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**SAFETY BELT USE RATES IN A PRIMARY LAW STATE
COMPARED TO A NEIGHBORING SECONDARY LAW STATE**

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INTRODUCTION

Seat belt use rates in states with primary enforcement safety belt laws are generally eleven percentage points higher than in secondary enforcement law states (Glassbrenner, 2004). Washington State enacted a primary law in 2002 and began an intensive multi-year public education and enforcement effort (Click It or Ticket). The safety belt use rate increased from 83% to 93% following implementation of the law and rose to 95.2% in 2005. Washington has been consistently among the highest usage rate states over the past four years.

In contrast, the neighboring state of Idaho has a secondary safety belt law and a much lower belt use rate of 76.2% in 2005. Idaho has been making steady, but slow, progress improving safety belt use and remains below the national average.

The objective of the nation's safety belt campaign is to support primary safety belt laws and frequent enforcement sufficient to produce habitual, un-enforced use of safety belts by motorists. A question of more than theoretical interest concerns whether belt use rates change when residents of a primary law state are traveling in a secondary law state as well as the converse.

One of the authors has observed motorcycle operators traveling from Washington (which has a helmet law) to Idaho (where the law applies only to riders under age 18) stop at the border to remove a helmet before proceeding. Does similar behavior affect safety belt use? Do Washington motorists remove their belts when crossing the border into Idaho? Do Idaho motorists buckle up when entering Washington?

Washington drivers have received continuing reminders and reinforcement in recent years to wear seat belts by highway signs (more than 650 throughout the state) and twice a year media campaigns combined with targeted seat belt enforcement. Washington also has a substantial \$101 fine that is displayed on the signs (Salzberg and Moffat, 2004). Do Washington drivers wear belts only because they perceive a high probability of getting a seat belt ticket? If this was true, we would expect the usage rate to drop when they are traveling in Idaho and the threat of strict, primary enforcement is removed. However, if belt use has become habitual among Washington drivers it is likely that they will continue to wear seat belts when traveling in a secondary enforcement state.

Conversely, will Idaho drivers change their belt use behavior when traveling in Washington and the perceived threat of being cited is greater than in their home state? Idaho uses a "softer" message, "Click It, Don't Risk It", has less intense police enforcement and a weaker law, i.e., secondary enforcement, a nominal fine of \$10, and belt citations are not counted as "moving" violations.

The present study was designed to address these questions by observing belt use for Washington and Idaho licensed vehicles traveling in Washington and Idaho cities.

METHOD

The cities selected for the study were matched based on population, demographics, economics, politics, and geographic proximity. The Washington cities selected are in the eastern part of the state. This section is politically conservative with a primarily agricultural economy as are the cities that were selected in Idaho. There were 10 cities in the sample, five from each state. Six of the cities are located near the border of the two states, and four are located between 40 and 100 miles of the state border. The cities are listed in Table 1.

Procedures. Trained observers collected belt use data following the same protocol that is used for the annual Washington statewide survey of seat belt use (Salzberg and Thurston, 2005). Observations were done at eight sites in each city, and each site was observed for 40 minutes. Belt use or non-use was observed for drivers of passenger cars (including SUVs and vans) and pickup trucks. The procedure was to first determine whether the vehicle had a Washington or an Idaho license plate and then ascertain belt use. Vehicles licensed in other states were excluded from the study. The counts of “using” or “not using” belts were tallied separately for cars and trucks and for vehicles licensed in Washington and Idaho. Differences between belt use rates were tested for significance using t-tests for proportions.

Table 1. Cities selected for the study.

CITY	STATE
LEWISTON *	ID
CLARKSTON *	WA
SANDPOINT	ID
EPHRATA	WA
MOSCOW *	ID
PULLMAN *	WA
POST FALLS *	ID
EAST SPOKANE *	WA
TWIN FALLS	ID
WENATCHEE	WA

* Border cities.

RESULTS

Safety belt use rates are shown in Table 2. Belt use for Washington cars observed in Washington cities was 94.8% compared to a 2.3% lower rate of 92.5% when traveling in Idaho; this difference was statistically significant ($p < .01$).

Belt use for drivers of Idaho cars was significantly higher ($p < .01$) when they were observed in Washington (83.9% vs. 93.8%).

Belt use in Washington pickup trucks was significantly lower (5.3%, $p < .01$) when traveling in Idaho (92.5% vs. 87.2%) while Idaho trucks showed a significant increase of about 16% when observed in Washington (87.4% vs. 71.1%, $p < .01$).

**Table 2. SEAT BELT USE RATES FOR WASHINGTON AND IDAHO VEHICLES
OBSERVED IN THEIR HOME STATE OR NEIGHBORING STATE**

CARS	N	WA VEHICLES	N	IDAHO VEHICLES
IDAHO CITIES	1270	92.5%	6996	83.9%
WA CITIES	8488	94.8%	752	93.8%
Total	9758	94.5%	7748	84.9%

PICKUP TRUCKS	N	WA VEHICLES	N	IDAHO VEHICLES
IDAHO CITIES	397	87.2%	2809	71.1%
WA CITIES	2640	92.5%	350	87.4%
Total	3037	91.8%	3159	72.9%

DISCUSSION

The findings of this study suggest that drivers of vehicles licensed in Washington are somewhat less likely to use seat belts when traveling in Idaho. However, the 2% lower rate for Washington cars observed in Idaho, while significant, did not approach the baseline rate of 83% that was measured in Washington under the previous secondary law (Salzberg and Thurston, 2001). Thus, the practical significance of this 2% reduction is

minimal. It appears that safety belt usage by Washington State motorists has become habitual and that it continues when they are traveling in areas where safety belt law enforcement is more difficult for the police and penalties are less threatening. Washington motorists apparently do not remove their safety belts when they cross the border into Idaho.

Washington pickup truck drivers showed a greater (5%) decrease when observed in Idaho suggesting that they are less likely than car drivers to make belt use an habitual behavior. However, the use rate did not revert back to the lower rate (74% for pickups) found under the earlier secondary law (Salzberg and Thurston, 2001).

Idaho car drivers observed in Washington had a 10% higher belt use rate than in their home state. The behavior change of was even more dramatic among the drivers of Idaho pickup trucks where a 16% increase was found. These differences clearly are consistent with the presumed powerful effect of a primary enforcement law to increase the use of seat belts.

LIMITATIONS. The data from this study cannot identify whether the motorist being observed had just recently arrived in the neighboring state or had been there for a longer period. It was also not possible to determine if the driver was a one-time visitor or a frequent visitor to the state.

We assume that drivers observed in the neighboring states are aware that the seat belt law is different than in their home state, but we could not independently verify this. It is likely that Idaho drivers are aware that the Washington law and enforcement are stringent because of the highway signs posted in Washington. However, the extent to which Washington drivers are aware of the weaker law in Idaho is unknown. It is reasonable to assume that drivers residing in cities located near the state border (six out of 10 in this study) are not infrequent travelers in the neighboring state and would be aware of the differences between the two states.

CONCLUSIONS. We conclude that in addition to success in changing the safety belt use behavior of its own population, Washington State's safety belt regime has been sufficient to influence a change in behavior amongst Idaho motorists traveling in Washington that has not been obtained in their home state.

Overall, the findings of this study suggest that the effect of primary laws on seat belt use behavior seem to be dramatic when drivers accustomed to a secondary law travel in a neighboring region subject to a primary law. The findings also suggest that belt use behavior among drivers who have experienced continued strong enforcement under a primary law becomes habitual and continues even when the threat of enforcement is reduced.

REFERENCES

Glassbrenner D. Safety Belt Use in 2003 – Use Rates in the States and Territories. Mathematical Analysis Division, National Center for Statistics and Analysis, National Highway Traffic Safety Administration, US Department of Transportation. DOT HS 809 713, March 2004.

Salzberg PM, Moffat JM. Ninety five percent: an evaluation of law, policy, and programs to promote seat belt use in Washington state. J Safety Res. 2004;35(2):215-22.

Salzberg P & Thurston R. Seat Belt Use Rates in Washington State, 2001. Olympia: Washington Traffic Safety Commission, 2001.

Salzberg P & Thurston R. Seat Belt Use Rates in Washington State, 2005. Olympia: Washington Traffic Safety Commission, 2005.