Written Statement of

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before the

U.S. House of Representatives Committee on Energy & Commerce
Subcommittee on Consumer Protection & Commerce
and
Subcommittee on Environment & Climate Change

Hearing on the Trump Administration's SAFE Proposal

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I. Introduction

Good morning Chairwoman Schakowsky and Ranking Member McMorris Rodgers and good morning Chairman Tonko and Ranking Member Shimkus and to all of the members on the committee.

My name is Ramzi Hermiz, and I am the President and Chief Executive Officer of Shiloh Industries, Inc., a U.S. based, Ohio headquartered, provider of innovative component technologies to the mobility market.

Thank you for inviting me to speak to you about the Safe Affordable Fuel Efficient (SAFE) Vehicles proposal for greenhouse gas emission standards, the Corporate Average Fuel Economy Standards (CAFE) for light duty vehicles and the One National Program.

Throughout my testimony, I will present you information regarding the excellent work companies like Shiloh are doing to provide job opportunities for U.S. workers and to make our country the world leader in the development of new and important auto component technologies.

I will first provide you with some background on Shiloh. I will then turn to discussing Shiloh's and the Motor & Equipment Manufacturers Association's perspectives on the SAFE proposal. I am also happy to answer any questions you may have now or after this hearing.

II. About Shiloh Industries

Shiloh Industries, Inc. (NASDAQ: SHLO) is a global innovative solutions provider focused on developing and implementing lightweighting technologies that provide improved performance, environmental and safety benefits to the mobility market. Our company designs and manufactures products within body structure, chassis and propulsion systems.

Shiloh has over 3,800 dedicated employees with operations, sales and technical centers throughout North America, Europe and Asia. We employ over 2,100 employees in the United States at our facilities in Indiana, Kentucky, Michigan, Ohio, Tennessee and Wisconsin.

Shiloh's multi-component, multi-material solutions are composed of a variety of alloys in aluminum, magnesium and steel, along with its proprietary line of noise and vibration reducing **ShilohCore** acoustic laminate products. Our strategic **BlankLight**, **CastLight** and **StampLight** brands combine to maximize lightweighting solutions without compromising safety, quality, sustainability, performance or cost.

III. About the Motor & Equipment Manufacturers Association

Shiloh is a member of the Original Equipment Suppliers Association (OESA), a division of the Motor & Equipment Manufacturers Association (MEMA). I am the current Chairman of the Board of OESA.

MEMA represents more than 1,000 vehicle suppliers[1] that manufacture and remanufacture new original equipment (OE) and aftermarket components and systems for use in passenger cars and heavy trucks. MEMA members lead the way in developing advanced, transformative technologies that enable safer, smarter, and more efficient vehicles, all within a rapidly growing global marketplace with increasing regulatory and customer demands.

Vehicle suppliers are the largest sector of manufacturing jobs in the United States, directly employing over 871,000 Americans in all 50 states. Together with indirect and employment-induced jobs, the total U.S. employment impact of the supplier industry is 4.26 million jobs.[2] Nearly $435 billion in economic contribution to the U.S. GDP is generated by the motor vehicle parts manufacturers and its supported activity.

Suppliers provide about 77 percent of the vehicle value. To put this into perspective, a typical vehicle contains more than 30,000 components. Vehicle suppliers manufacture materials, parts, and systems for a wide range of customers including new vehicle manufacturers (a.k.a. "OEMs") and other Tier 1-3 suppliers. They also manufacture for the vehicle aftermarket by way of multiple channels to provide vehicle service technicians, commercial fleets, and consumers the parts and materials needed for vehicle maintenance and repair. The variety of service applications ranges widely too: from passenger cars, SUVs and pick-ups to heavy-duty vocational trucks, semi-tractor trailers and military tactical vehicles –

[1] MEMA represents vehicle suppliers through the following four divisions: Automotive Aftermarket Suppliers Association (AASA), Heavy Duty Manufacturers Association (HDMA), Motor & Equipment Remanufacturers Association (MERA) and Original Equipment Suppliers Association (OESA).

[2] "Driving the Future: The Employment and Economic Impact of the Vehicle Supplier Industry in the U.S." IHS Markit on behalf of MEMA, January 2017. https://www.mema.org/sites/default/files/MEMA_ImpactBook.pdf

suppliers provide the components necessary to support the production of millions of these vehicles annually.

MEMA members manufacture and remanufacture a wide array of vehicle components for new vehicles as original equipment and for the aftermarket as replacement parts. They manufacture and produce essential vehicle components and materials – such as axles, brakes, tires, wheels, batteries, wire harnesses, seats, front/rear lights, bearings, oil filters, fluids, plastics, metals, composites, and thousands more. Suppliers also innovate by developing and deploying complex and highly integrated vehicle systems – such as emissions control technologies, alternative propulsion systems, regenerative braking technologies, advanced driver assistance systems, vehicle-to-vehicle communications, automated driving systems, advanced refrigerants and HVAC systems.

Unless specifically noted in this Written Statement, the testimony presented is provided by me on behalf of Shiloh Industries, Inc. and MEMA.

IV. Executive Summary

The proposed SAFE Vehicles rule that the U.S. Environmental Protection Agency (EPA) and U.S. Department of Transportation's National Highway Traffic Safety Administration (NHTSA) released for public comment in August 2018 proposed keeping the existing emissions standards in place through model year 2020 followed by zero percent improvement in model years 2021-2026 (Alternative 1 in Graphic 1 below). The proposed rule also sought comment on a no-action alternative and eight other options. Shiloh and MEMA support continuous improvement in both Corporate Average Fuel Economy (CAFE) standards and light duty vehicle greenhouse gas (GHG) emissions standards through Alternative 6 and Alternative 8 (see Graphic 1 below). Continuous improvement in these standards along with achieving the goals set forth in the One National Program will preserve long-term supplier investments and employment, provide clarity for suppliers to continue to invest in the U.S., and ensure that the U.S. remains a global mobility technological leader, ultimately benefitting our environment.

Graphic 1. The SAFE Vehicles Rule Proposed Alternatives

Alt 1	0% increase year-on-year for passenger cars and trucks MYs 2021-2026
Alt 2	.5% increase year-on-year for passenger cars and trucks MYs 2021-2026
Alt 3	.5% increase year-on-year for passenger cars and trucks MYs 2021-2026, phase out of A/C and off-cycle
Alt 4	1% increase year-on-year for passenger cars and 2% increase year-on-year for trucks MYs 2021-2026
Alt 5	1% increase year-on-year for passenger cars and 2% increase year-on-year for trucks MYs 2022-2026
Alt 6	2% increase year-on-year for passenger cars and 3% increase year-on-year for trucks MYs 2021-2026
Alt 7	2% increase year-on-year for passenger cars and 3% increase year-on-year for trucks MYs 2021-2026, phase out of A/C and off-cycle
Alt 8	2% increase year-on-year for passenger cars and 3% increase year-on-year for trucks MYs 2022-2026

* Also proposed to eliminate the low-GWP AC refrigerant credit in each alternative

Providing direction and regulatory certainty to the automotive industry by supporting the continuous improvement approach to these standards would enable the continued

development and commercialization of a broader range of advanced technology options, ultimately providing consumers with more fuel efficient vehicles, relief at the pump and charging stations, and a healthier environment. This approach is also good business and will promote motor vehicle industry job growth in the U.S. Shiloh and MEMA support positively impacting U.S. job growth, promoting long-term supplier investments, and maintaining U.S. global leadership in critical economic and technological areas. These benefits would be at risk if the U.S. does not finalize an option improving fuel efficiency and greenhouse gas emissions reductions beyond MY 2020 standards.

Motor vehicle suppliers help enable OEMs to achieve the current standards through the use of strategies such as advanced lightweighting and regenerative braking to alternative propulsion systems and emissions control, making vehicles safer and more efficient while reducing emissions. Shiloh and many of these suppliers have the opportunity and incentive to continuously develop and commercialize technologies well beyond their current state to enable OEMs to meet continuously improved standards, and would prioritize their investment in the U.S. as the U.S. continues to lead the world through its CAFE vehicle and GHG emissions standards.

V. Shiloh and MEMA Support Continuous Improvement to the Standards

Shiloh and MEMA support continued year-over-year improvement to the CAFE standards and the GHG vehicle emissions standards for passenger cars and light trucks. This improvement will continue to drive technology development, commercialization and manufacturing in the U.S. and help the U.S. auto industry remain competitive in the global marketplace. Of the alternatives proposed in the SAFE rule, it is our view that alternative 6 (which would keep existing standards through model year 2020 and then 2 percent annual increases for passenger cars and 3 percent annual increases for light trucks for model years 2021-2026), and alternative 8 (which would keep existing standards through model year 2021 and then 2 percent annual increases for passenger cars and 3 percent annual increases for light trucks for model years 2022-2026), best preserve long-term supplier investments and U.S. employment decisions and will enable the U.S. to continue to be a global automotive technological leader. Further, if current standards are relaxed in the U.S., the emission performance gap created by the revised standards may impede vehicles manufactured to the lower standards from being exported and used in the large markets of Europe and Asia directly impacting volumes manufactured in the U.S. This gap would also provide a strong incentive for suppliers to pursue business opportunities in Europe or Asia where these technologies would be utilized, resulting in investment in people and development to occur in other markets, potentially to the detriment of investment in the U.S.

Shiloh and MEMA support the U.S. leading by example, through setting appropriate standards, while not dictating how to achieve them. We believe that industry should have the flexibility to take innovative and different approaches towards meeting new standards. In fact, Shiloh and MEMA welcome the challenge and opportunity to continue to enable our OEM customers to meet the standards by using a full array of technologies and development techniques and leveraging our full supply chain. Conversely, dictating any one particular technological pathway or means of compliance would only preclude innovation in our industry.

From Shiloh's perspective, our lightweighting technologies enable our customers to improve vehicle and emissions performance, in many cases reducing their supply chain and manufacturing costs as compared to the replaced technologies, which creates an opportunity to provide additional consumer benefits.

VI. Continuous Improvement to the Standards Supports Continued Motor Vehicle Supplier Job Growth

Motor vehicle supplier manufacturing jobs are critical to the U.S. economy. The motor vehicle components manufacturing industry is the nation's largest sector of manufacturing jobs in the U.S. The supplier sector employs over 871,000 workers with a total employment impact of 4.26 million jobs. Suppliers have seen an employment growth rate that is three times that of any other major manufacturing sector in the U.S – an overall 19 percent increase in employment since 2012. The growth rate of employment for original equipment automotive suppliers since 2012 was even higher at 23 percent.[3] Since 2012, Shiloh has increased its U.S. employment by more than 90 percent, driven primarily by the opportunity that Shiloh sees in developing its lightweighting technology in the U.S. to enable our customers to meet the GHG and CAFE program standards set in 2012 and providing this technology to its customers globally.

The supplier industry's increase in employment can also partly be attributed to these long-term investments in advanced technology development because of existing GHG and CAFE program standards.[4] Motor vehicle supplier direct employment in the U.S. is highest in Indiana, Michigan and Ohio. In addition, the Southeast region, including Alabama, Kentucky, North Carolina, South Carolina and Tennessee, has seen the highest growth over the past few years and now accounts for one-third of all supplier jobs.[5] Thus, the economic impacts to the motor vehicle supplier industry affect the entire U.S., not just the Midwest.

Analysis conducted by IHS Markit on behalf of MEMA[6] found the SAFE proposal of zero percent improvements through 2026 (Alternative 1) would result in a loss of 67,000 direct auto industry jobs with a full impact of 500,000 direct, indirect, and induced jobs by 2025, due to the change in component output in comparison to the employment levels supported by the existing standards.[7]

According to the same analysis, in comparison to implementing a zero percent improvement year-over-year, the implementation of Alternative 8[8] would instead provide enough demand for these advanced technologies that it would result in (i) the automotive industry growing 32,000 more direct jobs by 2025, and (ii) 250,000 more direct, indirect and induced jobs by 2025.

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[3] "Driving the Future: The Employment and Economic Impact of the Vehicle Supplier Industry in the U.S." IHS Markit on behalf of MEMA, January 2017, pg. 2. https://www.mema.org/sites/default/files/MEMA_ImpactBook.pdf

[4] 2017 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions and Corporate Average Fuel Economy Standards (Docket Numbers EPA-OAR-201-0799; FRL-9495-2; NHTSA-2010-0131)

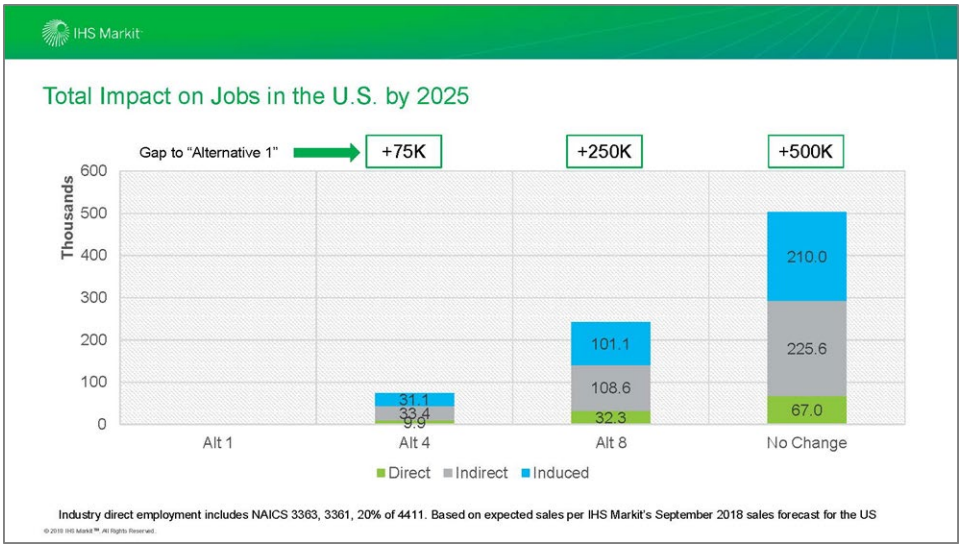
[5] "Driving the Future: The Employment and Economic Impact of the Vehicle Supplier Industry in the U.S." MEMA and IHS Markit, January 2017, pg. 8.

[6] MEMA commissioned IHS Markit to conduct the analysis in 2018.

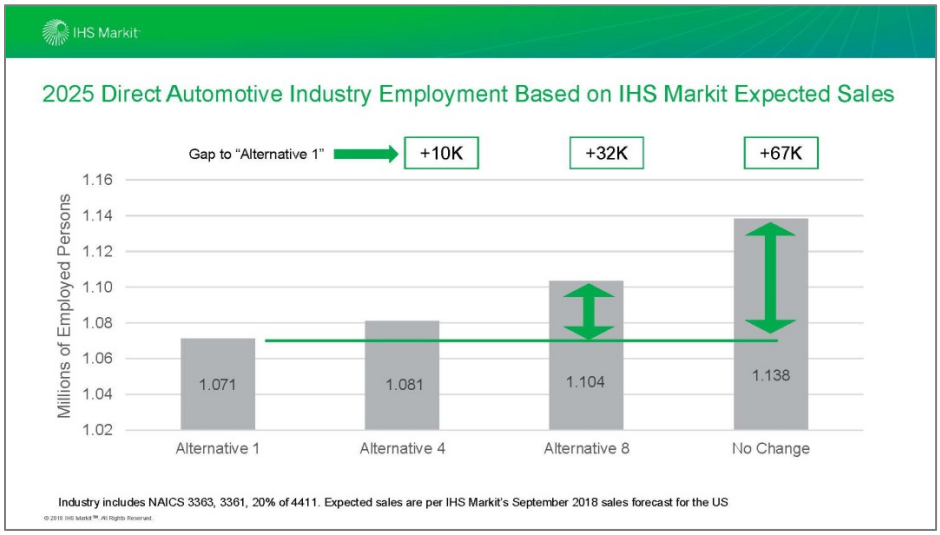
[7] Auto industry jobs includes auto dealership, vehicle manufacturers and motor vehicle parts supplier jobs.

[8] 2 percent for passenger cars year-over-year and 3 percent for light truck year-over-year.

Graphic 2. Alternative 1 Total Impact on U.S. Jobs in Comparison to the Augural Standards[9]



Graphic 3. 2025 Direct Employment Impact in Comparison to Alternative 1[10]



VII. <u>Continued Improvement to the Standards Will Support Investments Made by U.S. Suppliers</u>

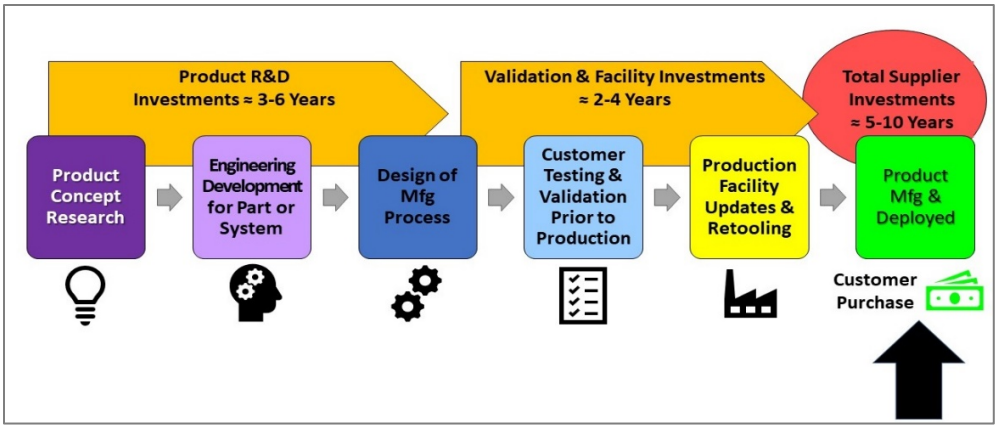
A zero percent improvement year-on-year through model year 2026 (Alternative 1) would strand billions of dollars in motor vehicle supplier technology investments made in the U.S. In pursuit of transformative technology, suppliers have invested in innovation to enable

[9] Based on IHSM modeling and data. The 2016 employment baseline is set to the BLS baseline for NAICS codes 3363, 3361, 20 percent of 4411 per Section 8 of the PRIA.
[10] Based on IHSM modeling and data.

performance to the standards set in 2012. These investments have gone into the wide array of technology advancements and innovative material development needed to improve vehicle safety, fuel efficiency and emissions reduction. Motor vehicle suppliers are leading these innovation efforts to develop and commercialize these emissions-reducing, fuel-efficiency technologies, while taking on the associated risk. Eliminating progress in the standards reduces the incentive for the U.S. auto industry to continue to improve, ultimately jeopardizing these investments and the supplier industry as a whole.

The roll-out of these emission-reducing, fuel-efficiency technologies require substantial lead-time and major economic resources. A supplier's product planning and investments timeline includes several stages, each stage ranging from 6 months to 2 years depending on the technology (see Graphic 4). Importantly, suppliers do not get paid until these technologies are deployed. The return on investment is estimated very carefully and amortized over several years. Therefore, a significant delay in product deployment, a shortening of a product's anticipated lifespan or a curtailment in demand will jeopardize these investments put in place several years in advance.

Graphic 4: Motor Vehicle Parts Suppliers Product Planning and Investments Timeframe



Even with the risks and challenges of the industry, the suppliers are currently providing the products and technology necessary for the OEMs to compete in the global marketplace. These same suppliers look forward to taking on the innovation leadership role to develop concepts that increase fuel efficiency of vehicles and reduce vehicle emissions while working collaboratively with the vehicle manufacturers to validate them. To fulfill this role and pursue the related opportunities, suppliers like Shiloh will continue to invest significant resources on research and development (R&D), including building technical centers and manufacturing facilities and employing and training the human resources necessary to innovate. Continuous improvement in the U.S. standards will enable these investments to be made in the U.S., greatly benefiting employees, the vehicle manufacturers, and the environment, all while enabling the U.S. to remain a global leader in vehicle technology and manufacturing.

VIII. American Innovation Relies on Continued Improvement to the Standards and One National Program

The U.S. has a strong history of being a global leader in innovation and has the opportunity to be the world leader in advanced fuel efficiency and emissions-reducing technologies. We do not want to see stagnation in the standards move world leadership to another country. Therefore, continued improvement to the standards is necessary.

If a finalized SAFE rule weakens standards in the U.S. and removes the U.S. from its leading position, it seems inevitable that the investment in these emissions-reducing technologies will shift to other markets where the set standards have created a business incentive for development and commercialization. If suppliers do not have the certainty that the technology is needed in the U.S., suppliers may have the incentive to invest in innovation and manufacturing for this technology outside of the U.S.

If other countries progress ahead of the U.S. in the targets, investments that would have been made in the U.S. on emission-reducing technologies, and the related jobs, will instead go to these other markets such as the EU and China where there is a higher likelihood of payback for these investments. In order to preserve and grow supplier jobs and investments in the U.S., Shiloh and MEMA support continued year-over-year improvements to the standards.

A "One National Program" of unified targets and timelines is critical in allowing suppliers to make important necessary long-term business planning decisions which drives domestic investments in these emissions-reducing technologies, grows supplier jobs and is key to U.S. companies' global leadership in innovation. Further, a One National Program creates a competitive advantage for the U.S. auto industry by providing its stakeholders with certainty and economies of scale, leading to reduced compliance costs for the OEMs and better vehicle costs ultimately benefiting consumers. For these reasons, Shiloh and MEMA support the stability and certainty of a One National Program.

IX. Shiloh and MEMA Support the Role of Lightweighting in Fuel Efficiency

Lightweighting is an important part of the overall strategy for improving fuel efficiency and improving product performance. The general rule of thumb for U.S. Department of Energy (DOE) research is that a 10 percent mass reduction would lead to a possible 6-8 percent fuel consumption reduction.[11] As currently implemented in the fleet and as anticipated to be deployed in the future (with a focus on larger, heavier automobiles), lightweighting technologies provide greater efficiency, without compromising strength or safety. Automakers validate these technologies in the current fleet by meeting the required strict NHTSA safety standards and showing improved crash ratings over time.

[11] U.S. Department of Energy Office of Energy Efficiency and Renewable Energy. *Lightweight and Propulsion Materials*. Retrieved on June 17, 2019. https://www.energy.gov/eere/vehicles/lightweight-and-propulsion-materials, this is based on numerous research and modeling exercise by both independent researchers and a variety of DOE national labs.

In recent years, research – including NHTSA's own studies – have proven that lightweight materials maintain fleet safety.[12,13] NHTSA and numerous other automotive safety experts acknowledge the overall safety and fuel economy benefits of reducing weight in the largest, heaviest trucks and cars, while maintaining or increasing their size for safety and comfort.[14,15,16]

Despite these well documented studies, the SAFE proposal that came out of the EPA and NHTSA last year included some inaccurate assertions regarding the safety of lightweighting technology in today's fleet. The proposal made the statement that if OEMs increasingly choose the technology option of "vehicle lightweighting ... as the stringency of the standards increases, so does the likelihood that higher stringency will increase on-road fatalities."[17] This assertion, that there is a correlation between lightweighting and decreased safety as it is implemented in the fleet today is unfounded and unsupported. Shiloh looks at lightweighting well beyond simply taking mass out of vehicles. Shiloh invests to develop products for its customers under the method of "Lightweighting without Compromise." Our company continues to provide products to its customers that lightweight their vehicles without compromising safety, quality, sustainability, performance or cost by using a variety of design, manufacturing and material innovations. In our experience, specially designed components made from lighter weight aluminum, magnesium or high-strength steels can be just as strong or stronger than similar parts made from traditional materials.

Unfounded challenges to the safety of lightweighting threatens the industry's significant investments in these innovative technologies, the sector's jobs and the public perception of these technologies. Statements asserting a correlation between lightweighting and safety concerns should be removed from the final rule.

X. Conclusion

I urge the members of the two subcommittees to support the U.S. automobile industry and the large number of companies and U.S. workers that make up its component part and supply chain. To summarize my testimony in one sentence, I would say that I am here today to support U.S. jobs and our nation's technological leadership, with the added benefit of a healthier environment.

In this particular case, the motor vehicle supplier sector requires long-term investments in facilities and employees, so certainty is paramount. Shiloh and MEMA see a great opportunity for the U.S. to provide this certainty through regulatory leadership in pursuit of continued innovation and the long-term health and competitiveness of the industry.

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[12] Relationships Between Fatality Risk, Mass, and Footprint in Model year 2000-2007 Passenger Cars and LTVs, Report No. DOT HS 811 665, NHTSA 2012, Kahane, C.J.

[13] Relationships between Fatality Risk, Mass, and Footprint in Model Year 2003-2010 Passenger Cars and LTVs (Docket No. NHTSA-2016-0068), NHTSA, 2016, Puckett, S.M., Kindelberger, J.C.

[14] Independent Review: Statistical Analyses of Relationship between Vehicle Curb Weight, Track Width, Wheelbase and Fatality Rates," UMTRI, 2011, Green *et. al*.

[15] Updated Analysis of the Effects of Passenger Vehicle Size and Weight on Safety, Phase I. Report No. DRI-TR-11-01. (Docket No. NHTSA-2010-0152-0030) 2011, Dynamic Research, Inc., Van Auken, R.M., Zellner, J. W.

[16] Supplemental Results on the Independent Effects of Curb Weight, Wheelbase, and Track on Fatality Risk in 1985-1998 Model Year Passenger Cars and 1985-1997 Model Year LTVs [17] DRI-TR-05-01, 2005, R.M. Van Auken and J.W. Zellner.

[17] 83 Fed Reg 42991

Our goal is to support the continued growth of our economy, and we believe that Alternatives 6 or 8 best facilitate the protection of U.S. industry, U.S. workers and U.S. leadership. U.S. companies like ours have made significant investments in driving global improvement in emissions. Alternatives other than 6 or 8 would reduce the incentives for companies to invest in technology development and manufacturing in the U.S. These impacts would have significant ramifications to job growth in the motor vehicle supplier industry, strand long-term investments by motor vehicle suppliers and threaten the U.S. global leadership position in the motor vehicle industry.

In sum, thank you for inviting me to share my views on the importance of continuous improvement to the CAFE and emissions standards and how the federal government can provide the important leadership and certainty that U.S. automotive suppliers need to continue to innovate, develop new technologies and remain a global leader in job creation, in reducing emissions and protecting the environment. Shiloh and MEMA support these worthy goals and welcome questions from the committee.

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