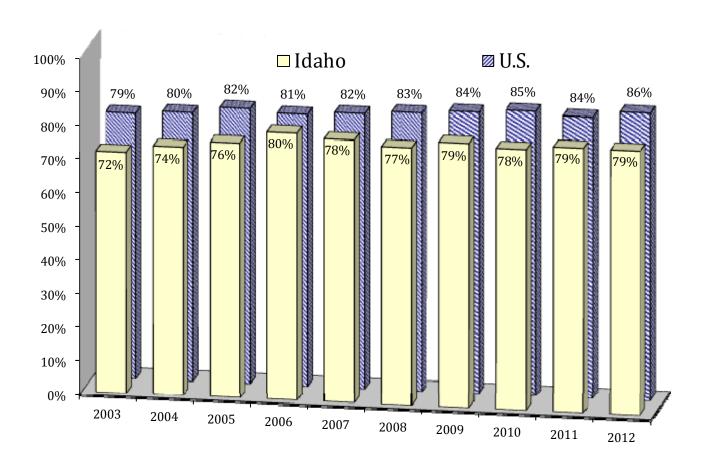
### **Safety Restraint Usage**

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.: 2003 - 2012** 



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: 2008-2012									
	2008	2009	2010	2011	2012	Change 2011-2012	Avg. Change 2008-2011		
Ada	91.1%	94.0%	96.9%	95.5%	94.7%	-0.8%	1.6%		
Bannock	66.0%	66.7%	65.5%	62.2%	67.2%	8.0%	-1.9%		
Bingham	50.5%	58.0%	54.2%	55.0%	57.0%	3.7%	3.2%		
Blaine	72.7%	69.9%	79.1%	71.4%	71.2%	-0.3%	-0.1%		
Bonner	86.2%	71.1%	74.0%	66.9%	71.0%	6.1%	-7.7%		
Bonneville	58.7%	65.0%	65.2%	67.3%	67.3%	0.0%	4.7%		
Canyon	86.3%	87.7%	90.2%	92.7%	94.2%	1.7%	2.4%		
Cassia	61.9%	65.6%	60.7%	56.5%	57.8%	2.3%	-2.8%		
Elmore	71.3%	72.2%	72.3%	72.8%	76.4%	4.9%	0.7%		
Kootenai	78.1%	82.2%	70.2%	75.8%	72.3%	-4.7%	-0.4%		
Latah	81.8%	80.3%	84.7%	81.0%	85.4%	5.3%	-0.2%		
Madison	60.7%	68.8%	63.2%	68.6%	74.4%	8.4%	4.6%		
Minidoka	75.2%	66.1%	67.3%	66.1%	60.5%	-8.6%	-4.0%		
Nez Perce	86.9%	84.0%	89.0%	88.6%	86.5%	-2.4%	0.7%		
Payette	82.1%	88.5%	91.3%	92.6%	92.4%	-0.3%	4.2%		
Twin Falls	73.7%	75.5%	76.6%	69.1%	73.6%	6.4%	-1.9%		
Statewide	76.9%	79.2%	77.9%	79.1%	79.0%	-0.1%	1.0%		

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) districts<sup>4</sup> by vehicle type. District 3 (south-western Idaho) had the highest overall usage at 93.1%, while district 5 (south-eastern Idaho) had the overall lowest usage at 64.3%.

Table 28 Idaho Safety Belt Observation Survey: 2012 - Usage by Vehicle Type									
Vans and ITD District Passenger Cars Sport Utility Vehicles Pickup Trucks All Vehicles									
1	70.4%	74.8%	70.6%	71.8%					
2	89.8%	92.1%	75.9%	86.1%					
3	94.3%	93.5%	90.1%	93.1%					
4	71.6%	78.7%	50.9%	66.0%					
5	66.1%	72.1%	50.4%	64.3%					
6	75.3%	76.6%	54.5%	70.9%					
Statewide	81.3%	82.9%	70.8%	79.0%					

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 2012 ranged from a high of 90.1% in District 3 (south-western Idaho) to a low of 50.4% 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 98.5% on urban interstates to a low of 46.3% 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 80.1%, while usage on rural roadways was 76.4%. 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 76.7%. 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 use<sup>5</sup>. 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: 2008-2012 Age 7 and Older in Passenger Cars, Pickups, Sport Utility Vehicles, and Vans								
Injury Type	2008	2009	2010	2011	2012	Change 2011-2012	Avg. Change 2008-2011	
Fatalities -Restraints Used	32.9%	41.0%	46.7%	31.7%	43.0%	35.5%	2.1%	
Serious Injuries -Restraint Used	64.6%	65.9%	65.4%	66.2%	65.8%	-0.6%	0.9%	

Of the 135 passenger motor vehicle occupants over the age of 7 killed in 2012, only 58 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 58 lives saved in 2012 by seat belt usage and an additional 37 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	
2012 Costs of In	juries
Persons Using Safety Restraints versus Per	sons Not Using Safety Restraints
Age 7 & Older in Passenger Cars, Pickups,	Sport Utility Vehicles, and Vans
Safety Restraints	Costs of Injuri

		Safety Restraints	1	Costs of Injuries			
Injury Type	Used	Not Used	Unknown	Used	Not Used	Unknown	
Fatality	58	73	4	\$365,133,536	\$459,564,622	\$25,181,623	
Serious Injury	619	261	61	\$194,066,710	\$81,827,805	\$19,124,506	
Visible Injury	2,114	385	176	\$185,639,276	\$33,808,477	\$15,455,304	
Possible Injury	4,675	521	318	\$272,125,093	\$30,326,668	\$18,510,327	
Total				\$1,016,964,615	\$605,527,573	\$78,271,760	

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 2008 through 2012. 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: 2008-2012 in Passenger Cars, Pickups, Sport Utility Vehicles, and Vans

	1 moodinger on	, 1 1011 <b>u</b> po	, opor cours	.,,			
	2000	2000	2040	2044	2042	Change	Avg. Change
County by Population 50,000 and over	2008	2009	2010	2011	2012	2011-2012	2008-2011
Ada	85.4%	83.9%	85.1%	87.9%	87.8%	0.0%	1.0%
Bannock	53.4%	64.2%	72.6%	72.9%	62.4%	-14.4%	11.2%
Bonneville	65.8%	72.4%	64.1%	63.5%	75.3%	18.5%	-0.7%
Canyon	78.4%	80.1%	76.4%	81.2%	82.7%	1.8%	1.3%
Kootenai	77.8%	82.0%	77.3%	81.1%	77.8%	-4.0%	1.5%
Twin Falls	76.3%	76.4%	82.1%	76.3%	79.2%	3.9%	0.2%
20,000 - 49,999							
Bingham	51.6%	54.6%	47.7%	62.7%	41.4%	-34.0%	8.2%
Blaine	47.4%	29.3%	52.4%	70.6%	42.9%	-39.3%	25.2%
Bonner	74.0%	84.7%	83.3%	64.9%	62.9%	-3.2%	-3.1%
Cassia	60.9%	60.0%	61.4%	76.5%	53.3%	-30.3%	8.4%
Elmore	69.1%	74.4%	67.7%	62.7%	57.8%	-7.9%	-2.9%
Jefferson	25.0%	60.0%	57.9%	53.3%	48.1%	-9.7%	42.9%
Jerome	60.6%	56.4%	74.3%	69.8%	71.9%	3.1%	6.2%
Latah	81.6%	70.0%	75.0%	60.7%	77.6%	27.9%	-8.7%
Madison	74.6%	55.6%	56.5%	43.3%	63.2%	45.7%	-15.7%
Minidoka	53.9%	61.5%	60.6%	73.7%	72.7%	-1.3%	11.4%
Nez Perce	81.4%	58.8%	76.1%	82.9%	74.1%	-10.5%	3.5%
Payette	66.1%	63.5%	75.0%	71.4%	74.1%	3.7%	3.1%
10,000 - 19,999							
Boundary	77.8%	40.0%	70.6%	61.1%	72.7%	19.0%	4.8%
Franklin	60.9%	58.8%	68.4%	88.9%	69.2%	-22.1%	14.3%
Fremont	63.8%	63.6%	52.9%	69.2%	79.3%	14.6%	4.6%
Gem	77.3%	68.0%	76.0%	64.3%	95.0%	47.8%	-5.2%
Gooding	53.9%	65.0%	52.9%	39.6%	62.5%	57.7%	-7.7%
Idaho	42.9%	45.2%	58.1%	60.5%	50.0%	-17.4%	12.7%
Owyhee	25.0%	42.9%	52.4%	18.2%	55.6%	205.6%	9.5%
Shoshone	54.6%	66.7%	80.0%	50.0%	60.0%	20.0%	1.6%
Teton	90.9%	40.0%	50.0%		50.0%		-15.5%
Washington	91.7%	56.3%	68.8%	64.7%	84.6%	30.8%	-7.4%

Table 31 (Continued)
Self-Reported Restraint Use of All Occupants in Fatal and Serious Injury Crashes by County: 2008-2012 in Passenger Cars, Pickups, Sport Utility Vehicles, and Vans

Country by Douglotics	2000	2000	2010	2011	2012	Change	Avg. Change
County by Population 5,000 - 9,999	2008	2009	2010	2011	2012	2011-2012	2008-2011
Bear Lake	53.3%	31.3%	72.2%	66.7%	55.0%	-17.5%	27.3%
Benewah	28.6%	9.5%	32.1%	85.7%	52.6%	-38.6%	112.5%
Boise	75.5%	62.3%	69.2%	76.3%	45.5%	-40.4%	1.3%
Caribou	60.0%	80.0%	33.3%	100.0%	50.0%	-50.0%	58.3%
Clearwater	36.4%	41.7%	44.4%	10.0%	100.0%	900.0%	-18.7%
Lemhi	80.0%	50.0%	73.3%	40.0%	30.0%	-25.0%	-12.1%
Lincoln	53.3%	50.0%	54.6%	44.4%	16.7%	-62.5%	-5.2%
Power	55.0%	30.8%	38.2%	34.3%	50.0%	45.8%	-10.0%
Valley	81.8%	50.0%	36.7%	64.7%	77.3%	19.4%	3.6%
0 - 4,999							
Adams	50.0%	85.7%	100.0%	100.0%	28.6%	-71.4%	29.4%
Butte	69.2%	90.0%	50.0%	0.0%			-38.1%
Camas	0.0%	72.7%		0.0%	0.0%	0.0%	0.0%
Clark	88.2%	72.7%	84.6%	50.0%	66.7%	33.3%	-14.0%
Custer	38.9%	75.0%	12.5%	44.4%	18.2%	-59.1%	88.4%
Lewis	50.0%	60.0%	92.3%	70.0%	66.7%	-4.8%	16.6%
Oneida	42.9%	44.4%	55.6%	66.7%	50.0%	-25.0%	16.2%
Statewide Average	71.8%	71.7%	73.1%	74.4%	74.6%	0.2%	1.2%

## **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.

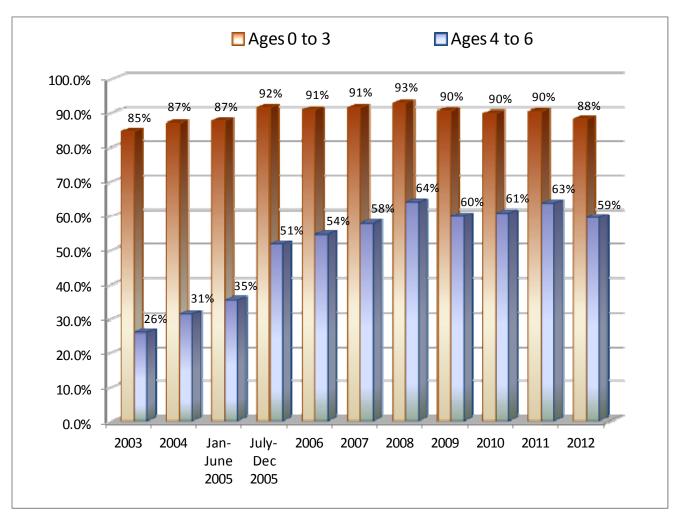


Figure 14
Child Safety Seat Usage by Age Group in Crashes: 2003 - 2012

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 (88%), while only 59% 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 2008 to 2012.

Table 32
Self-Reported Child Safety Seat Use by Injury Type: 2008-2012
Under Age 7
in Passenger Cars, Pickups, Sport Utility Vehicles, and Vans

Injury Type	2008	2009	2010	2011	2012	Change 2011-2012	Avg. Change 2008-2011
Fatalities	•	-		-			
Restrained	3	1	3	2	1	-50.0%	33.3%
Unrestrained	2	3	1	2	1	-50.0%	27.8%
Serious Injuries							
Restrained	15	12	10	10	7	-30.0%	-12.2%
Unrestrained	10	13	13	7	6	-14.3%	-5.4%
Visible Injuries							
Restrained	46	54	65	47	44	-6.4%	3.4%
Unrestrained	16	21	32	22	36	63.6%	17.5%
Possible Injuries							
Restrained	254	175	193	173	179	3.5%	-10.4%
Unrestrained	65	54	67	51	59	15.7%	-5.6%
No Injuries							
Restrained	2,334	2,168	2,193	2,019	1,913	-5.3%	-4.6%
Unrestrained	502	564	580	454	592	30.4%	-2.2%
Total Restrained	2,653	2,411	2,465	2,251	2,144	-4.8%	-5.2%
Total Unrestrained	597	655	695	536	694	29.5%	-2.4%
% of Children Restrained	81.6%	78.6%	78.0%	80.8%	75.5%	-6.5%	-0.3%

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 2012. Additionally, 16 serious injuries were prevented and 4 of the 6 unrestrained serious injuries may have been prevented if they had all been properly restrained.