

# Traffic Safety Facts

## Traffic Tech – Technology Transfer Series

Number 312

June 2006

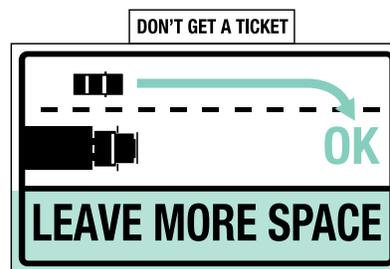
## Ticketing Aggressive Cars and Trucks in Washington State

Congress directed the National Highway Traffic Safety Administration and the Federal Motor Carrier Safety Administration to work together to “*educate the motoring public on how to share the road safely with commercial motor vehicles*” (CMVs) in 2004 and 2005. Washington State piloted this project because of its success in implementing other highway safety enforcement projects such as the Washington State Patrol (WSP) *Step Up and R.I.D.E.* program in Seattle. The local project put a trooper in a large truck to observe unsafe driving behaviors and radio other troopers ahead who then stopped and ticketed the driver.

*Ticketing Aggressive Cars and Trucks (TACT)* combined the *Step Up and R.I.D.E.* program with high visibility enforcement directed at unsafe driving by any vehicle around CMVs. The Washington Traffic Safety Commission (WTSC) chose four high crash interstate corridors, each approximately 25 miles in length. Two intervention corridors received TACT media and increased enforcement: I-5 near Bellingham, and I-5 near Olympia. Two comparison corridors received no TACT media or increased enforcement: I-5 near Kalama, and I-90 just west of Spokane.

### Cutting Off Trucks Message

After considering a number of unsafe driving behaviors, TACT addressed the unsafe behavior of “cutting off trucks.” Public awareness activities and paid media increased awareness among all motorists of the need to leave one car length for every 10 miles of speed when merging in front of trucks. WTSC developed a road sign to communicate the safe merging distance and enforcement messages. An advertisement created for radio aired between July 7 and October 20, 2005 in Olympia and Bellingham (in Seattle it ran until September 4). The ad ran 45 times Monday through Friday during major drive times (6 a.m. through 7 p.m.) on all major radio stations in the intervention areas. The message reached more than one million people in the Seattle media market, 113,200 in Olympia, and 42,800 in Bellingham. Additional media activities included TV and newspaper coverage, posters, road signs, and large trucks wrapped in TACT banners that traveled up and down the intervention corridors. Applying the Click It or Ticket high



visibility enforcement model to the TACT pilot project, WTSC ran the media at the intervention sites prior to and during the two enforcement waves. Media started on the Monday following the

July 4th, 2005 holiday and continued through the end of enforcement in the last week of September 2005.

### Enforcement Activity

Two waves of enforcement each lasting two weeks (July 11-22 and September 19-30, 2005) took place at the intervention sites. Increased enforcement was deployed Monday through Friday, from 6 a.m. to 2 p.m. Crash data had shown that most CMV/passenger vehicle (PV) collisions occurred weekdays during the morning commute and lunch hours. State and local law enforcement officers rode in the CMVs, equipped with mobile radios. WSP aviation supported the enforcement, and marked and unmarked patrol vehicles made the traffic stops.

### Citation Data

A total of 4,737 contacts with drivers were made during the two enforcement waves, approximately 237 contacts per day over the 20 days of special TACT enforcement. Most contacts resulted in a citation being issued (72%) while 28 percent resulted in warnings. PV drivers accounted for 86 percent of contacts and CMV drivers 14 percent. Most stopped drivers were male (73%) and the average age was 52. Most were residents of western Washington (28% lived near the Bellingham intervention corridor, 21% near the Tacoma intervention corridor, and 22% lived in other western Washington communities). Very few drivers were from eastern Washington (less than 1%), while many were from Canada (13%) and other States (15%). The numbers of driver contacts were equally distributed across days of the week with the largest proportion (17%) of contacts during the morning commute hours (7 a.m. to 8 a.m.).

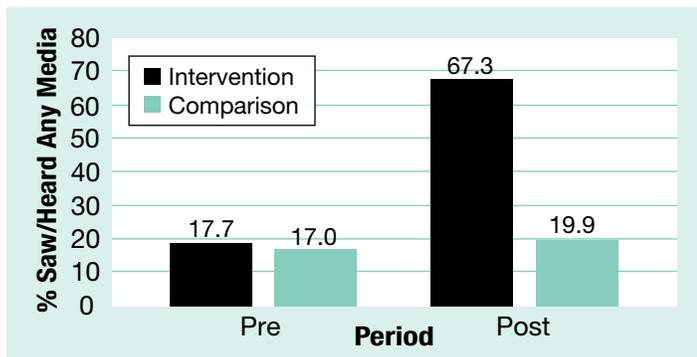
## Drivers Saw and Heard TACT Messages

The Washington State Department of Licensing (DOL) administered public awareness surveys to 6,155 motorists who visited the DOL offices serving the four test corridors. Overall, drivers at the intervention sites who said they saw or heard any of the TACT messages increased from 17.7 percent in the pre period to 67.3 percent in the post period. Drivers at the intervention sites also reported increased exposure to the core message of leaving more space when passing trucks (14% pre to 40% post). Intervention site drivers reported increased exposure to the message via road signs (4% pre to 40% post), radio ads (3% pre to 18% post), television (5% pre to 15% post) and newspaper (4% pre to 9% post). Drivers at comparison sites showed no changes in exposure.

## Self Reported Behavior Change

The percentage of drivers who said they leave more room when passing trucks than when passing cars, rose from 16 percent in the pre period to 24 percent in the post period at the intervention sites, while comparison sites showed no change.

## Percent Who Saw or Heard Media About Giving Semi Trucks Space



## Observed Changes in Driving Behaviors

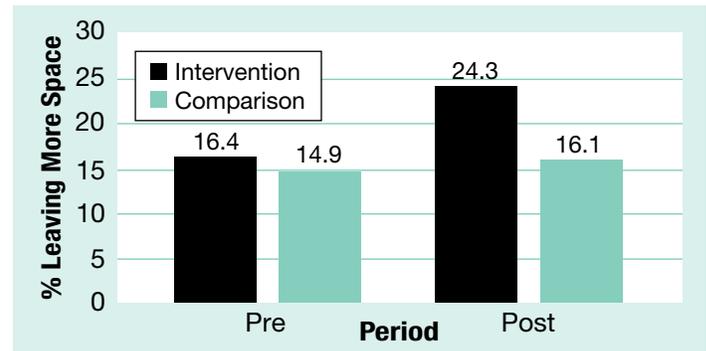
Five waves of driving behaviors (1 pre and 4 post intervention) were recorded on video by WSP troopers who followed semi trucks in unmarked cars using a predetermined observation and recording protocol. Approximately 160 hours of video (8 hours x 4 sites x 5 waves) was collected containing 1,843 sequences in which a PV crossed paths with a CMV (whether or not a violation was committed). Statistical analyses showed that violation rates were reduced significantly at the intervention sites (between 23% and 46%), while rates remained constant at the comparison sites.

## Seriousness of Violations

Three groups of participants blind to the study (5 truckers, 6 WSP officers, and 6 highway safety professionals)

rated a random sample of video violation sequences to determine if any changes in the seriousness of violations occurred after the TACT program. Post intervention violations at the intervention sites were rated as lower in crash risk, less intentional, less illegal, and less intimidating than in the pre period.

## Percent Who Said They Are Leaving More Space When Passing Semi Trucks



## Summary

The evaluation provides a consistent picture of the effectiveness of the TACT pilot project. Success was demonstrated at every step — messages were received and understood, knowledge was changed in the intended direction, self reported behavior improved, and observed behavior confirmed the self reports.

## How to Order

For a copy of *Ticketing Aggressive Cars and Trucks (TACT) in Washington State: High Visibility Enforcement Applied to Share the Road Safely* (41 pages plus appendices) download at [www.nhtsa.dot.gov](http://www.nhtsa.dot.gov). In a few weeks the printed report will be available by writing to the Office of Behavioral Safety Research, NHTSA, NTI-130, 400 Seventh Street SW, Washington, DC 20590, or send a fax to 202-366-7096. Linda Cosgrove, Ph.D., was the evaluation contract manager.



U.S. Department  
of Transportation

**National Highway  
Traffic Safety  
Administration**

400 Seventh Street, SW., NTI-130  
Washington, DC 20590

**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 Patricia Ellison Potter, Ph.D., Editor, fax 202-366-7096, e-mail: [patricia.ellison-potter@nhtsa.dot.gov](mailto:patricia.ellison-potter@nhtsa.dot.gov).