Electric Vehicles and Fuel Economy:

A Nationally Representative Multi-Mode Survey

Results

Overview of Methodology

Consumer Reports fielded a nationally-representative survey of Americans to understand attitudes toward fuel economy among Americans who intend to purchase a vehicle in the next two years and to better understand American drivers' familiarity with an attitudes toward electric vehicles, including what they see as incentives and barriers to owning them. The results are based on interviews conducted July 29, 2020 through August 12, 2020.

The survey was administered by NORC at the University of Chicago through its AmeriSpeak® Panel to a nationally representative sample; Dynata's nonprobability opt-in panel was also used to oversample three states (Minnesota, Nevada, and Virginia—California, also oversampled, was fully NORC). Interviews were conducted in English and in Spanish, and were administered both online and by phone. In total NORC collected 3,879 interviews, 3,758 by web mode and 121 by phone mode. Questions about electric vehicles were asked of the 3,392 who have valid driver's licenses, while questions about fuel economy were asked of those who plan to purchase or lease a vehicle in the next two years (n=1,735) unless otherwise noted. Final data are weighted separately for each section by sex, age, education, race/ethnicity, census region, housing tenure, and telephone status.

Because of the nonprobability data used to oversample some states, margins of error cannot be calculated for the nationally-representative samples.

TOPLINE RESULTS

Which section displayed first, fuel economy or electric vehicles, was randomized. Many respondents were only eligible for one section. The questions presented below were shown to respondents in order within each section. Where appropriate, question verbiage, response answer choices, or direction of scales were randomized or rotated and those instances are noted below.

Respondents who identified as Hispanic were offered the opportunity to take the survey in Spanish or English.

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ELECTRIC VEHICLES

EV1. *[RANDOMLY FLIP RESPONSE SCALE.]*

EV1	Do you currently own or lease a plug-in electric vehicle?	
		Total
		%
	Yes	6
	No, but I have in the past	4
	No, I have never owned or leased one	91
	Base: Respondents with a valid driver's license who currently own vehicles and are planning to buy or lease a vehicle in the next two years.	505

Note: This was only asked of this specific sub-group (respondents with a valid driver's license who currently own vehicles and plan to buy or lease another in the next two years), not all licensed drivers, as the rest of this section is.

EV2. *[RANDOMLY FLIP RESPONSE SCALE.]*

EV2	Which of the following best describes your knowledge of plug-in electric vehicles?	
		Total
		%
	I know a lot about plug-in electric vehicles	8
	I have heard of plug-in electric vehicles and know quite a bit about them	21
	I've heard of plug-in electric vehicles but don't know much about them	68
	I've never heard of a plug-in electric vehicle before	2
	Base: Respondents with a valid driver's license	3,380

EV3. *[RANDOMIZE. IN QUESTION STEM, SHOW "ANOTHER PLUG-IN ELECTRIC VEHICLE" INSTEAD OF "A PLUG-IN ELECTRIC VEHICLE" IF EV1 = "YES" OR "NO, BUT I HAVE IN THE PAST."]*

EV3	Here are some attributes that a plug-in electric vehicle might have. Which of these would most encourage you to purchase a plug-in electric vehicle?	
		Total
		%
	Costs less to charge than fueling a gasoline-powered vehicle	21
	Lower maintenance costs than gasoline-powered vehicles	17
	A purchase price similar to a gasoline-powered vehicle in the same class	17
	Ability to charge at home	11
	Higher reliability than gasoline-powered vehicles	11
	No tailpipe emissions (exhaust fumes)	9
	Not having to pump gas	9
	Better acceleration than gasoline-powered vehicles	3
	Car runs quietly (that is, very little engine noise)	2
	Attractive styling or other aesthetic features	1
	Base: Respondents with a valid driver's license	3,323

EV4. *[IN QUESTION STEM, SHOW "ANOTHER ONE" INSTEAD OF "ONE" IF EV1 = "YES" OR "NO, BUT I HAVE IN THE PAST."]*

EV4	How far would a plug-in electric vehicle have to be able to travel between charges for you to consider purchasing or leasing one?	
		Total
		%
	Less than 50 miles	2
	50 miles to less than 100 miles	6
	100 to less than 150 miles	9
	150 to less than 200 miles	9
	200 to less than 250 miles	11
	250 to less than 300 miles	14
	300 to less than 350 miles	14
	350 to less than 400 miles	10
	400 miles or more	25
	Base: Respondents with a valid driver's license	3,359

EV6. *[IN QUESTION STEM, SHOW "ANOTHER **PLUG-IN ELECTRIC VEHICLE**" INSTEAD OF "**A PLUG-IN ELECTRIC VEHICLE**" IF EV1 = "YES" OR "NO, BUT I HAVE IN THE PAST." **RANDOMLY FLIP RESPONSE SCALE.**]*

EV6	Which of the following statements best describes your thoughts on buying or leasing a plug-in electric vehicle?	
		Total
		%
	I definitely plan on getting a plug-in electric vehicle for my next vehicle.	4
	I would consider getting a plug-in electric vehicle as my next vehicle.	27
	I have some interest in getting a plug-in electric vehicle in the future, but not for my next vehicle.	40
	I have no interest in ever getting a plug-in electric vehicle.	29
	Base: Respondents with a valid driver's license	3,383

EV5. *[IN QUESTION STEM, SHOW "ANOTHER PLUG-IN ELECTRIC VEHICLE" INSTEAD OF "A PLUG-IN ELECTRIC VEHICLE" IF EV1 = "YES" OR "NO, BUT I HAVE IN THE PAST." SELECT UP TO THREE. RANDOMIZE. ANCHOR "OTHER" AND "NOTHING" AT END, IN THAT ORDER.]*

EV5	Of the following attributes, which, if any, are holding you back from purchasing or leasing a plug-in electric vehicle for your next vehicle?	
		Total
		%
_4	Not enough public charging stations	48
_1	Purchase price	43
_2	Insufficient driving range (number of miles vehicles can be driven on a full charge)	42
_5	I don't know enough about electric vehicles to buy one	30
_3	Nowhere to charge it at home	28
_6	Long charging times	21
_8	Lack of options among plug-in electric vehicle models currently on the market	14
_7	Higher state registration fees for plug-in electric vehicles	9
_9	Difficult to use technology	2
_10	Other, please specify:	6
_11	Nothing; I am open to and comfortable with the idea of purchasing or leasing a plug-in electric vehicle	4
	Base: Respondents with a valid driver's license who do not "definitely" plan to get a plug-in electric vehicle for their next vehicle.	3,252

EV7. *[RANDOMIZE. SHOW ON THREE SCREENS: FOUR ITEMS ON THE FIRST SCREEN, THREE ON THE OTHER TWO. RANDOMLY SHOW AS EITHER "AGREE OR DISAGREE" OR "DISAGREE OR AGREE," WITH RESPONSE OPTIONS SHOWING IN THE SAME ORDER AS THE STEM. ANCHOR "UNSURE" AT END.]*

EV7	Please indicate if you agree or disagree with, or are unsure about, each of the following statements.	
		Total
		%
A	*Widespread electric vehicle use will help reduce air or climate pollution*	
	Strongly agree	33
	Agree	39
	Neither agree nor disagree	17
	Disagree	4
	Strongly disagree	3
	Unsure	4
	Base: Respondents with a valid driver's license	3,378
B	*Automakers should make a variety of vehicle types (like sedans, minivans, SUVs and pickups) available as plug-in electric models*	
	Strongly agree	26
	Agree	44
	Neither agree nor disagree	22
	Disagree	2
	Strongly disagree	2
	Unsure	3
	Base: Respondents with a valid driver's license	3,382
C	*My state should require automakers to offer plug-in electric vehicle options*	
	Strongly agree	12
	Agree	25
	Neither agree nor disagree	33
	Disagree	17
	Strongly disagree	9
	Unsure	5
	Base: Respondents with a valid driver's license	3,380
D	*The federal government should require automakers to offer plug-in electric vehicle options*	
	Strongly agree	13
	Agree	25
	Neither agree nor disagree	32
	Disagree	17
	Strongly disagree	9
	Unsure	4
	Base: Respondents with a valid driver's license	3,382

EV7, *CONTINUED.*

E	*Incentives and tax rebates for plug-in electric vehicles should be targeted towards low and moderate income consumers*	
	Strongly agree	21
	Agree	34
	Neither agree nor disagree	26
	Disagree	10
	Strongly disagree	4
	Unsure	4
	Base: Respondents with a valid driver's license	3,383
F	*Incentives and tax rebates for plug-in electric vehicles should be available to all consumers, including high income*	
	Strongly agree	20
	Agree	40
	Neither agree nor disagree	25
	Disagree	8
	Strongly disagree	4
	Unsure	3
	Base: Respondents with a valid driver's license	3,381
G	*My state should invest money to increase the availability of plug-in electric vehicle charging stations*	
	Strongly agree	20
	Agree	34
	Neither agree nor disagree	27
	Disagree	9
	Strongly disagree	6
	Unsure	4
	Base: Respondents with a valid driver's license	3,383
H	*The federal government should invest money to increase the availability of plug-in electric vehicle charging stations*	
	Strongly agree	21
	Agree	34
	Neither agree nor disagree	24
	Disagree	10
	Strongly disagree	6
	Unsure	4
	Base: Respondents with a valid driver's license	3,385

EV7, *CONTINUED.*

I	*Electric utility providers should offer discounts to charge plug-in electric vehicles at times when electricity demand is low*	
	Strongly agree	24
	Agree	45
	Neither agree nor disagree	21
	Disagree	4
	Strongly disagree	3
	Unsure	3
	Base: Respondents with a valid driver's license	3,379
J	*My state should create policies that financially support increasing the use of plug-in vehicles as electric school buses, public transit, and fleets (that is, groups of vehicles owned by businesses or government agencies).*	
	Strongly agree	21
	Agree	37
	Neither agree nor disagree	25
	Disagree	8
	Strongly disagree	5
	Unsure	4
	Base: Respondents with a valid driver's license	3,379

EV8. *[SELECT ALL THAT APPLY. RANDOMIZE.]*

EV8	Which, if any, of the following have you experienced?	
		Total
		%
_1	Seen a public charging station for plug-in electric vehicles	63
_2	Seen an ad for a plug-in electric vehicle	44
_3	Seen a plug-in electric vehicle in your neighborhood	36
_5	Known someone who owned a plug-in electric vehicle	31
_4	Seen a plug-in electric vehicle at an auto dealership or store	25
_6	Been a passenger in a plug-in electric vehicle	17
_7	Seen a plug-in electric vehicle at an auto show	14
_8	Driven a plug-in electric vehicle	9
_9	None of the above	14
	Base: Respondents with a valid driver's license	3,392

EV9. *[IN QUESTION STEM, SHOW "ANOTHER PLUG-IN ELECTRIC VEHICLE" INSTEAD OF "A PLUG-IN ELECTRIC VEHICLE" IF EV1 = "YES" OR "NO, BUT I HAVE IN THE PAST." SELECT THREE. RANDOMIZE. ANCHOR "NONE OF THESE" AT END.]*

EV9	Out of the following state or federal policies, which, if enacted, would most likely increase your interest in purchasing or leasing a plug-in electric vehicle?	
		Total
		%
_4	Public charging stations along highways	42
_5	Discounts to install a home charging station	37
_2	Discounted charging rates from your electric utility provider	35
_1	Rebates at the time of purchase or lease	34
_3	Rebates as tax credits	30
_6	Access to workplace charging stations	16
_8	Charging stations or access to plug-in spots at apartment buildings	13
_7	Preferential parking spaces for plug-in electric vehicles	8
_9	Access to HOV lanes with only the driver in the vehicle	7
_10	None of these	18
	Base: Respondents with a valid driver's license	3,392

EV10.

EV10	If you were to own a plug-in electric vehicle in the future, where do you think you would do most of your charging?	
		Total
		%
	In my private driveway or garage	72
	At public fast-charging stations in my community	9
	At a charger provided by my apartment building or complex	7
	At public charging stations at places like restaurants and shopping centers	6
	At a charger provided at work	5
	Other	1
	Base: Respondents with a valid driver's license	3,370

EV11.

EV11	Does the state in which you currently live offer any discounts, rebates, or credits for purchasing or leasing plug-in electric vehicles?	
		Total
		%
	Yes	6
	No	11
	Don't know	83
	Base: Respondents with a valid driver's license	3,386

FUEL ECONOMY

FE2.

FE2	You said you are considering buying or leasing a vehicle within the next two years. Are you considering new, used, or both?	
		Total
		%
	Either new or used	48
	Used only	30
	New only	22
	Base: Respondents planning to buy or lease a vehicle within the next two years.	1,732

FE3.

FE3	What kind of vehicle do you currently own or lease?	
		Total
		%
	Car/sedan	38
	Small SUV or "crossover" with two rows of seats	20
	Pickup truck	14
	Large SUV with three rows of seats	10
	Van or minivan	6
	Sports car	3
	Other	1
	I don't currently own or lease a vehicle	6
	Base: Respondents planning to buy or lease a vehicle within the next two years.	1,730

FE4. *[RANDOMIZE. ANCHOR "OTHER" AND "UNSURE" AT END, IN THAT ORDER.]*

FE4	What kind of vehicle(s) are you considering for your next purchase/lease?	
		Total
		%
_3	Small SUV or "crossover" with two rows of seats	40
_1	Car/sedan	37
_4	Pickup truck	31
_2	Large SUV with three rows of seats	21
_5	Van or minivan	9
_6	Sports car	8
_7	Other, please specify:	2
_77	Unsure	3
	Base: Respondents planning to buy or lease a vehicle within the next two years.	1,735

FE5. *[INCLUDED ADDITIONAL INSTRUCTION "IF YOU PLAN TO LEASE, SELECT THE RESPONSE CORRESPONDING TO WHAT YOU THINK THAT VEHICLE WOULD COST IF YOU PAID FOR IT IN FULL."]*

FE5	What is the maximum amount that you could spend on your next vehicle (i.e., if a vehicle were more than this price, you would not be able to afford it)?	
		Total
		%
	$10,000 or less	19
	$10,001 to $15,000	12
	$15,001 to $20,000	13
	$20,001 to $25,000	11
	$25,001 to $30,000	11
	$30,001 to $35,000	11
	$35,001 to $40,000	7
	$40,001 to $45,000	5
	$45,001 to $50,000	5
	$50,001 to $55,000	2
	More than $55,000	4
	Base: Respondents planning to buy or lease a vehicle within the next two years.	1,640

FE6.

FE6	You mentioned you are planning to purchase or lease a vehicle within the next two years. Has the coronavirus pandemic had any impact on your decision of what to get or when to get it?	
		Total
		%
	Yes	33
	No	67
	Base: Respondents planning to buy or lease a vehicle within the next two years.	1,731

FE7. *[SHOW IF FE6="YES." SELECT ALL THAT APPLY. RANDOMIZE. ANCHOR "OTHER" AT END.]*

FE7	You said the coronavirus pandemic has affected your vehicle shopping in some way. How?	
		Total
		%
_1	I am planning to purchase or lease later than I otherwise would have	64
_3	I am planning to purchase or lease a different vehicle than I previously considered to save money	29
_4	I am planning to purchase or lease a different vehicle than I previously considered because I plan to drive less often	13
_2	I am planning to purchase or lease sooner than I otherwise would have	7
_5	Other	9
	Base: Respondents planning to buy or lease a vehicle within the next two years and say the coronavirus pandemic has affected their vehicle shopping plans.	644

FE8. *[SHOW IF FE3 ISN'T "YOU DON'T CURRENTLY OWN OR LEASE A VEHICLE." SHOW ON TWO SCREENS, FOUR ITEMS PER SCREEN. RANDOMIZE.]*

FE8	Due to the coronavirus pandemic, many people have made changes to their day-to-day activities. We are interested in which of the following activities you used a vehicle for before the pandemic, and which you use a vehicle for **currently. If you never do this activity, with a vehicle or otherwise, select "not applicable."** Please select one response in each row to complete the sentence "I use a vehicle for this activity...."	
		Total
		%
A	*Running errands (e.g., shopping, going to appointments)*	
	Both currently and before the pandemic	88
	Currently, but not before the pandemic	2
	Before the pandemic, but not currently	6
	Neither before the pandemic nor currently	1
	Not applicable	1
	Base: Respondents planning to buy or lease a vehicle within the next two years who currently have a vehicle.	1,617
B	*Commuting to and from work*	
	Both currently and before the pandemic	51
	Currently, but not before the pandemic	3
	Before the pandemic, but not currently	19
	Neither before the pandemic nor currently	8
	Not applicable	20
	Base: Respondents planning to buy or lease a vehicle within the next two years who currently have a vehicle.	1,617

FE8, *CONTINUED.*

C	*Taking road trips or vacations*	
	Both currently and before the pandemic	43
	Currently, but not before the pandemic	2
	Before the pandemic, but not currently	35
	Neither before the pandemic nor currently	10
	Not applicable	10
	Base: Respondents planning to buy or lease a vehicle within the next two years who currently have a vehicle.	1,615
D	*Driving children to and from school*	
	Both currently and before the pandemic	13
	Currently, but not before the pandemic	2
	Before the pandemic, but not currently	20
	Neither before the pandemic nor currently	19
	Not applicable	45
	Base: Respondents planning to buy or lease a vehicle within the next two years who currently have a vehicle.	1,614
E	*Carrying cargo (e.g., luggage, equipment)*	
	Both currently and before the pandemic	45
	Currently, but not before the pandemic	2
	Before the pandemic, but not currently	9
	Neither before the pandemic nor currently	17
	Not applicable	27
	Base: Respondents planning to buy or lease a vehicle within the next two years who currently have a vehicle.	1,619
F	*Towing (a boat, trailer, etc.)*	
	Both currently and before the pandemic	15
	Currently, but not before the pandemic	1
	Before the pandemic, but not currently	4
	Neither before the pandemic nor currently	31
	Not applicable	49
	Base: Respondents planning to buy or lease a vehicle within the next two years who currently have a vehicle.	1,612
G	*For entertainment, such as recreational off-roading*	
	Both currently and before the pandemic	20
	Currently, but not before the pandemic	2
	Before the pandemic, but not currently	9
	Neither before the pandemic nor currently	33
	Not applicable	36
	Base: Respondents planning to buy or lease a vehicle within the next two years who currently have a vehicle.	1,613
H	*Driving for a ride-hailing company (i.e., Uber/Lyft) or delivery company (i.e., Instacart)*	
	Both currently and before the pandemic	3
	Currently, but not before the pandemic	1
	Before the pandemic, but not currently	5
	Neither before the pandemic nor currently	38
	Not applicable	52
	Base: Respondents planning to buy or lease a vehicle within the next two years who currently have a vehicle.	1,617

FE9. *[SHOW IF FE3 ISN'T "YOU DON'T CURRENTLY OWN OR LEASE A VEHICLE." RANDOMIZE.]*

FE9	Thinking about your current vehicle, which three attributes have the most room for improvement?	
		Total
		%
_1	Fuel economy	42
_3	Purchase price	25
_2	Maintenance costs	25
_4	Infotainment or connectivity (e.g., Bluetooth, GPS navigation, Wi-Fi)	22
_9	Reliability	19
_11	Vehicle size	18
_7	Vehicle comfort	18
_8	Cargo space	17
_12	Safety	17
_5	Passenger room	17
_10	Horsepower	14
_13	Style	12
_6	Off-road capability	9
_14	Handling	9
	Base: Respondents planning to buy or lease a vehicle within the next two years who currently have a vehicle.	1,620

FE10. *[RANDOMLY FLIP RESPONSE SCALE.]*

FE10	How important is fuel economy to you when considering what vehicle to purchase or lease?	
		Total
		%
	Extremely important	25
	Very important	38
	Somewhat important	31
	Not very important	4
	Not at all important	2
	Base: Respondents planning to buy or lease a vehicle within the next two years.	1,731

FE11. *[SHOW ON TWO SCREENS, FOUR ITEMS PER SCREEN. RANDOMIZE. RANDOMLY SHOW AS EITHER "AGREE OR DISAGREE" OR "DISAGREE OR AGREE," WITH RESPONSE OPTIONS SHOWING IN THE SAME ORDER AS THE STEM.]*

FE11	Please indicate if you agree or disagree with each of the following statements.	
A	*Automakers should continue to improve fuel economy for all vehicle types*	
	Strongly Agree	56
	Agree	34
	Neither agree nor disagree	8
	Disagree	1
	Strongly Disagree	1
	Base: All respondents.	3,869
B	*Making larger vehicles such as SUVs or trucks more fuel-efficient is important*	
	Strongly Agree	47
	Agree	37
	Neither agree nor disagree	12
	Disagree	3
	Strongly Disagree	1
	Base: All respondents.	3,867
C	*I expect each new generation of vehicles available on the market to be more fuel-efficient than the last*	
	Strongly Agree	46
	Agree	38
	Neither agree nor disagree	14
	Disagree	2
	Strongly Disagree	1
	Base: All respondents.	3,863
D	*The U.S. government should continue to increase fuel-efficiency standards*	
	Strongly Agree	42
	Agree	31
	Neither agree nor disagree	18
	Disagree	7
	Strongly Disagree	3
	Base: All respondents.	3,863
E	*The federal government should prevent states from setting stronger vehicle emissions standards than the federal government*	
	Strongly Agree	10
	Agree	20
	Neither agree nor disagree	34
	Disagree	19
	Strongly Disagree	17
	Base: All respondents.	3,833

FE11, *CONTINUED.*

F	*Automakers are doing a good job of making fuel-efficient passenger vehicles*	
	Strongly Agree	7
	Agree	42
	Neither agree nor disagree	34
	Disagree	13
	Strongly Disagree	3
	Base: All respondents.	3,839
G	*Automakers have a responsibility to consumers to improve gas mileage*	
	Strongly Agree	26
	Agree	48
	Neither agree nor disagree	20
	Disagree	4
	Strongly Disagree	1
	Base: All respondents.	3,849
H	*Automakers care about lowering fuel costs for their customers*	
	Strongly Agree	6
	Agree	23
	Neither agree nor disagree	43
	Disagree	22
	Strongly Disagree	5
	Base: All respondents.	3,844

FE12. *[RANDOMLY SHOW AS EITHER "AGREE OR DISAGREE" OR "DISAGREE OR AGREE," WITH RESPONSE OPTIONS SHOWING IN THE SAME ORDER AS THE STEM.]*

FE12	The U.S. government has recently reduced fuel economy improvement requirements for automakers; standards will continue to go up, but by 1.5% per year instead of 5% per year. Do you agree or disagree with this change?	
		Total
		%
	Strongly Agree	6
	Agree	19
	Neither agree nor disagree	36
	Disagree	21
	Strongly Disagree	18
	Base: All respondents.	3,858

FE13.

FE13	How quickly would fuel savings have to offset a higher purchase price for you to be willing to pay extra for a more fuel-efficient vehicle?	
		Total
		%
	Within the first month	10
	One month to less than three months	7
	Three months to less than six months	10
	Six months to less than one year	16
	One year to less than two years	19
	Two years to less than three years	10
	Three years to less than five years	6
	Over the lifetime of the vehicle	10
	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	13
	Base: Respondents planning to buy or lease a vehicle within the next two years.	1,713

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