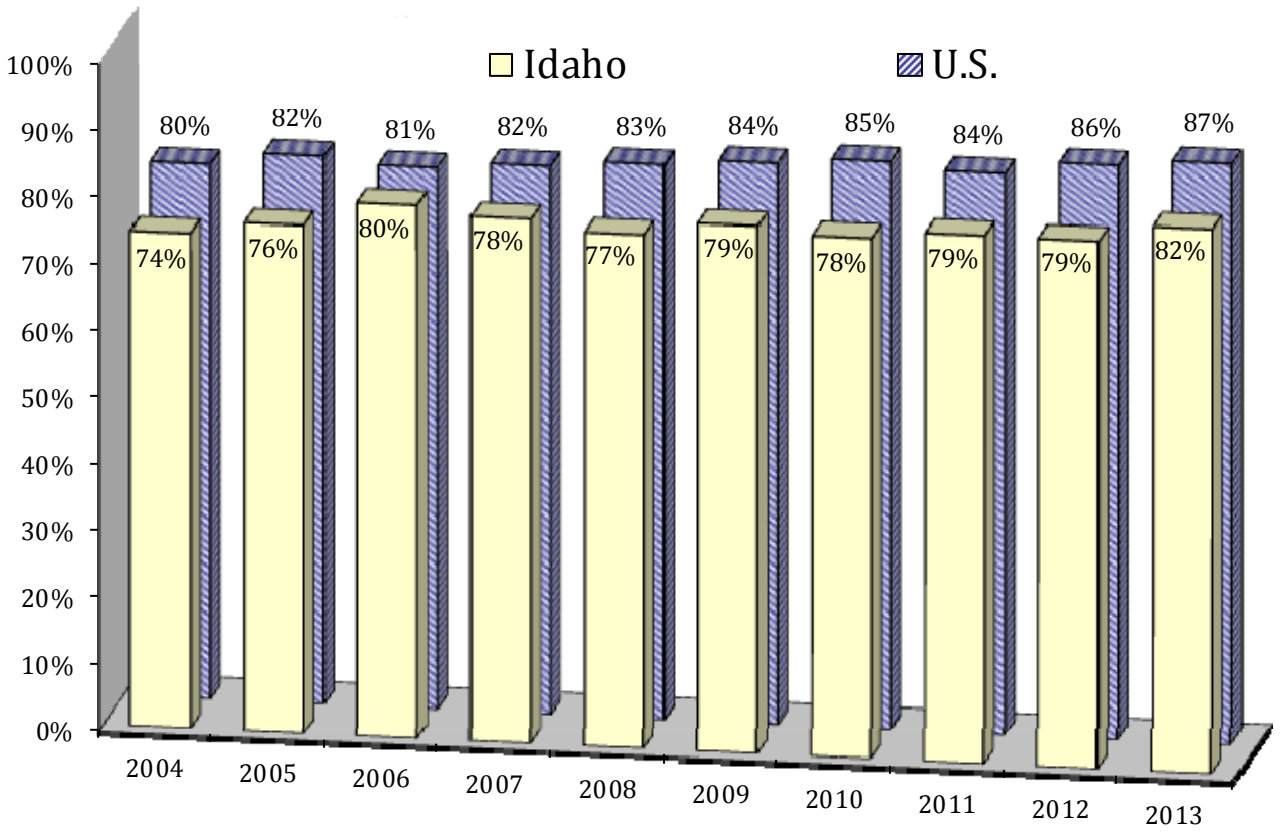
Safety Restraint Usage

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.: 2004 - 2013



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. The methodology for the observational seat belt survey was revised in 2013 and a new set of counties was selected for the sample.

Table 27
Observed Seat Belt Use by County: 2009-2013

	2009	2010	2011	2012	2013	Change 2012-2013	Avg. Change 2009-2012
Ada	94.0%	96.9%	95.5%	94.7%	85.2%	-10.1%	0.3%
Bannock	66.7%	65.5%	62.2%	67.2%	82.1%	22.3%	0.4%
Bingham	58.0%	54.2%	55.0%	57.0%	79.5%	39.4%	-0.5%
Blaine	69.9%	79.1%	71.4%	71.2%	-----	-----	1.0%
Bonner	71.1%	74.0%	66.9%	71.0%	75.6%	6.4%	0.2%
Bonneville	65.0%	65.2%	67.3%	67.3%	59.4%	-11.6%	1.2%
Canyon	87.7%	90.2%	92.7%	94.2%	81.8%	-13.2%	2.4%
Cassia	65.6%	60.7%	56.5%	57.8%	-----	-----	-4.1%
Elmore	72.2%	72.3%	72.8%	76.4%	82.8%	8.3%	1.9%
Gem	-----	-----	-----	-----	55.5%	-----	-----
Gooding	-----	-----	-----	-----	62.8%	-----	-----
Kootenai	82.2%	70.2%	75.8%	72.3%	64.5%	-10.8%	-3.7%
Latah	80.3%	84.7%	81.0%	85.4%	60.9%	-28.7%	2.2%
Madison	68.8%	63.2%	68.6%	74.4%	51.1%	-31.4%	3.0%
Minidoka	66.1%	67.3%	66.1%	60.5%	56.3%	-6.9%	-2.8%
Nez Perce	84.0%	89.0%	88.6%	86.5%	80.7%	-6.6%	1.0%
Payette	88.5%	91.3%	92.6%	92.4%	80.2%	-13.2%	1.4%
Twin Falls	75.5%	76.6%	69.1%	73.6%	64.4%	-12.5%	-0.6%
Statewide	**79.2%**	**77.9%**	**79.1%**	**79.0%**	**81.6%**	**3.3%**	**-0.1%**

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. The methodology for the observational seat belt survey was revised in 2013 and a new set of counties was selected for the sample, as well as an entirely new set of observation sites.

Table 28 shows the observed seat belt use for the Idaho Transportation Department (ITD) districts[4] by vehicle type. A map of the transportation districts can be found in Appendix A. District 3 (south-western Idaho) had the highest overall usage at 85.8%, while district 1 (northern Idaho) had the overall lowest usage at 72.3%.

Table 28
Idaho Safety Belt Observation Survey: 2013 – Usage by Vehicle Type

ITD District	Passenger Cars, Vans, and Sport Utility Vehicles	Pickup Trucks	All Vehicles
1	75.7%	65.3%	72.3%
2	86.9%	79.0%	85.0%
3	87.1%	81.7%	85.8%
4	79.9%	61.9%	74.2%
5	81.0%	82.0%	81.2%
6	83.3%	59.2%	76.8%
Statewide	**84.4%**	**73.5%**	**81.6%**

Usage rates for the occupants of pickup trucks continue to be lower than usage rates for other types of passenger vehicles. The usage rate for pickup truck occupants in 2013 ranged from a high of 82.0% in District 5 (south-eastern Idaho) to a low of 59.2% in District 6 (north-eastern Idaho).

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 use[5]. 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.

Table 29
Self-Reported Seat Belt Use: 2009-2013
Age 7 and Older in Passenger Cars, Pickups, Sport Utility Vehicles, and Vans

Injury Type	2009	2010	2011	2012	2013	Change 2012-2013	Avg. Change 2009-2012
Fatalities -Restraints Used	41.0%	46.7%	31.7%	43.0%	33.3%	-22.4%	5.7%
Serious Injuries -Restraint Used	65.9%	65.4%	66.2%	65.8%	63.2%	-4.0%	-0.1%

Of the 156 passenger motor vehicle occupants over the age of 7 killed in 2013, only 52 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 52 lives saved in 2013 by seat belt usage and an additional 49 lives (half of those killed and unbelted) could have been saved if everyone had buckled up.

Costs of Injuries by Safety Restraint Use

Table 30
2013 Costs of Injuries
Persons Using Safety Restraints versus Persons Not Using Safety Restraints
Age 7 & Older in Passenger Cars, Pickups, Sport Utility Vehicles, and Vans

	Safety Restraints			Costs of Injuries		
Injury Type	Used	Not Used	Unknown	Used	Not Used	Unknown
Fatality	52	97	7	$332,358,111	$619,975,706	$44,740,515
Serious Injury	590	274	70	$187,798,282	$87,214,795	$22,281,152
Visible Injury	2,279	428	189	$203,183,491	$38,158,198	$16,850,232
Possible Injury	5,075	466	331	$299,917,792	$27,539,249	$19,561,141
Total				**$1,023,257,676**	**$772,887,950**	**$103,433,040**

Self-reported seat belt use can be biased because of the penalties involved for not wearing a seat belt (meaning people misrepresent their belt use to avoid a ticket). 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.

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 2009 through 2013. 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. Values of "---" indicate there were no fatal or serious injury crashes.

Table 31
Self-Reported Restraint Use of All Occupants in Fatal and Serious Injury Crashes by County: 2009-2013
in Passenger Cars, Pickups, Sport Utility Vehicles, and Vans

County by Population	2009	2010	2011	2012	2013	Change 2012-2013	Avg. Change 2009-2012
50,000 and over							
Ada	83.9%	85.1%	87.9%	87.8%	83.3%	-5.2%	1.5%
Bannock	64.2%	72.6%	72.9%	62.4%	61.5%	-1.5%	-0.3%
Bonneville	72.4%	64.1%	63.5%	75.3%	65.5%	-13.1%	2.0%
Canyon	80.1%	76.4%	81.2%	82.7%	79.6%	-3.7%	1.2%
Kootenai	82.0%	77.3%	81.1%	77.8%	76.6%	-1.6%	-1.6%
Twin Falls	76.4%	82.1%	76.3%	79.2%	69.2%	-12.6%	1.4%
20,000 - 49,999							
Bingham	54.6%	47.7%	62.7%	41.4%	60.4%	46.1%	-5.0%
Blaine	29.3%	52.4%	70.6%	42.9%	82.4%	92.2%	24.8%
Bonner	84.7%	83.3%	64.9%	62.9%	73.2%	16.5%	-9.0%
Cassia	60.0%	61.4%	76.5%	53.3%	70.0%	31.3%	-1.1%
Elmore	74.4%	67.7%	62.7%	57.8%	69.2%	19.8%	-8.1%
Jefferson	60.0%	57.9%	53.3%	48.1%	35.3%	-26.7%	-7.0%
Jerome	56.4%	74.3%	69.8%	71.9%	62.9%	-12.5%	9.6%
Latah	70.0%	75.0%	60.7%	77.6%	58.3%	-24.8%	5.3%
Madison	55.6%	56.5%	43.3%	63.2%	69.7%	10.4%	8.0%
Minidoka	61.5%	60.6%	73.7%	72.7%	53.3%	-26.7%	6.3%
Nez Perce	58.8%	76.1%	82.9%	74.1%	63.8%	-14.0%	9.3%
Payette	63.5%	75.0%	71.4%	74.1%	70.7%	-4.5%	5.7%
10,000 - 19,999							
Boundary	40.0%	70.6%	61.1%	72.7%	80.0%	10.0%	27.4%
Franklin	58.8%	68.4%	88.9%	69.2%	14.3%	-79.4%	8.0%
Fremont	63.6%	52.9%	69.2%	79.3%	36.0%	-54.6%	9.5%
Gem	68.0%	76.0%	64.3%	95.0%	66.7%	-29.8%	14.7%
Gooding	65.0%	52.9%	39.6%	62.5%	41.7%	-33.3%	4.7%
Idaho	45.2%	58.1%	60.5%	50.0%	53.7%	7.3%	5.1%
Owyhee	42.9%	52.4%	18.2%	55.6%	47.4%	-14.7%	54.2%
Shoshone	66.7%	80.0%	50.0%	60.0%	36.7%	-38.9%	0.8%
Teton	40.0%	50.0%	----	50.0%	77.8%	55.6%	----

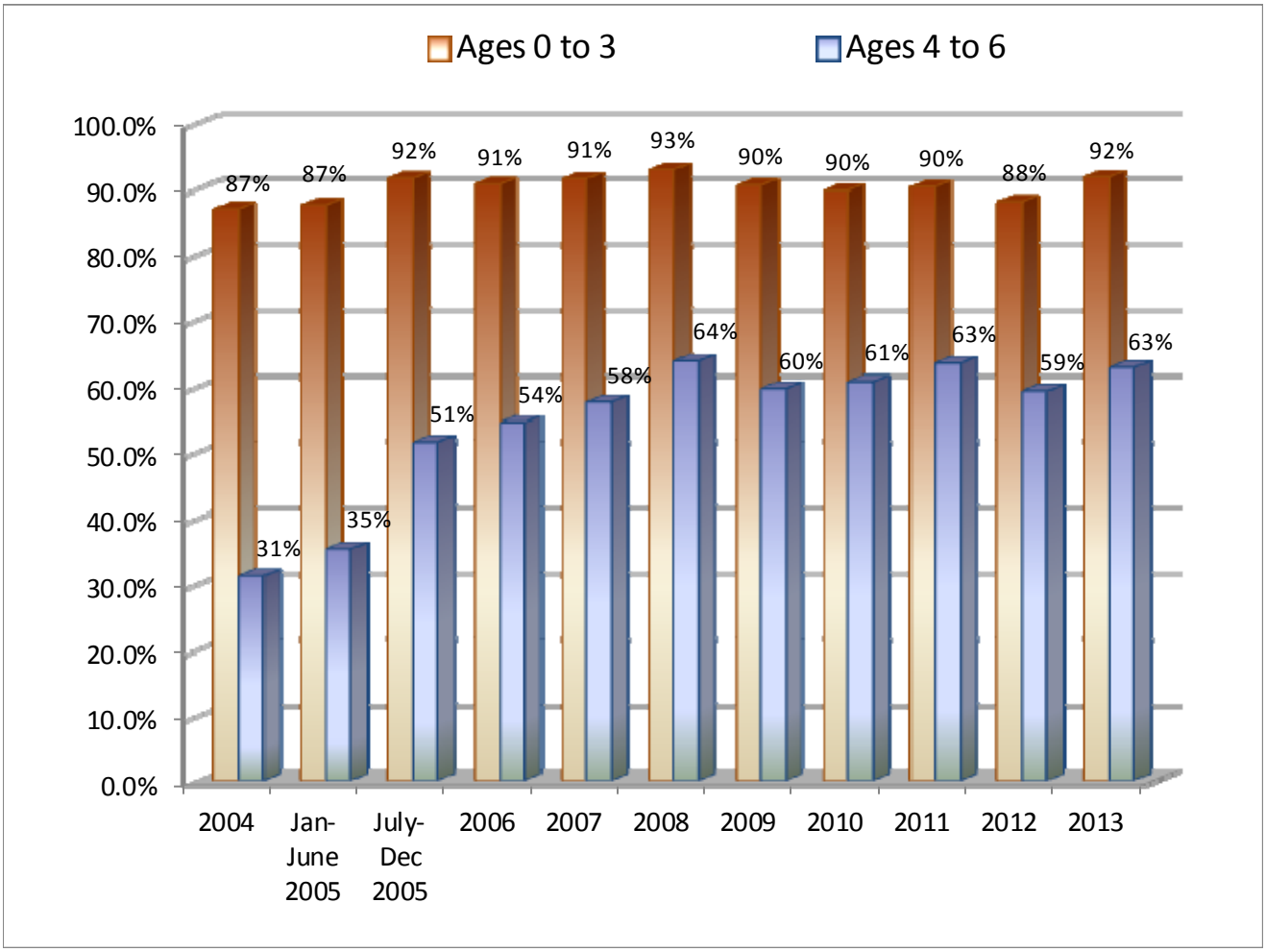
Table 31 (Continued)
Self-Reported Restraint Use of All Occupants in Fatal and Serious Injury Crashes by County: 2009-2013
in Passenger Cars, Pickups, Sport Utility Vehicles, and Vans

County by Population	2009	2010	2011	2012	2013	Change 2012-2013	Avg. Change 2009-2012
5,000 - 9,999							
Bear Lake	31.3%	72.2%	66.7%	55.0%	80.0%	45.5%	35.3%
Benewah	9.5%	32.1%	85.7%	52.6%	35.3%	-32.9%	121.9%
Boise	62.3%	69.2%	76.3%	45.5%	73.5%	61.8%	-6.3%
Caribou	80.0%	33.3%	100.0%	50.0%	54.5%	9.1%	30.6%
Clearwater	41.7%	44.4%	10.0%	100.0%	55.6%	-44.4%	276.4%
Lemhi	50.0%	73.3%	40.0%	30.0%	46.7%	55.6%	-7.9%
Lincoln	50.0%	54.6%	44.4%	16.7%	37.5%	125.0%	-24.0%
Power	30.8%	38.2%	34.3%	50.0%	80.0%	60.0%	19.9%
Valley	50.0%	36.7%	64.7%	77.3%	94.4%	22.2%	23.1%
Washington	56.3%	68.8%	64.7%	84.6%	33.3%	-60.6%	15.7%
0 - 4,999							
Adams	85.7%	100.0%	100.0%	28.6%	68.8%	140.6%	-18.3%
Butte	90.0%	50.0%	0.0%	---	0.0%	---	-72.2%
Camas	72.7%	---	---	---	---	---	---
Clark	72.7%	84.6%	50.0%	66.7%	33.3%	-50.0%	2.9%
Custer	75.0%	12.5%	44.4%	18.2%	91.7%	404.2%	37.7%
Lewis	60.0%	92.3%	70.0%	66.7%	33.3%	-50.0%	8.3%
Oneida	44.4%	55.6%	66.7%	50.0%	37.5%	-25.0%	6.7%
Statewide Average	**71.7%**	**73.1%**	**74.4%**	**74.6%**	**71.4%**	**-4.2%**	**1.3%**

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: 2004 - 2013



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.

Parents are continuing to place their very young children (ages 0-3) in a child safety seat at a high rate (92%), while only 63% place their toddlers (ages 4-6) in child safety seats or booster seats, even though they are too small for seat belts to fit them correctly.

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 2009 to 2013.

Table 32
Self-Reported Child Safety Seat Use by Injury Type: 2009-2013
Under Age 7
in Passenger Cars, Pickups, Sport Utility Vehicles, and Vans

Injury Type	2009	2010	2011	2012	2013	Change 2012-2013	Avg. Change 2009-2012
Fatalities							
Restrained	1	3	2	1	1	0.0%	38.9%
Unrestrained	3	1	2	1	2	100.0%	-5.6%
Serious Injuries							
Restrained	12	10	10	7	9	28.6%	-15.6%
Unrestrained	13	13	7	6	4	-33.3%	-20.1%
Visible Injuries							
Restrained	54	65	47	44	55	25.0%	-4.6%
Unrestrained	21	32	22	36	35	-2.8%	28.3%
Possible Injuries							
Restrained	175	193	173	179	209	16.8%	1.1%
Unrestrained	54	67	51	59	68	15.3%	5.3%
No Injuries							
Restrained	2,168	2,193	2,019	1,913	2,053	7.3%	-4.0%
Unrestrained	564	580	454	592	501	-15.4%	3.8%
Total Restrained	2,411	2,465	2,251	2,144	2,324	8.4%	-3.7%
Total Unrestrained	655	695	536	694	608	-12.4%	4.2%
% of Children Restrained	78.6%	78.0%	80.8%	75.5%	79.3%	4.9%	-1.2%

The National Highway Traffic Safety Administration (NHTSA) estimates child safety seats are 69% effective in preventing fatalities and serious injuries. By this estimate we can deduce that a child safety seats saved 2 lives in 2013. Additionally, 20 serious injuries were prevented and 3 of the 4 unrestrained serious injuries may have been prevented if they had all been properly restrained.