



Project Summary Report 1720-S  
Project O-1720: Develop State Traffic Laws Related  
to Construction and Maintenance Zones

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## Using Traffic Legislation to Improve Work Zone Safety

Like many other states, Texas recently enacted legislation to increase penalties for traffic violations in work zones.

Unfortunately, Texas Transportation Institute (TTI) research indicates that the law has no significant effect on driving behavior. This research identified several reasons why the law is ineffective. More importantly, researchers identified a number of actions that can improve work zone traffic legislation in Texas.

### *What We Did . . .*

Researchers reviewed national experience with work zone-related traffic legislation by contacting state department of transportation and law enforcement personnel nationwide and by reviewing available state and national

crash data. Researchers also conducted traffic speed studies at several Texas work zones immediately before and after implementation of a law that

doubled the traffic fines in work zones in Texas. Researchers examined citation frequencies and their adjudication characteristics (frequency of



dismissals, average fines levied, etc.) from those study sites before and after implementation of the law.

## *What We Found . . .*

As shown in Figure 1, the traffic speed studies showed that the double-fine law had little effect at the Texas work zones examined. No statistically significant changes in speed were detected at 50 percent of the sites studied. The remaining sites split fairly evenly between increases and decreases in average speeds (22 versus 28 percent, respectively).

Researchers found citation characteristics similarly unaffected between the before and after conditions at the study sites. The

number of citations issued and the average fines for those citations were statistically unchanged as a result of the double-fine law.

However, as illustrated in Figure 2, researchers did find that significantly more motorists chose to take defensive driving to have their citations dismissed after the double-fine law was implemented than did so before.

The results from Texas were consistent with experiences reported by officials in a number of other states nationwide. Many officials acknowledged that a lack of strong enforcement was responsible for the lack of effect of the law. Aside from normal budgetary limitations, anecdotal

information provided by law enforcement officers and others suggested a number of additional reasons for the lack of stronger enforcement. Two major reasons were the following:

- The “workers must be present” portion of the current law (in order for higher fines to apply) is difficult for officers to verify at the time of citation issuance. This makes some officers hesitant to mark a citation eligible for the higher fine.
- The narrow cross-section and lack of emergency shoulders in many work zones make it difficult for officers to safely pursue violators and pull them over to issue citations.

## *The Researchers Recommend . . .*

Based on the findings of this project, TTI researchers recommend the following:

- The worker presence requirement in the current Texas double-fine law should be eliminated.
- The minimum fine required for a work zone offense should be



increased. Another state with comparable wording in its legislation (Wisconsin) specifies a minimum of \$60 for speeding and \$40 for other traffic violations.

- The current double-fine law should be modified to eliminate the defensive driving adjudication

option for work zone citations. If this is not possible, an additional surcharge should be imposed upon those who take defensive driving in lieu of paying a fine for a work zone traffic citation.

- New legislation should be developed to allow the district

engineer (or appointed representative) to establish temporary regulatory speed limits in work zones within that district.

This last recommendation will allow more realistic regulatory speed limits to be posted in work zones so that enforcement activities can better target those motorists whose behavior lies truly outside the norm.

Despite these difficulties, most states are trying to do more work zone enforcement. The researchers found that many states do use construction or safety grant funds to hire off-duty police officers as a way to help increase enforcement presence in work zones. In addition, legislation in two states (Kentucky and Indiana) specifically requires the additional monies collected through the increased fines to be used to pay for additional work zone enforcement activities.

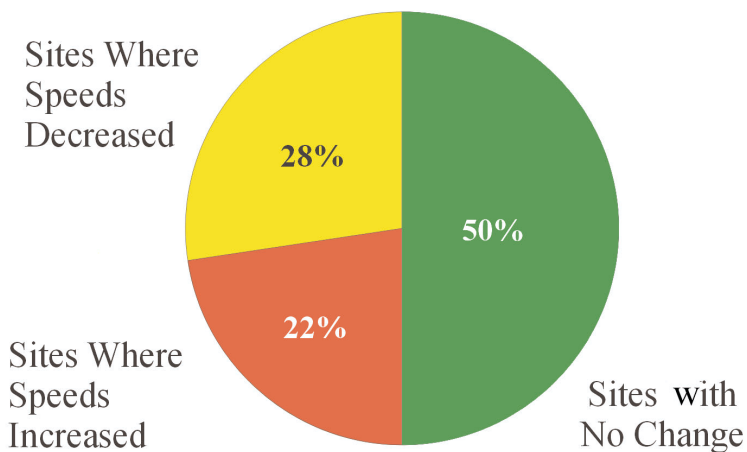


Figure 1. Effect of Texas double-fine law on average work zone speeds at study sites

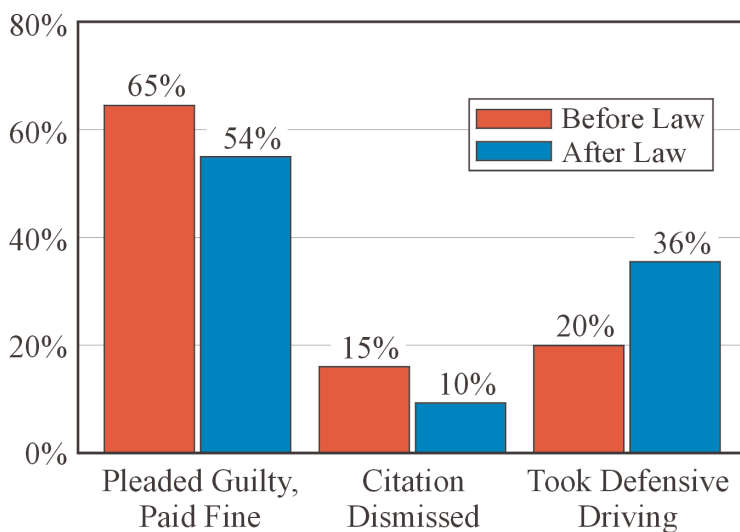


Figure 2. Effect of Texas double-fine law on adjudication process



## *For More Details . . .*

The research is documented in the following reports:

1720-1, *Work Zone-Related Traffic Legislation: A Review of National Practices and Effectiveness*

1720-3, *Work Zone Traffic Legislation in Texas*

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**To obtain copies of the reports, contact Dolores Hott, Texas Transportation Institute, Information & Technology Exchange Center, (979) 845-4853, or e-mail d-hott@tamu.edu. See our on-line catalog at <http://tti.tamu.edu>.**

## *TxDOT Implementation Status June 2001*

Implementation of the research recommendations requires a change in current Texas law, which is beyond direct control of TxDOT personnel. However, information provided through this research may be considered for possible inclusion in TxDOT's agenda in future sessions of the Texas Legislature.

**For more information, please contact Dan Maupin, P.E., RTI Research Engineer, (512) 302-2363 or e-mail dmaupin@dot.state.tx.us**

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## *Disclaimer*

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