



**Consumer Federation of America**

# **Consumer Attitudes Towards the Rollback and Freeze of Fuel Economy Standards**

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## Table of Contents

EXECUTIVE SUMMARY .....	2
INTRODUCTION.....	5
1. American Attitudes Toward Fuel Economy Standards .....	9
Support for Fuel Economy Standards .....	9
Past Surveys .....	10
Changes in Support for Specific Levels of Standards.....	11
2. Political Orientation and Support for Fuel Economy Standards .....	13
3. Analysis of Public Opinion on Fuel Economy Standards on the State Level ..	15
Current Survey Results by Various Categories of States.....	16
The 2018 Survey .....	17
4. Consumer Attitudes About Fuel Economy .....	18
Importance of Mileage in Purchase Decisions.....	18
Expected Mileage of Next Car Purchased .....	19
Impact of Efficiency on Automakers .....	20
5. Support for Standards and Payback Periods .....	22
6. Multivariate Approaches.....	25
Multiple Regression .....	25
Examination of “Inconsistent” Responses .....	26
CONCLUSION.....	31
APPENDIX A.....	32

*[The Consumer Federation of America](#) is a national organization of more than 250 nonprofit consumer groups that was founded in 1968 to advance the consumer interest through research, advocacy, and education.*

## EXECUTIVE SUMMARY

In the Consumer Federation of America's most recent survey of public opinion<sup>1</sup>, there is broad, intense and consistent support for federal fuel economy standards in all states and across all political orientations. Respondents who are Democrats (92%) and independents who lean democratic (89%) almost universally support the standards, followed by independents (72%). Even among Republicans, there is significant support for the standards with two-thirds (66%) of respondents supporting the standard. Over 12 years of public opinion polling by CFA shows that consumers have consistently supported fuel economy standards. Even when gas prices rise and fall, corresponding support changes only slightly.

The results of this latest research are particularly important as the Trump Administration implements plans to roll back fuel economy standards that have been in place since 2012 and are on track to raising overall vehicle fuel efficiency to 40 MPG by 2025. These standards, agreed to in 2012 by one of the most diverse set of stakeholders in regulatory history (car companies, environmentalists, consumer groups, scientists, and unions) are clearly achievable and will protect consumer pocketbooks, U.S. car sales, and the environment. As this report will demonstrate, there is no conceivable reason to roll back the standards other than to fill the coffers of the oil industry.

When respondents to CFA's latest survey were asked if they supported a rollback, Democrats (23%) and independents leaning Democrat (28%), supported the rollback of the current standards. A slightly higher number of independents (46%) support the rollback of the standards, while Republicans (71%) and independents leaning Republican (69%) support the rollback and freeze of the current standards. The contradiction between support for the standards and support for the rollback shows conflict among the respondents. While this contradiction is present among all groups, it is particularly present among Republicans and independents leaning Republican. While Republicans 33% of all respondents, they make up 46% of the group of respondents that supports standards and the rollback. In looking at responses from those identifying as Democrats we found little

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<sup>1</sup> The survey was conducted for CFA by Engine Group's CARAVAN® by cell phone and landline on March 7-10, 2019, using a representative sample of 1001 adult Americans. The survey's margin of error is plus or minus 3.1 percentage points.

conflict with supporting the standard (92%) and supporting a rollback of the standard (23%). However, those identifying as Republicans were significantly conflicted with 66% supporting the standard and 71% supporting the rollback. One interpretation of these results is that Republicans DO want a standard and more fuel efficient vehicles, but their long-standing approach to government is to always call for less regulation. In their efforts to roll back the fuel economy standards, the Trump Administration is likely ignoring the overarching need among Republicans for more efficiency and mistakenly focusing on the “old-school—all regulations are bad” position.

What is particularly ironic about the Trump rollback, which the President says is to help the car companies, is that a strong majority of all respondents (74%) believe that if American auto makers made more fuel-efficient vehicles, they would sell more. This belief is also held by 59% of Republicans, and 67% of independents leaning Republicans.<sup>2</sup> In addition, when these two groups were asked what gas mileage, they would like their next vehicle to get, Republicans stated 33, which is above the Trump Administration’s proposed rollback and independents leaning Republican wanted 37, which is far above the Trump plan and very close to the current standard set for 2025.

Our research also examined consumer attitudes on the state level. In those states whose economies are heavily dependent on the auto industry, Indiana, Michigan, Missouri, and Ohio, have stronger support for fuel economy standards (77%) than consumers across the country. This is a clear indication that the citizens of those states know firsthand what happens to their states’ economy when fuel inefficient vehicles don’t sell, as was the case in 2008. They suffered first hand when poor fuel economy meant acres of unsold vehicles and expensive government bail outs.

Our detailed economic analysis of the current fuel economy standards implemented in 2012,<sup>3</sup> the entire 40 year history of fuel economy and our

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<sup>2</sup> In fact, these respondents are correct. In a recent CFA analysis of the relationship between fuel efficiency and sales *SUVs, Crossovers and Pickups with High Mpg Percent Increases Sell Better* (August 15, 2018) we confirmed that increasing fuel economy resulted in a corresponding increase in sales.

<sup>3</sup> The national standard on greenhouse gas emissions (GHG) and light-duty vehicle fuel economy was developed by the Environmental Protection Agency (EPA), the National Highway Traffic

preliminary analysis of the Trump proposal to roll back the standard<sup>4</sup> all provide extraordinary evidence of why consumers are right to support the standards and oppose the rollback. In fact, the proposed rollback will drain consumer pocketbooks of a half a trillion dollars of cost savings over the next few decades. These are savings that will end up in the coffers of the oil industry instead of being used to stimulate the U.S. economy.

The Administration's proposed rollback and freeze of the standards, misleadingly called SAFE (Safer Affordable Fuel-Efficient Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks), is not only uneconomical and unpopular, but it violates the Administrative Procedure Act (APA) because of its severely flawed analysis. By totally disregarding current and historical evidence, the proposed rollback will hurt Americans financially, reduce auto sales, and harm the environment. In addition to being a violation of the APA, it also violates the underlying statutes that govern EPA and NHTSA in setting standards.

While there are numerous empirical and technological reasons not to roll back the standards, because the auto industry is now a global market, such an action would again have America's car companies losing out internationally as the rest of the world focusses on significantly improving vehicle fuel efficiency.

Americans, regardless of their political inclinations, don't want a roll back. A roll back would severely disadvantage American car companies; continue our dependence on oil; take money that could be used to stimulate the economy out of consumer pocketbooks; and further hamper efforts to address climate change. In a thoughtless effort to deregulate, the Trump Administration has created a situation where each and every stakeholder is going to suffer losses.

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Safety Administration (NHTSA) and the California Air Resource Board (CARB) with the express purpose of unifying emissions and fuel efficiency standards across the country. This is often referred to by the industry and regulators as the "Single National Standard" or "One National Program."

<sup>4</sup> The Trump Administration's roll back effort is called SAFE (Safer Affordable Fuel-Efficient Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks)

## INTRODUCTION

The Consumer Federation of America (CFA) has been sampling public opinion on fuel economy standards for over 12 years. The surveying began in 2007, just before the passage of the Energy Independence and Security Act (EISA). These surveys consistently found strong support for standards as do CFA's two surveys since the Trump administration began to address the fuel economy standards. The results of the two most recent surveys (2018 and 2019) add key insights in several ways.

Over the past decade, the Consumer Federation of America has examined public opinion about both vehicle fuel efficiency and the regulation of fuel efficiency. During this process, the survey questions have varied slightly due to the policy issues being considered at the time. It is clear that over the last decade consumers have consistently supported a desire for both fuel-efficient vehicles and regulatory efforts to improve fuel efficiency.

Given the significant impact that gas costs have on household budgets, the volatility of gas prices and consumers' desire for technological improvements in the products they buy, it is no surprise that consumers want more fuel-efficient vehicles. On the other hand, bringing about those improvements has been a challenge, as the auto industry, and specifically the U.S. manufacturers, have, until 2012, generally opposed regulations requiring improvements. It wasn't until the economic disaster which befell GM, Chrysler and Ford during the days of skyrocketing gas costs (2008-2009), when fuel inefficient vehicles sat on dealer lots for months, that the car companies saw the wisdom of joining an extraordinary collection of stakeholders to come to consensus on a regulatory plan. The National Program set the goal of creating a fleet of vehicles that reached about 42 MPG<sup>5</sup> by 2025. Never before had car companies, unions, consumer advocates, environmentalists, suppliers, transportation companies and other industries been so unified on regulatory policy.

In spite of the strong consumer demand for more fuel-efficient vehicles and the fact that car companies are fully capable of complying with the standards they agreed to in 2012, automakers asked President Trump to roll those standards back.

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<sup>5</sup> CFA uses the EPA "real-world" sticker MPG conversion of the 54.5 MPG by 2025 number based on the DOT CAFE standard.

The juxtaposition of this request in the face of recently rising and volatile gas prices shows both a disregard for the economic welfare of America's already financial beleaguered households and extremely poor business judgement.

Over the course of 2017, it became clear that the agencies with responsibility for energy efficiency intended to dramatically reduce standards. However, we showed in a 2017 report entitled [\*Pocketbook Savings, Macroeconomic Growth and Other Public Benefits of Fuel Economy Standards\*](#) and in our following report entitled [\*An Analysis of Consumer Savings and Automaker Progress On the Road to 2025 CAFE Standards\*](#) that car companies were not only on the road to full compliance, but increasing fuel efficiency increases car sales. However, by 2018 the direction of Trump policy was clear and we presented a historical look at the most important reason for improving vehicle fuel efficiency – consumer desire for more fuel-efficient vehicles.

Beginning in 2018, our surveys started to address the Administration's proposal to rollback and freeze the fuel economy standards, which we continue to do in 2019, calling these our "Trump era" survey's

This is a unique moment in the history of the fuel economy standards. After half a decade of remarkable success, the Trump Administration has proposed to abandon the process of steady increases in fuel economy, which was initiated after President Bush rebooted the CAFE program by signing EISA. This change in direction is not supported by public opinion.

In 2018 we deepened the analysis by conducting a very large survey,<sup>6</sup> with comparable national and state-by-state sampling to examine public opinion about key aspects of the debate. As such, we were able to:

- Ask specific questions about current policy issues, as well as long term general questions;
- Do intensive analysis of different types of states combining a national random sample telephone survey with an online survey conducted in 4 automotive states;

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<sup>6</sup> Mark Cooper, Jack Gillis, *Report On Consumer Attitudes Toward Fuel Economy Standards* (Consumer Federation of America, September 2018).

- Analyze the responses across political identification to questions in both the national and auto state surveys.

The recent 2019 survey not only follows that template, it adds new data. We have brought back questions about the mileage respondents would like to get in their new vehicles, which allows a comparison of what consumers want and what the administration has proposed for vehicles. We have also repeated questions about consumer attitudes toward the “payback period” associated with the fuel economy standards, in other words the time it takes for lower gas expenditures to cover the increase in vehicle price associated with the fuel saving technology. This was a central point of discussion and debate in the freeze and rollback proposal and regulatory comments.

Our most recent and historical analysis of consumer attitudes is included in this report as follows:

**Section 1: American Attitudes Toward Fuel Economy Standards** analyzes attitudes toward standards in the overall population, including a long-term historical review. In addition to our repeated question about support for standards, in 2018 we added a second question about standards relating to the rollback proposed by the Trump administration.

**Section 2: Political Orientation and Support for Fuel Economy Standards** analyzes attitudes toward standards across the political spectrum, using self-identified political orientation. The Administration’s proposed rollback to the 2020 level through 2026, is very substantial, fixing the standards a full 24% below the current standard which goes through 2025. We also analyze the striking difference in the “inconsistency” of responses towards general support for the standards versus the Administration’s proposed rollback of the standards across political orientations.

**Section 3: Analysis of Public Opinion on Fuel Economy Standards on the State Level** analyzes the attitudes toward standards in different types of states, clean car, climate aware, automotive and other.

While the previous sections focus on standards, the next set of analyses focuses on individual attitudes toward vehicles.



**Section 4: Consumer Attitudes about Fuel Economy** were explored in four questions to ascertain consumer attitudes toward fuel economy. The first three of these are discussed in this section.

First, we asked consumers how important mileage is in their vehicle purchase decision.

Second, we asked about the mileage they hope to get in their next vehicle purchase.

Third, we asked whether they think improving fuel economy is good for automakers.

**Section 5: Support for Standards and Payback Periods** analyzes two questions to ascertain consumer willingness to pay for fuel economy technology with 3-year and 5-year payback periods. The payback period is the time it takes for the increased cost of the vehicle due to energy saving technologies to be offset by the reduction in gas expenditures. Over the years we have tested various “payback time frames”. In the 2019 survey we asked about 3-year and 5-year payback periods.

Throughout the analysis, we include in each section information on the historical patterns of attitudes. This enables us to establish the context for the impact of the dramatic change in fuel economy standards by the Trump Administration.

**Section 6: Multivariate Analysis is presented in two ways.** First, the responses to the attitudinal questions are examined in a standard, multiple regression framework. Second, we consider the apparent conflict between responses to the support for standards/support for rollback across categories of political identification.

# 1. American Attitudes Toward Fuel Economy Standards

## Support for Fuel Economy Standards

In the most recent (March, 2019) survey, we asked two questions on fuel economy. First, was a general question on support for standards<sup>7</sup> which we have asked for over a decade. In prior surveys we frequently confirmed support for the standards, as discussed below with questions on support at specific payback periods.<sup>8</sup> In the recent period, we have added a question on support for the rollback of standards.<sup>9</sup>

Throughout this analysis we drop the “don’t know/refused” responses to the questions about attitudes and expectations. Generally, the percentage of respondents who did not offer an opinion was between 3 and 8 percent for each question.<sup>10</sup>

In our most recent survey conducted from March 7-10, 2019, by ORC International, as shown in Figure 1.1, we found almost eighty percent of respondents support fuel economy standards (46% strongly) compared to 22 percent who oppose standards (11% strongly). Thus, while supporters outnumber opponents by a margin of 3.5-to 1, strong supporters outnumber strong opponents by over 4-to-1.

There are very few statistically significant differences between demographic groups in support for standards, however, education does have a large effect. Those with at least some college express much more strong support (50%) than those who have a high school or less education (29%).

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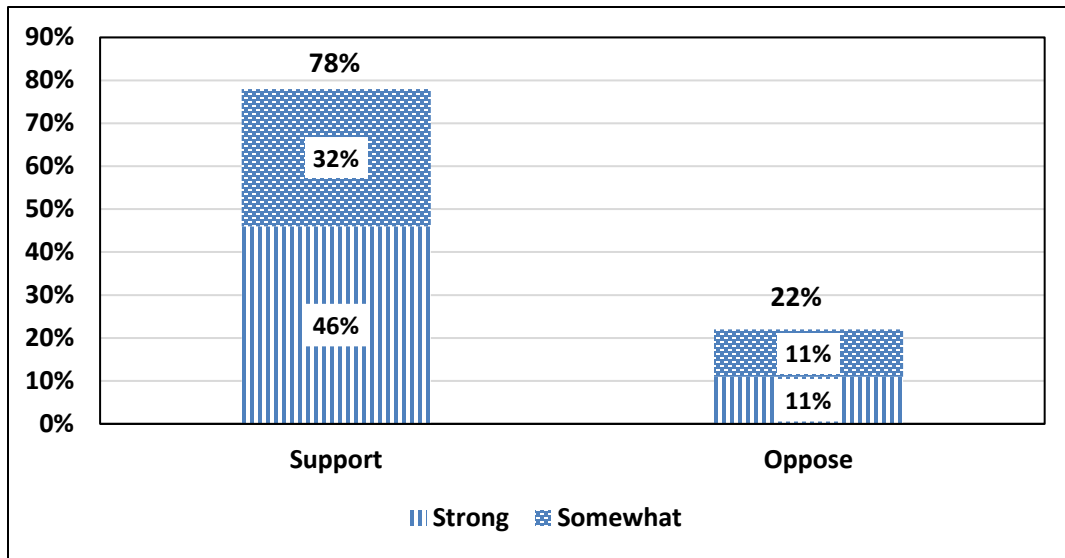
<sup>7</sup> Appendix A, question 1.

<sup>8</sup> Id., questions 6 and 7

<sup>9</sup> Id., question 2.

<sup>10</sup> In the 2019 survey, for example, 4% of respondents did not give an opinion about standards or the rollback. The respondents who answered one of the questions dealing with standards but not the other look very much like the respondents who answered both. About 67% who answered the support question but not the roll back question, support standards. In contrast, only about 44% of those who answered the roll back question but not the support question support the roll back.

**Figure 1.1: 2019 Consumer Support for Federal Fuel Economy Standards**

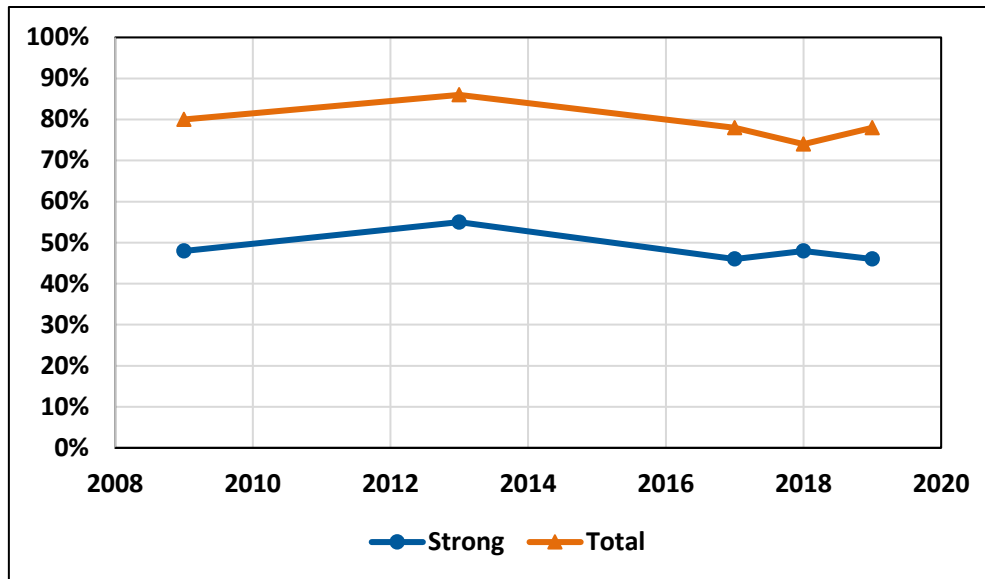


### Past Surveys

Since we began conducting public opinion polls in 2007, the overall trend of consumers supporting fuel economy standards has been increasing, as shown in Figure 1.2.<sup>11</sup> Even during the recent years of lower gas prices, the level of support has remained strong and consistent. In our 2019 survey, increasing federal fuel economy standards for cars and light duty trucks, to approximately 40 MPG by 2025, rather than reducing them to about 30 mpg, is supported by 78% of Americans. Clearly support has declined somewhat in the “Trump era,” but still remains substantial and in the 75% range.

<sup>11</sup> The trend provides a good fit, explaining 43% of the variance. % supporting = .0197(year) +.5649,

**Figure 1.2: Consumers Historically Support Fuel Economy Standards**



## Changes in Support for Specific Levels of Standards

In addition to the broad support for standards that we have observed over the last 12 years of surveying public opinion, we began surveying attitudes toward raising standards to specific targets in 2011 as the government was developing the 2012 CAFE standards. In two surveys conducted in 2010<sup>12</sup>, we found a clear majority of respondents supported setting the standard for 2025<sup>13</sup> in the range of 38 miles per gallon (65% in March 2010) and 46 miles per gallon (59% in September 2010).

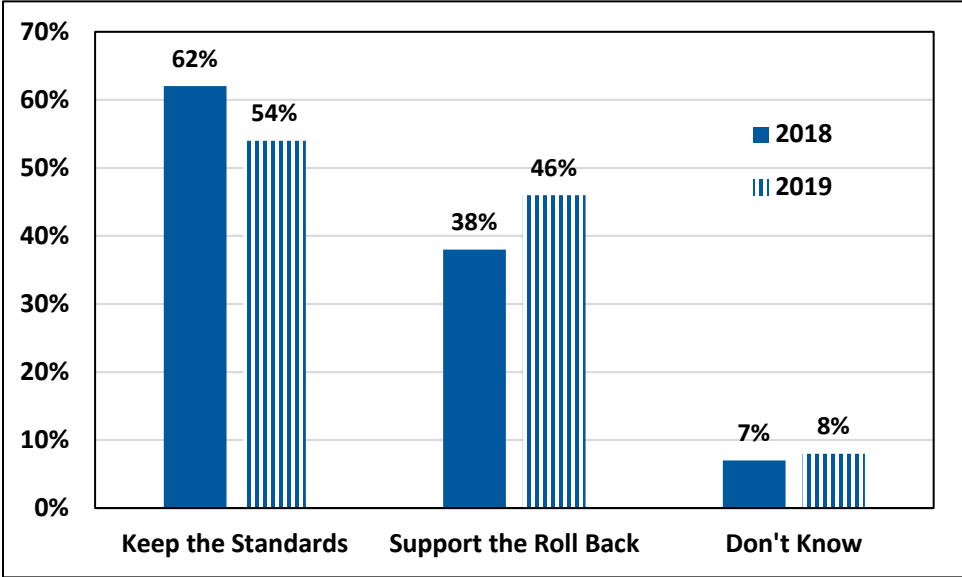
In the last two years the government has shifted from increasing standards to decreasing standards. Starting in CFA’s 2018 survey, in addition to asking about general support for fuel economy standards, we also asked about support for rolling back the standards. As shown in Figure 1.3, the rollback of standards has been opposed by a majority of respondents in both our 2018 and 2019 surveys. We do note that the support for the rollback is lower in response to this question

<sup>12</sup> Mark Cooper, *Issue Brief: Public Support for a 60 Mile per Gallon Fuel Economy Standard* (Consumer Federation of America, September 2010), p. 2 (hereafter *2010 Issue Brief*).

<sup>13</sup> In this analysis, our MPG figures are based on the EPA expected mileage ratings that appear on vehicle window stickers and published by the EPA as predictors of actual mileage. This is opposed to the CAFE figures which are based on laboratory tests and do not reflect actual expected mileage. There is a proven relationship between the two numbers, which track each other.

than is the support for the standards. The difference raises a question about the inconsistency between responses i.e. respondents who support standards and a rollback. We will examine this in Section 2: Political Orientation and Support for Standards, after we examine difference across political orientations in the following section.

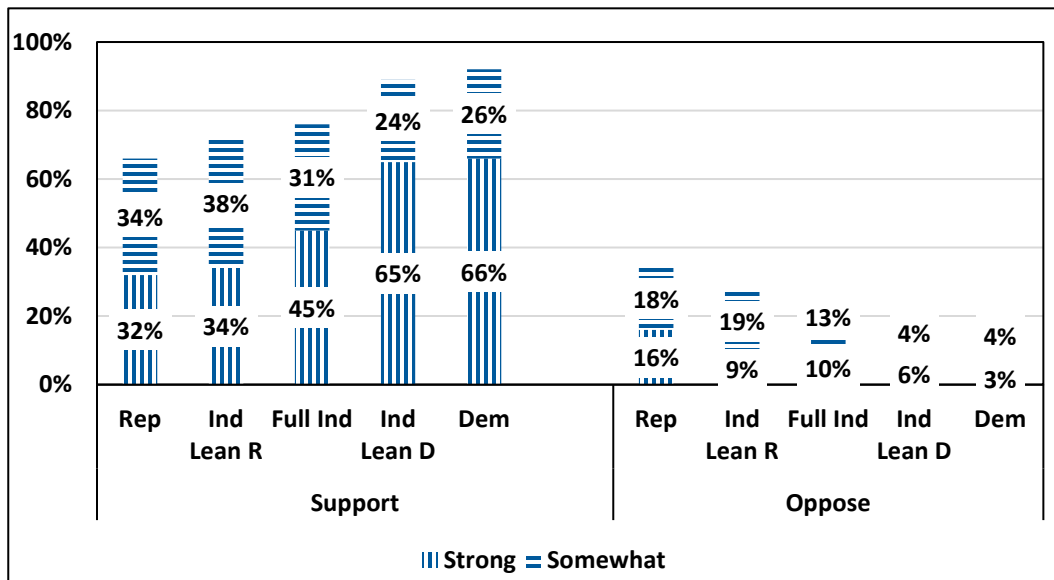
**Figure 1.3: Attitudes Toward Rollback of Standards**



## 2. Political Orientation and Support for Fuel Economy Standards

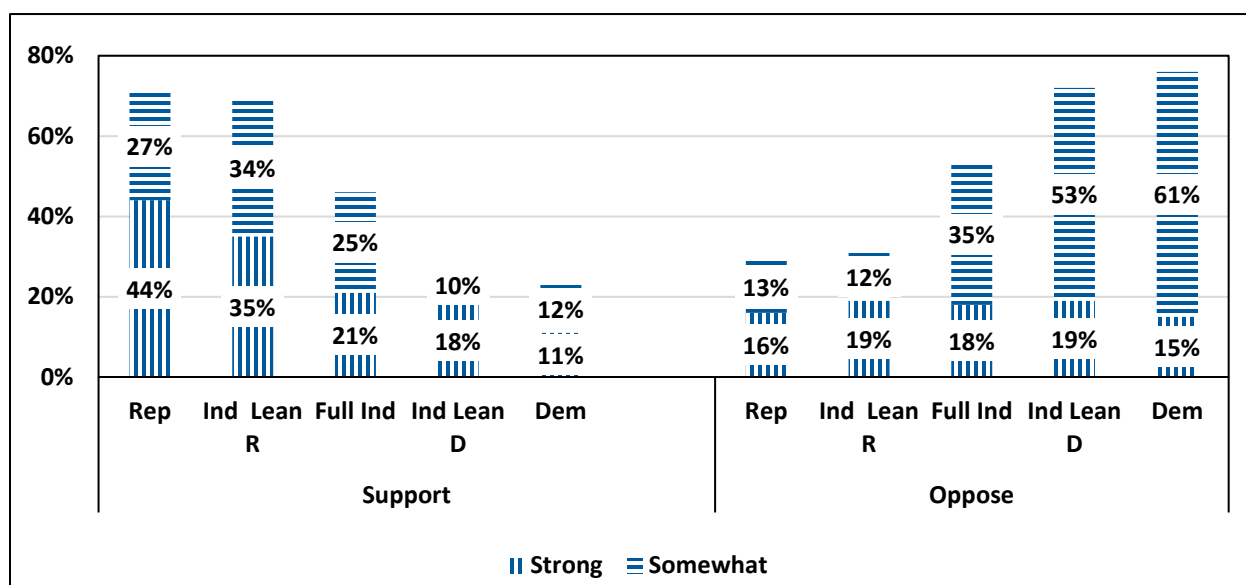
In the current (March, 2019) survey, support for the standards remains bipartisan, as it has always been. Using only respondents who offered an opinion, we find that while 78% of all respondents support standards, as shown in the previous Figure 1.1. 66% of Republicans and 72% of independents leaning Republican support the standards. 76% of independents also support the standards. On the Democratic side, independents leaning Democrat (89%) and Democrats (92%) express a much higher support. The level of strong support is also quite high among all groups, with 32% of Republicans and 34% if independents leaning Republican strongly supporting the standards, while 45% of independents do and very large majority of independents leaning Democrat (65%) and Democrats (66%) do.

**Figure 2.1: 2019 Support for the Standards Across the Political Spectrum**



In the current survey CFA also asked about support for the rollback of the standards, which unlike support for the standards is highly partisan. Using only respondents who offered an opinion, we find that while 50% of all respondents oppose rolling back the standards. 71% of Republicans and 69% of independents leaning Republican support the rolling back the standards. 46% of independents also support the rollback. On the Democratic side, independents leaning Democrat (28%) and Democrats (23%) express a much lower levels of support.

**Figure 2.2: 2019 Support for Rollback of Standards Across the Political Spectrum**



All the analyses of the political identification include all of the respondents, with the respondents who fell in the “don’t know, Refused” counted as full independents. Examination of their responses to all seven of the attitudinal questions showed that they were very much like the full independents.<sup>14</sup> Figures 2.1 and 2.2 present a potential inconsistency (or conflict) between support for standards and support for rollback. We discuss this in Section 5, where we show that Republicans make up a disproportionate share of this the “inconsistent”

<sup>14</sup> On six of the seven questions used to assess attitudes towards standards and fuel economy, the differences in the responses of the full independent and refused categories are not statistically significant. The one exception is the importance of fuel economy question where full independent were more likely to say it is important (55%) than among the “refused,” category. This difference is significant at the 5% level.

### 3. Analysis of Public Opinion on Fuel Economy Standards on the State Level

In order to examine public opinion about standards and the current policy debate on the state from a geographic, industry and political level, CFA has broken up its 2019 national survey data in various ways as follows:

**Figure 3.1: Groups of States Used for Analysis**

<p><b>Clean car states</b> are those that have adopted the standard set by California which is allowed under the Clean Air Act.</p> <p><b>Climate concerned states</b> are those states in which mayors of major urban areas have committed to the clean car standards, or the state has joined the Climate Alliance.</p> <p><b>Automotive states</b> are those with a disproportionate share (more than 10%) of their workforce employed in automotive industries.</p> <p><b>Other states</b> are the remainder of the states.</p>			
Category of States	Entities	National Sample in CFA Survey (n)	
		2018	2019
Clean car	CA CO, CT, DC, DE. MA, MD, ME, NJ, NY, OR, PA, RI, VT, WA	350	373
Climate concerned	Mayors, State and Cities: GA: Atlanta, +4, TN: Nashville, Memphis, TX: Austin, Dallas, Houston, San Antonio, AZ: Phoenix, Tucson, +3		
	Climate Alliance States NM. IA, IL, NC, VA, MN	318	300
Auto states	IN, MI, MO, OH	106	120
Other	AL, AR, ID, KS, KY, LA, MS, ND, NE, NH, NV, OK, SC, UT, WI, WV, WY	226	204

In addition to our current (2019) survey, in 2018, we also surveyed Americans in four states whose economies are heavily dependent on the auto industry: Indiana, Michigan, Missouri, and Ohio. This was an online survey of 400 respondents in each state. Because we had the contemporaneous national random sample from our 2019 survey, we compared the group of auto states in our 2018 national poll with the results of our specific state polls. We find that, as a group, the attitudes of the respondents in the four auto states were similar in the national and state level surveys.

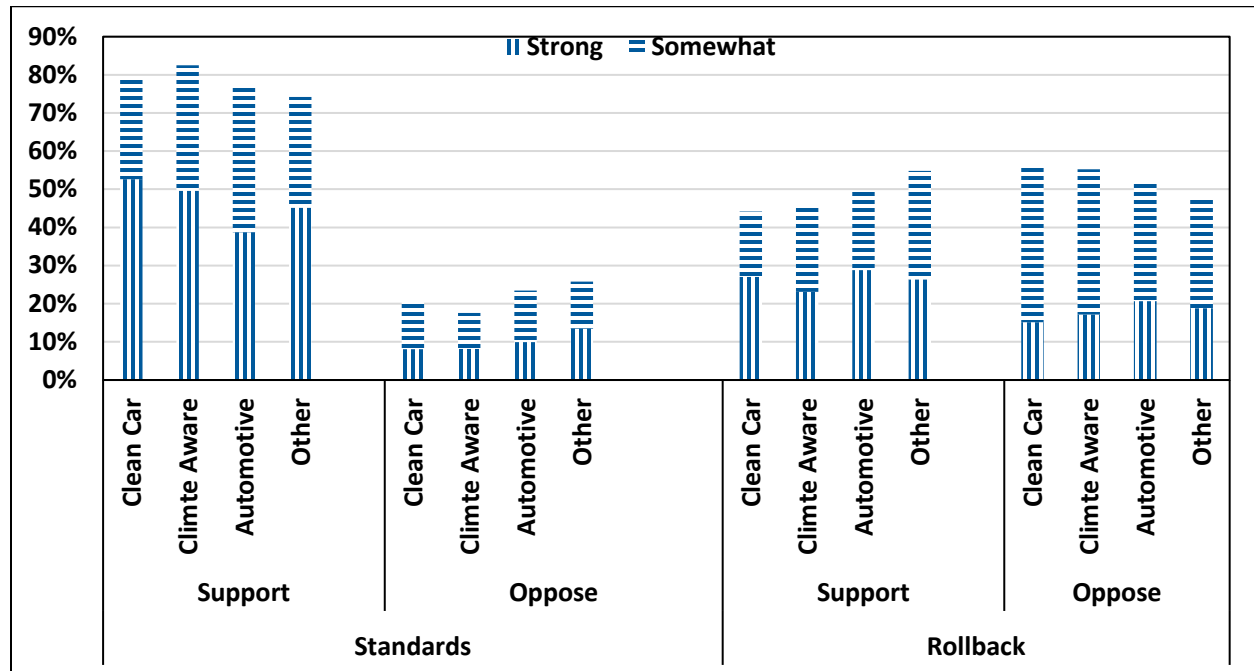


In an earlier, national random sample survey<sup>15</sup> conducted in 2011, we had taken a similar approach to defining groups and comparing results for individual groups. The results of our national random sample were similar across the four groups of state, so we feel confident that these comparisons lead to valid observations.

## Current Survey Results by Various Categories of States

Figure 3.2 shows the results of the various categories of states in response to two questions on attitudes toward standards and rolling back the standards in the 2019 survey. The state results are similar to the overall national survey. A substantial majority supports standards in every group of states. Support for the rollback is a closer call, with small majorities supporting the rollback in the automotive (50%) and other states (58%). However, these differences are not statistically significant compared to the clean car (44%) and climate aware states (46%).

**Figure 3.2: Attitudes Toward Standards and the Rollback across States**



<sup>15</sup> In CFA's 2011 fuel economy survey, we doubled our normal number of respondents from 1,000 to 2,000 in order to get higher levels of respondents in key categories of states.

## The 2018 Survey

In comparing the 2019 survey to the 2018 survey, we found similar results. We observed consistent support for standards in every group of states. In the 2018 national survey, about 70% of respondents supported standards in each group of states. Strong support hovered around 40%, while strong opposition was in single digits for all groups, except the “other” states, where it was 16%. The pattern for the responses to the other questions was similar to the support for standards. None of the differences were statistically significant, except for the response to the rollback question, where the auto states respondents were less opposed to the rollback. The percentage who opposed the rollback still exceeded the percentage that supported it by a substantial margin (49% to 39%).

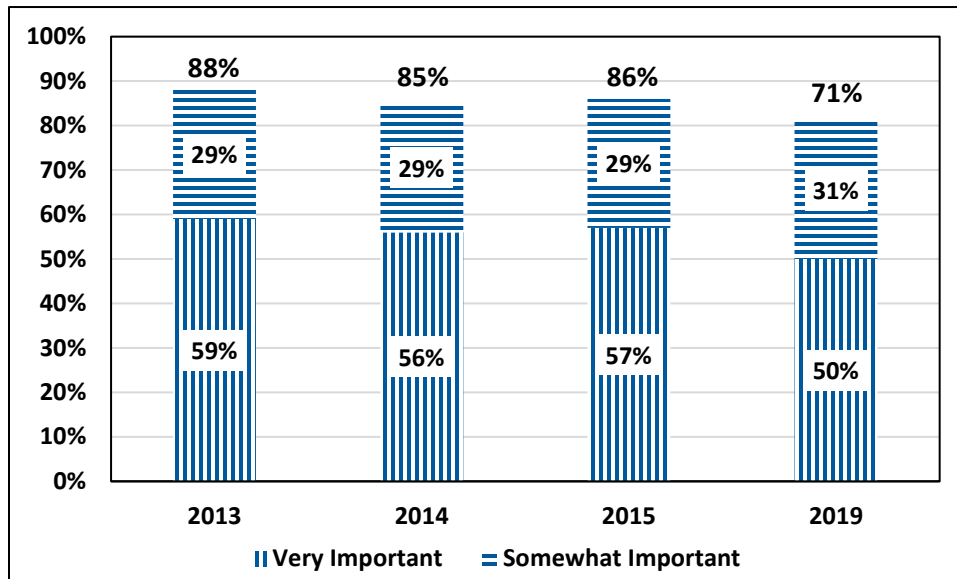
## 4. Consumer Attitudes About Fuel Economy

The preceding analysis focuses on attitudes toward standards across various state groups. In this section we turn our attention to consumer attitudes toward fuel economy and how this affects their attitudes toward standards. Consumer attitudes toward fuel economy are consistent with the above observations about standards in each of the aspects about mileage we addressed.

### Importance of Mileage in Purchase Decisions

Figure 4.1 shows that consumers consider mileage an important consideration in the purchase of their next vehicle.<sup>16</sup> The percentage has consistently been above 80%, with very important above 50%. There has been a slight downward trend in both.

**Figure 4.1: Historic Importance of Mileage in Vehicle Purchase Decisions**

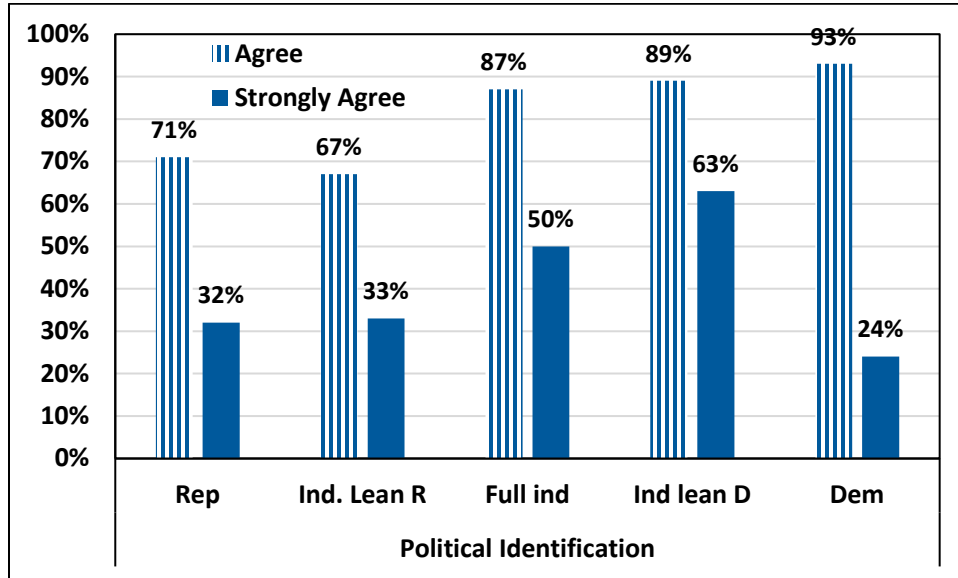


Current attitudes about the mileage for their next vehicle to be purchased are strong across political identification, as shown in Figure 4.2. Over 70% of Republicans and 65% of independents leaning Republican think it is important,

<sup>16</sup> Appendix A, question 3.

with about one-third of Republicans and independents leaning Republican saying it is very important. The percentages increase substantially as we move across the political spectrum, with over 90% of Democrats saying mileage is an important consideration in the purchase of their next vehicle, with over two-third saying it is very important.

**Figure 4.2: Importance of Fuel Economy Across Groups of Respondents**



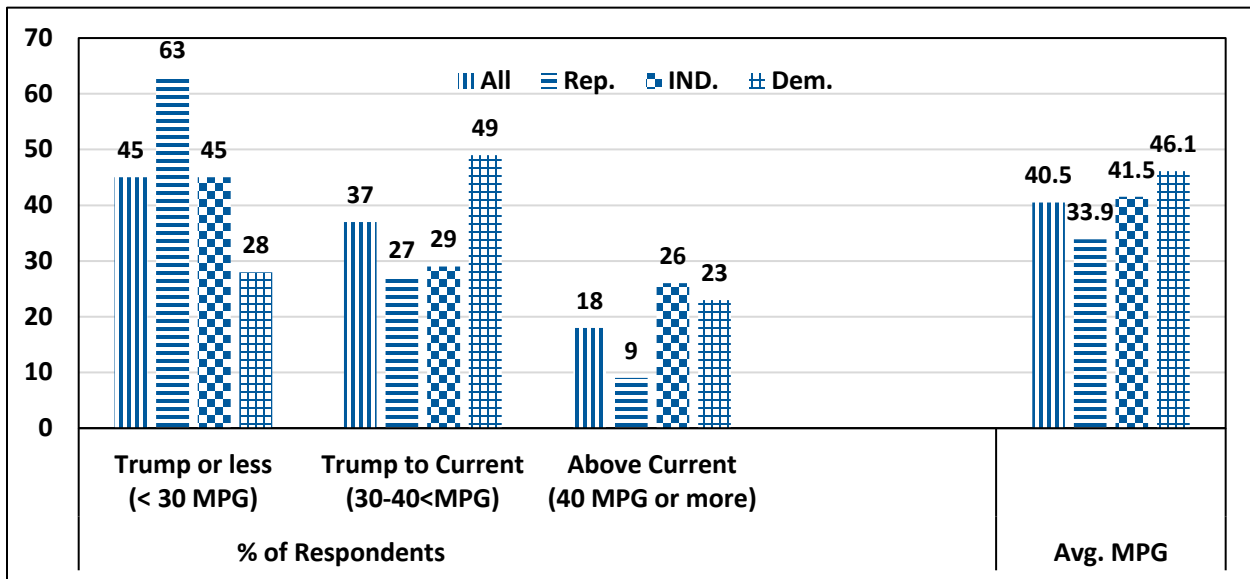
### Expected Mileage of Next Car Purchased

The respondents who stated that fuel economy would be important in their next purchase, unsurprisingly wanted gas mileage that was much higher than those who did not think fuel economy would be an important factor in their next vehicle (see Figure 4.3). Only 45% of all respondents would like to get the Trump target of 30 MPG or less, whereas 55% would like to get more than that. Furthermore, about 18%, like to get more than the current fuel economy target of 40 mpg or higher. Across political identifications 36% of Republicans and independents leaning Republican would like to get more than Trump’s target. This rises to 55% of full independents and 72% of Democrats.

## Impact of Efficiency on Automakers<sup>17</sup>

One of the important issues that is debated when standards are set is the impact on automakers. Over the past decade, our analysis has shown that improving fuel economy helps automakers sell cars. Respondents to the 2019 survey agree with this observation, because they believe “if American auto manufacturers made more fuel-efficient vehicles, they would sell more”.

**Figure 4.3: Expected Mileage of Next Car Purchased**

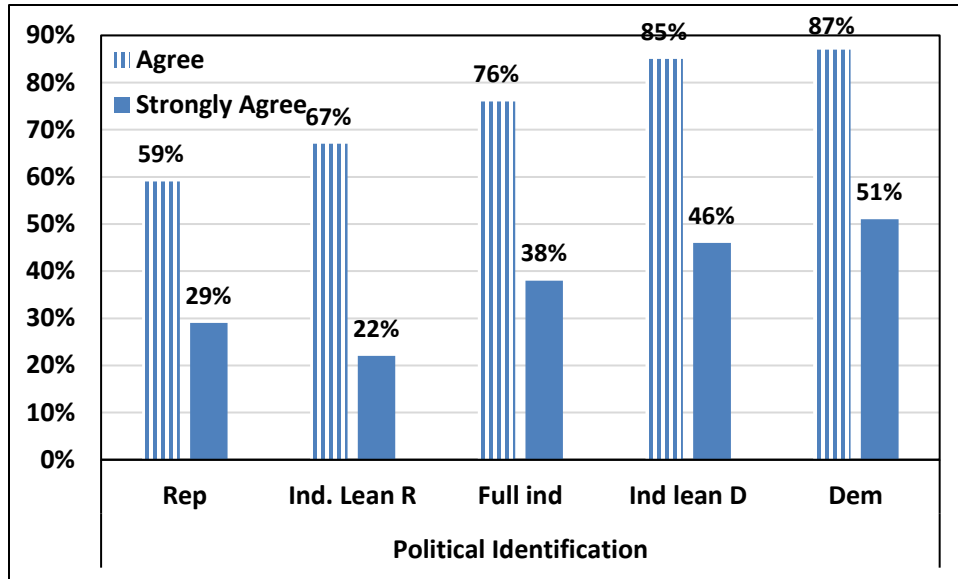


Asked whether making more fuel-efficient cars would increase sales, 74% of respondents agreed (38% strongly).<sup>18</sup> As shown in Figure 4.4, a majority (59%) of Republicans agree with the statement. Democrats almost universally agree (87%), that increased fuel economy would increase automaker sales.

<sup>17</sup> Appendix A, question 5.

<sup>18</sup> Respondents were asked if they supported the idea “If American auto manufacturers made more fuel-efficient vehicles, they would sell more.”

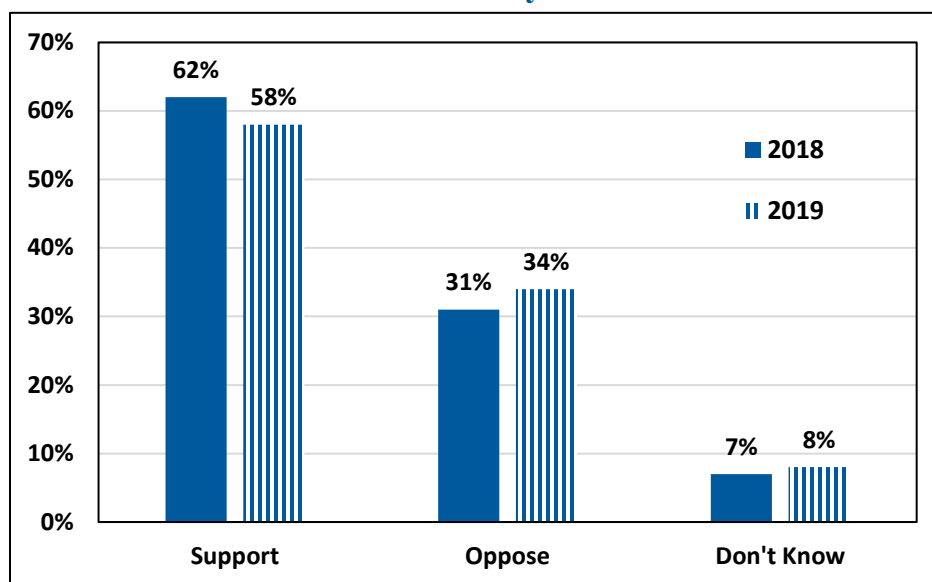
Figure 4.4: Fuel Economy Helps Sell Vehicles



## 5. Support for Standards and Payback Periods

Consumers understand that the technology needed for increasing fuel economy may increase the vehicle purchase cost. To determine if consumers would accept a higher initial price for a vehicle knowing that savings on fuel costs would pay for the fuel economy technology and save money after a payback period, we asked consumers if they would accept a 3-year payback period. In surveys conducted in 2018 and 2019 62% consumers supported a 3-year payback period for vehicles (see Figure 5.1).

**Figure 5.1: Consumers Are Willing to Pay for Fuel Efficiency  
If the Cost of Fuel Economy Technology took 3 Years to Pay Back, Would that be Okay?**

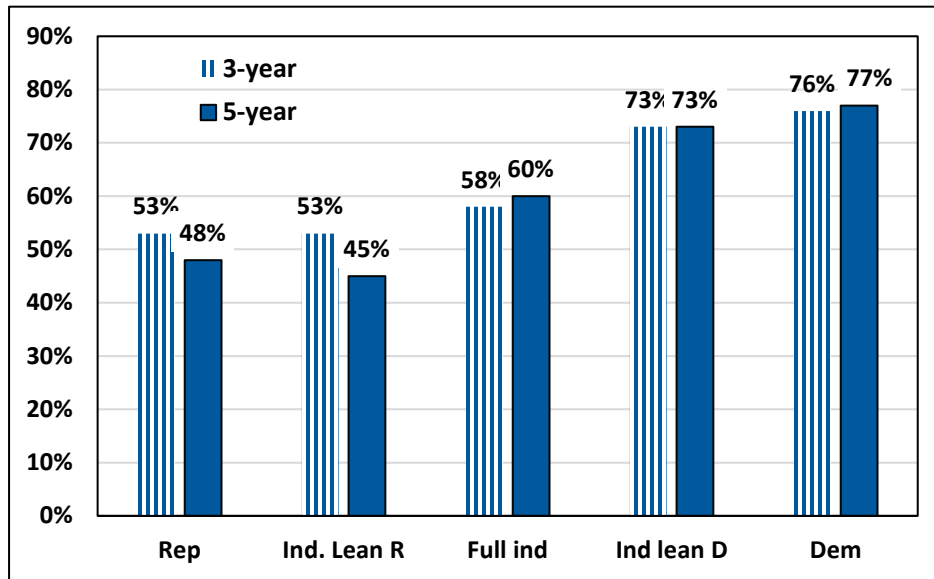


Interestingly, the percentage of respondents supporting standards that took 5-years to payback their cost is equal to the 3-year payback. The support for standards across political identifications and payback periods Figure 5.2 is consistent with that observation. The Republicans are a slight majority, but the support rises to over three quarters among the Democrats. For the 5-year payback Republications fall just below a majority, but the other political identifications are unaffected.

Interestingly, the percentage of respondents supporting standards at a 5-year payback is equal to the 3-year payback. The support for standards across political

identifications and payback periods Figure 5.2 is consistent with that observation. The Republicans are a slight majority, but the support rises to over three quarters among the Democrats. For the 5-year payback Republications fall just below a majority, but the other political identifications are unaffected.

**Figure 5.2: 2019 Support for the Standards by Political Party Based on a 3- or 5-Year Payback Period**



These results are similar to the 2018 results across political identification. Support for standards among Republicans (52%) and independent leaning Republicans is a slight majority (53%), with a 3-year payback period. It rises to 60% among independents and 80% among Democrats and independent leaning Democrats.

Earlier, we mentioned that there were a small number of statistically significant demographic differences. Figure 5.3 includes those observations and also identifies the statistically significant differences with respect to the attitudes included in this section. The pattern is clear and consistent. Women, younger and better educated respondents are more supportive of standards (because) they think mileage is more important and want more mileage in their next vehicle. The statistically significant differences are about 10 percentage points, e.g. 58% of women oppose the rollback compared to 48% of men).



**Figure 5.3 Statistically Significant Difference Across Demographic Groups**

Group	Issue				
	Support Standards	Oppose Roll Back	Mileage More Important	Want More Mileage	Support w/ 5-year Payback
Women	X	X	X	X	
Young		X	X	X	
Better Educated	X		X	X	X
Region	North East	West			

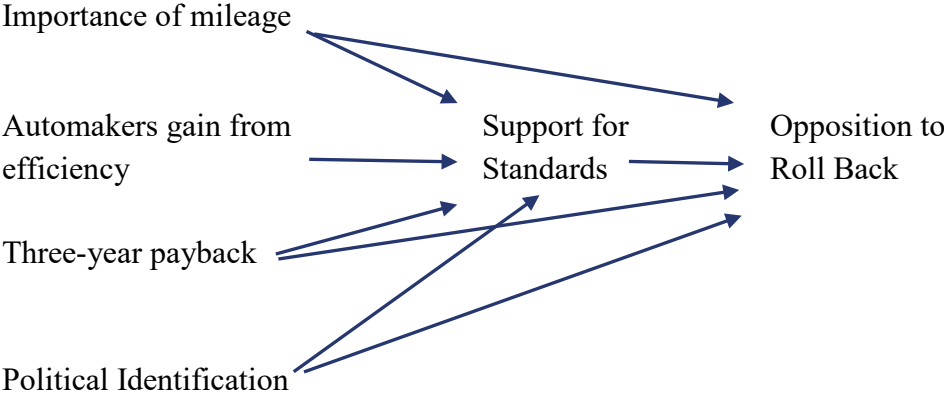
# 6. Multivariate Approaches

In this section we examine two multivariate approaches to the analysis, in order to, first, assess how the attitudes of respondents interact to yield the high level of overall support. . Second, we examine a subtheme that points in the opposite direction – respondents who say they support (oppose) standards in general but express the opposite opinion when it comes to rollback This adds considerable depth to the analysis, although it also introduces complexity. First, we report on a multiple regression analysis. Then we report on a typology of responses to the attitudes toward standards.

## Multiple Regression

Given the large quantity of data covered in this survey, a “simple” way to summarize and present it is to use a multiple regression, as in Figure 6.1 and Figure 6.2. The demographic differences noted also suggest the direction of the outcome of that analysis.

**Figure 6.1: A Multivariate Model of Attitudes and Support for Standards**



Interestingly, the individual level attitudes, alone, explain over one fifth of the variance in attitudes toward standards. In every case, however, the signs are opposite, which is to be expected. The more the importance of fuel economy, the more the respondents think fuel economy would be good for the automakers and the more willing respondents are to support a 3-year payback, the more they support standards and oppose the roll back. Adding in political identification on top of those variables is statistically significant, but raises explained variance by only 2 percentage points for support for standards. However, it raises the

explained variance by 12 percentage points for rollback, affirming our demonstration that roll back is very much a political undertaking.

**Figure 6.2 Multiple Regression Results**

Independent Variables	Dependent Variable (Coefficient (Sig.))								
	Variable:	Standards		Rollback				Consistency/Conflict	
	Model:	I	II	III	IV	V	VI	VII	VIII
Importance of mileage		0.19	0.23	-0.35	-0.23	-0.29	-0.19	-0.62	-0.47
Automakers gain from efficiency		0.15	0.13					-0.25	-0.16
Three-year payback		0.27	0.27	-0.17	-0.1	-0.11	-0.07	-0.48	-0.42
Political Identification			0.09		-0.28		-0.16		-0.40
Standards						-0.25	-0.27		
R <sup>2</sup>		0.23	0.25	0.11	0.23	0.16	0.26	0.26	0.35

Notes: Beta Coefficient, Robust Standard Errors and adjust-R<sup>2</sup>

Interestingly, the individual level attitudes, alone, explain over one fifth of the variance in attitudes toward standards. In every case, however, the signs are opposite, which is to be expected. The more the importance of fuel economy, the more the respondents think fuel economy would be good for the automakers and the more willing respondents are to support a 3-year payback, the more they support standards and oppose the roll back. Adding in political identification on top of those variables is statistically significant, but raises explained variance by only 2 percentage points for support for standards. However, it raises the explained variance by 12 percentage points for rollback. In other words, even after controlling for the statistically significant attitudinal factors, including political identification has a much bigger effect on support for rollback than it does on support for standards. This suggests that the rollback is much more political undertaking, as will be discussed in the next. The last two columns show regression results for a new variable “Consistency/conflict” that is introduced below.

**Examination of “Inconsistent” Responses**

To explore this issue, we created a seven-point scale to describe their responses as shown in Figure 6.3.

**Figure 6.3 Typology of Categories of Consistency/Conflict in Support of Standards**

		Support Standards		Oppose Standards	
		Strong	Somewhat	Somewhat	Strong
Support Rollback	Strong	<b>5</b> Very Conflicted Support	<b>4</b> Moderately Conflicted Support	<b>2</b> Moderately Consistent Support	<b>1</b> Very Consistent Support
	Somewhat	<b>4</b> Moderately Conflicted Support	<b>4</b> Moderately Conflicted Support	<b>2</b> Moderately Consistent Support	<b>2</b> Moderately Consistent Support
Oppose Rollback	Somewhat	<b>6</b> Moderately Consistent Support	<b>6</b> Moderately Consistent Support	<b>3</b> Status Quo	<b>3</b> Status Quo
	Strong	<b>7</b> Very Consistent Support	<b>6</b> Moderately Consistent Support	<b>3</b> Status Quo	<b>3</b> Status Quo

The end points are straightforward. Strong opposition to standards and support for rollback is coded as a 1, very consistent opposition to standards. Strong support for standards and opposition to rollback is coded as 7, very consistent support for standards. We then distinguish mixed positions working down from these two end points. Moderately consistency is defined by all others who expressed a uniform view, but not a consistently strong one (2=moderately consistent opposition, 6=moderately consistent support). Respondents are categorized as “status quo” (3) if they oppose standards but also oppose rollback. Very conflicted respondents state strong preferences in opposite directions (4). Moderately conflicted respondents (5) express support and opposition that is “somewhat” on at least one of the two questions.

The distribution of the respondents across political identification categories is presented in Figure 6.4. Republicans are divided into three roughly equal groups – consistent opponents of standards, status quo, and conflicted supporters of standards. In contrast, the Independents tend to fall in the status quo and consistent support categories, while the Democrats fall in the very consistent support category, with some in the status quo category (which of course supports the

current standards. The “non-Republican” part of the population consistently leans much more heavily in favor of standards, and, the number of Republicans who support standards equals number of Republicans consistently oppose them. In other words, among Republicans the percentage that consistently oppose standards (categories 1+2 = 27%) is just slightly above the percentage that consistently support them (categories 6+7 = 24%). A third of Republicans fall into the status quo category. Independents and Democrats are much less likely to fall into the opposition categories and more likely to fall into the support category. More importantly we find that about 70% of the consistent opposition to standards is Republican, but they represent only 10% of the total population, which is a very narrow base of opposition.

**Figure 6.4: Distribution of Consistency/Conflict in Support of Standards**

Complex Attitudes	% of Respondents			
	All	Republican	Independent	Democrat
1. Very Consistent Opposition	7.3	14	7	1
2. Moderately Consistent Opposition	7.4	13	7	2
3. Status Quo	26.7	34	25	13
4. Very Conflicted Support	8.9	9	9	9
5. Moderately Conflicted Support	6.7	6	10	5
6. Moderately Consistent Support	19.9	16	21	23
7. Very Consistent Support	26.2	8	21	47

Figure 6.5 shows that there are also difference between Republicans and the other political identifications in terms of the mileage expected. To keep the comparison simple, we show the expected mileage for “conflict” categories across political identifications that we highlight in Figure 6.4. Excluding these mixed categories also avoids the categories with the smallest cell counts.

**Figure 6.5: Expected Mileage Across “Consistency/Conflict Categories”**

<b>Complex Attitudes</b>	<b>All</b>	<b>Republican</b>	<b>Independent</b>	<b>Democrat</b>
1. Very Consistent Opposition	31.2	26.4		
2. Moderately Consistent Opposition	29.6	29.8		
3. Status Quo	31.9	29.2	35.0	34.7
4. Very Conflicted Support				
5. Moderately Conflicted Support				
6. Moderately Consistent Support	34.0	34.5	32.6	34.4
7. Very Consistent Support	47.7	40.9	50.5	48.0

Consistent opponents among the Republicans expect 5 miles per gallon less than the overall population. Status Quo Republicans expect somewhat lower mileage (2.7 MPG). Moderately consistent supportive Republicans look about the same as the rest of the respondents in this category, but very consistent supportive Republicans are well below (almost 7 MPG) the rest of the respondents in this category. Thus, the difference in the Republican respondents is a result of both the distribution of the population and their expectations. Note also that consistent Republicans expect substantially more mileage than the rollback target. This is true among the independents and Democrats and also the Status Quo categories of these two political identifications.

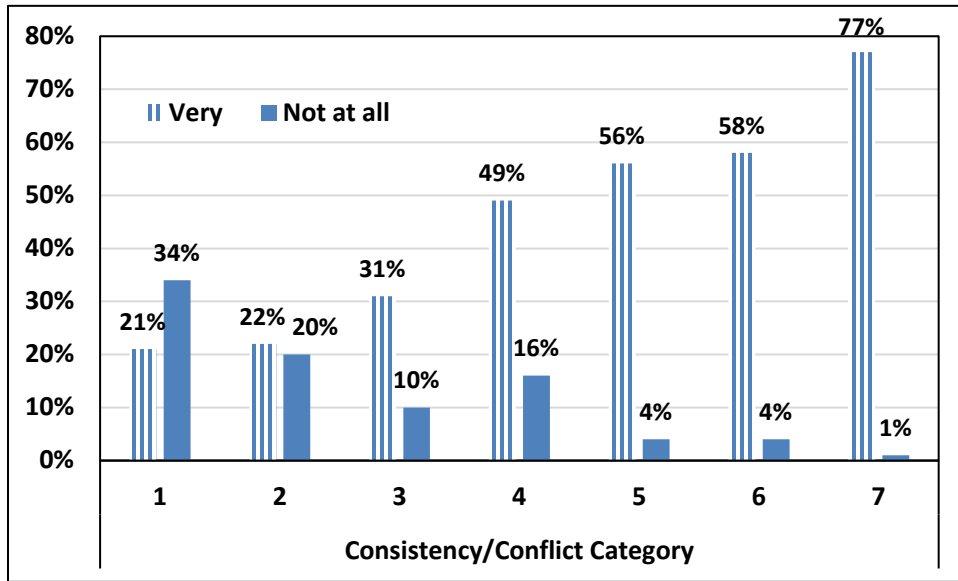
Figures 6.6 and 6.7 show the relationships between the consistency/conflict scale and the other two questions asked to measure attitudes toward standards. The results follow the same pattern. The more consistent the support for standards, the more importance respondents attach to them and the more they think fuel economy helps sales. The regression results in Figure 6.1 reflects these relationships. The three attitudinal variables combined with political identification explain over one-third of the variance in the consistency/conflict scale.

The bottom line on the issue of the apparent “conflict” between support for standards and support for rollback can be summarized as follows. About 85% of respondents make up a group that supports standards and/or opposes the rollback, while only 15% fall in the group that opposes standards and supports the rollback. Moreover, over two-thirds (70%) of the later group are Republicans or

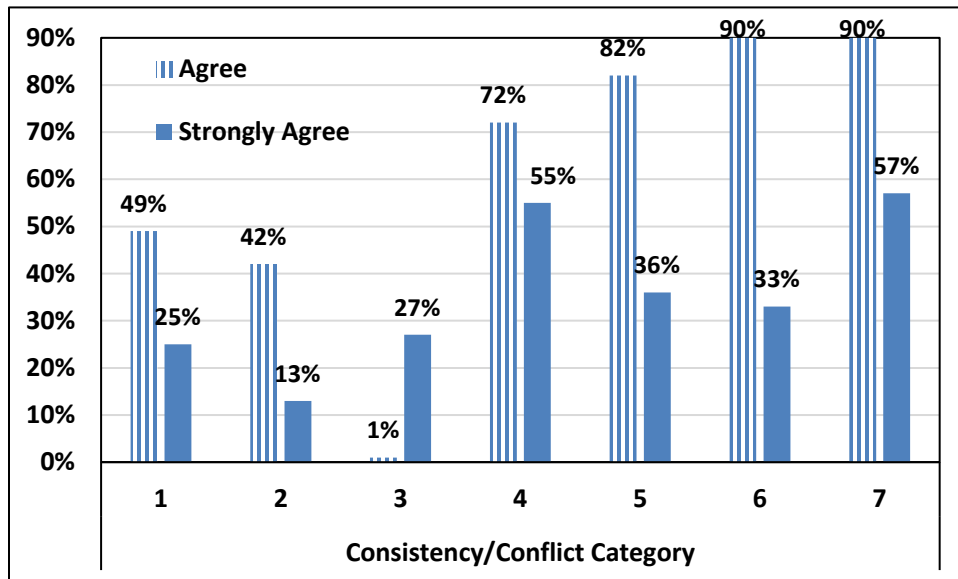
independents who lean Republican. Thus, consistent support for the Trump administration proposal is very narrow and highly partisan.

**Figure 6.6: Importance of Fuel Economy**

**“Consistency/Conflict Categories”**



**Figure 6.7: Fuel Economy Helps Sell Vehicles Across “Consistency/Conflict Categories”**



## CONCLUSION

Our detailed economic analysis of fuel economy standards, including the recent National Program, as well as the entire history going back forty years and our preliminary analysis of the Notice of Proposed Rulemaking give a good indication of why consumers are right to support the standards and oppose the rollback and freeze.<sup>19</sup> The rollback is bad economic policy that will harm consumers and the economy by draining consumer pocketbooks of half a trillion dollars of cost savings over the next few decades which could have been used to stimulate substantial economic growth. The Administration should listen to the consumers, who want their next vehicle to get 40 MPG, in line with the current standard, and who believe that the automakers would sell more vehicles if they made more fuel efficient cars. Not only will the SAFE proposal uneconomical and unpopular, but it violates the Administrative Procedure Act (APA) because of its severely flawed analysis. By totally disregarding current and historical evidence, the proposed rollback will hurt Americans financially, reduce auto sales, and harm the environment. In addition to being a violation of the APA, it also violates the underlying statutes that govern EPA and NHTSA in setting standards.

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<sup>19</sup> Comments of the Consumer Federation of America, before the Department of Transportation, Office of the Secretary of Transportation, Re: Notification of Regulatory Review: 14 CFR Chapters I, II, and III, 23 CFR, Chapters I, II, and III, 46 CFR Chapter II, 48, CFR Chapter 12, 49 CFR Chapters I, II, III, V, VI, VII, VIII, X, and XI, Docket No. DOT-OST-2017-0069, November 1, 2017; Comments of the Consumer Federation of America on the California Air Resources Board *Mid-Term Review*, March 24, 2017; Comments of the Consumer Federation of America, Before the Environmental Protection Agency, Evaluation Draft Technical Assessment Report for Model Year 2022–2025 Light Duty Vehicle GHG Emissions and CAFE Standards, EPA-HQ-OAR-2015-0827; NHTSA-2016-0068; FRL-9949-54-OAR, Department Of Transportation RIN 2060-AS97; RIN 2127-AL76, September 26, 2016.



## APPENDIX A

### 2019 CFA Survey Questions<sup>20</sup>

Now I'd like to ask you several questions about motor vehicle fuel economy standards.

#### Support for Standards

F1 For almost 40 years, the Department of Transportation has set standards for the minimum level of fuel economy or miles per gallon of cars, SUVs and pickups. Do you support federal standards requiring auto companies to increase the fuel economy of the vehicles they manufacture? Would you say you...

(READ ENTIRE LIST BEFORE RECORDING ONE ANSWER)

- 01 Support strongly
- 02 Support somewhat
- 03 Oppose somewhat
- 04 Oppose strongly
- 99 DON'T KNOW/NO OPINION

#### Support for Roll Back

F2 Current fuel economy standards require each automaker to increase the average fuel economy of all their new cars and light duty trucks to approximately 40 miles per gallon by 2025. The Trump administration is proposing to reduce this 40 miles per gallon average to about 30 miles per gallon in 2025. What is your view of this proposal to reduce the standards? Do you...

(READ ENTIRE LIST BEFORE RECORDING ONE ANSWER)

- 01 Support strongly
- 02 Support somewhat
- 03 Oppose somewhat
- 04 Oppose strongly
- 99 DON'T KNOW/NO OPINION

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<sup>20</sup> The survey was conducted for CFA by Engine Group's CARAVAN<sup>®</sup> by cell phone and landline on March 7-10, 2019, using a representative sample of 1001 adult Americans. The survey's margin of error is plus or minus 3.1 percentage points.

### **Importance of Fuel Economy in Vehicle Purchase**

F3 Thinking about the next vehicle you will purchase, how important will MPG, or miles per gallon, be in your decision of which vehicle to buy? Will it be...

(READ ENTIRE LIST BEFORE RECORDING ONE ANSWER)

- 01 Very important
- 02 Somewhat important
- 03 Not very important
- 04 Or, not at all important
- 99 DON'T KNOW/NO OPINION

### **Expected Mileage**

F4 What would you like the gas mileage of your next vehicle to be? Please answer in terms of MPG, or miles per gallon.

(RECORD A NUMBER. RANGE IS 1-150 MILES PER GALLON, DON'T KNOW/NO OPINION)

### **Benefit of Fuel Efficiency to Automakers**

F5 Please indicate if you agree or disagree with the following statement: 'If American auto manufacturers made more fuel-efficient vehicles, they would sell more.' Would you say you...

(READ ENTIRE LIST BEFORE RECORDING ONE ANSWER)

- 01 Agree strongly
- 02 Agree somewhat
- 03 Disagree somewhat
- 04 Disagree strongly
- 99 DON'T KNOW/NO OPINION

### **Support for Standards with 3-year Payback**

F6 Now suppose increases in the fuel economy of motor vehicles increased their purchase price but reduced the cost of driving them. If these price increases were offset by reduced gasoline costs over a THREE-YEAR time period, would you favor or oppose these fuel economy increases? Would you say you...

(READ ENTIRE LIST BEFORE RECORDING ONE ANSWER)

- 01 Favor strongly
- 02 Favor somewhat
- 03 Oppose somewhat
- 04 Oppose strongly
- 99 DON'T KNOW/NO OPINION

## Support for Standards with 5-year Payback

F7 If increases in the purchase price of motor vehicles were offset by reduced gasoline costs over a FIVE-YEAR time period, would you favor or oppose these fuel economy increases? Would you say you...

(READ ENTIRE LIST BEFORE RECORDING ONE ANSWER)

- 01 Favor strongly
- 02 Favor somewhat
- 03 Oppose somewhat
- 04 Oppose strongly
- 99 DON'T KNOW/NO OPINION

SP1 In politics, as of today, do you consider yourself a Republican, a Democrat, or an Independent?

- 01 REPUBLICAN
- 02 DEMOCRAT
- 03 INDEPENDENT
- 98 OTHER PARTY
- 99 DON'T KNOW/REFUSED

[ASK IF SP1 (03-99)]

SP2 As of today, do you lean more to the Democratic Party or the Republican Party?

- 02 DEMOCRATIC
- 01 REPUBLICAN
- 98 NEITHER/OTHER
- 99 DON'T KNOW/REFUSED

Sp2a Political party identification [to be set up for data file]

- 01 Republican [Sp1 (01)]
- 02 Independent-Lean Republican [Sp2 (01)]
- 03 Independent [Sp1 (03) That Are Sp2 (98, 99)]
- 04 Independent-Lean Democratic [Sp2 (02)]
- 05 Democrat [Sp1 (02)]
- 98 Other Party [Sp1 (98) That Are Sp2 (98) Or Sp1 (99) That Are Sp2 (98)]
- 99 Don't Know/Refused [Sp1 (99) That Are Sp2 (99) Or Sp1 (98) That Are Sp2 (99)]

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