59.0%	64.8%	OHIO	60.6%	64.8%	65.3%
GEORGIA <sup>#</sup>	<b>73.6%</b>	<b>74.2%</b>	<b>73.6%</b>	OKLAHOMA <sup>#</sup>	<b>56.0%</b>	<b>60.7%</b>	<b>67.5%</b>
HAWAII <sup>#</sup>	<b>80.5%</b>	<b>80.3%</b>	<b>80.4%</b>	OREGON <sup>#</sup>	<b>82.6%</b>	<b>82.7%</b>	<b>83.6%</b>
IDAHO	57.3%	57.9%	58.6%	PENNSYLVANIA	67.8%	69.7%	70.7%
ILLINOIS	64.5%	65.9%	70.2%	RHODE ISLAND	58.6%	67.3%	64.4%
INDIANA <sup>#</sup>	<b>61.8%</b>	<b>57.3%</b>	<b>62.1%</b>	SOUTH CAROLINA	64.8%	65.2%	73.9%
IOWA <sup>#</sup>	<b>76.9%</b>	<b>78.0%</b>	<b>78.0%</b>	SOUTH DAKOTA	45.7%	*	53.4%
KANSAS	58.7%	62.6%	61.6%	TENNESSEE	56.7%	61.0%	59.0%
KENTUCKY	54.3%	58.6%	60.0%	TEXAS <sup>#</sup>	<b>74.4%</b>	<b>74.0%</b>	<b>76.6%</b>
LOUISIANA <sup>#</sup>	<b>65.6%</b>	<b>67.0%</b>	<b>68.2%</b>	UTAH	66.7%	67.4%	75.7%
MAINE	61.3%	*	*	VERMONT	62.7%	69.8%	61.6%
MARYLAND <sup>#</sup>	<b>82.6%</b>	<b>82.7%</b>	<b>85.0%</b>	VIRGINIA	73.6%	69.9%	69.9%
MASSACHUSETTS	51.0%	52.0%	50.0%	WASHINGTON	79.1%	81.1%	81.6%
MICHIGAN <sup>#</sup>	69.9%	70.1%	<b>83.5%</b>	WEST VIRGINIA	56.5%	51.9%	49.5%
MINNESOTA	64.2%	71.5%	73.4%	WISCONSIN	61.9%	65.1%	65.4%
MISSISSIPPI	58.0%	54.5%	50.4%	WYOMING	50.1%	*	66.8%
MISSOURI	60.4%	60.8%	67.7%	PUERTO RICO <sup>#</sup>	<b>78.3%</b>	<b>77.8%</b>	<b>87.0%</b>

\* Did not submit a use rate. <sup>#</sup> Standard Enforcement Seat Belt Law in effect in for years with Rate in **Bold Italics**

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### Survey Criteria

The estimates reported by the States are based on surveys conducted following the *Uniform Criteria for State Observational Surveys of Seat Belt Use (23 CFR Part 1340)*, issued by the National Highway Traffic Safety Administration (NHTSA) in September 1998. The criteria are part of an occupant protection incentive grant program authorized under Section 1403 of the Transportation Efficiency Act for the 21<sup>st</sup> Century (TEA-21). This grant program, Section 157 of Title 23 of the United States Code, required States to provide estimates of their safety belt use rates that were "accurate and representative." The criteria are summarized below:

1. Estimates must be obtained through a survey using actual observation of occupant shoulder belt use in vehicles on roadways. Use rates determined from secondary sources, e.g., police crash reports or use reported through telephone surveys, are not permitted.
2. The survey must be probability based. Statistical procedures must be employed to select sites at which observation of shoulder belt use are made. Following probability-based sampling procedures permits estimates that are "representative" of the use rate in the desired population and makes it possible to calculate their sampling errors.
3. The survey must be designed and conducted to permit estimating shoulder belt use for the following population of interest:
  - Front seat, outboard passengers, i.e., the driver and right front seat passenger.
  - All passenger motor vehicles, i.e., automobiles, pickup trucks, vans, minivans, and sport utility vehicles, must be observed, regardless of the State (or country) of registration.
  - Observational sites in the largest geographic areas (usually counties) in the State containing at least 85 percent of the State's population must be included in the sampling frame and have positive probabilities of selection. This criterion permits the exclusion of large, sparsely populated geographic areas where few observations are expected.
  - Observations must be conducted during all daylight hours and on all days of the week and must be scheduled without regard to day-of-week and time-of-day (for daylight hours).
4. The survey must be designed to produce an overall estimate of shoulder belt use with a relative precision (the estimated sampling error of the use divided by the estimated use rate) of +/- 5 percent. This ensures that there are a sufficient number of observational sites and observed vehicles to produce a statistically reliable estimate.
5. The survey design and results must be properly documented for evaluation of survey results by NHTSA and others and to determine compliance with Criteria 1 - 4 listed above.

For additional copies of this research note, please call 202.366.4198 or fax your request to 202.366.7078. For questions regarding the data reported in this research, contact Dennis Utter (202.366.5351) of the

National Center for Statistics and Analysis. This research note and other general information on highway traffic safety may be accessed by Internet users at <http://www.nhtsa.dot.gov/people/nca>.

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