## STATEMENT

OF THE
ALLIANCE OF AUTOMOBILE MANUFACTURERS

BEFORE THE:
ENERGY AND COMMERCE COMMITTEE
SUBCOMMITTEE ON ENVIRONMENT AND CLIMATE CHANGE AND
SUBCOMMITTEE ON CONSUMER PROTECTION \& COMMERCE U.S. HOUSE OF REPRESENTATIVES

HEARING TITLE:
"Driving in Reverse: The Administration's Rollback of Fuel Economy and Clean Car Standards"

June 20, 2019

## PRESENTED BY:

David Schwietert
Interim President and CEO

## Introduction

Good morning Chairwoman Schakowsky, Ranking Member McMorris Rodgers, as well as Chairman Tonko, Ranking Member Shimkus and all members of the subcommittees. On behalf of the 12 members of the Alliance of Automobile Manufacturers (Alliance), thank you for the opportunity to testify today regarding future light-duty vehicle Corporate Average Fuel Economy (CAFE) and greenhouse gas standards.

The Alliance is the leading advocacy group for the auto industry representing over 70 percent of new car and light trucks sold in the United States. The Alliance's diverse membership includes companies headquartered in the U.S., Europe and Asia -- the BMW Group, FCA 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, building exports and advancing mobility, automakers are driving the American economy forward. Nationwide, nearly 10 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.

## Automakers Are Invested in a Cleaner Future

The auto industry has invested billions of dollars on powertrain development and that investment is paying off - automakers are providing customers with record-breaking choice in fuel-efficient vehicles.

## Automakers Provide More Choice for Today's Consumers



> In dealer showrooms, customers are finding greater MPG across all classes of vehicles, from cars to SUVs, vans and pickups

> In 2019, 490 models are on sale that achieve high mileage*, including 45 models of hybrids, 34 plug-in hybrids, 24 fully battery electric models and the first fuel cell models. And more models are coming to market soon.

Find out what people drive in your state wwwAutoAlliance.org

Today, more than 490 models are on sale that achieve at least 30 miles per gallon, an increase of nearly 70 percent from the 2012 model year. While this increase recognizes annual improvements in internal combustion engine efficiency, it also reflects automakers' investments in alternative powertrains, including 45 models of hybrids, 34 plug-in hybrids, 24 fully battery electric models and three fuel cell models.

These investments are making a difference - both for consumers and environment. Since 2005, real-world fuel economy has increased on average nearly 2 percent per year from 19.9 miles per gallon (MPG) to a projected 25.4 MPG in 2018 - which represents about a
27.6 percent fuel economy improvement for the new car fleet over that time period. ${ }^{1}$

These record efficiency gains are important, but they are not the only success story. Today, per mile carbon emissions from new passenger vehicles have dropped 22 percent in just 15 years, which approaches the goals of the Paris Climate Accord for the U.S. to reduce economy-wide greenhouse gas emissions by 26-28 percent over 20 years. ${ }^{2}$

Alliance members have committed to a roadmap for fuel economy and clean car progress. According to consumer research, our customers want it all which is why automakers are committed to increasing fuel economy to offer more energy-efficient autos with fewer emissions and the latest safety technologies. And, automakers seek to accomplish this while working to keep new automobiles affordable.

## The Mid-Term Review and Future Standards

Despite progress in developing cleaner and more energy-efficient vehicles for sale, automakers face significant challenges in the years ahead. To understand those challenges, I think it is important to briefly review the history of fuel efficiency standards - specifically One National Program.

In the last decade, automakers have been subject to three different regulators - NHTSA, EPA and the California Air Resources Board (CARB) - pursuing similar objectives in different ways. In order to address these inconsistent and conflicting regulations that

[^0]ultimately raised costs to consumers with no additional environmental benefits, automakers worked with the three regulators to more closely align standards in two rulemakings covering Model Years (MY) 2012-2016 and 2017-2025. The result was what is now called One National Program, an attempt to better align the three regulatory programs, thereby reducing regulatory burdens and cost, which helped automakers rapidly improve fuel economy and greenhouse gas emissions. It is important to note that while the program sought to better align the regulatory programs on stringency, they remained three separate programs.

Critical to automakers’ agreement to the aggressive MY 2017-2025 standards proposed under One National Program in 2012 were two key elements: (1) a robust, data-driven, and transparent Mid-Term Evaluation to determine the feasibility of the MY 2022-2025 standards by April 2018 and (2) continued alignment of the two federal programs including California's acceptance of compliance to the EPA program.

Unfortunately, in January 2017, EPA finalized the Mid-Term Evaluation in a manner that did not fully account for the data-driven and coordinated process envisioned in the 2012 agreement. In fact, when EPA made their Final Determination that no changes were warranted for MY 2022-2025 GHG standards, NHTSA had yet to begin the statutorily required rulemaking to determine the feasibility of future CAFE standards between MY 2022-2025. EPA's abrupt action effectively undermined the agreement that was reached with the federal government (EPA and NHTSA), California and automakers in 2012.

## Current Market Conditions

Changing consumer preferences and market realities continue to be a big challenge for automakers. Under existing regulation, automakers are judged by what consumers buy, not what we offer for sale. Consumers have many different preferences, goals or priorities when purchasing a new vehicle. The market demonstrates that many of these preferences - notably affordability, safety and reliability - rank much higher than fuel economy. ${ }^{3}$ Despite record numbers of models of alternative powertrain and fuel efficient vehicles being offered in dealer showrooms, sales of these vehicles remain low - less than 4 percent of total U.S. sales for all alternative powertrains (including plug-in EVs, hybrid and Fuel Cell Vehicles). If you remove hybrid vehicles, plug-in EVs account for less than 2 percent of all sales nationwide.

## Sales of the most energy-efficient models remain low.

Once the government sets CAFE standards, automakers are evaluated based on the products that consumers buy - not what automakers put in dealer showrooms.

Many factors drive consumer buying decisions, including vehicle costs, the price of gas and business and family needs.


Source:Word's Automotive, 2019

[^1]Other factors contributing to the compliance challenge include changing consumer buying preferences and lower than projected gas prices. In early 2011, the Department of Energy's AEO report used in crafting the draft rules projected today's gasoline would average $\$ 3.99$ per gallon instead of the national average of $\$ 2.67 .{ }^{4}$ When gas prices fall, the desire to pay more for a vehicle with higher fuel economy diminishes. Since 2012, low gas prices, as well as improved engine efficiency have contributed to a dramatic shift in consumer demand away from passenger cars to vehicles with other attributes such as 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.

Assumptions vs. Market Realities

Rulemaking assumptions needed to be compared to market realities to ensure that future standards are attainable.

|  | 2016 | 2017 | 2018 |
| :---: | :---: | :---: | :---: |
| Gas Prices Projected (2012) | \$3.68 | \$3.77 | \$3.82 |
| Gas Prices Actual | \$2.34 | \$2.58 | \$2.81 |
| Sales: New Cars v. Light Trucks Projected (2012) | 66/34\% (Car/lt) | 63/37\% (Car/LT) | 64/36\% (Car/LT) |
| Sales: New Cars v. Light Trucks $\underbrace{\text { (2) }}_{\text {Actual }}$ | 55/45\% (Сar/LT) | 52/48\% (Car/2T) | 49/51\% (Car/l)! |
| Annual New Vehicle Sales | Record Year | Softening | Flat |

[1) Based on 2011 ELA Annual Energy Outlookin 2018 dollars
(2) Begulatory defirition of carand lighttruck

[^2]Yet, in reality, the actual 2016 light-duty fleet mix was 55.7\% passenger cars and 44.3\% trucks. In 2018, the light-duty fleet mix has actually reversed as passenger cars are now only $49 \%$ of the market and trucks are now $51 \%$ and this trend is projected to continue. In fact, to illustrate this new fleet mix reality, a pickup is the top selling new vehicle in 289 congressional districts, or $66 \%$ of Congress.

To shine more light on consumer preferences the attached chart shows the individual state breakdown for both new vehicle purchases and registered vehicles (see Attachment 1). A few additional data points regarding vehicle sales in 2018 further illuminate consumer preferences:

- SUVs/CUVs are the top selling vehicles in 85 congressional districts (19\%)
- Sedans are the top selling vehicles in 56 congressional districts (13\%)
- There are 150 congressional districts (34\%) where the top three selling vehicles are pickup trucks.

Consumers can now buy EVs of all different shapes and sizes - small cars, large cars, SUVs and minivans, in 2WD or AWD, with shorter and longer ranges, from entry-level vehicles to luxury models and everything in between. However, despite the record offering of such EV's, again, less than 2 percent of all new vehicles purchased last year were plug-in hybrids, fully battery electric or fuel cell vehicles. ${ }^{5}$

[^3]
## Bumpy Road Ahead

At present, consumer preferences and market realities do not align with policy aspirations outlined in 2012. As noted in the most recent EPA Automotive Trends Report for MY 2017 vehicles, there is a substantial gap between government targets and what Americans are buying. For instance, in MY 2017 ten of the top 13 manufacturers (by volume) relied on the use of credits earned in prior years to achieve compliance. This was up from only four of the top 13 using banked credits in MY 2015. Without a more realistic set of future standards, automakers will struggle to achieve compliance, which will only become more difficult as credits expire and standards ratchet up even more rapidly after MY 2020. Last but not least, despite the continued gains that have been made to improve vehicle efficiency, only a few models available today could meet the MY 2025 standards envisioned under the previous One National Program.

## Few Models Available Today Could Meet 2025 Standards

Only some hybrids and electric models are projected to meet future targets.


Furthermore, only about 5 percent of MY 2018 vehicles meet the 2023 greenhouse gas standards. It's important to note that not even all MY 2018 hybrid vehicles meet the 2025 GHG targets.

So where do we go from here? Many may see this as a binary choice - you either support the previous standards or you support a freeze at MY2020 standards. For the industry, the environment and consumers, this is anything but binary. The previous MY2022-2025 standards do not reflect market realities and, therefore warrant adjustment. Likewise, a federal standard that causes a split with California and the 13 other states, breaking up One National Program, will create a bifurcated market, not to mention prolonged litigation - adding uncertainty as well as additional costs to automakers and consumers, possibly limiting consumer choice in some areas, and effectively providing less environmental benefit than a single national standard.

This, therefore, cannot be a binary choice but instead requires compromise, understanding and a willingness to find a path forward that serves all interests. This is why automakers remain steadfast in our support of a negotiated solution that balances environmental goals, consumer preferences and market realities. Our priorities remain unchanged and include:

- Year-over-year increases in fuel economy to provide our customers with more energy-efficient vehicles with greater emissions reductions and the latest safety technology.
- Partner with public/private groups to get more energy-efficient vehicles on our roads via charging/fueling infrastructure, consumer incentives, government fleet sales and car-sharing and ride-sharing programs.
- Continue increasing investments in research and development for more advancements in safety and efficiency.
- Do all this while keeping vehicles affordable for consumers.


## Conclusion

Automakers remain committed more than ever to deploying ever-more 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. Although it remains unclear exactly when the U.S. Department of Transportation and the Environmental Protection Agency will issue a Final Rule regarding motor vehicle standards, there's no question that changes are warranted based on the agreement in 2012 that specified that a Mid-Term Review would ensure that the future standards reflected market realities. The Auto Alliance and our members eagerly await the final rule and will continue to advocate an outcome that better aligns future standards with market realities.

Attachment 1

| 2018 Light Vehicle Registrations And New Purchases: Body Style |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2018 Registrations |  |  |  |  |  |  | 2018 New Purchases |  |  |  |  |  |  |
|  |  | Vehicle Type |  | Light Truck Segments |  |  |  |  | Vehicle Type |  | Light Truck Segments |  |  |  |
| State | Total | Cars | Light Trucks | CUVs | SUVs | Pickups | Vans/ Minivans | Total | Cars | Light Trucks | CUVs | SUVs | Pickups | Vans/ Minivans |
| AK | 607,052 | 25.62\% | 74.38\% | 18.24\% | 15.59\% | 34.02\% | 6.53\% | 26,452 | 19.57\% | 80.43\% | 35.52\% | 10.93\% | 28.17\% | 5.81\% |
| AL | 4,920,798 | 43.46\% | 56.54\% | 13.74\% | 12.21\% | 25.95\% | 4.64\% | 209,124 | 31.79\% | 68.21\% | 31.68\% | 9.87\% | 22.47\% | 4.19\% |
| AR | 2,649,722 | 35.90\% | 64.10\% | 14.83\% | 12.93\% | 31.70\% | 4.65\% | 122,614 | 24.72\% | 75.28\% | 32.51\% | 10.62\% | 28.39\% | 3.76\% |
| AZ | 6,304,340 | 44.29\% | 55.71\% | 16.36\% | 12.02\% | 20.88\% | 6.45\% | 386,255 | 31.83\% | 68.17\% | 30.82\% | 7.74\% | 18.53\% | 11.08\% |
| CA | 31,507,331 | 51.22\% | 48.78\% | 17.09\% | 10.15\% | 15.78\% | 5.76\% | 1,959,243 | 45.73\% | 54.27\% | 31.66\% | 6.89\% | 11.67\% | 4.05\% |
| CO | 5,309,996 | 36.48\% | 63.52\% | 21.66\% | 15.69\% | 21.26\% | 4.91\% | 270,687 | 23.32\% | 76.68\% | 40.49\% | 12.58\% | 19.29\% | 4.32\% |
| CT | 3,052,626 | 47.54\% | 52.46\% | 24.97\% | 9.95\% | 11.77\% | 5.78\% | 169,074 | 30.57\% | 69.43\% | 47.19\% | 8.86\% | 9.78\% | 3.60\% |
| DC | 349,111 | 63.24\% | 36.76\% | 19.64\% | 7.57\% | 3.93\% | 5.61\% | 22,770 | 44.18\% | 55.82\% | 39.80\% | 6.89\% | 3.61\% | 5.53\% |
| DE | 854,561 | 45.12\% | 54.88\% | 21.00\% | 11.22\% | 15.85\% | 6.81\% | 49,592 | 31.23\% | 68.77\% | 40.05\% | 9.50\% | 14.27\% | 4.95\% |
| FL | 17,133,318 | 48.46\% | 51.54\% | 19.97\% | 9.72\% | 15.75\% | 6.10\% | 1,328,459 | 38.51\% | 61.49\% | 36.17\% | 8.34\% | 12.29\% | 4.70\% |
| GA | 8,908,162 | 44.44\% | 55.56\% | 16.60\% | 11.96\% | 21.20\% | 5.80\% | 509,087 | 35.17\% | 64.83\% | 32.32\% | 9.08\% | 18.23\% | 5.21\% |
| HI | 1,227,125 | 42.26\% | 57.74\% | 17.77\% | 10.32\% | 22.06\% | 7.59\% | 88,909 | 35.52\% | 64.48\% | 27.61\% | 14.34\% | 15.07\% | 7.46\% |
| IA | 3,123,958 | 37.48\% | 62.52\% | 17.79\% | 10.51\% | 26.63\% | 7.59\% | 131,176 | 20.45\% | 79.55\% | 38.41\% | 8.91\% | 26.45\% | 5.79\% |
| ID | 1,765,462 | 35.26\% | 64.74\% | 15.22\% | 13.28\% | 31.08\% | 5.16\% | 64,596 | 18.67\% | 81.33\% | 37.98\% | 9.48\% | 30.31\% | 3.57\% |
| IL | 10,641,237 | 44.95\% | 55.05\% | 22.59\% | 10.46\% | 13.82\% | 8.18\% | 616,104 | 30.15\% | 69.85\% | 43.23\% | 8.42\% | 11.75\% | 6.45\% |
| IN | 5,955,100 | 41.01\% | 58.99\% | 18.61\% | 11.12\% | 21.55\% | 7.72\% | 247,013 | 25.60\% | 74.40\% | 39.06\% | 8.77\% | 19.01\% | 7.56\% |
| KS | 2,831,833 | 40.32\% | 59.68\% | 16.07\% | 10.95\% | 26.29\% | 6.36\% | 98,285 | 25.88\% | 74.12\% | 35.22\% | 10.01\% | 23.43\% | 5.46\% |
| KY | 4,028,531 | 41.58\% | 58.42\% | 16.46\% | 10.81\% | 25.14\% | 6.01\% | 149,421 | 28.59\% | 71.41\% | 37.01\% | 8.86\% | 20.48\% | 5.06\% |
| LA | 3,779,281 | 38.04\% | 61.96\% | 14.81\% | 12.53\% | 30.66\% | 3.96\% | 218,709 | 28.76\% | 71.24\% | 28.95\% | 10.88\% | 27.91\% | 3.50\% |
| MA | 5,382,570 | 45.10\% | 54.90\% | 27.06\% | 9.34\% | 12.36\% | 6.14\% | 355,731 | 28.56\% | 71.44\% | 45.65\% | 9.25\% | 12.39\% | 4.15\% |
| MD | 4,723,057 | 48.45\% | 51.55\% | 21.45\% | 9.43\% | 13.23\% | 7.43\% | 329,936 | 35.22\% | 64.78\% | 37.58\% | 7.75\% | 11.89\% | 7.55\% |
| ME | 1,287,077 | 37.65\% | 62.35\% | 22.40\% | 9.31\% | 25.29\% | 5.35\% | 70,462 | 19.64\% | 80.36\% | 42.22\% | 7.78\% | 26.48\% | 3.87\% |
| MI | 8,710,114 | 38.02\% | 61.98\% | 23.38\% | 12.06\% | 19.19\% | 7.37\% | 606,504 | 16.41\% | 83.59\% | 47.09\% | 10.53\% | 21.84\% | 4.13\% |
| MN | 5,134,436 | 39.78\% | 60.22\% | 21.54\% | 10.63\% | 20.40\% | 7.66\% | 250,471 | 21.17\% | 78.83\% | 44.05\% | 8.18\% | 21.29\% | 5.31\% |
| M0 | 5,776,127 | 40.92\% | 59.08\% | 17.49\% | 10.35\% | 24.01\% | 7.23\% | 311,578 | 27.11\% | 72.89\% | 32.14\% | 9.00\% | 23.11\% | 8.64\% |
| MS | 2,809,895 | 42.83\% | 57.17\% | 11.80\% | 12.60\% | 28.58\% | 4.19\% | 106,676 | 31.06\% | 68.94\% | 28.68\% | 10.22\% | 26.54\% | 3.50\% |
| MT | 1,351,398 | 32.74\% | 67.26\% | 13.34\% | 13.61\% | 35.33\% | 4.97\% | 57,724 | 16.49\% | 83.51\% | 33.75\% | 12.28\% | 32.91\% | 4.57\% |
| NC | 8,924,646 | 43.77\% | 56.23\% | 17.76\% | 11.34\% | 20.95\% | 6.18\% | 462,028 | 33.27\% | 66.73\% | 35.28\% | 9.19\% | 17.45\% | 4.81\% |
| ND | 783,878 | 31.02\% | 68.98\% | 16.10\% | 12.62\% | 34.80\% | 5.46\% | 39,472 | 12.41\% | 87.59\% | 32.58\% | 11.38\% | 40.43\% | 3.20\% |
| NE | 2,003,160 | 38.64\% | 61.36\% | 16.75\% | 11.93\% | 26.28\% | 6.41\% | 86,138 | 20.92\% | 79.08\% | 37.70\% | 10.23\% | 26.12\% | 5.03\% |
| NH | 1,306,353 | 40.62\% | 59.38\% | 24.82\% | 8.80\% | 20.02\% | 5.74\% | 97,069 | 24.93\% | 75.07\% | 42.67\% | 7.52\% | 20.76\% | 4.13\% |
| NJ | 7,243,886 | 47.81\% | 52.19\% | 25.03\% | 10.34\% | 9.35\% | 7.47\% | 581,215 | 33.57\% | 66.43\% | 44.61\% | 9.55\% | 7.83\% | 4.43\% |
| NM | 1,891,881 | 38.83\% | 61.17\% | 14.25\% | 12.44\% | 30.05\% | 4.43\% | 87,576 | 30.98\% | 69.02\% | 30.76\% | 9.31\% | 25.92\% | 3.03\% |
| NV | 2,364,062 | 44.96\% | 55.04\% | 17.87\% | 12.80\% | 19.62\% | 4.74\% | 143,917 | 36.80\% | 63.20\% | 34.01\% | 9.24\% | 15.94\% | 4.01\% |
| NY | 11,731,223 | 43.75\% | 56.25\% | 26.83\% | 10.24\% | 11.55\% | 7.64\% | 1,011,032 | 27.75\% | 72.25\% | 47.72\% | 9.86\% | 10.05\% | 4.61\% |
| OH | 10,743,373 | 45.11\% | 54.89\% | 20.84\% | 9.26\% | 17.37\% | 7.42\% | 598,699 | 29.34\% | 70.66\% | 42.43\% | 7.49\% | 15.36\% | 5.37\% |
| OK | 4,354,435 | 37.82\% | 62.18\% | 17.35\% | 11.39\% | 26.88\% | 6.56\% | 770,178 | 33.78\% | 66.22\% | 29.75\% | 9.50\% | 16.45\% | 10.52\% |
| OR | 3,790,198 | 40.68\% | 59.32\% | 18.38\% | 11.49\% | 22.99\% | 6.45\% | 175,570 | 27.51\% | 72.49\% | 39.84\% | 8.09\% | 19.00\% | 5.56\% |
| PA | 12,032,941 | 44.14\% | 55.86\% | 22.11\% | 10.77\% | 15.97\% | 7.01\% | 661,479 | 27.13\% | 72.87\% | 44.52\% | 7.96\% | 15.49\% | 4.90\% |
| RI | 859,116 | 49.62\% | 50.38\% | 23.63\% | 8.58\% | 12.50\% | 5.67\% | 49,166 | 30.65\% | 69.35\% | 45.37\% | 7.63\% | 13.20\% | 3.14\% |
| SC | 4,902,802 | 43.47\% | 56.53\% | 16.12\% | 12.71\% | 21.96\% | 5.73\% | 218,753 | 31.10\% | 68.90\% | 35.48\% | 9.34\% | 19.38\% | 4.71\% |
| SD | 961,184 | 33.60\% | 66.40\% | 15.59\% | 12.86\% | 31.55\% | 6.40\% | 38,271 | 14.68\% | 85.32\% | 37.35\% | 10.49\% | 33.67\% | 3.81\% |
| TN | 6,124,542 | 42.20\% | 57.80\% | 16.71\% | 12.40\% | 23.40\% | 5.28\% | 273,666 | 31.83\% | 68.17\% | 33.97\% | 9.73\% | 19.88\% | 4.58\% |
| TX | 22,847,822 | 38.63\% | 61.37\% | 17.50\% | 12.89\% | 26.48\% | 4.49\% | 1,515,438 | 29.75\% | 70.25\% | 31.03\% | 10.55\% | 25.12\% | 3.55\% |
| UT | 2,675,339 | 41.80\% | 58.20\% | 16.58\% | 12.56\% | 22.92\% | 6.14\% | 143,459 | 24.86\% | 75.14\% | 31.77\% | 10.40\% | 27.87\% | 5.10\% |
| VA | 7,532,673 | 45.39\% | 54.61\% | 19.23\% | 11.24\% | 17.44\% | 6.69\% | 382,955 | 34.53\% | 65.47\% | 37.59\% | 8.54\% | 12.41\% | 6.94\% |
| vT | 564,886 | 37.77\% | 62.23\% | 26.82\% | 7.22\% | 23.53\% | 4.66\% | 42,913 | 20.90\% | 79.10\% | 44.09\% | 5.76\% | 26.40\% | 2.86\% |
| WA | 6,908,023 | 44.62\% | 55.38\% | 18.36\% | 10.78\% | 20.01\% | 6.24\% | 295,582 | 30.67\% | 69.33\% | 40.24\% | 7.59\% | 16.45\% | 5.04\% |
| WI | 5,351,303 | 40.28\% | 59.72\% | 21.18\% | 10.25\% | 20.14\% | 8.14\% | 246,648 | 21.93\% | 78.07\% | 42.87\% | 8.02\% | 21.32\% | 5.85\% |
| wV | 1,584,252 | 35.68\% | 64.32\% | 19.45\% | 12.36\% | 27.85\% | 4.66\% | 81,580 | 22.12\% | 77.88\% | 40.01\% | 9.87\% | 25.20\% | 2.79\% |
| WY | 637,640 | 27.53\% | 72.47\% | 13.79\% | 15.27\% | 39.47\% | 3.95\% | 26,171 | 13.19\% | 86.81\% | 31.59\% | 11.80\% | 40.67\% | 2.75\% |
| U.S. Total | 278,243,836 | 43.49\% | 56.51\% | 19.30\% | 11.13\% | 19.83\% | 6.26\% | 16,785,627 | 31.6\% | 68.40\% | 37.3\% | 8.9\% | 17.0\% | 5.2\% |


| 2018 Light Vehicle Registrations And New Purchases: Powertrain |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2018 Registrations |  |  |  |  | 2018 New Purchases |  |  |  |  |  |
| State | Total | Gas | Diesel | Hybrid | Electric | PHEV | Total | Gas | Diesel | Hybrid | Electric | PHEV |
| AK | 607,052 | 92.09\% | 6.88\% | 0.89\% | 0.09\% | 0.05\% | 26,452 | 91.47\% | 6.48\% | 1.46\% | 0.37\% | 0.22\% |
| AL | 4,920,798 | 96.27\% | 2.98\% | 0.69\% | 0.03\% | 0.03\% | 209,124 | 95.06\% | 3.49\% | 1.03\% | 0.25\% | 0.16\% |
| AR | 2,649,722 | 95.22\% | 3.93\% | 0.80\% | 0.02\% | 0.03\% | 122,614 | 93.74\% | 4.74\% | 1.17\% | 0.21\% | 0.14\% |
| AZ | 6,304,340 | 94.78\% | 3.20\% | 1.64\% | 0.24\% | 0.14\% | 386,255 | 93.43\% | 2.80\% | 1.93\% | 1.44\% | 0.39\% |
| CA | 31,507,331 | 92.60\% | 2.40\% | 3.48\% | 0.83\% | 0.70\% | 1,959,243 | 85.83\% | 2.31\% | 3.94\% | 4.74\% | 3.18\% |
| CO | 5,309,996 | 93.43\% | 4.57\% | 1.64\% | 0.22\% | 0.14\% | 270,687 | 90.78\% | 4.51\% | 2.11\% | 1.82\% | 0.78\% |
| CT | 3,052,626 | 96.28\% | 1.89\% | 1.51\% | 0.15\% | 0.18\% | 169,074 | 95.00\% | 1.25\% | 1.73\% | 1.09\% | 0.93\% |
| DC | 349,111 | 94.94\% | 0.95\% | 3.55\% | 0.28\% | 0.28\% | 22,770 | 92.35\% | 0.43\% | 3.87\% | 1.78\% | 1.56\% |
| DE | 854,561 | 96.35\% | 1.96\% | 1.47\% | 0.08\% | 0.13\% | 49,592 | 95.15\% | 1.71\% | 1.88\% | 0.70\% | 0.57\% |
| FL | 17,133,318 | 96.06\% | 2.33\% | 1.36\% | 0.15\% | 0.10\% | 1,328,459 | 95.57\% | 2.02\% | 1.38\% | 0.74\% | 0.29\% |
| GA | 8,908,162 | 96.00\% | 2.62\% | 1.12\% | 0.17\% | 0.09\% | 509,087 | 94.67\% | 2.72\% | 1.42\% | 0.88\% | 0.30\% |
| HI | 1,227,125 | 95.35\% | 1.69\% | 2.20\% | 0.54\% | 0.22\% | 88,909 | 94.79\% | 0.85\% | 1.78\% | 1.75\% | 0.84\% |
| IA | 3,123,958 | 95.06\% | 3.79\% | 1.05\% | 0.03\% | 0.06\% | 131,176 | 93.23\% | 4.31\% | 1.76\% | 0.37\% | 0.33\% |
| ID | 1,765,462 | 90.93\% | 7.82\% | 1.13\% | 0.06\% | 0.07\% | 64,596 | 87.71\% | 9.40\% | 2.11\% | 0.45\% | 0.32\% |
| IL | 10,641,237 | 96.17\% | 1.99\% | 1.63\% | 0.12\% | 0.10\% | 616,104 | 94.91\% | 1.65\% | 2.25\% | 0.88\% | 0.31\% |
| IN | 5,955,100 | 95.88\% | 2.89\% | 1.12\% | 0.05\% | 0.07\% | 247,013 | 93.87\% | 3.53\% | 1.78\% | 0.55\% | 0.27\% |
| KS | 2,831,833 | 94.99\% | 3.76\% | 1.13\% | 0.06\% | 0.07\% | 98,285 | 93.18\% | 3.91\% | 1.95\% | 0.64\% | 0.32\% |
| KY | 4,028,531 | 95.81\% | 3.19\% | 0.92\% | 0.03\% | 0.04\% | 149,421 | 94.39\% | 3.49\% | 1.60\% | 0.31\% | 0.21\% |
| LA | 3,779,281 | 95.25\% | 4.15\% | 0.55\% | 0.03\% | 0.02\% | 218,709 | 94.11\% | 4.89\% | 0.72\% | 0.18\% | 0.10\% |
| MA | 5,382,570 | 96.15\% | 1.43\% | 2.03\% | 0.18\% | 0.21\% | 355,731 | 94.39\% | 1.11\% | 1.97\% | 1.39\% | 1.13\% |
| MD | 4,723,057 | 95.38\% | 2.24\% | 2.02\% | 0.17\% | 0.18\% | 329,936 | 93.53\% | 2.19\% | 2.37\% | 1.16\% | 0.75\% |
| ME | 1,287,077 | 95.61\% | 2.59\% | 1.60\% | 0.06\% | 0.14\% | 70,462 | 94.50\% | 2.51\% | 1.86\% | 0.36\% | 0.77\% |
| MI | 8,710,114 | 95.49\% | 3.37\% | 0.95\% | 0.05\% | 0.15\% | 606,504 | 96.72\% | 1.57\% | 1.12\% | 0.27\% | 0.32\% |
| MN | 5,134,436 | 95.52\% | 2.86\% | 1.44\% | 0.09\% | 0.09\% | 250,471 | 94.05\% | 2.83\% | 1.98\% | 0.74\% | 0.39\% |
| MO | 5,776,127 | 94.99\% | 3.61\% | 1.27\% | 0.06\% | 0.07\% | 311,578 | 93.51\% | 3.76\% | 2.00\% | 0.49\% | 0.24\% |
| MS | 2,809,895 | 96.04\% | 3.40\% | 0.52\% | 0.01\% | 0.02\% | 106,676 | 94.53\% | 4.37\% | 0.89\% | 0.11\% | 0.11\% |
| MT | 1,351,398 | 90.24\% | 8.90\% | 0.79\% | 0.04\% | 0.03\% | 57,724 | 88.16\% | 10.08\% | 1.28\% | 0.31\% | 0.16\% |
| NC | 8,924,646 | 95.71\% | 2.71\% | 1.42\% | 0.08\% | 0.08\% | 462,028 | 94.52\% | 2.74\% | 1.72\% | 0.71\% | 0.31\% |
| ND | 783,878 | 92.44\% | 7.00\% | 0.52\% | 0.02\% | 0.02\% | 39,472 | 90.71\% | 8.37\% | 0.67\% | 0.13\% | 0.11\% |
| NE | 2,003,160 | 94.64\% | 4.37\% | 0.90\% | 0.04\% | 0.05\% | 86,138 | 93.60\% | 4.19\% | 1.49\% | 0.44\% | 0.29\% |
| NH | 1,306,353 | 95.61\% | 2.56\% | 1.59\% | 0.09\% | 0.15\% | 97,069 | 95.10\% | 2.13\% | 1.61\% | 0.60\% | 0.56\% |
| NJ | 7,243,886 | 96.89\% | 1.55\% | 1.24\% | 0.17\% | 0.15\% | 581,215 | 96.21\% | 0.90\% | 1.30\% | 0.97\% | 0.62\% |
| NM | 1,891,881 | 93.02\% | 5.48\% | 1.36\% | 0.07\% | 0.07\% | 87,576 | 91.34\% | 5.76\% | 2.10\% | 0.45\% | 0.35\% |
| NV | 2,364,062 | 94.13\% | 3.92\% | 1.62\% | 0.20\% | 0.13\% | 143,917 | 92.75\% | 3.59\% | 2.04\% | 1.17\% | 0.44\% |
| NY | 11,731,223 | 96.43\% | 1.68\% | 1.54\% | 0.14\% | 0.21\% | 1,011,032 | 95.92\% | 1.09\% | 1.42\% | 0.68\% | 0.88\% |
| OH | 10,743,373 | 96.64\% | 2.16\% | 1.06\% | 0.06\% | 0.07\% | 598,699 | 95.95\% | 1.82\% | 1.49\% | 0.50\% | 0.24\% |
| OK | 4,354,435 | 94.48\% | 4.39\% | 1.02\% | 0.08\% | 0.03\% | 770,178 | 95.79\% | 2.26\% | 1.60\% | 0.31\% | 0.04\% |
| OR | 3,790,198 | 90.63\% | 6.23\% | 2.58\% | 0.33\% | 0.23\% | 175,570 | 86.76\% | 6.26\% | 3.57\% | 2.05\% | 1.35\% |
| PA | 12,032,941 | 96.57\% | 2.16\% | 1.12\% | 0.07\% | 0.09\% | 661,479 | 94.94\% | 2.50\% | 1.65\% | 0.57\% | 0.34\% |
| RI | 859,116 | 96.81\% | 1.53\% | 1.45\% | 0.07\% | 0.13\% | 49,166 | 96.01\% | 1.19\% | 1.54\% | 0.56\% | 0.70\% |
| SC | 4,902,802 | 96.56\% | 2.40\% | 0.96\% | 0.04\% | 0.05\% | 218,753 | 95.38\% | 2.75\% | 1.33\% | 0.31\% | 0.22\% |
| SD | 961,184 | 92.57\% | 6.67\% | 0.70\% | 0.03\% | 0.03\% | 38,271 | 91.26\% | 7.18\% | 1.20\% | 0.18\% | 0.17\% |
| TN | 6,124,542 | 96.18\% | 2.69\% | 1.01\% | 0.06\% | 0.05\% | 273,666 | 94.83\% | 2.96\% | 1.48\% | 0.51\% | 0.22\% |
| TX | 22,847,822 | 94.43\% | 4.34\% | 1.06\% | 0.10\% | 0.07\% | 1,515,438 | 92.81\% | 5.24\% | 1.17\% | 0.54\% | 0.23\% |
| UT | 2,675,339 | 91.76\% | 6.37\% | 1.53\% | 0.20\% | 0.13\% | 143,459 | 84.44\% | 11.92\% | 2.04\% | 1.13\% | 0.47\% |
| VA | 7,532,673 | 95.56\% | 2.34\% | 1.88\% | 0.11\% | 0.11\% | 382,955 | 94.17\% | 1.73\% | 2.44\% | 1.18\% | 0.49\% |
| VT | 564,886 | 94.10\% | 3.18\% | 2.19\% | 0.19\% | 0.33\% | 42,913 | 93.26\% | 2.78\% | 2.04\% | 0.83\% | 1.09\% |
| WA | 6,908,023 | 92.41\% | 4.37\% | 2.60\% | 0.41\% | 0.21\% | 295,582 | 86.86\% | 4.57\% | 4.29\% | 3.06\% | 1.22\% |
| WI | 5,351,303 | 95.47\% | 3.02\% | 1.36\% | 0.07\% | 0.09\% | 246,648 | 94.44\% | 2.83\% | 1.93\% | 0.47\% | 0.32\% |
| WV | 1,584,252 | 95.65\% | 3.63\% | 0.67\% | 0.01\% | 0.03\% | 81,580 | 94.68\% | 3.86\% | 1.19\% | 0.12\% | 0.15\% |
| WY | 637,640 | 87.67\% | 11.62\% | 0.66\% | 0.03\% | 0.03\% | 26,171 | 84.77\% | 13.92\% | 0.96\% | 0.23\% | 0.12\% |
| U.S. Total | 278,243,836 | 95.01\% | 3.05\% | 1.57\% | 0.20\% | 0.17\% | 16,785,627 | 93.2\% | 2.9\% | 1.9\% | 1.2\% | 0.7\% |


[^0]:    ${ }^{1}$ U.S. Environmental Protection Agency, The 2018 Automotive Trends Report: Greenhouse Gas Emissions, Fuel Economy, and Technology since 1975, EPA-420-R-19-002, (March 2019) at 32.
    ${ }^{2}$ First U.S. Nationally Determined Contribution submission in accordance with the UN Paris Agreement

[^1]:    3 "Strategic Vision New Vehicle Experience Study (2018); ranking of purchase reasons"

[^2]:    ${ }^{4}$ Annual Energy Outlook 2011, motor gasoline converted to 2019 dollars; AAA national average gasoline price on June 18, 2019.

[^3]:    ${ }^{5}$ Alliance of Automobile Manufacturers (2019). Advanced Technology Vehicle Sales Dashboard. Data compiled by the Alliance of Automobile Manufacturers using information provided by IHS Markit. Data last updated 3/12/2019. Retrieved 6/18/2019 from https://autoalliance.org/energy-environment/advanced -technology-vehicle-sales-dashboard/.

