

SUMMARY REPORT 232-1F(S)

**PUBLIC UNDERSTANDING OF TRAFFIC
CONTROL DEVICES IN TEXAS**

**SUMMARY REPORT
of
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Public Understanding of Traffic Control Devices in Texas

by

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The intent of the research summarized in this publication was to explore the knowledge level of drivers regarding traffic control devices. A survey approach was undertaken, whereby Texas Department of Public Safety licensing offices were utilized as survey sites in five large urban areas and five matching small cities. In the aggregate, the ten sites evidenced population characteristics highly similar to the Texas population. Thus, the driver sample was representative of the driving public in the State with regard to primary population parameters.

Driver education and defensive driving instructors, State Department of Highways and Public Transportation staff, and previous studies provided the bases for decision-making with regard to the inclusion of 27 traffic control devices in the final survey. The following eleven devices represent those that were the most seriously misunderstood and also pointed to misperceptions that were potentially hazardous:

1. Crossing Signs: Advance vs. at-Crossing symbol sign.
2. Slippery When Wet symbol sign.
3. Curve vs. Turn symbol sign.
4. Pavement Width Transition symbol sign.
5. Double Turn symbol sign.
6. Climbing Lane Ahead.
7. Yield to Traffic in Center Lane.
8. Double Yellow Line (nature of prohibition).
9. Solid White Line (not discriminated from dashed).
10. Protected Turn Traffic Signals (green and amber arrows).
11. Flashing intersection control beacon.

Traffic control devices have become more technically sophisticated in recent years while, simultaneously, traffic congestion has been increasing. Without elimination or modification of existing traffic control devices, training of motor vehicle operators provides the most appropriate alternative for maintaining the effectiveness of the roadway system. The Texas Transportation In-

stitute has recommended a study of informational counter-measures for the misunderstandings of traffic control devices found in this research endeavor, based on further analysis of study data and in consultation with education and training specialists in highway safety in Texas.

To be effective, traffic control devices must be clearly understood by the driving public. A lack of familiarity or misperceptions regarding the meanings of traffic signs, markings, signals, and delineators precipitates hazardous situations and hinders traffic movement.

The survey findings presented in this report are designated to facilitate implementation of informational programs, including dissemination through:

- Public service announcements.
- Driver education and defensive driving courses.
- Drivers licensing stations.
- Vehicle registration.
- Roadsign "advertisements."

Specific information approaches will be assessed in conjunction with the Office of Traffic Safety. However, these informational and educational efforts need to be geared to specific population segments, those evidencing the highest misperceptions on the Texas Driver Knowledge Scale: (1) those with low driving exposure; (2) the young and the elderly drivers; (3) female drivers; and (4) ethnic minorities with language and other barriers to understanding traffic control devices.

Other options which warrant consideration, but which may not be implemented in the near future, include deletion and/or alteration of particularly problematic devices.

The published version of this report may be obtained by addressing your request as follows:

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