



Determining the Relationship of Primary Seat Belt Laws to Minority Ticketing

When a State converts from secondary to primary seat belt enforcement, studies show increases of 10 percentage points or more in observed seat belt use. Primary enforcement laws allow an officer to ticket a motorist whenever they observe a seat belt offender. Under secondary enforcement, an officer must stop the vehicle for some other infraction first. While approval ratings of primary laws are high, issues of minority harassment, differential enforcement, racial profiling, or “driving while Black” still arise in discussions when States convert seat belt laws to primary enforcement status. A number of studies suggest that minorities perceive stricter law enforcement than Caucasians overall and were more likely to believe that they would be ticketed if unbelted. These studies showed no systematic differential enforcement in actual ticketing.

Differential enforcement is clearly undesirable. One element that makes seat belt laws effective is the heightened perception that they are being strictly enforced. Primary laws motivate people to obey laws and convey the message that a State considers seat belts important to the safety of its citizens. NHTSA conducted a study to investigate changes before and after States switched to primary enforcement. Thirteen States upgraded seat belt laws to primary enforcement between 2000 and 2009.

Seat Belt Use in Fatal Crashes

NHTSA’s Fatality Analysis Reporting System (FARS) data were used to track belt use across time and across States. Of the 13 States that upgraded their seat belt laws since 2000, 7 had sufficient pre- and post-law change periods (two years before and two years after) and a sufficiently large minority population; they are Delaware, Illinois, Kentucky, Mississippi, South Carolina, Tennessee, and Washington. States that upgraded since 2006 (Alaska, Arkansas, Florida, Maine, Minnesota, and Wisconsin) did not have two years of post-law data or substantial minority populations.

FARS provides information about seat belt use among every fatally injured passenger vehicle occupant in the United States. Belt use rates in fatal crashes are lower than observed rates, in part because seat belts prevent some fatalities, but also because individuals more likely to be in potentially fatal crashes are less likely to use belts.

An overall comparison of belt use by fatally injured occupants in the United States showed that the percentage belted was significantly higher in primary law States (52%) than in secondary law States (37%). Table 1 shows a similar pattern by race. Race categories included Caucasian (84% of fatalities), African-American

(12%), and Other (4%, of which 46% were Asian, 37% Native American and 17% multiple races, or Other). A wider Minority category includes all non-White occupants (African-American plus Other). Minority belt rates were lower in both primary and secondary law States and lower than the overall U.S. rates.

Table 1. Percentage Belted Fatalities in U.S. by Primary and Secondary States and by Race, 2000-2008

	Primary Law Belt Use	Secondary Law Belt Use	% of Total Fatalities
Overall	51.6% (N=97,491)	37.2% (N=91,877)	100% (N=189,368)
Caucasian	52.4% (N=80,595)	38.0% (N=80,289)	85% (N=160,884)
Minority	48.2% (N=16,896)	31.2% (N=11,588)	15% (N=28,484)
African-American	44.4% (N=12,098)	30.1% (N=8,527)	11% (N=20,625)
Other	57.5% (N=4,798)	34.4% (N=3,061)	4% (N=7,859)

Fatalities in the 7 Primary Law States

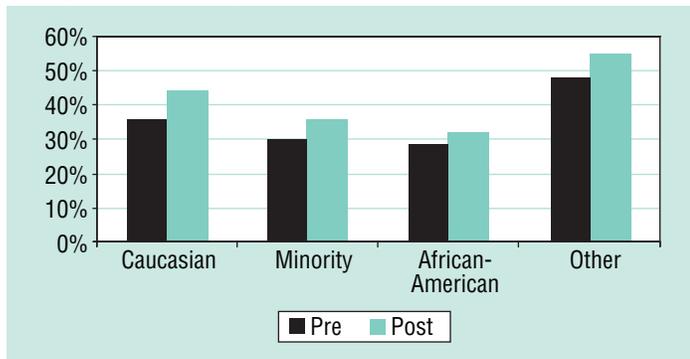
Fatalities in the 7 study States dropped by 8.1% from pre- to post-upgrade overall. Table 2 shows the decreases in the number of fatalities for Caucasians (7.4%), all Minorities (11.3%), African-American (10.1%), and the Other subgroup (19.9%, while representing only 2% of all fatalities).

Table 2. Number of Fatalities Before and After the Primary Law Change in 7 States

	Pre-	Post-	% Change	% Total Fatalities
All Fatalities	8,342	7,668	-8.1%	100%
Caucasian	6,894	6,383	-7.4%	83%
Minority	1,448	1,285	-11.3%	17%
African-American	1,282	1,152	-10.1%	15%
Other	166	133	-19.9%	2%

In the 7 States, while fatalities dropped, overall FARS seat belt use increased by 8 percentage points after the law upgrades, from 34% to 42%. Figure 1 shows that belt use of fatally injured occupants increased for all racial groups after the law change.

Figure 1. Percentage Belted Fatalities Before and After the Law Change in 7 States by Race, 2000-2008



Seat Belt Citations

Four States provided seat belt citation data covering the period before and after the law upgrade. Table 3 shows no real change in the proportion of citations across races before and after the law change. In these 4 States, citations to Minorities either stayed the same or declined.

Table 3. Proportion of Seat Belt Citations Before and After the Law Change in Four States by Minority Status

State	Race	Pre-		Post-	
		2 years	1 year	1 year	2 years
Kentucky	Caucasian	89%	90%	90%	90%
	Minority	11%	11%	10%	10%
Mississippi	Caucasian	43%	47%	47%	47%
	Minority	57%	53%	53%	53%
South Carolina	Caucasian	62%	62%	63%	62%
	Minority	38%	38%	37%	38%
Tennessee	Caucasian	n/a	87%	87%	88%
	Minority	n/a	13%	14%	12%

Injuries

The 7 study States were contacted to obtain hospital discharge data for the pre- and post-law change period to assess changes in injury rate by race. Kentucky, South Carolina, and Washington provided these data. Only South Carolina’s hospital discharge data contained the race of each patient. In Washington and Kentucky, ZIP codes were used as a proxy to race. Where ZIP codes were used, there was a greater decrease, albeit non-significant, in Minority compared to Caucasian admissions to hospitals. In South Carolina, where the actual race was known, there was also a decrease in admissions for motor vehicle injuries after the switch to primary for both African-Americans and Caucasians.

News Articles

Close to 200 news articles were collected in Arkansas, Florida, Minnesota, and Wisconsin (all upgraded in 2009) and Maine and Alaska (upgraded in 2007 and 2006, respectively). Racial profiling was mentioned in 43.5% of articles; 56.5% made no mention of it. About one-third of news reports presented arguments favorable to the primary seat belt law (34%); 8% presented arguments unfavorable to the primary law upgrade; 35% reported a balanced view (i.e., judged to present both favorable and unfavorable arguments); and 24% were neutral. There were wide variations between States in percentage of articles mentioning racial profiling. Some States made no mention of racial profiling.

Conclusions

The results clearly show the advantages of primary belt laws for increasing belt use and reducing injuries. Seat belt use in fatal crashes increased in each of the 7 States studied, with an average gain of 8 percentage points. There were significant gains among Caucasians, African-Americans, and Others and the gains were not proportionately greater in the Minority groups. African-Americans had substantially lower belt use than Caucasians both when the laws were secondary and when they were primary. The information on changes in hospital admissions was obtainable from fewer States, but showed that there were decreases in hospital admissions for all groups after the switch to primary law. Since there were no differential changes in belt use by race, changes in hospital admissions by race were not expected.

The numbers of citations for nonuse of seat belts increased substantially in every State that switched to primary enforcement, and increased in all groups. The percentage of citations received by each group changed very little. Both for African-Americans and Hispanics, their share of citations remained about the same before and after the conversion to primary. Primary laws were associated with gains in belt use in all racial groups. Conversion to primary laws is clearly a forward step in improving injury protection for all drivers.

How to Order

For a copy of *Determining the Relationship of Primary Seat Belt Laws to Minority Ticketing* (33 pages plus appendices), prepared by Preusser Research Group, Inc., write to the Office of Behavioral Safety Research, NHTSA, NTI-130, 1200 New Jersey Avenue SE., Washington DC 20590, send a fax to 202-366-7394, or download from www.nhtsa.gov.