



Questions for the Record – Responses

**U.S. Senate Committee on Commerce, Science, and Transportation
Nominations Hearing of Mr. Steven Cliff
December 16, 2021**

Contents

Questions for the Record from Ranking Member Roger Wicker	2
Questions for the Record from Senator Todd Young	7
Questions for the Record from Senator Mike Lee	8
Questions for the Record from Senator Shelley Moore Capito	11
Questions for the Record from Senator Rick Scott.....	12



Questions for the Record – Responses

U.S. Senate Committee on Commerce, Science, and Transportation
Nominations Hearing of Mr. Steven Cliff
December 16, 2021
Questions for the Record – Minority

Questions for the Record from Ranking Member Roger Wicker

Question 1: *The Department of Transportation’s Unified Regulatory Agenda for Fall 2021 delays multiple rulemakings that could help advance critical safety technology such as autonomous vehicles. These include the Facilitating New Automated Driving System Vehicle Designs for Crash Avoidance Technologies, the Framework for Automated Driving Systems Safety (which remained unchanged), and the Occupant Protection for Automated Driving Systems. Can you provide the Department’s reasoning for delaying these rulemakings?*

Response: NHTSA remains committed to the safe deployment of new technologies and continues to closely evaluate these technologies as they are being developed and tested. NHTSA is analyzing comments from the crash avoidance rulemaking as it explores governance possibilities beyond the current FMVSS framework. We are also working to finalize the occupant protection rulemaking proposal in the near future.

Question 2: *The actions the National Highway Traffic Safety Administration (NHTSA) has taken this year, including the Standing General Order and the letters to automakers, take a more punitive approach to information collection than, for example, the advance notice of proposed rulemaking in 2019. Does NHTSA plan to work collaboratively with stakeholder experts to update federal autonomous vehicle policy? Additionally, how will the agency use the information it collects from the Standing General Order and the responses to NHTSA’s letters, and will that information be made public?*

NHTSA chose to advance the data collection by mandating a response from the automakers rather than a rulemaking. Can you provide clarity as to why you chose to forego the regular public notice and comment actions?

Response: NHTSA will continue to collaborate with all stakeholders to continuously improve and update guidance on automated driving systems. The Standing General Order (SGO) provides NHTSA with proactive access to data on a regular basis so that potential safety issues are identified early. The data will also further lines of inquiry and research and inform policy development. NHTSA chose the SGO approach to expedite access to this important safety data and to better fulfill its obligation to ensure the safety of the traveling public. While the agency typically uses rulemaking to address issues of more



Questions for the Record – Responses

**U.S. Senate Committee on Commerce, Science, and Transportation
Nominations Hearing of Mr. Steven Cliff
December 16, 2021**

general applicability, the SGO requests information in a more targeted way and was issued pursuant to NHTSA's information gathering authority under the Motor Vehicle Safety Act. The SGO also was carried out in compliance with the Paperwork Reduction Act (PRA), which requires public notice and comment. The agency is currently analyzing comments it received from interested parties, including the regulated industry, in response to its PRA publication in the Federal Register. Information collected under the SGO and other responses will be made available to the public, and NHTSA expects to do so in early 2022.

Question 3: *In 2019, NHTSA began investigating, through an advance notice of proposed rulemaking, the removal of regulatory barriers for highly automated vehicles – in other words those operating at a level of automation not currently available on U.S. roadways. How has NHTSA used the information received as part of its solicitation for comments? What regulatory barriers have been identified and addressed since 2019? What regulatory barriers is the agency currently working to remove and when can they be expected? What is NHTSA doing to speed up approval of Part 555 exemption petitions for AVs without manual controls in order to maintain US AV leadership while the regulatory barriers are being addressed?*

Response: NHTSA is using the information received from the request for comments to inform decisions regarding vehicle research and rulemaking priorities. In addition, since 2019, NHTSA has identified potential barriers in current Federal Motor Vehicle Safety Standards (FMVSS) that contain requirements for vehicles to be equipped with traditional driver controls, as well as FMVSS that reference driver seating positions. While NHTSA does not believe that these requirements pose barriers for ADS-equipped vehicles with conventional driver controls and conventional seating, NHTSA has identified the requirements as potential barriers for ADS-dedicated vehicles (ADS-DVs) that lack traditional controls and vehicles with unconventional seating. NHTSA continues to explore options to improve vehicle safety through innovative technologies.

To address vehicles without manual controls, NHTSA previously clarified in a Federal Register notice published in December 2020, that the FMVSS test conditions and procedures apply to NHTSA's own compliance testing but not to certifications by the manufacturer. This means that manufacturers can certify a vehicle that cannot be tested in accordance with the test procedures in the FMVSS if they can rely on alternative means showing that they have exercised "reasonable care" in certifying the vehicle. The clarification has reduced the need for petitions and the overall number of Part 555 exemptions that need to be filed. NHTSA is also finalizing a rulemaking that amends



Questions for the Record – Responses

**U.S. Senate Committee on Commerce, Science, and Transportation
Nominations Hearing of Mr. Steven Cliff
December 16, 2021**

certain crashworthiness standards associated with the certification of motor vehicles without driver controls and is conducting research on alternative test procedures for incorporation into the FMVSS for vehicles that lack traditional controls.

Question 4: *NHTSA’s proposed corporate average fuel economy standards rule sets increased fuel efficiency standards for model years 2024-2026, and appears to rely on increased electric vehicle sales to meet the requirements. To what extent are the fuel economy standards NHTSA is proposing reliant on an increase in zero emission vehicle sales? What action will NHTSA take if those sales do not materialize, either because consumers are not ready to purchase these vehicles or because the assumptions NHTSA makes are incorrect?*

NHTSA’s proposed rule estimated that the rule would increase the average cost of a vehicle by \$960 by 2029. Has NHTSA factored in current inflationary pressures and the effects those pressures have on consumers’ ability to purchase vehicles when developing its analysis?

Response: NHTSA’s proposed rule estimates close to \$140 billion in fuel savings for new vehicles sold by 2030 and \$470 billion by midcentury. When NHTSA analyzes different potential CAFE standards, it carefully considers both consumer fuel expenditures (as part of the need of the United States to conserve energy) and consumer demand for vehicles with improved fuel economy and the potential effect of different levels of CAFE standards on vehicle sales. Vehicles equipped with fuel-saving technology pay their owners back over time through savings at the fuel pump or charger. NHTSA’s analysis relies on the Energy Information Administration’s Annual Energy Outlook for fuel price forecasts, which suggests that fuel prices will rise over time, increasing the consumer benefit of higher fuel economy. NHTSA’s analysis also projects that fuel economy-improving technology will become cheaper to apply over time as manufacturers gain more experience with it. These analyses give NHTSA confidence that any cost increases in new vehicles that could be attributable to the CAFE program will be cost-effective and not unduly impactful on new vehicle sales. NHTSA does not consider alternative fuel vehicles such as electric vehicles in setting CAFE standards, though automakers can use these vehicles to comply with the standards.

Question 5: *In its most recent proposal for CAFE standards, has NHTSA attempted to similarly ensure that CAFE standards do not add undue costs associated with multiple Federal and State regulations, and if so, how?*

Response: The Energy Policy and Conservation Act (EPCA) of 1975, as amended by the Energy Independence and Security Act (EISA) of 2007, requires NHTSA to consider



Questions for the Record – Responses

**U.S. Senate Committee on Commerce, Science, and Transportation
Nominations Hearing of Mr. Steven Cliff
December 16, 2021**

“the effect of other motor vehicle standards of the Government” on fuel economy when NHTSA is determining what CAFE standards would be “maximum feasible.” In its recent proposal, NHTSA considered California’s zero emission vehicle (ZEV) sales mandates by adding it to the baseline. The baseline is an estimate of “the world as it would exist in the absence of new CAFE standards,” so NHTSA assumed that automakers would comply with the ZEV mandate irrespective of any further action on CAFE. NHTSA also coordinates closely with the Environmental Protection Agency to ensure that its rules work in tandem with EPA greenhouse gas standards.

Question 6: *NHTSA estimated 14 percent plug-in vehicle share is needed to meet the proposed standards. The 2021 Year-to-date plug-in electric vehicle sales averaged 3.9 percent versus roughly 2 percent in 2020. What does NHTSA estimate as the required share of non-electric vehicles in order for manufacturers to meet the proposed CAFE standards for model year 2026?*

Response: In its proposal, NHTSA estimated that approximately 81 percent of the fleet will be non-electrified vehicles in Model Year 2026. NHTSA does not consider alternative fuel vehicles in setting standards even though manufacturers can choose to comply with the CAFE standards by producing such vehicles, including electric vehicles.

Question 7: *The recent Environmental Protection Agency trends report that was issued just last month noted that automakers attained record high fuel economy and record low greenhouse gas (GHG) emissions, but also that most automakers had to rely on credits that they previously earned or purchased to comply with GHG rules. Do you expect this trend of non-attainment for the actual standards to continue?*

Response: NHTSA has no reason to believe that manufacturers will stop relying on credit trades and transfers as a compliance tool, but they are not the *only* compliance tool, nor can they be used forever. Some manufacturers may consistently over-comply with the standards, and thus continue to have credits to sell; other manufacturers may make business decisions about whether to make fuel economy improvements or, instead, purchase credits from an over-complying competitor. CAFE compliance can be achieved either way. As standards increase in stringency over time, it is foreseeable that more manufacturers will choose to make their own improvements – this is consistent with numerous manufacturer announcements of forthcoming higher fuel-economy models.



Questions for the Record – Responses

U.S. Senate Committee on Commerce, Science, and Transportation
Nominations Hearing of Mr. Steven Cliff
December 16, 2021

Question 8: *NHTSA has been evaluating updates to the U.S. New Car Assessment Program (NCAP) for some time, and the recently passed bipartisan infrastructure legislation included additional direction for NHTSA on NCAP. When will NHTSA publish its updated NCAP proposal? What is the current status of NHTSA’s work to modernize NCAP?*

Response: Consistent with the Bipartisan Infrastructure Law, NHTSA is planning to issue a notice requesting public comment on updating NCAP to add new advanced crash avoidance technologies and to develop a multi-year agency roadmap for future updates. NHTSA is planning to issue the notice in early 2022. NHTSA is also working on an update to the vehicle safety rating section of the Monroney label to include crash avoidance safety information.

Question 9: *What partnerships has NHTSA reinforced with law enforcement agencies during the rise in roadway fatalities over the last two-years? Do you agree that enforcement of our nation’s traffic laws is one of the best ways to help protect the traveling public?*

Response: Traffic enforcement is one of many proven safety countermeasures NHTSA and states use to influence safe driving behavior, and NHTSA is committed to using all available and effective tools to combat the current highway safety crisis. NHTSA has long collaborated with law enforcement through its law enforcement liaison program, and with organizations such as the International Association of Chiefs of Police (IACP), the National Sheriffs’ Association (NSA), and the National Organization of Black Law Enforcement Executives (NOBLE). NHTSA’s collaboration with these groups focuses on traffic-enforcement-related issues, such as the key issues observed during the last two years: failure to wear a seat belt, speeding, and driving after using alcohol or other drugs.

NHTSA continues to work closely with law enforcement partners on nationwide high-visibility enforcement campaigns throughout the year. On December 14, 2021, NHTSA kicked off our annual holiday high-visibility enforcement campaign, aimed at preventing impaired driving and improving safety for all road users. This campaign will run through January 1, 2022.

NHTSA also recently worked with the IACP on the drafting of a resolution titled, *Resolution to Combat the Dramatic Increase in Traffic Fatalities*, which has been officially adopted by its membership. The resolution recognizes that traffic enforcement must have equity - the consistent, fair, just and impartial treatment of all people – at its foundation and that law enforcement and the work of our nation’s law enforcement officers are critical to the prevention and reduction of traffic-related fatalities and injuries.



Questions for the Record – Responses

**U.S. Senate Committee on Commerce, Science, and Transportation
Nominations Hearing of Mr. Steven Cliff
December 16, 2021**

Question 10: *With the recently passed investment in infrastructure legislation, how will NHTSA utilize the significant additional funding? What will the balance be between new programs and continuing with ongoing programs with proven effectiveness?*

Response: The Bipartisan Infrastructure Law (BIL) provides an increase in NHTSA funding that is the largest investment in motor vehicle and highway safety since the agency was created fifty years ago. With this additional funding, NHTSA will focus on the development of new programs and the continuation of effective existing ones. Specifically, the funding will be used to accelerate and expand the agency’s reporting of crash data; to carry out research on protecting vulnerable road users; to understand the impact disparities of traditional traffic safety countermeasures; to study and deploy technologies that review vehicle safety data faster and more accurately; and to create new tools to address roadway fatalities. BIL also provides over \$700 million in State safety grants this year, funding that will go to support life-saving State traffic safety programs. As a high priority for the agency, NHTSA has already provided a significant amount of this additional funding to the States and will provide additional funds as Congress appropriates them.

Questions for the Record from Senator Todd Young

Question 1: *Dr. Cliff, for many months, NHTSA has kept pending a proposed rule to expand mobility for people with disabilities. Specifically, the rule would allow rental car companies to temporarily disable the knee bolster air bag to install hand controls to assist people with disabilities in operating the vehicle. This would give rental car companies the same rights as dealers and motor vehicle repair businesses, which are already permitted to make such modifications. I am concerned that the number of vehicles that disabled customers have access to is dwindling. So, time is of the essence for NHTSA to act. The proposed rule has strong support from the National Disability Rights Network, Paralyzed Veterans of America, and other disability rights groups. Can you give us a specific date when NHTSA will issue this important final rule?*

Response: This is a top priority for NHTSA and we are working to finalize this important rulemaking before March 2022, consistent with our planned projections in the 2021 Fall Unified Agenda.



Questions for the Record – Responses

U.S. Senate Committee on Commerce, Science, and Transportation
Nominations Hearing of Mr. Steven Cliff
December 16, 2021
Questions for the Record from Senator Mike Lee

Question 1: *The first half of 2021 saw the largest number of road fatalities since 2006. NHTSA’s research indicates that most of the blame today rests with the behavior of drivers. By avoiding those human errors, autonomous vehicles may well represent an opportunity to address some safety concerns, yet NHTSA has taken little action to incentivize the development and deployment of these technologies. What specific actions will you take to remove barriers and incentivize the deployment of highly automated vehicles if confirmed?*

Response: NHTSA agrees that technology can play a significant role in reducing roadway fatalities, injuries and crashes. Automated Driving Systems (ADS) offer the potential of significant safety enhancement opportunities at their maturity. Numerous crash avoidance technologies are available to consumers today that can help drivers avoid crashes. NHTSA is undertaking a rulemaking, for example, on Automated Emergency Braking and Pedestrian Automated Emergency Braking, technologies research shows can significantly reduce crashes and fatalities. In addition, the agency is updating the New Car Assessment Program (NCAP) to include a number of safety technologies. NHTSA will continue to research and study automated technologies as they come to market to evaluate their safety and verify their safe use by the public. Information that confirms the safe operation of such technologies will help spur continued development. NHTSA considers the full spectrum of available technologies in its policy considerations, and this includes reviewing its own regulations to determine whether barriers exist to the continued advancement and safe deployment of technologies. Recently, NHTSA identified barriers in current Federal Motor Vehicle Safety Standards (FMVSS) that contain requirements for vehicles to be equipped with traditional driver controls, as well as FMVSS that reference driver seating positions. NHTSA continues to explore options to improve vehicle safety through innovative technologies. If confirmed, I am committed to ensuring that NHTSA continue and advance these efforts.

Question 2: *During your hearing, you continually cited data collection as your only answer to autonomous vehicle progress. While I wholeheartedly support data driven decisions, I would like to know at what point you will have accumulated enough data to move AV rulemakings forward?*

Response: The Vehicle Safety Act requires NHTSA’s rulemaking to rely on objective data to support the actions being proposed. The Standing General Order is for the first time providing the agency with consistent, uniform and real time data from



Questions for the Record – Responses

**U.S. Senate Committee on Commerce, Science, and Transportation
Nominations Hearing of Mr. Steven Cliff
December 16, 2021**

manufacturers that detail the use and operation of advanced vehicle technologies. NHTSA plans to integrate these data into its current rulemaking efforts to move them forward. In addition, as outlined in response to Question 1, NHTSA is working to amend FMVSS to support safety technologies. NHTSA has also granted an exemption under its Section 555 authority to one manufacturer who is operating low speed AVs for food delivery and will consider additional Section 555 exemption petitions as they are filed with the agency.

Question 3: *There are developers today who are making vehicles that are not designed to have human occupants. A study by Virginia Tech suggests that these zero-occupant vehicles by themselves could enhance safety by 60%. These vehicles clearly require innovative designs and won't have human controls like steering wheels and brake pedals, yet NHTSA's outdated requirements still refer to them as having human drivers. These zero-occupant vehicles are an entirely new category of vehicle, different from trucks or low-speed vehicles. Will you commit to updating NHTSA's rules to create a new category of zero-occupant vehicles, and ensure that the regulations are appropriate for this new design?*

Response: NHTSA is committed to evaluating vehicles that do not include human occupants (“cargo only”) to determine crash compatibility for cargo-only autonomous vehicles, and the research is in the final stages. NHTSA will also investigate how cargo-only vehicles interact with pedestrians. These types of efforts will help inform future rulemakings on cargo-only AVs. NHTSA also has completed several reviews of its current regulations to identify any rules that present barriers to the development of advanced vehicles and associated technologies. NHTSA continues efforts to revise such rules to improve safety.

Question 4: *Conducting cost-benefit analyses for proposed regulations has been a practice undertaken by agencies under both Democrat and Republican Administrations. Please explain your views on the use of cost-benefit analysis when considering proposed regulations. Should all NHTSA regulations be considered with a cost-benefit analysis? If regulatory costs outweigh the benefits, should that be a determining factor that prevents NHTSA from moving forward with a proposed regulation?*

Response: Consistent with Executive Order 12866 and OMB Circular A-4, agencies should assess costs and benefits of available regulatory alternatives. Costs and benefits include both quantifiable measures and qualitative measures that are difficult to quantify but nevertheless essential to consider. Under Executive Orders 12866 and 13563, to the extent permitted by law, DOT and other agencies must propose or adopt a regulation only upon a reasoned determination that its benefits justify its costs, recognizing that some



Questions for the Record – Responses

**U.S. Senate Committee on Commerce, Science, and Transportation
Nominations Hearing of Mr. Steven Cliff
December 16, 2021**

benefits and costs are difficult to quantify. If confirmed, I will continue to work within this framework, as improved under the President’s January 20 Memorandum on Modernizing Regulatory Review. That memo proposes that a regulatory review process should reflect new developments in scientific and economic understanding and should consider regulatory benefits that are not easy to quantify.



Questions for the Record – Responses

U.S. Senate Committee on Commerce, Science, and Transportation
Nominations Hearing of Mr. Steven Cliff
December 16, 2021

Questions for the Record from Senator Shelley Moore Capito

Question 1: *NHTSA has developed test procedures and crash countermeasures in its occupant protection programs in order to reduce the fatality risk when in a crash. NHTSA has also recognized that the use of lightweight materials, such as plastics and lightweight polymer composites, can materially improve safety through science-based vehicle design. I believe that the use of composites in automotive manufacturing can improve the safety of the vehicle while also reducing the weight of the vehicle. If confirmed, will you ensure that NHTSA updates its test procedures and crash countermeasures to reflect the latest science on vehicle design?*

Response: NHTSA's research shows that lightweight materials, such as carbon fiber, have unique properties that can improve safety while reducing the weight of the vehicle. Fundamentally, test procedures and safety requirements specified by federal motor vehicle safety standards are performance-based. There is no limitation on the use of lightweight materials as long as the safety requirements are met. NHTSA carefully monitors the implementation of these materials in vehicle designs to ensure they do not lessen occupant protection. If confirmed, I am committed to ensuring that NHTSA's test procedures do not needlessly inhibit their use in vehicle construction.

Question 2: *Thank you for taking to the time to meet with me before your nomination hearing. I wanted to follow up on an issue we discussed on our call. As you know, as a part of the Infrastructure Investment and Jobs Act (IIJA), we were able to include the RIDE Act – of which I am a cosponsor. As part of this provision, NHTSA is required to conduct a rulemaking on a new safety standard requiring advanced drunk driving prevention technology in new vehicles. Reducing and preventing drunk driving fatalities is a priority for me and look forward to working with you on this issue. If confirmed, will you work with me on this issue as NHTSA moves forward on implementing the RIDE Act?*

Response: I agree that reducing and preventing drunk driving fatalities is critically important and I will ensure that it remains a top priority for NHTSA. If confirmed, I look forward to working with you on these issues.



Questions for the Record – Responses

U.S. Senate Committee on Commerce, Science, and Transportation
Nominations Hearing of Mr. Steven Cliff
December 16, 2021

Questions for the Record from Senator Rick Scott

Question 1: *The recently signed Infrastructure Investment and Jobs Act (P.L. 117-58) included a provision (Sec. 24220) based on my RIDE Act (S. 1331), that will require new passenger vehicles to be equipped with technology that can passively monitor or detect driver alcohol impairment and stop the vehicle if impairment is detected. How will you oversee the enforcement of this provision? How else do you plan to reduce drunk and impaired driving in the United States?*

Response: NHTSA expects the widespread use of technology designed to detect driver impairment to be effective in reducing alcohol-impaired driving related crashes, injuries and fatalities. As part of rulemaking activities, NHTSA will develop compliance test procedures for such technology to ensure it works as intended. As the technology develops, NHTSA will continue to pursue several efforts to address impaired driving. These efforts include leveraging existing technology such as ignition interlocks, using education campaigns as part of high visibility efforts, and coordinating with traffic safety professionals and law enforcement to reduce impaired driving and save lives. Through our formula grant programs, NHTSA will ensure that States have the financial and technical resources necessary to reduce impaired driving.