



September 21, 2016

Environmental Protection Agency (EPA)  
National Highway Traffic Safety Administration (NHTSA)  
California Air Resources Board (CARB)  
Submitted via: [www.regulations.gov](http://www.regulations.gov) and  
<http://www.arb.ca.gov/lispub/comm2/bcsubform.php?listname=drafttar2016-ws>

Re: Consumers Union's Comments on Midterm Evaluation Draft Technical Assessment Report for Model Year 2022–2025 Light Duty Vehicle GHG Emissions and CAFE Standards (Docket ID No. EPA–HQ–OAR–2015–0827 and Docket No. NHTSA–2016–0068)

### **Introduction**

Consumers Union<sup>1</sup> ("CU"), submits the following comments to the U.S. Environmental Protection Agency ("EPA"), National Highway Traffic Safety Administration ("NHTSA"), and California Air Resources Board ("CARB"), (collectively "the agencies") in the above-referenced matter. In addition, 31,973 consumers signed a petition in support of strong fuel economy and greenhouse gas standards, which is included in Appendix A.

The transportation sector places a heavy burden on consumers and the environment. In 2015, consumers spent an average of \$2,090 on fuel costs and motor oil, even as gas prices remained near their lowest point in a decade.<sup>2</sup>

Transportation accounts for over one-quarter of domestic greenhouse gas

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<sup>1</sup> Consumers Union is the policy and mobilization arm of Consumer Reports. Consumers Union works for [pro-consumer energy policies,] health reform, food and product safety, financial reform, and other consumer issues in Washington, D.C., the states, and in the marketplace. Consumer Reports is the world's largest independent product-testing organization. Using its more than 50 labs, auto test center, and survey research center, the nonprofit rates thousands of products and services annually. Founded in 1936, Consumer Reports has over 8 million subscribers to its magazine, website, and other publications.

<sup>2</sup> "Consumer Expenditures (Annual) News Release" Bureau of Labor Statistics at <http://www.bls.gov/news.release/cesan.htm>.

emissions, and light-duty vehicles are by far the biggest emitter in the transportation sector, putting 1,100 million metric tons of greenhouse gases in the atmosphere in 2014.<sup>3</sup> Fortunately, gradual improvements to fuel economy and emission standards are part of a practical and tested program to reduce fuel consumption, improve the vehicle fleet, and save consumers trillions of dollars in fuel costs. Automakers have developed the technology to make better, safer, and more efficient vehicles, and the agencies should push forward in setting and implementing the standards to continue this progress.

## **Comments**

### **Consumers Support Fuel Economy Standards**

In a nationally representative survey conducted in May 2016, Consumers Union found strong majority support for robust fuel economy standards and also found that fuel economy is the number one attribute vehicle owners would like to see improved.<sup>4</sup> Highlights from the survey include:

- 76% of American adults agreed that increasing average fuel economy from 25 miles per gallon today to 40 miles per gallon by 2025 is a worthwhile goal.
- 79% of American adults agreed that making larger vehicles, such as SUVs or trucks, more fuel-efficient is important.
- 60% of American adults are willing to pay extra for a more fuel-efficient vehicle if they can recover the additional cost through fuel savings within 5 years.

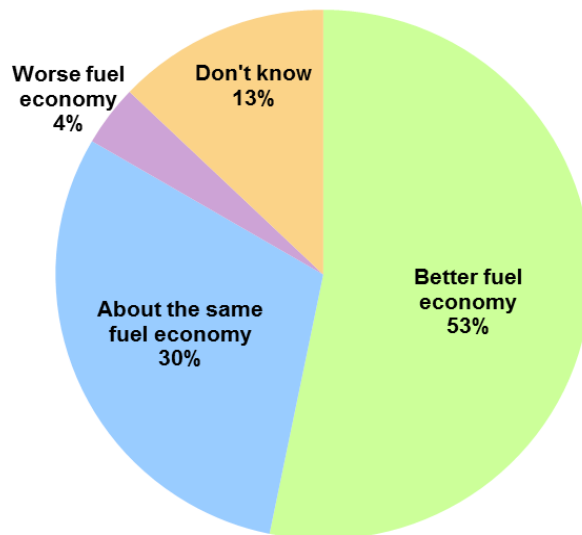
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<sup>3</sup> “Fast Facts U.S. Transportation Sector Greenhouse Gas Emissions 1990-2014,” Office of Transportation and Air Quality, EPA-420-F-16-020, published June 2016 at <https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockkey=P100ONBL.pdf>.

<sup>4</sup> See Appendix B for the full survey report.

- Fuel economy topped the list of attributes that American drivers think have the most room for improvement, beating out: purchase price, connectivity, range, vehicle comfort, passenger room, safety, cargo space, reliability, horsepower, vehicle size, off-road capability, style, and handling.
- The auto brands perceived as the best overall were also those perceived as the best in delivering fuel economy.
- Compared to their current vehicles, over half (53%) of adult American drivers expect better fuel economy with their next car purchase.

### Expected change in fuel economy with next vehicle purchase



### Fuel Economy Standards Provide a Clear Positive Value for Consumers

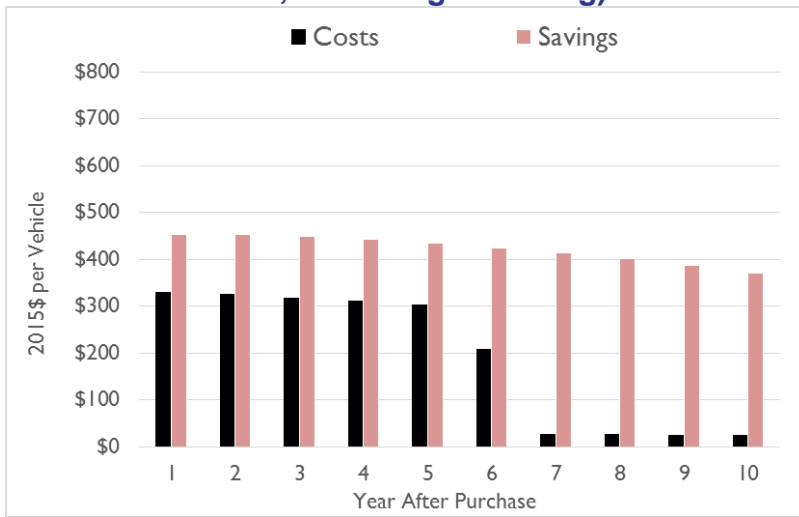
#### 1. Net savings.

Consumers Union commissioned a study from Synapse Energy Economics to identify the net costs and benefits car buyers are likely to experience once the 2025 standards are in place.<sup>5</sup> This study shows that increased fuel economy with the more stringent 2025 CAFE standards will lead to substantial net savings for both car and truck owners. Under mid-range assumptions, the report estimates

<sup>5</sup> The full report is in Appendix C and can be found here: <http://consumersunion.org/wp-content/uploads/2016/09/Fueling-Savings-Consumer-Savings-from-CAFE-2025.pdf>.

that the new standard will save \$3,200 per car and \$4,800 per truck. Assuming the vehicle is purchased using a loan, decreased fuel spending immediately outweighs the compliance costs.<sup>6</sup>

**Figure 3: Annual Car Compliance Costs and Fuel Savings (relative to MY 2016, assuming financing)**



**Figure 4: Annual Light Truck Compliance Costs and Fuel Savings (relative to MY 2016, assuming financing)**



If a buyer pays cash for the new vehicle, payback for added efficiency

technology occurs in 3 to 4 years. These results are based on a gasoline price

<sup>6</sup> Using the average loan term of 68 months and average interest rate of 4.79% based on data from Experian.

forecast of \$3.00–\$3.50 per gallon for the decade beginning in 2025. Under a high gas price (\$5.00–\$5.50) regime, the net savings increase by nearly 80 percent for cars and 70 percent for trucks. In the unlikely case that gas prices decrease from today’s prices—and remain low—the net savings would remain positive, but decrease by about half the levels under base case gas prices.

*2. Greater choice and selection.*

A majority of consumers expect their next vehicle to get better fuel economy, even if they expect to buy an SUV.<sup>7</sup> Footprint-based fuel economy standards encourage automakers to design and sell vehicles that have better fuel economy across vehicle size and class. This trend aligns with consumer preferences for better fuel economy in SUVs and trucks. In 2016, there are dozens of SUVs and trucks that get in the mid- to high-20s miles per gallon overall, many of them non-hybrids. In 2006, there were only a handful of SUVs and trucks that broke into the 20s for overall miles per gallon, and most of them *were* hybrids. Vehicle selection, variety of powertrains, and consumer choice will continue to expand as the standards continue to steadily rise.

*3. Insulation from future higher prices.*

Gas prices are notoriously hard to predict, but taking the long view to incrementally improve fuel economy over time provides market stability for automakers and pocketbook security for consumers. By making the investments over a longer time frame, automakers and consumers can avoid more costly

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<sup>7</sup> See Consumers Union survey, p. 6 in Appendix B.

market shifts that occur more suddenly and without enough time to redesign a new fleet or buy new vehicles when gas price swings occur.

### Higher Fuel Economy Is Correlated with Higher Owner Satisfaction

As another measure of consumer interest and benefits from better fuel economy, Consumers Union investigated the relationship between fuel economy and owner satisfaction. The results of the two-part analysis show that when holding other factors constant, higher fuel efficiency is positively associated with higher owner satisfaction in almost all cases.<sup>8</sup>

The first part of the analysis was based on responses to the 2015 Consumer Reports Annual Questionnaire conducted in the spring of 2015; a follow-up survey conducted during summer 2015; and road tests performed by CR's Auto Test Center. The dataset consisted of approximately 1 million records and represents the population of CR subscribers. Though many additional factors determine owner satisfaction, the analysis evaluated the relationship between owner satisfaction and the following vehicle attributes: fuel economy, acceleration, horsepower, mechanical problems, CR's road-test score, and CR's tested price. All six attributes examined in the first analysis show significant association with owner satisfaction for cars and SUVs. Fuel economy was second only to mechanical problems in the strength of the association with higher owner satisfaction.

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<sup>8</sup> The full analysis is attached as Appendix D and can be found here: <http://consumersunion.org/wp-content/uploads/2016/06/CU-Owner-Satisfaction-MPG-Report.pdf>.

The second analysis was based on vehicle-specific owner-reported MPG and therefore, was not affected by differences in vehicle attributes. It also showed a significant relationship between owner satisfaction and increases in fuel economy for all vehicle types.

The dataset for this analysis included vehicles from model years 2012-2015 and so it includes many fuel-efficient technologies and designs that are identified in the joint TAR. While the analysis does not break out individual technologies, it seems clear that consumer welfare is likely improved from the shift to greater efficiency.

#### Future considerations

As the agencies finalize MY 2022-2025 standards and post-2025 standards are contemplated, Consumers Union urges the agencies to consider which policy mechanisms are warranted in order to reap the fuel savings and consumer benefits envisioned by the program. For example, a minimum efficiency or floor for each footprint size may be necessary to avoid either “footprint creep,” (whereby automakers enlarge vehicles in order to water down their compliance requirements) or heavy cross-class subsidization (whereby automakers rely on improvements to a limited class of vehicles to avoid improvements to other vehicle classes). Setting “backstops” by vehicle size could complement the footprint-based standards to further avoid perverse incentives that undermine safety, and help provide greater market certainty and assurance that the programs’ goals and benefits will be realized.

### **Conclusion**

For the reasons stated above, Consumers Union urges the agencies to move forward with the standards as drafted in 2012 and to consider placing a minimum efficiency requirement by footprint size as part of future standards beyond 2025.

Respectfully Submitted,

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