Consumer Federation of America

FUEL ECONOMY STANDARDS: THERE IS NO TRADEOFF WITH SAFETY, COST, AND FLEET TURNOVER

July 24, 2018 — UPDATE

The Consumer Federation of America is an association of more than 250 non-profit consumer groups that, since 1968, has sought to advance the consumer interest through research, education, and advocacy.

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OVERVIEW

Consumer Federation of America (CFA) has undertaken an analysis of the relationship between increased vehicle fuel efficiency and safety, vehicle cost, fleet turnover, and sales, given these issues are part of the Trump/Pruitt team's stated rationale for freezing gradually increasing fuel efficiency requirements intended to carry through to 2025, at year 2020. The original requirement was a true consensus standard in which the car companies, consumers, environmentalists, unions, and the government came to agreement in 2011 with implementation starting in 2012. Rarely has such an elegant and well thought-out regulatory standard been implemented. What made the original requirements eminently achievable was the sensible connection between the size of the vehicle and its fuel efficiency requirements. Simply put, larger, heavier vehicles have lower requirements than smaller, lighter vehicles. The result enabled consumers to continue to buy, and manufacturers continue to make, whatever size vehicles were desired in the market rather than force either group into making or buying vehicles that didn't meet their needs.

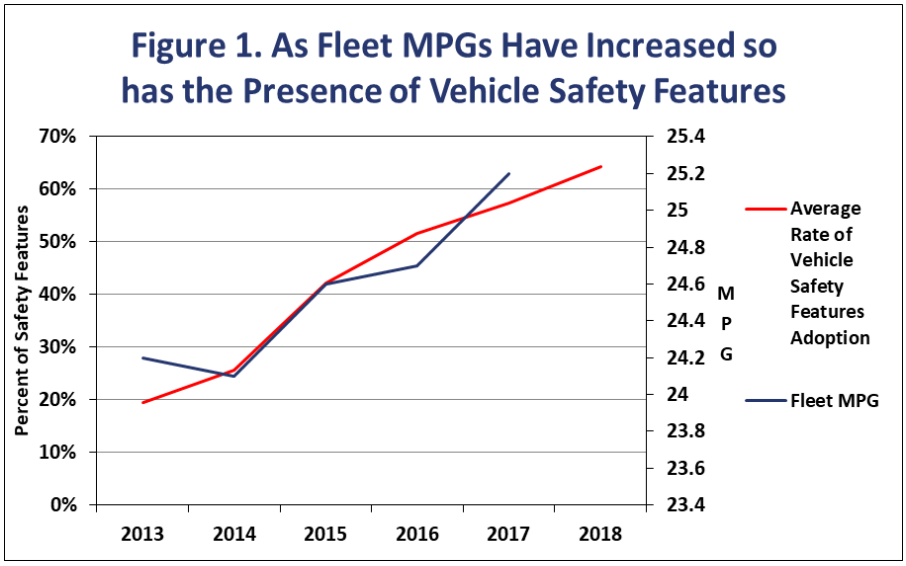
In what amounts to a rollback of well-considered, money-saving standards, the Trump/Pruitt team has said that they jeopardize safety, hamper sales and raise costs. Essentially the automakers are claiming that consumers are not willing to buy more fuel efficient vehicles and that this is hurting manufacturers profits. The Trump/Pruitt team wants to bring to a halt the significant improvements in vehicle fuel efficiency at the year 2020, in an effort to put corporate profits ahead of consumer needs and desires.

This report finds that newer, more fuel efficient vehicles have: 1) more safety features, 2) continue a strong upward trend in sales, 3) provide cost savings that eliminate price increases, and, in fact, 4) sell better as their fuel efficiency increases.

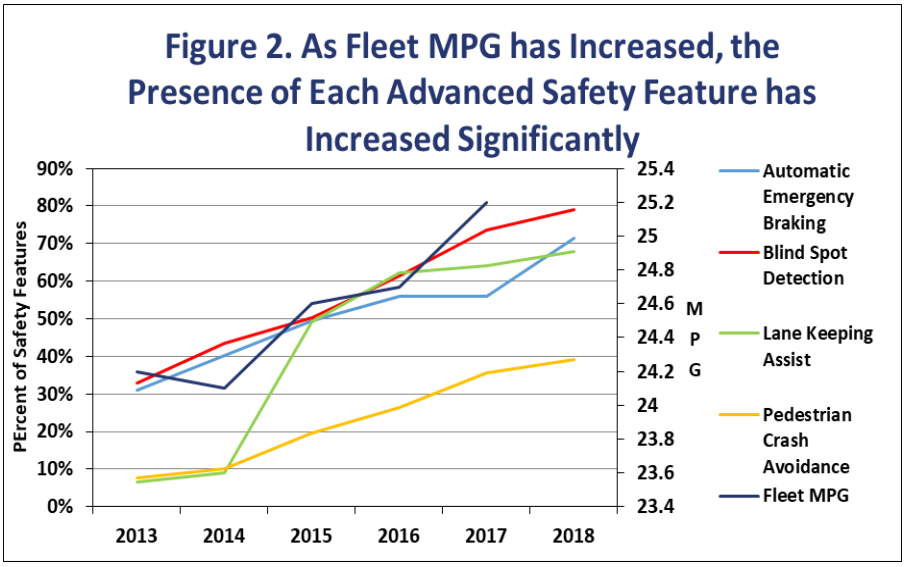
To address the Trump/Pruitt claims, here is what we found is actually happening in the market as fuel efficiency continues to increase:

- The average number of vehicle safety features increased from 19.5 percent to 64 percent since 2013.
- The average fuel economy of "all-new" vehicles increased to 25.1 MPG in 2018 from 21.8 MPG in 2011 (a year before current standards were adopted).
- 2018's "all-new" vehicles include an average of 12.3 advanced safety features such as blind-spot detection and lane keeping assist, compared to an average of 7.4 in 2011.
- Drivers of "all-new" vehicles introduced in 2018, compared to their 2011 models, will save an average of $2,605, which eclipses the average sticker price increase of $2,127. Not only will fuel savings cover any cost of fuel saving technology, but also all of the other costs that go into carmaker price increases such as new safety features, technology and designs.
- Each year for the past five years, an average of 16.9 million new, safer and more fuel efficient vehicles (17 million over the last two years) have been added to the fleet, while an average of 13 million older, less safe and less fuel efficient vehicles have been retired. Along with becoming more fuel efficient, the fleet is becoming safer every year.
- Already, 2018 is projected to be another record year in vehicle sales, with a record 8,617,655 sold in the first half alone, up 1.9% from last year. CFA projects that 2018 will see vehicle sales of 17.4 million.

NEW VEHICLES HAVE BECOME MORE FUEL EFFICIENT AND SAFER



While many vehicles have significantly increased their fuel efficiency over the past five years, the average fleet fuel efficiency has increased from 24.2 to 25.2[1]. At the same time, the average number of high-tech safety features has increased from 19.5 percent to over 64 percent.[2] Today's fleet includes both more fuel efficient vehicles and significantly higher percentages of advanced safety features. The gradually increasing fuel efficiency requirements from 2012 to 2018 did not have any negative impact on the safety of today's vehicles.

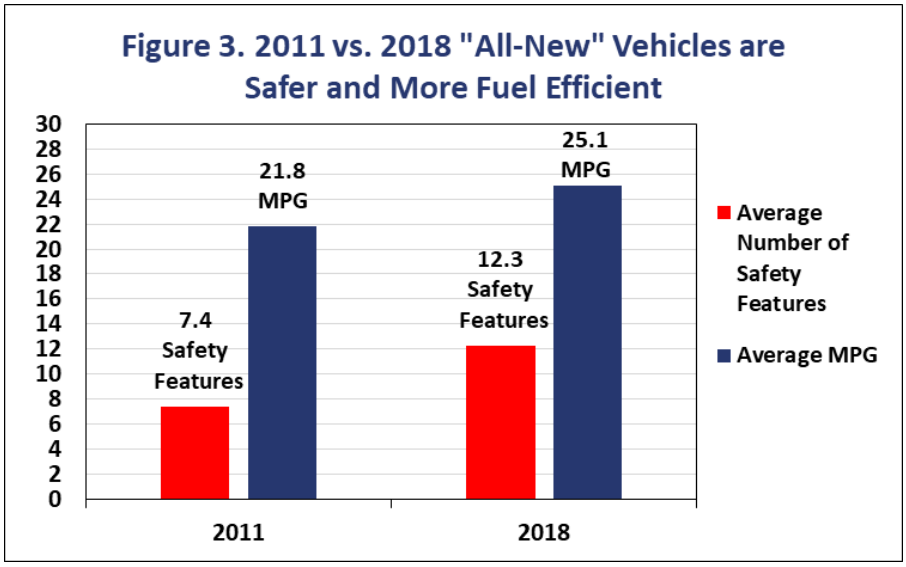


[1] According to the 2017 EPA Fuel Efficiency Trends Report.

[2] We examined the presence of four critical safety features—automatic emergency braking, blind spot detection, lane keeping assist, and pedestrian crash avoidance—and determined the average presence of those features in the 2011 fleet versus the 2018 fleet, using the data from NHTSA's safercar.gov.

Looking at the individual safety features, the presence of each one has increased significantly in the 5 years since the current fuel efficiency standard was implemented. The marketplace has provided consumers with a true "win-win" with money-saving increases in fuel efficiency and, significantly increasing the availability of critical safety features, (in some cases by 10-fold). Today's more fuel efficient vehicles are far safer than their less fuel efficient predecessors.

"All-New" Vehicles Are Leading the Way on Both Fuel Efficiency and Safety Additions



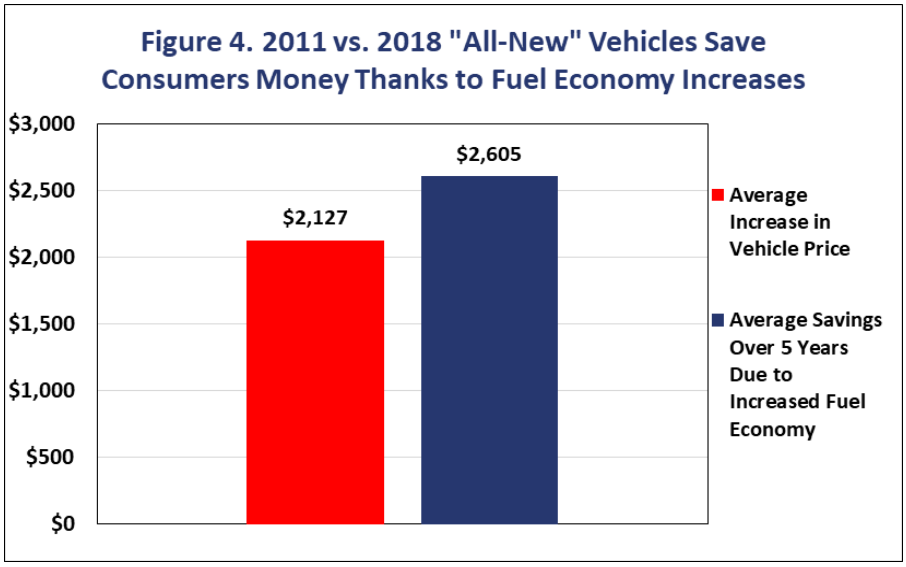
"All-new" vehicles[3] provide the best indication of manufacturers' ability to improve fuel efficiency as these vehicles have been designed and built with the new standards in place. We examined 19 truly "all-new" 2018 models which had a (pre-standard) 2011 version, to see how much they improved in both safety and fuel efficiency. On the safety side, the "all-new" 2018 vehicles contained an average of 12.3 important safety features (out of 15 possible[4]). This is significantly more than the average of 7.4 safety features in their 2011 versions. These same vehicles increased their fuel efficiency by 15 percent from an average of 21.8, to an average of

[3] NOTE: When a car maker introduces an "all-new" model, that version of the vehicle essentially remains the same for about 5 years. During that time, while the car maker will tweak certain aspects of the vehicle, the mechanical underpinnings generally remain the same. As such, it is difficult to make any significant improvements in the fuel efficiency of that particular vehicle during its model series. On the other hand, each year manufacturers introduce 25-30 truly "all-new" versions of their vehicles and that's when they have the opportunity to incorporate the latest fuel saving technology and significantly increase the vehicle's fuel efficiency. For this part of the report, CFA looked at the models that were "all-new" for 2018, that is, significantly redesigned, and compared them with their pre-standard predecessors (2011 models). There were 19 "all-new" models that had 2011 predecessors.

[4] The 15 features we reviewed included Head Airbag, Torso Airbag, Knee Airbag, Roll Sensing, Stability Control, Frontal Collision Warning, Collision Avoidance, Lane Departure Warning, Lane Keep Assist, Blind Spot Detection, Auto Crash Notification, Day Running Lamps, Dynamic Head Restraints, Pretensioners, and Adjustable Front Belts using data from NHTSA's safercar.gov.

25.1 MPG[5]. Clearly, when it comes to vehicles designed and built after the standards were in place, they were not only more fuel efficient, but contained significantly more safety features. The Trump/Pruitt claims that somehow the fuel efficiency standards are impinging on vehicle safety is absolutely the opposite of what is happening. Not only are these "all-new" vehicles significantly improved in safety and fuel efficiency, but their sales are expected to be 40 percent[6] higher than their previous versions.[7] Consumers are voting in the marketplace for both increased fuel efficiency and safety.

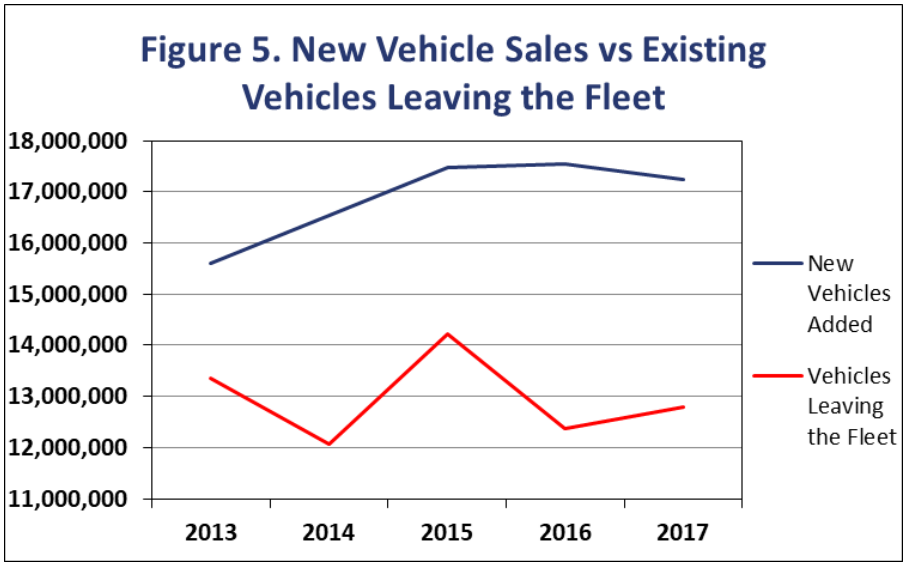
GAS SAVINGS ELIMINATE "ALL-NEW" VEHICLE PRICE INCREASES



The average price of "all-new" vehicles introduced in 2018 increased by $2,127[8] from 2011 but these vehicles will save consumers an average of $2,605[9] over 5 years due to increased fuel efficiency. So not only will the fuel efficiency savings cover the minor technological costs associated with better mileage, but they also cover all of the safety features, design improvements, new features and new electronics in these vehicles, which make up the normal year over year price increases. Thanks to the fuel economy standards, the increased MPG of the "all-new" 2018 vehicles enables the gas savings alone to more than make up for all of the additional costs. And as gas prices start going back up, the savings will be even greater. They are already up 12 percent since January 1st, and 17 percent since a year ago. Instead of increasing the cost for consumers as the Trump/Pruitt team suggests, the fuel efficiency standards actually underwrite all of the cost increases that typically occur as "all-new" vehicles are introduced.

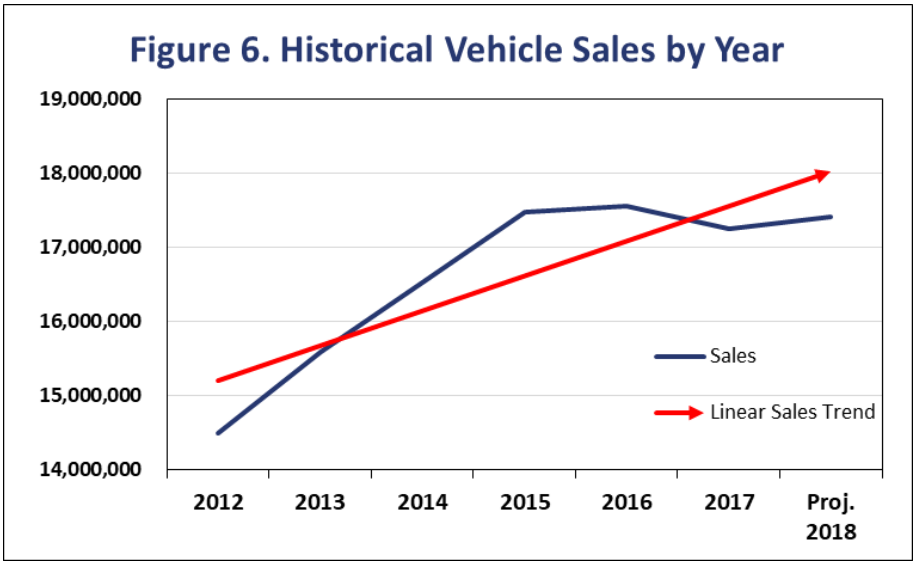
[5] Based on EPA estimates for these vehicles.
[6] Based on an extrapolation of 2018 first quarter year-to-date sales data from Auto News.
[7] Based on Auto News sales data.
[8] Using MSRP from the New Car Cost Guide and eliminating inflation.
[9] Using AAA average national gas price as of 5/7/018.

Fuel Efficiency Improvements Do Not Cause More Unsafe Vehicles to Remain in the Fleet



The Trump/Pruitt team implies that fuel efficiency standards are causing more unsafe vehicles to remain in the fleet. Nothing could be further from the truth. In fact, each year, for the past five years, an average of 16.9 million new, safer vehicles have been added to the fleet[10] while an average of 13.0 million older, less safe vehicles have left the fleet[11]. As a result, each year there will be fewer and fewer older and less safe vehicles on the road. The simple fact is that the fleet is getting safer as the number of newer, safer cars entering the fleet is significantly greater than the number of older less safe cars leaving the fleet.

Vehicle Sales are Continuing Their Upward Trend as Fuel Efficiency Increases



[10] Based on Auto News sales data.
[11] According to vehicle registration data from the U.S. DOT.

The claim that fuel efficiency standards have hurt vehicle sales is simply false. Every year since the 2012, when the standards were first put into place, vehicle sales have steadily increased (with a small correctional slump in 2017). They've gone from 14.5 million in 2012, to a high of 17.6 million in 2016, for an overall increases of 19% by 2017.[12] Looking at 2018, first half vehicle sales of 8.6 million are up by 1.9 percent from 2017, almost matching the all-time record for first half vehicle sales reached in 2016.[13] Using the 2018 first quarter sales of 8.6 million, we project[14] that 2018 could see 17.4 million sales, over 200,000 more vehicles than 2017. Therefore the Trump/Pruitt team's claim that the standards need to be revisited due to a slowdown in vehicle sales is completely false.

CONCLUSION

The administration's woefully misguided plan to freeze fuel economy standards, at the behest of auto companies, using concerns about safety, cost and reduced sales will actually cause consumers to pay more and lower auto sales. Vehicles manufactured under the current standards are safer and more fuel efficient than ever before. In addition, thanks to the higher MPG requirements, the fuel savings of "all-new" cars offset any increases in vehicle retail pricing. The result is continued record setting sales for the auto industry, which has contributed to both record industry profits and pocketbook savings for consumers. The gradual increase in the fuel economy standards through 2025 needs to go forward—freezing them will cost consumers, harm auto sales, make U.S. cars less competitive globally, and ultimately hurt our economy.

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[12] Based on Auto News sales data.
[13] Based on Auto News sales data.
[14] To project the full 2018 vehicle sales, CFA calculated the average percent of sales of yearly sales from 2012 to 2017 that are sold in the first half of the year (49.5 percent).