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STATEMENT

OF THE

ALLIANCE OF AUTOMOBILE MANUFACTURERS

BEFORE THE:
ENERGY AND COMMERCE COMMITTEE
SUBCOMMITTEE ON ENVIRONMENT AND SUBCOMMITTEE ON DIGITAL COMMERCE AND CONSUMER PROTECTION
U.S. HOUSE OF REPRESENTATIVES

HEARING TITLE:
"Update on the Corporate Average Fuel Economy Program (CAFE) and Greenhouse Gas Emissions Standards for Motor Vehicles"

December 12, 2017

PRESENTED BY:

Mitch Bainwol
President and CEO

On behalf of the 12 members of the Alliance of Automobile Manufacturers (Alliance), thank you for the opportunity to testify today on light-duty vehicle Corporate Average Fuel Economy (CAFE) /greenhouse gas (GHG) emission standards. The Alliance is the leading advocacy group for the auto industry and represents 77% of all car and light trucks on the road in the United States. The Alliance includes amongst its diverse membership companies headquartered in the U.S., Europe and Asia, including the BMW Group, Fiat Chrysler Automobiles US, Ford Motor Company, General Motors Company, Jaguar Land Rover, Mazda, Mercedes-Benz USA, Mitsubishi Motors, Porsche, Toyota, Volkswagen Group of America and Volvo Car Group.

By creating jobs, fueling innovation, driving exports, and advancing mobility, automakers are driving the American economy forward. Nationwide, more than seven million workers and their families depend on the auto industry. Each year, the industry generates $500 billion in paychecks, and accounts for $205 billion in tax revenues across the country. Historically, the auto industry has contributed between 3 - 3.5 percent to America's total gross domestic product. No other single industry is linked to so much of U.S. manufacturing or generates so much retail business and employment.

Background

It is hard to believe that I was before the Committee just 14 months ago discussing this same topic. The National Highway Traffic Safety Administration (NHTSA), the Environment Protection Agency (EPA), and the California Air Resources Board (CARB) had recently issued the joint Draft Technical Assessment Report (TAR), a 1,200 page document examining a wide-range of technical issues related to the feasibility of the model year (MY) 2022-2025 light-duty

vehicle GHG emission and augural CAFE standards, as the first formal step in the Mid-term Evaluation (MTE) of those standards. At that hearing, the Alliance highlighted several flaws within the Draft TAR and argued that considerably more technical work needed to be conducted before the agencies moved forward with a proposed determination regarding the appropriateness of the standards or a Notice of Proposed Rulemaking (NPRM). Both EPA and NHTSA also testified at that same hearing and reiterated that the Draft TAR was only the initial step in the MTE, was not a decision document, and stressed that "up-to-date information" would inform the MTE to determine the appropriateness of the MY 2022-2025 standards. That determination was to be issued jointly by the agencies by April 2018 and the agencies had repeatedly represented that they would not complete a Proposed Determination/NPRM until mid-2017 at the earliest[1].

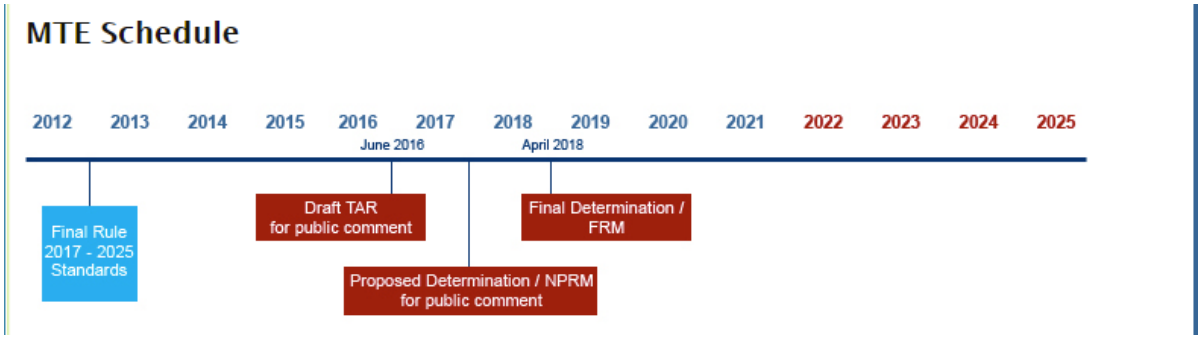

Figure 1: Screengrab of "MTE Schedule" as Available on EPA's Website on July 8, 2016[2]

Yet much to our surprise, on November 30, 2016 – just two months following that hearing and on the heels of the presidential election and contrary to what their website showed just a few

[1] Alliance Comments on Proposed Determination at 11. December 20, 2016. Docket ID No. EPA-HQ-OAR-2015-087, https://www.regulations.gov/document?D=EPA-HQ-OAR-2015-0827-9194.

[2] U.S. ENVIRONMENTAL PROTECTION AGENCY, *MIDTERM EVALUATION OF LIGHT-DUTY VEHICLE STANDARDS FOR MODEL YEARS 2022-2025*, JULY 8, 2016, 2:35 AM), https://www3.epa.gov/otaq/climate/mte.htm (accessed through the Internet Archive Wayback Machine).

months earlier – the EPA abruptly abandoned these commitments and issued the Proposed Determination that the MY 2022-2025 GHG emission standards should remain unchanged. EPA issued that Proposed Determination without the coordination of NHTSA. And, on January 13, 2017, only 14 days after the public comment period closed and seven days prior to President Trump being sworn into office, EPA issued its Final Determination that the MY 2022-2025 GHG emission standards should go into force. By acting prematurely and without the coordination of NHTSA, the previous EPA essentially fractured what is commonly referred to as One National Program – created to align the conflicting federal and state requirements and provide automakers with long-term regulatory certainty and compliance flexibility.

Critical to automakers' agreement to the aggressive MY 2017-2025 standards finalized under One National Program in 2012 were two key elements: (1) a robust, data-driven, and transparent MTE to determine the feasibility of the aspirational MY 2022-2025 GHG emission standards and (2) better alignment of the two federal programs (California accepts compliance with the EPA program). Yet, these two elements have largely been unfulfilled. As discussed above, the MTE process has not unfolded as expected and, until recently, it has not been the robust, transparent, and data-driven process that the previous Administration repeatedly promised. And, further discussed below, One National Program remains misaligned – still amounting to three separate regulatory programs, created under three separate statutes, managed by three separate regulatory agencies.

On February 10, 2017, the CEOs of 18 automakers wrote to President Trump to urge him to reinstate the data-drive MTE and to harmonize the federal requirements. Such broad consensus is rare in this competitive industry, underscoring the egregious nature of the regulatory process

foul committed by the previous Administration. And, we very much appreciate the announcement made on March 15, 2017, by President Trump, along with Department of Transportation Secretary Elaine Chao and EPA Administrator Scott Pruitt, that EPA would revisit the Final Determination and restore the Mid-term Evaluation process. That process is back on track with a determination on the appropriateness of the standards expected by April 2018.

Much has changed since the agencies issued the final rulemaking for the MY 2017-2025 vehicle fuel economy/GHG emission standards in 2012. In my testimony last fall, I pointed out how several of the assumptions – such as gas prices, technology effectiveness and cost, and the consumer acceptance of advanced technology vehicles – on which the agencies determined that automakers would be able to comply with the current MY 2022-2025 standards have drastically shifted since 2012. That pattern has only continued, making compliance with the more aggressive later year standards very challenging.

CAFE/GHG Compliance Trends

At the hearing last fall and in various documents supporting the rushed Final Determination, the previous EPA pointed to the over-compliance by automakers in MYs 2012-2015 as justification to maintain the aggressive MY 2022-2025 GHG emission standards. Yet, had they waited to consider more up-to-date information, they would see that compliance trend data – including the feasibility of meeting the standards, projections on compliance, and the credit system – are increasingly indicating that it is not feasible to meet the MY 2022-2025 GHG emission standards as they currently are set. For example, the most recent data available continues to demonstrate

that compliance trends for MY 2016 are opposite to those of the earlier years upon which the previous EPA based its Final Determination – the industry on average is no longer meeting its targets. Furthermore, preliminary assessments of MY 2017 indicate the continuance of this trend[3].

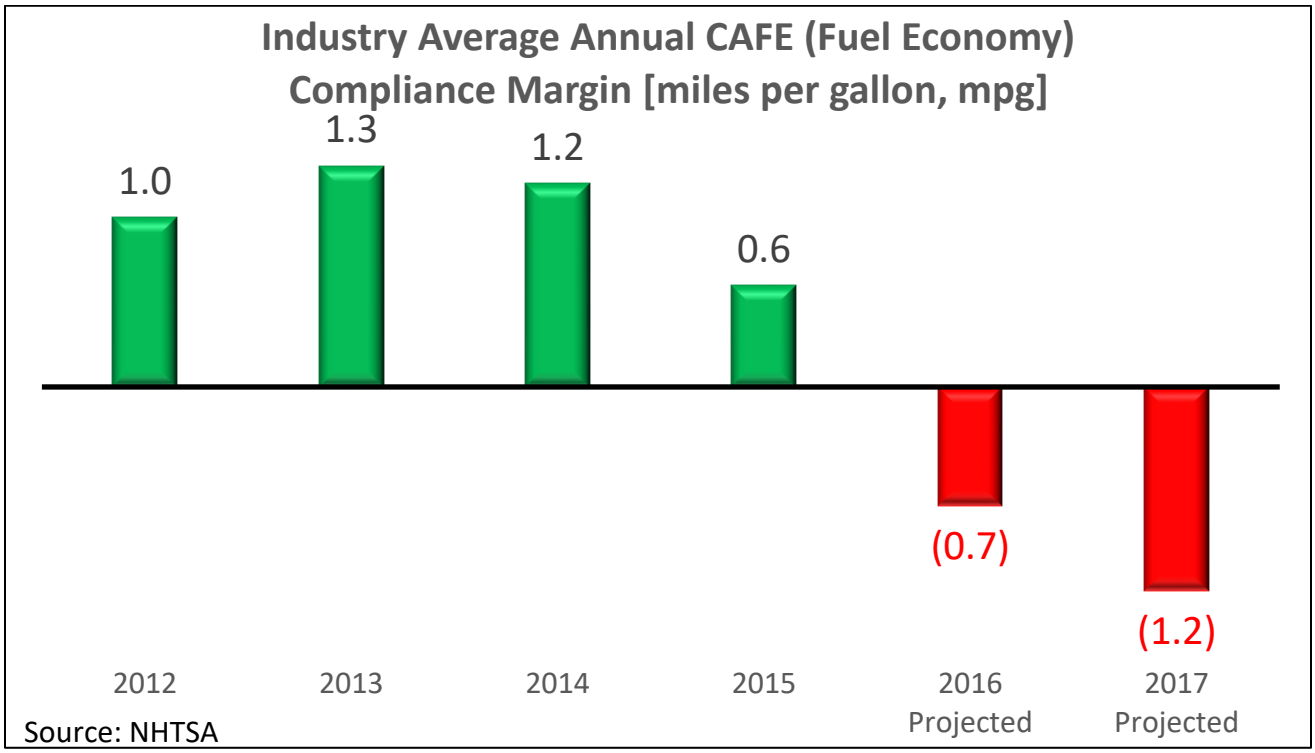

Figure 2: Light-Duty Fuel Economy Compliance Trend

Low Gas Price Environment Affecting Compliance

So what has changed that is causing automakers to fail to meet the standards for the first time since 2004? I noted in my testimony last fall that the fuel market has shifted quite dramatically since the standards were finalized in 2012. While various uncertainties have the potential to

[3] Novation Analytics, *MY 2012-2017 Baseline Studies*, November 2017.

disrupt the world oil market, in its *2017 Annual Energy* Outlook, the U.S. Energy Information Administration continues to project gas prices to remain relatively low through 2030.

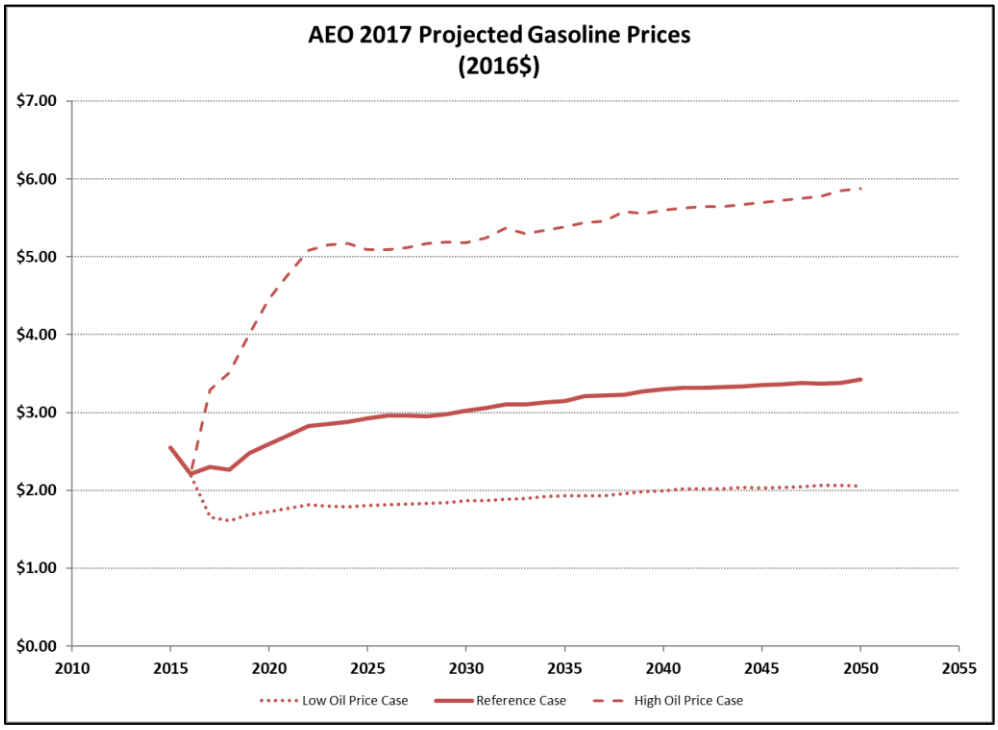

Figure 3: U.S. Energy Information Administration 2017 Annual Energy Outlook Projected Gasoline Price[4]

Such low gas prices have resulted in a disconnect between consumer preferences and the future standards. When gas prices fall, the desire to pay more for a vehicle with higher fuel economy diminishes. We continue to urge the agencies to consider how low gas prices are reducing consumer demand for more expensive fuel-savings technologies and alternative powertrains, thereby impeding overall compliance.

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[4] U.S. ENERGY INFORMATION ADMINISTRATION, ANNUAL ENERGY OUTLOOK 2017 (Jan 5, 2017), tbl.Real Petroleum Prices: Transportation: Motor Gasoline, *available at* https://www.eia.gov/outlooks/aeo/data/browser/#/?id=12-AEO2017&region=0-0&cases=ref2017~highprice~lowprice&start=2015&end=2050&f=A&linechart=~~~ref2017-d120816a.30-12-AEO2017~highprice-d120816a.30-12-AEO2017~lowprice-d120816a.30-12-AEO2017&ctype=linechart&sourcekey=0.

Low gasoline prices have been a significant factor in another important development since 2012 – the dramatic shift in consumer demand away from passenger cars to sport utility vehicles (SUVs) and crossover utility vehicles (CUVs). The 2012 Final Rule projected that the 2016 light-duty fleet mix would be comprised of 65.6% passenger cars and 34.4% trucks. Yet, in reality, the actual 2016 light-duty fleet mix was 55.7% passenger cars and 44.3% trucks reflecting an unanticipated shift in market preferences.

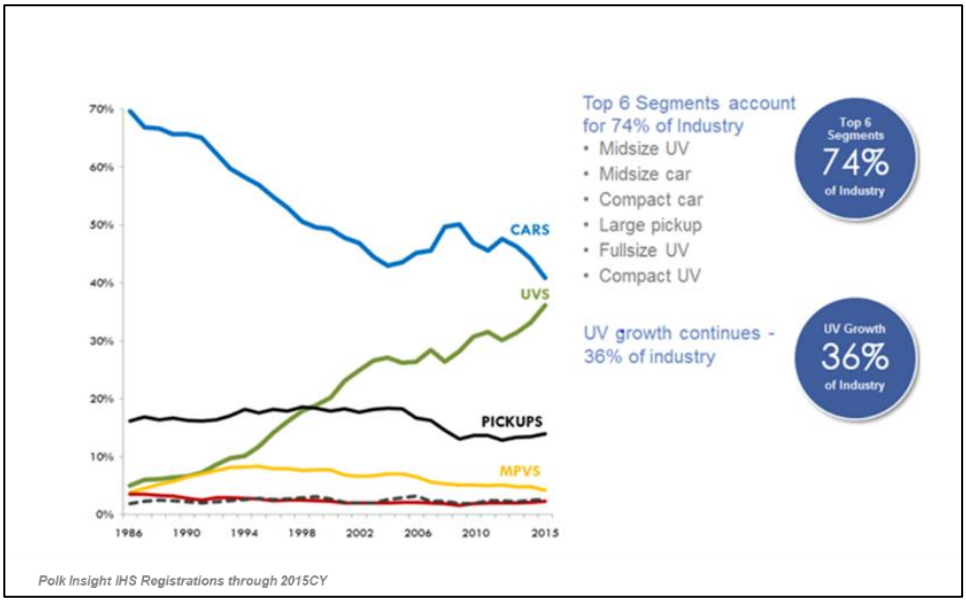

Figure 6: Major Shift in Sales of Cars and Utility Vehicles[5]

Since automaker compliance is dictated by what consumers purchase, not by what automakers produce, this large shift in consumer purchase patterns toward the truck fleet has negatively impacted industry compliance.

Footprint-based Standards Still Have Shortcomings

[5] Generated from information on file with the Alliance.

Many argue that the introduction of footprint-based standards adequately addresses such shifts in consumer buying patterns between market segments. And, although the footprint-based standards do alleviate certain problems compared to the previous uniform standards that applied the same targets to all automakers, they continue to have shortcomings. There are many aspects of vehicle design and consumer purchase behavior that may occur differently than anticipated when the standards were established. For example, in prosperous economic times or in a low gas price environment, consumers may opt to purchase larger, more powerful engine options, rather than the base engine. They may also spend more on optional content or other features instead of spending more on fuel saving technologies. Some of these features may even reduce fuel economy compared to the base model by adding weight, electrical load, etc.

As noted above, there has been a significant market shift from passenger cars towards trucks. Within the truck fleet, SUV market share has increased relative to pick-ups and within the car fleet, CUV and SUV market share has increased relative to traditional sedans and coupes. Such shifts within the segments are not addressed by the footprint-based standards and create significant compliance hurdles. Figure 7 below shows examples of the fuel economy penalty incurred by SUVs and CUVs. High-volume MY 2016 SUV/CUV models are shown relative to other passenger cars from the same manufacturers that share the same powertrains. In each case, the fuel economy of the SUV/CUV is from 2 miles/per gallon (mpg) to 4 mpg worse than the comparison sedan, while the SUV/CUV footprint is from 3 square feet to 4 square feet less. Both the fuel economy and footprint differentials are unfavorable for regulatory compliance. The industry anticipates that the market shift by consumers seeking the functionality offered by SUVs and CUVs will continue or even grow through MY 2025.

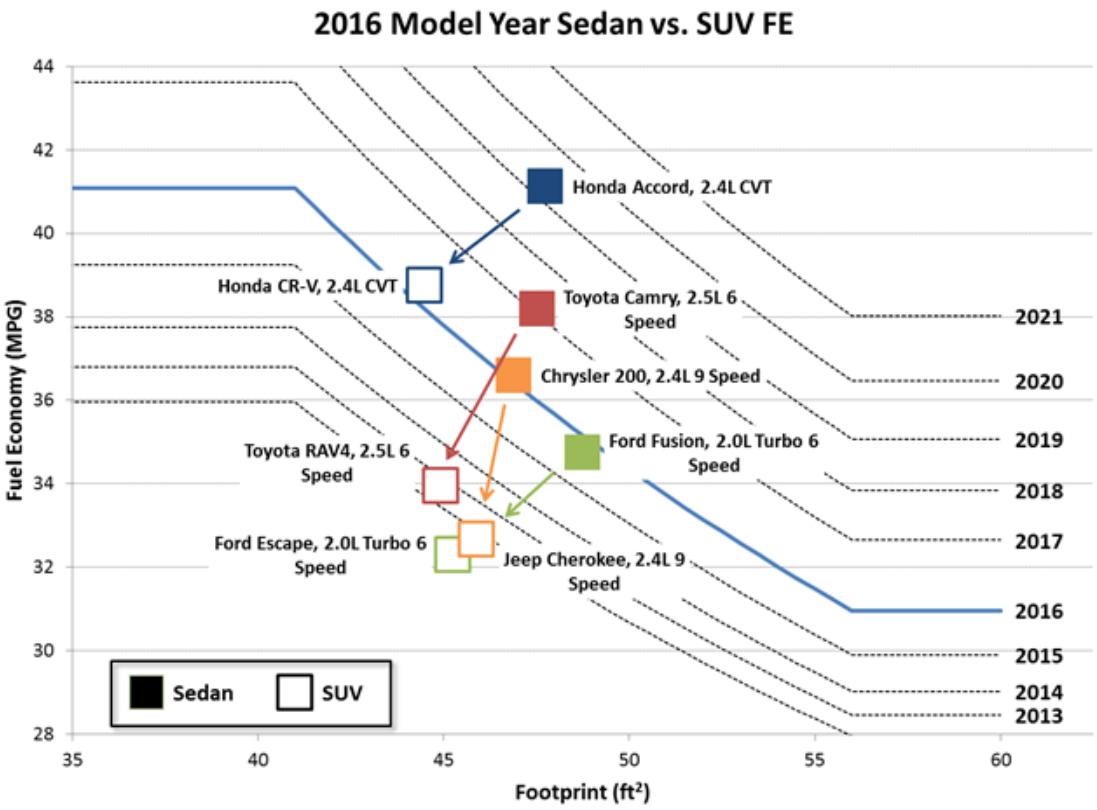

Figure 7: 2016 Model Year Sedan v. SUV Fuel Economy[6]

Strong Electrification Necessary

In the Final Determination issued earlier this year by the previous Administration, EPA concluded that "minimal" penetration of strong hybrid or full electric vehicles would be necessary to meet the aggressive MY 2022-2025 GHG emission standards – 18% mild hybrids, 2% strong hybrids, and 5% plug-in electric vehicles.[7] In fact, EPA stated that "advanced

[6] Alliance analysis of data from *Print the Fuel Economy Guide*, FUELECONOMY.GOV, http://fueleconomy.gov/feg/epadata/17data.zip.

[7] EPA, Final Determination on the Appropriateness of the Model Year 2022-2025 Light-Duty Vehicle Greenhouse Gas Emissions Standards under the Midterm Evaluation at 24, January 2017.

gasoline vehicles will be the predominant technologies that manufacturers can use to meet the MY 2025 standards."[8] The Alliance strongly disagrees with this assessment and recent research published by SAE International, Novation Analytics and Oak Ridge National Laboratory found that "the U.S. future standards cannot be achieved without higher levels of electrification than has been previously estimated by NHTSA and EPA[9]. This study estimates that nearly every vehicle sold in the U.S. in MY 2025 will need to be a mild hybrid, or alternatively the fleet will need to consist of greater than 30% full hybrids for compliance.[10]

Consumer Acceptance of Advanced Technology Vehicles

Automakers continue to offer an increasing amount of advanced technology vehicles for sale in dealer showrooms nationwide, including roughly 50 hybrid models and 30 electric vehicle models. Yet, consumer adoption of advanced technology vehicles has not lived up to expectations. Through August 2017, the calendar year 2017 U.S. sales share of zero-emission vehicles (ZEVs) (battery electric, plug-in electric and fuel cell electric vehicles) was 1.05%[11], approximately one-fifth of the level projected by EPA for MY 2025.

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[8] Final Determination at 13

[9] Pannone, G., Betz, B., Reale, M., and Thomas, J., *Decomposing Fuel Economy and Greenhouse Gas Regulatory Standards in the Energy Conversion Efficiency and Tractive Energy Domain,* SAE INT. J FUELS LUBR. 10(1):2017, doi:10.4271/2017-01-0897.

[10] *Id.*

[11] Auto Alliance, *ZEV Sales Dashboard: ZEV Market Share,* https://autoalliance.org/energy-environment/zev-sales-dashboard/.

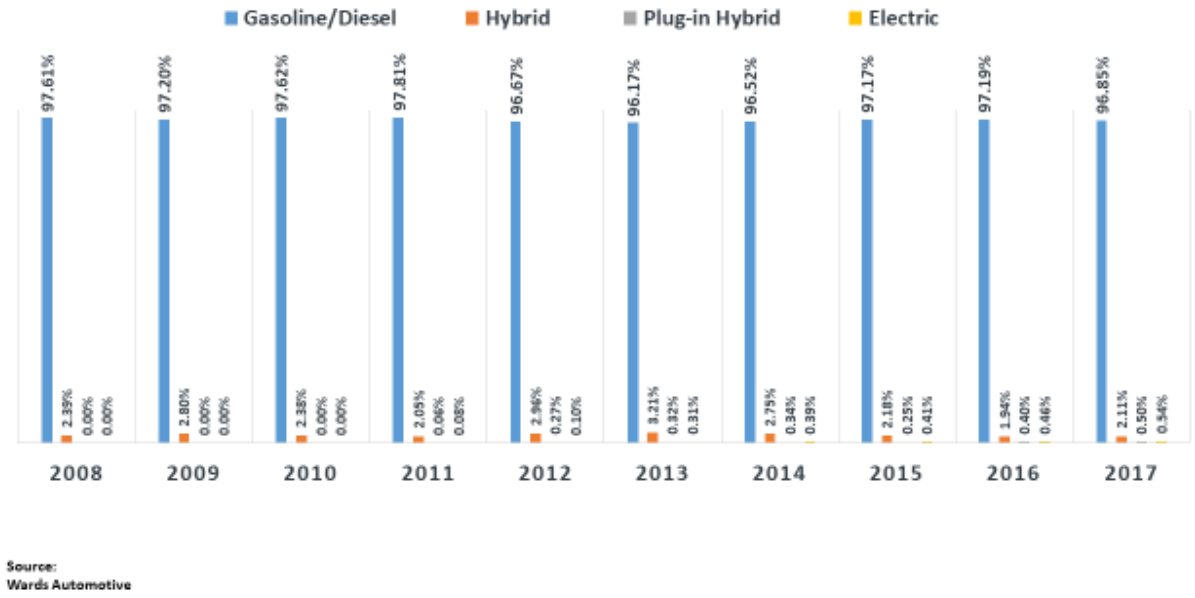

Figure 8: Powertrain Market Share 2008-2017

Although consumers may say they value fuel economy highly, actual vehicle purchasers consider a wide range of other factors when making new vehicle purchasing decisions. Among these are cost, affordability, comfort with new technology, seating capacity, handling, tow and load capacity, safety, and comfort. Often consumers are not willing to compromise such vehicle attributes for high fuel economy and/or low GHG emission technologies. Automakers have limited tools with which to drive customer acceptance despite significant efforts to promote and incentivize highly fuel efficient vehicles.

For example, the 2016 Lincoln MKZ was offered with a variety of powertrains including a 2.0L Hybrid, 2.0L EcoBoost, and 3.7L V6. Lincoln priced the 2.0L Hybrid and 2.0L EcoBoost models at identical retail pricing, providing the opportunity for customers to choose a hybrid without incurring the additional cost, even at the base price. If customers were motivated by fuel

savings, most would be expected to choose the hybrid to reduce fuel costs without increasing their upfront cost. However, only 30% of customers chose the hybrid version, while 70% chose the ICE variants in 2016.

As the Mid-term Evaluation process moves forward, the Alliance has encouraged the agencies to fully examine the factors noted above in evaluating the feasibility of the MY 2022-2025 standards. Such data is precisely the "up-to-date information" the previous Administration either chose to ignore or would have had available to consider had it not truncated the MTE in January 2017. The Alliance also believes that two additional areas that need further examination include the impact of the standards on vehicle affordability and impact of fleet turnover on the overall success of One National Program.

Impact of MY 2022-2025 Standards on Vehicle Affordability & Fleet Turnover

The average light-duty vehicle transaction price in the U.S. continues to increase, and, according to Kelley Blue Book, is now approximately $35,000. The agencies should evaluate how the slowdown in growth of disposable personal income, the long period of particularly low interest rates, combine with the Federal Reserve's recent decision to begin increasing interest rates will impact a consumer's ability to afford to purchase a new vehicle. If consumers have difficultly affording or simply cannot afford the increasingly expensive technologies required for compliance, then they may decide to hold on to their current, less efficient vehicle longer or purchase in the used market. In either case, the cycle of fleet turnover is stalled – resulting in disruption to the industry and national economy, delaying the introduction of advanced vehicle

safety and fuel-efficient technologies to consumers, and reducing the environmental and safety benefits of all standards relying on fleet turnover.

A decline in vehicle sales is not only bad for the environment, since older, less-efficient vehicles remain on the road, it is also bad for employment in the auto industry. There is a direct correlation between auto sector employment and vehicle sales; the higher the sales, the higher the level of employment. This relationship is depicted in Figure 9 below. When new vehicle sales drop, automakers and suppliers begin to scale back production, resulting in eliminated shifts and employee lay-offs. Such a downturn in the auto industry has a cascading effect on the broader U.S. economy.

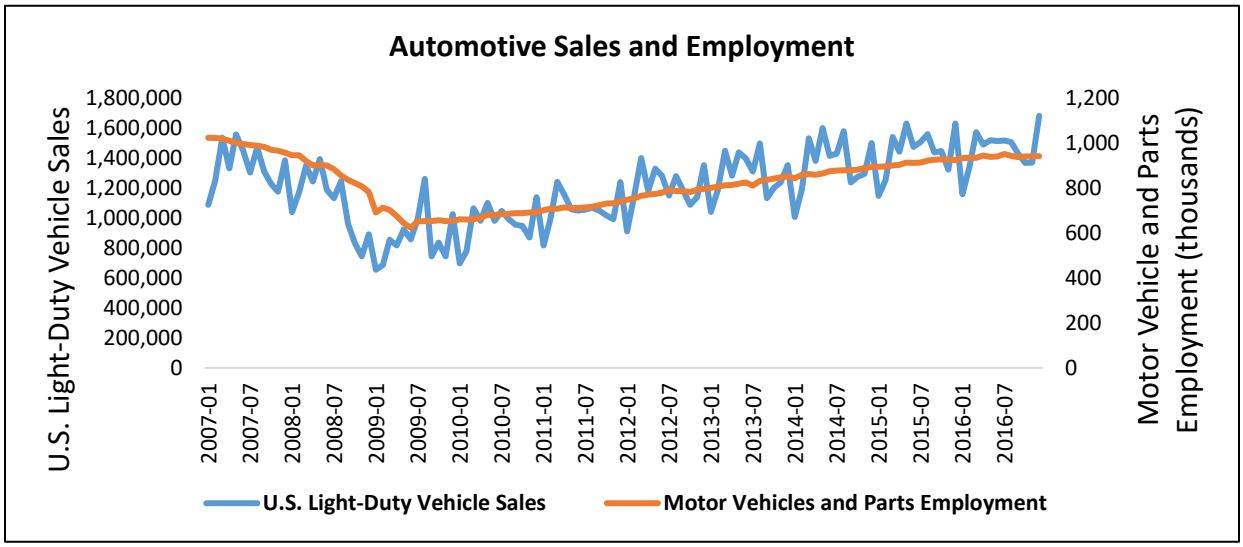

Figure 9: U.S Light-Duty Vehicle Sales v. Motor Vehicle and Parts Employment

Harmonization of NHTSA CAFE & EPA GHG Programs

Central to the success of One National Program is the close coordination between NHTSA and EPA. Resolving to use one set of models and inputs is a critical, common sense step in that direction. The current situation, in which NHTSA and EPA use different modeling tools and

input assumptions to answer essentially the same set of questions, involves inconsistencies and conflicts, is inefficient, and counterproductive. Vehicle fuel economy and greenhouse gas emissions are both calculated by measuring the amount of carbon dioxide and other emissions from a vehicle's tailpipe. Why waste taxpayer resources to have two regulatory agencies model essentially the exact same thing using as a basis the same emissions tests and vehicle fleet? It certainly runs counter to President Trump's Executive Order 13781 to improve the efficiency, effectiveness and accountability of federal agencies. While the different statutes governing the CAFE and GHG programs dictate some minor differences in program designs, there is no reason why the same model cannot be appropriately tailored to capture those differences.

While coordination among the agencies is important for the Mid-term Evaluation, a critical element to the automakers' support of One National Program, that pre-dates the MTE, was to ensure that the two federal programs were as harmonized as possible. In fact, the previous Administration said in its Regulatory Announcement in August 2012 that "Continuing the National Program ensures that auto manufacturers can build a single fleet of U.S. vehicles that satisfy requirements of both federal programs as well as California's program.[12]" Unfortunately, attempts to harmonize the EPA and NHTSA requirements have fallen short of expectations. As automakers assess where they are currently and forecast where they see product development and future customer demands, many automakers are anticipating problems in managing compliance with the different programs.

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[12] Joint EPA-NHTSA Regulatory Announcement, *EPA and NHTSA Set Standards to Reduce Greenhouse Gases and Improve Fuel Economy for Model Years 2017-2025 Cars and Light Trucks*, August 2012.

The Alliance has taken two steps, separate from the Mid-term Evaluation, to address these harmonization gaps: (1) on June 20, 2016 the Alliance and Global Automakers petitioned NHTSA and EPA to address the nine gaps identified that can be addressed administratively. On December 28, 2016, the previous Administration granted consideration of this petition, affirming that our concerns have merit. We continue to work with the agencies to formally address them; and (2) we have sought the introduction of bipartisan legislation in both the House and Senate to address three additional harmonization gaps. The Alliance commends Reps. Fred Upton and Debbie Dingell for recognizing the need to avoid the unnecessary costs that stem from the misalignment of the regulatory programs and that are ultimately passed along to consumers. We applaud their work to craft H.R. 4011, the bipartisan "Fuel Economy Harmonization Act" and urge the Committee to promptly consider this important legislation.

H.R. 4011: Fuel Economy Harmonization Act

The primary source of the three discrepancies that H.R. 4011 seeks to address is the difference in how credits are treated within the NHTSA and EPA programs. Under both programs, automakers can earn credits by producing cars and trucks that are better than the requirements in a given year – and can then apply those credits to deficits that may occur in future years when the requirements are more stringent. As customer demands shift, or when the increasing stringency of the federal requirements exceed the automakers ability to comply given current fleet mix, credits are a key tool for a manufacturer to remain in compliance. However, due to some limitations within the CAFE statute, NHTSA does not have as much flexibility as EPA to address how credits are managed. As a result, it is now likely that many automakers will actually comply with the more numerically stringent (i.e., higher MPG number) requirements

under the EPA program, but because of the different structure of the CAFE program, these automakers could be subject to fines from NHTSA for the same product portfolio. It is important to stress that this harmonization problem is an immediate problem and should be addressed outside of the Mid-term Evaluation.

Let me briefly discuss the three provisions within H.R. 4011 as well as the harmonization discrepancies they are seeking to address.

1) **Section 2 (Credit Life):** Allows automakers to utilize "earned CAFE credits" over a longer period of time (up to 11 years) – more consistent with that provided under the EPA program. This Section would allow automakers to more fully utilize credits earned for MY 2010 and thereafter by having treatment of those credits mimic the EPA's program.

   Rationale: Pursuant to the 2007 amendments to the CAFE program, NHTSA has a limitation of 5 years during which these credits can be used (i.e., carried forward). Under the Clean Air Act, EPA has no such guidance or restrictions, so EPA has allowed its credits to exist for as many as 11 years. An important component of the EPA program was to allow automakers to "bank" many credits in the early years – while the stringency is low – to be applied later when the stringency is higher. Unfortunately, as the automakers race to buildup credits in the EPA program, those same credits expire after five years under the NHTSA program.

2) **Section 3 (Transfer Cap):** Indexes the credit transfer cap to track the increased stringency of the standards. The cap will gradually increase from 2 mpg in 2017, to

4mpg in 2019, and to 6 mpg in 2022. This provides greater flexibility within the CAFE program – flexibility that is provided at an un-capped level within the EPA program.

Rationale: A similar issue arises for a manufacturer regarding the transfer of credits from one fleet of vehicles to another (e.g., domestic car fleet to light truck fleet). Currently, NHTSA has a statutory limit on the number of credits that can be transferred between fleets while EPA has no such limit. This "fleet transfer cap" limits movement of credits from one fleet to another to a total of 2 mpg -- regardless of how many credits the manufacturer may have available. When the current limitation was originally written in 2007, the overall fleet average was expected to be around 35 mpg by 2020. Today, the target is 54.5 mpg by 2025. This provision increases the 2mpg cap to better track the diminishing returns of higher fuel economy standards.

3) **Section 3 (Off Cycle Credits):** Moves up the opportunity to generate "off cycle" credits in the NHTSA program from 2017 to 2012 -- to match the EPA program.

Rationale: Off-cycle technologies achieve fuel economy improvements that are not completely captured by current EPA test procedures. Off-cycle technologies might include such things as: solar panels on hybrids, engine start-stop capability or active aerodynamics (louvers in the grill that close at highway speeds). These technologies provide efficiency improvements for the vehicle, but the current fuel economy tests do not measure their benefit completely or at all. EPA recognized the benefit of these technologies and decided to provide "off cycle" credits to automakers that implement these and other similar technologies. This credit opportunity started with the 2012-2016

rule. For MYs 2014 and later, EPA provided a pre-approved list of technologies and credit values. EPA also allows automakers to petition for credits for items that are not on the list, but for which benefits can be documented. NHTSA has a similar program starting in 2017 but is not providing those credits earlier.

4) **Section 4 (Rule of Construction):** Clarifies that this legislation does not impact the Secretary's authority to implement "maximum feasible" fuel economy standards.

   Rationale: Many critics of the legislation have mischaracterized the legislation as an attempt to weaken the standards. This language clarifies that the Secretary still has the authority to set standards that are "maximum feasible."

The goal of H.R. 4011 is to ensure that One National Program works as it was intended. Instances where the existing regulatory programs are not harmonized hurt the integrity of the overall program. As indicated, several critics have mischaracterized this legislation as a backdoor attempt to roll back the standards. It is important to stress that this legislation does not amend the EPA program. Again, automakers must still comply with the more numerically stringent EPA GHG program. In the 2012 joint rulemaking, both NHTSA and EPA estimated almost identical amounts of fuel saved from their respective programs through 2021 – NHTSA at 65.3 billion gallons and EPA at 65.6 billion gallons. Because the EPA program will be unchanged by the legislation, these harmonization provisions will not reduce the oil savings projected for the overall fleet of vehicles in the U.S. Harmonization fixes to the NHTSA program will not affect the EPA program.

Additionally, the notion that H.R. 4011 will enable automakers to stop investing in and deploying fuel-saving technologies is false. Automakers already are doing everything that makes sense in pursuit of compliance with the ever-escalating requirements of both federal programs. Product plans and technology deployment are set years in advance. They involve long-term commitments to tooling needed for our facilities and commitments to suppliers for needed parts. Companies cannot simply decide to add technology to already approved and locked-in products to address these issues. And again, companies will still need to comply with the EPA GHG program – thus, driving them to deploy low-GHG emitting and fuel-saving technologies.

Conclusion

The Alliance continues to support One National Program for light-duty vehicle fuel economy/GHG emission standards and views both harmonization and a data-driven MTE of the MY 2022-2025 as essential to the program's success. Automakers remain committed more than ever to deploying ever-efficient vehicles on U.S. roads to maximize our energy security and environmental objectives. It is not a matter of *if* we will meet the aspirational goals set by the previous Administration in 2012, but rather, it is simply a matter of *when*. We look forward to continuing to work with Congress, this Administration, and California to ensure that the ongoing data-driven Mid-term Evaluation establishes future standards that are technologically feasible and will enable automakers to continuing producing fuel-efficient vehicles that consumers are able to afford. In the near-term, we urge the Committee and Congress to consider and adopt H.R. 4011. A harmonized One National Program will deliver on the unfulfilled commitment

made by the previous Administration and will benefit both the industry and consumers, while ensuring the program remains a success.

Thank you for your consideration of our views.