Texas Seat Belt Use Rates Increases  Texas has reached the 90% benchmark in safety belt use for all passenger vehicles, with this year’s estimate coming in at 90.44%.  2006 marks the first year in this bracket of belt usage, and this number shows how effective belt use encouragement programs have been over the past years; raising 14.3 percentage points in only 5 years, from 2001’s 76.1% to this year’s 90.4%.

Protection Is Important Reason For Wearing A Motorcycle Helmet  Motorcycle helmet use rates have been on the decline in Texas since the repeal of its universal helmet law, dropping from 99.7% in 1997 to 58.6% in 2006. The survey also elicited information about rider experience, training, and licensure, as well as demographic information about the survey respondents.

Fatal Crashes Involving 16-year old Texas Drivers  CTS Senior Research Scientist David Willis has published his findings from research analyzing the effects of the graduated driver licensing (GDL) program in Texas. In his report, “Fatal Crashes Involving 16 Year-Old Texas drivers Pre- and Post-GDL: Who, When, Where, and Why?” David compares data to determine what effects, if any, GDL implementation may have had on these crashes.

CTS News Briefs

Child in Crash Okay after TTI Safety Event

CTS Research to Aid in Reducing Motorcycle Crashes, Improve Motorcycle Safety

Center Hosts Forum to Address Motorcycle Safety Issues

CTS Highlights is a free, online publication of the Center for Transportation Safety at the Texas Transportation Institute. No permission is needed to reprint from articles, but attribution is requested.

To receive CTS Highlights, please subscribe here.
Texas Seat Belt Use Rate Increases

Texas has reached the 90% benchmark in safety belt use for all passenger vehicles, with this year’s estimate coming in at 90.44%. 2006 marks the first year in this bracket of belt usage, and this number shows how effective belt use encouragement programs have been over the past years; raising 14.3 percentage points in only 5 years, from 2001’s 76.1% to this year’s 90.4%.

According to the National Highway Traffic Safety Administration (NHTSA), the use of 3-point belts in passenger vehicles is associated with an estimated 45% reduction in fatalities, and a 60% reduction in fatalities in accidents involving a fixed object*. Seat belts have been identified as the single most effective safety countermeasure**. NHTSA also estimates that for every 1% increase in belt use nationally, 270 lives are saved. In Texas, this translates to 25 lives saved per year in motor vehicle crashes for each 1% increase in belt use across the state.

The survey was conducted by the Center for Transportation Safety at TTI, and headed by senior research scientist Katie Womack. The Center was established in 2001 by Texas Senate Bill 586 to conduct research and education to assist the state in achieving the goal of reducing the overall fatality rate on Texas roadways.

Researchers performed data collections at intersections throughout Texas. This survey has been conducted by the Center since 1992, and will continue to be collected annually. Other findings from this year’s survey include: passenger cars still lead pickups by a margin of 91.4% to 86.4; also, drivers in Texas are more likely than their passengers to buckle up (91.7% to 84.4%).

For more information about Texas safety belt use, you may contact Katie Womack at kwomack@tamu.edu.

* NHTSA Technical report DOT HS 809 198

Protection is Important Reason for Wearing a Motorcycle Helmet

Motorcycle helmet use rates have been on the decline in Texas since the repeal of its universal helmet law, dropping from 99.7% in 1997 to 58.6% in 2006. So that effective public information programs could be put in place to inform motorcyclists about the benefits of helmet use, the Center for Transportation Safety at the Texas Transportation Institute conducted a survey of motorcyclists for the Texas Department of Transportation to ascertain reasons for helmet and non-helmet use. The survey also elicited information about rider experience, training, and licensure, as well as demographic information about the survey respondents.

Approximately 7 out of 10 of the 1,037 respondents (69.3%) reported that they wear a helmet “always” (55%) or “most of the time” (14.3%) when they ride. Less than one-fifth of the respondents (17.6%) indicated that they “rarely” or “never” wear a helmet when they ride. The data show that sport bike riders and riders on “other” bike types were more likely to ride with a helmet “always” or “most of the time” (74.7%) compared to riders on cruiser-style motorcycles (64.2%). Results also show that as bike engine size increases, helmet use frequency decreases. Respondents riding smaller engine size bikes (1000cc and below) indicated “always” or “most of the time” wearing a helmet 81.4% of the time, compared to 64.3% of the time among respondents riding bikes with greater than 1000cc engines.

The protective benefits offered by a helmet was the number one reason given by those who “almost always” or “always” wear a helmet (76.7%). Other reasons stated for helmet use include: family obligations and desires; bug and rock deflection; comfort and style; common sense; lack of windshield; hearing protection; and the ability to listen to music and communicate with passengers.
According to respondents who indicated that they "sometimes" or "rarely" wear a helmet, the predominant reasons for not using a helmet include: personal freedom/choice (70.5%); weather (too hot/humid) (41.8%); hear better without the helmet (38.8%); and see better without a helmet (32.7%). Other reasons given for non-helmet use included: not owning a helmet, and riding in less congested traffic. A few indicated that it was "more fun" to ride without a helmet. Other situations respondents reported not wearing helmets include when: riding on rural or open roads or on private property; giving someone else a ride; riding alone; riding in groups, testing a bike; and riding in parades.

For more information about the survey, contact Patricia Turner at 979-458-2619 or p-turner@tamu.edu.

---

**Fatal Crashes Involving 16-year old Texas Drivers**

CTS Senior Research Scientist David Willis has published his findings from research analyzing the effects of the graduated driver licensing (GDL) program in Texas. In his report, "Fatal Crashes Involving 16 Year-Old Texas drivers Pre- and Post-GDL: Who, When, Where, and Why?" David compares data to determine what effects, if any, GDL implementation may have had on these crashes.

Drivers in this youngest age bracket are the riskiest age demographic of drivers on the roads today. While not necessarily involved in the most fatal collisions, they are involved in the most collisions overall. The riskiest time for drivers is shortly after the learning period. GDL was implemented to lessen risks during the time shortly following licensure and during the first few months of unsupervised driving (Williams, 2003).

By reviewing NHTSA's Fatality Analysis Reporting System (FARS) data, Willis found many unchanged factors pre- and post-GDL implementation:

- Dangerous times for young drivers (3:00-7:00 pm and 9:00-11:00 pm)
- Most dangerous days (Friday and Saturday)
- Driver-related factor (speed)
- Crashes involving a single vehicle, two vehicles, or three vehicles
- Interstate and high standard roads had the fewest driver cases
- Local roads and streets had the most

The following differences, pre- and post-GDL were found:

- Drop in crashes while carrying passengers
- Drop in run-off-the-road crashes
- Restraint use increased by 5.5%
- Drop in crashes on urban local streets and roads
- Crashes on rural major collectors increased

Allan F. Williams, Teenage Drivers: Patterns of Risk, Journal of Safety Research 34.

---

**Determine the Incidence of Alcohol and Other Drugs in Fatally Injured Drivers and Pedestrians in Texas**

By Becky Davies

Texas lacks a coordinated procedure for agencies and individuals responsible for collecting and reporting toxicology (alcohol and drug) results required for traffic crashes that involve a death. Thus, missing data on the incidence of alcohol and other drug use must be obtained from medical examiner (M.E.) offices around the state. Most toxicology results remain in the M.E. files unless the information is requested by the investigating agency. Consequently, these data are never recorded in the Texas Department of Public Safety (DPS) Crash Records Information System (CRIS) or the National Highway Traffic Safety Administration's (NHTSA's) Fatality Analysis Reporting System (FARS).

Existing problems with toxicology reporting will continue unless there is a concerted effort to increase awareness of how important the information is.

This study identified gaps in knowledge and understanding of laws as they relate to crash reporting; developed educational materials for officials and individuals responsible for reporting alcohol and drug test
results to the CRIS database; assisted with facilitating electronic submission of results to the CRIS and FARS databases; and continued to assist with improving the quality and reliability of toxicology results for persons killed in traffic crashes in Texas. The project was funded by the Texas Department of Transportation. For further information please contact Becky Davies at b-davies@tamu.edu.

CTS News Briefs

CTS Research to Aid in Reducing Motorcycle Crashes, Improve Motorcycle Safety

TTI’s Center for Transportation Safety (CTS) has been awarded two separate contracts to address alcohol-impaired motorcycle riding and to improve motorcycle safety and increase motorcycle awareness.

In the first contract, awarded by the National Highway Traffic Safety Administration (NHTSA), the CTS, in collaboration with the University of North Carolina Highway Safety Research Center, will conduct a study on the programs and activities targeted at reducing motorcycle crashes, deaths, and injuries resulting from drinking and riding.

"Motorcyclists have the highest intoxication rates among all road users involved in fatal crashes, says Associate Research Scientist Patricia Turner. Because motorcycle riding requires greater physical skills and balance than driving a car, any amount of alcohol puts a rider at greater risk for crashes, injuries, and death.”

The research also includes examining data and statistics on alcohol-impaired motorcycle crashes and developing recommendations on how to reduce the number of crashes, fatalities, and injuries associated with alcohol-impaired motorcycle operation.

In the second contract, awarded by the Texas Department of Transportation (TxDOT), TTI researchers will work with the Department of Public Safety (DPS) to develop a new statewide motorcycle safety campaign set to kick off in Texas in 2007. “The campaign goals are to increase interest in attending motorcycle safety courses as well as motorist awareness of motorcycles, and to reduce the number of motorcycle crashes, injuries, and deaths on Texas roads,” says Clifford Burdette, coordinator or the DPS Motorcycle & ATV Safety Training Unit.

For more information on motorcycle research at TTI, contact Patricia Turner at p-turner@tamu.edu.

Child in Crash Okay after TTI Safety Event

When Charlot Finnigan came to TTI’s Child Safety Seat "check-up" event Dec. 13, 2005, she had no idea it would become perhaps one of the most important decisions of her life. On Jan. 15, 2006, as Charlot and her husband were driving south on Texas Avenue, a car pulled out from a parking lot, causing a collision that totaled their 12-year-old automobile. Immediately, Charlot and her husband checked the backseat and the safety of their 4-month old, 11-pound daughter, Jasmine. Inside and secure in her infant child safety seat, she was fine. (Jasmine is small for her age, weighing less than 6 pounds at birth). The family was later checked out at the hospital and released, found to be uninjured. "Before I went to the safety seat "check-up" event, I didn't know how to install the seat," Charlot said. "Without knowing how to do it right, Jasmine could have been hurt."

In fact, the notes from the Dec. 13 inspection of little Jasmine’s seat showed some serious problems. TTI employees Katie Womack and Sandra Schoeneman jotted down these observations: “Harness is not snug,” “Chest clip not at right level,” and “Safety belt not secure.” Child Safety Seat expert Bev Kellner of Texas Cooperative Extension says
those problems are typical in the hundreds of child seat inspections they do annually. "These are things that can be devastating for families in crashes," she said. "Those specific items can be the cause of children being ejected from their seats."

A 2003 study conducted by the National Highway Traffic Safety Administration (NHTSA) shows 80 percent of child safety seats were found with serious misuses. "That’s why we applaud parents like Charlot Finnigan who come to check-up events for that extra measure of assurance that they are using their car seats correctly, and understand that for the safety of their children the details do matter," Womack said.

Center Hosts Forum to Address Motorcycle Safety Issues

Approximately 30 traffic safety professionals, including citizen motorcycle advocates, law enforcement, educators, and Federal and state motorcycle safety representatives, attended a first-ever Motorcycle Safety Forum at the Texas Transportation Institute on February 16, 2006.

The meeting, hosted by the Center for Transportation Safety, allowed participants to share expertise regarding the significance of the motorcycle safety problem and discuss opportunities for improving motorcycle safety in Texas.

The forum was convened in response to the alarming and consistently growing trend in motorcycle fatalities in Texas and nationwide. "I’m very pleased that the Texas Transportation Institute hosted a meeting on motorcycle safety," said Kenneth Copeland, the National Highway Traffic Safety Administration’s South Central Region Traffic Safety Specialist.

"Infuriatingly, motorcycle fatalities in Texas and across the nation are rising and we need everyone to be aware of the problems and to be part of the solutions."

Participants heard presentations on national and state motorcycle crash trends, rider education and training efforts, helmet law and impaired rider law enforcement challenges, and initiatives to improve motorist awareness of motorcycles in local Texas communities.

Breakout sessions on motorist and rider awareness, impaired riding, rider training and licensing, and protective gear use provided an opportunity for participants to share ideas on what can be done and how best to address a particular issue.

The forum also facilitated communication and networking among motorcycle safety advocates throughout the state and resulted in plans for future meetings to continue long-range motorcycle safety planning efforts in the state.

"I’m glad that everyone in attendance seemed truly interested in the topic and is interested in working together now and in the future towards a common goal of fewer motorcycle-related crashes and resulting injuries and fatalities," said Clifton Burdette, Program Coordinator of the Texas Department of Public Safety Motorcycle Safety Unit.

"I think that the most important aspect of the forum was having participants from a variety of traffic safety disciplines get together to discuss a topic that is of tremendous importance to us in the motorcycle safety field."

For more information contact Patricia Turner at 979-458-2619 or p-turner@tamu.edu.
**New Staff**

Quinn Brackett re-joined the Texas Transportation Institute as an advisor to the Center for Transportation Safety when it was initiated. Dr. Brackett was a researcher at TTI from 1974 to 1996, after which he turned his full-time attention to human factors and safety consulting. Dr. Brackett joined the Center staff in October, 2005 to take the lead on developing new research initiatives.