Remarks Prepared for David Strickland, Administrator Texas Traffic Safety Conference San Antonio, TX June 5, 2012

Thank you, John [Mounce] for that generous introduction. Good morning, everyone. I am honored to address you this morning. I feel right at home here, because all of you are working on the frontlines of highway safety research and administration. I'm excited to bring the perspective of the National Highway Traffic Safety Administration to this important conference.

I want to acknowledge John Barton and his colleagues at the Texas Department of Transportation for their tireless work on highway safety issues. Thanks also to Dennis Christiansen and John Mounce of the Texas Transportation Institute and the Texas A&M University System for your extensive and spectacular transportation research agenda.

I also want to extend special thanks to the San Antonio Police Department and Chief William McManus for their commitment and tireless work on the 24-7 No Refusal DWI enforcement effort. It's a powerful initiative that addresses the unacceptably high level of DWI fatalities in Texas. I know that the "No Refusal" DWI Policies and Practices breakout session this morning will be of great interest to this audience.

As you know, at NHTSA we have a single-minded focus on saving lives and preventing injuries. Our diverse programs and initiatives emerge from data-driven and research-oriented activities that touch on every aspect of driving safety. We focus on driver behavior, emerging technologies, vehicle testing, law enforcement and research, rulemaking, international collaboration, and public outreach.

Under the leadership of Secretary Ray LaHood, the Department of Transportation is focused on making our transportation systems the safest in the world. The core of our mission is the safety of the American public, and that mission rules our daily lives.

A statistical projection of traffic fatalities shows that an estimated 32,310 people died in U.S. motor vehicle traffic crashes in 2011. This represents a decline of about 1.7 percent compared to the 32,885 fatalities that occurred in 2010. Clearly, any decline in highway deaths is welcome news. But 32,310 deaths is still an enormous number. And that's not counting the number of injuries. For 2010, Texas DOT reported that there were 3,023 motor vehicle traffic fatalities across the state, and that 82,685 people sustained a serious crash-related injury.

This morning I want to touch on some of NHTSA's highpriority safety initiatives and highlight issues of special concern in Texas—including impaired driving, occupant protection, and motorcycle safety.

While Texas has made great strides in traffic safety, the state lags far behind much of the nation in reducing deaths and injuries from impaired driving. In fact, Texas is one of the Top Ten Impaired Driving High Fatality Rate States.

IMPAIRED DRIVING

In the past five years, the number of people killed in Texas where a driver or motorcycle operator had a BAC of .08+ has decreased by 10 percent (from 1,400 in 2006 to 1,259 in 2010). The good news is that in that same time period, overall traffic deaths are down a remarkable 15 percent. 500 fewer people died in 2010 than in 2006.

While the rate of impaired driving fatalities per 100,000 people has dropped 20 percent in Texas in the last decade from a rate of 6.6 to 5.3, Texas' ranking among all states nationally has moved negatively from 40th to 41st. That simply means that most of the rest of the states are bringing down their rates faster than Texas. Impaired driving is a complicated issue that requires work in multiple areas to effectively address the problem. Law enforcement, prosecution, the courts, and treatment all play a significant role in reducing the number of deaths and injuries caused by impaired drivers on our roads.

Best practices that can help continue to bring down the numbers include DWI courts, first offender ignition interlock laws, alcohol screening and brief interventions by emergency room physicians, and High Visibility Enforcement of existing DWI laws. The deterrence model is critical to getting drivers to make the right decision: not getting behind the wheel after drinking.

Texas has shown the rest of the Nation the way when it comes to "No Refusal" enforcement campaigns. This program escalates deterrence and increases the chance that drinking and driving arrests result in convictions. Alcohol-related crash deaths are truly a crime that can and should be stopped. I urge you to continue your work with law enforcement to increase impaired driving enforcement.

The No Refusal Program continues to make a difference right here in San Antonio. During the city's 2012 Fiesta celebration in April, there were no alcohol-related traffic fatalities during the 11 days of Fiesta, which brings a million tourists to the area. In addition, there were no arrests for intoxicated manslaughter during Fiesta, or in the entire month of April, which traditionally has been the deadliest month for alcoholrelated fatalities in San Antonio. Nearly 400 people were arrested in Bexar [pronounced Bear] County for DWI, a 10 percent increase from the 2011 Fiesta season. The city also conducted a public information campaign

that encouraged the public to seek alternative transportation or designate a driver if they planned to drink alcohol excessively.

Currently, Texas is one of a handful of states still not permitted to conduct Sobriety Checkpoints. This is a tool that could make a huge difference in reducing impaired driving deaths and injuries on state roads. Study after study has documented that Sobriety Checkpoints can significantly lower the incidence of drunk driving. A Center for Disease Control review of 11 high-quality studies found that checkpoints reduced alcohol-related fatal, injury, and property damage crashes each by about 20 percent. If fully implemented, they could save more than 250 lives annually in Texas. (That's about the number of people in this room.)

The hard work and commitment of Chief McManus and the San Antonio PD has put 24-7 No Refusal DWI enforcement on the map. Unfortunately, organized efforts to authorize sobriety check points have failed in the Texas legislature for at least the past ten years. I urge you to continue working with Texas lawmakers to implement Sobriety Checkpoints.

OCCUPANT PROTECTION / SEAT BELTS

Occupant protection has long been a fundamental safety goal for NHTSA. Since the DOT Click It or Ticket annual campaign began in 2002, Texas has increased seat belt usage by 17.6 percentage points, from 76 percent to nearly 94 percent. And the belt use rate in pickup trucks has soared by over 20 percentage points. NHTSA estimates that in the last decade seat belts have saved 2,843 lives in Texas and prevented 48,000 serious injuries—and saved more than \$10 billion in associated costs.

Of the 2,090 passenger vehicle occupants who died in crashes in Texas in 2010, 44 percent (or 834) were known to not be wearing their seat belts. The overall use of seat belts in Texas is high (94 percent), yet over half of the passenger vehicle occupants who die in crashes at night are unbelted. That's especially troubling, given the higher likelihood of night-time crashes. So we still face a fundamental challenge—here in Texas and across the U.S—in convincing both drivers and passengers that seat belts are still the most effective means of reducing fatalities and serious injuries when traffic crashes occur.

MOTORCYLE SAFETY

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Motorcycle fatalities in Texas are now offsetting many of the lives saved in other vehicles. In 2001, there were 243 Texas motorcyclists killed, compared with 415 in 2010. That's a 70 percent increase over the decade. The solutions are right in front of us: More than one in three of motorcyclists killed in Texas had a BAC over the legal limit of .08 and six of every ten of the motorcyclists killed were not wearing helmets. The solution is grounded in the "uncommon sense" of rider responsibility: refrain from operating a motorcycle while impaired and always wear a DOT-compliant helmet.

DADSS

Given the deadly consequences of alcohol-impaired driving nationwide, I want to touch on a technological innovation that NHTSA has been working that could reduce alcohol-related crashes.

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In 2008, NHTSA initiated a \$10 million, five-year cooperative research program with the Automotive Coalition for Traffic Safety (ACTS), a nonprofit industry coalition funded by 17 automakers. The program, called the Driver Alcohol Detection System for Safety (DADSS), is developing non-invasive technologies to quickly and accurately measure a driver's blood alcohol concentration (BAC). If the system detects that the driver has a BAC at or above the legal intoxication limit (currently .08 BAC or higher), the vehicle will be disabled from being driven.

NHTSA research shows that drivers involved in fatal accidents with blood alcohol levels above the .08 legal limit are eight times more likely to have had a prior conviction for impaired driving than drivers who had no alcohol in their bodies at the time of a crash.

The technology could be voluntarily installed as an option on new cars. One system being developed determines the blood alcohol concentration through a touch-based approach and the other system uses a breath-based approach.

Phase One, completed last year, produced proof-ofprinciple prototypes focused on speed, accuracy, and precision. These prototypes showed significant promise towards meeting the stringent performance specifications. The program is now in Phase Two, which will conclude in late 2013 with a practical demonstration of the DADSS alcohol detection systems in a research vehicle. These systems, while still research prototypes, will be suitable for continued development and subsequent vehicle testing.

Although DADSS research is still in the early stages, we are following a step-by-step, data-driven process to ensure that the end result is a highly unobtrusive, accurate, and precise system. ACTS has also formed a Blue Ribbon Panel of experts to advise the project, including automotive manufacturers and suppliers, public interest organizations, highway safety researchers, domestic and international government agencies, and medical and behavioral scientists. There is still much more work to be done, but we believe that a technology could be ready for general use and integrated into vehicles in eight to 10 years.

DISTRACTED DRIVING

Approximately 90 percent of vehicle crashes are due to driver error. As you may know, NHTSA has been deeply involved in widespread behavioral issue that significantly impacts highway safety: the epidemic of distracted driving. Secretary LaHood spoke to this issue at the Texas Distracted Driving Summit here in San Antonio in April, and I want to follow up here.

The epidemic of distraction is one of our greatest highway safety challenges. Too many drivers are using their cell phones and texting devices when they should be focused on the road. And because we anticipate further growth of on-board smartphone-based applications, NHTSA has been carefully examining the human-machine interface.

The data are telling us that as technology evolves, the potential for distraction in vehicles rises. When drivers are talking on cell phones, texting, and surfing the Internet their eyes, hands, and focus are diverted from their primary responsibility: driving.

Distraction is a deadly habit on America's roadways. In 2010, more than 3,000 people in the United States lost their lives in crashes where distraction was a factor.

Drivers who use a hand-held device are four times more likely to get into a crash serious enough to cause injury. Texting drivers are 23 times more likely to be involved in a crash. Sending or reading a text takes your eyes off the road for an average of 4.6 seconds. At 55 mph, that's like driving the length of a football field blindfolded.

Traffic fatalities remain the leading cause of death in the United States for young people age 4 and every age 11 through 27. And we know that teenagers are especially vulnerable because they lack driving experience, are prone to take risks, and their world is fundamentally defined by mobile technologies and social connectivity.

How do we deal with the safety consequences of people wanting to live a digital lifestyle in every aspect of their lives?

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NHTSA is developing an evaluative framework for invehicle technologies. With the support and leadership of the Secretary of Transportation, we are finalizing specific guidelines to help automakers develop invehicle electronic devices that provide the features consumers want—without interfering with the driver's focus or sacrificing safety by distracting the driver's attention.

In March, NHTSA conducted hearings on our proposed guidelines across the country and gathered responses from automakers and other stakeholders. We are now looking ahead to a collaborative solution that directly addresses the dangerous connection of electronic devices to distraction.

Our foremost goal is to aid automakers in reducing the complexity and amount of time it takes to use onboard

electronic devices. Our proposed guidelines recommend reducing the distraction potential of in-vehicle electronic designs. Specifically, we recommend that devices be designed so that they can be operated with only one hand (leaving the other for steering), and with limited glances away from the road. The guidelines contain a test method for measuring the duration and number of off-the-road glances as well as thresholds for determining whether a device is too distracting to be operated by the driver while driving.

Our proposed guidelines recommend limiting the amount of manual inputs needed to operate a device and unnecessary visual information in the driver's field of view. We also propose disabling certain electronic devices while driving. The first set of guidelines is dedicated to visual-manual interfaces and is expected to be completed this year. Guidelines for portable and aftermarket devices and voice-based interfaces are expected to be completed in 2013 and 2014.

CONNECTED VEHICLE TECHNOLOGY

I want to finish by speaking briefly about NHTSA's connected vehicle research, which I believe will enable the industry to take a giant leap toward preventing crashes from occurring in the first place. Vehicle-to-Vehicle technologies have the potential to address approximately 80 percent of the crash scenarios involving unimpaired drivers.

Our research shows that these technologies could help prevent a majority of the collisions that typically occur in the real world, such as rear-end collisions, intersection crashes, and collisions caused by switching lanes. Connected vehicle mobility applications have the potential to create a connected, data-rich travel environment. We envision a network that captures realtime data from equipment located on-board vehicles (including automobiles, trucks, and buses) and within the roadway infrastructure. The data then could be transmitted wirelessly and potentially used by transportation managers in a variety of dynamic, multimodal applications to manage the transportation system for optimum performance.

NHTSA has been conducting vehicle performance testing to evaluate the technical effectiveness of these technologies. The NHTSA Vehicle Research and Test Center, along with industry partners from the Crash Avoidance Metrics Partnership, has conducted a large program of work on functionality and interoperability of these technologies. The results to date are very positive. This is a great example of how government and industry can work together to develop and assess technology to address safety issues.

Since 2011, NHTSA has been conducting Safety Pilot driver clinics in a research program jointly developed with the Research and Innovative Technology Administration (RITA) and other DOT agencies.

The driver clinics are designed to evaluate cars and trucks equipped with vehicle-to-vehicle communications systems in a controlled environment where researchers can observe the drivers' responses. The technologies we've been testing include in-vehicle collision warnings, "do not pass" alerts, warnings that a vehicle ahead has stopped suddenly, and other similar safety messages. These clinics have expanded our understanding of how drivers will respond to the technology and how connected vehicles communicate in real-world scenarios.

Feedback from 688 drivers who participated in tests of V2V communications has shown that an overwhelming majority of drivers would like to have the features included in their own vehicles. Most of them believe the technology would be useful in improving driver safety.

A second-phase Safety Pilot using approximately 2,800 vehicles will further test Connected Vehicle technology in a real-world field test and demonstration from the summer of 2012 through the summer of 2013. It will focus on vehicle-to-vehicle applications, in addition to continuing the research on a limited number of vehicleto-infrastructure communication systems.

The potential safety benefit coupled with the increasing technical maturity of this technology has encouraged NHTSA to announce our intent to make an Agency Decision on Connected Vehicle Technology in 2013. Ultimately, I think the next great safety breakthrough will be to implement crash-avoidance technologies throughout the fleet—and that is going to save many thousands of lives long term.

There is much work to be done to advance highway safety—in Texas and across the country. You are leaders

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in your field and I congratulate you for all that you have accomplished. One consequence of doing a good job is that you are likely to be asked to do even more. I want to conclude by congratulating all of you on the exceptional work you are doing for highway safety. Your research, advocacy, enforcement, and innovation are important contributions for Texas and for the nation. There is much work yet to be done—for all us.

Thank you for giving me this opportunity to speak. And have a great conference!

Thank you.