

STATUS REPORT

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FOR HIGHWAY SAFETY

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Washington State sets example for **BELT USE**

Three out of four drivers on U.S. roads are buckling their safety belts, the National Highway Traffic Safety Administration reports. It's a big improvement compared with previous years, but the gains aren't consistent nationwide. In recent months Washington State is setting a good example. Last

June Washington enacted a primary safety belt law, which allows police officers to ticket motorists for belt violations alone. In most other states, officers must stop a motorist for some other violation before issuing a ticket for not buckling up.

At the same time, state officials launched an enforcement and publicity program with stepped-up ticketing for safety belt violations and education about both the impor-

tance of using belts and the relatively hefty fine of \$86 that's imposed for neglecting to buckle up. The result is that now Washington boasts a belt use rate of 93 percent, the highest statewide rate ever reported in the United States.

Washington's current belt use rate represents a 12 percentage point improvement compared with the average buckle-up rate of 81 percent before the state's primary law

took effect and the program of enforcement and publicity got under way.

"This is a big boost in belt use, especially because the use rate already was relatively high. It's especially hard to get those last hold-outs to buckle up. They're the ones who have known for years that they should buckle up but still haven't done it. The change in the law plus the enforcement and publicity about the fine are what finally con-



Washington State boasts a safety belt use rate of 93 PERCENT. This is the highest statewide rate ever reported in the United States, and it represents a 12 percentage point increase compared with Washington's average buckle-up rate before the state's primary enforcement law took effect and "Click It or Ticket" got under way last spring. One reason for the achievement is the relatively hefty \$86 fine that's imposed for failing to use a belt.

vinced many of them to do it," says Institute chief scientist Allan Williams.

Washington State's program began in April 2002 with media announcements and highway signs about the implementation in June of the primary law. But this didn't start the safety belt use rate on its upward climb. The rate didn't begin going up sharply until police stepped up enforcement, beginning in late May.

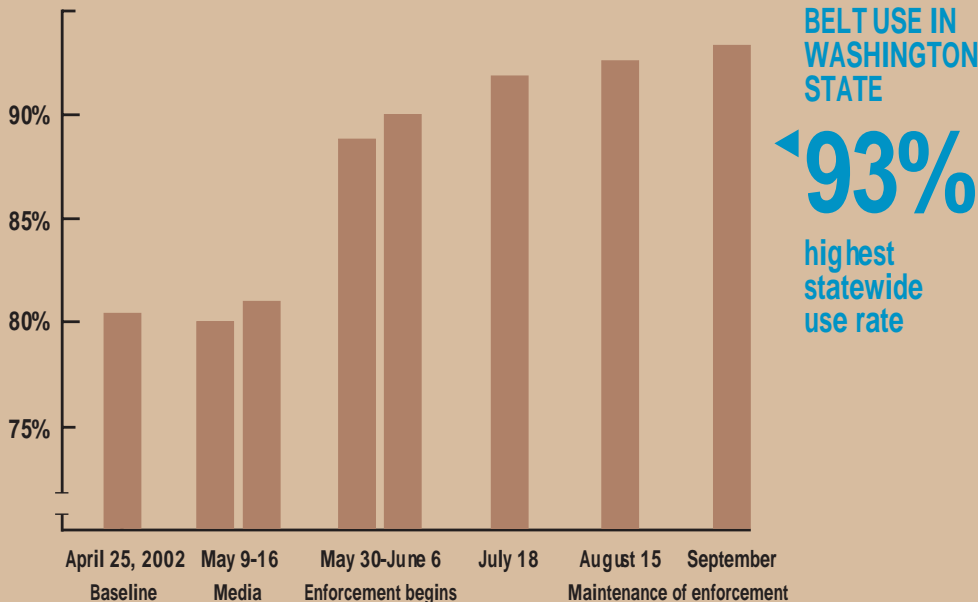
Drivers opt for more, not less, safety belt law enforcement

More than half of California drivers surveyed say the safety belt law should be enforced 'very strictly'

Like Washington State, California has achieved a belt use rate that exceeds 90 percent. In both states, a key to the achievement is enforcement. "It was impossible to drive on Washington highways during late May and early June without seeing a police vehicle and, typically, an officer in

the process of issuing a citation," the Washington Traffic Safety Commission reported. More than 6,000 safety belt and child safety seat violations were issued from May through September, when the belt use rate was climbing statewide.

Police in California also enforce the safety belt law "routinely, all day and every day. This is a policy that isn't in effect in many other U.S. jurisdictions," says Susan Ferguson, Institute senior vice president for research. "For some politicians in other states there's concern that people will object to enforcement of safety belt laws, but what we've found is just the opposite. Most people want more, not less, police enforcement of these laws. So politicians in states across the country should be doing



The Washington Traffic Safety Commission, which evaluated this program, points out that the increase in belt use "was immediate and simultaneous with the enforcement." The Commission adds that this is "compelling evidence" of the importance of visible enforcement. "The onset of belt enforcement appears to be the critical factor. The announcement of impending enforcement is not enough."

Once the safety belt use rate started to climb in May 2002, it (continues on p.4)

what's being done in California, Washington State, North Carolina, and a few other places, which is to enact primary belt laws and then encourage police to enforce them."

Late last year, Virginia governor Mark Warner called for a change in the state's belt law to allow for primary enforcement instead of secondary. Then police could stop and ticket motorists for belt law violations alone. Fewer than half of the states have primary laws.

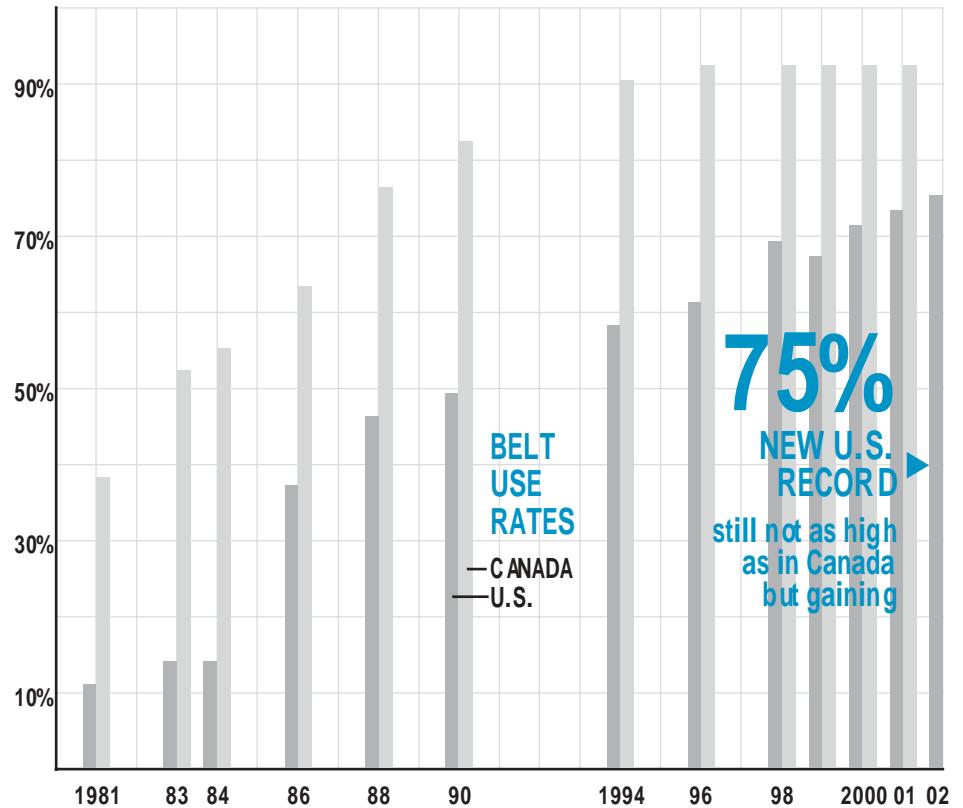
A recent Institute survey of California drivers found 90 percent favor the state's belt use law, which allows for primary enforcement. Even though police enforce this law more aggressively than in most other states, only 22 percent of the Californians surveyed thought the law was being very strictly enforced. Fifty-nine percent thought it should be very strictly enforced, and 46 percent thought the penalty should be higher than the \$20 fine that's currently imposed.

"So there's plenty of public support and no reason at all for legislators to shy away from enacting primary laws or for police to scale back enforcement efforts," Ferguson points out.

(continued from p.3) increased steadily and reached 93 percent in September. Belt use was high in all types of passenger vehicles, although it was a few percentage points higher in cars and sport utility vehicles (94 percent) than in vans (91 percent) and pickup trucks (89 percent).

Washington's record was achieved as part of a 30-state expansion of "Click It or Ticket." This program of belt law enforcement and publicity began with a five-year effort in North Carolina (see *Status Report*, Nov. 15, 2001; on the web at www.highway-safety.org) that insurers helped launch in the mid-1990s. NHTSA and the Institute worked with state officials and enforcement personnel to achieve 84 percent belt use.

Among the 30 states that participated in 2002's expanded "Click It or Ticket," Washington isn't the only winner. States where belt use had been lagging reported big gains. The use rate in Vermont jumped from 66 percent before the program to 85 percent after



it. West Virginia recorded a similar improvement, from 56 to 72 percent belt use. Across states where comprehensive "Click It or Ticket" programs were conducted, the average increase in the use rate was 9 percentage points, from 68 to 77 percent.

Despite these gains, the average use rate of 75 percent across the United States still is lower than in many other countries (see

Status Report, Dec. 7, 2002; on the web at www.highwaysafety.org). The U.S. rate is higher than in Belgium, the Netherlands, and Italy, but it's lower than Australia's 97 percent safety belt use. It's also lower than the reported use rates in Canada, France, Germany, and the United Kingdom. The use rate in each of these countries exceeds 90 percent.

Higher U.S. rates generally are reported in states with primary enforcement laws. NHTSA reports 80 percent belt use in states with such laws, compared with an average of 69 percent in states where officers must stop a motorist for some other violation before issuing a ticket for not buckling up. In New Hampshire, where no safety belt law is in effect, the use rate is about 50 percent.

What's good for government workers is good for people in the private sector, too, Institute tells OSHA

Agency rejects petition to require all workers to use safety belts

Under a rule in effect since 1986, government employees must use belts on the job. But this rule never has been applied in the private sector, so last October the Institute petitioned the Occupational Safety and Health Administration (OSHA) to require all employees to use belts while riding in vehicles on the job.

OSHA proposed a similar rule in 1990 but failed to finalize it. Now OSHA has rejected the Institute's 2002 petition, saying it plans to "provide increased occupant protection in motor vehicles through educational efforts." Institute president Brian O'Neill counters that "education alone won't work. Study after study proves this, which is why OSHA should require every employee to use a belt on the job. This would be one of the most inexpensive and cost-effective safety rules OSHA ever issued."

The Institute is asking OSHA to reconsider its denial of the petition.

Motor vehicle injuries are the leading cause of work-related deaths. More than 1,300 people died in on-the-job crashes in 2000. But the National Institute for Occupational Safety and Health reports that safety belts aren't used in at least two-thirds of these fatal crashes. A recent University of Michigan study suggests that belt use among drivers of commercial light vehicles is significantly lower than among drivers of similar private vehicles.

By requiring everybody in vehicles driven on the job to use belts, OSHA could supplement existing state belt laws. A number of government, nonprofit, and private employers have attained observed use rates of 85 percent or more, typically through a combination of highly visible enforcement and incentives.



WHY OSHA ACTION IS NEEDED: Passenger vehicle drivers on the job are significantly less likely to use safety belts, compared with drivers of similar noncommercial vehicles. This is the main finding of an observational study conducted by researchers at the University of Michigan Transportation Research Institute. The study found lower belt use among passengers as well as

drivers in commercial vehicles. The observers recorded shoulder belt use for both drivers and right front passengers in cars, SUVs, vans, minivans, and pickup trucks stopped at intersections and freeway off ramps. Vehicles were considered commercial if they exhibited lettering or business logos or if they carried work equipment. The belt use rate in private vehicles was 72 percent (drivers) and 69 percent (passengers). Comparable use rates in commercial vehicles were 56 percent and 42 percent. "A comparison of belt use between commercial and noncommercial light-vehicle occupants" by D.W. Eby et al. is in *Accident Analysis and Prevention* 34:285-91.

They're called JAMMERS, but they fail to jam police radar and could encourage motorists to speed

In the medical world, it's called a placebo. It's a little sugar pill that allows patients to believe they're being treated, even when they're not. Among speeders the equivalent is a radar jammer, a device that tricks speeders into believing they're "invisible" to police radar and laser.

Jammers have no benefit in terms of actually jamming radar, but that's not what the promotional materials say. The pamphlet accompanying one device, the Rocky Mountain Radar Phazer II Laser and Radar Jammer, claims it disables X, K, and Ka band radar as well as all laser units, causing police radar and laser guns to remain blank. There's "an FM chirp, a mixer and antenna" that reflect a modified signal to "confuse the computer inside the radar gun," the pamphlet says. It cautions that police radar units might be able to "punch through" this tricky signal within 150 feet and warns motorists to adjust their speeds accordingly.

Most consumers have no way to check the validity of these claims, other than by speeding and risking a ticket. It doesn't work to speed by a roadside sign that feeds back information about vehicle speed

because, as the pamphlet for the Phazer II points out, the device won't scramble the roadside signs that "do not have the sampling computer."

"The bottom line is that the so-called jammers don't work," says P. David Fisher, engineering Professor Emeritus at Michigan State University. "Motorists thinking about buying one should consider just putting a block of wood on the dashboard of the vehicle. Doing this instead of buying a device that purports to jam police radar would save a significant amount of money and achieve a virtually identical result. Besides relieving consumers of \$150 to \$300 for a product that utterly fails to reduce the effectiveness of radar and laser, these devices encourage motorists to speed."

Both Fisher and Institute researchers tested Phazer II, finding no effect on the operation of police equipment to monitor vehicle speeds and identify violators. Installing and operating a Phazer II according to the manufacturer's instructions, researchers drove past police officers expert in operating radar and laser. The researchers made several runs at speeds between 32 and 50 mph, with the Phazer II sometimes turned on and sometimes off. However, police had no indication of whether the device was operating. In each case the officers reported no difficulty



measuring the speeds of the vehicles. Nor did they find any reduction in the effective range of their radar/laser units, regardless of whether the Phazer II was on.

Vehicle speeds measured and recorded by the police officers matched the speeds recorded by researchers on the cars' speedometers. The speeds matched for vehicles that were as far away as 300 feet and as close as 150 feet.

Richard Retting, the Institute's senior transportation engineer, points out that "from a safety standpoint, it would be worse if the jammers did work. But just because they aren't effective in shielding speeders doesn't mean there's no safety concern. There is a concern — consumers

ABOUT AS GOOD

AS A BLOCK OF WOOD:

Phazer II and other such devices aren't any more useful to jam radar than a block of wood. The safety downside is that drivers who believe they can use these devices to evade speeding tickets might go faster or speed more often.

purchase these devices because they think they can speed and evade detection. Manufacturers encourage this by advertising money back guarantees that promise to pay for fines. So the major concern about the availability of radar jammers is their effect on driving behavior. Obviously these devices encourage speeding."

Fatally injured drivers with very high BACs: are they likely to be hard-core problem drinkers?

Researchers look at the drinking histories of fatally injured drivers

Drinking drivers with very high blood alcohol concentrations (BACs 0.15 percent or more) often are assumed to be hard-core drinkers who repeatedly drive while impaired. The term "hard-core" implies serious drinking problems and behavior that's hard to change.

But how accurate is this assumption? Exactly how common are so called hard-core, or problem, drinkers among drivers with high BACs? Some answers come from a recent study of the drinking histories of a sample of drivers who were killed in crashes in 1993. A main conclusion is that drivers with BACs of 0.15 percent or higher were far more likely than other drivers to have been problem drinkers. The higher the BAC, the more likely the driver was to have a history suggestive of problem drinking.

This finding isn't surprising. However, there's an important caveat — many fatally injured drivers with very high BACs didn't fit the profile of a problem drinker.

"The estimated percentages of fatally injured drivers with very high BACs who were problem drinkers ranged from 21 percent to 61 percent, depending on what indicators we looked at," explains Susan Baker, professor at the Johns Hopkins University School of Public Health.

Interviews with relatives of the fatally injured drivers were used to assess whether those drivers had indicators of problem drinking. For example, one question was whether the drivers were problem drinkers during the last month of life, based on whether they had any physical, emotional, work, or family problems related to drinking.

Drivers with high BACs were more likely than those with low or zero BACs to have prior convictions for alcohol-impaired driving on their records. But the known repeat offenders were a small minority. Even among drivers with very high BACs, fewer than 20 percent had convictions on their records.

"The larger debate this study speaks to is, what's the most effective strategy for prevention? Some say hard-core drinking drivers are the major problem, so we need tougher sanctions when they're caught," says Institute epidemiologist Elisa Braver. "Then again, relatively few people who drive while impaired are caught, which makes tougher sanctions largely ineffective in reducing the problem. We need to prevent impaired driving before it occurs among both problem drinkers and others. Active and highly visible DUI/DWI enforcement programs, in particular sobriety checkpoints, probably are our best way to deter both groups."

"Drinking histories of fatally injured drivers" by S.P. Baker et al. appears in *Injury Prevention* (September 2002). Visit <http://ip.bmjournals.com>.



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