

Responses to Written Questions Submitted by Chairman John Thune to Heidi King

Question 1. Ethanol is an affordable and comparatively clean source of octane. As the agency considers CAFE standards for future model years, to what extent does NHTSA anticipate a greater role for vehicles with high-compression engines running on higher octane ethanol blend fuels such as E15?

Response. High-octane fuels, regardless of their source, can significantly reduce knocking and allow for development and deployment of high compression ratio engines. These engines can achieve greater fuel economy performance. Conceptually, if the market were to adopt a higher base standard of octane, the agency would anticipate automakers may design vehicles with higher-compression ratio engines, thereby achieving a higher base level fuel economy. NHTSA and EPA are considering technologies for improved fuel economy including higher octane blend fuels.

Responses to Written Questions Submitted by Honorable Roger F. Wicker to Heidi King

Question 1. There were approximately 755 child vehicular heat stroke fatalities in the U.S. between 1990 and 2015 - including 26 in Mississippi. I believe these tragic deaths are easily preventable. I cosponsored a provision in the AV bill that would require automakers to install rear seat reminders in new vehicles to prevent children from being unintentionally left in the back seat.

I've heard concerns regarding the cost of implementing child rear seat reminders in new vehicles. This safety feature is already standard in some vehicles. As autonomous vehicle technology continues to improve, would you agree that this safety feature will become easier and cheaper to implement in new vehicles?

Response. Thank you for your attention to this important safety issue and your leadership in raising awareness. I agree with you that these tragic, heart-breaking deaths are preventable. I am aware that there are technological solutions currently being researched and developed, as well as several solutions that are being tested and even incorporated in existing vehicles on the market today. I am optimistic that advances in vehicle technology will make it easier and cheaper to implement such technology in new vehicles in the near future, and that consumers will drive adoption of such technologies.

Question 2. With tragic incidents continuing at an alarming pace, I do not believe simple public service announcements are doing enough to address the issue. What actions do you think the auto makers can take to help prevent these senseless deaths?

Response. Automakers can and will continue to research and develop technology that will remind parents or vehicle operators to check the rear seats for a child passenger. Whether it is by reminding them through a call or text to their cellphone when the interior temperature reaches a certain temperature, or alerting passersby through vehicle horns or flashing lights. As you know, many of these tragic incidents also involve children who let themselves into a parked vehicle without the owner's awareness. Technology that would prevent such incidents is just as important to an overall solution.

Question 3. What administrative actions beyond just public service announcements can NHTSA take to help address the serious issue of child vehicular heat stroke fatalities?

Response. NHTSA works to share data and information and to identify potential best practice approaches to mitigate hyperthermia cases. In addition, the agency has conducted meetings with safety stakeholders to provide an opportunity to discuss ways to collaborate and improve ongoing efforts to raise awareness on this important safety issue. Further, NHTSA is working with safety advocates, caregivers, and the auto industry to educate the public about the dangers of heat stroke in cars, and the agency is conducting research about the best methods and technologies to end these tragic and preventable deaths.

NHTSA developed and made available research test procedures that technology companies, vehicle manufactures, and inventors can use to evaluate how a system performs under different real world scenarios. You may find of particular interest this 2015 report addressing the functional assessment of unattended child reminder systems.

Question 4. Toyota recently announced that it would be deploying vehicles with DSRC systems by 2021.

Can you comment on whether NHTSA supports preserving the 5.9 GHz spectrum band for vehicle-to-vehicle communications and other vehicle safety applications?

Response. Safety is the Department of Transportation's top priority. It is DOT and NHTSA's hope to preserve the spectrum for transportation lifesaving technologies.

Question 5. Is NHTSA collaborating with the FCC and NTIA on the open proceeding at the FCC that is looking into spectrum sharing in the 5.9 GHz band? If yes, can you provide an update on your discussions with those agencies?

Response. NHTSA, in partnership with relevant federal agencies, has continued to pursue further research and testing of the 5.9 GHz spectrum band. The agency is working closely with NTIA and the FCC, and its technical experts and staff have shared data and results and are coordinating efforts. I hope to provide additional information on the status of our joint progress in the near future.

Question 6. Does the agency have the adequate number of resources to handle dealing with new technologies in vehicles? How do you see safety regulation evolving as cars increasingly employ crash avoidance technologies?

Response. The budget request lays the groundwork for NHTSA to respond effectively to the changing technological environment and address new safety challenges proactively. More specifically, NHTSA requested nearly \$38 million for Vehicle Safety Research and Analysis, including a dedicated \$10 million set-aside for Automated Driving Systems research. NHTSA has identified the need for increased emphasis on crash avoidance technologies with significant potential to reduce fatalities and injuries by preventing the crash from occurring; reducing the severity of crashes through automatic braking or steering interventions; or by providing timely warnings to the driver. NHTSA recognizes that the rapid pace of technological change requires the agency to adapt, and to that end, the agency is performing extensive research into the need to adjust current standards to recognize new vehicle safety technologies.

Question 7. NHTSA's New Car Assessment Program rates vehicles to determine crash worthiness. I understand that NHTSA intends to update the program to reflect new safety technologies. Future direction of the New Car Assessment Program (NCAP) is not clear. The second Request for Comment of the proposed new NCAP was released and immediately withdrawn due to the "Regulatory Freeze" in early 2017. There has not been any clear indication how NHTSA will proceed with this proposal. What actions do you intend to take at NHTSA to move this program forward?

Response. NHTSA continues to evaluate the best manner in which to improve consumer understanding of advanced safety technologies. In 2018, the agency plans to engage stakeholders on its next actions for NCAP – the public comments received in response to the 2015 notice demonstrated the need for a dialogue regarding the types of information that would be most helpful to consumers and the types of tests and rating systems would be best suited to achieve program goals. NHTSA plans to give consideration to advanced driver assistance systems that have the potential to further automotive safety. If confirmed, I plan to focus agency efforts on how the program can most effectively deliver information to the public.

Responses to Written Questions Submitted by Honorable Dan Sullivan to Heidi King

Question 1. According to the National Highway Traffic Safety Administration, there were 81 traffic fatalities in Anchorage between 2010 and 2014. Although 5% of people walk, bike, and ride motorcycles as their primary mode of transportation in Anchorage, combined they make up 52% of the traffic fatalities.

Working with the Municipality of Anchorage and Bike Anchorage, “Vision Zero” is an Anchorage based community commitment to reduce the loss of life and major injuries on roadways to zero. This effort is using a data-driven and coordinated approach to designing safer streets, public education, evaluating what works, and enforcing the best laws.

Can you tell me what NHTSA is doing to work with local partners to identify specific traffic safety problems at the State and local levels?

Response. The Alaska Highway Safety Office 2018 Highway Safety Plan includes performance targets to reduce both pedestrian and bicyclist fatalities. There are two projects included in Alaska’s plan which address this issue. One project will engage community stakeholders in the Anchorage area, especially the business community, in addressing pedestrian safety issues in high risk areas. The second project will fund various bicycle and pedestrian safety projects in the State that are identified in the state’s plan, which was developed by the Alaska State Department of Transportation in collaboration with other stakeholders including the highway safety office.

Thanks to Congress, the FAST Act also authorized a new non-motorized grant program. NHTSA awarded these grants to States with combined pedestrian and bicyclist fatalities greater than 15% of the total motor vehicle related fatalities.

In FY 2018, 23 States (including Alaska), Puerto Rico and the District of Columbia qualified for non-motorized safety grants.

Question 2. What countermeasures are available to curtail the high fatality rates?

Response. NHTSA's Office of Regional Operations and Program Delivery administers more than \$500 million in grant programs annually to the 50 States, the District of Columbia, Puerto Rico, the U.S. Territories and the Bureau of Indian Affairs. Under Section 405, NHTSA awards grants for occupant protection, state traffic safety information systems, impaired driving countermeasures, distracted driving, motorcyclist safety, non-motorized safety, and State graduated driver licensing laws. Regional offices help States identify their highway safety problems using data, evaluate safety programs and activities, and provide technical assistance and training to State program managers.

NHTSA facilitates:

Occupant Protection Assessment

Impaired Driving Program Assessment

Traffic Records Assessment

Pedestrian Safety Program Assessment

Emergency Medical Services Assessment

Standardized Field Sobriety Testing Assessment

Driver Education Assessment

Motorcycle Safety Assessment

To further support local efforts, NHTSA offers marketing tools for numerous traffic safety campaigns, including drunk driving, car seats, vehicle safety, distracted driving, and motorcycles at <https://www.trafficsafetymarketing.gov/>.

Responses to Written Questions Submitted by Honorable Dean Heller to Heidi King

Question 1. As you know, I authored a provision with Senator Markey to ensure crash avoidance technologies are incorporated into safety ratings for cars. I appreciate you responding to me with an update about including these technologies in the safety rating, but it didn't provide a timeline for completion. Can you provide me with a timeline for a rulemaking and a deadline on when you intend to complete it?

Response. We plan to continue our efforts to update NCAP by following our process for public engagement, including a public meeting during summer 2018. The timing and content of the rulemaking to add crash avoidance information to the Monroney label will be determined from the results of our public engagement process this summer and fall 2018.

Question 2. I authored a provision in the FAST Act that would allow small kit car manufacturers to sell up to 325 completed replica vehicles in the U.S. each year. The provision was straightforward, but it has not been implemented yet. Can NHTSA issue an interim rule allowing companies to register and begin production immediately while the agency works on a rule? Can I have your commitment companies will be able to start producing replica cars by August of this year?

Response. An interim final rule would require a "good cause" exception from the notice and comment requirements of the Administrative Procedure Act. NHTSA is drafting the Notice of Proposed Rulemaking (NPRM) to address replica vehicles, and working to publish the notice in the federal register in May 2018. The timing and content of a final rule will be determined following the public comment process of the NPRM.

Responses to Written Questions Submitted by Honorable Todd Young to Heidi King

Question 1. Ms. King, on April 2 of this year, the Administration issued a formal notice indicating the upcoming review of the emissions standards for model year 2022 to 2025 light duty vehicles. I welcome this Administration's attention to this important economic issue. The Corporate Average Fuel Economy standards are an important issue for the state of Indiana. The Hoosier state is the most manufacturing intensive state in the country which is in large part is driven by Indiana's status as a top-five automotive manufacturing state, with nearly half a million Hoosiers employed in the sector. I would urge NHTSA, in conjunction with the EPA, to dialogue with a wide range of stakeholders throughout this process. It is of utmost importance for the administration to dialogue with a diverse set of stakeholders, including consumers, to ensure standards are technologically feasible, economically efficient, and preserve vehicle choice. If confirmed, could you speak to your plans regarding how NHTSA will ensure the diverse coalition of stakeholders will be represented in the rulemaking process?

Response. I agree that the upcoming standards need to be technologically feasible, economically efficient, and preserve consumer choice. NHTSA has met extensively with a wide variety of stakeholders to gather information as we have developed our proposal, and we look forward to gathering more information from more stakeholders as part of the public comment process once the proposal is public. In addition, NHTSA is considering public meetings on aspects of the rule to enhance transparency for all stakeholders.

Question 2. Ms. King, in your tenure as Deputy Administrator at NHTSA, you have been involved in a multitude of important transportation safety issues. In March, NHTSA launched an initiative to combat drug-impaired driving on our roadways. In my home state of Indiana, the opioid crisis continues to trouble numerous Hoosier communities. If confirmed, could you speak to your plans for combatting the opioid crisis on our transportation network? How can Congress partner with NHTSA to further empower your efforts?

Response. Last year, President Trump identified the opioid epidemic as a public health emergency; we lost at least 64,000 neighbors, friends, and family members to drug overdose, primarily from opioids. Unfortunately, we don't know the full extent to which drug-impaired drivers were involved in crashes, but we do know that impaired driving is illegal and deadly. We also know that our partners in law enforcement are seeing drug-impaired drivers on our roads and in the courts every day.

Combatting drug-impaired driving requires proven strategies and innovative practices. Across the country, NHTSA-sponsored programs like the Advanced Roadside Impaired Driving Enforcement (ARIDE) training and the Drug Recognition Expert (DRE) program, which is especially robust in Indiana, help law enforcement professionals to remove drug-impaired drivers from behind the wheel. NHTSA also provides training for toxicologists and prosecutors to enhance the functioning of the criminal justice system.

Like other states, Indiana's system for dealing with opioid-impaired driving is not without its challenges. There is currently a five-month delay on drug analysis for chemical testing samples due to a backlog of samples. In addition, Indiana's chemical testing equipment does not have the

capability to do drug confirmations on samples which screen positive for opioids, meaning the sample must be sent out of State for confirmation. Efforts to remedy these problems are currently underway.

As NHTSA continues its initiative to combat drug-impaired driving, we are engaging stakeholders through listening sessions to identify best practices and program needs. We know there are needs both in the criminal justice community and in the toxicology realm so we will convene experts from across the country to clarify what the gaps are. NHTSA is also committed to improving the science behind the impairing effects of drugs on driving safety. From these activities, NHTSA will define a path for eliminating drug-impaired driving from our roads.

In 2018, Congress appropriated \$5 million for NHTSA to enhance its efforts to reduce impaired driving. These funds will support NHTSA's new drug-impaired driving initiative. Further, the funds will help us to develop robust and effective public education tools that focus on the message that impaired driving includes both alcohol and other drugs. Your attention and support are a significant contribution to finding solutions to this challenging issue, and we look forward to further collaboration on this lifesaving activity.

Question 3. Ms. King, NHTSA is at the heart of the autonomous vehicle debate. As Congress works arduously to pass the AV Start Act in this year, NHTSA's work in the AV space continues. Earlier this spring, two notices were posted on the Unified Agenda of Regulatory & Deregulatory Actions – notably removing barriers for Automated Driving Systems and removing barriers for innovative motor vehicle technologies. Can you please speak to how these notices may or may not inform the work on the proposed rule for vehicle-to-vehicle communication standards?

Response. With the Request for Comments notices published earlier this year, NHTSA sought public comments regarding the update of regulations to adapt to new technologies. The comment period closed on March 20, 2018 to which we received 97 submissions. The agency is conducting a thorough analysis of each of these public comments and determining appropriate actions to take moving forward. Any public comment to this recent RFC pertaining to V2V will be taken in account and considered along with the comments submitted to the V2V NPRM published in December 2016.

Question 4. Ms. King, NHTSA's work is vital to ensuring violations of emissions standards, like the recent Volkswagen emissions scandal, does not occur again. In regards to diesel vehicles approved for sale, how does NHTSA plan to monitor the vehicles fixed with reported upgrades to ensure they will safely and reliably operate on U.S. highways?

Response. NHTSA is responsible for setting and enforcing fuel economy and safety standards for vehicles. The Volkswagen emissions issue centered on a violation of emission standards that the Environmental Protection Agency (EPA) regulates and enforces. However, if the vehicle fixes turn out to present an unreasonable risk to safety, NHTSA will work with the manufacturers to ensure that the safety defects are recalled and corrected.