

## Motor Vehicle Safety Act of 2010

### Title I — VEHICLE ELECTRONICS AND SAFETY STANDARDS

- **NHTSA Electronics, Software and Engineering Expertise** — Testimony during the Toyota hearings revealed that NHTSA has only two electronics engineers to adequately assess today's vehicles that increasingly rely on electronic systems for safety. NHTSA has no software engineers, although computers now run many vehicle functions, including acceleration. This provision would establish within NHTSA a Center for Vehicle Electronics, Vehicle Software and Emerging Technologies to build, focus and integrate expertise in vehicle electronics. The provision also would establish an "Honors Recruitment Program" to train engineering students for a career in vehicle safety.
- **Vehicle Stopping Distance and Brake Override Standard** — Several automakers already program their engine computers to always allow the brake to override the accelerator pedal. Therefore, whenever the brake is pressed for a certain amount of time, the engine computer automatically orders the engine to reduce its throttle. However, instead of mandating specific "brake override" technology in all cars, this legislation mandates a "performance standard" by which every automobile must be able to stop within a certain distance when the engine is operating with an open throttle. Auto manufacturers likely will meet this standard with brake override technology. However, if a better technology emerges for stopping vehicles operating at open throttle, automakers would be free to adopt it — as long as it can stop a vehicle at open throttle. This "performance standard" also accommodates the differences with manual transmissions and electric vehicles to which brake override technology may not be applicable. The rule also would permit the driver to temporarily suspend the function for times when both brake and throttle need to be applied together, such as on a steep hill or for maneuvering a trailer. The rule would require the installation of redundant circuits or mechanisms for the throttle in the event that the primary circuit or mechanism fails.
- **Pedal Placement Standard** — To address the potential for out-of-place floor mats and other objects to obstruct vehicle foot pedals, this provision would require NHTSA to issue a rule requiring minimum distances between floor pedals, minimum distances between foot pedals and the vehicle floor, and minimum distances to account for any other potential obstructions to pedal movement.
- **Electronic Systems Performance Standard** — There are currently no standards governing the safety and performance of vehicle electronics — including electronic throttle control — as a system within the vehicle. This provision would require NHTSA to issue a rule requiring passenger vehicles to meet minimum performance standards for electronic systems, taking into account electronic components, the interaction of electronic components, and the effect of surrounding environments on the entire vehicle electronic systems. In this instance, surrounding environments include potential impacts of electromagnetic waves from within and outside the vehicle.

- **Keyless Ignition Systems Standard** — Consumer complaints to NHTSA about sudden acceleration often noted that drivers of vehicles with push-button ignitions could not determine how to turn off the engine during an emergency. This provision would require NHTSA to issue a rule standardizing the means by which a driver who may be unfamiliar with the vehicle uses the ignition system to safely bring the vehicle under control during an emergency situation.
- **Transmission Configuration Standard** — Consumers involved in sudden acceleration incidents noted that sometimes the label for “neutral” on gearshifts did not correspond with the actual neutral position of the gearshift. This provision would require NHTSA to issue a rule that requires an intuitive configuration and accurate labeling for gear shifting controls, including for drivers not familiar with the vehicle.
- **Vehicle Event Data Recorders Standard** — Discovering the root cause of sudden acceleration and other defects is difficult because vehicles with EDRs only record events when there is a vehicle crash. Because there was no crash in several instances of sudden acceleration, there was no data to retrieve. Also, consumers whose vehicles have crashed have been unable to retrieve the data from the vehicle’s data recorders in an open and transparent manner. This provision would require that manufacturers equip all new vehicles with EDRs that record at least the 60 seconds prior to — and 15 seconds after — a vehicle crash and airbag deployment. NHTSA would be directed to consider standards for recording data after unusual events of rapid deceleration, full-throttle acceleration lasting more than 15 seconds, or full braking lasting more than 10 seconds. Manufacturers would be required to make EDRs readable by commercially available devices, make EDRs resistant to fire and water, and provide prominent notice in the owner’s manual that the vehicle is equipped with an EDR. To protect privacy, the data on an EDR would be deemed the sole property of the vehicle owner or lessee.

## **Title II — ENHANCED SAFETY AUTHORITIES**

- **Civil Penalties** — NHTSA’s authority to assess civil fines for deceptive acts is capped at \$16.4 million. In the context of multi-billion-dollar auto manufacturers, this amount has ceased to be an effective deterrent. This provision would increase the per-vehicle civil penalty from \$5,000 to \$25,000, and remove the overall cap on civil penalties, for auto manufacturers that intentionally fail to report vehicle safety defects to NHTSA, or that intentionally provide misleading information to NHTSA.
- **Imminent Hazard Authority** — This provision would give the NHTSA Administrator authority to stop further sales of a vehicle if a defect creates an imminent hazard that could lead to deaths and serious injuries. An affected auto manufacturer or parts supplier would have the right to an expedited review in a federal court of appeals.

### Title III — TRANSPARENCY AND ACCOUNTABILITY

- **Public Availability of Early Warning Data** — The TREAD Act required auto manufacturers to submit to NHTSA data regarding defects and other problems found with their vehicles. However, there is a presumption in the TREAD Act that none of the information submitted by manufacturers should be made public, unless the Secretary of Transportation determines that it should. This provision would reverse that presumption in favor of requiring the Secretary to disclose the maximum amount of safety information to the public, with only limited exceptions for keeping the data confidential.
- **Improved NHTSA Vehicle Safety Database** — NHTSA’s Early Warning Reporting system is poorly organized for public consumption, making analysis of vehicle safety trends too difficult. This poorly organized data delayed recognition of increasing trends of sudden acceleration in Toyotas. The bill would require NHTSA to modernize its reporting system with basic drop-down menus for categorizing vehicles, standardize search terms, and post aggregate data files for easy download. The provision would require that information about recalls be searchable by vehicle identification number. The provision also would allow the Secretary of Transportation to require automakers to publish recall information on their own web sites.
- **Consumer Notice of Software Updates and Other Communications with Dealers** — Many of the “fixes” for defective vehicles, such as the Toyota Prius braking system, involve reprogramming the vehicle’s software. Some software updates are done through recalls. However, some software updates are performed during routine maintenance at dealerships without knowledge of the vehicle owner. By requiring consumer notice of software updates, consumers will be better informed about potential safety issues affecting their vehicles. In addition, consumers who use independent mechanics need to know if their vehicles need a software update to address a potential safety issue — even if it does not rise to the level of a recall.
- **Promotion of Vehicle Defect Reporting** — The average vehicle owner does not know whom to contact if his or her vehicle might contain a safety defect. This provision would require the placement of a sticker or other notification in the glove box or other location accessible by the consumer with plain language about how to contact NHTSA to report a potential vehicle safety defect.
- **Whistleblower Protections and NHTSA Hotline for Auto Workers** — Auto industry executives, production workers, dealership employees and mechanics may be the first to discover vehicle defects. However, many of those employees will be reluctant to sound the alarm due to fear of retaliation, or the loss of his or her job. This provision would grant auto industry personnel the same whistleblower protections currently provided to airline employees. This provision also would require NHTSA to establish a “hotline” just for mechanics and other auto industry workers to confidentially report potential vehicle defects.

- **Corporate Responsibility for NHTSA Reports** — To fully engage automaker executives on safety issues, this provision would require that the automaker’s principle executive officer residing in the United States personally attest and sign that periodic safety information provided to NHTSA does not contain untruthful information, nor purposefully omits information that would mislead safety investigators. This provision is similar to Sarbanes-Oxley requirements for financial statements. Violation of that attestation would subject the principle executive officer to additional civil and criminal penalties.
- **Anti-Revolving Door** — Personal relationships between former NHTSA employees and current NHTSA employees should never compromise safety. This provision would prohibit former NHTSA employees from working for an automaker, or other entity regulated by NHTSA, for a period of three years after leaving the agency. The restriction only applies to private-sector employment that involves communicating with NHTSA or giving advice regarding vehicle safety regulations.

#### **Title IV — FUNDING**

- **More Resources for NHTSA** — In FY2010, Congress allocated NHTSA \$140 million for vehicle safety operations, including rulemakings, investigations, and enforcement. Testimony before Congress during the Toyota hearings illustrated that NHTSA does not have enough people or resources to adequately enforce vehicle safety regulations for 246 million vehicles on U.S. roads. NHTSA also lacks the expertise to investigate automobile software that now manages vehicle safety functions. This provision would increase authorizations for NHTSA’s vehicle safety functions to \$200 million in FY2011, \$240 million in FY2012, and \$280 million in FY2013. The initial increase would be weighted toward dramatically improving NHTSA’s vehicle safety databases and information collection, while also starting the process of hiring additional personnel. In FY2012 and FY2013, a greater share of the money would be directed toward the steady hiring of more auto safety engineers, vehicle inspectors, and enforcement personnel.