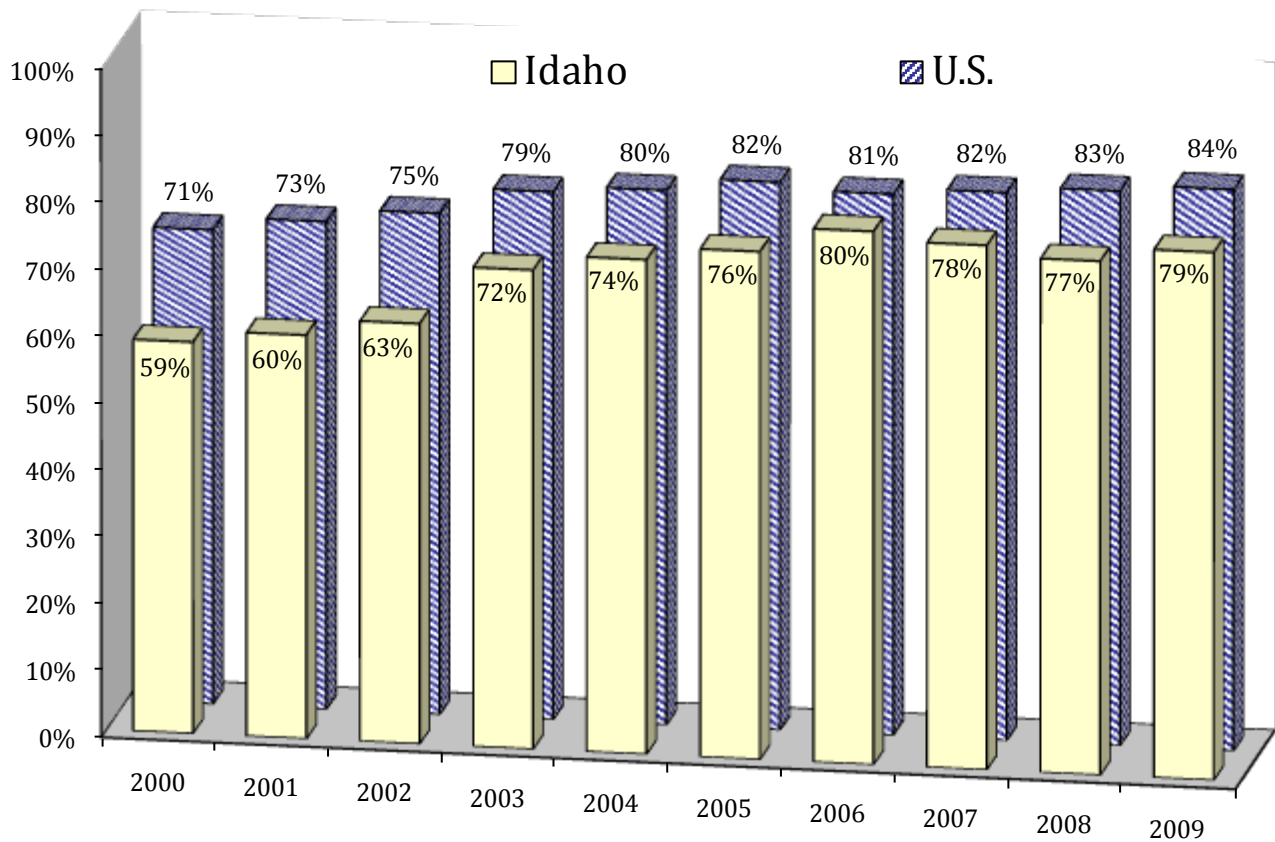


Safety Restraint Usage

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 92% 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.: 2000 - 2009



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: 2005-2009							
	2005	2006	2007	2008	2009	Change 2008-2009	Avg. Change 2005-2008
Ada	89.9%	93.0%	90.5%	91.1%	94.0%	3.2%	0.5%
Bannock	58.7%	66.9%	65.1%	66.0%	66.7%	1.1%	4.3%
Bingham	48.7%	53.9%	54.8%	50.5%	58.0%	14.8%	1.5%
Blaine	66.9%	66.6%	66.9%	72.7%	69.9%	-3.8%	2.9%
Bonner	73.0%	82.5%	89.8%	86.2%	71.1%	-17.5%	6.0%
Bonneville	70.7%	66.3%	60.9%	58.7%	65.0%	10.7%	-6.0%
Canyon	79.2%	80.5%	82.9%	86.3%	87.7%	1.6%	2.9%
Cassia	66.9%	58.9%	68.1%	61.9%	65.6%	6.1%	-1.8%
Elmore	68.3%	70.8%	72.8%	71.3%	72.2%	1.2%	1.5%
Kootenai	78.5%	89.0%	86.3%	78.1%	82.2%	5.3%	0.3%
Latah	78.6%	79.4%	76.7%	81.8%	80.3%	-1.9%	1.4%
Madison	62.2%	65.3%	59.0%	60.7%	68.8%	13.4%	-0.6%
Minidoka	75.3%	70.4%	66.7%	75.2%	66.1%	-12.0%	0.3%
Nez Perce	82.5%	85.1%	84.6%	86.9%	84.0%	-3.4%	1.8%
Payette	75.4%	86.9%	83.4%	82.1%	88.5%	7.8%	3.2%
Twin Falls	74.5%	68.4%	71.1%	73.7%	75.5%	2.5%	-0.2%
Statewide	76.0%	79.8%	78.5%	76.9%	79.2%	3.1%	0.4%

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 90.7%, while district 5 (south-eastern Idaho) had the overall lowest usage at 64.7%.

ITD District	Passenger Cars	Vans and Sport Utility Vehicles	Pickup Trucks	All Vehicles
1	80.2%	82.3%	67.7%	77.2%
2	86.6%	89.2%	71.3%	82.8%
3	92.2%	93.0%	84.4%	90.7%
4	77.0%	77.2%	57.0%	70.3%
5	69.2%	71.1%	49.1%	64.7%
6	71.2%	77.5%	47.5%	66.7%
Statewide	82.7%	84.5%	67.3%	79.2%

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 2009 ranged from a high of 84.4% in District 3 (south-western Idaho) to a low of 47.5% in District 6 (north-eastern Idaho).

Seat belt usage varied by the type of roadway the vehicles were traveling on. It ranged from a high of 98.0% on urban interstates to a low of 68.4% on rural minor collectors.

There was no statistically significant difference between urban and rural sites. Usage on urban roadways was 81.1%, while usage on rural roadways was 74.8%. There was also no statistically significant difference between major and minor roadways. Usage on major roadways was 81.5% while usage on minor roadways was 77.8%. 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, 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	2005	2006	2007	2008	2009	Change 2008-2009	Avg. Change 2005-2008
Fatalities -Restrains Used	40.0%	38.8%	34.8%	32.9%	41.0%	24.6%	-6.2%
Serious Injuries -Restraint Used	64.7%	67.6%	66.1%	64.6%	65.9%	2.1%	0.0%

Of the 156 passenger motor vehicle occupants killed in 2009, only 64 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, there were 64 lives were saved in 2009 by seat belt usage and an additional 43 lives (half of those killed and 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	64	85	7	\$383,773,160	\$509,698,729	\$41,975,189
Serious Injury	682	305	48	\$203,664,655	\$91,081,700	\$14,334,169
Visible Injury	2,071	530	108	\$173,227,117	\$44,331,421	\$9,033,573
Possible Injury	4,928	612	235	\$273,230,118	\$33,931,987	\$13,029,439
Total				\$1,033,895,050	\$679,043,837	\$78,372,371

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 80% of the motor vehicle occupants in crashes said they were wearing seat belts, the observational surveys show only 79% 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 2005 through 2009. 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	2005	2006	2007	2008	2009	Change 2008-2009	Avg. Change 2005-2008
50,000 and over							
Ada	85.0%	84.8%	83.8%	85.4%	83.9%	-1.8%	0.2%
Bannock	73.5%	64.8%	73.6%	53.4%	64.2%	20.1%	-8.6%
Bonneville	63.2%	68.5%	69.4%	65.8%	72.4%	10.2%	1.5%
Canyon	79.1%	79.7%	82.2%	78.4%	80.1%	2.1%	-0.3%
Kootenai	79.4%	74.3%	79.2%	77.8%	82.0%	5.4%	-0.5%
Twin Falls	82.6%	83.0%	71.2%	76.3%	76.4%	0.1%	-2.2%
20,000 - 49,999							
Bingham	58.0%	58.5%	49.5%	51.6%	54.6%	5.7%	-3.4%
Blaine	55.3%	76.5%	40.0%	47.4%	29.3%	-38.2%	3.0%
Bonner	73.0%	63.3%	72.7%	74.0%	84.7%	14.5%	1.1%
Cassia	65.6%	50.7%	55.1%	60.9%	60.0%	-1.5%	-1.2%
Elmore	69.8%	69.9%	70.1%	69.1%	74.4%	7.7%	-0.3%
Latah	84.1%	63.5%	77.3%	81.6%	70.0%	-14.2%	1.0%
Madison	48.0%	58.6%	42.1%	74.6%	55.6%	-25.5%	23.7%
Nez Perce	73.8%	83.5%	70.8%	81.4%	58.8%	-27.9%	4.3%
Payette	79.0%	80.4%	51.2%	66.1%	63.5%	-3.9%	-1.8%
10,000 - 19,999							
Boundary	58.3%	75.8%	69.4%	77.8%	40.0%	-48.6%	11.2%
Franklin	31.8%	66.7%	55.3%	60.9%	58.8%	-3.4%	34.2%
Fremont	43.8%	66.7%	93.8%	63.8%	63.6%	-0.2%	20.3%
Gem	60.0%	61.5%	69.7%	77.3%	68.0%	-12.0%	8.9%
Gooding	52.5%	43.5%	57.1%	53.9%	65.0%	20.7%	2.8%
Idaho	75.0%	71.4%	35.5%	42.9%	45.2%	5.4%	-11.4%
Jefferson	72.0%	46.2%	57.7%	25.0%	60.0%	140.0%	-22.5%
Jerome	63.1%	57.9%	63.1%	60.6%	56.4%	-6.9%	-1.1%
Minidoka	67.5%	64.7%	56.7%	53.9%	61.5%	14.3%	-7.2%
Owyhee	32.6%	64.5%	16.3%	25.0%	42.9%	71.4%	25.5%
Shoshone	14.8%	73.3%	65.0%	54.6%	66.7%	22.2%	122.6%

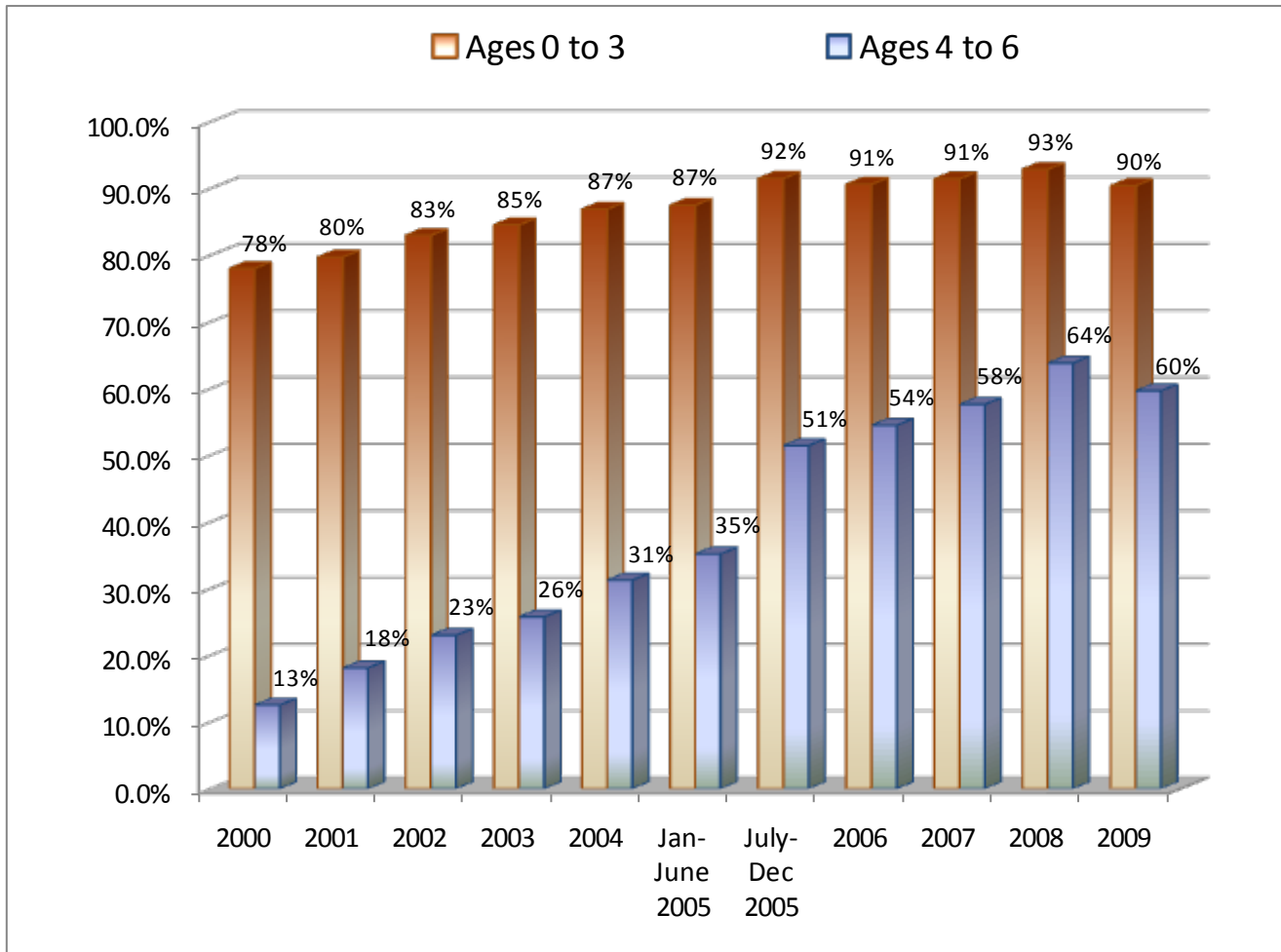
Table 31 (Continued)
Self-Reported Restraint Use in Fatal and Serious Injury Crashes by County: 2005-2009
in Passenger Cars, Pickups, Sport Utility Vehicles, and Vans

County by Population	2005	2006	2007	2008	2009	Change 2008-2009	Avg. Change 2005-2008
5,000 - 9,999							
Bear Lake	75.0%	50.0%	65.0%	53.3%	31.3%	-41.4%	-7.1%
Benewah	63.6%	63.2%	68.2%	28.6%	9.5%	-66.7%	-17.0%
Boise	59.1%	75.0%	77.6%	75.5%	62.3%	-17.5%	9.2%
Caribou	46.7%	92.9%	0.0%	60.0%	80.0%	60.0%	33.0%
Clearwater	66.7%	42.3%	33.3%	36.4%	41.7%	14.6%	-16.2%
Lemhi	50.0%	59.3%	63.2%	80.0%	50.0%	-37.5%	17.3%
Power	52.6%	46.2%	41.7%	55.0%	30.8%	-44.1%	3.3%
Teton	28.6%	58.3%	50.0%	90.9%	40.0%	-56.0%	57.2%
Valley	45.8%	48.2%	81.4%	81.8%	50.0%	-38.9%	24.9%
Washington	73.3%	100.0%	78.6%	91.7%	56.3%	-38.6%	10.5%
0 - 4,999							
Adams	31.3%	100.0%	38.5%	50.0%	85.7%	71.4%	62.8%
Butte	44.4%	50.0%	60.0%	69.2%	90.0%	30.0%	16.0%
Camas	50.0%	66.7%	0.0%	0.0%	72.7%	100.0%	-66.7%
Clark	61.5%	40.0%	83.3%	88.2%	72.7%	-17.6%	26.4%
Custer	76.5%	90.0%	40.0%	38.9%	75.0%	92.9%	-13.5%
Lewis	76.2%	0.0%	66.7%	50.0%	60.0%	20.0%	-91.7%
Lincoln	54.6%	52.2%	44.4%	53.3%	50.0%	-6.2%	0.3%
Oneida	40.0%	58.3%	70.8%	42.9%	44.4%	3.7%	9.3%
Statewide Average	72.2%	73.5%	72.3%	71.8%	71.7%	-0.2%	-0.2%

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: 2000 - 2009



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.

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 2005 to 2009.

Injury Type	2005	2006	2007	2008	2009	Change 2008-2009	Avg. Change 2005-2008
Fatalities							
Restrained	5	3	4	3	1	-66.7%	-10.6%
Unrestrained	0	0	2	2	3	50.0%	66.7%
Serious Injuries							
Restrained	17	7	15	15	12	-20.0%	18.5%
Unrestrained	19	12	10	10	13	30.0%	-17.8%
Visible Injuries							
Restrained	51	63	44	46	54	17.4%	-0.7%
Unrestrained	39	45	40	16	21	31.3%	-18.6%
Possible Injuries							
Restrained	204	217	199	254	175	-31.1%	8.6%
Unrestrained	122	71	77	65	54	-16.9%	-16.3%
No Injuries							
Restrained	2,449	2,175	2,522	2,334	2,168	-7.1%	-0.9%
Unrestrained	932	627	649	502	564	12.4%	-17.3%
Total Restrained	2,727	2,466	2,785	2,653	2,411	-9.1%	-0.5%
Total Unrestrained	1,119	771	788	597	655	9.7%	-17.7%
% of Children Restrained	70.9%	76.2%	77.9%	81.6%	78.6%	-3.7%	4.8%

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 2 lives in 2009. Additionally, 27 serious injuries were prevented and 9 of the 13 unrestrained serious injuries may have been prevented if they had all been properly restrained.