

# FUEL ECONOMY

SEPTEMBER/OCTOBER 2022 NATIONALLY REPRESENTATIVE PHONE AND  
INTERNET SURVEY

REPORT PREPARED FEBRUARY 3RD, 2023  
CONSUMER REPORTS® SURVEY GROUP

# INTRODUCTION

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This nationally representative survey of 2,161 adults residing in the USA was conducted by phone (n=64) and internet (n=2,097) by NORC at the University of Chicago from September 23<sup>rd</sup> through October 17<sup>th</sup>, 2022.

The purpose of this survey was to **assess Americans' beliefs and attitudes about fuel economy**, as well as the current fuel economy of the vehicles they drive.

# HIGHLIGHTS

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- Most American drivers (92%) say the vehicle they drive most often has a gasoline-powered engine. Five percent drive a hybrid, one percent drive a fully electric vehicle, and just over half a percent drive a plug-in hybrid.
- Seven in ten American drivers say that fuel economy is “very important” (41%) or “extremely important” (29%) to them when considering what vehicle to purchase or lease.
  - This is lowest among those who say the vehicle they drive most often is a pickup truck (50%) and highest among those who drive a car or sedan (77%).
  - The most common reason given for saying fuel economy is important is to decrease spending on fuel or gasoline (60% of drivers who said fuel economy was “not very important” through “extremely important”).
- When asked which attributes of the vehicle they drive most often have the most room for improvement, drivers most commonly select fuel economy (43%), with purchase price and maintenance costs following distantly (30% and 27%, respectively).
  - Only 18% of those who drive a hybrid (not including plug-in hybrid) select fuel economy as having room for improvement.
- When asked to estimate their vehicle's MPG, around one in ten drivers of gasoline-powered vehicles say it gets 35 MPG or better (11%), compared to nearly two in three drivers of hybrids (65%; includes both plug-in and regular hybrid).
- Most Americans (85%) agree or strongly agree that automakers should continue to improve fuel economy for all vehicle types, and almost as many (82%) agree or strongly agree that making larger vehicles more fuel-efficient is important.
- Seven in ten Americans say that they would buy or lease a vehicle with a higher monthly payment if they would save enough at the pump to make their total monthly expense lower.
- Around half of Americans (49%) say fuel savings would have to offset a higher price for a more fuel-efficient vehicle in a year or less for them to be willing to pay that higher price.
- Most Americans (86%) say it is true that hybrids are more fuel-efficient than non-hybrid gasoline vehicles of the same class.
- Forty percent of Americans say the vehicle they most commonly drive is a sedan; 27% say it is an SUV with two rows of seats; and 12% say it is an SUV with three rows of seats.
- Around a quarter of drivers say the vehicle they drive most often was made in the past five years (a model year of 2019 through 2023).

# AMERICAN DRIVERS AND THEIR VEHICLES

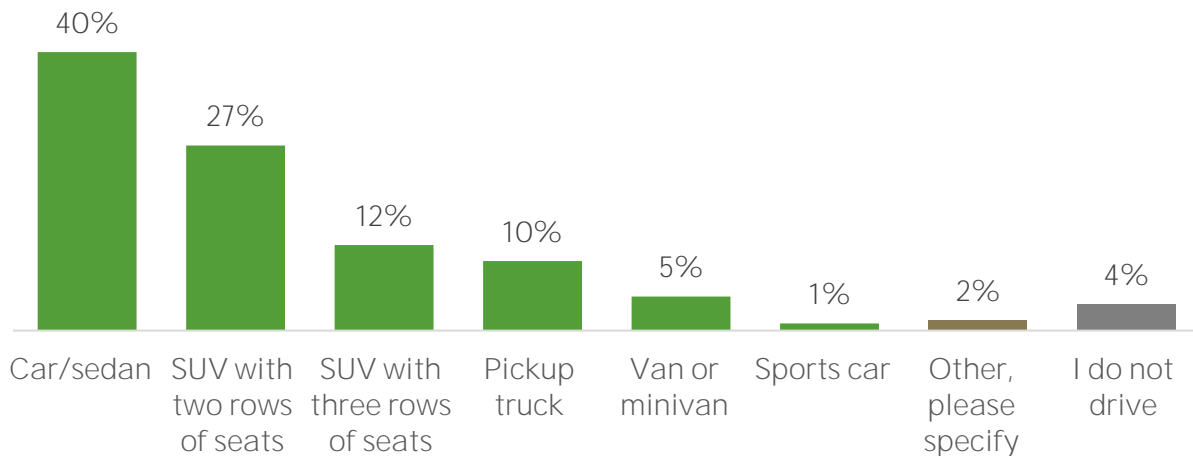
We began the survey by asking Americans about their vehicles.

**9%**  
OF AMERICANS SAY THEIR HOUSEHOLD  
**DOES NOT CURRENTLY OWN OR  
LEASE ANY VEHICLES**

Most Americans (91%) say their household owns or leases at least one vehicle. When we asked what kind of vehicle they drive most often—whether they own this vehicle or not—four in ten say it is a sedan; a similar percentage say an SUV of some kind, either with two rows of seats (27%) or three (12%). Ten percent drive a pickup truck.

**4%**  
OF AMERICANS  
**DO NOT DRIVE**

## How would you describe the vehicle that you drive most often?

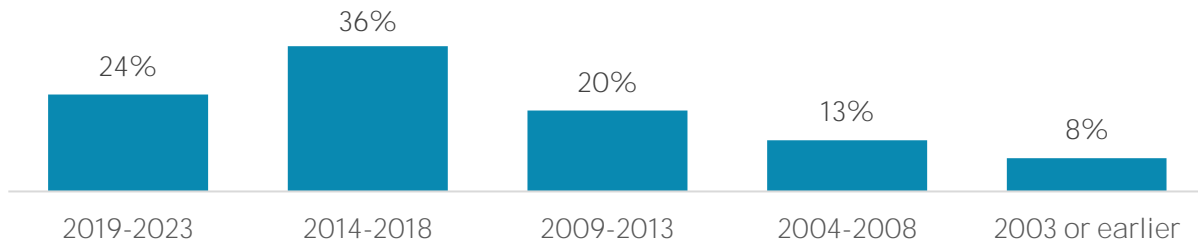


Base: All respondents.

The rest of the questions covered in this section of the report were asked only of those who gave an answer other than “I do not drive,” because they are about the vehicle the respondent drives most often.

Overall, around one in four drivers say the vehicle they drive most often was made in the past five years (a model year of 2019 through 2023). Thirty-six percent have one with a model year of 2014 through 2018. Just eight percent have a vehicle 20 years old or more (model year 2003 or earlier).

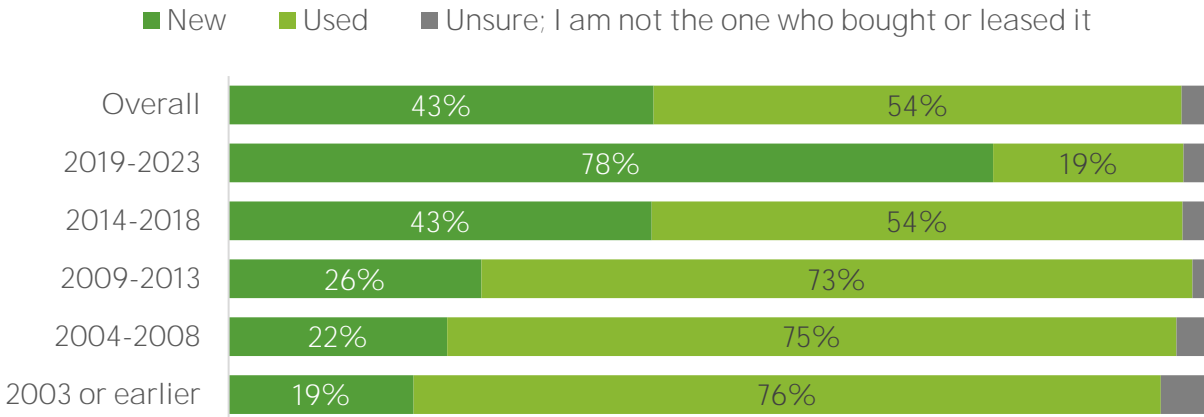
## What is the model year of the vehicle that you drive most often?



Base: Respondents who drive.

A little more than half of American drivers say the vehicle they drive most often was purchased or leased used (54%). As might be expected, those who drive newer model years are more likely to say they got them new. More than three in four (78%) of those who drive vehicles made in the past five years (model years 2019 through 2023) say they purchased or leased them new, compared to just 19% used. For vehicles six to ten years old (model years 2014 through 2018), more than half purchased or leased used (54%), and the percentage obtained used increases among older model years.<sup>1</sup>

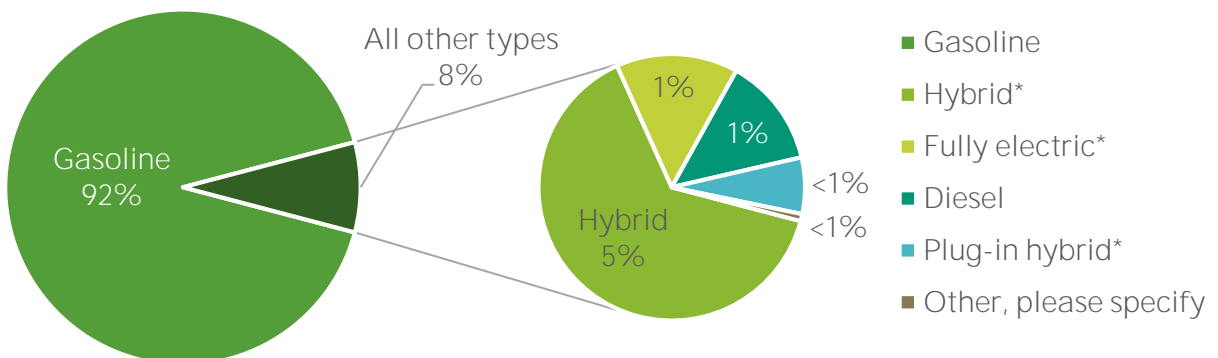
Did you buy or lease the vehicle you drive most often new or used?  
By model year



Base: Respondents who drive.

We also asked about the engine type of the vehicle—what sort of fuel it takes. Most drivers (92%) say the vehicle they drive most often is a gasoline-powered vehicle. Overall, 7% of American drivers say the vehicle they drive most often is some kind of hybrid or fully electric. Five percent drive a hybrid, which runs mainly on gasoline, but also uses a battery and electric motor to help power the vehicle. Just over half a percent drive a plug-in hybrid—fewer than drive diesel or fully electric vehicles (each a little over 1%).

What is the engine type of the vehicle you drive most often?



Base: Respondents who drive. Base: Respondents whose main vehicle does not run on gas.  
\*Item wording abbreviated to fit.

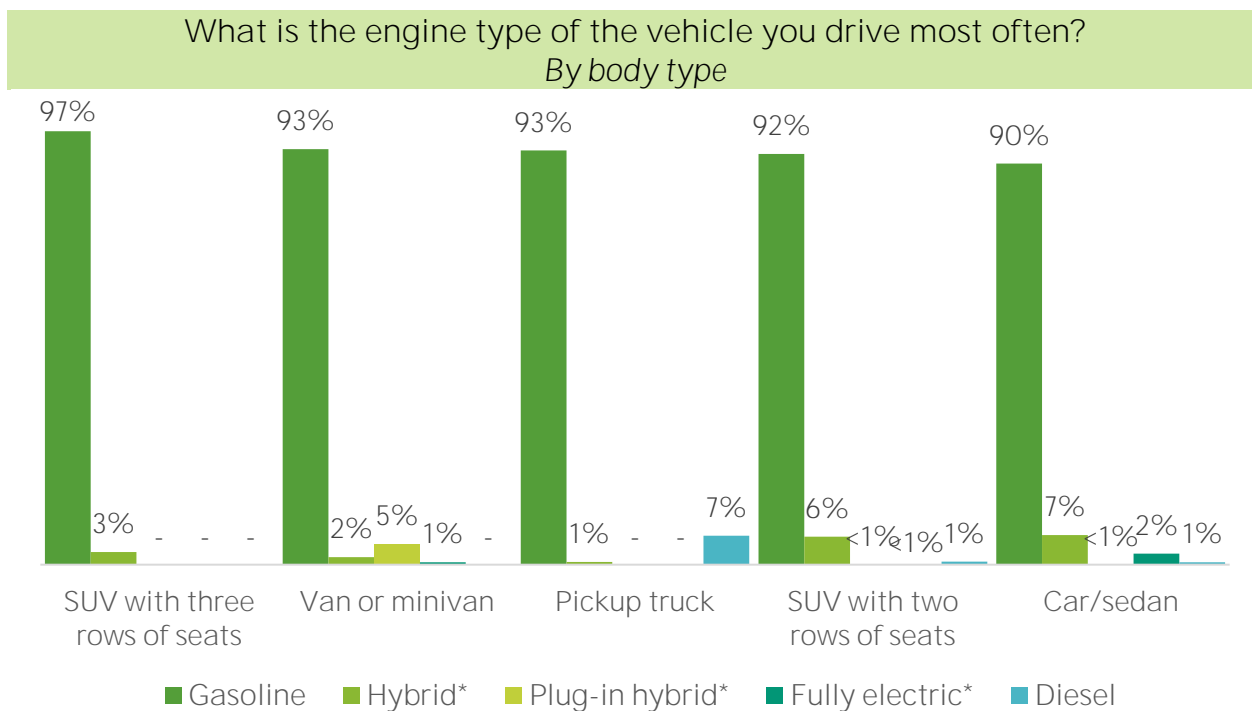
<sup>1</sup> The difference in percentage buying new or used by model year is statistically significant at the .05 level.

There are differences by political leaning in what kinds of vehicles Americans drive. While roughly equal percentages of Democrats and Republicans most commonly drive a gasoline-powered vehicle (91% and 92%), nine percent of Democrats and those who lean Democrat drive some kind of hybrid or electric vehicle, compared to just 5% of Republicans or those who lean Republican. Democrats are also more likely to drive sedans than Republicans (46% compared to 33%), while Republicans are twice as likely to drive pickup trucks (15% compared to just 7% of Democrats).<sup>2</sup>

In addition, certain body types are more likely to take certain types of fuel. Gasoline is still by far the most common fuel type in all categories, but this ranges from 97% for those who most commonly drive SUVs with three rows of seats to just 90% of those who say the vehicle they drive most often is a sedan.

Sedans are the body type most likely to be hybrids<sup>3</sup> or electric vehicles if they do not run on gas; **seven percent of sedan drivers say their sedan is a hybrid, while two percent say it is fully electric.** On the other hand, pickup trucks are most likely to run on diesel if they do not run on gas: Among those who say the vehicle they drive most often is a **pickup truck, seven percent say their vehicle runs on diesel**, and 1% say it is a hybrid. Finally, the van/minivan category has the highest concentration of plug-in hybrids: five percent of van or minivan drivers say their vehicle is a plug-in hybrid, two percent say it is a hybrid, and 1% say it is fully electric.

Not enough people most commonly drive sports cars to examine them more closely.



Base: Respondents who drive. \*Item wording abbreviated to fit.

<sup>2</sup> The differences in vehicle fuel and body type by political affiliation are both statistically significant at the .05 level, as is the difference in fuel type by body type.

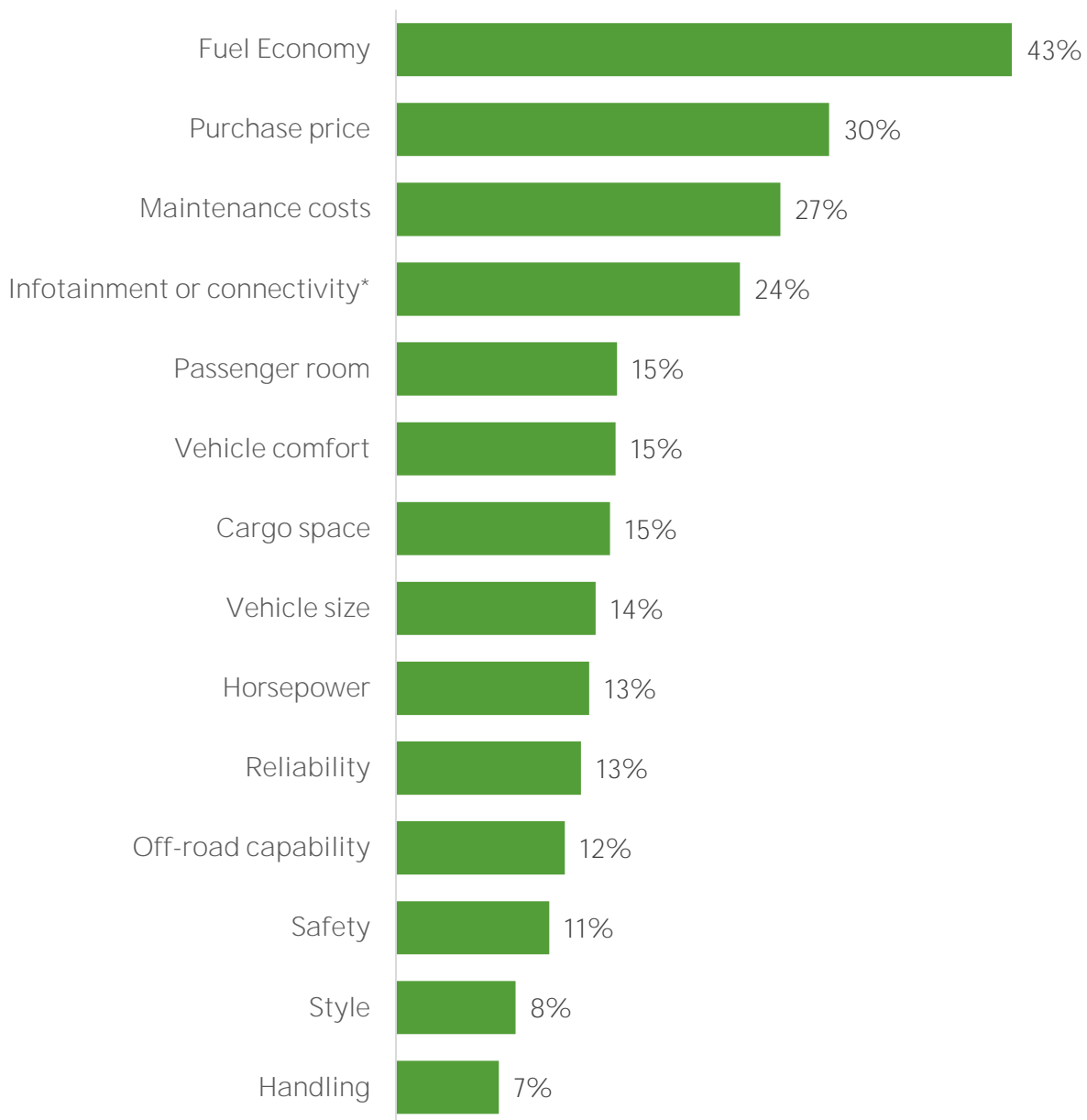
<sup>3</sup> In this report, "hybrid" should be taken to mean "hybrid that is not a plug-in hybrid" unless otherwise specified. Sometimes hybrid and non-plug-in hybrid vehicles are combined to have sufficient sample size for reporting; the combined group is referred to as "hybrid (regular and plug-in)" or "both kinds of hybrid."

## ROOM FOR IMPROVEMENT

More than four in ten drivers (43%) say that fuel economy is one of the attributes of the vehicle they drive most often that has the most room for improvement. This is the most common response by a large margin: the second most common response, purchase price, is much lower, 30%. This is followed by maintenance costs (27%) and infotainment or connectivity (24%).

Thinking about the vehicle you drive most often, which three attributes have the most room for improvement?

Select up to three responses.

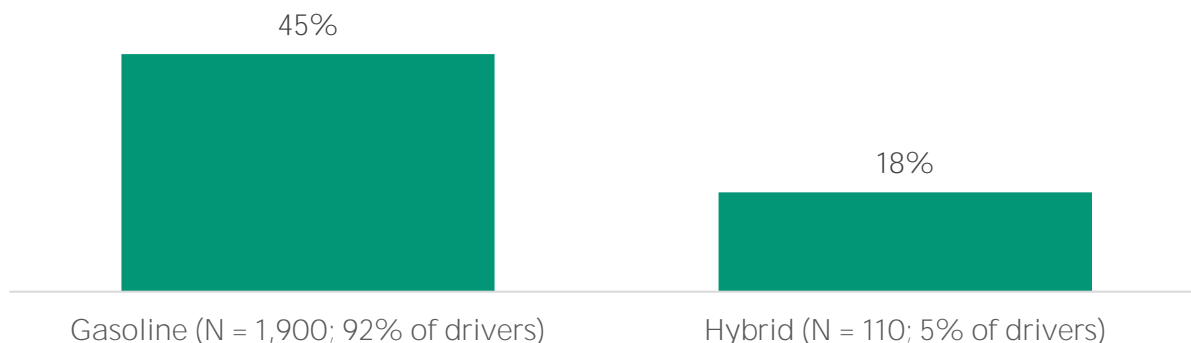


Base: Respondents who drive. \*Item wording abbreviated to fit.

Unsurprisingly, drivers who answered about gasoline-powered vehicle are more than twice as likely as drivers who answered about a non-plug-in hybrid to say that fuel economy has room for improvement: 45% compared to 18%. (Too few people drive other types of vehicles for comparisons to be made.) This is true even after taking vehicle body types into account.<sup>4</sup>

### Percentage of drivers selecting "fuel economy" as having room for improvement

By fuel type of most commonly driven vehicle: Gasoline vs regular hybrid



Base: Respondents who drive

Even after taking engine type into account, fuel economy is more likely to be an issue for certain body types. Those whose primary vehicle is a van or minivan; an SUV with three rows of seats; or a pickup are more likely than those who drive a sedan to say that fuel economy is one of the attributes of their vehicle that has most room for improvement. In further evidence that larger vehicles have more room for improvement in fuel economy, people who drive vans or minivans or SUVs with three rows of seats are also more likely than those who drive SUVs with only two rows of seats to say that their vehicle's fuel economy has room for improvement. (Too few people drive sports cars for them to be included in these comparisons.)

### Percentage of drivers selecting "fuel economy" as having room for improvement

By body type of most commonly driven vehicle



Base: Respondents who drive

In addition, drivers living in the West are more likely to say that fuel economy has room for improvement (52%) than those living in other regions (43% of those in the Northeast and 39% each

<sup>4</sup> All differences on this page are statistically significant at the .05 level controlling for gender, race/ethnicity, age, education, income, urbanicity, region, political leaning, body type, and engine type.

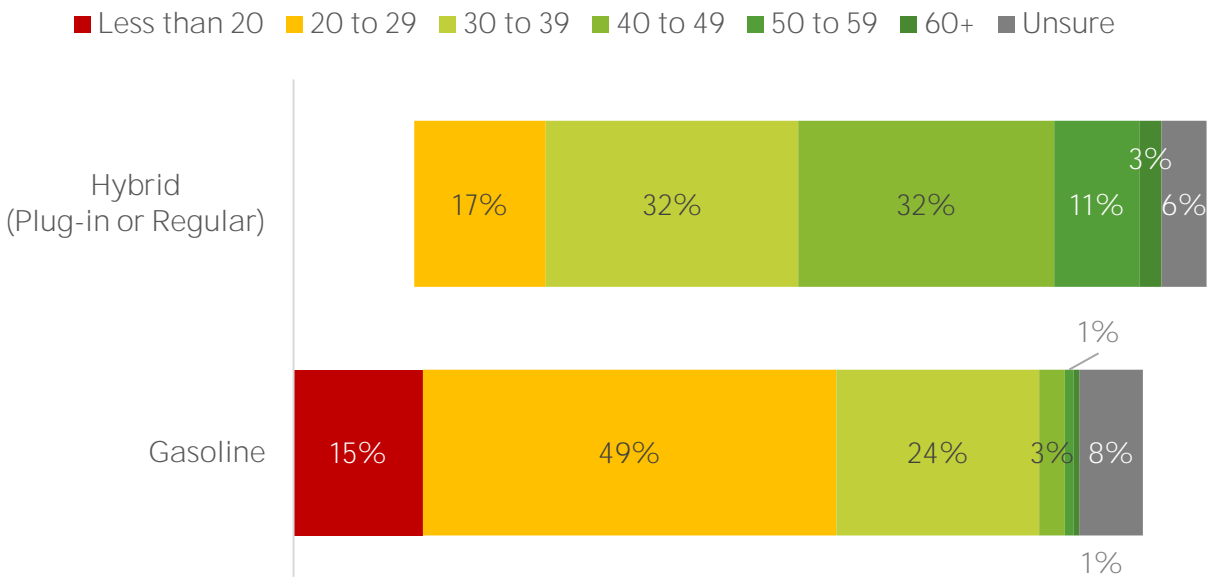
for those in the Midwest and South). Given that this is significant despite controlling for political leaning, urbanicity, vehicle body and engine type, and more, one possible explanation is that this is a response to higher gas prices. The average cost of gas is higher in the West than elsewhere in the USA.<sup>5</sup> There are no differences by urbanicity.

## AMERICANS' ACTUAL FUEL ECONOMY (MPG)

In addition, we asked American drivers who most commonly drive a vehicle that is not fully electric what the MPG they get with that vehicle is. Overall, **a little less than half say they get between 20 and 29 MPG** (24% get 20-24 MPG and 23% get 25-29 MPG). Fifteen percent say they get less than 20 MPG and 31% say they get 30 MPG or more; seven percent are unsure.

Most people say the vehicle they drive most often is gasoline-powered, but there are enough who drive hybrid vehicles (combining plug-in and regular hybrids) to compare. In this figure, we have included both hybrid and plug-in hybrid vehicles to have as large a comparison group as possible. People say the vehicle they drive most often is a hybrid of either type report better mileage with that vehicle than those who drive gasoline-powered vehicles: while 49% of gasoline-powered vehicles get between 20 and 29 MPG, only 17% of hybrids do, and none get below that. On the flip side, only **5% of gasoline-powered vehicles get 40 MPG or higher, while in comparison 46% of hybrid vehicles get 40 MPG or higher.**

On average, what is the MPG that you get with the vehicle you drive most often?



Base: Respondents who drive each type of vehicle.

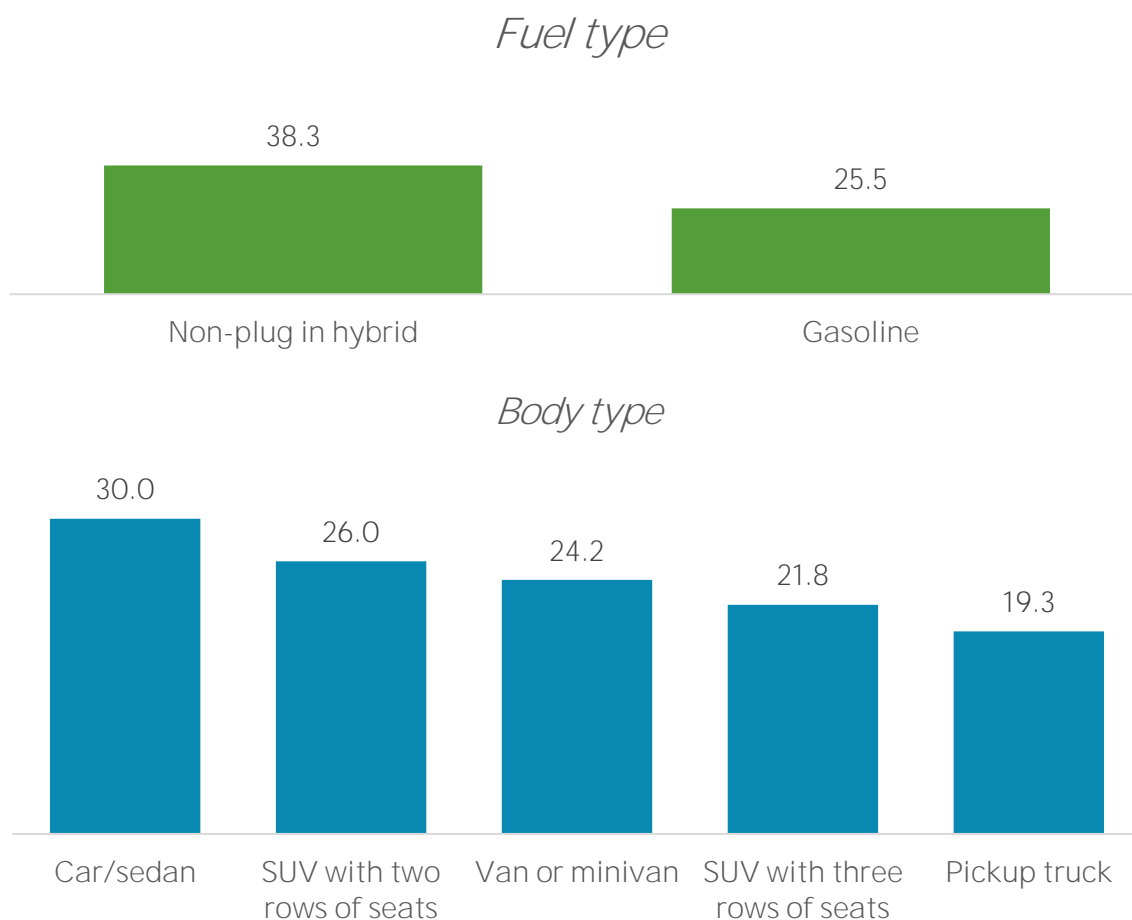
<sup>5</sup> See <https://gasprices.aaa.com/state-gas-price-averages/>



Excluding those who are “unsure,” non-plug-in hybrids have a higher average MPG (approximately 38 MPG) than gasoline-fueled vehicles (approximately 26 MPG).<sup>6</sup> Note that here the hybrid groups are not combined—this figure is only for standard hybrid vehicles in order to give a more precise number for a more precise group.

Moreover, controlling for fuel type, sedans get higher average MPG than vans, pickup trucks, and SUVs with two or three rows—approximately 30 MPG compared to 26 MPG for SUVs with two rows of seats, 24 MPG for vans or minivans, 22 MPG for SUVs with three rows of seats, and 19 MPG for pickup trucks. Pickups also get lower average MPG than vans and SUVs with two rows of seats, though they do not differ from SUVs with three rows of seats. SUVs with two rows of seats get better average MPG than SUVs with three rows of seats. (Again, there were too few people who most commonly drive sports cars to include that in this comparison.)

On average, what is the MPG that you get with the vehicle you drive most often?  
By fuel type and by body type



Base: Respondents who drive and did not say “unsure.”

<sup>6</sup> All differences on this page are statistically significant at the .05 level controlling for gender, race/ethnicity, age, education, income, urbanicity, region, political leaning, body type, and engine type. This analysis approximated the actual MPG, since respondents could only respond in five-MPG ranges.

## IMPORTANCE OF FUEL ECONOMY

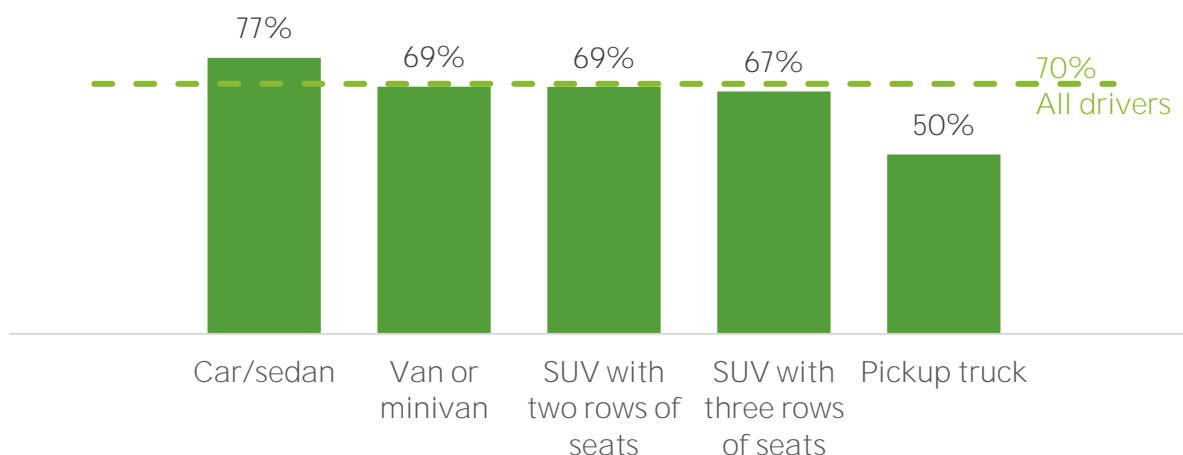
Around three in ten American drivers (29%) say that fuel economy is “extremely important” to them when considering what vehicle to purchase or lease. Fully seven in ten say it is “very” or “extremely” important to them. There are no differences in this by political leaning when controlling for the body and engine type of the vehicle people drive most often; when leaving that out, though, Democrats and people who lean Democrat are more likely than Republicans and those who lean Republican to say fuel economy is “very” or “extremely” important to their choice of vehicle (73% compared to 65%).<sup>7</sup>

There are no differences by urbanicity, and while people in the West are more likely to say fuel economy is very or extremely important to them than people in the Midwest (75% versus 64%), there are no other regional differences. There are also no differences between those whose most commonly-driven vehicle runs on gas and those for whom it is a non-plug-in hybrid, the only two groups large enough to compare.

However, there are differences in the percentage who say fuel economy is “very important” or “extremely important” by the body type of the vehicle they drive most often. Only half of drivers who most commonly drive a pickup truck say that fuel economy is very or extremely important to them when considering what vehicle to get—lower than those who most commonly drive a sedan (77%), van or minivan (69%), or an SUV with two (69%) or three (67%) rows of seats.

On the other hand, people who most commonly drive sedans are more likely to say that fuel economy is very or extremely important to them than those who drive pickups or either kind of SUV. (They did not differ from those who most commonly drive vans or minivans, and there were too few people who drove sports cars to include that in this comparison.)

**Percentage saying fuel economy is “very important” or “extremely important”**  
when considering what vehicle to purchase or lease  
By body type



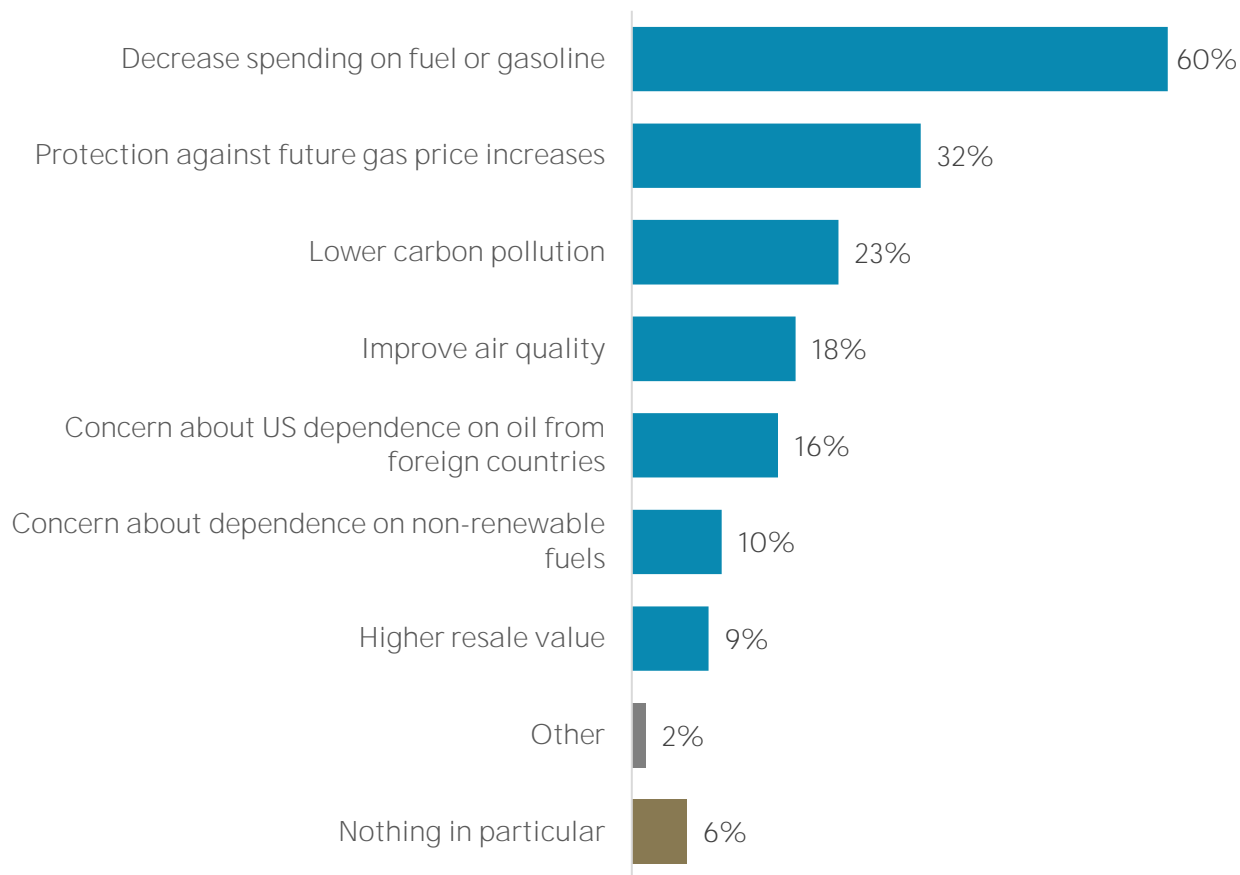
Base: Respondents who drive.

<sup>7</sup> All differences on this page are statistically significant at the .05 level controlling for gender, race/ethnicity, age, education, income, urbanicity, region, political leaning, and (except where noted) body type and engine type.

In addition, a higher percentage of Hispanic drivers (77%) than white drivers (67%) say that fuel economy is “very” or “extremely” important to them.

We asked all drivers except the two percent who said “not at all important” why fuel economy matters to them when considering what vehicle to purchase or lease. **Sixty percent say fuel economy is important to them to decrease spending on fuel or gasoline—by far the most common response.**

Which two, if any, of the following are reasons you think fuel economy is important?  
*Select up to two responses.*



Base: Respondents who drive and who say fuel economy is “not very important” through “extremely important” to them when considering what vehicle to get.

Drivers who lean Republican are more likely than independents or those who lean Democrat to **select “decrease spending on fuel or gasoline”** as a reason fuel economy matters to them (70% compared to 56% of independents and 52% of Democrats).<sup>8</sup>

<sup>8</sup> All differences on this page are statistically significant at the .05 level controlling for gender, race/ethnicity, age, education, income, urbanicity, region, and political leaning—but nothing about their specific vehicle for this question.

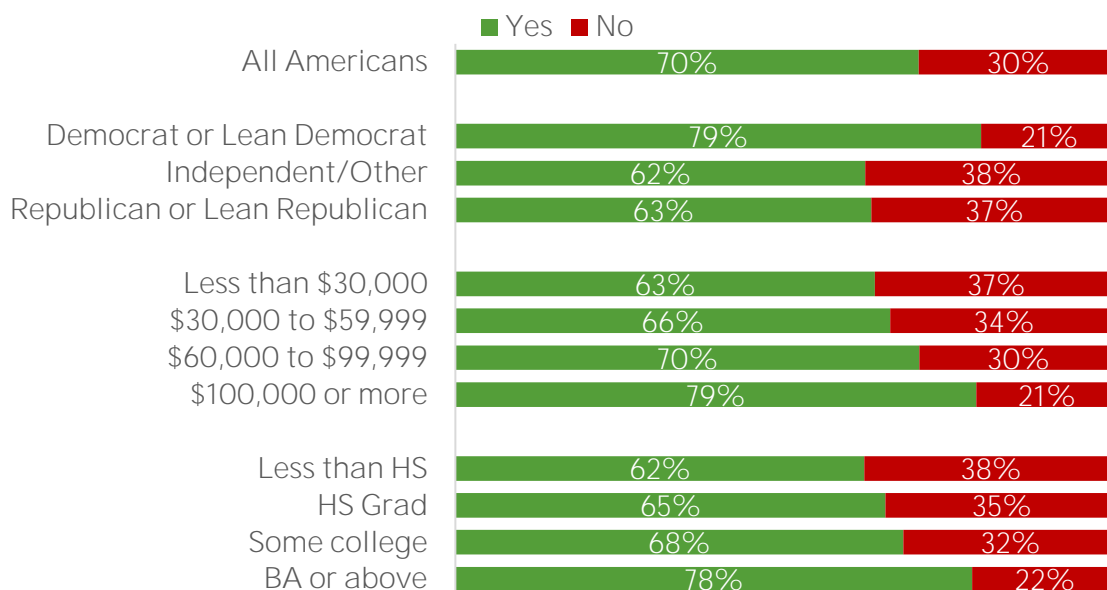
## FUEL ECONOMY COST SAVINGS

Better fuel economy means less frequent refueling, and consequently savings on gas. However, more fuel-efficient vehicles can be more expensive. We asked two questions about the trade-off between higher purchase price and savings at the pump to take stock of where Americans fall on this issue. These questions appeared in either order—half of the survey respondents saw one first, the rest saw the other. They showed even to those who do not drive.

In one question, we asked **how quickly fuel savings would have to offset a higher purchase price for them to be willing to pay extra for a more fuel-efficient vehicle.** Given that there are both financial and environmental incentives for greater fuel efficiency, we included an option for “I would be willing to pay extra for a more fuel-efficient vehicle regardless of whether I would make the money back in fuel cost savings.” Indeed, one in ten Americans selected this response. **The most common responses are “six months to less than one year” (18%) and “one year to less than two years” (17%).** Overall, 49% would like to make up the cost in one year or less. The median (excluding people who said “regardless”) is just over eleven months.

The other question was a simple yes or no. **Seventy percent of Americans say they would get a vehicle with a higher monthly payment if the extra cost for the vehicle itself would be more than offset by savings at the pump,** meaning the total monthly expense was lower. People who lean Democrat are more likely to say yes to this than independents and people who lean Republican. The percentage saying “yes” also goes up with income and with education.<sup>9</sup>

If you had the choice to buy or lease a vehicle at a higher monthly payment, but would save enough at the pump that your total monthly expense would be lower, would you buy that vehicle?

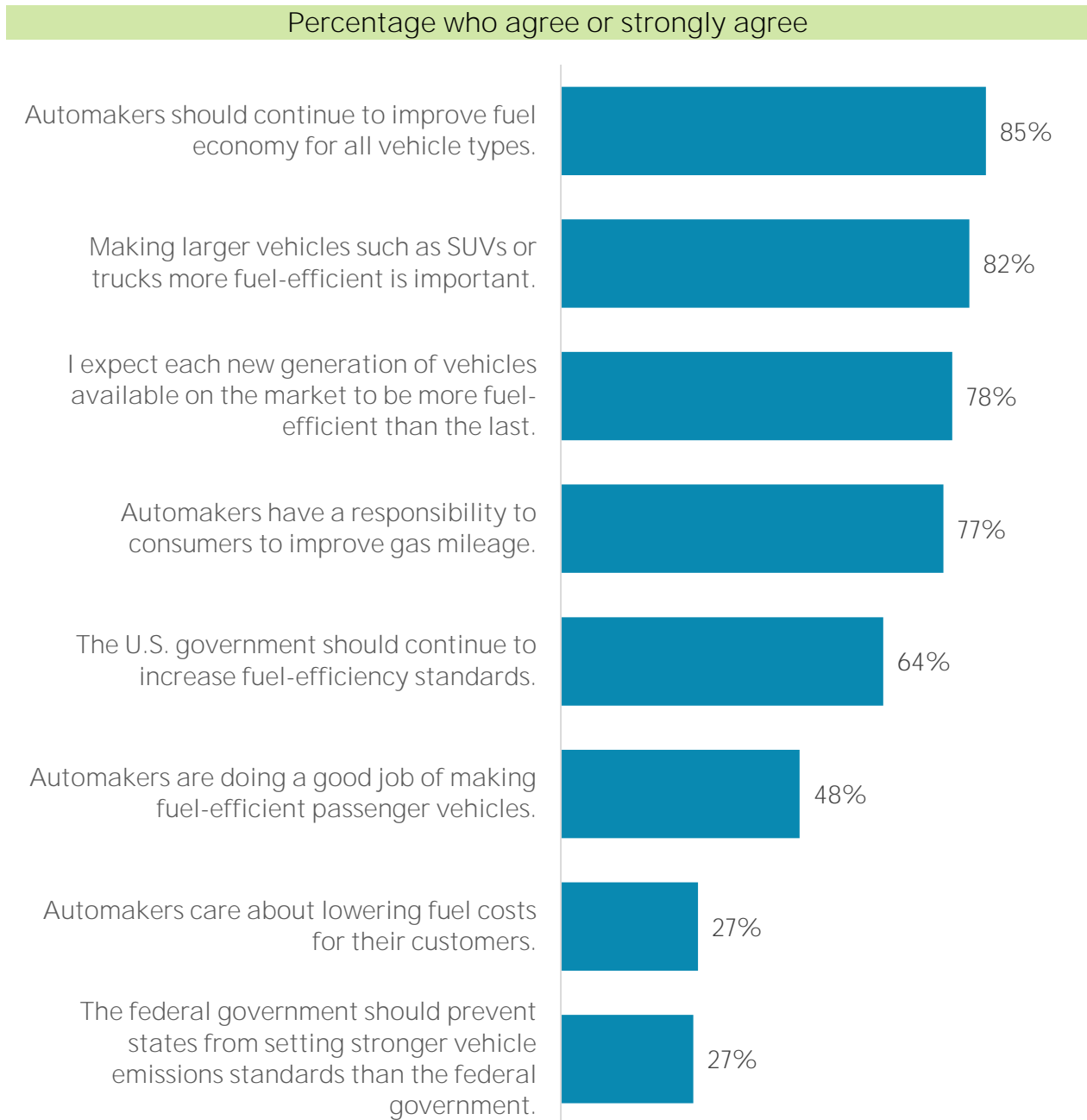


Base: All respondents.

<sup>9</sup> All differences on this page are statistically significant at the .05 level controlling for gender, race/ethnicity, age, education, income, urbanicity, region, and political leaning—but nothing about their specific vehicle for this question.

## FUEL ECONOMY & POLICY ATTITUDES AND BELIEFS

We also asked Americans (regardless of whether or not they drive currently) about agreement or disagreement with some more general beliefs and opinions around fuel economy and policies. **Most Americans (85%) agree or strongly agree that automakers should continue to improve fuel economy for all vehicle types** (44% strongly agree). Almost as many (82%) agree or strongly agree that making larger vehicles more fuel-efficient is important. More than three in four agree or strongly agree that they expect each new generation of vehicles to be more fuel-efficient (78%) and that automakers have a responsibility to continue to improve gas mileage (77%).



Base: All respondents.

Most of these differ significantly by political affiliation.<sup>10</sup> Democrats are more likely than Republicans and independents to agree that

- Automakers should continue to improve fuel economy for all vehicle types: 91% of Democrats compared to 80% of Republicans and 79% of independents.
- Making larger vehicles such as SUVs or trucks more fuel-efficient is important: 86% of Democrats compared to 78% of Republicans. (In this case, independents actually did not differ from either major party.)
- I expect each new generation of vehicles available on the market to be more fuel-efficient than the last: 89% of Democrats compared to 72% of Republicans and 67% of independents.
- Automakers have a responsibility to consumers to improve gas mileage: 85% of Democrats, 71% of Republicans, and 67% of independents.
- The U.S. government should continue to increase fuel-efficiency standards: 84% of Democrats compared to 53% of independents and 47% of Republicans.

For “Automakers care about lowering fuel costs for their customers,” a higher percentage of Republicans (31%) than Democrats (26%) agree. In this case, independents did not differ from either major party.

For “Automakers are doing a good job of making fuel-efficient passenger vehicles,” Republicans are more likely to agree than independents (52% compared to 40%), but the major parties do not differ significantly from each other (47% of Democrats agree).

Perhaps surprisingly, there are no significant differences by political leaning in the percentage agreeing that “The federal government should prevent states from setting stronger vehicle emissions standards than the federal government.”

## BELIEFS AND KNOWLEDGE ABOUT HYBRID VEHICLES

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Finally, we asked all Americans whether they think some statements about hybrid vehicles are true or false to get at their knowledge, beliefs, and possible misconceptions around hybrids. For this set of questions, we defined a hybrid vehicle as “a vehicle that runs on a combination of electricity and gasoline”—a definition that includes both “hybrid” and “plug-in hybrid” vehicles by the typologies used elsewhere in this report.

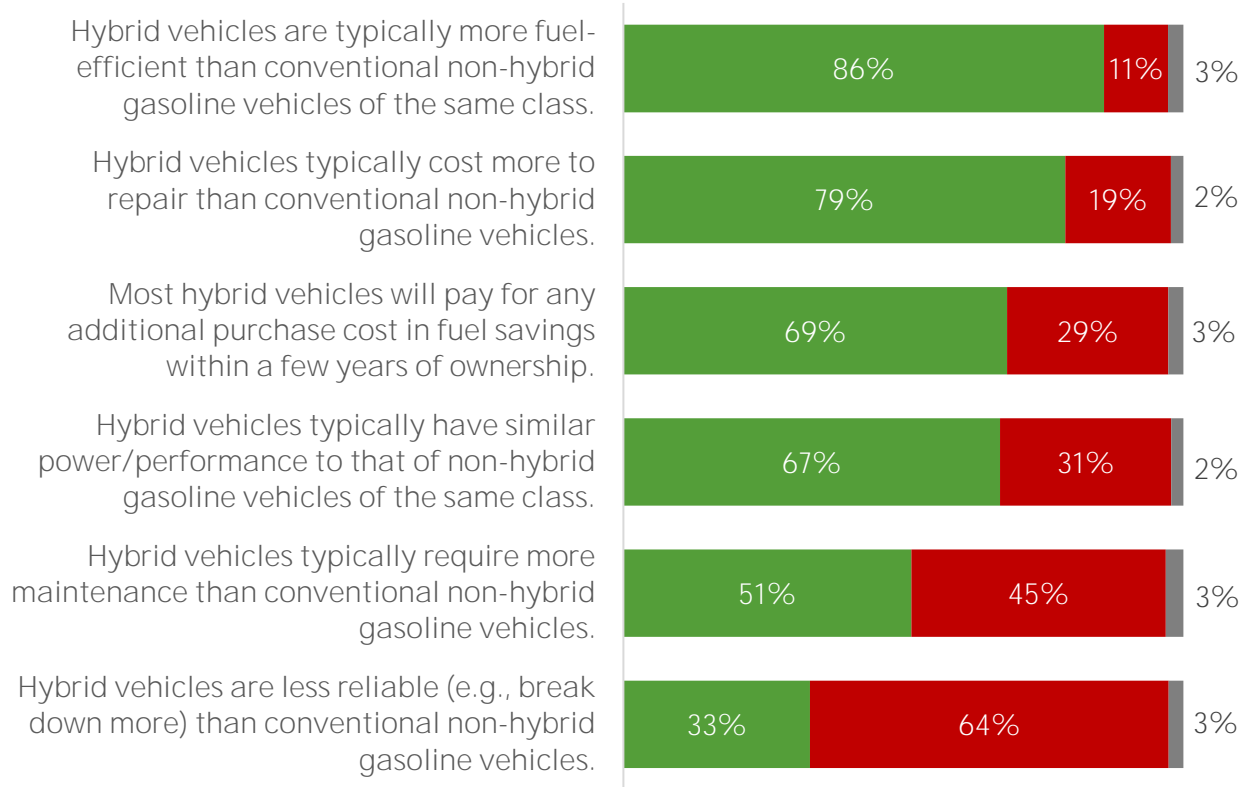
Most Americans (86%) say it is true that hybrids are more fuel-efficient than non-hybrid gasoline vehicles of the same class. Just one in three (33%) believe hybrid vehicles are less reliable than non-hybrid gasoline vehicles.

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<sup>10</sup> All differences on this page are statistically significant at the .05 level controlling for gender, race/ethnicity, age, education, income, urbanicity, region, and political leaning—but nothing about their specific vehicle for this question.

Please indicate, to the best of your knowledge, whether the following statements about hybrid vehicles are true or false

■ True ■ False ■ Skipped or said "don't know"



Base: All respondents.

Americans' overall impression seems to be that hybrids are fuel-efficient (86% true) and that their fuel efficiency pays off financially over time (69% true). They think hybrid vehicles generally have equivalent performance to gasoline-powered vehicles (67% true) and are at least as reliable as gasoline-powered vehicles (64% say it is false that they are less reliable). However, a majority also think that hybrids cost more to repair when they need it (79% true), and about half believe that they require maintenance more often than gasoline-powered vehicles (51% say it is true they need more maintenance).

On the other hand, people who drive hybrids themselves are less likely to think they need more maintenance or that maintenance is more expensive. People who actually drive hybrids—here referring to both regular and plug-in hybrids to match the question—differ from those who do not on several of these items.<sup>11</sup>

- Eighty-five percent of people who say the vehicle they most often drive is some kind of hybrid say it is **true** that "Most hybrid vehicles will pay for any additional purchase cost in fuel

<sup>11</sup> All differences in this section are statistically significant at the .05 level controlling for gender, race/ethnicity, age, education, income, urbanicity, region, political leaning, car body type, and fuel type.

savings within a few years of ownership." Only around two in three (68%) of those who drive vehicles with another type of fuel say this is true.

- Hybrid owners are more likely to say it is **false** that "Hybrid vehicles typically cost more to repair than conventional non-hybrid gasoline vehicles" (46% say false compared to 20% of everyone else) and "Hybrid vehicles typically require more maintenance" (70% compared to 47% of everyone else).

Note that two or three percent of people did not answer each question, either by skipping it (if taking the survey online) or by saying they didn't know (on the phone). While small, this is a larger than usual percentage for our surveys and probably reflects those people's lack of familiarity with hybrids.

## SUMMARY

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American drivers value fuel economy, with 70% saying it is "very" or "extremely" important to their choice of vehicle. (Even in groups that value it relatively less, such as pickup truck drivers, a high percentage do.) They also believe that fuel economy can and should improve. Not only is fuel economy the attribute most commonly selected as an area that could be improved in their current vehicle, but Americans also believe their options should continuously improve in the marketplace, with automakers improving fuel economy for each new generation of vehicles and across a wide array of vehicle types.

While fuel economy was the most commonly-selected attribute with room for improvement on Americans' current vehicles, purchase price was the second-most common, and the survey results show a tension between those priorities. The most common reasons drivers give for saying fuel economy is important reflect a very practical interest in saving money. Americans are generally open to the idea of a higher purchase price for a vehicle if fuel savings would offset—or more than offset—the higher initial price, but this support is not unanimous. Three in ten—a sizeable minority—say they would *not* get a vehicle at a higher monthly payment, even if they would save enough at the pump that their total monthly expenses would be lower.

Fuel economy is better in hybrid vehicles than in exclusively gas-powered ones, which is probably why drivers of hybrids are less likely to say that fuel economy is one of the attributes of their vehicle with room for improvement. Drivers of hybrids are especially likely to say that hybrid vehicles will pay for any additional purchase cost in fuel savings—likely speaking from experience. However, it is important to keep in mind that drivers of hybrid vehicles are only six percent of all drivers. The vast majority of Americans drive gasoline-powered vehicles.



## METHODOLOGY

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This nationally representative survey of 2,161 adults residing in the USA was conducted by phone (n=64) and internet (n=2,097) by NORC at the University of Chicago from September 23<sup>rd</sup> through October 17<sup>th</sup>, 2022. It was fielded through NORC's AmeriSpeak Panel, a nationally representative probability-based panel, in both English (n=2,002) and Spanish (n=159).

A general population sample of U.S. adults age 18 and older was selected from NORC's AmeriSpeak® Panel for this study. Funded and operated by NORC at the University of Chicago, AmeriSpeak® is a probability-based panel designed to be representative of the US household population. Randomly selected US households are sampled using area probability and address-based sampling, with a known, non-zero probability of selection from the NORC National Sample Frame. These sampled households are then contacted by US mail, telephone, and field interviewers (face to face). The panel provides sample coverage of approximately 97% of the U.S. household population. Those excluded from the sample include people with P.O. Box only addresses, some addresses not listed in the USPS Delivery Sequence File, and some newly constructed dwellings. While most AmeriSpeak households participate in surveys by web, non-internet households can participate in AmeriSpeak surveys by telephone. Households without conventional internet access but having web access via smartphones are allowed to participate in AmeriSpeak surveys by web. AmeriSpeak panelists participate in NORC studies or studies conducted by NORC on behalf of governmental agencies, academic researchers, and media and commercial organizations.

These data were weighted to provide nationally-representative estimates of the U.S. adult population based on sex, age, education, race/ethnicity, census region, housing tenure, and telephone status.

The margin of error for the full sample of 2,161 is +/- 2.72 percentage points at the 95% confidence level. Smaller subgroups will have larger margins. Panelists were offered the cash equivalent of \$2 for completing the survey.

Final data are weighted by age, gender, race/Hispanic ethnicity, housing tenure, telephone status, education, and Census Division to be proportionally representative of the U.S. adult population. After weighting, the sample is:

- 51% female
- Median age of 47
- 62% have an annual household income of \$50,000 or more.
- 35% have a BA or above; 26% have some college; 29% have high school diplomas or the equivalent; and 9% did not graduate high school.
- 61% are white; 17% are Hispanic; 12% are Black; 7% are English-speaking Asian; and the rest are some other ethnicity or did not provide their ethnicity.