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# **CONSUMER PREFERENCES AND MOTIVATIONS FOR OWNING LIGHT TRUCKS VERSUS PASSENGER CARS**

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**BRANDON SCHOETTLE  
MICHAEL SIVAK**



**SUSTAINABLE WORLDWIDE  
TRANSPORTATION**

UNIVERSITY OF MICHIGAN

CONSUMER PREFERENCES AND MOTIVATIONS FOR OWNING LIGHT  
TRUCKS VERSUS PASSENGER CARS

Brandon Schoettle  
Michael Sivak

The University of Michigan  
Sustainable Worldwide Transportation  
Ann Arbor, Michigan 48109-2150  
U.S.A.

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16. Abstract <p>This report focuses on consumer preferences related to vehicle purchasing decisions and vehicle utility. It documents the results of a survey that was conducted to gain an understanding of the overall importance of vehicle classes, consumer preferences, typical light-truck usage, the need or desire for light-truck utility, and willingness to consider other vehicle types (or classes) different from respondents' currently owned vehicles. Of special interest are the factors that consumers consider to be disadvantages and which could dissuade them from considering other vehicle types or classes when making a purchasing decision. In addition to investigating different vehicle classes, the survey also examined consumer views related to alternative fuels or powertrains for vehicles both within and outside of the respondents' specific type or class of vehicle.</p> <p>The main findings are as follows:</p> <ul style="list-style-type: none"><li>• The main usage for light trucks tended to be for general transportation and commuting.</li><li>• The primary reason for owning a light truck was for the overall increase in utility over passenger cars; the primary reasons for not owning a light truck and only owning passenger cars related to costs savings relative to light trucks.</li><li>• Light-truck owners and passenger-car owners both listed small (or smaller) light trucks as the vehicle type they were most likely to consider over their current vehicle.</li><li>• More than one third of both light-truck owners and passenger-car owners said that they would not consider another vehicle type or class other than their current vehicle.</li></ul> <p>The report also discusses perceived disadvantages of each vehicle type or class, and consumers' willingness to consider vehicles using alternative fuels or powertrains for each vehicle class (including hybrids and all-electric vehicles).</p>					
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## Background

As documented in our recent report (Sivak and Schoettle, 2017b), the overall, on-road, fleet fuel economy for light-duty vehicles (passenger cars and light trucks) in the U.S. has shown only slight improvements over the past several decades, increasing from 19.6 mpg in 1991 to 22.0 in 2015. New-vehicle window-sticker fuel economy has shown similarly flat performance in recent years (NHTSA, 2014; Sivak and Schoettle, 2017a). The nature of these improvements (or lack thereof) generally relates to the evolving mix of vehicle classes sold during this period. While individual vehicle models tend to gradually improve their fuel economy over time (Sivak and Schoettle, 2015), the overall fleet fuel economy is very much dependent upon the mix of vehicle classes—passenger cars versus light trucks—being bought each year in the U.S. (Schoettle and Sivak, 2012). An examination of the data in Sivak and Schoettle (2017b) shows that on-road fuel-economy gains for passenger cars, though increasing only modestly since 1991, have been much larger relative to those for light trucks (2.7 mpg vs. 0.3 mpg, respectively).

One of the important factors affecting this mix of vehicle classes purchased (or leased) in the U.S. is the fluctuating price of gasoline. Extremes in gas prices influence new-vehicle sales, with less fuel-efficient models (including light trucks) being purchased more frequently as gas prices decrease (and vice versa). In a recent study examining the relationship between the price of gasoline and the fuel economy of purchased new vehicles (Sivak and Schoettle, 2011), a regression analysis found that the fuel economy of the new-vehicle fleet was highly correlated with the price of gasoline (as well as the unemployment rate).

Figure 1 shows the trend for the mix of vehicle classes in the U.S. since 1975 (EPA, 2016). The overall mix of vehicle classes sold has fluctuated over the past decade, but sales of light-duty trucks (“light trucks”) have increased in several recent years, especially during years in which the price of gasoline dropped or was relatively low. This increase in the proportion of light trucks has directly impacted the projected long-term CAFE performance of the U.S. fleet. The much-discussed fleet CAFE target of 54.5 mpg\* for 2025 is now no longer expected, due to

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\* The initial target of 54.5 mpg for fleet-wide CAFE performance in 2025 (EPA/NHTSA, 2012) has always had the ability to “float” with the changing mix of vehicle classes sold (and their corresponding footprint targets). However, these targets anticipated a mix of vehicles with increasing shares of passenger cars. The actual trend has been different from what was forecast, with shares of passenger cars staying relatively flat or even decreasing during some years. Furthermore, all projected CAFE targets for 2022-2025, 54.5 mpg or otherwise, may be eliminated during the upcoming re-review of the CAFE midterm review (EPA/NHTSA, 2017; NPR, 2017).

the fact that the anticipated sales mix may eventually tilt toward light trucks in the coming years (Sivak and Schoettle, 2016).

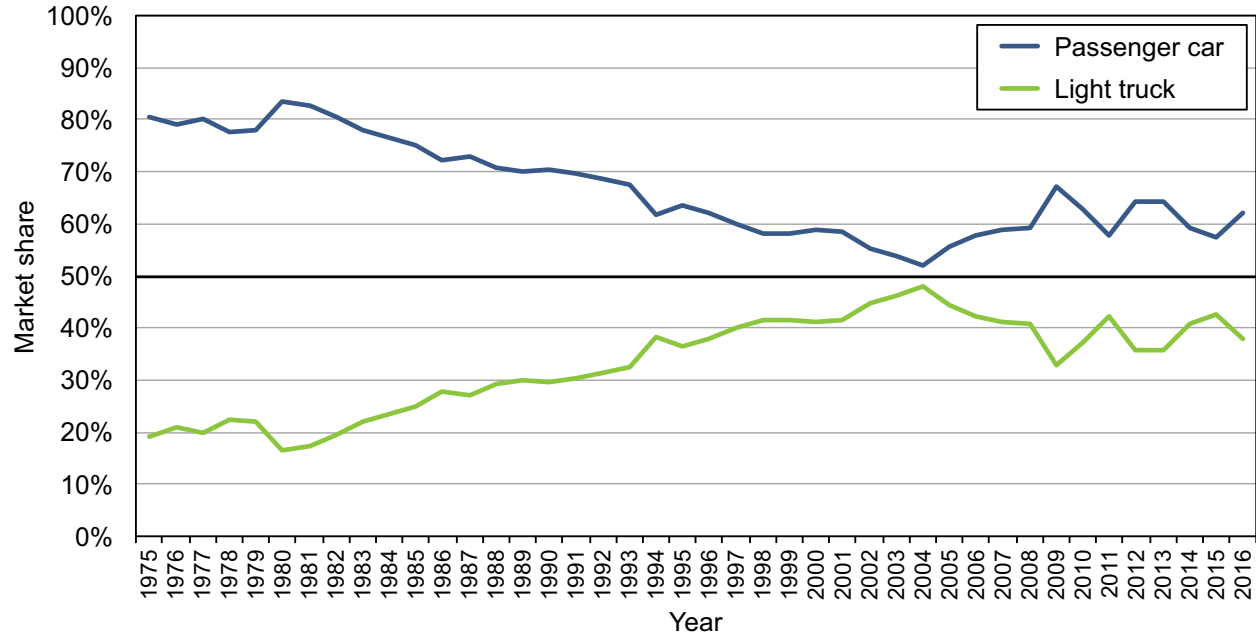


Figure 1. Trends in market shares of vehicle classes, 1975 to 2015 (EPA, 2016).

However, beyond the specific mix of vehicle classes and the strong effect gasoline prices have on this mix, we hope to gain a better understand of the other preferences and motivations of consumers regarding light trucks, including light-truck owners as well as those who only own passenger cars. This report focuses on consumer preferences related to vehicle-purchasing decisions and vehicle utility. It documents the results of a survey that was conducted to gain an understanding of the overall importance of vehicle classes, consumer preferences, typical light-truck usage, the need or desire for light-truck utility, and willingness to consider other vehicle types (or classes) outside of their current vehicle. Of special interest are the factors that consumers consider to be disadvantages and which could dissuade them from considering other vehicle types or classes when making a purchasing decision. In addition to investigating different vehicle classes, the survey also examined consumer views related to alternative fuels or powertrains for vehicles both within and outside of the respondent’s specific vehicle type or class.

## **Method**

### **Survey instrument**

An online survey was conducted using SurveyMonkey ([www.surveymonkey.com](http://www.surveymonkey.com)). A questionnaire was developed to examine different factors that consumers might consider when deciding whether to purchase a light truck or a passenger car. Fundamental differences in the design and operation of the two vehicle classes were examined, with a focus on those factors that might cause a consumer to favor a light truck over a passenger car, and vice versa. The text of the questionnaire is included in the Appendix. The survey was performed in March 2017.

### **Respondents**

SurveyMonkey's Audience tool was used to target and recruit vehicle owners (and lessees) 18 years and older from SurveyMonkey's respondent databases in the U.S. Fully completed surveys were received for 1,230 respondents. Demographic breakdowns for the respondents are presented in Table 1.

### **Demographic trends**

In addition to reporting the overall results and trends, we also report results by gender and age, and we describe demographic trends that were found to be noteworthy. The margin of error at the 95% confidence level for the overall demographic trends (1,230 respondents) is +/- 2.8%. The margin of error at the 95% confidence level for the light-truck-owner group (685 respondents) is +/- 3.7%, and +/- 4.2% for the passenger-car-owner group (545 respondents).



Table 1  
Demographic breakdowns for the 1,230 respondents.

Demographic aspect		Percent
Gender	Female	52.7
	Male	47.3
Age group	18 to 29	20.1
	30 to 44	24.4
	45 to 59	28.1
	60 or older	27.3
Income	\$0 to \$24,999	15.0
	\$25,000 to \$49,999	18.7
	\$50,000 to \$74,999	16.0
	\$75,000 to \$99,999	13.1
	\$100,000 to \$124,999	10.0
	\$125,000 to \$149,999	4.5
	\$150,000 to \$174,999	3.0
	\$175,000 to \$199,999	1.6
	\$200,000 or more	6.2
Prefer not to answer	12.0	
U.S. region	New England	6.0
	Middle Atlantic	12.1
	North Central	21.4
	South Atlantic	18.0
	South Central	15.4
	Mountain	7.5
	Pacific	19.5
Vehicle owner group <sup>†</sup>	Light-truck owner	55.7
	Passenger-car owner	44.3
Vehicle types owned or leased (Q1) <sup>‡</sup>	Pickup truck	18.5
	Sport utility vehicle (SUV)	29.0
	Van (full size or cargo)	3.0
	Minivan	7.1
	Crossover SUV (CUV)	11.8
	Passenger car	64.8

<sup>†</sup> “Light-truck owners” are those who own any combination of light trucks and passenger cars, including owning only light trucks; “Passenger-car owners” are those who own only passenger cars and do not own any type of light truck.

<sup>‡</sup> Percentages add to more than 100% due to ownership of multiple vehicles by individual respondents.



Figure 2. U.S. Census regions.

## Results

### Light-truck owners

Breakdowns of vehicle ownership for the light-truck owners included in this survey are shown in Table 2.

Table 2  
Breakdowns of vehicle ownership for the 685 light-truck respondents.

Aspect	Percent	
Vehicle brand (Q2)	Ford	17.8
	Toyota	13.0
	Chevrolet	12.4
	Honda	8.3
	Dodge/Ram	7.2
	Jeep	6.6
	Subaru	5.4
	Nissan	4.5
	GMC	4.4
	Mazda	2.8
	Hyundai	2.2
	Chrysler	2.0
	Kia	2.0
	Lexus	1.6
	Mercedes-Benz	1.3
Buick	1.0	
All other brands	7.4	
Vehicle model year (Q3) (corresponding age listed in parentheses)	Mean	2008 (9 years)
	Median (50 <sup>th</sup> percentile)	2009 (8 years)
Average vehicle mileage (Q4)	Weekly	171
	Annual (weekly x 52)	8,892

### ***Light trucks as primary vehicles***

For those respondents who own some type of light truck (“light-truck owner”), the light truck they use most frequently is also the primary vehicle (Q5) for a large majority (84.4%). Table 3 presents a complete summary of responses for all respondents, including breakdowns by gender and age.

While the light truck that respondents use most frequently is the primary vehicle for the majority in each age group, the youngest age group tended to use their light trucks more often as a primary vehicle (94.1%) than older age groups (steadily decreasing to 79.5% for the oldest group).

Table 3  
Percentage of responses, by gender and age, to Q5: “*For your light truck, overall is this vehicle your primary vehicle, or a secondary vehicle?*” The most frequent response for each group is shown in **bold**.

Response	Gender		Age				<i>Total</i>
	Female	Male	18-29	30-44	45-59	60+	
Primary vehicle	<b>86.7</b>	<b>82.2</b>	<b>94.1</b>	<b>86.0</b>	<b>82.9</b>	<b>79.5</b>	<b>84.4</b>
Secondary vehicle	13.3	17.8	5.9	14.0	17.1	20.5	15.6

### ***Typical daily light-truck usage***

The light-truck owners predominantly used their vehicles (Q6) for general transportation (68.9%) and commuting (65.4%). (The percentages add to more than 100 because respondents could select multiple uses.) The most common usage involving the additional utility available in light trucks was general outdoor recreation (16.8%). Figure 3 summarizes the results for all respondents, while Table 4 presents a complete summary of responses by gender and age.

Corresponding to the general trends for all respondents, males were most likely to say they used their light trucks for general transportation (69.7%) while females were most likely to say they used them to commute to work or school (68.3%). The three youngest age groups were most likely to say they used their light trucks for commuting to work or school (ranging from 85.3% for the youngest to 76.2% for the two middle age groups), while the oldest age group was most likely to use their light truck for general transportation (78.5%). Similarly, while general outdoor recreation ranked third for all age groups, its frequency generally decreased from the youngest group to the oldest group (from 27.5% to 13.0%, respectively).

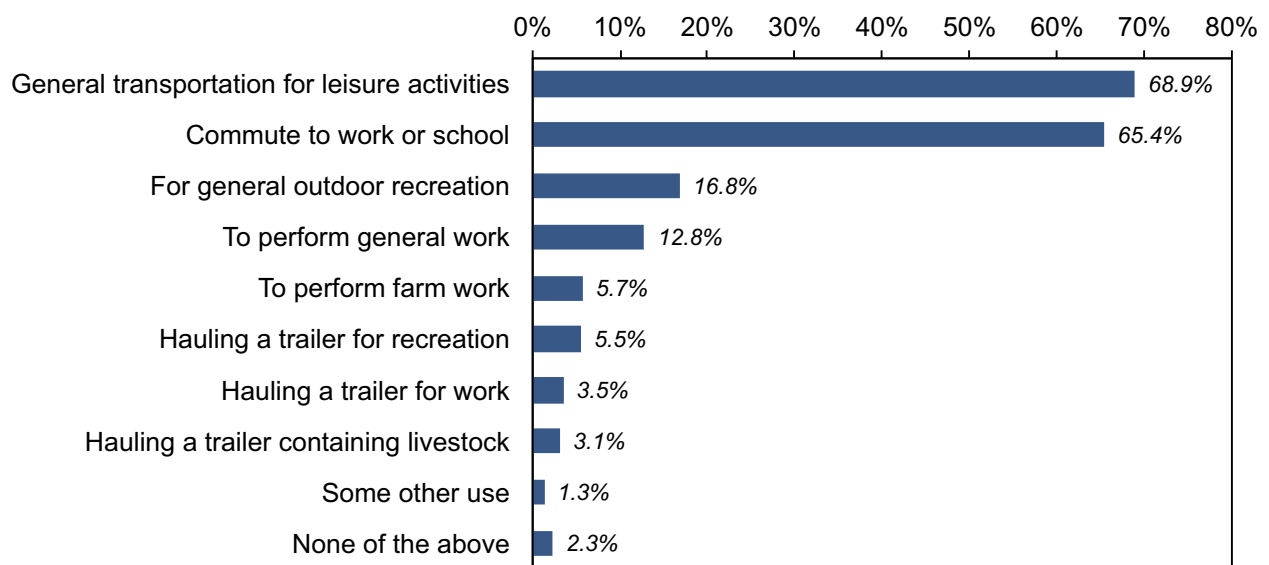


Figure 3. Summary of responses to Q6: “*On a normal day-to-day basis, how is your light truck generally used?*”

Table 4

Percentage of responses, by gender and age, to Q6: “On a normal day-to-day basis, how is your light truck generally used?” The most frequent response for each group is shown in **bold**. (The percentages add to more than 100 because respondents could select multiple uses.)

Response	Gender		Age				Total
	Female	Male	18-29	30-44	45-59	60+	
General transportation for leisure activities	68.0	<b>69.7</b>	79.4	65.7	57.1	<b>78.5</b>	<b>68.9</b>
Commute to work or school	<b>68.3</b>	62.6	<b>85.3</b>	<b>76.2</b>	<b>76.2</b>	34.5	65.4
For general outdoor recreation (off-roading, camping, fishing, hunting, etc.)	16.3	17.0	27.5	15.7	15.7	13.0	16.8
To perform general work (landscaping, delivery, contracting, construction)	9.4	15.9	15.7	11.0	15.7	9.5	12.8
To perform farm work (or similar work)	4.2	7.1	8.8	7.0	5.2	3.5	5.7
Hauling a trailer for <u>recreation</u> (camper, boats, etc.)	4.5	6.5	7.8	5.2	5.2	5.0	5.5
Hauling a trailer for <u>work</u> (cargo, work equipment, etc.)	2.1	4.8	9.8	2.3	4.3	0.5	3.5
Hauling a trailer <u>containing livestock</u> (horses, etc.)	3.0	3.1	3.9	3.5	4.3	1.0	3.1
Some other use	0.3	2.3	1.0	0.6	2.4	1.0	1.3
None of the above	2.1	2.5	0.0	3.5	10	4.0	2.3

### ***Primary reason for owning a light truck***

The top three reasons why respondents chose to purchase or lease a light truck rather than a smaller vehicle (such as a passenger car) all related to better overall utility from such vehicles. They were (1) greater general utility (19.2%); (2) need larger vehicle due to family size (13.5%); and (3) need to move large or heavy items in the cargo area (10.2%). Figure 4 summarizes the results for all respondents, while Table 5 presents a complete summary of responses by gender and age.

Choosing a light truck for greater general utility remained the number-one reason for the oldest two age groups, while the top reasons given by the youngest two age groups were for better on-road 4x4 capabilities (17.6%; 18-29 years old) and needing a larger vehicle due to family size (26.2%; 30-44 years old).

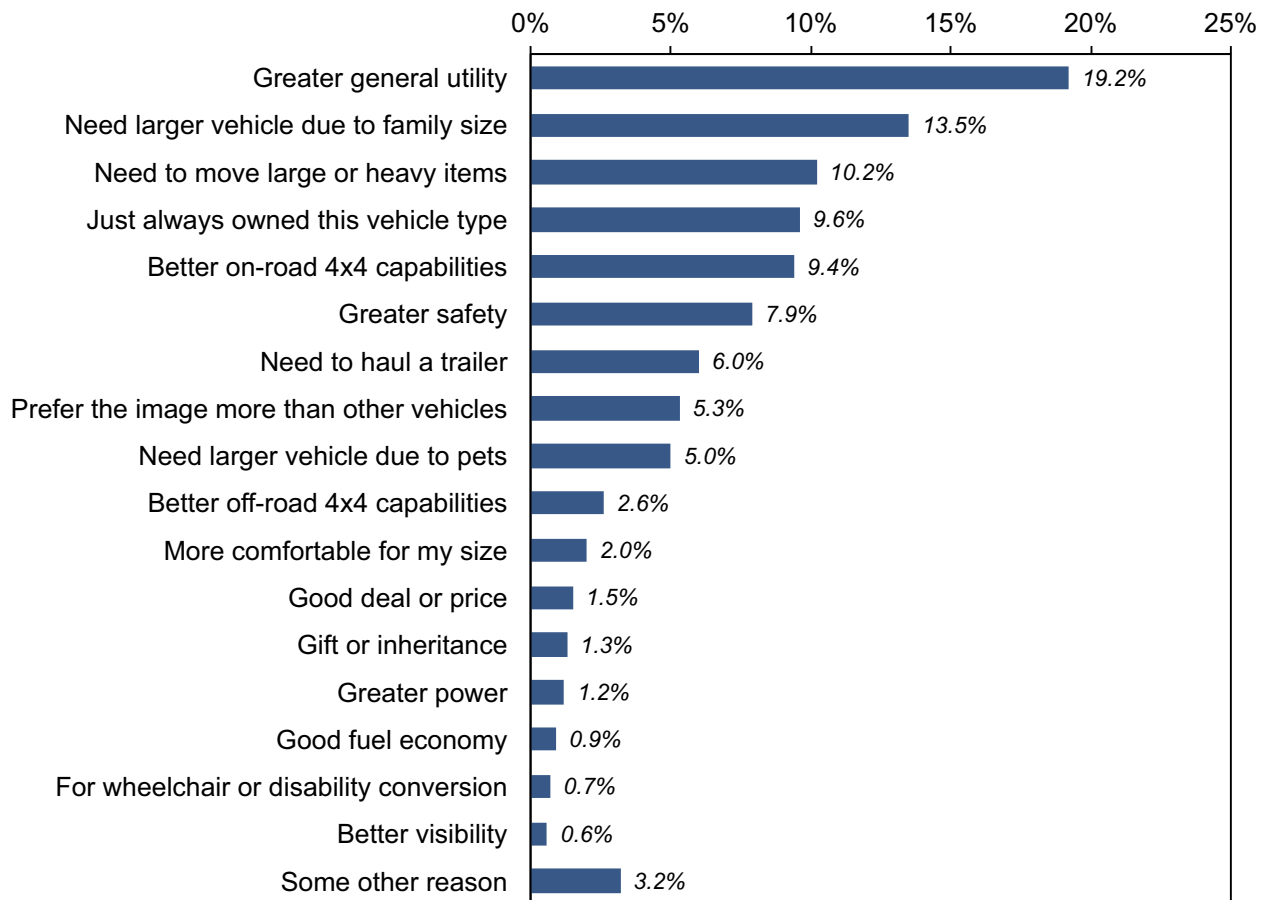


Figure 4. Summary of responses to Q7: “What is the primary reason you chose to purchase or lease your light truck rather than a smaller vehicle such as a passenger car?”

Table 5

Percentage of responses, by gender and age, to Q7: “What is the primary reason you chose to purchase or lease your light truck rather than a smaller vehicle such as a passenger car?” The most frequent response for each group is shown in **bold**.

Response	Gender		Age				Total
	Female	Male	18-29	30-44	45-59	60+	
Greater general utility	<b>16.9</b>	<b>21.2</b>	13.7	12.2	<b>19.5</b>	<b>27.5</b>	<b>19.2</b>
Need larger vehicle due to family size	13.9	13.0	11.8	<b>26.2</b>	12.4	4.5	13.5
Need to move large or heavy items in the cargo area or truck bed	8.5	11.9	4.9	11.6	11.4	10.5	10.2
I have just always owned/leased this vehicle type	11.8	7.6	10.8	8.7	2.4	9.0	9.6
Better on-road 4x4 capabilities	8.5	10.2	<b>17.6</b>	5.8	7.6	10.0	9.4
Greater safety	8.2	7.6	8.8	8.1	8.1	7.0	7.9
Need to haul a trailer (cargo, work equipment, boats, campers, 5th wheel, etc.)	7.6	4.5	3.9	6.4	7.1	5.5	6.0
Prefer the image more than other vehicle types	5.7	4.8	5.9	5.2	5.7	4.5	5.3
Need larger vehicle due to pets	6.9	3.1	2.9	4.1	6.2	5.5	5.0
Better off-road 4x4 capabilities	1.5	3.7	5.9	4.1	0.5	2.0	2.6
More comfortable for my size (big/tall)	2.1	2.0	2.0	0.6	2.4	3.0	2.0
Good deal or price	2.1	0.8	1.0	1.2	1.4	2.0	1.5
Gift or inheritance	1.5	1.1	2.9	1.7	1.4	0.0	1.3
Greater power	0.6	1.7	3.9	0.6	0.5	1.0	1.2
Good fuel economy	0.9	0.8	1.0	0.0	1.9	0.5	0.9
For wheelchair or disability conversion	0.6	0.8	0.0	0.6	0.5	1.5	0.7
Better visibility	0.9	0.3	0.0	0.0	0.5	1.5	0.6
Some other reason	1.8	4.5	2.9	2.9	10.5	4.5	3.2



### ***Additional (secondary) reasons for owning a light truck***

Respondents were generally evenly split between better overall utility from light trucks and greater safety as their top secondary reason for choosing a light truck over a passenger car. The top three secondary reasons were (1) greater general utility (25.4%); (2) greater safety (23.5%); and (3) need to move large or heavy items in the cargo area (20.1%). However, about 20% said that they had no additional (secondary) reasons beyond the primary reason given in Q7. Figure 5 summarizes the results for all respondents, while Table 6 presents a complete summary of responses by gender and age. (The percentages add to more than 100 because respondents could select multiple reasons.)

While choosing a light truck for greater general utility was the number-one secondary reason overall<sup>§</sup>, females most frequently mentioned greater safety (23.9%) as their top secondary reason. The top secondary reason given by the youngest age group (18-29) was better on-road 4x4 capabilities (29.4%).

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<sup>§</sup> Greater general utility was tied with greater safety and better on-road 4x4 capabilities for top secondary choice for the 30-44 age group (all 22.1%). Similarly, it is also tied with greater safety for top secondary choice for the 60+ age group (both 23.5%).

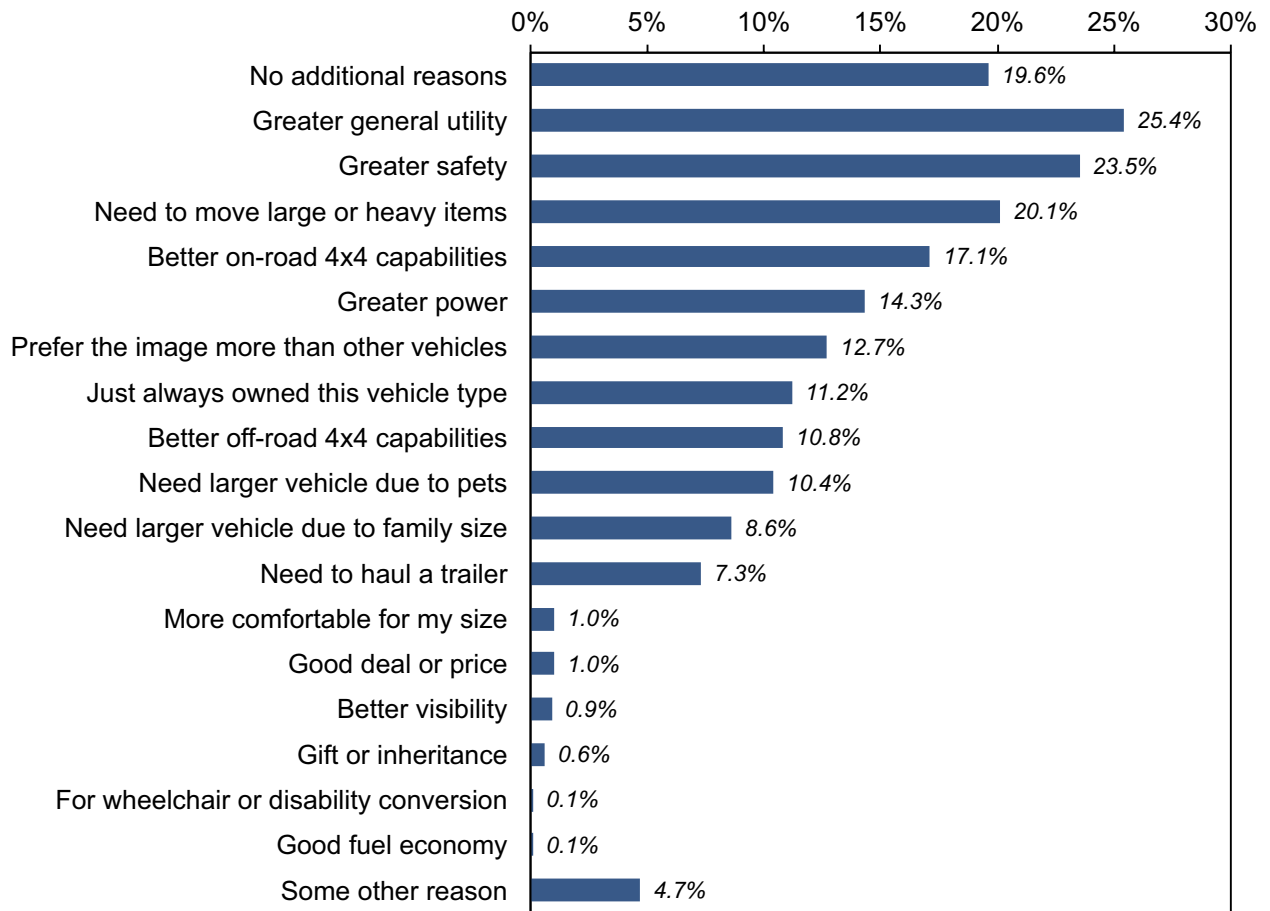


Figure 5. Summary of responses to Q8: “Are there any additional reasons you chose to purchase or lease your light truck rather than a smaller vehicle such as a passenger car?”

Table 6

Percentage of responses, by gender and age, to Q8: “Are there any additional reasons you chose to purchase or lease your light truck rather than a smaller vehicle such as a passenger car?”

The most frequent response for each group is shown in **bold**. (The percentages add to more than 100 because respondents could select multiple reasons.)

Response	Gender		Age				Total
	Female	Male	18-29	30-44	45-59	60+	
No additional reasons	19.0	20.1	17.6	22.1	18.6	19.5	19.6
Greater general utility	23.6	<b>26.9</b>	24.4	<b>22.1</b>	<b>26.2</b>	<b>23.5</b>	<b>25.4</b>
Greater safety	<b>23.9</b>	23.2	<b>29.4</b>	<b>22.1</b>	21.9	<b>23.5</b>	23.5
Need to move large or heavy items in the cargo area or truck bed	19.3	20.7	24.5	17.4	21.0	19.0	20.1
Better on-road 4x4 capabilities	19.3	15.0	24.5	<b>22.1</b>	11.9	14.5	17.1
Greater power	12.1	16.4	28.4	15.1	15.2	5.5	14.3
Prefer the image more than other vehicle types	11.8	13.6	21.6	14.0	10.5	9.5	12.7
I have just always owned/leased this vehicle type	11.2	11.3	11.8	8.7	11.4	13.0	11.2
Better off-road 4x4 capabilities	8.8	12.7	17.6	12.2	10.5	6.5	10.8
Need larger vehicle due to pets	13.9	7.1	10.8	7.6	12.4	10.5	10.4
Need larger vehicle due to family size	9.1	8.2	11.8	11.0	8.6	5.0	8.6
Need to haul a trailer (cargo, work equipment, boats, campers, 5th wheel, etc.)	6.0	8.5	8.8	9.9	6.2	5.5	7.3
More comfortable for my size (big/tall)	0.3	1.7	1.0	1.2	0.5	1.5	1.0
Good deal or price	0.6	1.4	0.0	0.6	2.4	0.5	1.0
Better visibility	1.2	0.6	0.0	0.0	1.9	1.0	0.9
Gift or inheritance	0.6	0.6	0.0	0.6	1.0	0.5	0.6
For wheelchair or disability conversion	0.0	0.3	0.0	0.6	0.0	0.0	0.1
Good fuel economy	0.3	0.0	1.0	0.0	0.0	0.0	0.1
Some other reason	4.8	4.5	2.0	3.5	4.3	7.5	4.7

***Most frequently used light-truck feature***

The top three most frequently used features of light trucks (Q9) were generally those related to the additional space found in such vehicles. They were (1) extra cargo space (33.8%); (2) moving large or heavy items inside the vehicle or in the cargo bed (21.9%); and (3) extra seating capacity (17.1%). Figure 6 summarizes the results for all respondents, while Table 7 presents a complete summary of responses by gender and age.

The same overall patterns were found for gender and age, but the usage of extra seating capacity (#3) declined substantially as the age group of the driver increased (from 23.5% down to 10.0%).

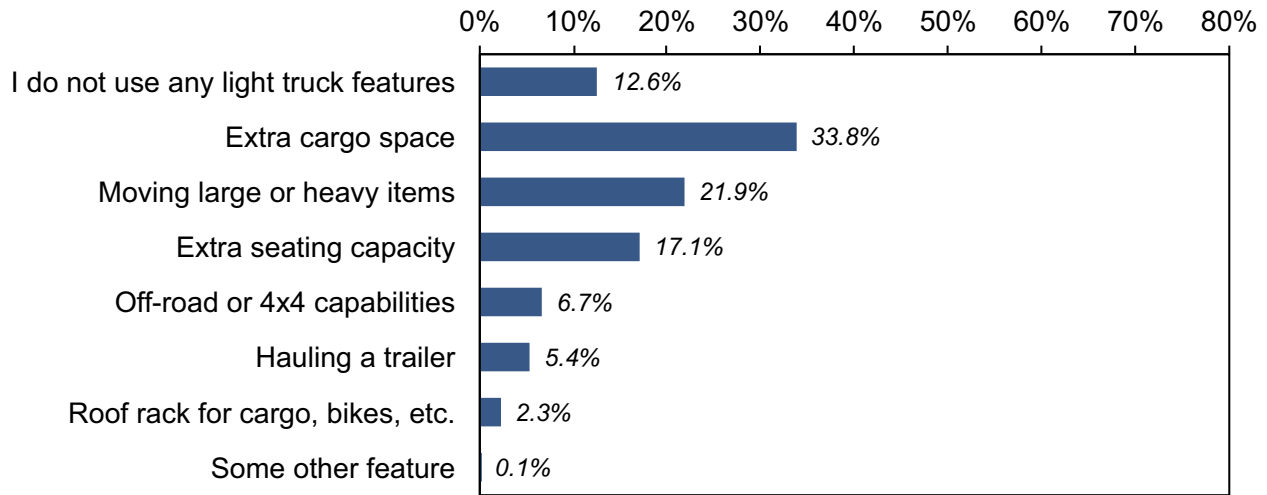


Figure 6. Summary of responses to Q9: “Which of the following features that are ordinarily found on light trucks (pickup trucks, minivans, SUVs, etc.) do you use most often in your light truck?”

Table 7

Percentage of responses, by gender and age, to Q9: “Which of the following features that are ordinarily found on light trucks (pickup trucks, minivans, SUVs, etc.) do you use most often in your light truck?” The most frequent response for each group is shown in **bold**.

Response	Gender		Age				Total
	Female	Male	18-29	30-44	45-59	60+	
I do not use any features ordinarily found on light trucks	14.8	10.5	8.8	10.5	12.4	16.5	12.6
Extra cargo space	<b>34.4</b>	<b>33.1</b>	<b>32.4</b>	<b>32.0</b>	<b>30.5</b>	<b>39.5</b>	<b>33.8</b>
Moving large or heavy items inside the vehicle or in the cargo bed	20.8	22.9	18.6	18.6	25.7	22.5	21.9
Extra seating capacity	16.3	17.8	23.5	23.8	15.2	10.0	17.1
Off-road or 4x4 capabilities	6.3	7.1	6.9	7.6	5.7	7.1	6.7
Hauling a trailer	4.2	6.5	6.9	5.8	6.2	3.5	5.4
Roof rack for cargo, bikes, etc.	3.0	2.3	2.9	1.7	4.3	0.5	2.3
Some other feature	0.0	0.3	0.0	0.0	0.0	0.5	0.1

### *Additional frequently used light-truck features*

The top three additional frequently used features of light trucks (Q10) continued to be related to the additional space found in such vehicles. They were the same top three features listed for Q9, differing only in their order: (1) moving large or heavy items inside the vehicle or in the cargo bed (28.4%); (2) extra seating capacity (26.9%); and (3) extra cargo space (24.6%). Figure 7 summarizes the results for all respondents, while Table 8 presents a complete summary of responses by gender and age. (The percentages add to more than 100 because respondents could select multiple features.)

The most frequently used light-truck features for females was extra seating capacity (27.6%). Extra seating capacity was also the top choice for the 30-44 age group (32.7%). The most frequent response for the 60+ age group was that they do not use any additional features (30.2%) (beyond any mentioned in Q9).

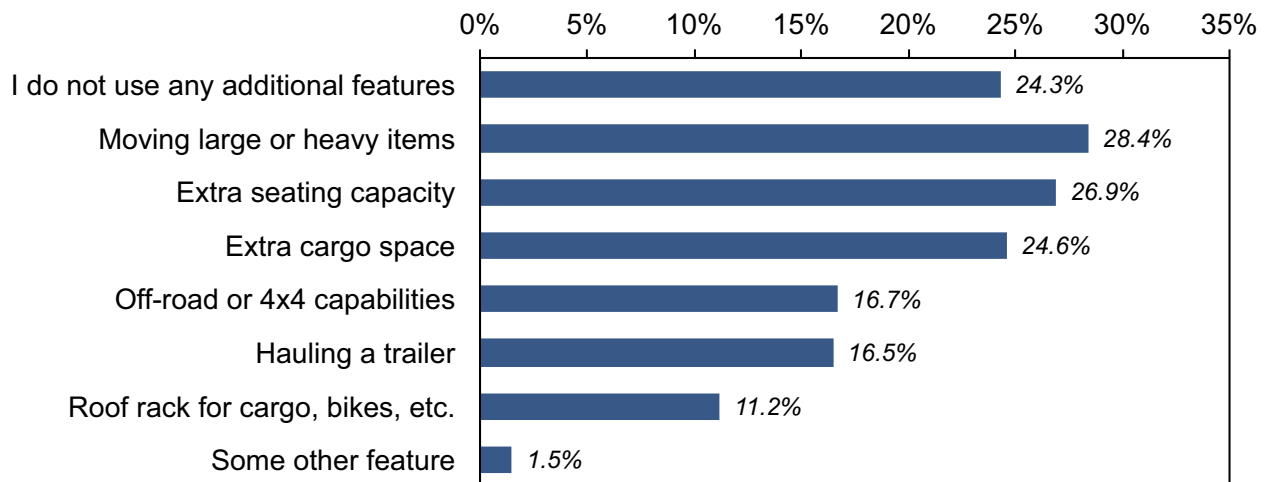


Figure 7. Summary of responses to Q10: “Are there any additional features that are ordinarily found on light trucks (pickup trucks, minivans, SUVs, etc.) that you use in your light truck?”

Table 8

Percentage of responses, by gender and age, to Q10: “*Are there any additional features that are ordinarily found on light trucks (pickup trucks, minivans, SUVs, etc.) that you use in your light truck?*” The most frequent response for each group is shown in **bold**. (The percentages add to more than 100 because respondents could select multiple features.)

Response	Gender		Age				Total
	Female	Male	18-29	30-44	45-59	60+	
I do not use any additional features	24.5	24.2	22.6	19.2	24.2	<b>30.2</b>	24.3
Moving large or heavy items inside the vehicle or in the cargo bed	27.3	<b>29.6</b>	<b>37.6</b>	26.9	<b>25.8</b>	27.8	<b>28.4</b>
Extra seating capacity	<b>27.6</b>	26.4	32.3	<b>32.7</b>	22.0	24.3	26.9
Extra cargo space	22.4	26.7	21.3	28.2	22.0	20.7	24.6
Off-road or 4x4 capabilities	12.9	19.8	28.0	16.7	14.0	13.0	16.7
Hauling a trailer	14.0	18.9	19.4	19.2	15.6	13.6	16.5
Roof rack for cargo, bikes, etc.	10.5	11.9	12.9	10.9	13.4	8.3	11.2
Some other feature	1.4	1.6	0.0	0.6	1.1	3.6	1.5

### ***Consideration of other vehicle types over currently owned light truck***

When respondents were asked which other vehicle types they would consider instead of their current light-truck model if there were a large *increase* in the price of gas (Q11), respondents were mostly likely to say they would not consider any other vehicle type over their current model (36.4%). Following not considering other vehicles, the three most frequent responses were (1) a smaller light truck (20.6%); (2) a non-plug-in hybrid version of their current model (20.0%); and (3) a passenger car (19.9%). Figure 8 summarizes the results for all respondents, while Table 9 presents a complete summary of responses by gender and age. (The percentages add to more than 100 because respondents could select multiple vehicle types.)

The top choice for females was a non-plug-in hybrid version of their current light truck (21.8%), while males would be most likely to consider a passenger car (21.2%). The two youngest age groups (18-29 and 30-44) preferred passenger cars as their top alternative (28.4% and 26.2%, respectively), while the oldest age group (60+) said that a non-plug-in hybrid was the vehicle they were most likely to consider (23.0%).

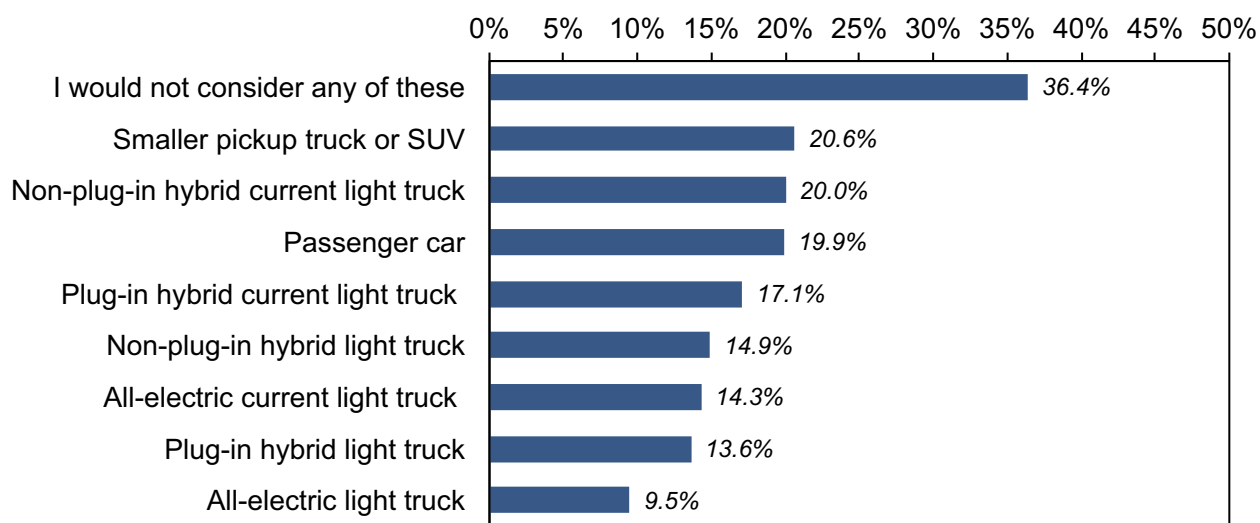


Figure 8. Summary of responses to Q11: “*If there were a large increase in the cost of gasoline, which of the following vehicle types would you consider purchasing or leasing instead of your current light truck?*”



Table 9

Percentage of responses, by gender and age, to Q11: “If there were a large increase in the cost of gasoline, which of the following vehicle types would you consider purchasing or leasing instead of your current light truck?” The most frequent response for each group is shown in **bold**. (The percentages add to more than 100 because respondents could select multiple vehicle types.)

Response	Gender		Age				Total
	Female	Male	18-29	30-44	45-59	60+	
I would not consider any of these vehicle types over my current light truck	<b>34.7</b>	<b>38.0</b>	<b>32.4</b>	<b>33.1</b>	<b>37.6</b>	<b>40.0</b>	<b>36.4</b>
Smaller pickup truck or SUV	20.2	20.7	27.5	21.5	20.5	16.0	20.6
Non-plug-in hybrid current light-truck model	21.8	18.4	17.6	19.8	18.6	23.0	20.0
Passenger car	18.4	21.2	28.4	26.2	17.6	12.5	19.9
Plug-in hybrid current light-truck model	16.6	17.6	19.6	20.3	14.8	15.5	17.1
Non-plug-in hybrid light truck	16.6	13.3	12.7	18.0	15.7	12.5	14.9
All-electric current light truck model	15.4	13.3	16.7	18.0	13.3	11.0	14.3
Plug-in hybrid light truck	13.9	13.3	17.6	15.1	13.3	10.5	13.6
All-electric light truck	9.7	9.3	11.8	13.4	9.0	5.5	9.5

## ***Disadvantages of switching from light truck to other vehicle types***

### *Passenger cars*

The most frequently mentioned disadvantages of switching to a passenger car from respondents' current light truck (Q12) were (1) reduced cargo capacity (65.8%); (2) a reduced hauling (trailer) capacity (28.6%); and (3) reduced safety (27.9%). About one tenth of respondents said that they do not see any disadvantages of switching to a passenger car. Figure 9 summarizes the results for all respondents, while Table 10 presents a complete summary of responses by gender and age. (The percentages add to more than 100 because respondents could select multiple disadvantages.)

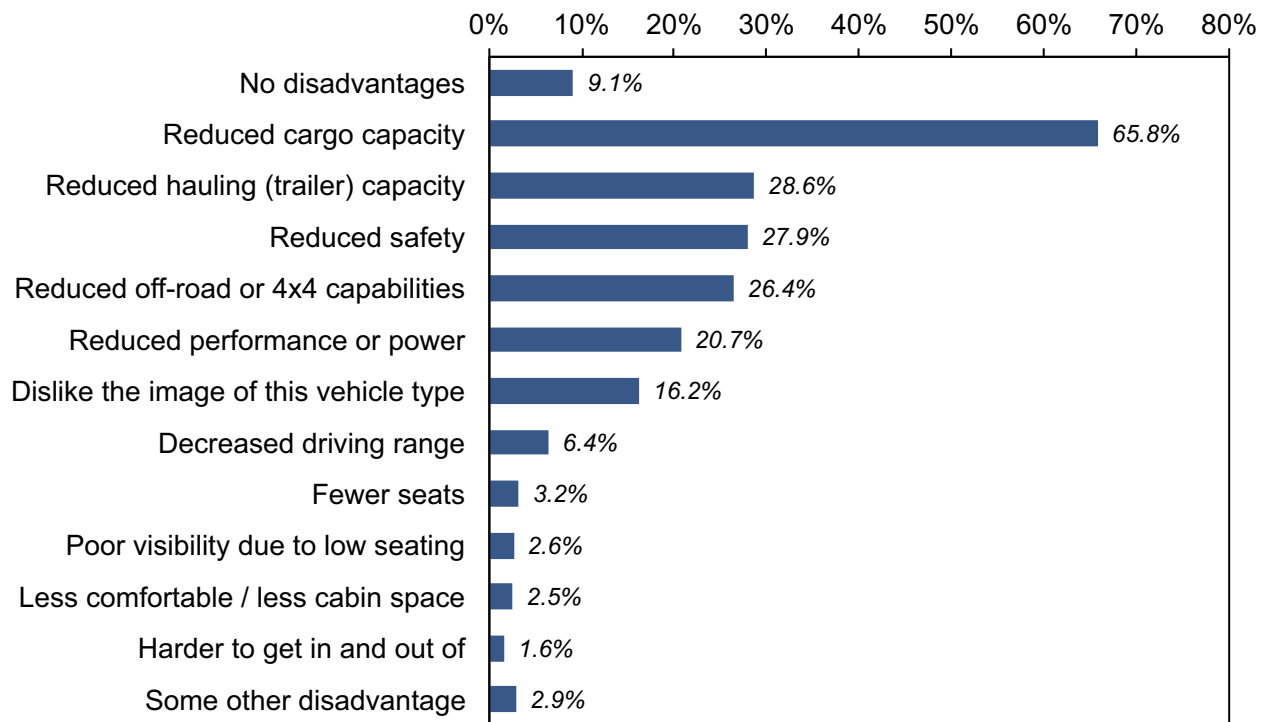


Figure 9. Summary of responses to Q12: “*In your opinion, what are the disadvantages of switching from your current light truck to a passenger car?*”

Table 10

Percentage of responses, by gender and age, to Q12: “In your opinion, what are the disadvantages of switching from your current light truck to a passenger car?” The most frequent response for each group is shown in **bold**. (The percentages add to more than 100 because respondents could select multiple disadvantages.)

Response	Gender		Age				Total
	Female	Male	18-29	30-44	45-59	60+	
No disadvantages	9.7	8.5	11.8	11.0	4.8	10.5	9.1
Reduced cargo capacity	<b>66.5</b>	<b>65.2</b>	<b>58.8</b>	<b>64.5</b>	<b>71.0</b>	<b>65.0</b>	<b>65.8</b>
Reduced hauling (trailer) capacity	23.9	33.1	33.3	28.5	30.0	25.0	28.6
Reduced safety	28.4	27.5	24.5	27.9	29.5	28.0	27.9
Reduced off-road or 4x4 capabilities	23.9	28.9	45.1	27.9	23.3	19.0	26.4
Reduced performance or power	20.2	21.2	27.5	24.4	23.8	11.0	20.7
Dislike the image of this vehicle type	15.4	17.0	25.5	16.3	14.8	13.0	16.2
Decreased driving range	4.8	7.9	17.6	5.8	5.7	2.0	6.4
Fewer seats	3.6	2.8	2.0	5.2	3.3	2.0	3.2
Poor visibility due to low seating	3.3	2.0	0.0	0.6	4.3	4.0	2.6
Less comfortable / less cabin space	2.7	2.3	2.0	2.9	3.3	1.5	2.5
Harder to get in and out of	2.7	0.6	0.0	0.6	0.5	4.5	1.6
Some other disadvantage	2.7	3.1	1.0	3.5	1.9	4.5	2.9

### *Smaller pickup trucks or SUVs*

The most frequently mentioned disadvantages of switching to a smaller pickup truck or SUV from respondents' current light truck (Q13) were (1) reduced cargo capacity (46.9%); (2) reduced safety (24.4%); and (3) reduced performance or power (21.3%). Figure 10 summarizes the results for all respondents, while Table 11 presents a complete summary of responses by gender and age. (The percentages add to more than 100 because respondents could select multiple disadvantages.)

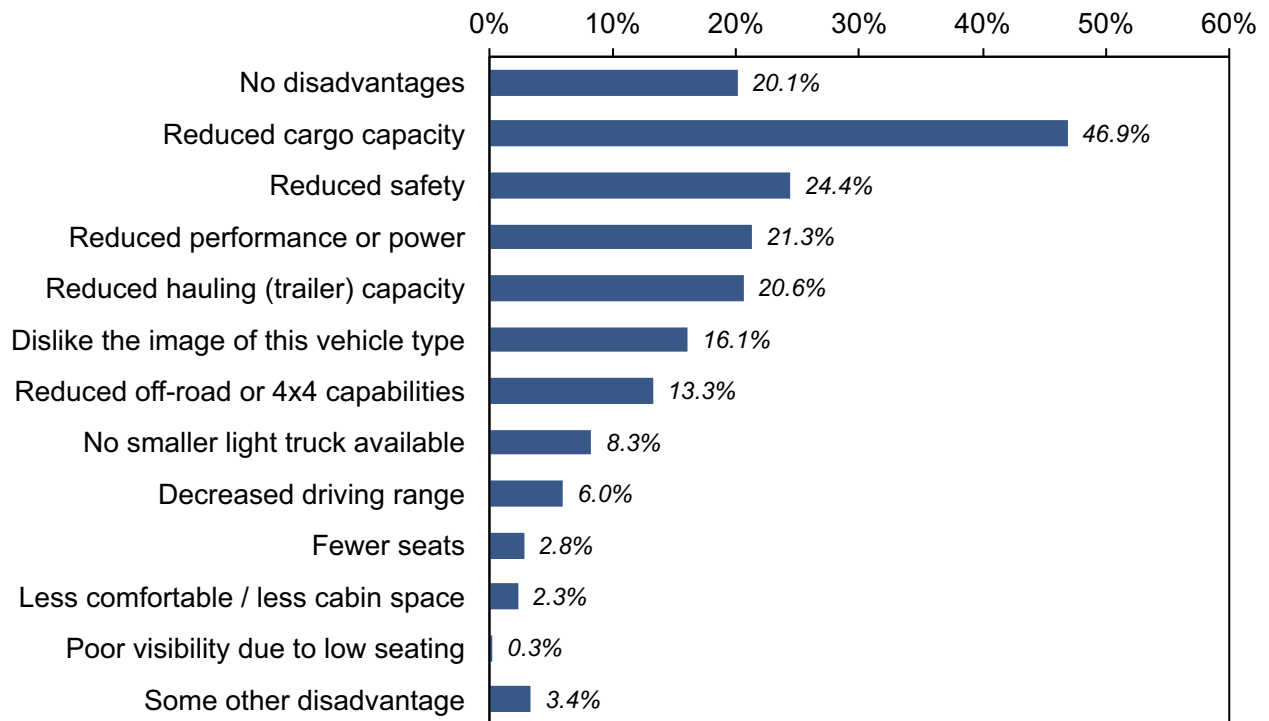


Figure 10. Summary of responses to Q13: “*In your opinion, what are the disadvantages of switching from your current light truck to a smaller pickup truck or SUV?*”

Table 11

Percentage of responses, by gender and age, to Q13: “*In your opinion, what are the disadvantages of switching from your current light truck to a smaller pickup truck or SUV?*”  
 The most frequent response for each group is shown in **bold**. (The percentages add to more than 100 because respondents could select multiple disadvantages.)

Response	Gender		Age				Total
	Female	Male	18-29	30-44	45-59	60+	
No disadvantages	22.7	17.6	26.5	21.5	18.1	17.5	20.1
Reduced cargo capacity	<b>45.0</b>	<b>48.7</b>	<b>38.2</b>	<b>47.7</b>	<b>48.1</b>	<b>49.5</b>	<b>46.9</b>
Reduced safety	24.2	24.6	18.6	19.2	27.1	29.0	24.4
Reduced performance or power	19.0	23.5	22.5	20.9	23.8	18.5	21.3
Reduced hauling (trailer) capacity	14.5	26.3	20.6	24.4	21.4	16.5	20.6
Dislike the image of this vehicle type	13.9	18.1	26.5	15.1	14.3	13.5	16.1
Reduced off-road or 4x4 capabilities	12.1	14.4	16.7	14.0	12.4	12.0	13.3
No smaller light truck available	7.9	8.8	12.7	6.4	8.1	8.0	8.3
Decreased driving range	3.9	7.9	6.9	5.8	6.7	5.0	6.0
Fewer seats	2.1	3.4	2.0	3.5	1.4	4.0	2.8
Less comfortable / less cabin space	3.3	1.4	1.0	3.5	0.5	4.0	2.3
Poor visibility due to low seating	0.6	0.0	0.0	0.0	0.5	0.5	0.3
Some other disadvantage	3.3	3.4	2.0	2.9	1.4	6.5	3.4

*Plug-in hybrid pickup trucks or SUVs*

The most frequently mentioned disadvantages of switching to a plug-in hybrid pickup truck or SUV from respondents' current light truck (Q14) were (1) charging the vehicle requires special equipment (49.6%); (2) increased initial vehicle cost (45.7%); and (3) limited or decreased driving range (43.2%). Figure 11 summarizes the results for all respondents, while Table 12 presents a complete summary of responses by gender and age. (The percentages add to more than 100 because respondents could select multiple disadvantages.)

While most respondents' main concern related to the requirement for special charging equipment, the oldest group (60+) were most concerned about having limited or decreased driving range (51.0%).

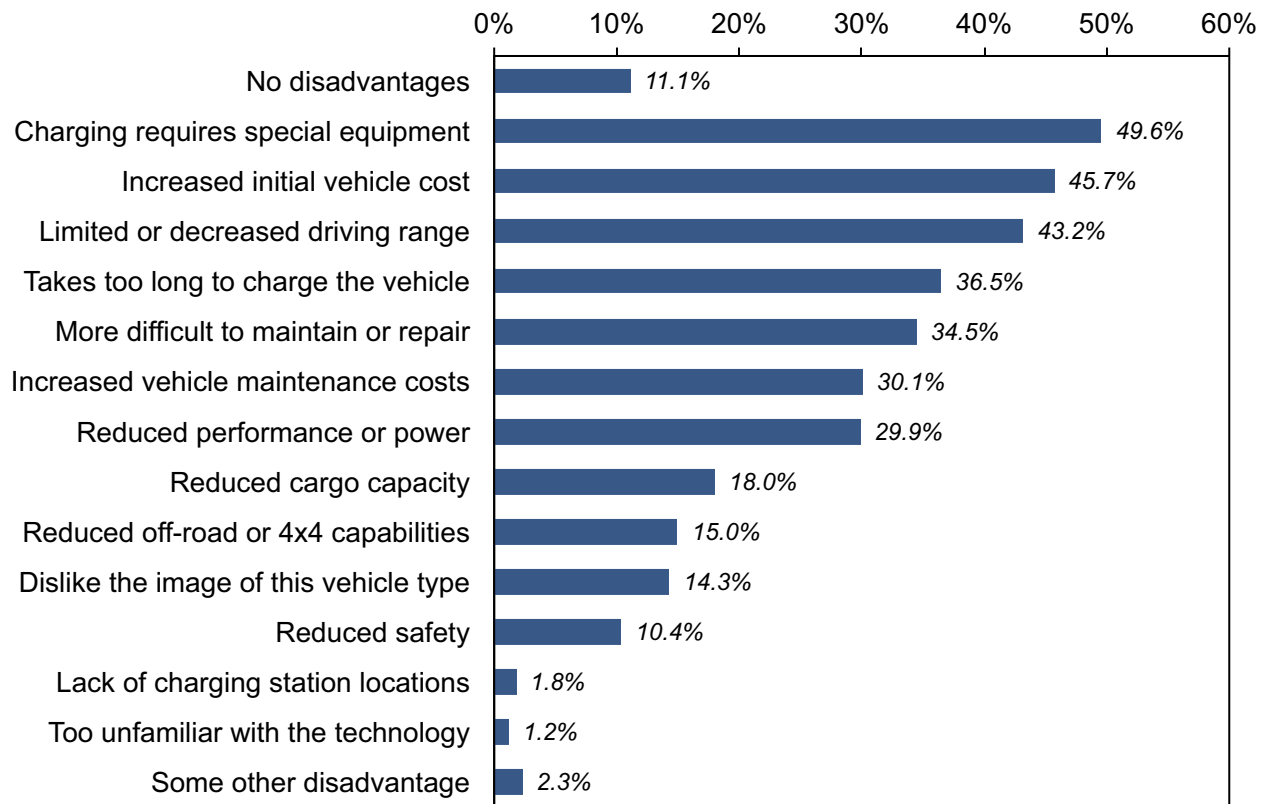


Figure 11. Summary of responses to Q14: “In your opinion, what are the disadvantages of switching from your current light truck to a plug-in hybrid pickup truck or SUV?”

Table 12

Percentage of responses, by gender and age, to Q14: “In your opinion, what are the disadvantages of switching from your current light truck to a plug-in hybrid pickup truck or SUV?” The most frequent response for each group is shown in **bold**. (The percentages add to more than 100 because respondents could select multiple disadvantages.)

Response	Gender		Age				Total
	Female	Male	18-29	30-44	45-59	60+	
No disadvantages	12.1	10.2	12.7	11.0	9.5	12.0	11.1
Charging the vehicle requires special equipment	<b>51.4</b>	<b>48.2</b>	<b>55.9</b>	<b>50.6</b>	<b>52.4</b>	43.0	<b>49.6</b>
Increased initial vehicle cost	43.5	47.9	47.1	46.5	45.2	45.0	45.7
Limited or decreased driving range	40.5	45.6	32.4	36.6	46.2	<b>51.0</b>	43.2
Takes too long to charge the vehicle	37.2	35.7	38.2	36.6	38.1	33.5	36.5
More difficult to maintain or repair	34.1	34.8	49.0	39.5	31.9	25.5	34.5
Increased vehicle maintenance costs	27.2	32.9	44.1	32.6	28.1	23.0	30.1
Reduced performance or power	27.2	32.6	28.4	33.1	33.3	24.5	29.9
Reduced cargo capacity	14.8	21.0	12.7	20.3	18.1	18.5	18.0
Reduced off-road or 4x4 capabilities	10.6	19.3	22.2	18.0	12.4	11.5	15.0
Dislike the image of this vehicle type	13.0	15.6	17.6	18.6	11.9	11.5	14.3
Reduced safety	10.6	10.2	7.8	12.2	11.0	9.5	10.4
Lack of charging station locations	2.4	1.1	0.0	0.0	2.9	3.0	1.8
Too unfamiliar with the technology	1.5	0.8	0.0	0.0	2.4	1.5	1.2
Some other disadvantage	0.9	3.7	0.0	4.7	0.5	3.5	2.3

*All-electric pickup trucks or SUVs*

The most frequently mentioned disadvantages of switching to an all-electric pickup truck or SUV from respondents' current light truck (Q15) were (1) increased initial vehicle cost (54.0%); (2) charging the vehicle requires special equipment (52.8%); and (3) limited or decreased driving range (51.4%). Figure 12 summarizes the results for all respondents, while Table 13 presents a complete summary of responses by gender and age. (The percentages add to more than 100 because respondents could select multiple disadvantages.)

Females differed in their view of the main disadvantage, most frequently mentioning that charging the vehicle requires special equipment (53.5%). The most frequently stated disadvantage among the youngest age group (18-29) was tied between increased initial vehicle cost and charging the vehicle requires special equipment (both 60.8%); the 30-44 age group mentioned charging the vehicle requires special equipment as the main disadvantage (54.7%); the oldest two age groups (44-59 and 60+) mentioned limited or decreased driving range most often as the main disadvantage (56.2% and 58.5%, respectively).



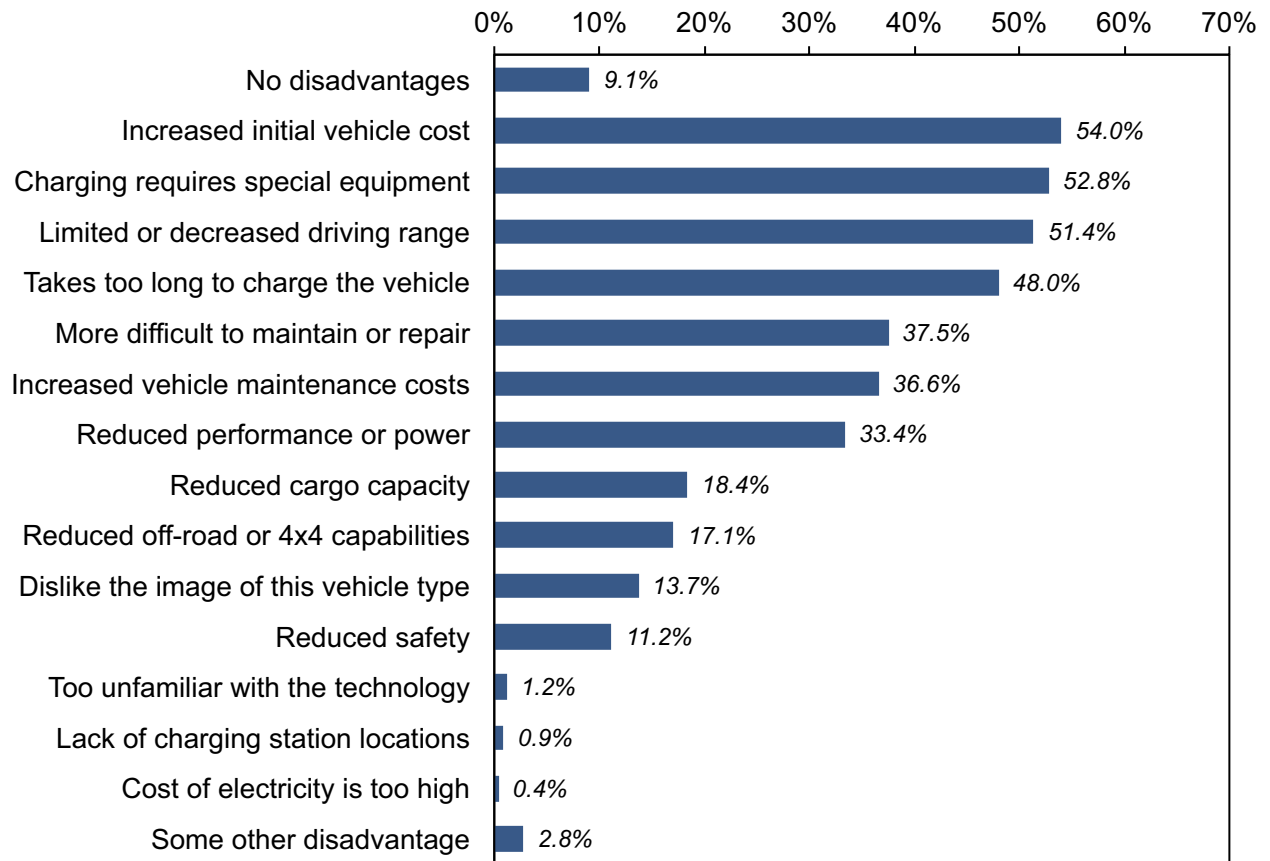


Figure 12. Summary of responses to Q15: “In your opinion, what are the disadvantages of switching from your current light truck to an all-electric pickup truck or SUV?”

Table 13

Percentage of responses, by gender and age, to Q15: “In your opinion, what are the disadvantages of switching from your current light truck to an all-electric pickup truck or SUV?” The most frequent response for each group is shown in **bold**. (The percentages add to more than 100 because respondents could select multiple disadvantages.)

Response	Gender		Age				Total
	Female	Male	18-29	30-44	45-59	60+	
No disadvantages	9.1	9.1	11.8	11.0	7.6	7.5	9.1
Increased initial vehicle cost	52.6	<b>55.5</b>	<b>60.8</b>	54.1	54.3	50.5	<b>54.0</b>
Charging the vehicle requires special equipment	<b>53.5</b>	52.4	<b>60.8</b>	<b>54.7</b>	51.9	48.5	52.8
Limited or decreased driving range	48.0	54.4	40.2	43.6	<b>56.2</b>	<b>58.5</b>	51.4
Takes too long to charge the vehicle	47.4	48.4	51.0	46.5	47.6	48.0	48.0
More difficult to maintain or repair	36.9	38.2	54.9	39.0	37.6	27.5	37.5
Increased vehicle maintenance costs	37.5	36.0	51.0	39.5	35.2	28.5	36.6
Reduced performance or power	30.8	36.0	31.4	32.6	39.0	29.5	33.4
Reduced cargo capacity	15.7	21.0	9.8	15.7	20.5	23.0	18.4
Reduced off-road or 4x4 capabilities	13.9	20.1	22.5	18.0	16.2	14.5	17.1
Dislike the image of this vehicle type	11.8	15.6	14.7	13.4	13.8	13.5	13.7
Reduced safety	10.0	12.5	10.8	11.0	10.0	13.0	11.2
Too unfamiliar with the technology	1.2	1.1	0.0	0.6	1.4	2.0	1.2
Lack of charging station locations	1.5	0.3	0.0	0.0	1.4	1.5	0.9
Cost of electricity is too high	0.6	0.3	0.0	0.6	0.0	1.0	0.4
Some other disadvantage	2.7	2.8	0.0	3.5	1.9	4.5	2.8

**Passenger-car owners**

Breakdowns of vehicle ownership for the passenger-car owners included in this survey are shown in Table 14.

Table 14  
Breakdowns of vehicle ownership for the 545 passenger-car respondents.

Aspect		Percent
Vehicle brand (Q16)	Toyota	19.1
	Honda	12.7
	Chevrolet	9.9
	Ford	9.2
	Nissan	8.3
	Hyundai	6.8
	Kia	3.3
	Mazda	3.3
	Volkswagen	3.1
	Chrysler	2.4
	Buick	2.2
	Mercedes-Benz	2.0
	Subaru	2.0
	Pontiac	1.8
	BMW	1.7
	Dodge	1.7
Volvo	1.7	
Lexus	1.1	
All other brands	7.9	
Vehicle model year (Q17) (corresponding age listed in parentheses)	Mean	2008 (9 years)
	Median (50 <sup>th</sup> percentile)	2009 (8 years)
Average vehicle mileage (Q18)	Weekly	155
	Annual (weekly x 52)	8,060

***Passenger-car types owned***

For those respondents owning only passenger cars (“passenger-car owner”), the passenger car they use most frequently is equipped with a conventional engine (Q19) for nearly all respondents (89.7%). Table 15 presents a complete summary of responses for all respondents, including breakdowns by gender and age.

Table 15

Percentage of responses, by gender and age, to Q19: “*Is your passenger car a non-plug-in hybrid, plug-in hybrid, all-electric vehicle, or does it have a conventional internal combustion engine?*” The most frequent response for each group is shown in **bold**.

Response	Gender		Age				Total
	Female	Male	18-29	30-44	45-59	60+	
Conventional engine (ICE)	<b>90.2</b>	<b>89.0</b>	<b>91.0</b>	<b>91.4</b>	<b>89.6</b>	<b>86.7</b>	<b>89.7</b>
Non-plug-in hybrid	8.9	10.1	8.3	7.8	8.9	12.6	9.4
All electric	0.6	0.4	0.7	0.8	0.0	0.7	0.6
Plug-in hybrid	0.3	0.4	0.0	0.0	1.5	0.0	0.4

***Primary reason for owning a passenger car***

The top three reasons why respondents chose to purchase or lease a passenger car rather than a light truck (Q20) were (1) better fuel economy or lower fuel costs (25.0%); (2) lower initial purchase price (12.2%); and (3) having always owned this type of passenger car (11.4%). Figure 13 summarizes the results for all respondents, while Table 16 presents a complete summary of responses by gender and age.

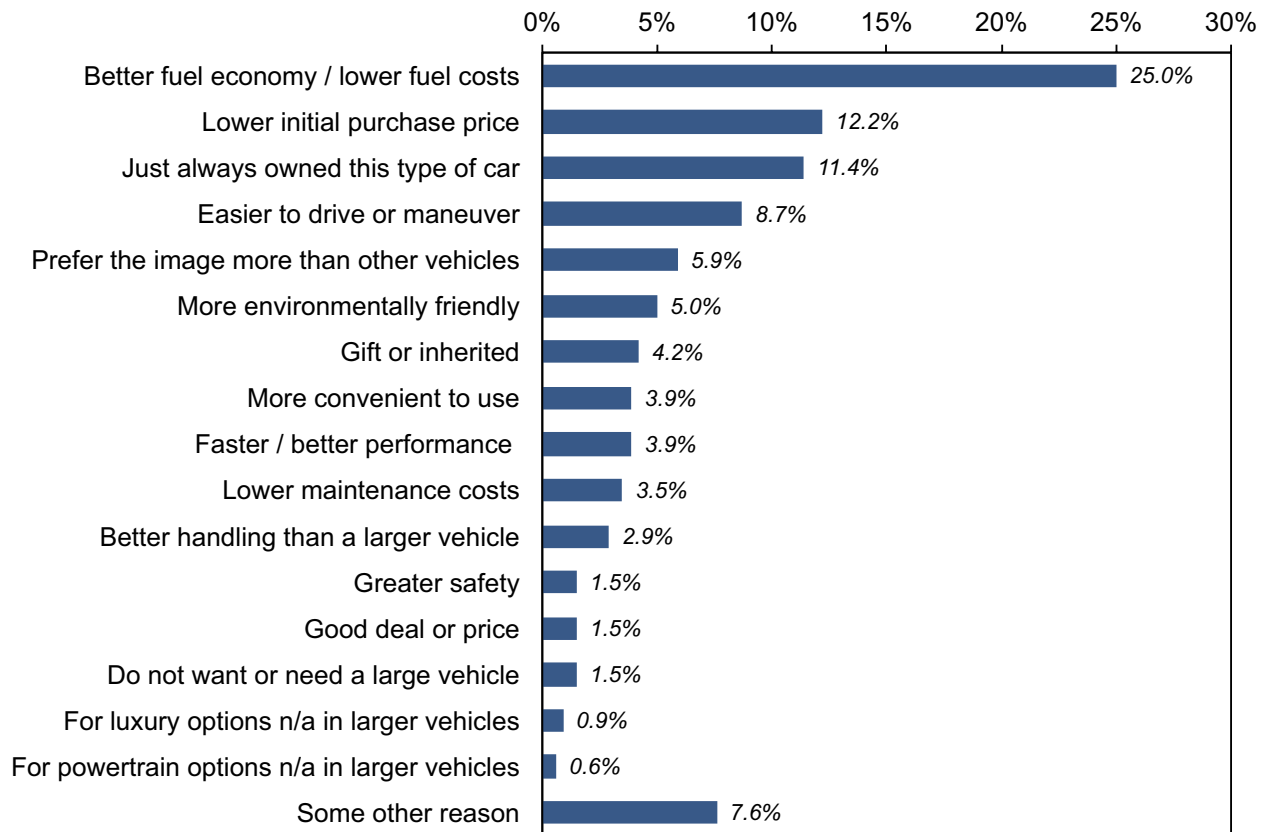


Figure 13. Summary of responses to Q20: “What is the primary reason you chose to purchase or lease your passenger car rather than a larger vehicle such as a pickup truck or SUV?”

Table 16

Percentage of responses, by gender and age, to Q20: “What is the primary reason you chose to purchase or lease your passenger car rather than a larger vehicle such as a pickup truck or SUV?” The most frequent response for each group is shown in **bold**.

Response	Gender		Age				Total
	Female	Male	18-29	30-44	45-59	60+	
Better fuel economy / lower fuel costs	<b>23.1</b>	<b>27.8</b>	<b>22.8</b>	<b>30.5</b>	<b>28.9</b>	<b>18.5</b>	<b>25.0</b>
Lower initial purchase price	12.7	11.5	17.2	8.6	10.4	11.9	12.2
I have just always owned/leased this type of passenger car	12.3	10.1	8.3	14.8	10.4	12.6	11.4
Easier to drive or maneuver	8.2	9.3	11.7	8.6	6.7	7.4	8.7
Prefer the image more than other vehicle types	6.0	5.7	4.1	7.8	5.9	5.9	5.9
More environmentally friendly	7.0	2.2	3.4	5.5	5.2	5.9	5.0
Gift or inherited	5.7	2.2	6.9	2.3	3.0	4.4	4.2
More convenient to use	3.8	4.0	4.8	3.9	1.5	5.2	3.9
Faster or better performance than a larger vehicle	1.9	6.6	2.8	3.1	6.7	3.0	3.9
Lower maintenance costs	3.5	3.5	5.5	2.3	1.5	4.4	3.5
Better handling than a larger vehicle	2.2	4.0	2.1	4.7	2.2	3.0	2.9
Greater safety	1.6	1.3	0.7	1.6	2.2	1.5	1.5
Good deal or price	1.9	0.9	1.4	0.8	2.2	1.5	1.5
Do not want or need a large vehicle	2.5	0.0	0.7	0.0	3.0	2.5	1.5
For luxury options not available in larger vehicles	0.6	1.3	0.7	0.0	3.0	0.0	0.9
For powertrain options (hybrid, electric, etc.) not available in larger vehicles	0.6	0.4	0.7	0.0	0.7	0.7	0.6
Some other reason	6.3	9.3	6.2	5.5	6.7	11.9	7.6

***Additional (secondary) reasons for owning a passenger car***

The top three secondary reasons for owning a passenger car (Q21) were nearly identical to the primary reasons for owning this vehicle type. They were (1) better fuel economy or lower fuel costs (35.6%); (2) lower initial purchase price (33.6%); and (3) easier to maneuver and drive (30.3%). About 17% said that they had no additional (secondary) reasons beyond the primary reason given in Q20. Figure 14 summarizes the results for all respondents, while Table 17 presents a complete summary of responses by gender and age. (The percentages add to more than 100 because respondents could select multiple reasons.)

For males, the top secondary choice was lower initial purchase price (31.3%). The 30-44 age group also mentioned lower initial purchase price as their top secondary reason (32.8%).

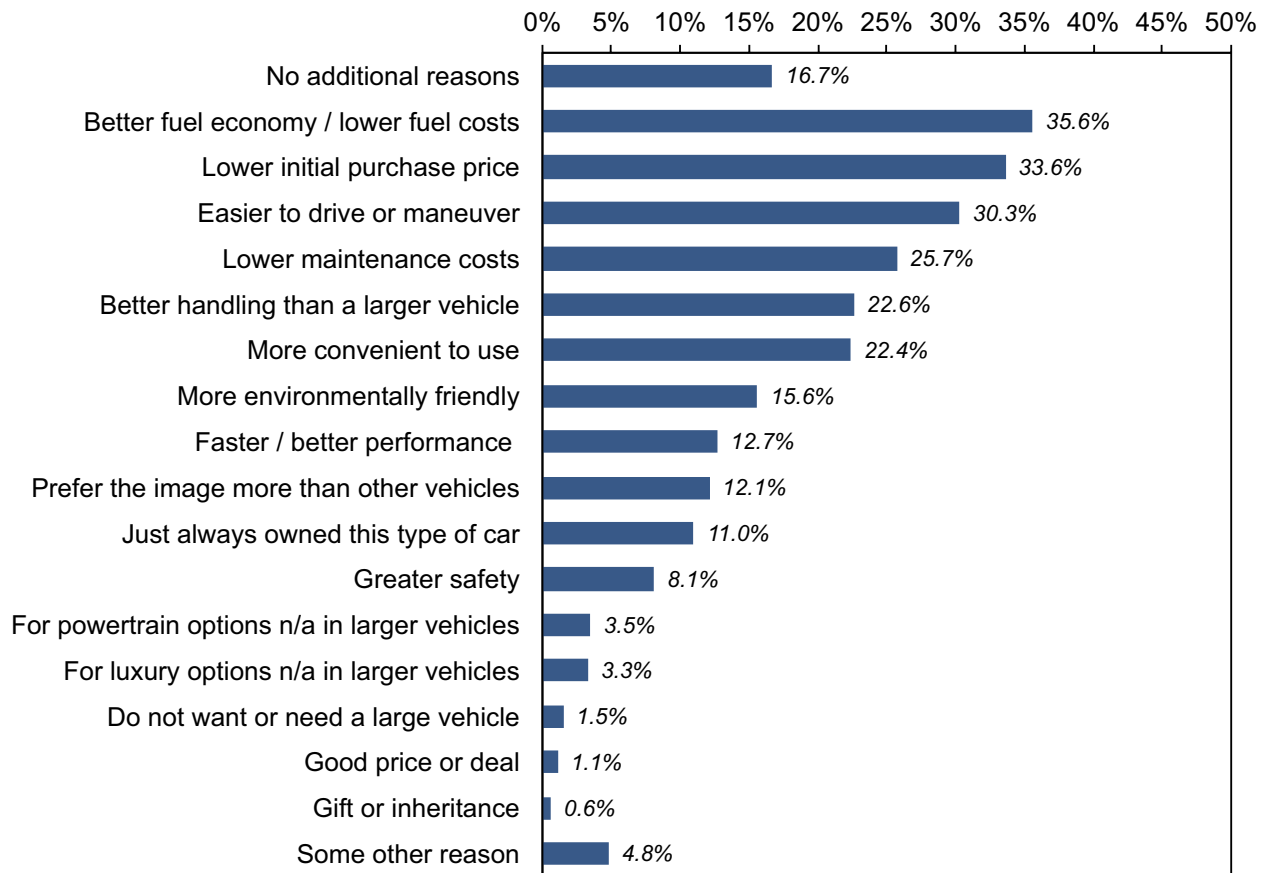


Figure 14. Summary of responses to Q21: “Are there any additional reasons you chose to purchase or lease your passenger car rather than a larger vehicle such as a pickup truck or SUV?”

Table 17

Percentage of responses, by gender and age, to Q21: “Are there any additional reasons you chose to purchase or lease your passenger car rather than a larger vehicle such as a pickup truck or SUV?” The most frequent response for each group is shown in **bold**. (The percentages add to more than 100 because respondents could select multiple reasons.)

Response	Gender		Age				Total
	Female	Male	18-29	30-44	45-59	60+	
No additional reasons	15.8	18.1	14.5	20.3	19.3	13.3	16.7
Better fuel economy / lower fuel costs	<b>39.2</b>	30.8	<b>47.6</b>	28.1	<b>33.3</b>	<b>32.6</b>	<b>35.6</b>
Lower initial purchase price	35.4	<b>31.3</b>	42.1	<b>32.8</b>	32.6	26.7	33.6
Easier to drive or maneuver	30.7	30.0	38.6	27.3	26.7	28.1	30.3
Lower maintenance costs	26.6	24.2	29.0	29.7	22.2	21.5	25.7
Better handling than a larger vehicle	20.3	26.0	26.9	20.3	19.3	23.7	22.6
More convenient to use	22.2	22.9	30.3	20.3	16.3	22.2	22.4
More environmentally friendly	15.8	15.4	20.0	14.1	15.6	12.6	15.6
Faster or better performance than a larger vehicle	11.7	14.1	18.6	11.7	11.1	8.9	12.7
Prefer the image more than other vehicle types	13.3	10.6	15.9	14.1	11.1	7.4	12.1
I have just always owned/leased this type of passenger car	11.4	10.6	10.3	14.8	8.9	10.4	11.0
Greater safety	9.5	6.2	12.4	10.2	5.2	4.4	8.1
For powertrain options (hybrid, electric, etc.) not available in larger vehicles	3.8	3.1	4.1	1.6	1.5	6.7	3.5
For luxury options not available in larger vehicles	1.9	5.3	2.8	3.1	3.0	4.4	3.3
Do not want or need a large vehicle	0.9	1.8	1.4	1.6	2.2	0.0	1.5
Good price or deal	1.3	0.9	1.4	2.3	0.0	0.7	1.1
Gift or inheritance	0.9	0.0	0.7	0.0	1.5	0.0	0.6
Some other reason	5.4	4.0	2.1	2.3	3.7	11.1	4.8



***Light-truck features passenger-car owners would be most likely to use***

The top three light-truck features passenger-car owners would be most likely to use if they owned a light truck (Q22) generally related to the additional space found in light trucks. They were (1) moving large or heavy items inside the vehicle or in the cargo bed (41.1%); (2) extra cargo space (40.4%); and (3) extra seating capacity (28.6%). Approximately one-third said that they would not use any features ordinarily found on light trucks. Figure 15 summarizes the results for all respondents, while Table 18 presents a complete summary of responses by gender and age. (The percentages add to more than 100 because respondents could select multiple features.)

The youngest age group said that the extra cargo space (#2 feature for all respondents) was the feature they would be most likely to use if they owned a light truck (55.2%), while the oldest age group most frequently said that they would not use any features ordinarily found on light trucks (47.4%).

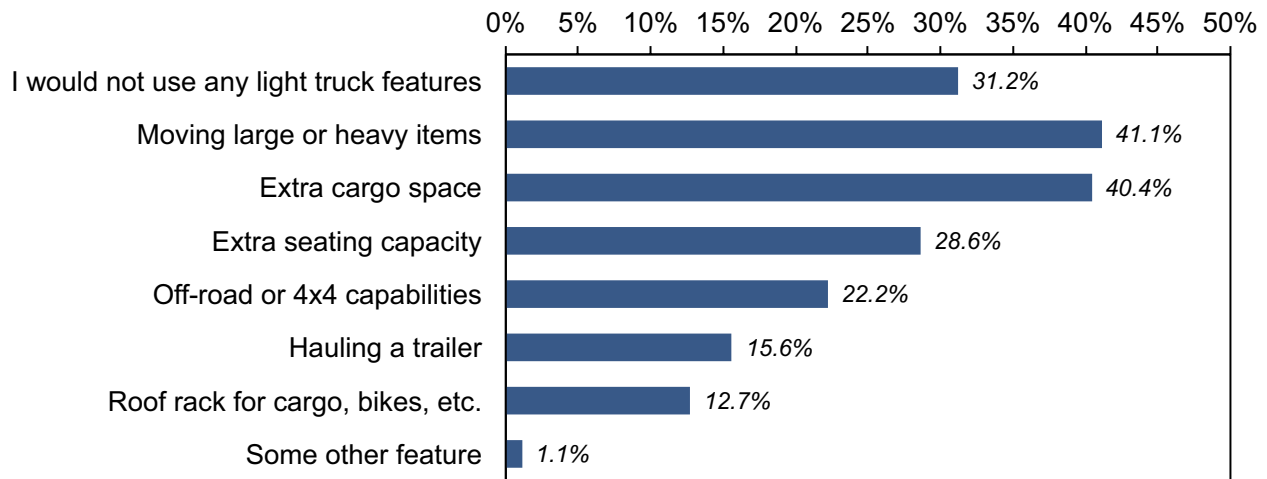


Figure 15. Summary of responses to Q22: “Are there any features that are ordinarily found on light trucks (pickup trucks, minivans, SUVs, etc.) that you would be likely to use if you owned or leased one of those vehicle types?”

Table 18

Percentage of responses, by gender and age, to Q22: “Are there any features that are ordinarily found on light trucks (pickup trucks, minivans, SUVs, etc.) that you would be likely to use if you owned or leased one of those vehicle types?” The most frequent response for each group is shown in **bold**. (The percentages add to more than 100 because respondents could select multiple features.)

Response	Gender		Age				Total
	Female	Male	18-29	30-44	45-59	60+	
I would not use any features ordinarily found on light trucks	30.4	31.7	17.9	27.3	31.9	<b>47.4</b>	31.2
Moving large or heavy items inside the vehicle or in the cargo bed	<b>42.7</b>	<b>39.2</b>	47.6	<b>44.5</b>	<b>40.7</b>	31.9	<b>41.1</b>
Extra cargo space	41.8	38.8	<b>55.2</b>	40.6	32.6	32.6	40.4
Extra seating capacity	32.6	23.3	52.4	27.3	21.5	11.9	28.6
Off-road or 4x4 capabilities	18.7	27.3	37.2	23.4	20.0	7.4	22.2
Hauling a trailer	15.2	16.3	24.1	13.3	15.6	8.9	15.6
Roof rack for cargo, bikes, etc.	14.2	10.6	20.7	18.0	8.1	3.7	12.7
Some other feature	1.6	0.4	0.0	0.8	2.2	1.5	1.1

***Light-trucks features available on currently owned passenger car***

The top three light-truck features that passenger-car owners currently have and use on their passenger car (Q23) also related to the availability of additional space. They were (1) extra seating capacity (8.6%); (2) extra cargo space (8.3%); and (3) moving large or heavy items inside the vehicle or in the cargo bed (5.3%). However, more than three-quarters said that they do not have any features on their passenger car that are ordinarily found on light trucks. Figure 16 summarizes the results for all respondents, while Table 19 presents a complete summary of responses by gender and age. (The percentages add to more than 100 because respondents could select multiple features.)

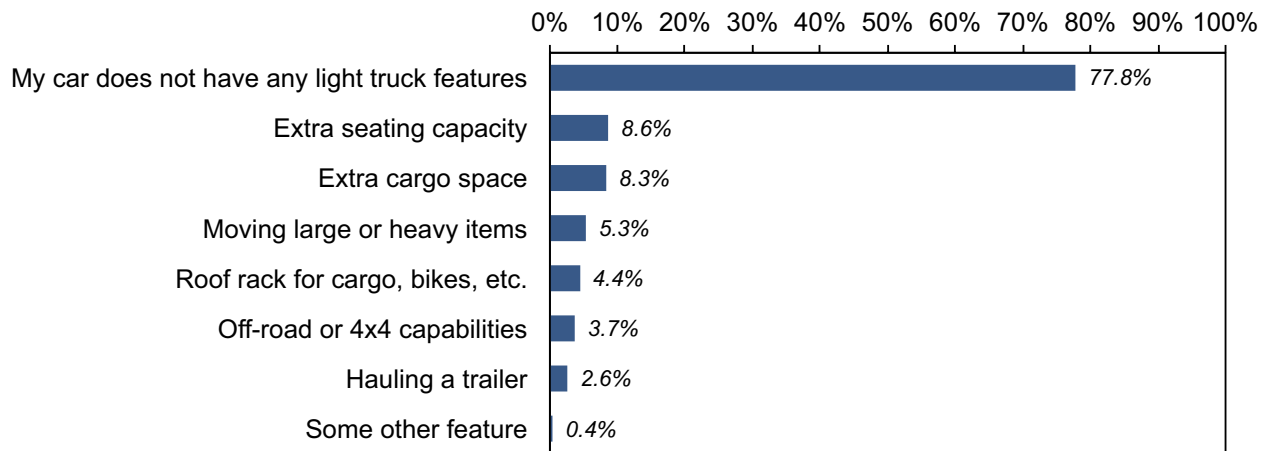


Figure 16. Summary of responses to Q23: “*Are there any features that are ordinarily found on light trucks (pickup trucks, minivans, SUVs, etc.) that you currently have and use on your passenger car?*”

Table 19

Percentage of responses, by gender and age, to Q23: “Are there any features that are ordinarily found on light trucks (pickup trucks, minivans, SUVs, etc.) that you currently have and use on your passenger car?” The most frequent response for each group is shown in **bold**. (The percentages add to more than 100 because respondents could select multiple features.)

Response	Gender		Age				Total
	Female	Male	18-29	30-44	45-59	60+	
My passenger car does not have any features ordinarily found on light trucks	<b>79.1</b>	<b>75.8</b>	<b>77.2</b>	<b>75.8</b>	<b>77.8</b>	<b>80.0</b>	<b>77.8</b>
Extra seating capacity	6.6	11.5	11.0	8.6	8.1	6.7	8.6
Extra cargo space	8.2	8.4	6.2	13.3	5.9	8.1	8.3
Moving large or heavy items inside the vehicle or in the cargo bed	5.4	5.3	8.3	3.9	4.4	4.4	5.3
Roof rack for cargo, bikes, etc.	4.1	4.8	4.1	7.0	4.4	2.2	4.4
Off-road or 4x4 capabilities	4.1	3.1	5.5	2.3	3.7	3.0	3.7
Hauling a trailer	2.2	3.1	3.4	3.1	2.2	1.5	2.6
Some other feature	0.6	0.0	0.0	1.6	0.0	0.0	0.4

### ***Consideration of other vehicle types over current passenger car***

When respondents were asked which other vehicle types they would consider instead of their current passenger-car model if there were a large *decrease* in the price of gas (Q24), respondents were mostly likely to say they would not consider any other vehicle type over their current model (37.2%). Following not considering other vehicles, the three most frequent responses were (1) a small light truck (27.9%); (2) an all-electric version of their current model (17.1%); and (3) a non-plug-in hybrid version of their current model (16.3%). Figure 17 summarizes the results for all respondents, while Table 20 presents a complete summary of responses by gender and age. (The percentages add to more than 100 because respondents could select multiple vehicle types.)

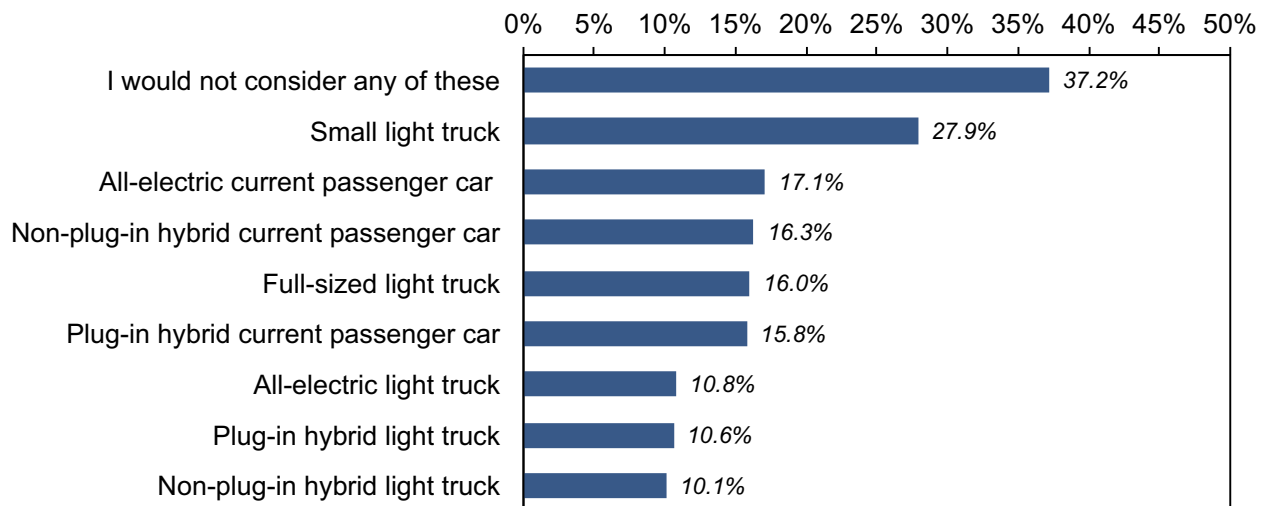


Figure 17. Summary of responses to Q24: “*If there were a large decrease in the cost of gasoline, which of the following vehicle types would you consider purchasing or leasing instead of your current passenger car?*”

Table 20

Percentage of responses, by gender and age, to Q24: “If there were a large decrease in the cost of gasoline, which of the following vehicle types would you consider purchasing or leasing instead of your current passenger car?” The most frequent response for each group is shown in **bold**. (The percentages add to more than 100 because respondents could select multiple vehicle types.)

Response	Gender		Age				Total
	Female	Male	18-29	30-44	45-59	60+	
I would not consider any of these vehicle types over my current passenger car	<b>34.8</b>	<b>41.0</b>	<b>27.6</b>	<b>27.3</b>	<b>45.2</b>	<b>49.6</b>	<b>37.2</b>
Small light truck	31.0	23.8	39.3	32.8	18.5	20.7	27.9
All-electric current passenger-car model	17.7	15.9	22.1	21.1	12.6	11.9	17.1
Non-plug-in hybrid current passenger-car model	17.7	14.1	15.2	18.0	16.3	15.6	16.3
Full-sized light truck	13.3	19.8	24.1	22.7	14.1	3.0	16.0
Plug-in hybrid current passenger-car model	16.5	15.0	17.2	20.3	14.1	11.9	15.8
All-electric light truck	11.1	10.6	17.9	16.4	4.4	4.4	10.8
Plug-in hybrid light truck	12.0	8.8	15.9	12.5	8.9	5.2	10.6
Non-plug-in hybrid light truck	12.7	6.6	16.6	10.9	8.1	4.4	10.1

## **Key Findings**

### **Light-truck usage**

- Nearly all owners of light trucks (84%) reported that their light truck is also their primary vehicle.
- The main usage for light trucks tended to be for general transportation (69%) and commuting (65%).

### **Reason for owning a light truck**

- The primary reasons for owning a light truck were for the overall increase in utility over passenger cars, including greater general utility (19%), need for larger family size (14%), and for moving cargo (10%).

### **Reasons for not owning a light truck (i.e., owning a passenger car)**

- The primary reasons for not owning a light truck and owning only passenger cars related to cost savings relative to light trucks, including better fuel economy (25%) and lower purchase price (12%).
- The tendency to own a passenger car due to tradition or habit (“I have always owned/leased this type of vehicle”) was similar when compared to light trucks (including all primary and secondary reasons: 22.4% vs. 20.8%, respectively).

### **Frequently used or desired light-truck features**

- For light-truck owners, the most-used features that are typical of light trucks all related to the availability of extra space. Extra cargo space (34%), moving cargo (22%), and extra seating (17%) topped the most frequently used light-truck features.
- For passenger-car owners, the features that are typical of light trucks that they would be most likely to use also related to the availability of extra space. Moving cargo (41%), extra cargo space (40%), and extra seating (29%) were also the top light-truck features most likely to be used. (These are the same features most used by light-truck owners, only in a slightly different order.)

- Additionally, these most-used or desired light-truck features are the same as comparable features found on the passenger-car owners' current vehicles: extra seating (9%), extra cargo space (8%), and moving cargo (5%).

### **Consideration of other vehicle types over currently owned vehicle model**

- Responses regarding consideration of other vehicle types were quite similar between light-truck owners and passenger-car owners, with both groups listing small (or smaller) light trucks as the vehicle type they were most likely to consider (21% and 28%, respectively).
- The number-two pick for light-truck owners and number-three pick for passenger-car owners was a non-plug-in hybrid of their respective current vehicle type.
- Both groups were also willing to consider some type of passenger car, with 20% of light-truck owners saying they would consider them (#3 response) and 17% of passenger-car owners saying they would consider an all-electric passenger car (#2 response).
- An important issue regarding willingness to consider other vehicle types is the fact that more than one-third of both light-truck owners (36%) and passenger-car owners (37%) said that they would not consider another vehicle type other than their current vehicle type.

### **Perceived disadvantages of switching from a light truck to another vehicle type**

#### *Passenger cars:*

- The main disadvantage listed for switching from a light truck to a passenger car was reduced cargo capacity (66%), followed by reduced hauling capacity (29%) and reduced safety (28%).
- About one-tenth of all light-truck owners felt that there was no disadvantage for them in switching to a passenger car.

#### *Smaller light truck:*

- As with switching to passenger cars, the main disadvantage listed for switching from a light truck to a smaller light truck was reduced cargo capacity (47%). This was followed by reduced safety (24%) and reduced performance or power (21%).



- About one-fifth of all light-truck owners felt that there was no disadvantage for them in switching to a smaller light truck.

*Plug-in hybrid light truck:*

- Switching from a light truck to a plug-in hybrid light truck brings with it the unique concern that requiring special equipment to charge the vehicle would be the main disadvantage (50%). Concern was also high regarding other disadvantages such as increased initial vehicle cost (46%) and limited or decreased driving range (43%).
- About one-tenth of all light-truck owners felt that there was no disadvantage for them in switching to a plug-in hybrid light truck.

*All-electric light truck:*

- The concerns regarding the disadvantages of all-electric light trucks mirror the same items identified for plug-in hybrid light trucks. A majority of light-truck owners listed the main disadvantages for switching to an all-electric light truck as being increased initial vehicle cost (54%), requiring special equipment to charge the vehicle (53%), and limited or decreased driving range (51%).
- Though more respondents listed disadvantages for this vehicle type than the others, about one tenth of all light-truck owners still felt that there was no disadvantage for them in switching to an all-electric light truck.

**Consideration of alternative fuels and powertrains (hybrids and electrics)**

- For light-truck owners, interest in considering alternative fuels or powertrains was relatively low, although consideration of non-plug-in hybrid models of their current light trucks was ranked similarly to conventional passenger cars (both about 20%). Similarly, respondents were more interested in considering plug-in hybrid and all-electric (i.e., battery-electric) models of their current light trucks over the same technologies in other light truck models.
- For passenger-car owners, interest in considering alternative fuels or powertrains was generally higher than for light truck owners, with willingness to consider all-electric and non-plug-in hybrid models of their currently owned passenger car ranking higher than a full-sized light truck. Furthermore, a plug-in hybrid model of their currently owned

passenger car was ranked higher than all three light truck models with alternative fuels or powertrains (i.e., non-plug-in hybrid, plug-in hybrid, and all-electric).

- Overall, around ten percent of both owner groups would be willing to consider all-electric light trucks or plug-in hybrid light trucks over their currently owned vehicle model. It is worth noting that the lowest ranking for consideration across both owner groups for all vehicle types was for an all-electric light truck by light-truck owners, with around 10% saying they would consider this vehicle type over their currently owned light truck.

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## Appendix: Questionnaire

### Light-truck purchasing factors survey

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#### INTRODUCTION

We are conducting a brief survey about different factors people may consider when buying or leasing a vehicle.

We are interested in your views about buying or leasing cars, trucks, and SUVs used for your personal transportation.

Please do not include responses for vehicles that are used exclusively for work or business purposes when answering this survey.

---

Q1. Which of the following vehicle types do you own or lease?

*Please select all that apply:*

- Pickup truck
- Sport utility vehicle (SUV)
- Van (full size or cargo)
- Minivan
- Crossover SUV (CUV)
- Passenger car → *Skip to Q16 if this is the only vehicle type*
- I do not own or lease any of these vehicle types → *Disqualify (~10%)*

Branch 1: LIGHT TRUCKS (Q2 – Q15)	→ own or lease ANY light trucks (~75%)
Branch 2: PASSENGER CARS (Q16 – Q23)	→ own or lease ONLY cars (~25%)

---

#### Branch 1: LIGHT TRUCKS (Q2 – Q15)

---

Q2. Please enter the make and model information for the **pickup truck, SUV, van, minivan, or CUV** that you use most frequently.

*Examples: Chevrolet Equinox, Ford F-150, Jeep Wrangler, Toyota Highlander, etc.*

Q3. Please select the model year of your [ Q2 ].

*[Menu options: individual years 2017-1990, or "1989 or earlier"]*

---

Q4. For the remainder of the survey, please answer only for your [ Q3 ] [ Q2 ].

In a typical week, how many miles would you estimate you drive your [ Q2 ]?

*Please enter number of miles driven **per week**:*

---

Q5. For your [ Q2 ], overall is this vehicle your primary vehicle, or a secondary vehicle?

- Primary vehicle – this vehicle is used for most trips and tasks
  - Secondary vehicle – a different vehicle is used for most trips and tasks
- 

Q6. On a normal day-to-day basis, how is your [ Q2 ] generally used?

*Please select all that apply:*

- Commute to work or school
- General transportation for leisure activities
- To perform general work (landscaping, delivery, contracting, construction)
- To perform farm work (or similar work)
- For general outdoor recreation (off-roading, camping, fishing, hunting, etc.)
- Hauling a trailer for work (cargo, work equipment, etc.)
- Hauling a trailer for recreation (camper, boats, etc.)
- Hauling a trailer containing livestock (horses, etc.)
- None of the above
- Other use (describe): \_\_\_\_\_

Q7. What is the PRIMARY reason you chose to purchase or lease your [ Q3 ] [ Q2 ] rather than a smaller vehicle such as a passenger car?

*Please select one primary reason:*

*[the order of options in the box is randomized]*

- Greater safety
- Greater general utility
- Greater power
- Better on-road 4x4 capabilities
- Better off-road 4x4 capabilities
- Prefer the image more than other vehicle types
- Need larger vehicle due to family size
- Need larger vehicle due to pets
- Need to move large or heavy items in the cargo area or truck bed
- Need to haul a trailer (cargo, work equipment, boats, campers, 5th wheel, etc.)
- I have just always owned/leased this vehicle type
- Other reason (describe): \_\_\_\_\_

---

Q8. Are there any additional reasons you chose to purchase or lease your [ Q3 ] [ Q2 ] rather than a smaller vehicle such as a passenger car?

*Please select all additional reasons that apply:*

*[Q7 response excluded from options below]*

- No additional reasons
- Greater safety
- Greater general utility
- Greater power
- Better on-road 4x4 capabilities
- Better off-road 4x4 capabilities
- Prefer the image more than other vehicle types
- Need larger vehicle due to family size
- Need larger vehicle due to pets
- Need to move large or heavy items in the cargo area or truck bed
- Need to haul a trailer (cargo, work equipment, boats, campers, 5th wheel, etc.)
- I have just always owned/leased this vehicle type
- Other reason (describe): \_\_\_\_\_

Q9. Which of the following features **that are ordinarily found on light trucks (pickup trucks, minivans, SUVs, etc.)** do you use most often in your [ Q2 ]?

*Please select one feature:*

*[the order of options in the box is randomized]*

- |   |
|---|
| <ul style="list-style-type: none"><li><input type="checkbox"/> Off-road or 4x4 capabilities</li><li><input type="checkbox"/> Extra cargo space</li><li><input type="checkbox"/> Roof rack for cargo, bikes, etc.</li><li><input type="checkbox"/> Hauling a trailer</li><li><input type="checkbox"/> Extra seating capacity</li><li><input type="checkbox"/> Moving large or heavy items inside the vehicle or in the cargo bed</li></ul> |
|---|
- I do not use any features ordinarily found on light trucks → *Skip to Q11*
  - Other feature (describe): \_\_\_\_\_

---

Q10. Are there any additional features **that are ordinarily found on light trucks (pickup trucks, minivans, SUVs, etc.)** that you use in your [ Q2 ]?

*Please select all additional features that you use:*

*[Q9 response excluded from options below]*

- None – I do not use any additional features
- Off-road or 4x4 capabilities
- Extra cargo space
- Roof rack for cargo, bikes, etc.
- Hauling a trailer
- Extra seating capacity
- Moving large or heavy items inside the vehicle or in the cargo bed
- Other feature (describe): \_\_\_\_\_



Q11. If there were a large increase in the cost of gasoline, which of the following vehicle types would you consider purchasing or leasing instead of a [ Q2 ]?

*Please select all that apply:*

- I would not consider any of these vehicle types over a [ Q2 ]
- A passenger car
- A smaller pickup truck or SUV
- A non-plug-in hybrid pickup truck or SUV
- A plug-in hybrid pickup truck or SUV (if available)
- An all-electric pickup truck or SUV (if available)
- A non-plug-in hybrid [ Q2 ] (if available)
- A plug-in hybrid [ Q2 ] (if available)
- An all-electric [ Q2 ] (if available)

---

Q12. In your opinion, what are the **disadvantages** of switching from a [ Q2 ] to a passenger car?

*Please select all that apply:*

*[the order of options in the box is randomized]*

- Decreased driving range
  - Reduced performance or power
  - Reduced cargo capacity
  - Reduced safety
  - Reduced hauling (trailer) capacity
  - Reduced off-road or 4x4 capabilities
  - Dislike the image of this vehicle type
- No disadvantages
  - Other disadvantage (describe): \_\_\_\_\_

Q13. In your opinion, what are the **disadvantages** of switching from a [ Q2 ] to a smaller pickup truck or SUV?

*Please select all that apply:*

*[the order of options in the box is randomized]*

- Decreased driving range
- Reduced performance or power
- Reduced cargo capacity
- Reduced safety
- Reduced hauling (trailer) capacity
- Reduced off-road or 4x4 capabilities
- Dislike the image of this vehicle type
- No smaller pickup truck or SUV is available

- No disadvantages
- Other disadvantage (describe): \_\_\_\_\_

---

Q14. In your opinion, what are the **disadvantages** of switching from a [ Q2 ] to a plug-in hybrid pickup truck or SUV (if they were available)?

*Please select all that apply:*

*[the order of options in the box is randomized]*

- Limited or decreased driving range
- Increased initial vehicle cost
- Increased vehicle maintenance costs
- More difficult to maintain or repair
- Reduced performance or power
- Reduced cargo capacity
- Reduced safety
- Reduced off-road or 4x4 capabilities
- Takes too long to charge the vehicle
- Charging the vehicle requires special equipment
- Dislike the image of this vehicle type

- No disadvantages
- Other disadvantage (describe): \_\_\_\_\_

Q15. In your opinion, what are the **disadvantages** of switching from a [ Q2 ] to an all-electric pickup truck or SUV (if they were available)?

*Please select all that apply:*

*[the order of options in the box is randomized]*

- Limited or decreased driving range
- Increased initial vehicle cost
- Increased vehicle maintenance costs
- More difficult to maintain or repair
- Reduced performance or power
- Reduced cargo capacity
- Reduced safety
- Reduced off-road or 4x4 capabilities
- Takes too long to charge the vehicle
- Charging the vehicle requires special equipment
- Dislike the image of this vehicle type
- No disadvantages
- Other disadvantage (describe): \_\_\_\_\_

**LIGHT TRUCKS → Skip to CONCLUSION**

---

**Branch 2: PASSENGER CARS (Q16 – Q23)**

---

Q16. Please enter the make and model information for the **passenger car** that you use most frequently.

*Examples: Chevrolet Cruze, Ford Fusion, Honda Accord, Toyota Camry, etc.*

---

Q17. Please select the model year of your [ Q16 ].

*[Menu options: individual years 2017-1990, or “1989 or earlier”]*

Q18. For the remainder of the survey, please answer only for your [ Q17 ] [ Q16 ].

In a typical week, how many miles would you estimate you drive your [ Q16 ]?

*Please enter number of miles driven **per week**:*

---

Q19. Is your [ Q16 ] a non-plug-in hybrid, plug-in hybrid, all-electric vehicle, or does it have a conventional internal combustion engine?

- A non-plug-in hybrid [ Q16 ]
- A plug-in hybrid [ Q16 ]
- An all-electric [ Q16 ]
- Conventional engine (gasoline or diesel)

---

Q20. What is the PRIMARY reason you chose to purchase or lease your [ Q17 ] [ Q16 ] rather than a larger vehicle such as a pickup truck or SUV?

*Please select one primary reason:*

*[the order of options in the box is randomized]*

- |  |
|--|
| <ul style="list-style-type: none"><li><input type="checkbox"/> Greater safety</li><li><input type="checkbox"/> Easier to drive or maneuver</li><li><input type="checkbox"/> More convenient to use</li><li><input type="checkbox"/> Faster or better performance than a larger vehicle</li><li><input type="checkbox"/> Better handling than a larger vehicle</li><li><input type="checkbox"/> For luxury options not available in larger vehicles</li><li><input type="checkbox"/> For powertrain options (hybrid, electric, etc.) not available in larger vehicles</li><li><input type="checkbox"/> Lower initial purchase price</li><li><input type="checkbox"/> Lower maintenance costs</li><li><input type="checkbox"/> Better fuel economy / lower fuel costs</li><li><input type="checkbox"/> More environmentally friendly</li><li><input type="checkbox"/> Prefer the image more than other vehicle types</li><li><input type="checkbox"/> I have just always owned/leased this type of passenger car</li></ul> |
|--|

Other reason (describe): \_\_\_\_\_

Q21. Are there any additional reasons you chose to purchase or lease your [ Q17 ] [ Q16 ] rather than a larger vehicle such as a pickup truck or SUV?

*Please select all additional reasons that apply:*

*[Q20 response excluded from options below]*

- No additional reasons
- Greater safety
- Easier to drive or maneuver
- More convenient to use
- Faster or better performance than a larger vehicle
- Better handling than a larger vehicle
- For luxury options not available in larger vehicles
- For powertrain options (hybrid, electric, etc.) not available in larger vehicles
- Lower initial purchase price
- Lower maintenance costs
- Better fuel economy / lower fuel costs
- More environmentally friendly
- Prefer the image more than other vehicle types
- I have just always owned/leased this type of passenger car
- Other reason (describe): \_\_\_\_\_

---

Q22. Are there any features **that are ordinarily found on light trucks (pickup trucks, minivans, SUVs, etc.)** that you would be likely to use if you owned or leased one of those vehicle types?

*Please select all features that you would likely use:*

*[the order of options in the box is randomized]*

- |   |
|---|
| <ul style="list-style-type: none"><li><input type="checkbox"/> Off-road or 4x4 capabilities</li><li><input type="checkbox"/> Extra cargo space</li><li><input type="checkbox"/> Roof rack for cargo, bikes, etc.</li><li><input type="checkbox"/> Hauling a trailer</li><li><input type="checkbox"/> Extra seating capacity</li><li><input type="checkbox"/> Moving large or heavy items inside the vehicle or in the cargo bed</li></ul> |
|---|
- None – I would not use any features ordinarily found on light trucks
  - Other feature (describe): \_\_\_\_\_

Q23. Are there any features **that are ordinarily found on light trucks (pickup trucks, minivans, SUVs, etc.)** that you currently have and use on your [ Q16 ]?

*Please select all features that you currently have and use:*

*[the order of options in the box is randomized]*

- |  |
|--|
| <input type="checkbox"/> Off-road or 4x4 capabilities<br><input type="checkbox"/> Extra cargo space<br><input type="checkbox"/> Roof rack for cargo, bikes, etc.<br><input type="checkbox"/> Hauling a trailer<br><input type="checkbox"/> Extra seating capacity<br><input type="checkbox"/> Moving large or heavy items inside the vehicle or in the cargo bed |
|--|
- None – My [ Q16 ] does not have any features ordinarily found on light trucks  
 Other feature (describe): \_\_\_\_\_

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Q24. If there were a large decrease in the cost of gasoline, which of the following vehicle types would you consider purchasing or leasing instead of a [ Q16 ]?

*Please select all that apply:*

- I would not consider any of these vehicle types over a [ Q16 ]  
 A full-sized pickup truck or SUV  
 A small pickup truck or SUV  
 A non-plug-in hybrid pickup truck or SUV  
 A plug-in hybrid pickup truck or SUV (if available)  
 An all-electric pickup truck or SUV (if available)  
 A non-plug-in hybrid [ Q16 ] (if available) *[not shown if said in Q19]*  
 A plug-in hybrid [ Q16 ] (if available) *[not shown if said in Q19]*  
 An all-electric [ Q16 ] (if available) *[not shown if said in Q19]*

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## CONCLUSION

**Thank you for taking the time to complete this survey!**