

STATEMENT

OF

THE ALLIANCE OF AUTOMOBILE MANUFACTURERS

BEFORE THE:

**SUBCOMMITTEE ON
CONSUMER AFFAIRS, INSURANCE AND AUTOMOTIVE SAFETY
OF THE
SENATE COMMERCE, SCIENCE AND TRANSPORTATION COMMITTEE**

February 28, 2007

Thank you Mr. Chairman. My name is Dave McCurdy and I am President and CEO of the Alliance of Automobile Manufacturers. Within Alliance membership, safety is our highest priority. Ours is a high-tech industry that uses cutting-edge safety technology to put people first. In fact, automakers invest more in research and development than any other industry, including pharmaceuticals and computers, according to the National Science Foundation. In 2005 alone, automakers invested \$40 billion, roughly \$2,400 for every car and light truck sold in the U.S. that year. The Alliance of Automobile Manufacturers (Alliance) is a trade association of nine car and light truck manufacturers including BMW Group, DaimlerChrysler, Ford Motor Company, General Motors, Mazda, Mitsubishi Motors, Porsche, Toyota and Volkswagen.

INDUSTRY, CONSUMERS and MOTOR VEHICLE SAFETY

Automakers lead legislative and regulatory initiatives with the invention, development and implementation of advanced technologies focused upon safety improvements. Consider for example the installation of: dual stage frontal air bags, side impact air bags, safety belt pretensioners, load limiting retractors, side curtain air bags (for side impact and some with roll over capacity), advanced lighting, adaptive speed control, lane departure warnings, brake assist systems, adjustable torso belts for small passengers, child security door locks, automatic door locks, electronic stability control systems, battery isolation in severe collisions, automatic post collision notification to emergency responders, engineered structures for car to truck collisions and other crash modes. All of these technologies are voluntarily installed by manufacturers on their own initiative.

The automobile industry engineers, manufacturers, and markets the most complex consumer product that is offered for sale in the global economy. It is a product of great utility, essential to the day to day flow of people, goods and services in developed and developing economies and a key contributor to economic growth. Motor vehicle manufacturers' institutional successes are contingent upon the desire of individual consumers to purchase the products our manufacturers offer for sale. In making their independent purchase decisions, consumers balance many considerations, style, color, fuel economy, performance, reputation, safety, technology content, interior noise levels, accommodation for passengers, cargo, pets and all those things we transport frequently or rarely.

The industry is brutally competitive with little margin for error. A new product program may consume as much as \$1 B in development, take 3 to 5 years to bring a product to market and in a strong economy, may sometimes actually have a chance to earn a positive return on investment. Globally and here in the U.S., manufacturing capacity significantly exceeds market demand. This condition makes for great consumer choice, value and competitive/lower product prices. We have seen the effects of global and local excess capacity in our market here in the U.S. reflected by real lower prices for vehicles that are increasing equipped with more performance and technology content. Much of that additional performance and technology content is safety related. Consumers expect more safety performance and technology content and manufacturers respond to those customer needs and demands.

Before addressing specific performance conditions and technology installations, it is important to understand the industry's approach motor vehicle safety. There are several principles to which the industry adheres and it's important to explain these precepts.

First, we consider motor vehicle safety to be a public health challenge. Collisions result in a human toll and in direct economic loss. This is why we work to improve safety. In every respect, it is in the interest of the industry and society to reduce these losses.

Second, as with any public health challenge, it is essential to base policy and improvement initiatives on good scientific understandings of the priorities, cause and pathology of specific concerns. It is also important to use good science in identifying and prioritizing specific opportunities for improvement. To do so, good solid data about the human victim and injury morphology, the environment in which collision events occur (roadways), and the vehicle are necessary. Therefore, we support the collection and analysis of collision data and the prioritization of collision problems by measures of harm (numbers of fatalities, serious injuries, total economic cost, lost days of productivity, etc.). Ideally, with a good understanding of collision related injury patterns, problem areas can be identified, prioritized and addressed in sequential order to ensure the maximum safety return and to facilitate continued improvement.

Third, there are many public institutions with an interest in improving motor vehicle safety; think of this effort as injury control. Auto makers have an interest in injury control as do many public institutions and classes of individuals: drivers, other roadway users, law enforcement agencies, municipal and state governments responsible for roadway safety, medical

practitioners, first responders, legislative bodies, government regulators, and various non-governmental organizations. All of these institutions and groups are partners in injury control and our common interests are to improve motor vehicle safety.

Fourth, safety resources should be expended so as to maximize the safety return and injury reduction consequent to the expenditures.

**ALLIANCE MEMBERS ARE AGGRESSIVELY PURSUING SAFETY
ADVANCEMENTS, COLLECTIVELY AND INDIVIDUALLY**

Advancing motor vehicle safety remains a significant public health challenge – one that automakers are addressing daily, both individually and collectively. Alliance members make huge investments in safer vehicle design and technology. Most of the new, significant safety features currently available on motor vehicles – antilock brakes, stability control, side airbags for head and chest protection, side curtains, pre-crash occupant positioning, lane departure warnings, radar use for collision avoidance – in the U.S. were implemented voluntarily by manufacturers, not as a result of any regulatory mandate. While the industry is engaged in high-tech research and implementation of new safety technologies, it continues to add safety features voluntarily, even such mundane features as right-hand side mirrors for passenger cars, obstacle detection devices for sliding doors and automatic liftgates, automatic lights on with wiper use, etc. Those who claim that vehicle safety will not be advanced in the absence of regulatory requirements are living in the past and are not paying attention to today's market place.

The Alliance also has engaged in collective activities, not only of its member companies, but also with other vehicle manufacturers and interested safety partners. A number of these initiatives are intended to enhance child safety directly or indirectly. However, it is important to state here: Auto manufacturers, as well as all other safety advocates, implore parents and caregivers to NEVER leave children unattended either in or around automobiles and NEVER leave the key in the ignition.

Vehicle Safety for Children – Traffic Related

According to federal government statistics, in 2005 there were a total of 43,443 traffic fatalities in the United States. The 14 and younger age group accounted for 4 percent (1,946) of these traffic fatalities. The majority of young children riding in motor vehicles in the United States are restrained by some type of child safety seat or seat belt, with 98 percent of infants and 89 percent of children ages 1 to 3 so restrained in 2006. Children between the ages of 4 and 7 are also restrained at somewhat lower rates than younger children, with 78 percent of these children restrained by a safety seat or seat belt in 2006. Most children now ride in the rear seat of vehicles. In 2006, 93 percent of infants, 94 percent of children ages 1 to 3, and 91 percent of children ages 4 to 7 rode in the rear seat. National fatality data show, however, that of the more than 400 tweens – children 8 to 12 years old – killed in crashes each year, nearly 50 percent are unrestrained and one-third were riding in the front seat. In 2004, a Partners for Child Passenger Safety (PCPS) study found that 35 percent of 9 to 12 year-olds were riding in the front seat, compared to only 7 percent of 4 to 8 year-olds. Research shows that children are 40 percent more likely to be injured in a front seat than if they had been seated in back. Finally, child restraint use continues to be lower when the driver was unbelted than for belted drivers.

National fatality data show when adult drivers are not restrained 91 percent of 8 to 15 year-old fatals are unrestrained. However, when adult drivers are restrained, 48 percent of 8 to 15 year-old fatals are restrained.

Research has shown that lap/shoulder belts, when used, reduce the risk of fatal injury to front seat occupants (age 5 and older) of passenger cars by 45 percent. For light-truck occupants, safety belts reduce the overall risk of fatal injury by 60 percent. But in light truck rollover crashes, seat belts reduce the risk of being killed by 80 percent. Research on the effectiveness of child safety seats has found them to reduce fatal injury by 71 percent for infants (less than 1 year old) and by 54 percent for toddlers (1-4 years old) in passenger cars. For infants and toddlers in light trucks, the corresponding reductions are 58 percent and 59 percent, respectively.

Alliance members' support of the Air Bag and Seat Belt Safety Campaign conducted over the last decade has worked to get children in back seats properly restrained in a restraint appropriate for their age and size. Moreover, the Campaign has been very successful in increasing seat belt usage – 20 percentage points in the last 10 years. Further still, the Campaign has been successful in securing the adoption of primary enforcement seat belt laws. States with primary enforcement laws have average safety belt usage rates approximately 11 percentage points higher than states having secondary enforcement laws. NHTSA estimates that a single percentage point increase in safety belt use nationwide would result in an estimated 280 lives saved per year. In 1996, 11 states had primary enforcement laws covering 38 percent of the population. As of 2006, 25 states and the District of Columbia have primary enforcement laws

covering 65 percent of the population. When an adult restraint is used, it is far more likely that children riding with that adult are restrained as well.

Alliance members were also active participants in two Blue Ribbon Panels on child passenger safety. The Automotive Coalition for Traffic Safety (ACTS), at the request of the U.S. Department of Transportation, served as the facilitator for both Panels. The first endeavor was the Blue Ribbon Panel on Child Restraint and Vehicle Compatibility. This panel was announced in February 1995 and recommendations were released that May. One key recommendation resulted in the new LATCH (Lower Anchors and Tethers for CHildren) system created to help standardize the way child restraints are attached to vehicles without using a seat belt. All child restraints and most new vehicles manufactured on or after September 1, 2002 were required by NHTSA to include hardware components designed to simplify child seat installation and to reduce the incidence of misuse and incorrect installation of child safety seats. A study released by NHTSA in December 2006 concluded that LATCH, “*appear(s) to be helping to reduce insecure installation of child safety seats.*” The study further concluded that people who have experience with LATCH appear to prefer its use over the conventional method using the vehicle seat belt. Finally, the study concluded that the primary reason that people do not use LATCH is that they don’t know about it or because LATCH was not available in some center-rear seats. The Alliance has committed to work with NHTSA to resolve these and other questions about LATCH.

The second panel, the Blue Ribbon Panel on Protecting Our Older Child Passengers was announced in November 1998. Panel members focused recommendations on getting 4 to 16 year-olds into the correct restraint systems and seating positions for their age and size.

Please see <http://www.actsinc.org/blueribbon.cfm> for more information about both of these Panels.

To address the large number of tweens who are needlessly at risk when riding in motor vehicles because they are not always wear seat belts and many sit in front seats, the Alliance turned to ACTS. According to research released by ACTS, parents have more influence on tween behavior than many people realize. Tweens are well aware of safety messages, including the benefits of buckling up and dangers associated with sitting in front of a deploying air bag. However, safety awareness alone has limited influence on how tweens ride in vehicles because other factors may be more important to them. Even though tweens are becoming more independent, they still need parental guidance to ensure their safety in cars.

Surveys showed when parents take control, tweens tend to sit in the back. Two thirds of tweens sit in a back seat when parents make the decision, compared to only half of tweens who independently decide where to sit. When tweens in two pilot sites were asked what might encourage them to sit in a back seat, most said being told by a parent or the vehicle's driver. This was especially true for those tweens who were less likely to buckle up. To reach out to tweens, their parents and others who influence their behavior – to increase the number of tweens who are

properly restrained in back seats – ACTS established a new interactive website, <http://www.tweensafety.org>.

In 2005, a total of 414, or 21 percent, of the fatalities among children age 14 and younger occurred in crashes involving alcohol. Another 48 children age 14 and younger who were killed in traffic crashes in 2005 were pedestrians or pedalcyclists who were struck by drinking drivers (BAC of 0.01 g/dL or higher). The Alliance's support of MADD's Campaign to Eliminate Drunk Driving – described below – is aimed at ending drunk driving in the United States and the associated fatalities and injuries including those involving children.

Vehicle Safety for Children – Nontraffic Related

Turning to the issues that were before this Committee in the 109th Congress as presented in S. 1948, “The Cameron Gulbransen Kids and Cars Safety Act of 2005,” the Alliance supports the establishment of a data collection system for nontraffic, noncrash events involving motor vehicles. Good solid data about the human victim, injury morphology, the environment in which events occur, and the vehicle are a necessary first step to identifying possible interventions that might be effective. However, before determining whether action by this Committee on this point is needed, please consider that Congress has already acted on this issue with the provisions of Sections 2012 and 10305 of Pub. L. 109-59 (119 Stat. 1539 and 1941 (2005)) that was enacted as part of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A legacy for Users (SAFETEA-LU).

Similarly, the Alliance supports the establishment of a consumer information program to provide information about hazards to children in nontraffic, noncrash incident situations. However, implementation of such a provision(s) could and should be timelier than the 18 months proposed in S. 1978. The Alliance believes 90 days following enactment may be possible. Such a directive could, for example, complement SAFE KIDS Worldwide's "Spot the Tot" program designed to prevent injury to children in non-crash events. The program is a nationwide expansion of the successful program of the same name created by SAFE KIDS Utah. It is designed to raise parents' awareness of the risk of vehicle backovers in driveways and parking lots by providing a few simple tips for adults and kids to make sure the area around the vehicle is safe before driving away.

With regard to the mandated rulemakings on vehicle technology, we offer the following.

The 109th Congress specifically addressed power window switches in motor vehicles. Power window safety has been addressed by Congress previously. Section 10308 of SAFETEA-LU directed:

"The Secretary [of Transportation] shall upgrade Federal Motor Vehicle Safety Standard 118 to require that power windows in motor vehicles not in excess of 10,000 pounds have switches that raise the window only when the switch is pulled up or out. The Secretary shall issue a final rule implementing this section by April 1, 2007."

In April 2006, NHTSA implemented the changes to FMVSS No. 118 that were required by SAFETEA-LU. See 71 Fed. Reg. 18673, April 12, 2006. (*“The agency is amending ... the standard to require that any actuation device for closing a power-operated window must operate by pulling away from the surface in the vehicle on which the device is mounted [i.e., “pull-to-close” switches]. This provision implements the mandate of section 10308 of SAFETEA-LU.”*)

NHTSA’s April 2006 final rule also responded to petitions for reconsideration received in response to the agency’s September 2004 power window final rule. Whether the installation of automatic reversal systems for power windows and panels should be mandated was evaluated by NHTSA in response to separate petitions for rulemaking submitted to the agency seeking such a mandate. NHTSA denied these petitions to include an automatic reversal requirement under FMVSS No. 118 in part because the petitioners did not provide any new data regarding the incidence of fatalities and injuries for inadvertent or intentional actuation of power window switches. NHTSA concluded that their most recent amendments to the standard *“... will prevent the types of power-window incidents that have been documented.”* The agency further rejected some hypothetical scenarios offered by petitioners by stating, *“... there is not any documentation that any such cases have actually occurred. Even so, the risk of unintentional switch operation ... is already addressed by the safer switch requirement of the final rule ... we do not believe that the speculative arguments in the Advocates, et. al., petition about magnitude of risk justify their request for the agency to require automatic reversal systems, absent data demonstrating a safety problem. It is not feasible to eliminate all potentially conceivable risks through regulation.”* (emphasis added).

Regarding rearward visibility, again Congress has addressed the issue of backover incidents by requiring several studies on the magnitude of the problem and the potential effectiveness of different technologies to address the problem. A report on one such study was released by NHTSA in November 2006. That study concluded that backover crashes involving all vehicle types, “*are estimated to cause at least 183 fatalities annually ... <and> between 6,700 and 7,419 injuries per year ...*” The report also described the results of tests conducted by NHTSA involving several systems currently available as original equipment on vehicles and aftermarket products to evaluate their performance and potential effectiveness. The report concluded that, “*the performance of sensor-based (ultrasonic and radar) parking aids in detecting child pedestrians behind the vehicle was typically poor, sporadic and limited in range.*” The testing by NHTSA did find that camera based systems, “*may have the greatest potential to provide drivers with reliable assistance in identifying people in the path of the vehicle when backing.*” However, NHTSA cautions, “*readers of this report about relying on the results of our testing or other published test results to promote such systems as an effective means to address the backover crash risk.*” The agency cited numerous reasons for this caution, including the need to better understand the environmental factors (e.g., rain, fog, or other inclement weather, or sun glare) that limit the effectiveness of cameras and the limits of driver performance using such systems. The report observed that: “*Even if cameras allow the driver to identify an object in the back of a vehicle, the driver must look at the display and have the capability to identify an object or person in the path when backing up, and to react and brake quickly enough to prevent the incident. The speed being traveled, the level of driver attention and reaction time all play significant roles in estimating the systems’ effectiveness.*” Therefore,

the Alliance believes that a mandate to require technology that may or may not be effective in addressing a problem whose exact nature is not objectively known would be premature.

Finally a mandate to require brake transmission shift interlocks (BTSI) to work in all ignition key positions is simply not needed. A BTSI requires the operator of the vehicle to be positioned in the driver's seat and to depress the service brake pedal in order to shift the automatic transmission control out of the "Park" position. Virtually all automatic transmission-equipped cars and light trucks have a BTSI, but not all of them work in all ignition key positions. In August 2006, Alliance members, and others, completed development of and immediately began implementing an initiative to further reduce the incidents of shift selector movement in vehicles equipped with automatic transmissions in circumstances where an unsupervised and unattended child has gained access to both a vehicle and its ignition keys by requiring that the vehicle's service brake be depressed, in all key positions, before the transmission can be shifted out of "Park". Approximately 80 percent of 2006 model year cars and light trucks are already equipped with an all-key-position BTSI and all new vehicles will have it no later than September 1, 2010. More information about this agreement can be found at <http://www.nhtsa.dot.gov> under "Agreement on Brake Transmission Shift Interlock" or by entering docket number '25669' in the search box found at <http://dms.dot.gov/search/searchFormSimple.cfm>.

Other Alliance initiatives are providing real-world safety benefits to the public, including children. These are described below.

In December 2003, auto manufacturers committed to a plan developed by an international group of safety experts for enhancing the crash compatibility of passenger cars and light trucks. The plan established new performance criteria for further enhancing occupant protection in front and side crashes between cars and light trucks. It also defined research programs to investigate future test procedures and performance criteria. The Insurance Institute for Highway Safety (IIHS) facilitated the development of this plan with the sponsorship of the Alliance.

By September 2009, 100 percent of each participating manufacturer’s applicable vehicles will be designed to these criteria. However, participating auto manufacturers began implementing the front-to-front and front-to-side performance criteria immediately upon industry’s agreement. Manufacturers’ recent progress in implementing this commitment is described below.

Approximate Percentage of Production Designed in Accordance w/Performance Criteria		
Crash Mode	Production Year 2005	Production Year 2006
Front-to-Front Criteria	62%	75%
Front-to-Side Criteria	33%	53%

The frontal component of the commitment established criteria to further reduce the potential for vehicle override and underride in serious front-to-front crashes between cars and light trucks by requiring sufficient overlap between the primary energy-absorbing structures (PEAS) of the two vehicle types. This may be achieved by ‘geometric matching’ or alignment of these structures or by providing additional structure in light trucks (called secondary energy absorbing structures (SEAS)) for this purpose. In November 2005, new test procedures were added by safety experts to measure the performance of the SEAS. An updated version of the

December 2003 compatibility commitment, reflecting this change, was submitted to NHTSA on May 10, 2006.

In 2006, IIHS completed an analysis of the safety benefits of the front-to-front compatibility agreement.

In front-to-front crashes involving light trucks into passenger cars, IIHS found that the passenger car driver was 16 percent less likely to be killed if struck by a sport utility vehicle (SUV) with a front-end design that met the compatibility performance criteria. Similarly, the passenger car driver was 20 percent less likely to be killed if struck by a pickup truck with a front-end design that met the compatibility performance criteria. The overall reduction in passenger car driver deaths in front-to-front crashes involving both SUVs and pickup trucks was 19 percent.

In front-to-side crashes involving light trucks into passenger cars, IIHS found that the passenger car driver was 30 percent less likely to be killed if struck by a sport utility vehicle (SUV) with a front-end design that met the front-to-front compatibility performance criteria. The passenger car driver was 10 percent less likely to be killed if struck by a pickup truck with a front-end design that met the front-to-front compatibility performance criteria. The overall reduction in passenger car driver deaths in front-to-side crashes involving both SUVs and pickup trucks was 19 percent.

The front-to-side crash component of the commitment established performance criteria that further enhances head protection for people riding in passenger vehicles that are struck in the

side. Manufacturers have voluntarily agreed to engineer their vehicles using two test options: (1) the federal government's (NHTSA) optional side-into-pole test (see FMVSS 201), or (2) the Insurance Institute for Highway Safety (IIHS) test for consumer information, using a moving deformable barrier with front-end geometry to simulate an SUV or pickup. Use of the NHTSA pole test option will sunset in 2009, and all manufacturers will then have to use the IIHS test.

In 2006 the IIHS updated its estimate of the real-world benefits of side airbags in reducing struck vehicle driver fatalities. The results show that side airbags that protect people's heads are reducing driver deaths in cars struck on the driver side by an estimated 37 percent. Airbags that protect the chest and abdomen but not the head are reducing deaths by 26 percent. The results also show an estimated 52 percent reduction in fatality rates for drivers of SUVs equipped with side airbags with head protection. These real-world findings corroborate the good crash test performance of these devices in crashes simulating an SUV striking the driver side of a vehicle and suggest that the manufacturer's voluntary front-side commitment will lead to significant reductions in struck vehicle driver fatality rates.

To learn more about the Crash Compatibility initiative, please see <http://www.autoalliance.org/safety/> or visit <http://dms.dot.gov/search/searchFormSimple.cfm> and enter docket number '14623' in the search box.

Another voluntary initiative led to the establishment of test procedures and performance criteria to assure that in the event an occupant is out-of-position at the time of deployment of a side air bag, the risk of serious injury is limited to 5 percent. In response to concerns about potential injury risk to out-of-position (OOP) women and children from deploying side airbags,

the Alliance, the Association of International Automobile Manufacturers (AIAM), the Automotive Occupant Restraints Council (AORC), and IIHS used a joint working group to develop test procedures with injury criteria and limits to ensure that the risk of injury to OOP occupants from deploying side airbags would be very limited. The initiative produced recommended procedures for evaluating occupant injury risk from deploying side air bags that were finalized in August 2000 and updated in September 2003. Currently, 90 percent of Alliance member company side airbags have been designed in accordance with the recommended procedures. More importantly, the field performance of side air bags remains positive. For more information, please visit <http://twg.iihs.org/> or visit <http://dms.dot.gov/search/searchFormSimple.cfm> and enter docket number '5098' in the search box.

In July 2006, Canada's Minister of Transport, Infrastructure and Communities (The Honourable Lawrence Cannon) announced the signing of three memoranda of understanding (MOUs) with vehicle manufacturers. Each of the agreements will advance the safety by:

- updating the side impact protection requirements to better protect children who sit next to an air bag;
- improving compatibility between vehicles of different sizes to reduce the severity of occupant injury in side and frontal collisions; and
- promoting the use of new technologies in the design and manufacture of vehicles to ensure optimal seatbelt fit for front seat passengers.

Each of these MOUs are based on voluntary agreements first initiated and developed by the Alliance. In announcing these agreements, Transport Canada stated that, "*The department*

continues to modernize its system of regulatory governance by making smarter regulations through innovative consultation mechanisms and processes, harmonized initiatives and voluntary agreements with the transportation industry.”

These efforts to develop voluntary standards to enhance motor vehicle safety, when combined with an industry commitment to design vehicles in accordance with them, is a model for responsible industry action. These programs are proven to be a very effective way to bring significant safety improvements into the fleet faster than has been historically possible through regulation. The voluntary standards process also has the flexibility to produce rapid modifications should the need arise.

The Alliance has also developed a set of principles to address the safety aspects of driver interactions – often called “driver distraction” – with new in-vehicle telematics systems. The Alliance’s Driver Focus – Telematics Guidelines relate to the design, use, and installation of in-vehicle information and communications systems. The Guidelines contain 24 principles to enhance the safety of driver interaction with telematics systems. Each principle includes verification procedures and performance criteria for the safe operation of advanced in-vehicle information and communications systems intended for use by the driver while the vehicle is in motion. The Guidelines were first issued in draft form in 2002 and continue to be updated as research, field data, and technology become available. Alliance members are voluntarily using the Guidelines to minimize driver distraction and collaborate with NHTSA on efforts to further enhance efficiency using in-car systems. Transport Canada is also in negotiations with automakers to establish a memorandum of understanding (MOU) which would set out the general terms and conditions with regard to limiting driver distraction from in-vehicle telematics

devices pursuant to the Alliance Guidelines. Finally, the United Nations Inland Transport Committee has accepted these Guidelines and has presented them to its World Forum for the Harmonization of Vehicle Regulations (WP.29), the internationally-recognized governmental body that helps set the future direction of global motor vehicle safety activities. For more information, please visit <http://www.autoalliance.org/safety/>.

Alliance members are also individually pursuing initiatives to enhance motor vehicle safety. One such initiative that has received widespread support is the installation of vehicle-based technologies to encourage safety belt usage. Preliminary research on one system deployed in the United States by one Alliance member found a statistically significant 5 percentage point increase in safety belt use for drivers of vehicles equipped with that system compared with drivers of unequipped vehicles. NHTSA estimates that a single percentage point increase in safety belt use nationwide would result in an estimated 280 lives saved per year. Beginning in model year 2004, all members of the Alliance began deploying various vehicle-based technologies to increase safety belt use. Eighty-five percent of model year 2006 cars and light trucks were equipped with safety belt reminder systems.

SIGNIFICANT PROGRESS HAS BEEN MADE TO REDUCE FATALITIES AND INJURIES FROM MOTOR VEHICLE CRASHES, BUT CHALLENGES REMAIN

Over the past 25 years, significant progress has been made in reducing the traffic fatality rate. In 1981, the number of fatalities per 100 million vehicle miles traveled stood at 3.17. By 2005, this rate had been driven down by 54 percent to 1.45 fatalities per 100 million vehicle miles traveled. The level of competitiveness among automakers has helped to accelerate the

introduction of safety features in the absence of regulation, aiding in the progress made. In fact, all of the most recent technologies like side airbags and stability control have been introduced ahead of federal regulation or legislative mandate.

Safety is an area in which manufacturers compete and seek competitive advantage. Manufacturers leverage their safety performance and equipment in efforts to distinguish their products from competitors. Manufacturers continue to make innovative safety features available to consumers across their entire product line. For example, side airbags with head protection were available on 84 percent of model year cars and light trucks. Two-thirds of these air bags were side curtains and one-quarter were rollover-activated devices. Another example: electronic stability control was available on 63 percent of model year 2006 cars and light trucks. These two breakthrough technologies, as well as the others mentioned and the growing use of electronics and radar to take advantage of the time prior to a crash to either eliminate it or reduce its severity through automatic braking, demonstrate the commitment of manufacturers to improving safety.

Despite the progress made, however, data show that 43,443 people lost their lives on U.S. highways in 2005 and almost 2.7 million were injured. Tragically, 55 percent of vehicle occupants killed in crashes were not restrained by safety belts or child safety seats. Alcohol was a factor in 39 percent of all fatalities. This is unacceptable. As a nation, we simply must do better.

As the Government Accountability Office reaffirmed, vehicle factors contribute less often to crashes and their subsequent injuries than do human or roadway environmental factors¹. We will never fully realize the potential benefits of vehicle safety technologies until all vehicle occupants are properly restrained and all impaired drivers are off the road.

INCREASED SAFETY BELT USAGE AND PREVENTING IMPAIRED DRIVING ARE NEEDED TODAY TO PREVENT NEEDLESS FATALITIES AND INJURIES

The single most effective way to reduce traffic fatalities and serious injuries in the short term is to increase the proper use of safety belts and child safety seats. Alliance members have a long and proud record of working to increase safety belt usage. Over the past two decades, efforts, nearly totally funded by automakers, have led to a 44 percentage point increase in safety belt usage; from 37 percent in 1986 to 81 percent in 2006, resulting in an estimated 12,000 additional lives saved annually.

However, we are still working to make that number higher, and with good reason. Safety experts say an additional 3,000 lives a year could be saved if the safety belt usage rate increased to 92 percent. Belt use in 5 states and one jurisdiction (CA, HI, MI, OR, WA, and PR) currently exceed 92 percent confirming that high belt usage is possible. The proper use of safety belts and child safety seats is the single most effective way to reduce traffic fatalities and serious injuries.

The significant increase in belt use over the years is largely due to high visibility enforcement mobilizations. Last May, the most successful mobilization ever was conducted with more than 10,000 law enforcement agencies providing stepped up enforcement and close to \$31

¹ “Highway Safety – Research Continues on a Variety of Factors That Contribute to Motor Vehicle Crashes.” United States Government Accountability Office, GAO-03-436, March 2003.

million in state and national paid advertising to augment the enforcement effort. Funding for the enforcement ads, both national and state, comes from funds earmarked by Congress for this purpose. These mobilizations have consistently achieved dramatic increases in safety belt use. We believe that it is important for Congress to continue to provide funding for these law enforcement mobilizations and the paid ads informing the public about them.

Primary enforcement safety belt use laws are significantly correlated with higher safety belt usage levels. States with primary enforcement laws have average safety belt usage rates approximately 11 percentage points higher than states having secondary enforcement laws. Currently, only 25 states and the District of Columbia have primary safety belt laws. Efforts to enact primary enforcement laws are now being enhanced by the Section 406 incentive grants Congress provided in SAFETEA-LU for states passing primary enforcement laws or achieving high belt use rates. Primary enforcement bills have been introduced in at least a dozen states this year and the Alliance is actively working to secure their enactment.

Impaired driving is also a significant highway safety problem. While substantial progress in reducing impaired driving has been made in the last quarter century, more must be done to prevent these needless tragedies. Just one-half of 1 percent of the trips taken annually in the United States by personal motor vehicles are made by alcohol-impaired drivers. Yet, these trips result in nearly 40 percent of all motor vehicle fatalities occurring in the United States each year.

In November 2006, the Alliance joined with the U.S. Department of Transportation, the Insurance Institute for Highway Safety (IIHS), the Governors Highway Safety Association, The

Century Council, the Distilled Spirits Council of the United States (DISCUS), and the International Association of Chiefs of Police, to support MADD's Campaign to Eliminate Drunk Driving. There is no single solution that will eliminate drunk driving. Drunk driving remains a behavioral challenge, a law enforcement challenge and a challenge requiring innovative new approaches, including exploring new technologies. Recognizing this, the Campaign has initiated a bold new 4-point plan intended to end drunk driving in the United States. The plan is leading the nation toward the goal of eliminating drunk driving through:

1. **Intensive high-visibility law enforcement**, including twice-yearly crackdowns and frequent enforcement efforts that include sobriety checkpoints and saturation patrols in all 50 states.
2. **Full implementation of current alcohol ignition interlock technologies**, including efforts to require alcohol ignition interlock devices for all convicted drunk drivers. A key part of this effort is working with judges, prosecutors and state driver's license officials to stop repeat offenders.
3. **Exploration of advanced vehicle technologies** through the establishment of a Blue Ribbon Panel of international safety experts to assess the feasibility of, the potential benefits of, and the public policy challenges associated with a range of advanced technologies that might help prevent drunk driving. These technologies must be moderately priced, absolutely reliable, and unobtrusive to the sober driver. This element of the Campaign is being led by the Alliance.
4. **Mobilization of grassroots support**, led by MADD and its 400+ affiliates, to make the elimination of drunk driving a reality. MADD is uniting drunk driving

victims, families, community leaders, and policy makers in the fight to eliminate drunk driving.

COMPREHENSIVE AND CURRENT DATA ARE NECESSARY TO MAKE INSIGHTFUL AND SOUND PUBLIC POLICY DECISIONS

Sound science provides the foundation on which we build true progress. Data collection is critical to assessing a promising idea's expected real-world benefits. Our extensive research starts with knowledge of human behavior and how people act – and react – in autos.

The Alliance sponsors a significant amount of safety research that is shared with the safety community. The Alliance is sponsoring a program to collect-real world crash data on the performance of depowered and advanced air bags at three sites around the U.S. (Dade County, Florida, Dallas County, Texas, and Chilton, Coosa, St. Clair, Talledega, and Shelby Counties in Alabama). This program adds valuable information about air bag performance to the extensive crash data already being collected by NHTSA through NASS. The Alliance project observes all the NASS data collection protocols so that the Alliance funded cases can be compared with, and evaluated consistently with, other cases in the NASS dataset. For more information, please visit <http://groups.iihs.org/brp/>.

In December 2006, NHTSA issued a technical report, titled *An Evaluation of the 1998-1999 Redesign of Frontal Air Bags*. The Alliance estimates that approximately 25 percent of the crash investigations considered as part of this evaluation were cases investigated by the Alliance. The report finds that, compared to first-generation air bags, redesigned air bags reduced fatalities to infants and children by 83 percent and to out-of-position drivers by 70 percent in low-to-

moderate speed crashes. Yet they entirely preserved the overall life-saving benefits of first-generation air bags for belted drivers and for passengers age 13 and up.

Consistent with need for more real world data, some Alliance members have voluntarily installed Event Data Recorders (EDRs) that provide improved data to assist safety researchers, auto engineers, government researchers and trauma doctors in their work. EDRs can improve our collective understanding of crash events and lead to improvements in vehicle safety systems. Recording certain data elements in the moments just prior to and during a crash can contribute to the breadth and reliability of the crash data already gathered by state and federal governments and widely used by public and private entities to study and improve transportation safety. NHTSA and NTSB have noted the important safety benefits of EDRs and NHTSA has recently issued a regulation federally mandating performance and disclosure requirements for voluntarily installed EDRs. NHTSA's regulation, acknowledging the importance of consistent EDR requirements and encouraging the continued voluntary installation of EDRs by automakers, preempts conflicting state and local requirements and any requirement that would affect EDR performance, design, or operation, including "On/Off Switches".

Mandated EDR "On/Off Switches," which were considered and dismissed by NHTSA as technically unfeasible, have, nonetheless, been proposed in a recent House bill. As certain parties fail to acknowledge, the EDR's in today's vehicles are typically integrated into the air bag control module. They are not stand-alone devices that can be deactivated without disabling the airbag system. Disabling the EDR would also be prohibited by federal law. Federal motor vehicle safety standards (FMVSS) No. 208 requires that "[a]n occupant protection system that deploys in the event of a crash shall have a monitoring system with a readiness indicator." (49

CFR Part 208, S4.5.2). These monitoring systems are integrated with EDR functions. And, it would also violate Federal law to install a switch that would disable the airbag system.²

THE POTENTIAL BENEFITS OF VEHICLE SAFETY TECHNOLOGIES CAN NOT BE FULLY REALIZED UNTIL VEHICLE OCCUPANTS ARE PROPERLY RESTRAINED AND IMPAIRED DRIVERS ARE OFF THE ROAD

Motor vehicle safety is a shared responsibility among government, consumers and vehicle manufacturers. Auto manufacturers are more committed than ever to developing advanced safety technologies to reduce fatalities and injuries resulting from motor vehicle crashes. But as a nation, we will never fully realize the potential benefits of vehicle safety technologies until occupants are properly restrained and impaired drivers are off the road.

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² Section 30122 of Title 49, United States Code, forbids a manufacturer, dealer, or motor vehicle repair business from “making inoperative” anything that is installed in a motor vehicle to comply with a federal motor vehicle safety standard.