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Year 1 of the Washington Nighttime Seat Belt Enforcement Program

As seat belt use has increased, the strong suspicion has arisen that "residual drivers" who resist buckling up are different from those who have responded to laws, enforcement, and education by becoming regular belt users. It has been suspected that the unbuckled are more likely to be driving at night, to drive after drinking, and to be worse drivers in terms of crash and violation history than drivers who wear their seat belts. The National Highway Traffic Safety Administration and the Washington Traffic Safety Commission



(WTSC) joined together to conduct a high-visibility night-time seat belt enforcement (NTSBE) program in Washington State to investigate these questions. WTSC's program follows the basic *Click It or Ticket* (CIOT) model -- highly visible enforcement combined with paid and earned media about the enforcement and evaluation. The emphasis occurred during nighttime to address nighttime crash problems.

For example, from 2001 through 2007, half (49%) of the fatal crashes in Washington State occurred between 6 a.m. and 5:59 p.m. (daytime) when an estimated 80% of traffic occurs. Half (51%) of the fatal crashes occurred between 6 p.m. and 5:59 a.m. (nighttime) when about 20% of all vehicle travel occurs. Washington State has one of the highest seat belt use rates in the country with about 95% of drivers observed to be wearing seat belts during the daytime. Despite the high seat belt use rate, unbuckled motorists accounted for almost half of the traffic fatalities in the State.

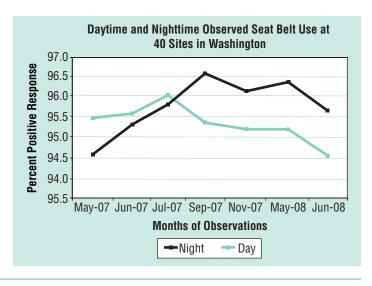
The first year of the Washington nighttime belt program ran from May 2007 through May 2008. During this period,

WTSC ran three, two-week nighttime seat belt enforcement campaigns. The primary message of the ad was that "extra seat-belt-focused law enforcement patrols are taking place at night because the death rate at night is four times higher than it is during the day." Preliminary findings from the first year of the program are now available.

Law enforcement issued 4,516 seat belt citations during NTSBE activities in May 2007, 3,822 in November 2007, and 5,194 in May 2008. The number of citations issued per hour worked was comparable to daytime CIOT campaigns although fewer law enforcement agencies participated in the nighttime programs. Other arrests, such as DUI, drug, and felony arrests per officer hour worked, increased during the nighttime seatbelt enforcement campaigns compared to daytime CIOT.

Observed Seat Belt Use Increases

There were statistically significant increases in nighttime seat belt use at 40 sites across Washington State, selected as a convenience sample that when taken all together, approximate statewide belt rates. Nighttime belt use started at 94.6%, peaked at 96.6% in September 2007, and ended at 95.7% in June 2008. Observed daytime belt use dipped slightly at the 40 sites used in this study, but showed a small increase from



96.4% in 2007 to 96.5% in 2008 in Washington's 2008 statewide daytime survey.

Public Awareness Increases

Before and after each mobilization, the WTSC administered public awareness surveys to licensed drivers at Washington Department of Licensing offices across the State. Licensed drivers who had read, seen, or heard any media about night-time time seat belt enforcement increased significantly after each intervention. Awareness, which started at 10% of all survey respondents, peaked at 69% and finished the year at 49%. It was higher for 18- to 34-year-old males, a high-risk group. Their awareness started at 12%, peaked at 78%, and ended the first year at 55%.

Interestingly, when drivers see an officer stopped with motorist on the side of the road during the day, most reported that they think that the stop is about speeding even during CIOT campaigns. During nighttime hours, most think the stop is about impaired driving.

Unbelted Nighttime Drivers Have Worse Driving And Criminal Records

The WTSC accessed driver abstracts (5 years) and criminal records (11 years) of drivers who were observed to be unbuckled or who had received seat belt citations. In general, unbelted drivers at night had the worst records when compared to daytime belted drivers. Tables 1 and 2 summarize the results for the baseline period only before the beginning

of the program. They show driving record data (N=1,926) and criminal records (N=1,715). Percentages for each group (night unbelted and belted; day unbelted and belted) for drivers who had one or more of the violations or criminal acts on their records were divided by the day belted group's percentage to create a ratio. Ratios greater than 1.0 had higher violation and criminal act rates than the daytime belted group.

Night unbelted drivers are 2.7 times more likely than day belted drivers to have felony arrests on their criminal records, 3.0 times more likely to have alcohol citations, and 2.4 times more likely to have license-related citations on their driving records.

Based on the first year's activities, the nighttime seat belt enforcement program in Washington is successful in raising nighttime belt use rates without losing high daytime rates, and in using paid and earned media to support nighttime enforcement. Analysis of the second year of the program will expand these results.

How to Order

To order Evaluation of the First Year of the Washington Night-time Seat Belt Enforcement Program (82 pages plus appendices), prepared by Dunlap and Associates, write to the Office of Behavioral Safety Research, NHTSA, NTI-130, 1200 New Jersey Avenue SE., Washington, DC 20590, fax 202-366-7394, or download from www.nhtsa.gov. John Siegler, Ph.D., was the Contracting Officer's Technical Representative for this project.

Table 1. One or more driving violations by belt use and time of day: Baseline period April 26 to May 1, 2007

	Alcohol Citations		Any Moving Violation		Speeding Citations		Negligent or Reckless Citations		License-Related Citations	
Driver Group	% of Group	Ratio*	% of Group	Ratio*	% of Group	Ratio*	% of Group	Ratio*	% of Group	Ratio*
Night** Unbelted	10.4	3.0	55.4	1.4	42.1	1.3	10.4	2.1	14.6	2.4
Night Belted	4.9	1.4	49.0	1.3	35.6	1.1	8.4	1.7	11.0	1.8
Day*** Unbelted	5.7	1.6	45.1	1.1	33.2	1.0	7.3	1.5	7.8	1.3
Day Belted	3.5	1.0	39.2	1.0	32.3	1.0	4.9	1.0	6.0	1.0

Table 2. One or more criminal offenses by belt use and time of day: Baseline period April 26 to May 1, 2007

	Any Crimir	nal Offense	Felo	nies	Violent Crimes		
Driver Group	% of Group	Ratio*	% of Group	Ratio*	% of Group	Ratio*	
Night** Unbelted	19.8	2.1	8.3	2.7	9.1	2.2	
Night Belted	13.6	1.4	6.9	2.2	6.9	1.7	
Day*** Unbelted	9.4	1.0	3.2	1.0	3.5	0.9	
Day Belted	9.6	1.0	3.1	1.0	4.1	1.0	

^{*}Ratio is the quotient of the percentage in each category divided by the percentage of day belted drivers. **6 p.m. to 5:59 a.m. ***6 a.m. to 5:59 p.m.



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TRAFFIC TECH is a publication to disseminate information about traffic safety programs, including evaluations, innovative programs, and new publications. Feel free to copy it as you wish. If you would like to receive a copy, contact Angela H. Eichelberger, Ph.D., Editor, fax 202-366-7394, e-mail: angela.eichelberger@dot.gov.