Written Testimony of the

Motor & Equipment Manufacturers Association

for the Hearing on

"Driving Innovation: The Future of Automotive Mobility, Safety, and Technology"

before the

U.S. Senate Committee on Commerce, Science, and Transportation
Subcommittee on Surface Transportation, Maritime, Freight, and Ports

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Introduction

MEMA represents more than 1,000 vehicle suppliers that develop innovative technologies and manufacture and remanufacture original equipment (OE) and aftermarket components and systems for use in passenger cars and heavy trucks.[1] This industry operates in all 50 states, directly employs almost one million Americans, and is the largest sector of manufacturing jobs in the United States. Direct, indirect, and induced vehicle supplier employment accounts for over 4.8 million U.S. jobs. Moreover, vehicle suppliers contribute 2.5 percent of U.S. GDP. The average U.S. wage for direct vehicle supplier jobs reached $80,300 – exceeding the average of all U.S. manufacturing sectors.[2]

Across the entire range of new vehicle innovation – from automated to zero-emission technologies – vehicle suppliers are leading the way. Vehicle suppliers conceive, design, and manufacture the OE components and technologies that make up more than 77 percent of the value in new vehicles. Vehicle suppliers also manufacture aftermarket parts and materials for the maintenance and repair of over 290 million vehicles on the road.

MEMA supports infrastructure legislation that accelerates the development, commercialization, manufacture, and deployment of new, advanced technologies in the United States.[3] This includes the more rapid deployment of the critical building-block technologies needed to reach the targets for electrified and automated vehicles. The promotion of technology development will allow the U.S. to be more innovative and globally competitive and to lead the world on the path of enhanced mobility for all citizens.

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[1] MEMA represents its member companies through its four divisions: Automotive Aftermarket Suppliers Association (AASA); Heavy Duty Manufacturers Association (HDMA); MERA - The Association for Sustainable Manufacturing; and Original Equipment Suppliers Association (OESA).

[2] U.S. Labor and Economic Impact of Vehicle Supplier Industry, MEMA and IHS Markit. February 2021.

[3] MEMA will provide this committee with additional views on the commercial vehicles and freight transportation.

MEMA members have long led in developing innovative vehicle technologies that save lives, improve efficiencies, and reduce emissions. We believe infrastructure legislation must be part of an overall comprehensive, strategic, and meaningful plan to prepare the U.S. for a technologically advanced transportation future. For too long, the U.S. has not moved forward at an adequate pace to accommodate and prepare our nation for these advanced technologies in a concerted, dedicated, and clear fashion.

The vehicle industry has long product cycles; suppliers must plan for components and systems ahead of the curve and well in advance of deployment. Vehicle suppliers and our customers are being encouraged by policymakers to design, develop, and deploy these technologies in the U.S. and require a more substantive framework within which we can innovate and create jobs. While there is an array of guidelines, best practices, voluntary agreements, and incomplete or shelved rulemakings, a more structured, coordinated policy framework is critical to abating the uncertainty that persists in the U.S. There are other regions in the world that are closing these gaps. A structured roadmap is needed in order to keep our country on the leading edge as a manufacturing and innovation center and to provide Americans with greater mobility, safety, and environmental benefits. Yet, this vision is not without challenges.

MEMA believes we must focus on five fundamentals:

1. **Advanced Technology Readiness and Competitiveness –** The U.S. must provide the tools for our manufacturers to compete globally for technology development and deployment. Our country has a strong foundation to be the global leader in creating new innovative, forward-leaning technology, including automated and electric vehicles. This leadership will require significant investments and incentives with an established roadmap.
2. **Infrastructure –** An infrastructure package must address motor vehicle safety. With an increasing level of U.S. motor vehicle fatalities, Congress must take this opportunity to provide the impetus and attack this issue. MEMA strongly supports implementing a substantive update of the U.S. New Car Assessment Program (NCAP). The timeline to update the program can be done in a shorter period, encourage deployment, and provide consumers with more comparable information, particularly about the benefits of crash avoidance technologies. Updating NCAP will also help the U.S. keep pace with other global regions in technological advancements. In addition, MEMA supports improving our nation's infrastructure to prepare the U.S. for future mobility, including automated and electric vehicles.
3. **Fuel Efficiency and Emissions –** MEMA supports a path to a net-zero carbon transportation system including electrification. This path must allow for multiple technologies including increased efficiency of internal combustion engines, hybrid, plug-in hybrid, battery-electric, and hydrogen fuel cell vehicles during this transition.

4. **Equity in Mobility and Service –** MEMA believes we must address the issue of equity in mobility and vehicle service. Automated vehicles (AVs) have the potential to enhance the mobility of people in a variety of ways by providing more options. For those many Americans that depend on a used vehicle for transportation to work, school, and daily life, vehicles are increasingly more durable and last longer because of advancements in vehicle technology. With the average age of passenger vehicles exceeding 12 years, there must be a focus on assuring Americans that their vehicles can provide the greatest degree of safety and fuel efficiency possible with regular obtainable maintenance service.
5. **Workforce –** Workforce development is one of the most significant challenges facing the industry. Our industry's workforce needs are evolving with the push to vehicle electrification and automation. In response to these changing needs, worker development and upskilling programs must advance to continue providing U.S. workers with the necessary skills to manufacture and service new technologies. The industry will require a diverse workforce with occupations across many industries with varying levels of education, training, and experience. Most of these occupations will require specialized training or work experience.

Advanced Technology Readiness and Competitiveness

The domestic motor vehicle industry is at a crossroads. Over the last five years, other countries have moved forward aggressively adopting, promoting, and mandating vehicle electrification, advanced driver-assistance (ADAS) systems, and automated technologies, threatening the leadership position of the United States.

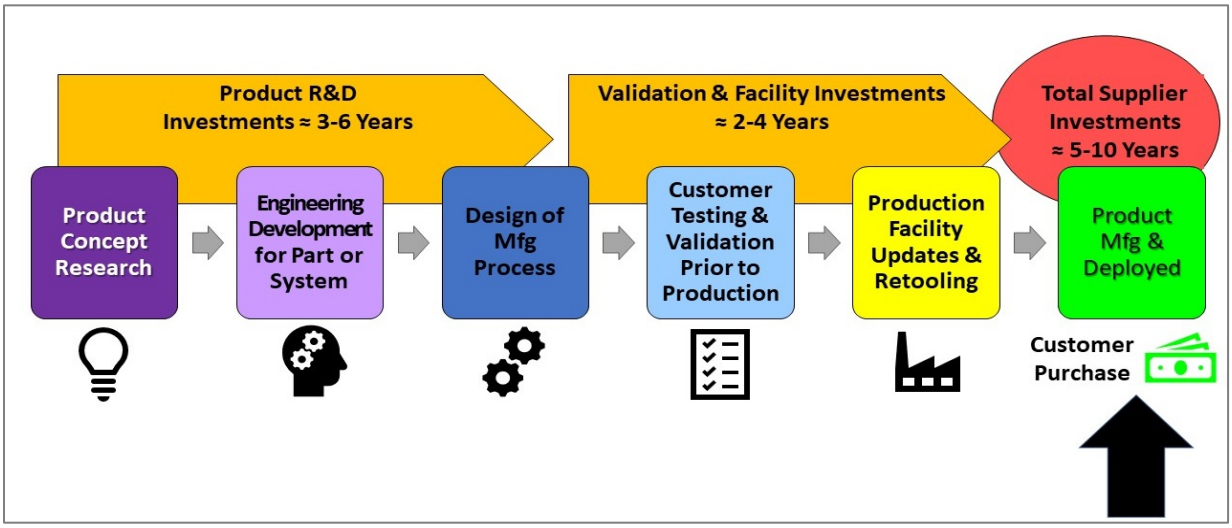
In short, the U.S. is currently without a comprehensive and definitive plan. We must adequately prepare and accommodate for not only the advanced vehicle technologies of today but the future transportation landscape of tomorrow. While the vehicle industry is always looking ahead and planning a range of vehicle technologies on a wide range of vehicle platforms, the uncertainty of the U.S. market can inhibit or discourage domestic development and deployment of technologies. Over the past decade, the National Highway Traffic Safety Administration (NHTSA) has lost forward momentum; there is a lack of definitive action by the agency on multiple fronts that has caused the U.S. to fall behind our global counterparts. While the European Union, Japan, Korea, and China move forward championing these endeavors, the U.S. is in danger of losing our competitive edge due to a lack of clear national policies.

Global companies have a choice of where to grow their businesses and where to invest in the research, development, and manufacturing of new products. Companies choose new facility locations based on complex analysis including customers and suppliers, consumer markets, workforce capabilities, tax and regulatory policies, direct government incentives, workforce capabilities, and export potential. However, the reality is that vehicle suppliers are unlikely to invest in the production of advanced components in the U.S. unless there is

strong regional demand for those technologies. If the demand is centered in European or Asian regions, then that development and manufacturing will be localized there.

In addition, suppliers depend on policy certainty in order to direct investment. Suppliers assume a leading role in developing technology solutions for motor vehicles and take on the associated risks of developing these technological advancements. In some cases, these investments are necessary to comply with federal and state standards that lower emissions or increase safety. In others, the investments are made because consumers and the industry are seeking to address the same challenges. The development of these advanced technologies requires substantial lead-time, major economic resources, and product planning that includes several stages. Importantly, suppliers do not get return on their capital investment until these technologies are deployed (see graphic below). The return on investment is estimated very carefully and amortized over several years. Therefore, policy certainty has enormous implications on the motor vehicle supplier industry. Definitive action by NHTSA and Congress will help provides the industry the needed certainty to develop and improve future products and systems.

Motor Vehicle Parts Suppliers Product Planning and Investments Timeframe



For the U.S. to remain a leader in innovative technological advancements, we require a competitive environment with access to skilled and educated workers, raw materials, financing, and transportation logistics. Suppliers rely on legislative and regulatory certainty to achieve steady progress toward sustainable objectives. Policies must be in place for the U.S. to continue leading in the race to develop and manufacture these innovations domestically or our nation's manufacturing and employment bases will ultimately suffer.

Finally, infrastructure legislation must be part of an overall comprehensive, strategic, and meaningful plan to prepare the U.S. for a technologically advanced transportation future. It must provide policy certainty such that advanced vehicle technologies – both safety and environmental – will have a clear and direct pathway to deployment that does not create unnecessary financial and regulatory burdens and avoids stranded domestic

investments. Research and development coordination, tax incentives, and federal support will provide greater progress than stringent or inflexible mandates. However, policy certainty does not necessitate the mandate of a single technological path. MEMA will work diligently with the Biden Administration and Congress to ensure that infrastructure legislation positively addresses each of these concerns.

Supply Chain Crisis

Since the end of 2020, the U.S. vehicle industry has faced a significant supply chain crisis. Although the shortage of semiconductors has been the focus of this crisis, the issues are more widespread (semiconductors, resins, foam, rubber, steel, and many other materials and components), as well as delays at our nation's ports. These shortages and delays lead to price increases on motor vehicle part inputs, cutting profits and funds available for research and development and other long-term priorities.

Due to these supply chain-induced shortages, the industry is anticipating an overall decline in motor vehicle production for the first three quarters of 2021 with adverse employment impacts, both for vehicle manufacturers and vehicle parts manufacturers. One of our smaller supplier members reported that the port crisis alone is costing their company more than $500,000 a month in shipping costs. These shortages are diverting capital that cannot be used now to meet the demands of our industry's changing landscape.

The current crisis reinforces the need to build more robust and steady global supply chains. These supply chains must focus on both domestic production and global availability. Over time, the U.S. must create greater sourcing of critical components and technologies for the domestic market. Additional sourcing from allies will also be helpful. Increasing and diversifying supplies of components and materials around the globe, including in the U.S., are vital to domestic motor vehicle parts manufacturers.

MEMA supports two key goals to enhance global supply chain competitiveness. The first is to develop and enhance the domestic capability to produce cutting-edge technology. Additionally, it is vital to ensure supply chain resiliency that will support America's current manufacturing jobs as well as economic and national security. This will create a robust supply of critical established technology, including legacy chips. To that end, MEMA supports funding for the CHIPS Act and further appropriations for the necessary additional capacity to produce motor vehicle grade chips.

Infrastructure

Surface transportation bills have long focused on the infrastructure needs of this country. Our industry relies on a robust infrastructure system of roads, bridges, and ports, but infrastructure needs are changing as motor vehicles are transforming. Congress must pass legislation that keeps pace with these needs.

This means that we must deploy charging stations, including public DC fast charging stations, at the rate of the expected adoption of plug-in hybrids and electric vehicles. This

must include a mix of options located at nonworkplace and nonresidential sites. Additionally, we must provide road markings and signage that improve the performance of advanced vehicle safety systems. All these programs will require a new level of investment to both maintain existing roadways and expand access for the transformative vehicles of the future.

Vehicle Safety

Motor vehicle parts manufacturers are key developers of the components and software for the safety systems in today's vehicles. Suppliers are committed to improving vehicle safety and are leading the way in developing the technologies necessary to reduce fatalities and injuries. Our industry embraces the culture, innovation, and direction that is necessary to advance the goals to significantly reduce vehicle fatalities, injuries, and societal costs.

Recent complete crash data show that, in 2019, over 36,000 people lost their lives in vehicle crashes.[4] Preliminary federal data for the first nine months of 2020 show that, unfortunately, the fatality figures are climbing despite a downturn in vehicle miles traveled.[5] The National Safety Council (NSC) recently estimated that over 42,000 Americans died in motor vehicle crashes in 2020.[6] This represents an 8 percent increase over 2019 and is the highest year-over-year increase that NSC has calculated in 96 years. In comparison, preliminary 2020 data from Europe show a significant drop in vehicle related fatalities, dropping 17 percent compared to 2019.[7] We should all be alarmed.

MEMA believes greater deployment of crash avoidance technologies such as automatic emergency braking (AEB), lane keeping, and blind spot detection will improve overall fatalities. Indeed, a study commissioned by MEMA and conducted by the Boston Consulting Group (BCG) in 2015 estimated that the U.S. could reduce fatalities on U.S. roads by 10,000 per year if all vehicles were equipped with a suite of advanced driver assistance (ADAS) technologies.[8]

Suppliers are the key innovators, developers, and manufacturers of these technologies. The evolution over the years has been transformational beginning with building-block passive systems to active, more automated systems. From anti-lock braking system (ABS) to electronic stability control (ESC), from forward collision and lane departure warning systems (FCW, LDW) to front and rear AEB systems and lane keeping assistance systems.

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[4] "Overview of Motor Vehicle Crashes in 2019," National Highway Traffic Safety Administration, Publication No. DOT HS 813 060, December 2020.

[5] "Early Estimate of Motor Vehicle Fatalities for the First 9 Months of 2020," National Highway Traffic Safety Administration, Publication No. DOT HS 813 053, December 2020.

[6] National Safety Council indicated their preliminary data show that as many as 42,060 people are estimated to have died in motor vehicle crashes in 2020 in its recent announcement "Motor Vehicle Deaths in 2020 Estimated to be Highest in 13 Years, Despite Dramatic Drops in Miles Driven," March 4, 2021.

[7] "Road safety: 4 000 fewer people lost their lives on EU roads in 2020 as death rate falls to all time low" European Commission, March 4, 2021.

[8] "A Roadmap to Safer Driving Through Advanced Driver Assistance Systems," MEMA and Boston Consulting Group, Sept. 29, 2015.

These and other advanced vehicle safety systems, plus improvements in vehicle crashworthiness, are all technologies that help drivers avoid or mitigate crashes and drastically reduce fatalities, injuries, property damage claims, and societal costs.

An array of ADAS technologies is currently commercially available and is proven to have safety benefits. Europe, which is a tangible counterpart to the U.S., has demonstrated the safety benefits and successful deployments of these technologies. There are many advanced safety features available in the vehicle marketplace ranging from passive to active systems that either warn and/or intervene to avoid or mitigate vehicle crashes. These advanced technologies have foundational systems upon which the more complex systems are built. Over recent years, computing power and sensor technologies have rapidly evolved and improved. Many of these systems and components are available on a larger scale and offered on a broader array of vehicle price points.

U.S. New Car Assessment Program (NCAP)

The U.S. NCAP is a voluntary program and provides consumers with information regarding the performance and equipment in new vehicles. The current program rates a vehicle's crashworthiness – in other words, how well it protects the vehicle's occupants in a crash. The NCAP is not keeping up with technology development and is not serving the American consumer well. It must be updated.

MEMA urges Congress to specifically direct NHTSA to update and modernize the NCAP. MEMA supported language in the FAST Act in 2015 that required NHTSA to include crash avoidance technology information on the Monroney Label. Although NHTSA has a substantial amount of data on the efficacy of these technologies, the agency never finalized the congressional mandate. The 2015 requirement is no longer sufficient to ensure that a consumer has enough information about crash avoidance technologies.

Instead, Congress should take additional steps to require NHTSA to plan for a substantive and comprehensive update of the NCAP. NHTSA should immediately update the NCAP by adding a list of pre-determined crash avoidance and mitigation technologies that will be considered when determining the rating of a specific vehicle. Regarding crash avoidance, several technologies are ripe for immediate inclusion and address common crash scenarios. Much of the technical work, research, and test procedures have already been completed for many of these currently available technologies. As such, there are several that can be immediately included as part of an initial update to the NCAP.

Therefore, NHTSA should be required to move forward quickly and finalize these new requirements without further delay. Equally important, NHTSA must establish a clear roadmap to allow for phased-in future updates by prescribed milestones, providing vital time and certainty needed for product development and planning of vehicle manufacturers and suppliers. These changes will assure NCAP keeps pace with new technologies and, more importantly, keep the U.S. on the leading edge of safety technology innovation.

Vehicle-to-Everything (V2X) Technologies

Vehicle suppliers are critical in the ongoing development and implementation of vehicle-to-vehicle (V2V), vehicle-to-infrastructure (V2I), and vehicle-to-pedestrian (V2P) technologies (collectively referred to as vehicle-to-everything, or V2X). V2X technologies are another innovation that promises to significantly increase transportation safety. These systems allow vehicles to communicate with other vehicles, infrastructure, law enforcement, and bicycle and pedestrian road users to avoid crashes, enhance safety, improve transportation efficiency, and reduce air pollution. NHTSA predicts that the safety applications enabled by V2X technologies could eliminate or mitigate the severity of up to 80 percent of non-impaired crashes, significantly reducing the nearly 37,000 lives lost and three million injuries that occur on U.S. roadways each year. V2X technologies will provide real economic savings as well by significantly reducing the more than $800 billion in annual costs associated with crashes on American roads.

V2X technologies require dedicated spectrum to ensure uninterrupted high-speed communication; many years ago, the 5.9 GHz spectrum was allocated to intelligent transportation systems. Over the years, suppliers spent millions of dollars on research, development, and production of these technologies in anticipation of wide deployment. Suppliers have been directly engaged with the U.S. Department of Transportation (DOT), several state departments of transportation, regional and city agencies, and a host of industry stakeholders to support a wide array of deployment projects. All stakeholders have made significant investments in research, infrastructure, and planning in reliance on the 5.9 GHz spectrum band would be in place.

Unfortunately, the Federal Communications Commission (FCC) has recently voted to reallocate more than half of the spectrum in the 5.9 GHz band reserved for these technologies. Analysis suggests that this will not leave an adequate spectrum for many important V2X safety applications including V2P applications, which are designed to improve road safety for vulnerable road users such as pedestrians and cyclists. There also would not be adequate spectrum to deploy advanced safety applications that rely on Collective Perception Messages and Maneuver Coordination Messages, which support applications that will enhance the safety of automated vehicles.

Additionally, the potential for harmful interference from adjacent channels threatens the ability of V2X to function in the spectrum remaining. Numerous technical assessments related to the FCC's proposal, including preliminary assessments released by the DOT, show that out-of-channel interference from unlicensed devices operating in adjacent bands would be likely to make the spectrum reserved for transportation safety communications unusable for such purposes. This interference would delay or block safety-critical messages where split-second action is required to avert a crash. MEMA agrees with the overwhelming consensus of the transportation safety community that this spectrum reallocation undermines transportation safety, and that all 75 MHz of the 5.9 GHz band should be preserved for V2X technologies.

Automated Vehicles

As the committee knows, 94 percent of motor vehicle crashes are the result of human error.[9] Legislation for AVs will go a long way to address this issue. Vehicle parts manufacturers are key developers of the components and software for automated driving systems (ADS) that enable AVs. As noted earlier, vehicle suppliers manufacture a wide range of ADAS technologies, as well as integrated active/passive safety systems, that lay the foundation for ADS-equipped AVs. MEMA strongly supports narrow, targeted AV legislation focused on creating a path forward for the development and deployment of ADS-equipped AVs and technologies for Levels 3-5 as identified by the SAE International Standard J3016. MEMA believes this can be done in a manner that protects the driving public while keeping pace with new and developing technologies. The AV START Act passed by the Committee during the 115th Congress would have been a first step to meeting these goals.

MEMA urges the Committee to act quickly this year to pass legislation that provides suppliers parity with the automakers on technology testing, affirming that motor vehicle equipment manufacturers can test and evaluate ADS on public roads. Suppliers are critical to the overall development and refinement of ADS technology. If suppliers are unable to carry out this work in an independent manner, then it will impede and delay the evolution of the critical systems, artificial intelligence, human-machine interface, and other advancements that are needed to bring the vision of automated vehicles to fruition.

MEMA continues to urge Congress to craft legislation that clarifies the distinction between federal and state roles in regulating AVs. A patchwork of state requirements may impede testing, deployment, and operating ADS-equipped vehicles. The federal government must have primary oversight over vehicle safety, with state and local governments regulating registration and licensing requirements.

Developing and evolving technologies for AVs will continue to remain ahead of government standards. To allow for this, MEMA recently recommended to NHTSA that the agency should create an ADS safety framework through the provision of guidelines, recommendations, and consumer information that are based on information and data that is currently available and take a technology-neutral approach.

At the same time, suppliers rely on clear, concise rulemakings that provide certainty as suppliers are developing and working to deploy advanced technologies. A clear path to deployment, including updating existing safety standards, is necessary, and NHTSA must continue working on translations from existing rules to allow for AV deployment. These translations, which include updating FMVSS standards that specify a person or driver, are necessary to allow for ADSs to be considered as "drivers and operators." This will eliminate incompatible regulations to allow the development of AV technologies. NHTSA must continue the modification and development of FMVSS standards to support the

[9] "Critical Reasons for Crashes Investigated in the National Motor Vehicle Crash Causation Survey," National Highway Traffic Safety Administration, Publication No. DOT HS 812 115, February 2015.

development of AV technology. Suppliers remain part of the ongoing government-industry dialogue to address these complex issues.

Fuel Efficiency and Emissions

MEMA is committed to working toward a net-zero carbon transportation future that includes a shift to electric-drive vehicles. This vision is shared by automakers, workers, and suppliers and has brought the auto industry in the U.S. to a transformative moment, one that will shape a cleaner future and redefine motor vehicle transportation for generations to come.

For the U.S. to be a leader in this transformation, we must work collaboratively to develop a comprehensive national vision and strategy to meet these goals. This is not just about the future of the auto industry in the U.S., it is about our country's race to innovation, global competitiveness, economic security, and the evolution of the U.S. workforce. Nations that lead the development and adoption of innovative technologies will also shape supply chains and job creation, define global standards and, potentially, reshape the international marketplace. However, neither the current rate of consumer adoption of EVs nor existing levels of federal support for supply- and demand-side policies, is sufficient to meet our goal of a net-zero carbon transportation future.

For this reason, MEMA joined with the Alliance for Automotive Innovation and UAW in specifically defining the commitments that must be made to reach our common goals.[10] In short, to get to this goal we must commit to a level of investment that we have rarely seen as a country. This includes investment in infrastructure, R&D, and retooling as well as consumer incentives.

MEMA believes that regulatory requirements from the U.S. Environmental Protection Agency (EPA) and NHTSA must provide for continued investment in reaching the full efficiency potential of the internal combustion engine. This means vehicles purchased during the transition to full electrification will provide strong fuel efficiency and emissions reduction while working towards the net-zero carbon emission goal. These vehicles will likely be on the road for an additional 20 years, and our collective commitment to climate change will not be met unless the propulsion system containing the internal combustion engine continues to improve its efficiency through system optimization and electrification.

We must also allow for the greater use of hybrid, plug-in hybrid, battery electric, and hydrogen fuel cell vehicles and provide the infrastructure for their usage. This will help both manufacturers and consumers alike in the transition.

A fully electric vehicle fleet will require significantly fewer supplier jobs, with some experts arguing that the supplier industry could lose up to 30 percent of its traditional

[10] Joint Vehicle Industry Letter to President Biden re: Working Towards a Net-Zero Carbon Transportation Future, from the Alliance for Automotive Innovation, MEMA, and UAW, March 29, 2021.

workforce. Engines, transmissions, aftertreatment systems, and other parts will simply not be manufactured for battery electric and fuel cell vehicles.

The supplier industry and the American workers need assistance and support in the forms of incentives to retool existing manufacturing facilities, economic development incentives, and programs that foster domestic investment. In addition, we must heavily invest in workforce up-skilling programs. Americans deserve an opportunity to secure meaningful skills that will carry them through their careers. This will take time, making the transition even more important.

Equity in Mobility and Service

For this testimony, MEMA is addressing equity in the broad context of mobility and vehicle service and maintenance.

As stated earlier, AVs have many anticipated benefits to open up and enhance the mobility of many citizens in a variety of ways and provide more options. The vehicle industry and beyond are looking at various pathways and opportunities that could be realized in the future. While it is unclear which services and applications will become part of our future transportation network, it is clear that it has the potential to get more people safely moving to their destinations.

Transformative, innovative vehicles should not only be available to the few. A robust, modern NCAP would provide our citizens with important vehicle safety information, no matter the size of their budget. In addition, we must provide electric charging opportunities in a wide range of locations to make ownership of new technologies feasible.

Many people depend on a used vehicle for transportation. Congress must recognize the role that the automotive aftermarket plays in providing affordable, reliable, and safe transportation to many Americans. The average cost of a new car now exceeds $40,000, far beyond the ability of many Americans to afford. Indeed, used car sales in this country rose in the early months of the pandemic as many Americans were forced to look for transportation options and were unable to find an affordable new vehicle.

Vehicles are increasingly more durable and last longer; the average age of passenger vehicles now exceeds 12 years. That means that many Americans keep their vehicles for 20 years or more, and often these individuals will be the second, third, or even fourth owner of a car. Vehicle suppliers develop and manufacture the aftermarket parts and materials needed to maintain and service over 290 million vehicles on the road. Regular service intervals for not only older vehicles, but also newer vehicles with advanced technologies, are critical to maintaining vehicle safety, efficiency, emissions, and performance.

MEMA would encourage this Committee to consider the following:

- This is not the time to institute any fuel efficiency or emissions consumer incentive program that requires the destruction of a trade-in vehicle. These trade-in vehicles

will have value to other Americans. There are better ways for Congress to ensure continued fuel efficiency and lower vehicle emissions.

- MEMA would encourage the Committee to consider ways to ensure greater safety of all vehicles on the road. In 2019, unperformed and under-performed maintenance totaled $41 billion. MEMA has long been a strong advocate of vehicle safety inspections. Yet only fifteen states have a periodic (annual or biennial) safety inspection program, while Maryland requires a safety inspection and Alabama requires a VIN inspection on sale or transfer of vehicles which were previously registered in another state. We urge Congress to set aside funding in an infrastructure package to assist states in the creation or maintenance of state safety inspections, including the reduction of fees for some citizens.

Finally, MEMA's automotive aftermarket division, AASA, has separately addressed the important issue of data access for the purpose of maintenance and repair. The significance of maintaining consumer choice, transparency, and affordability in auto repair cannot be downplayed. Consumers deserve to decide how and with whom they share their vehicle data. MEMA is committed to working with all parties, automakers, dealers, and consumers, to assure the continued ability of American to repair and maintain their vehicles in the manner and place of their choice.

Workforce

Workforce development is one of the most significant challenges facing the industry. The skilled worker shortage continues to grow. Suppliers support programs throughout the United States that focus on all levels of the workforce and potential workers – middle and high school students, high school graduates, two and four-year college graduates, continuing education, and non-traditional students. Yet, these programs are not sufficient to meet the evolving needs of the industry or the American public.

MEMA supports -

- Establishment of a broad National Institute of Manufacturing (NIM) to encourage federal coordination of policy and streamlining of manufacturing programs;
- An assessment of current federal workforce programs;
- Incentives for workers to enter and re-enter manufacturing;
- Adoption of policies that enhance the educated and mobile workforce in the quickly changing automated manufacturing world;
- Federal partnerships with state and local governments and private industry to provide training and support for technical colleges and apprenticeship programs;
- Restoration of open immigration and H1B and L-visa policies to assist in workforce development and ensuring skilled workforce needs are met; and,

- Preservation of market-oriented labor policies.

MEMA urges Congress to consider the evolving workforce needs of suppliers to ensure that today's workers, as well as tomorrow's, are equipped with the skills necessary to manufacture these advanced technologies here in the U.S.

Conclusion

This industry is in a transformative moment that can provide greater mobility, safety, and environmental protection for our citizens. MEMA is committed to being a part of the ongoing discussions on all aspects of the legislation facing Congress.

As these discussions continue, MEMA urges Congress to consider the five fundamental needs outlined above to support the supplier industry and our workforce. Our nation requires these tools for the complex vehicle supplier industry in this country to remain competitive.

For any additional information or questions, please contact Senior Vice President of Government Affairs Ann Wilson (awilson@mema.org) or Vice President of Legislative Affairs Catherine Boland (cboland@mema.org).