



February 15, 2022

Via Electronic Filing

National Institute of Standards and Technology
U.S. Department of Commerce
100 Bureau Drive, Stop 2000
Gaithersburg, MD 20899

Re: Study to Advance a More Productive Tech Economy (86 FR 66287)

To Whom It May Concern:

The U.S. Chamber of Commerce’s Technology Engagement Center (“C_TEC”) appreciates the opportunity to submit feedback to the National Institute of Standards and Technology’s (“NIST”) Request for Information on the “Study to Advance a More Productive Tech Economy” (“RFI”).¹ C_TEC strongly supported the American COMPETE Act (Pub. L. No. 116-260), which directed NIST to develop this RFI and provide recommendations to policymakers.²

These comments will focus on responses specific to “Unmanned Delivery Systems.”³ C_TEC notes that neither the American COMPETE Act nor the RFI defined unmanned delivery systems, so we encourage NIST to broadly construe that term to include systems that carry both goods and people as well as systems that operate in different domains such as air and ground systems. This will ensure that NIST can consider the impacts of a wide range of critical unmanned technologies, including automated vehicles, autonomous rail, unmanned aerial systems (“UAS”), and some advanced air mobility (“AAM”) platforms.

The U.S. Department of Transportation (“DOT”) and its modal agencies has primary responsibility for governing unmanned delivery systems given DOT’s role in regulating America’s transportation systems. Within DOT, the Federal Aviation Administration (“FAA”) regulates AAM and UAS operations within the national airspace (“NAS”). The National Highway Traffic Safety Administration (“NHTSA”) ensures the safety of motor vehicles through Federal Motor Vehicle Safety Standards and other tools. The Federal

¹ Study To Advance a More Productive Tech Economy, 87 Fed. Reg. 4564 (proposed Nov. 22, 2021).

² Letter to Congress Supporting H.R. 8132, the “American COMPETE Act”, U.S. Chamber of Commerce (Sept. 8, 2020).

³ The FAA’s Advanced Aviation Advisory Committee (“AAAC”) is presently examining gender-neutral terminology, including for “unmanned aircraft systems”.

Railroad Administration (“FRA”) regulates the safety of freight rail operations. Finally, the Federal Motor Carrier Safety Administration (“FMCSA”) governs the operations of interstate trucking and other motor carriers. Other agencies, however, have jurisdiction over tangential issues including the Federal Communications Commission, Department of Commerce, Environmental Protection Agency, National Aeronautics and Space Administration, and White House Office of Science and Technology Policy.

C_TEC believes that the Federal government, through both Congressional and Executive branch action, can foster and enhance the adoption of unmanned delivery systems by advancing supportive public policies and avoiding policies that would be detrimental to U.S. leadership in unmanned delivery systems. In October 2020, C_TEC published a white paper titled “*Building the Foundation for the Future of Transportation*” which outlines policy recommendations pertaining to emerging transportation technologies.⁴

Policymakers will lay a critical foundation for the future of transportation across all modes through facilitating innovation for unmanned delivery systems in sectors including rail, automotive, trucking, and aviation. C_TEC recommends that NIST consider several principles. First, policymakers should facilitate ongoing collaboration between DOT modal agencies to share insights gained, relevant technology advancements, and best practices. Second, policymakers should ensure technology neutrality as it develops policies related to transportation innovation and unmanned delivery systems. Third, C_TEC believes that policymakers should advance automation technologies and policies in all modes of transportation.

In addition, to enable the safe deployment of automated vehicle technology, C_TEC offers the following:

- Policymakers should explicitly and publicly prioritize U.S. leadership in automated vehicle technology, starting at DOT’s Office of the Secretary and throughout the appropriate DOT modal agencies.
- Policymakers should prioritize the modernization of regulations, specifically Federal Motor Vehicle Safety Standards (“FMVSS”) and Federal Motor Carrier Safety Regulations (“FMCSR”) to accommodate advances in automated vehicle technology. For example, NHTSA’s proposed rule on “*Occupant Protection for Automated Driving Systems*” has not been finalized despite that the comment period closed on May 29, 2020.
- In developing automated vehicle policy, policymakers should avoid deviating from NHTSA’s current self-certification regulatory model and should maintain

⁴ U.S. Chamber of Commerce, *Building the Foundation for the Future of Transportation* (Oct. 2020), <https://americaninnovators.com/research/building-the-foundation-for-the-future-of-transportation/>.

existing programs, such as the Voluntary Safety Self-Assessments (“VSSA”) disclosures.

- Policymakers should continue to partner with the private sector on important automated vehicle issues and programs, such as DOT’s AV TEST Initiative and the Work Zone Data Exchange. Also, beyond existing programs, policymakers should actively engage with industry to identify new areas of collaboration to accelerate automated vehicle technology.
- Congress should enact legislation similar to the SELF DRIVE Act of 2021 that would allow for expanded deployment and enhanced testing, and a strong national framework to regulate automated vehicles.

Further, to allow for the safe operation of novel aviation technologies, including UAS and AAM, C_TEC makes the following recommendations:

- Policymakers should explicitly and publicly prioritize U.S. leadership in emerging aviation technologies starting at DOT’s Office of the Secretary and consider appointing a lead official at DOT to coordinate UAS and AAM issues.
- Policymakers should reaffirm that the Federal government is the exclusive regulator of the NAS to provide for a safe airspace and innovative regulatory environment.
- Policymakers should prioritize removing barriers to UAS innovation through modernizing UAS regulations to enable routine beyond visual line of sight of operations to improve and standardize the type certification process for small UAS, and by providing the FAA the direction and resources to work with industry toward more rapid integration.
- Policymakers should address security concerns posed by the potential misuse of UAS, including through expediting the promulgation of proposed rule on “*UAS Flight Restrictions Near Critical Infrastructure*” and working with other agencies on safe counter-UAS efforts. Doing so is essential to the safe and critical integration of UAS into the NAS.
- For AAM specifically, policymakers should continue to work with the FAA and National Aeronautics and Space Administration to develop an AAM Concept of Operations and with stakeholders to develop the appropriate regulatory framework for AAM to provide the necessary certainty for this emerging technology to develop.

Finally, C_TEC believes that policymakers should prioritize the modernization of federal railroad safety regulations to incorporate new railroad safety technologies and allow for innovation in this space. Policymakers should adopt performance-based, rather than prescriptive, regulations that would focus safety, including automation efforts, on outcomes. Performance standards would give industry discretion to

innovate and create new ways to improve safety, while still being subject to regulatory oversight.

C_TEC appreciates the opportunity to provide comments to NIST's RFI on emerging technologies. C_TEC believes that policymakers can play a crucial role to facilitate the safe development and deployment of unmanned delivery systems that are consistent with the Administration's priorities. We look forward to working with NIST and other relevant agencies on these issues in the future. Please contact Matt Furlow at mfurlow@uschamber.com with any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Matt Furlow".

Matt Furlow
Policy Director
Chamber Technology Engagement Center
U.S. Chamber of Commerce