

April 1, 2020

BY ELECTRONIC SUBMISSION

Docket Management Facility
U.S. Department of Transportation
West Building, Ground Floor, Room W12-140
1200 New Jersey Avenue, SE
Washington, DC 20590-0001

Re: **Request for Comments on *Ensuring American Leadership in Automated Vehicle Technologies: Automated Vehicles 4.0* (“AV 4.0”)**
Docket No. DOT-OST-2019-0179

Dear Sir or Madam:

The Consumer Technology Association (“CTA”) welcomes the opportunity to submit the following comments on the most recent articulation of automated vehicle (“AVs”) policy guidance, *Ensuring American Leadership in Automated Vehicle Technologies: Automated Vehicles 4.0* (“AV 4.0”), jointly authored by the U.S. Department of Transportation and the White House National Science & Technology Council (collectively, the “Government”).

As a trade association, CTA represents the \$422 billion U.S. consumer technology industry, which supports more than 18 million U.S. jobs. Members of CTA are at the forefront of bringing self-driving vehicle (“SDV”) innovations to America’s roadways, including vehicle and component manufacturers, software developers, transportation platforms, and companies engaged in a multidisciplinary approach to this emerging and growing industry.

Our research indicates that public sentiment for SDVs is increasingly positive.¹ We applaud the Government’s efforts, therefore, to accelerate the testing and development of SDV technologies. The Government’s adoption of a flexible, yet comprehensive, approach to policymaking, as reflected in the forward-thinking guidance of AV 4.0, encourages continued stakeholder engagement and promotes innovation and U.S. competitiveness while upholding the primacy of safety.

We are particularly pleased that AV 4.0 continues to identify concepts that CTA previously highlighted in our comments on the Department of Transportation’s earlier guidance. Safety, for example, continues to be a foremost priority for both the Government and CTA membership. Additionally, CTA represents a broad and diverse membership that is especially

¹ CONSUMER TECHNOLOGY ASSOCIATION, SELF-DRIVING VEHICLES: CONSUMER SENTIMENTS 2018 at 6 (OCT. 2018), available at <https://www.cta.tech/Research-Standards/Reports-Studies/Studies/2018/Self-Driving-Vehicles-Consumer-Sentiments-2018.aspx>.

interested in technology neutral policies. The Government's adherence to remaining technology neutral is an important and appreciated aspect of AV 4.0. We also support the Government's commitment to updating and modernizing regulations to avoid unintended barriers to further self-driving and automated vehicle development, and to emphasize voluntary, consensus-based technical standards.

CTA welcomes AV 4.0's vision for the broad applications of automation, which extend far beyond passenger vehicles and could significantly enhance the safety and productivity of our country's freight and commercial transportation networks. The Government's efforts to foster a consistent policy approach and cross-agency coordination of automation-related activities are a critical component of unlocking this potential.

As with ADS 3.0, the expansion of policy goals reflected in AV 4.0 will create excitement in the industry and an increased focus on work with the Government. Collaboration between industry and government is key to ensuring that our regulatory frameworks, and the public at large, are ready for the transformative future of transportation. We stand ready to support this work in any way possible, including through the consumer research mentioned above and the expertise and experience of our member companies.

In the following comments, we highlight specific elements of AV 4.0 that are particularly important to CTA and our members. Our comments are generally organized according to the order of sections in AV 4.0. We would be pleased to discuss any questions about these comments or about the consumer technology industry more broadly.

1. U.S. Government SDV Technology Principles

The first substantive section of AV 4.0 outlines the ten guiding principles to the Government's approach to automated and self-driving vehicle technology. CTA agrees with and supports the Government's principles as enhancing the development and eventual integration of SDV technologies into mainstream transportation activities, whether passenger travel, public transit, or commercial transportation.

a. Protect Users and Communities

CTA supports the Government's paramount concern for the protection of users and communities, focusing on prioritizing safety, emphasizing security and cybersecurity, maintaining privacy and data security, and enhancing mobility and accessibility.

Safety is a central concern to CTA, and we applaud the Government's leadership in efforts to integrate self-driving and automated technologies safely, identify and address potential safety risks, and promote the potential of SDVs to save lives. Maintaining strong public confidence in the safety benefits of SDVs is equally important. CTA has been proactive about honest consumer education related to SDV capabilities. CTA is a founding member of the Partners for Automated Vehicle Education (PAVE) Campaign, a coalition of industry, nonprofit, and academic institutions working to educate the public and policymakers about SDVs.² Toward this end, CTA supports the Government's commitment to enforce existing laws and ensure that the public is not deceived or misled about the performance capabilities and limitations of advanced and automated vehicle technologies.

² PAVE CAMPAIGN, <https://pavecampaign.org>.

Cybersecurity is also increasingly important. Cybersecurity risks are always evolving and require a flexible and adaptive approach. We support the Government's efforts to promote industry standards and best practices that can be deployed across all data mediums to "deter, detect, protect, respond, and safely recover" from known and emerging risks.³ Additionally, we concur with the Government's risk-based approach to privacy and data security.

The advantages SDVs offer for mobility and accessibility are part of what make the future so exciting. We support the Government's effort to ensure that all consumers, including those with disabilities or older Americans, who may not be able to drive, have the freedom to make mobility choices that work for them.

b. Promote Efficient Markets

As noted above, the Government's adherence to flexible, technology-neutral policies is fully supported by CTA. This will allow the public to decide which technologies and mobility options are best for them. While we advocate for technology neutrality, the U.S. must also protect American innovation and ensure that other nations do not obtain an unfair advantage. Accordingly, CTA also supports the Government's efforts to uplift American innovation and protect American creativity by enforcing intellectual property rights, technical data, and sensitive proprietary communications.

In addition, the work of updating and modernizing regulations affecting SDVs is a critical and essential job. Modernized regulations will promote regulatory consistency across jurisdictions and allow for streamlined SDV operations nationwide and internationally. The Government's efforts in these essential areas are appreciated.

c. Facilitate Coordinated Efforts

CTA agrees that encouraging consistent, voluntary consensus standards and data-driven regulations across State, local, tribal, and territorial authorities is a priority in the implementation of SDV technology. Harmonizing standards and regulations with international partners should continue to be an active goal. CTA supports the Government's efforts on this front, and commends the Government for demonstrating leadership by engaging in cross-agency coordination of research, regulations, and policies.

2. Administration Efforts Supporting SDV Technology Growth and Leadership

The second substantive section of AV 4.0 focuses on the Administration's efforts to support SDV technology. The Government has taken a variety of steps to enhance American leadership in artificial intelligence ("AI") technology. CTA agrees with the Government's national strategy to pursue a diversified approach to furthering AI: research and development of AI, improving access to high-quality cyberinfrastructure and data, eliminating obstacles to innovation, educating and training the American workforce for AI developments, and cultivating an international landscape that favors American AI innovators. Likewise, devoting attention to developing a STEM workforce and STEM education initiatives will assist in preparing the national workforce for changes created by the SDV industry. CTA encourages these efforts and is ready to assist as needed.

³ NAT'L SCI. & TECH. COUNCIL & U.S. DEP'T. TRANSP., ENSURING AMERICAN LEADERSHIP IN AUTOMATED VEHICLE TECHNOLOGIES: AUTOMATED VEHICLES 4.0 at 4 (2020) (hereinafter AV 4.0).

3. Government Research and Commitment to the SDV Sector

a. Safety

As noted above, safety is of paramount importance to CTA membership. To that end, the Government's proactive approach to safety research is appreciated. In particular, CTA commends the National Transportation Safety Board's investigations and research related to crashes involving ADAS and AV systems. These efforts will assist with the investigation of crash causes and recommended solutions to prevent future crashes. We agree with the conclusion that the NTSB's work will enhance public confidence and assure the public that this issue is being taken seriously.

b. Fundamental Research

CTA commends the Government for conducting research across agencies on the use and impacts of SDV within the transportation sector and society as a whole. As recognized in AV 4.0, the impact of advanced and automated vehicle technologies is not only being seen in the typical transportation context, but also within a variety of diverse industries, such as agriculture and energy.

CTA particularly supports efforts to update standards and regulations relevant to the AV industry. For instance, the National Highway Traffic Safety Administration's ("NHTSA") updates to the Federal Motor Vehicle Safety Standards ("FMVSS") are crucial. The expeditious completion of these updates to the FMVSS are necessary because the standards historically have been based on human operation of a vehicle. As SDVs progress and driving tasks are shifted to the vehicle, updated standards are needed to foster continued development and prevent unnecessary barriers to innovation. Likewise, we support NHTSA's efforts to research alternative metrics and safety assessment models as part of this process. Similarly, CTA supports the Federal Highway Administration's plan to update the Manual on Uniform Traffic Control Devices to better incorporate technological advances and innovations. This work will help create infrastructure that assists all drivers, including SDVs.

c. Security and Cybersecurity

Taking a flexible and adaptable approach to address known and emerging risks, including cybersecurity issues, is critical to the future success of AVs. The Government's cross-agency collaboration in this area wisely taps into the deep cybersecurity expertise of other agencies such as the Department of Energy and the Department of Homeland Security. An interagency collaborative approach will yield the most effective guidelines and best practices to address potential risks proactively. CTA shares the Government's belief that this issue will require continued efforts from the Government and industry.

d. Economics and Workforce Research

While automation offers overall benefits to society, it is important to stay mindful of its impact on the American workforce. CTA has joined the Administration's Pledge to American Workers and has helped create the CTA Apprenticeship Coalition,⁴ a collaborative effort by CTA membership to create and expand hundreds of apprenticeship opportunities across the nation,

⁴ CTA APPRENTICESHIP COALITION, <https://www.cta.tech/Membership/Member-Groups/CTA-Apprenticeship-Coalition>

preparing American workers for careers in fields such as software engineering, data analytics, project management, and hardware design.

4. U.S. Government Enabling Activities in the SDV Sector

This section of AV 4.0 addresses efforts by the Government to facilitate fully integrating of SDV technologies into the national surface transportation system. CTA supports the Government's approach to fostering a collaborative relationship with non-federal stakeholders. Part of this effort, and of particular interest to CTA, is the promotion of voluntary consensus standards supported by the private sector. Voluntary consensus standards adapt to the changing developmental landscape and offer flexibility and the ability to quickly respond to rapidly advancing innovation. CTA believes this is the best approach to incorporate the results of testing protocols and enhance further development of SDV technologies.

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Thank you for the opportunity to provide these comments. We appreciate the Government's attention to the feedback we provided on the prior version of this guidance and look forward to working with you on its continued evolution. This policy and related efforts are important to realizing our shared goal of increasing public trust and confidence and substantially improving vehicle safety through technology and innovation. Please contact us with any questions you may have.

Sincerely,

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