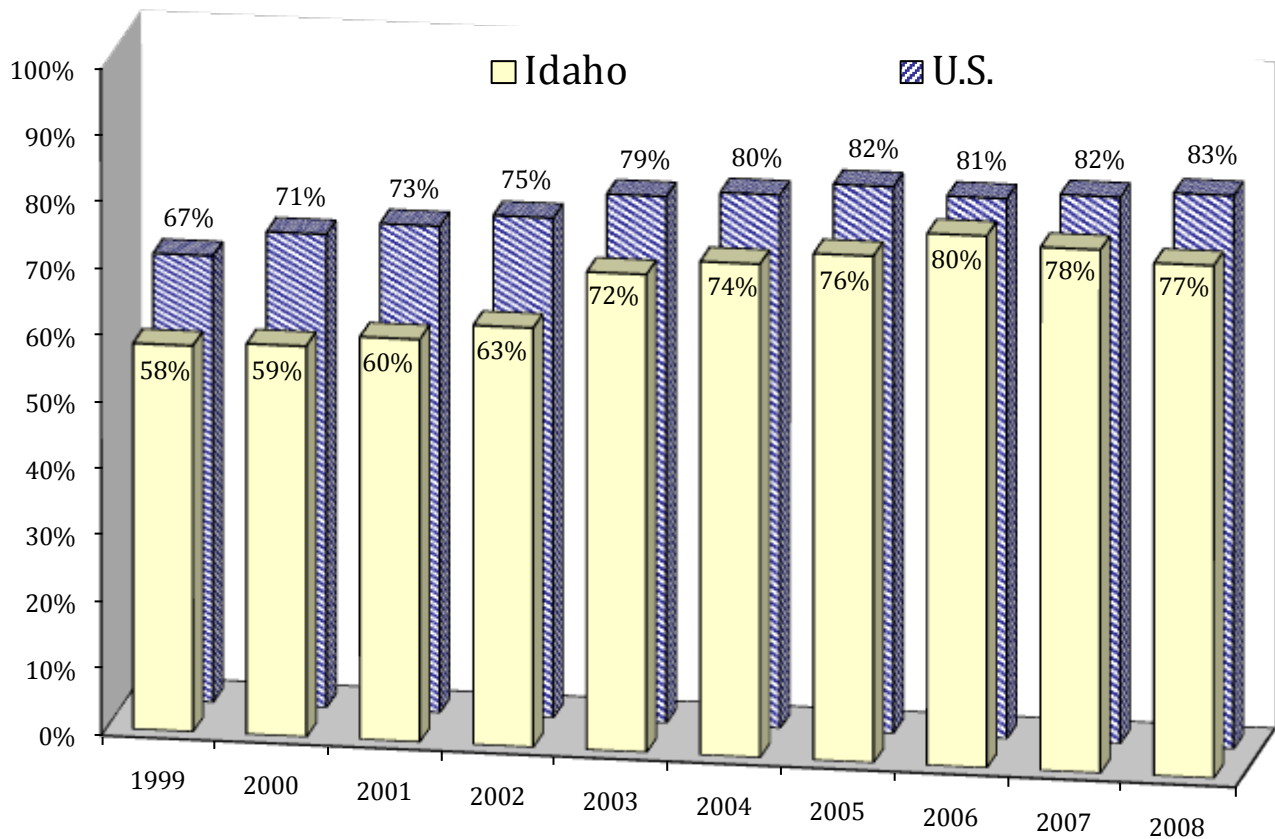


Safety Restraint Usage

Idaho's seat belt use law, effective July 1, 1986, requires seat belt use for front seat passengers and drivers, regardless of residency, in vehicles with a gross vehicle weight of 8,000 pounds or less that were manufactured with safety belts. The law is a "secondary" law and can only be enforced when someone is stopped for another traffic violation. The law was updated July 1, 2003. It now covers all seating positions and has enhanced penalties for drivers less than 18 years of age. Drivers and occupants, 18 years of age and older, receive separate tickets.

Figure 13 depicts observed seat belt use by year for both Idaho and the U.S. The figures are the observed rates for persons in passenger cars, pickups, sport utility vehicles, and vans, which make up 89% of the vehicles involved in motor vehicle crashes. The U.S. usage rate comes from the National Occupant Protection Use Survey (NOPUS) and the mini NOPUS, which are done alternately every year.

Figure 13
Observed Seat Belt Usage – Idaho vs. U.S.: 1999 - 2008



The methodology for national seat belt surveys differs from that of Idaho and does not include any observation sites in Idaho.

Observational Seat Belt Survey Results

Table 27 shows the observed shoulder harness seat belt use by county.

Table 27							
Observed Seat Belt Use by County: 2004-2008							
	2004	2005	2006	2007	2008	Change 2007-2008	Avg. Change 2004-2007
Ada	85.3%	89.9%	93.0%	90.5%	91.1%	0.7%	2.1%
Bannock	61.2%	58.7%	66.9%	65.1%	66.0%	1.4%	2.4%
Bingham	45.2%	48.7%	53.9%	54.8%	50.5%	-7.8%	6.7%
Blaine	68.6%	66.9%	66.6%	66.9%	72.7%	8.6%	-0.8%
Bonner	75.3%	73.0%	82.5%	89.8%	86.2%	-3.9%	6.2%
Bonneville	72.4%	70.7%	66.3%	60.9%	58.7%	-3.7%	-5.6%
Canyon	77.9%	79.2%	80.5%	82.9%	86.3%	4.1%	2.1%
Cassia	41.8%	66.9%	58.9%	68.1%	61.9%	-9.1%	21.2%
Elmore	70.2%	68.3%	70.8%	72.8%	71.3%	-2.0%	1.3%
Kootenai	76.8%	78.5%	89.0%	86.3%	78.1%	-9.6%	4.2%
Latah	71.9%	78.6%	79.4%	76.7%	81.8%	6.7%	2.3%
Madison	58.0%	62.2%	65.3%	59.0%	60.7%	2.9%	0.9%
Minidoka	54.2%	75.3%	70.4%	66.7%	75.2%	12.7%	9.1%
Nez Perce	77.6%	82.5%	85.1%	84.6%	86.9%	2.8%	2.9%
Payette	76.1%	75.4%	86.9%	83.4%	82.1%	-1.5%	3.4%
Twin Falls	73.2%	74.5%	68.4%	71.1%	73.7%	3.6%	-0.8%
Statewide	74.0%	76.0%	79.8%	78.5%	76.9%	-2.1%	2.0%

The Office of Highway Safety evaluates compliance rates through analysis of crash data and statewide observational surveys of seat belt use. Observational surveys are conducted by observing shoulder harness use or non-use. The observational survey is a representative sample of the state and does not include all counties.

Table 28 shows the observed seat belt use for the Idaho Transportation Department (ITD) districts⁴ by vehicle type. District 3 (south-western Idaho) had the highest overall usage at 87.9%, while district 6 (eastern Idaho) had the overall lowest usage at 59.6%.

ITD District	Passenger Cars	Vans and Sport Utility Vehicles	Pickup Trucks	All Vehicles
1	84.4%	85.6%	75.0%	82.3%
2	88.1%	90.0%	74.9%	85.2%
3	88.9%	91.0%	81.3%	87.9%
4	78.4%	78.9%	56.8%	71.6%
5	67.3%	64.6%	54.6%	63.3%
6	65.7%	68.5%	39.5%	59.6%
Statewide	79.9%	82.3%	65.1%	76.9%

Usage rates for the occupants of pickup trucks continue to be significantly lower than usage rates for other types of passenger vehicles. The usage rate for pickup truck occupants in 2008 ranged from a high of 81.3% in District 3 (south-western Idaho) to a low of 39.5% in District 6 (eastern Idaho).

Seat belt usage varied by the type of roadway the vehicles were traveling on. It ranged from a high of 95.5% on urban interstates to a low of 54.0% on rural minor collectors.

There was no statistically significant difference between urban and rural sites. Usage on urban roadways was 76.3%, while usage on rural roadways was 78.3%. There was also no statistically significant difference between major and minor roadways. Usage on major roadways was 77.5% while usage on minor roadways was 76.6%. Major roads were defined as interstates and principal arterials. Minor roads were comprised of the rest of the roadway functional classifications.

Self-Reported Seat Belt Usage Results

Table 29 shows the self-reported seat belt use for people, ages 7 and older (ages 4 and older prior to 2005), in passenger cars, pickups, sport utility vehicles, and vans that were killed or seriously injured. The child passenger safety seat law was upgraded in 2005 to include children age 6 and younger. Research has indicated there is a tendency for persons involved in crashes to falsely report compliance with the seat belt law and thus, self-reported use tends to overstate actual use⁵. Seat belt use by severely or fatally injured occupants can be more directly assessed by law enforcement officers or emergency medical personnel, and is therefore, more reliable.

Injury Type	2004	2005	2006	2007	2008	Change 2007-2008	Avg. Change 2004-2007
Fatalities -Restraints Used	42.4%	40.0%	38.8%	34.8%	32.9%	-5.3%	-6.3%
Serious Injuries -Restraint Used	64.7%	64.7%	67.6%	66.1%	64.6%	-2.4%	0.8%

Of the 164 passenger motor vehicle occupants killed in 2008, only 54 were using seat belts. The National Highway Traffic Safety Administration estimates seat belts are 50% effective in preventing fatalities and serious injuries. By this estimate, we can deduce that 54 lives were saved in 2008 by seat belt usage and an additional 53 lives (half of those killed an unbelted) could have been saved if everyone had buckled up.

Costs of Injuries by Safety Restraint Use

Injury Type	Safety Restraints			Costs of Injuries		
	Used	Not Used	Unknown	Used	Not Used	Unknown
Fatality	54	105	5	\$320,012,105	\$622,245,760	\$29,630,750
Serious Injury	722	350	45	\$213,081,875	\$103,294,538	\$13,280,726
Visible Injury	2,084	475	106	\$172,270,739	\$39,265,164	\$8,762,331
Possible Injury	5,152	622	260	\$282,300,565	\$34,082,095	\$14,246,535
Total				\$987,665,285	\$798,887,556	\$65,920,343

Self-reported seat belt use is biased because of the penalties involved for not wearing a seat belt (meaning people misrepresent their belt use to avoid a ticket). While 88% of the motor vehicle occupants in crashes said they were wearing seat belts, the observational surveys show only 77% wearing seat belts. The number of people using seat belts is higher for the less severe injury categories because of this bias, but also because seat belts lessen the severity of injuries sustained in crashes. Had the occupants that were seriously injured and belted not been wearing a seat belt, they may have been killed.

Local Safety Restraint Usage

Table 31 presents self-reported restraint use rates for all motor vehicle occupants, 7 years old and older, involved in fatal and serious injury crashes for each county, for 2004 through 2008. Crash data provides an analysis of the restraint use at the local level. This information is self-reported to the investigating officer after a crash. The self-reported use is for all occupants, regardless of injury type, involved in fatal and serious injury crashes.

County by Population	2004	2005	2006	2007	2008	Change 2007-2008	Avg. Change 2004-2007
50,000 and over							
Ada	83.2%	85.0%	84.8%	83.8%	85.4%	2.0%	0.2%
Bannock	66.7%	73.5%	64.8%	73.6%	53.4%	-27.4%	4.0%
Bonneville	73.9%	63.2%	68.5%	69.4%	65.8%	-5.2%	-1.6%
Canyon	73.5%	79.1%	79.7%	82.2%	78.4%	-4.6%	3.8%
Kootenai	80.4%	79.4%	74.3%	79.2%	77.8%	-1.8%	-0.4%
Twin Falls	73.1%	82.6%	83.0%	71.2%	76.3%	7.1%	-0.2%
20,000 - 49,999							
Bingham	61.2%	58.0%	58.5%	49.5%	51.6%	4.3%	-6.6%
Blaine	60.7%	55.3%	76.5%	40.0%	47.4%	18.4%	-6.1%
Bonner	64.8%	73.0%	63.3%	72.7%	74.0%	1.7%	4.7%
Cassia	71.1%	65.6%	50.7%	55.1%	60.9%	10.6%	-7.2%
Elmore	65.4%	69.8%	69.9%	70.1%	69.1%	-1.5%	2.4%
Latah	59.2%	84.1%	63.5%	77.3%	81.6%	5.6%	13.1%
Madison	44.0%	48.0%	58.6%	42.1%	74.6%	77.1%	1.0%
Nez Perce	83.1%	73.8%	83.5%	70.8%	81.4%	15.0%	-4.4%
Payette	74.5%	79.0%	80.4%	51.2%	66.1%	29.2%	-9.5%
10,000 - 19,999							
Boundary	85.7%	58.3%	75.8%	69.4%	77.8%	12.0%	-3.5%
Franklin	47.8%	31.8%	66.7%	55.3%	60.9%	10.2%	19.6%
Fremont	73.0%	43.8%	66.7%	93.8%	63.8%	-32.0%	17.6%
Gem	72.7%	60.0%	61.5%	69.7%	77.3%	10.9%	-0.6%
Gooding	55.9%	52.5%	43.5%	57.1%	53.9%	-5.8%	2.7%
Idaho	53.2%	75.0%	71.4%	35.5%	42.9%	20.8%	-4.7%
Jefferson	56.8%	72.0%	46.2%	57.7%	25.0%	-56.7%	5.3%
Jerome	73.6%	63.1%	57.9%	63.1%	60.6%	-3.9%	-4.5%
Minidoka	66.2%	67.5%	64.7%	56.7%	53.9%	-5.0%	-4.9%
Owyhee	53.1%	32.6%	64.5%	16.3%	25.0%	53.6%	-5.2%
Shoshone	76.5%	14.8%	73.3%	65.0%	54.6%	-16.1%	101.0%

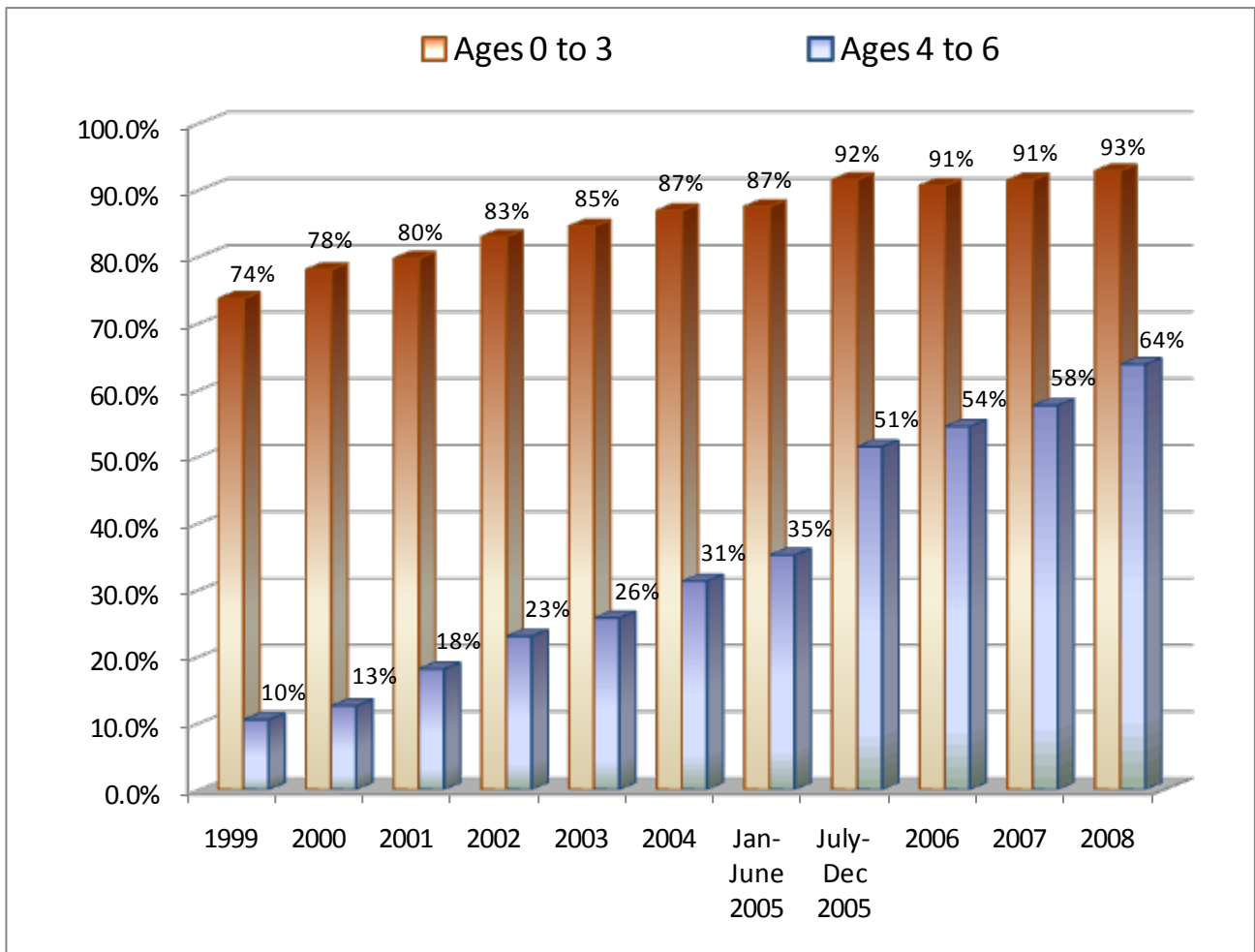
Table 31 (Continued)
Self-Reported Restraint Use in Fatal and Serious Injury Crashes by County: 2004-2008
in Passenger Cars, Pickups, Sport Utility Vehicles, and Vans

County by Population	2004	2005	2006	2007	2008	Change 2007-2008	Avg. Change 2004-2007
5,000 - 9,999							
Bear Lake	72.7%	75.0%	50.0%	65.0%	53.3%	-18.0%	-0.1%
Benewah	63.2%	63.6%	63.2%	68.2%	28.6%	-58.1%	2.7%
Boise	61.4%	59.1%	75.0%	77.6%	75.5%	-2.7%	8.9%
Caribou	50.0%	46.7%	92.9%	0.0%	60.0%	60.0%	-2.6%
Clearwater	78.6%	66.7%	42.3%	33.3%	36.4%	9.1%	-24.3%
Lemhi	83.3%	50.0%	59.3%	63.2%	80.0%	26.7%	-5.0%
Power	56.3%	52.6%	46.2%	41.7%	55.0%	32.0%	-9.5%
Teton	0.0%	28.6%	58.3%	50.0%	90.9%	81.8%	39.5%
Valley	60.0%	45.8%	48.2%	81.4%	81.8%	0.5%	16.8%
Washington	33.3%	73.3%	100.0%	78.6%	91.7%	16.7%	45.0%
0 - 4,999							
Adams	40.0%	31.3%	100.0%	38.5%	50.0%	30.0%	45.5%
Butte	50.0%	44.4%	50.0%	60.0%	69.2%	15.4%	7.1%
Camas	20.0%	50.0%	66.7%	0.0%	0.0%	0.0%	27.8%
Clark	100.0%	61.5%	40.0%	83.3%	88.2%	5.9%	11.6%
Custer	52.6%	76.5%	90.0%	40.0%	38.9%	-2.8%	2.5%
Lewis	62.5%	76.2%	0.0%	66.7%	50.0%	-25.0%	-55.9%
Lincoln	90.9%	54.6%	52.2%	44.4%	53.3%	20.0%	-19.7%
Oneida	55.2%	40.0%	58.3%	70.8%	42.9%	-39.5%	13.3%
Statewide Average	72.1%	72.2%	73.5%	72.3%	71.8%	-0.6%	0.1%

Child Safety Seat Usage by Age Groups

The child safety seat law was upgraded in 2005 to include all children under the age of 7 years old. The law took effect July 1, 2005. Prior to that, Idaho Code required every child, under the age of four, and weighing less than 40 pounds be restrained in a car safety seat that meets the federal standards when traveling in a non-commercial motor vehicle manufactured with seat belts after January 1, 1966.

Figure 14
Child Safety Seat Usage by Age Group in Crashes: 1999 - 2008



The change in the child safety seat law increased usage among the 4 to 6 year old age group by 16 percentage points in the last half of 2005. Increased publicity of the law change also seemed to have an effect on the 0 to 3 year old age group, increasing child safety seat usage by 5 percentage points.

While child safety seat usage continues to increase for the 4-6 year old age group, usage among the 0-3 year old age groups appears to have topped off.

Child Safety Seat – Self-Reported Usage

Table 32 shows self-reported child safety seat use for children in passenger cars, pickups, sport utility vehicles, and vans from 2004 to 2008. The higher numbers of children and lower percentage usage in 2005 is due to changing the criteria for examining child safety seat use to include children ages 4 through 6 years old.

Injury Type	2004	2005	2006	2007	2008	Change 2007-2008	Avg. Change 2004-2007
Fatalities							
Restrained	6	5	3	4	3	-25.0%	-7.8%
Unrestrained	1	0	0	2	2	0.0%	33.3%
Serious Injuries							
Restrained	3	17	7	15	15	0.0%	174.0%
Unrestrained	5	19	12	10	10	0.0%	75.5%
Visible Injuries							
Restrained	39	51	63	44	46	4.5%	8.0%
Unrestrained	12	39	45	40	16	-60.0%	76.4%
Possible Injuries							
Restrained	182	204	217	199	254	27.6%	3.4%
Unrestrained	30	122	71	77	65	-15.6%	91.1%
No Injuries							
Restrained	1,889	2,449	2,175	2,522	2,334	-7.5%	11.5%
Unrestrained	259	932	627	649	502	-22.7%	76.9%
Total Restrained	2,119	2,727	2,466	2,785	2,653	-4.7%	10.7%
Total Unrestrained	319	1,119	771	788	597	-24.2%	74.0%
% of Children Restrained	86.9%	70.9%	76.2%	77.9%	81.6%	4.7%	-2.9%

The National Highway Traffic Safety Administration estimates child safety seats are 69% effective in preventing fatalities and serious injuries. By this estimate we can deduce that a child safety seat saved 7 lives in 2008. Additionally, 33 serious injuries were prevented and 7 of the 10 unrestrained serious injuries may have been prevented if they had all been properly restrained.