

2014 Maryland Highway Safety Summit

Best Practices in Nighttime Seat Belt Enforcement



Best Practices in Nighttime Seatbelt Enforcement

- An overview of effective enforcement strategies; a summary of results and lessons learned from nighttime seat belt enforcement projects.

Why Conduct Seat Belt Enforcement At All?

- Observed seat belt use rate in Maryland is 91.1% (2012).
- National use rate is approximately 87% (NOPUS 2013).

The Data Tells Us

- ◉ Nationally:

- ◉ 52% of vehicle occupant fatalities are unbelted.

- ◉ 62% at night.

- <http://www-nrd.nhtsa.dot.gov/Pubs/811701.pdf>

The Data Tells Us

- ⦿ About half of all traffic fatalities occur at night, although only about one quarter of travel occurs after dark.
- ⦿ On average, nighttime use is 18 percentage points lower among fatally injured vehicle occupants than those killed during the daytime.

The Data Tells Us...

○ Maryland

- Approximately 40% (FARS data) of vehicle occupants killed are unrestrained (2008-2012) approximately 10% better than national average.
- 9% unrestrained = 40% of all fatalities?

The Data Tells Us...

- Approximately 39% of all vehicle occupant fatalities in Maryland are at night (2007-11).
- 75% of rear seat vehicle occupant fatalities were unbelted (2007-11).
- When are more belted fatalities a good thing?

The Data Tells Us...

- ⦿ Fatality rate is 3 – 4 times higher at night than during the day.
- ⦿ Lower overall number of deaths, but also lower traffic volumes.

Side Note

- ⦿ This type of data was critical in gaining legislative support for the Washington project.
- ⦿ Legislative Transportation Committees wanted significant justification to invest resources in a seat belt project when seat belt use was above 95%.

Maryland Traffic Safety Goals

- Reduce the annual number of unrestrained fatalities on all roads in Maryland from 153 in 2008 to fewer than 123 by December 31, 2015 (19.8 percent reduction).
 - Maryland has achieved the interim goal of fewer than 135 fatalities in 2012 and has achieved the 2015 goal.
- Reduce the annual number of unrestrained occupant injuries on all roads in Maryland from 2,693 in 2008 to fewer than 2,239 by December 31, 2015.
 - Maryland has achieved the interim goal of fewer than 2,424 injuries in 2012 and has achieved the 2015 goal.
- One strategy: Conduct a year round nighttime seatbelt enforcement and education program.

Why is Fatality Rate Higher at Night?

- Have you driven at night?
- Seem like a different population of drivers?

“Randy from Spanaway?”

NTSBE in Other States

- Asheville and Greenville, North Carolina
- Charleston, West Virginia
- Topeka, Junction City, Derby and Lawrence, Kansas
- Lexington, Kentucky
- Colorado
- Delaware
- Ohio

Case Studies of Nighttime Seat Belt Enforcement

- Delaware
- Georgia
- Illinois
- Kentucky
- Pennsylvania
- Washington

<http://www.lahighwaysafety.org/pdf/NIGHT%20BELT%20ENFORCEMENT%20CASE%20STUDIES%20FINAL%202012.pdf>

Is Enforcement Effective?

- ⦿ “The most effective strategy for achieving and maintaining high belt use is highly publicized high-visibility enforcement of strong occupant restraint use laws.”
- ⦿ “The statistical analyses suggest that the most important difference between the high and low belt-use States is enforcement, not demographics or funds spent on media.”

Analyzing the First Years of the Click It or Ticket Mobilizations; Preusser Research Group, Inc. January 2010; Julie Tison and Allan F. Williams

So...What Enforcement Strategy Works Best at Night?

- ⦿ Spotters and chase cars?
- ⦿ Random patrols?
- ⦿ Channelization?
- ⦿ Enforcement zones/saturation patrols?
- ⦿ Mini-Cades?

Short Answer

- ⦿ Yes
- ⦿ In many locations officers preferred spotter technique.
 - Required more coordination.
 - High volume/low speed traffic.
 - Freeway exits; traffic circles; controlled intersections.
- ⦿ Maryland – debriefs with LE conducted; results pending.

Enhancement Techniques?

- ① Night vision goggles?
- ① Auxiliary lighting?
- ① CAUTION – ensure compliance with State/local rules.

Oh, by the way... the nighttime unbelted driver had more...

Traffic violations and criminal arrests than all other drivers:

- Speeding tickets;
- License-related citations (suspended, revoked);
- Negligent driving or reckless driving citations;

And.....

- ⦿ Were three times more likely to have an alcohol arrest on their driving records.
- ⦿ Were more likely than day-belted drivers to have a felony arrest on their criminal records to include violent crimes.

Maryland – PRELIMINARY DATA

- Drivers cited for seat belt violations were nearly eight times more likely than drivers not cited to have prior violations on their driver records (MDAC Annual Report 2013).

Worried About Daytime Use?

- No reductions in observed daytime seat belt use in the case study States.
 - Significant with 405 applications/impacts.
 - Daytime use in many States increased.

Maryland NTSBE 403 Project

⦿ Thanks to MDHSO

- Tom Gianni, Chief, Maryland Highway Safety Office
- Tim Richards
- Christina Sinz

⦿ All participating LE Agencies

Wrap Up

- ⦿ The seat belt issue remains significant...especially at night.
- ⦿ Conduct your enforcement when and where your data says you should.
- ⦿ NTSBE can have significant impacts on increasing seat belt use.
- ⦿ Strategies should be tailored to jurisdictions/agencies.

Wrap Up

- ⦿ Randy is out there.....

Questions?

Brian Jones

National Highway Traffic

Safety Administration

brian.jones@dot.gov

202-366-1654

