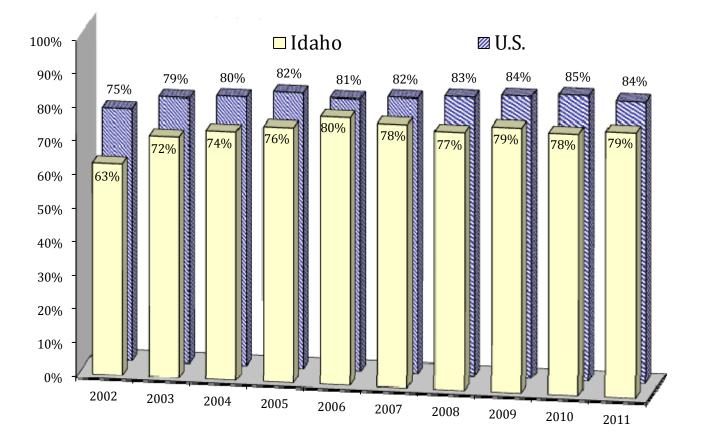
Safety Restraint Usage

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.: 2002 - 2011



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 Observed Seat Belt Use by County: 2007-2011										
	2007	2008	2009	2010	2011	Change 2010-2011	Avg. Change 2007-2010			
Ada	90.5%	91.1%	94.0%	96.9%	95.5%	-1.5%	2.3%			
Bannock	65.1%	66.0%	66.7%	65.5%	62.2%	-5.1%	0.2%			
Bingham	54.8%	50.5%	58.0%	54.2%	55.0%	1.5%	0.2%			
Blaine	66.9%	72.7%	69.9%	79.1%	71.4%	-9.7%	6.0%			
Bonner	89.8%	86.2%	71.1%	74.0%	66.9%	-9.5%	-5.8%			
Bonneville	60.9%	58.7%	65.0%	65.2%	67.3%	3.1%	2.5%			
Canyon	82.9%	86.3%	87.7%	90.2%	92.7%	2.7%	2.9%			
Cassia	68.1%	61.9%	65.6%	60.7%	56.5%	-6.9%	-3.5%			
Elmore	72.8%	71.3%	72.2%	72.3%	72.8%	0.7%	-0.2%			
Kootenai	86.3%	78.1%	82.2%	70.2%	75.8%	8.1%	-6.3%			
Latah	76.7%	81.8%	80.3%	84.7%	81.0%	-4.4%	3.4%			
Madison	59.0%	60.7%	68.8%	63.2%	68.6%	8.7%	2.7%			
Minidoka	66.7%	75.2%	66.1%	67.3%	66.1%	-1.8%	0.8%			
Nez Perce	84.6%	86.9%	84.0%	89.0%	88.6%	-0.5%	1.8%			
Payette	83.4%	82.1%	88.5%	91.3%	92.6%	1.4%	3.2%			
Twin Falls	71.1%	73.7%	75.5%	76.6%	69.1%	-9.7%	2.5%			
Statewide	78.5%	76.9%	79.2%	77.9%	79.1%	1.5%	-0.2%			

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

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 93.4%, while district 5 (south-eastern Idaho) had the overall lowest usage at 60.6%.

	Table 28 Idaho Safety Belt Observation Survey: 2011 – Usage by Vehicle Type										
Vans and ITD District Passenger Cars Sport Utility Vehicles Pickup Trucks All Vehicles											
1	72.7%	76.7%	66.2%	71.7%							
2	89.5%	91.0%	76.1%	86.2%							
3	94.3%	94.4%	90.4%	93.4%							
4	71.8%	76.7%	51.7%	66.7%							
5	62.5%	68.6%	47.3%	60.6%							
6	71.0%	72.6%	55.0%	68.0%							
Statewide	81.0%	83.4%	71.2%	79.1%							

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 2011 ranged from a high of 90.4% in District 3 (south-western Idaho) to a low of 47.3% in District 5 (south-eastern Idaho).

Seat belt usage varied by the type of roadway the vehicles were traveling on. It ranged from a high of 97.5% on urban interstates to a low of 44.8% on rural minor collectors (although there is only one site with this functional class and it has a very low amount of traffic).

There was no statistically significant difference between urban and rural sites. Usage on urban roadways was 81.0%, while usage on rural roadways was 74.4%. There was also no statistically significant difference between major and minor roadways. Usage on major roadways was 83.6% 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, 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.

Table 29 Self-Reported Seat Belt Use: 2007-2011 Age 7 and Older in Passenger Cars, Pickups, Sport Utility Vehicles, and Vans									
Change Avg. Chan Injury Type 2007 2008 2009 2010 2011 2010-2011 2007-201									
Fatalities -Restraints Used	34.8%	32.9%	41.0%	46.7%	31.7%	-32.1%	11.1%		
Serious Injuries -Restraint Used	66.1%	64.6%	65.9%	65.4%	66.2%	1.2%	-0.3%		

Of the 123 passenger motor vehicle occupants killed in 2011, only 39 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 39 lives were saved in 2011 by seat belt usage and an additional 39 lives (half of those killed and unbelted) could have been saved if <u>everyone</u> had buckled up.

Costs of Injuries by Safety Restraint Use

Table 30 2011 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										
Injury Type	Safety RestraintsCosts of InjuriesUsedNot UsedUnknownUsedNot UsedUnknown									
Fatality	39	77	7	\$241,549,039	\$476,904,512	\$43,354,956				
Serious Injury	637	278	47	\$196,479,301	\$85,747,638	\$14,496,903				
Visible Injury	2,152	417	150	\$185,919,151	\$36,026,155	\$12,959,049				
Possible Injury	4,657	503	286	\$266,692,124	\$28,805,269	\$16,378,344				
Total				\$890,639,615	\$627,483,575	\$87,189,251				

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. 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 2007 through 2011. 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.

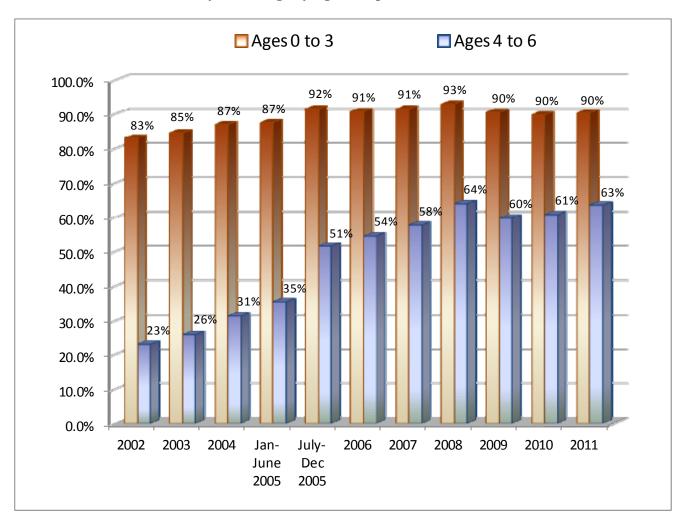
Table 31 Self-Reported Restraint Use of All Occupants in Fatal and Serious Injury Crashes by County: 2007-2011 in Passenger Cars, Pickups, Sport Utility Vehicles, and Vans									
	_		-			Change	Avg. Chang		
County by Population 50,000 and over	2007	2008	2009	2010	2011	2010-2011	2007-201		
Ada	83.8%	85.4%	83.9%	85.1%	87.9%	3.3%	0.5%		
Bannock	73.6%	53.4%	64.2%	72.6%	72.9%	0.4%	1.9%		
Bonneville	69.4%	65.8%	72.4%	64.1%	63.5%	-0.9%	-2.2%		
Canyon	82.2%	78.4%	80.1%	76.4%	81.2%	6.3%	-2.3%		
Kootenai	79.2%	77.8%	82.0%	77.3%	81.1%	4.8%	-0.7%		
Twin Falls	71.2%	76.3%	76.4%	82.1%	76.3%	-7.1%	4.9%		
20,000 - 49,999									
Bingham	49.5%	51.6%	54.6%	47.7%	62.7%	31.4%	-0.9%		
Blaine	40.0%	47.4%	29.3%	52.4%	70.6%	34.8%	19.7%		
Bonner	72.7%	74.0%	84.7%	83.3%	64.9%	-22.1%	4.9%		
Cassia	55.1%	60.9%	60.0%	61.4%	76.5%	24.5%	3.8%		
Elmore	70.1%	69.1%	74.4%	67.7%	62.7%	-7.3%	-1.0%		
Jefferson	57.7%	25.0%	60.0%	57.9%	53.3%	-7.9%	26.6%		
Jerome	63.1%	60.6%	56.4%	74.3%	69.8%	-6.1%	7.0%		
Latah	77.3%	81.6%	70.0%	75.0%	60.7%	-19.1%	-0.5%		
Madison	42.1%	74.6%	55.6%	56.5%	43.3%	-23.3%	17.8%		
Minidoka	56.7%	53.9%	61.5%	60.6%	73.7%	21.6%	2.6%		
Nez Perce	70.8%	81.4%	58.8%	76.1%	82.9%	8.9%	5.5%		
Payette	51.2%	66.1%	63.5%	75.0%	71.4%	-4.8%	14.5%		
10,000 - 19,999									
Boundary	69.4%	77.8%	40.0%	70.6%	61.1%	-13.4%	13.3%		
Franklin	55.3%	60.9%	58.8%	68.4%	88.9%	29.9%	7.7%		
Fremont	93.8%	63.8%	63.6%	52.9%	69.2%	30.8%	-16.3%		
Gem	69.7%	77.3%	68.0%	76.0%	64.3%	-15.4%	3.5%		
Gooding	57.1%	53.9%	65.0%	52.9%	39.6%	-25.2%	-1.2%		
Idaho	35.5%	42.9%	45.2%	58.1%	60.5%	4.2%	18.2%		
Owyhee	16.3%	25.0%	42.9%	52.4%	18.2%	-65.3%	49.1%		
Shoshone	65.0%	54.6%	66.7%	80.0%	50.0%	-37.5%	8.7%		
Teton	50.0%	90.9%	40.0%	50.0%			16.9%		
Washington	78.6%	91.7%	56.3%	68.8%	64.7%	-5.9%	0.1%		

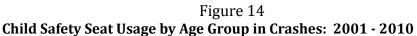
Table 31 (Continued)Self-Reported Restraint Use in Fatal and Serious Injury Crashes by County: 2007-2011in Passenger Cars, Pickups, Sport Utility Vehicles, and Vans

County by Population	2007	2008	2009	2010	2011	Change 2010-2011	Avg. Change 2007-2010
5,000 - 9,999	-	-	-	-	-	-	
Bear Lake	65.0%	53.3%	31.3%	72.2%	66.7%	-7.7%	23.9%
Benewah	68.2%	28.6%	9.5%	32.1%	85.7%	166.7%	37.6%
Boise	77.6%	75.5%	62.3%	69.2%	76.3%	10.2%	-3.0%
Caribou	0.0%	60.0%	80.0%	33.3%	100.0%	60.0%	25.0%
Clearwater	33.3%	36.4%	41.7%	44.4%	10.0%	-77.5%	10.1%
Lemhi	63.2%	80.0%	50.0%	73.3%	40.0%	-45.5%	11.9%
Lincoln	44.4%	53.3%	50.0%	54.6%	44.4%	-18.5%	7.6%
Power	41.7%	55.0%	30.8%	38.2%	34.3%	-10.3%	4.1%
Valley	81.4%	81.8%	50.0%	36.7%	64.7%	76.5%	-21.7%
0 - 4,999							
Adams	38.5%	50.0%	85.7%	100.0%	100.0%	0.0%	39.4%
Butte	60.0%	69.2%	90.0%	50.0%	0.0%	-100.0%	0.3%
Camas	0.0%	0.0%	72.7%		0.0%		
Clark	83.3%	88.2%	72.7%	84.6%	50.0%	-40.9%	1.6%
Custer	40.0%	38.9%	75.0%	12.5%	44.4%	255.6%	2.2%
Lewis	66.7%	50.0%	60.0%	92.3%	70.0%	-24.2%	16.3%
Oneida	70.8%	42.9%	44.4%	55.6%	66.7%	20.0%	-3.6%
Statewide Average	72.3%	71.8%	71.7%	73.1%	74.4%	1.8%	0.4%

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.





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 (90%), 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 2007 to 2011.

Table 32 Self-Reported Child Safety Seat Use by Injury Type: 2007-2011 Under Age 7 in Passenger Cars, Pickups, Sport Utility Vehicles, and Vans									
Injury Type	2007	2008	2009	2010	2011	Change 2010-2011	Avg. Chang 2007-2010		
Fatalities									
Restrained	4	3	1	3	2	-33.3%	36.1%		
Unrestrained	2	2	3	1	2	100.0%	44.4%		
Serious Injuries									
Restrained	15	15	12	10	10	0.0%	-12.2%		
Unrestrained	10	10	13	13	7	-46.2%	10.0%		
Visible Injuries									
Restrained	44	46	54	65	47	-27.7%	14.1%		
Unrestrained	40	16	21	32	22	-31.3%	7.9%		
Possible Injuries									
Restrained	199	254	175	193	173	-10.4%	2.3%		
Unrestrained	77	65	54	67	51	-23.9%	-2.8%		
No Injuries									
Restrained	2,522	2,334	2,168	2,193	2,019	-7.9%	-4.5%		
Unrestrained	649	502	564	580	454	-21.7%	-2.5%		
Total Restrained	2,785	2,653	2,411	2,465	2,251	-8.7%	-3.9%		
Total Unrestrained	788	597	655	695	536	-22.9%	-2.8%		
% of Children Restrained	77.9%	81.6%	78.6%	78.0%	80.8%	3.5%	0.1%		

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 4 lives in 2011. Additionally, 22 serious injuries were prevented and 5 of the 7 unrestrained serious injuries may have been prevented if they had all been properly restrained.