

EXECUTIVE SUMMARY

2015 Texas Nighttime Seatbelt Use Survey

Background

Crash data in Texas continue to show that a lower percentage of front seat occupants involved in nighttime fatal crashes use their seatbelts than during the daylight hours. The Texas A&M Transportation Institute (TTI) has been conducting nighttime observational seatbelt use surveys since 2008 to measure the belt use of drivers and front seat passengers. Since 2012, the survey has included observation in 18 cities from 10pm to 5am.

The Survey Sample

Data for 900 total vehicles per city in the 12 smallest cities, 1350 total vehicles in the five larger cities and 1800 vehicles in Houston were collected, with a minimum of 200 vehicles before midnight and 250 after midnight in each city. The 18-city sample includes: Abilene, Amarillo, Austin, Bryan/College Station, Beaumont, Brownsville, Corpus Christi, Dallas, El Paso, Fort Worth, Houston, Laredo, Lubbock, Midland, San Antonio, Tyler, Waco, and Wichita Falls.

What the Researchers Did

The researchers conducted observational surveys of driver and front seat passenger seatbelt use between the hours of 10pm and 5am. Two surveyors collected data at intersections where lighting and conditions were favorable. One observer was designated to observe traffic and call out the data codes to be recorded, while the other surveyor recorded the data on a paper form. The data consisted of belt use, gender, estimated age and vehicle type (car or pickup).

What They Found

Of the 25,894 front seat occupants observed, 85.2% were using their seatbelt. Compared with daytime usage in the same cities (90.2%), nighttime usage is 5 percentage points less. Consistent with daytime surveys, belt usage among men was lower; usage rates were 2 percentage points lower for male drivers and over 4 percentage points lower for male front passengers. Belt use was also consistently lower among pickup occupants than for car occupants, with nighttime use rates at 82.5% and 85.8% respectively. The hours past midnight had the lowest seatbelt use rates, dipping to a low of 82.9% for drivers in the 2-3am hour and 81.4% for front passengers in the 1-2am hour.

What This Means

The low seatbelt usage rates by front seat occupants observed at night means that the risk for serious injuries and fatalities also increase. In Texas, it is estimated that 25 lives can be saved for each one percent increase in seat belt use [1]. Increasing nighttime seatbelt use to daytime levels could mean 125 lives saved, and the prevention of many more injuries.

1. Womack, Katie. *Texas Seat Belt Use Rate Increases*. CTS eNewsletter Highlights. Texas A&M Transportation Institute. Fall 2006, Vol 31, No. 4.

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