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CAMERON GULBRANSEN KIDS TRANSPORTATION SAFETY ACT OF 2007

R E P O R T

OF THE

COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION

ON

S. 694

MARCH 13, 2008.—Ordered to be printed

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SENATE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION

ONE HUNDRED TENTH CONGRESS

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CAMERON GULBRANSEN KIDS TRANSPORTATION SAFETY ACT OF 2007

MARCH 13, 2008.—Ordered to be printed

Mr. INOUYE, from the Committee on Commerce, Science, and Transportation, submitted the following

REPORT

[To accompany S. 694]

The Committee on Commerce, Science, and Transportation, to which was referred the bill (S. 694) to direct the Secretary of Transportation to issue regulations to reduce the incidence of child injury and death occurring inside or outside of light motor vehicles, and for other purposes, having considered the same, reports favorably thereon with an amendment (in the nature of a substitute) and recommends that the bill (as amended) do pass.

PURPOSE OF THE BILL

S. 694, as amended, would direct the Secretary of Transportation (Secretary) to issue regulations applicable to passenger cars and light trucks that will reduce the incidence of injury and death. The Secretary would be granted rulemaking authority to consider requiring that power windows and panels automatically reverse direction when they detect an obstruction, to issue a performance standard to provide drivers with a means of detecting the presence of a person or object behind the vehicle, and to require that automatic transmissions manufactured on and after September 1, 2010, include a service brake system in which the service brake must be depressed before the driver can shift the transmission out of a "park" position. The feature is intended to prevent vehicles from rolling away.

BACKGROUND AND NEEDS

In 2006, 1,618 children ages 15 years and younger died as passengers in motor vehicle crashes in the United States, and approximately 206,000 were injured.[1] In addition, many children are killed and injured in driveway accidents, such as backover incidents each year, and vehicles without auto-reverse power windows and brake shift interlock systems also contributed to a significant number of injuries and fatalities.

Backover: Vehicle backover injuries and deaths occur when a person is positioned behind a vehicle without a driver's knowledge as the driver backs up. Most victims of backovers are children and the elderly. The National Highway Traffic Safety Administration (NHTSA) estimates that backover incidents cause at least 183 fatalities and between 6,700 and 7,419 injuries annually; however, the number of fatalities and injuries from those incidents is subject to debate because no comprehensive statistics are collected on vehicular accidents on private property. Some safety groups assert that the number of backover-related injuries and fatalities is higher. Because these accidents often occur on private property, rather than on public roads, they are not typically included in traffic-crash fatality data.

In preventing backover accidents, the size of vehicle blind spots, the area behind the vehicle where the driver cannot see using his or her side or rear-view mirrors, is a key factor. Generally, the larger the vehicle, the larger the blind spot. Children are especially vulnerable since their small stature makes them harder to see within a blind spot. As larger vehicles, including SUVs, pickup trucks, and minivans, have become more popular, more drivers are confronted with larger blind spots. Currently, without a standard, automakers can design similar-sized vehicles that have dramatically different blind spots. For example, among midsized SUVs, a 5 foot 1 inch driver of a 2006 Jeep Commander Limited has a 69 foot blind spot versus an 18 foot blind spot for a similar-sized driver of a 2005 Nissan Pathfinder LE.

In 2005, in the Safe, Accountable, Flexible, Efficient, Transportation Equity Act, A Legacy for Users (SAFETEA-LU), Congress required the NHTSA to conduct a study of effective methods for reducing the incidence of injury and death outside of parked vehicles and to include an analysis of backover prevention technology. In addition, the Senate Report accompanying H.R. 3058, the Fiscal Year 2006 Transportation, Treasury, HUD Appropriations bill asked for a similar study.

In November 2006, the NHSTA provided a report to Congress entitled the *Vehicle Backover Avoidance Technology Study*. The report examined on-board sensor-based warning systems and visual-only systems that are meant to detect objects behind a vehicle "to evaluate their performance and potential effectiveness in mitigating backover crashes" involving pedestrians. The report indicated that "vehicle manufacturers do not market these technologies as safety systems for preventing drivers from inadvertently backing into pedestrians;" rather they are designed and marketed as parking aids. According to the NHTSA report, in 2006 "there were thirty-one vehicle makes and 100 different model lines offering a parking aid

[1] NHTSA—2006 Annual Assessment of Motor Vehicle Crashes. September, 2007, page 103.

system in the U.S. market." There are a variety of similar systems available in the aftermarket, some of which espouse their abilities as both a parking aid and a safety device.

The NHTSA tested 9 technology-based systems: 6 with sensors only (half original equipment and half aftermarket); 2 with sensors and cameras (1 each original equipment and aftermarket); and 1 camera only (original equipment). Mirrors were used in 2 additional tests. Overall, six vehicle models were used. The data the NHTSA received reported that sensor-based warning systems were generally able to detect adult pedestrians but were lacking in their ability to consistently detect child pedestrians. The report stated that camera systems performed well visually in daylight and indoor lighted situations, but required drivers to be able to quickly and accurately interpret the video information to be effective. However, in a survey of car owners with sensor or camera-based systems, the report stated that at least 85 percent of those who had avoidance systems installed on their vehicles thought the systems were "effective or very effective at providing warnings about objects sufficiently in advance." The NHTSA indicated that the agency would conduct further study on the "serious safety problem presented by vehicle backing crashes."

Auto-Reverse Power Windows: Power windows cause numerous injuries to children and adults, including broken or amputated fingers, broken arms of small children, and strangulations of small children resulting from the force of the window as it rises. In a 1997 study, the NHTSA estimated that 499 people each year suffer an injury severe enough to require a visit to the emergency room due to power window injuries; almost a third of those were under the age of 6, and nearly a third were between the ages of 6 and 15.

In SAFETEA-LU, Congress required that window switch designs be changed to the push-down, pull-up variety that cannot be engaged by pressing against them. While the window switch modification in SAFETEA-LU solved the problem of children accidentally operating the windows, it did not address the situation when someone else is closing the window on a person. Approximately 15 to 20 percent of the vehicles in the U.S. market use auto-reverse window technology to re-open at least one window if sensors indicate an obstruction. According to the NHTSA, the estimated cost of equipping a vehicle with auto-reverse technology is $8 to $12 per window. It is anticipated that this price would decrease through economies of scale.

Brake Transmission Shift Interlock: When a vehicle is inadvertently put into gear or neutral, it may roll away causing harm to bystanders or individuals in the vehicle. Children are especially at risk because they may not know what they did or how to stop the vehicle once they realize what is happening. The nonprofit safety organization Kids and Cars estimates that rollaways were responsible for approximately 86 child fatalities since 2001. The safety technology needed to prevent these incidents is called Brake Transmission Shift Interlock (BTSI), and it requires depressing the brake pedal to move the gear shift. Since children typically cannot reach the brake pedal, if BTSI is in place, there is little chance they can shift the vehicle into gear by themselves.

In August of 2006, the Alliance of Automobile Manufacturers, the Association of International Automobile Manufacturers, and the NHTSA crafted a voluntary agreement which requires full implementation of BTSI not later than September 1, 2010. The agreement states that "any vehicle under 10,000 pounds produced for the U.S. market, with an automatic transmission that includes a 'park' position shall have a system that requires that the service brake be depressed before the transmission can be shifted out of 'park.'" S. 694 would codify the agreement. Automakers participating in the voluntary agreement include: Aston Martin, BMW Group, Ford Motor Company, Hyundai Motor, Maserati, Nissan, Suzuki, DaimlerChrysler Corporation, General Motors, Isuzu Motors, Mazda, Porsche, Toyota, Ferrari, Honda, Kia Motors, Mitsubishi Motors, Subaru, and Volkswagen Group.

Approximately 80 percent of model year (MY) 2006 motor vehicles produced that would have been subject to this agreement are equipped with an automatic transmission control system designed in accordance with the requirements of this agreement. More than 98 percent of MY 2009 motor vehicles are forecasted to be equipped with an automatic transmission control system designed in accordance with this agreement.

SUMMARY OF PROVISIONS

Under S. 694, the Secretary would initiate a rulemaking within 18 months of enactment to consider prescribing safety standards to require power windows and panels to automatically reverse when an obstruction is detected. S. 694 requires the Secretary to initiate a rulemaking within 12 months of enactment to expand the required field of view to enable a driver to better avoid accidental backover incidents. The Secretary would be required to phase in safety standards within 48 months after the issuance of a final rule. S. 694 would require that motor vehicles manufactured for sale after September 1, 2010, be equipped with a system that requires the brake to be depressed before the transmission can be shifted out of "park." S. 694 also would direct the Secretary to establish and maintain a database of nontraffic, noncrash related motor vehicle injuries and provide information about hazards to children in nontraffic, noncrash incident situations to consumers.

LEGISLATIVE HISTORY

On February 27, 2007, Senators Clinton and Sununu introduced S. 694, the Cameron Gulbransen Kids and Cars Safety Act of 2007, which was referred to the Committee on Commerce, Science, and Transportation. A number of members of the Committee cosponsored the measure, including Vice Chairman Stevens and Senators Kerry, Bill Nelson, Hutchison, Lautenberg, Boxer, Klobuchar, Rockefeller, Ensign, McCain, Dorgan, Snowe, Pryor, and Cantwell. On February 28, 2007, the Subcommittee on Consumer Affairs, Insurance, and Automotive Safety held a hearing on vehicle safety for children during which testimony was provided on S. 694.

On May 16, 2007, the Committee met in open executive session to consider an amendment in the nature of a substitute offered by Senator Sununu that made several changes to the bill as introduced and modified the title. By voice vote, the Committee adopted

the Sununu substitute amendment and ordered that bill be reported.

ESTIMATED COSTS

In accordance with paragraph 11(a) of rule XXVI of the Standing Rules of the Senate and section 403 of the Congressional Budget Act of 1974, the Committee provides the following cost estimate, prepared by the Congressional Budget Office:

S. 694—Cameron Gulbransen Kids Transportation Safety Act of 2007

S. 694 would establish additional safety measures in automobiles to protect children and would require the National Highway Traffic Safety Administration (NHTSA) within the Department of Transportation to oversee the implementation of such measures. S. 694 would require NHTSA to complete rulemakings and issue regulations regarding certain safety features on automobiles designed to improve the safety of children inside and behind vehicles. The bill also would require NHTSA to implement and to oversee the compliance of automobile manufacturers with those regulations. Further, the bill would require NHTSA to establish and maintain a database of injuries and deaths involving a single vehicle that is not in the flow of traffic and which is not involved in a crash, and to provide information about such accidents to the public through a consumer information program.

Based on information from NHTSA, CBO estimates that implementing the bill would not significantly increase spending subject to appropriation. Enacting the legislation would not affect direct spending or revenues. The bill contains no intergovernmental mandates as defined in the Unfunded Mandates Reform Act (UMRA) and would impose no costs on state, local, or tribal governments.

S. 694 would impose several private-sector mandates on certain manufacturers of motor vehicles. The bill would require the Department of Transportation to implement new regulations requiring that all vehicles have automatic reversal of direction by power windows and panels when they detect an obstruction, a rearward visibility performance standard to prevent backing incidents, and automatic transmissions to have an anti-rollaway system that requires the service brake to be depressed before the transmission can be shifted out of park. Because the cost of these mandates would depend on the rules to be established by the Secretary of Transportation, CBO cannot determine the exact cost of all of the mandates contained in the bill. However, based on information from NHTSA, it is likely that the cost will be in the billions of dollars and thus would exceed the annual threshold as defined in UMRA for private-sector mandates ($131 million in 2007, adjusted annually for inflation).

In addition, those sources estimate the cost to comply with the regulations for power windows would be about $25 per car. Furthermore, those sources estimate that it would cost vehicle manufacturers approximately $350 per car to install the equipment that would best enhance rearward visibility. The cost of those two mandates could amount to more than $5 billion. And finally, the cost to comply with the mandate requiring an anti-rollaway system

would be small, since manufacturers are already complying with this requirement.

The CBO staff contacts for this estimate are Sarah Puro (for federal costs) and Fatimot Ladipot (for the impact on the private sector). This estimate was approved by Peter H. Fontaine, Deputy Assistant Director for Budget Analysis.

REGULATORY IMPACT STATEMENT

In accordance with paragraph 11(b) of rule XXVI of the Standing Rules of the Senate, the Committee provides the following evaluation of the regulatory impact of the legislation, as reported:

NUMBER OF PERSONS COVERED

Establishing new motor vehicle safety standards would require all manufacturers to modify vehicle designs and production. Purchasers of a new motor vehicle in which the features were incorporated would benefit from the safety improvements.

ECONOMIC IMPACT

Safety modifications in the design and manufacture as required by S. 694 would increase the cost of some motor vehicles.

PRIVACY

S. 694 is not anticipated to impact the privacy of consumers.

PAPERWORK

The creation and maintenance of a database on injuries and deaths in nontraffic, noncrash events may result in additional paperwork related to the reporting of such events to the Secretary.

SECTION-BY-SECTION ANALYSIS

Section 1. Short Title.

This section would provide that the Act may be cited as the "Cameron Gulbransen Kids Transportation Safety Act of 2007" or the "K.T. Safety Act of 2007."

Section 2. Rulemaking Regarding Child Safety.

Power Window Safety. The Secretary would be required to initiate a rulemaking not later than 18 months after the date of enactment to consider amending or prescribing Federal motor vehicle safety standards to require power windows and panels to reverse direction when they detect an obstruction in order to prevent children from being trapped, injured, or killed. If a final rule is issued, any phase-in of the final rule requirements would be completed within 48 months from the date on which the final rule was issued. If the Secretary decides safety standards for power windows are reasonable, practicable, and appropriate, the Secretary would prescribe them within 30 months of the date of enactment. If the Secretary decides that no additional safety standards are reasonable, practicable, and appropriate, the Secretary, within 30 months of the date of enactment, would send a report to the House of Representatives Committee on Energy and Commerce and the Senate Committee on Commerce, Science, and Transportation describing

the reasoning for not prescribing the standards. The Secretary also would be required to publish and publicize information disclosing which vehicles are equipped with the auto-reverse windows and panels and which are not.

Rearward Visibility. Within 12 months of the date of enactment, the Secretary would be required to initiate a rulemaking to revise the Federal Motor Vehicle Safety Standard 111 to expand the required field of view to enable the driver to detect the presence of a person or object behind the vehicle in order to prevent death and injury resulting from backover incidents, particularly incidents involving small children and disabled persons. The Secretary would be authorized to prescribe different requirements for different types of motor vehicles. The provision of additional mirrors, sensors, cameras, or other technology to expand the driver's field of view would be acceptable for the purpose of meeting the standard. The Secretary would be required to prescribe final standards not later than 36 months after the date of enactment.

The Secretary would be required to establish a phase-in period for compliance with the rearward visibility standard which could not exceed 48 months from the date on which the final rule was issued. In establishing the phase-in period, the Secretary would consider whether to prioritize phase-in by type of motor vehicle based on data demonstrating the frequency by which various types of motor vehicles have been involved in injury causing backing incidents. If the Secretary determines that any type of motor vehicle should be given priority, the Secretary would be required to issue regulations that specify which type or types of motor vehicles shall be phased-in first and the percentages by which such motor vehicles shall be phased-in.

Preventing Motor Vehicles from Rolling Away. This section would require each motor vehicle manufactured for sale after September 1, 2010, to be equipped with a system that requires the brake to be depressed before the transmission can be shifted out of "park." This system would need to function in any key position in which the transmission can be shifted out of "park." Failure to comply would be treated as a violation of a Federal motor vehicle safety standard.

Not later than 60 days after the date of enactment, for the current model year, and annually thereafter through 2010, each motor vehicle manufacturer would be required to submit to the Secretary the make and model of light motor vehicles that are equipped with automatic transmissions that may be shifted out of "park" without depressing the brake. Not later than 30 days after receiving the information, the Secretary would be required to publish and otherwise make available to the public the make and model of the motor vehicles that do not comply with the regulations.

Database on Injuries and Deaths in Non traffic, Non crash Events. Not later than 6 months after the date of enactment, the Secretary would establish and maintain a database of injuries and deaths in nontraffic, noncrash events involving light motor vehicles.

Section 3. Child Safety Information Program.

Not later than 6 months after the date of enactment, the Secretary would be required to provide information about hazards to

children in nontraffic, noncrash incident situations by supplementing an existing consumer information program relating to child safety or by creating a new consumer information program relating to child safety. The Secretary would be required to utilize information collected regarding non traffic, non crash injuries, and other relevant data from private organizations, to establish priorities for the program. The Secretary also would need to address ways in which parents and caregivers can reduce risks to small children arising from backover incidents, overheating in closed vehicles, accidental activation of power windows, and any other risks that the Secretary determines should be addressed. The Secretary would be required to make information related to the program available to the public through the Internet and other means.

Section 4. Deadlines.

If the Secretary determines that the deadlines set forth under the bill cannot be met, this section would require the Secretary to establish a new deadline and notify the Committee on Energy and Commerce of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate of the new deadline and reason therefor.

CHANGES IN EXISTING LAW

In compliance with paragraph 12 of rule XXVI of the Standing Rules of the Senate, the Committee states that the bill as reported would make no change to existing law.

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