

Automated traffic safety cameras in work zones

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Automated speed enforcement in work zones - Legislative authority

- Originated with concern about safety of workers and travelers in Washington work zones.
- WSDOT Agency Request Legislation during 2006 and 2007 Sessions.
- In the 2007 Session, Legislature authorized automated speed enforcement in work zones as a pilot program.
- Fall of 2008 and Spring of 2009 WSDOT worked with WSP, and Lewis and Thurston County District Courts to test automated speed enforcement in highway work zones.
- 2009 report on Rush Road and Grand Mound projects.
- 2012 Engrossed Substitute House Bill 2190 Section 216 required WSDOT to continue to use automated speed enforcement in work zones.
- Fall of 2012 implemented automated speed enforcement zone in the I-90 Hyak project construction area.

Automated speed enforcement information

- Radar and camera housed in a small SUV.
- Automated speed enforcement signs must be posted.
- Photograph the rear of the vehicle and license plate only. The photograph may not reveal the face of the driver or passengers.
- Notices of infractions have to be mailed to the registered vehicle owner within 14 days of the infraction.
- Fine of \$137 issued as a non-moving violation



Locations

Locations were selected because of speed concerns and active construction taking place during the pilot phase.

- **I-5 at Rush Road to 13th St (MP 73 vicinity)**
 - 4-miles of widening of I-5 in Lewis County from 2 lanes to 3 and the construction of a new interchange.
 - Automated enforcement began September 15 and ended October 24, 2008.
 - ADT: About 50,000
- **I-5 at Grand Mound to Maytown Widening (MP 88 vicinity)**
 - 8 miles of widening of I-5 from 2 lanes to 3.
 - Automated enforcement began May 4 and ended June 30, 2009.
 - ADT: About 70,000
- **I-90 - Snoqualmie Pass East, Hyak to Keechelus Dam (MP 52 vicinity)**
 - 5 miles adding a lane in each direction, adding and replacing bridges and culverts, straightening curves and stabilizing slopes
 - Automated enforcement began September 17 and ended October 26, 2012
 - ADT: Over 27,000

Operational details

- Posted speed 60 mph in the work zone
- Enforcement speed 71 mph or greater
- Roadside signs and variable message signs warn drivers of both the 60 mph work zone speed limit and the presence of automated enforcement

Results at Rush Road and Grand Mound

- The Rush Road work zone speed limit was posted at 60 mph before enforcement, about 39% of drivers complied with the 60 mph limit. During enforcement, compliance with the 60 mph ranged from 44-60%. Nearly 1300 infractions were issued in the 5 weeks of enforcement.
- Grand Mound project showed drivers slowed at beginning of work zones but increased speeds once they were out of range of enforcement vehicle. Approximately 1500 infractions were issued during this deployment.

Hyak results

Speed studies conducted by WSDOT showed:

- Average and 85% speeds dropping between two and four miles an hour during the enforcement period compared to the pre-enforcement period.
- In the westbound direction, before automated enforcement 54% of the vehicles were traveling at 60 mph or less while during enforcement 82-88% of the vehicles were traveling at 60 mph or less.
- In the eastbound direction before automated enforcement began 47% of the vehicles were traveling at 60 mph or less while during enforcement 70-76% of the vehicles observed the speed limit.
- 504 infractions were issued.

Hyak location

During pre-enforcement testing of five locations in the Hyak work zone, we found one location was accounting for most of the potential infractions. The location was near the beginning of the project in the eastbound direction where no work was underway. Drivers based their speed on the conditions they perceived. Potential reasons why vehicles could be speeding in this area included:

- The approach to this area was downhill and allowed vehicles to continue to carry a fair amount of speed.
- Although the vehicles were in the work zone and the area was signed as 60 mph, this was before the actual construction work began, and the area had full shoulders and wide lanes.
- Drive through studies showed that drivers slowed once they reached the active work zone but not until they had passed the first automated speed enforcement area.
- In the end it was decided not to use the automated enforcement from the eastbound Hyak ramp location.

Summary of results

- The three deployments of automated speed enforcement in work zones showed positive reductions in speed.
- Deploying automated enforcement requires the cooperation of the local district court system.
- It may take 4-6 weeks to get a new enforcement location underway, including key players coordination

ATSC next steps

- Use again at Snoqualmie Pass in Spring 2013
- Potential deployment in two I-5 work zones
- Look for opportunities to use ATSC in short term projects including chip seal projects
- A decline in the number of project types suitable for automated enforcement
- Authority for automated speed enforcement expires June 30, 2013

Questions?

For more information on automated speed enforcement
in work zones, please contact:

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