

MOST ELECTRIC VEHICLES ARE CHEAPER TO OWN OFF THE LOT THAN GAS CARS

ROBBIE ORVIS

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EXECUTIVE SUMMARY

Many studies show electric vehicles (EVs) are cheaper to operate than gasoline-powered vehicles with lower total cost of ownership (TCO) over the vehicle lifetime, due to fuel and maintenance savings outstripping purchase price differences. However, most consumers focus on how much they'll have to pay to own and operate a vehicle each month, not necessarily how much a vehicle will save them over its lifetime. And roughly half of Americans think EVs are too expensive to consider or aren't willing to pay more for an EV compared to a gasoline car.

This research finds that **in most states, financing and owning an EV is cheaper on a monthly basis than financing and owning an equivalent gasoline car.**

In other words, **most new EVs are cheaper to own from the day they are driven off the lot, even when the sticker price is considerably higher. Consumer savings are even greater if the EV incentives currently proposed in Congress are included,** making EVs cheaper in nearly every instance, and more affordable for all Americans looking to purchase a new car.

Since 85 percent of new vehicle buyers finance their cars, understanding how the monthly loan repayment compares to estimated fuel and maintenance costs is critical to understanding the monthly impact to consumers.

This study compares monthly ownership costs of six EV and gasoline equivalent vehicles, accounting for financing costs,

state taxes and fees, state and federal rebates and tax credits, fuel costs, maintenance costs, and insurance costs. For two of the vehicle comparisons we evaluated, the Hyundai Kona SEL and the Ford F-150, the EV version was cheaper to own per month in *every single state*.

For several others, including the Volvo XC40, the Nissan Leaf (compared to the Nissan Versa), and the Hyundai Kona Limited, it was cheaper to own the EV version in about half of states. Where those models did cost more, it was often by less than \$15 per month. For one model, the Kia Niro, the EV was only cheaper in a handful of states, due largely to the fact that the hybrid gasoline version achieves 50 miles per gallon.

While monthly EVs costs during loan repayment are lower in many states, savings grow dramatically after the loan is repaid, with nearly every state-vehicle comparison showing significant monthly cost savings, in line with other studies. Our modeling finds that **TCO is significantly lower for EVs than for gasoline cars, with owners saving on average \$6,000 over the vehicle's lifetime**. Though we did not explicitly look at the used car market, used cars have a lower purchase price (though higher financing rates), and cost savings are likely to be even more advantageous for EVs, especially if Congress passes a used EV tax credit.

These monthly savings are contingent on the existing \$7,500 federal EV tax credit. Without this tax credit, most models are no longer cheaper during the loan repayment period (even though operating costs and TCO remain lower than for gasoline cars). Notably, two of the vehicle manufacturers we evaluated in this study, Ford and Nissan, will likely exceed the federal tax credit cap of 200,000 EV sales this year, meaning the tax credit will unlikely last at current levels beyond 2022 without a modification to current policy.

Our modeling shows that increasing the tax credit amount as currently proposed in Congress, significantly improve EV ownership economics, with a \$10,000 tax credit making EVs cheaper in nearly every state-vehicle comparison. The tax credits take on even greater significance if gas prices decline, because the operating cost difference will shrink. **These findings underscore why Congress must pass an extended and expanded EV tax credit in the coming months, or risk backsliding on EV deployment and consumer savings.**

INTRODUCTION

EVs are an increasingly economic choice for consumers worried about pain at the pump. Many studies show EVs can save owners thousands of dollars relative to gasoline vehicle equivalents over a vehicle's lifetime.^{1,2,3,4,5,6} TCO are considerably lower due to fuel and maintenance savings from driving an EV relative to a gasoline vehicle. Fuel savings accrue because EVs are two to four times more efficient than gasoline vehicles, so driving the same distance costs considerably less, and have fewer moving parts requiring less maintenance than gasoline vehicles. Indeed, numerous studies demonstrate considerable operational savings from driving an EV.

Despite these savings, customers may be dissuaded from purchasing an EV because of higher upfront costs (though upfront EV costs, despite near-term supply chain challenges, are expected to reach price parity with gasoline vehicles in the mid-2020s)⁷, especially when state and federal rebates and tax credits are not clearly articulated to potential consumers. This sticker shock may discourage consumers from purchasing EVs, even when it is in their economic interest, given that TCO and operating costs are consistently lower for EVs than gasoline cars: A Cox Automotive study found that 51 percent of Americans believe EVs are "too expensive to seriously consider,"⁸ and nearly half of Americans aren't willing to pay more for an EV than a gasoline car.⁹

However, while EVs have higher upfront prices today than comparable gasoline cars, very few people pay for their new cars upfront: More than 85 percent of new vehicle purchases are financed,¹⁰ creating a

payment stream over several years (six years is the most common lease term).¹¹ Ultimately, consumers are focused on how much their monthly costs will change as a result of a new vehicle purchase. TCO and operational savings are often too intangible to overcome concerns about upfront purchase price differences.

This study evaluates monthly ownership costs of EVs compared to gasoline vehicle equivalents, including the cost of paying back vehicle financing. We include financing costs, taxes, rebates and tax credits, state fees, fuel costs, maintenance costs, and insurance costs. We selected six different EV-gasoline comparisons, identifying vehicles that are as similar as possible. This is challenging as many base EV models have more advanced features than equivalent base gasoline models. More information on the selected vehicles and methodology used to estimate monthly vehicle ownership costs is discussed below.

METHODOLOGY

We estimate the monthly and annual vehicle ownership costs over the loan repayment period to evaluate monthly EV ownership costs when the vehicle is purchased. We include purchase, financing, insurance, fuel, and maintenance costs, as well as state rebates and federal tax credits.

Vehicle Purchase Costs

We collected data on vehicle prices from manufacturer websites for six gasoline vehicles and six EVs, for six direct comparisons. We selected models reflecting the range of vehicle types on the market (e.g., compact, crossover, pickup, and SUV). Base model EVs often have more features than comparative base model gasoline cars. We assessed model variants to identify the closest comparison between gasoline and electric versions of vehicles with the closest matching set of features.

EPA Size Class	Gasoline Model	MSRP	EV Model	MSRP
Small SUV	Hyundai Kona SEL	\$24,745	Hyundai Kona Electric SEL	\$35,245
Small SUV	Hyundai Kona Limited	\$29,845	Hyundai Kona Electric Limited	\$43,745
Standard Pickup Truck	Ford F-150 XL	\$31,685	Ford F-150 Lightning Pro	\$41,669
Small Station Wagon	Kia Niro EX Premium	\$33,600	Kia Niro EV EX Premium	\$45,865
Small SUV	Volvo XC40 Inscription	\$41,945	Volvo XC40 Recharge Plus	\$56,395
Compact/Midsize	Nissan Versa S Xtronic CVT	\$17,875	Nissan LEAF	\$28,425

Table 1: Selected 2022 Gas and EV Models and MSRP used in this study

Financing Costs

Total financed amounts include state tax for each vehicle, accounting for states with discounted EV sales taxes, and subtracting the estimated down payment using the national average from J.D. Power of 12 percent per vehicle, for gasoline vehicles.¹² For EVs, we assume the same down payment as the gasoline equivalent as a conservative estimate, increasing monthly loan repayment costs for EVs but providing an apples-to-apples comparison of upfront costs. Annual financing charges are then estimated using the total

financed amount, the national average new vehicle loan term of six years as reported by Edmunds, and a financing rate of 3.86 percent, which is the 2021 national average reported by NerdWallet.

We also include estimated state rebates and federal tax credits for EVs. Currently, all the evaluated models qualify for the \$7,500 federal tax credit, though beginning in 2023 at least two of the vehicles will likely lose their tax credits unless Congress passes legislation extending existing credits or adding new ones.¹³ State rebates are often applied at the point of sale or within several months following the vehicle purchase. The federal tax credit is received during tax filing for the year the vehicle is purchased (e.g., for a consumer purchasing an EV in 2022, the tax credit wouldn't be received until taxes are filed in 2023). For simplicity, we levelize tax credits over the loan term. We sum the financing charges, inclusive of state taxes and down payments, then apply rebates and tax credits to determine annual financing charges, as shown in Figure 1.^{14,15}

$$\text{Annual Financing Charges} = \frac{i(1+i)^n}{(1+i)^n - 1} * \text{MSRP} * (1 + \text{State Tax Rate} - \text{Down Payment Rate}) - \frac{(\text{State Rebate} + \text{Federal Tax Credit})}{n}$$

Where:

i = Average vehicle loan APR

n = Average loan term

MSRP = Manufacturer's suggested retail price

Figure 1: Formula for Calculating Annual Financing Charge

It is worth noting some manufacturers and dealers offer different financing rates for different vehicle types, which this analysis does not consider. For example, Nissan offers 3.39 percent financing¹⁶ for the Versa S Xtronic CVT but 0.9 percent financing¹⁷ for a LEAF purchase, a difference of around \$400 per year depending on state tax rates and available rebates. Different available financing rates could considerably impact annual financing costs and is an important policy consideration.

Operating Costs

Maintenance Costs

We estimate annual operating costs, including fuel and maintenance. For maintenance costs, we use U.S. Department of Energy (DOE) data on estimated maintenance costs per mile by vehicle type.¹⁸ This analysis found that monthly maintenance costs for EVs (\$0.061/mile) are roughly 40 percent lower than those for gasoline cars (\$0.101/mile). Annual maintenance costs are estimated using per-mile estimates from DOE and estimated average annual mileage of 13,469 over the loan term using data from the U.S. Environmental Protection Agency's (EPA) MOVES3 model.¹⁹

Fueling Costs

Vehicle fueling costs are estimated using annual mileage, fuel efficiency from FuelEconomy.gov, current average state gasoline prices from AAA as of May 4th, 2022²⁰ and 2021 average residential electricity rates for EVs. It is important to note EPA's fuel efficiency values reflect tested values, and that on-road efficiency is typically lower than rated values.

For EVs, we assume owners use Level 1 chargers. Although a high percentage of current EV owners have installed Level 2 chargers,²¹ data on average daily driving distance and Level 1 charging speed finds the vast

State	State Electricity Price (\$/kWh)	State Regular Gasoline Price (\$/gal)
Alabama	\$0.13	\$3.88
Alaska	\$0.23	\$4.68
Arizona	\$0.13	\$4.59
Arkansas	\$0.11	\$3.82
California	\$0.23	\$5.76
Colorado	\$0.13	\$4.04
Connecticut	\$0.22	\$4.17
Delaware	\$0.13	\$4.26
District of Columbia	\$0.13	\$4.53
Florida	\$0.12	\$4.18
Georgia	\$0.13	\$3.75
Hawaii	\$0.33	\$5.27
Idaho	\$0.10	\$4.46
Illinois	\$0.13	\$4.52
Indiana	\$0.13	\$4.12
Iowa	\$0.13	\$3.92
Kansas	\$0.13	\$3.82
Kentucky	\$0.12	\$3.88
Louisiana	\$0.11	\$3.89
Maine	\$0.17	\$4.26
Maryland	\$0.13	\$4.27
Massachusetts	\$0.23	\$4.24
Michigan	\$0.18	\$4.28
Minnesota	\$0.13	\$3.91
Mississippi	\$0.12	\$3.82
Missouri	\$0.11	\$3.82
Montana	\$0.11	\$4.18
Nebraska	\$0.11	\$3.95
Nevada	\$0.12	\$5.10
New Hampshire	\$0.20	\$4.17
New Jersey	\$0.16	\$4.28
New Mexico	\$0.14	\$4.11
New York	\$0.19	\$4.38
North Carolina	\$0.12	\$3.96
North Dakota	\$0.11	\$3.97
Ohio	\$0.13	\$4.02
Oklahoma	\$0.12	\$3.84
Oregon	\$0.11	\$4.71
Pennsylvania	\$0.14	\$4.40
Rhode Island	\$0.22	\$4.22
South Carolina	\$0.13	\$3.89
South Dakota	\$0.12	\$4.03
Tennessee	\$0.11	\$3.96
Texas	\$0.12	\$3.88
Utah	\$0.11	\$4.51
Vermont	\$0.19	\$4.29
Virginia	\$0.12	\$4.08
Washington	\$0.10	\$4.74
West Virginia	\$0.12	\$4.07
Wisconsin	\$0.15	\$3.99
Wyoming	\$0.11	\$4.17

Table 2: Gasoline Prices as of May 4, 2022 and 2021 State Electricity Rates

majority of daily driving needs can be met without Level 2 chargers. For example, the average single-car American household drives about 30 miles per day.²² Level 1 chargers can charge about five miles per hour,²³ meaning just six hours of charge each day with a Level 1 charger could recharge an EV for an average daily drive. Even on a day with double the average distance, a 12-hour overnight charge would be sufficient. And since most drivers park their cars for more than six hours a day (e.g., overnight), any shortfall in battery charge could be made up by subsequent charging sessions.

Maintenance and fuel costs are added together to estimate annual operating costs:

$$\text{Annual Operating Costs} = \left[\text{Maintenance Cost per Mile} + \left(\frac{1}{\text{MPGe}} * \text{Fuel Price} \right) \right] * \text{Average Annual Distance Traveled}$$

Figure 2: Formula for Calculating Annual Operating Costs

Insurance Costs

Insurance costs (premiums) are based on many factors, but vehicle price is arguably the most important. Data on rates by vehicle types also suggest EVs receive a slightly higher rate even when vehicles are similarly priced (a variety of potential reasons exist for this trend). We estimated the difference in insurance premiums for different vehicle types using data from MoneyGeek.com. Using data provided on insurance premiums across several different gasoline and EV models, we estimate insurance premiums for the models covered in this study as a function of MSRP and vehicle type (gasoline vs electric vehicle). Figure 3 below shows the equations used for estimating insurance premiums:

$$\text{Annual Insurance Costs for Gasoline Vehicle} = (\text{MSRP} * 0.01497) + 995.327657$$

$$\text{Annual Insurance Costs for Electric Vehicle} = (\text{MSRP} * 0.01459) + 1033.847682$$

Figure 3: Formulas for Calculating Insurance Costs

Additional Fees

Many states levy an annual fee on EVs, partially to compensate for lost gasoline tax revenue. We include summarized state-specific EV fees in this analysis from the American Council for an Energy Efficient Economy.

Total Monthly Ownership Costs

Total monthly ownership cost sums annual financing costs, operating costs, insurance costs, and additional fees by vehicle and divides by 12 months.

$$\text{Total Monthly Ownership Costs} = \frac{\text{Annual Financing Costs} + \text{Annual Operating Costs} + \text{Annual Insurance Costs} + \text{Annual EV Fees}}{12}$$

Figure 4: Formula for Calculating Total Monthly Ownership Costs

RESULTS

Monthly ownership costs, including several sensitivities, as well as TCO, are discussed below.

Monthly Ownership Costs During Financing Term

Estimated monthly ownership costs by state and vehicle model are shown in Table 3 with gasoline models on the left of each vehicle comparison.

Vehicle and state combinations where the EV model is cheaper on a monthly basis are shaded in green. EV models of the Hyundai Kona SEL and Ford F-150 are cheaper in *every single state* to finance and own today than the equivalent gasoline model. The Volvo XC40 and Nissan models are just slightly more expensive, on the order of a few dollars or less, in several of the states where it is cheaper to own the gasoline version. For example, the Nissan Leaf's monthly difference is less than \$15 in Alaska, Arkansas, Indiana, Iowa, Kansas, Minnesota, Mississippi, New Hampshire, Ohio, South Carolina, Tennessee, Vermont, West Virginia, Wisconsin, and Wyoming, and less than \$1 per month in some states. Yellow shaded cells below show combinations where EVs were \$15 or less per month more expensive to own. EVs that were than \$15 a month more to own are shaded red.

Monthly Ownership Cost during Financing Term												
States	2022 Hyundai Kona		2022 Ford F-150		2022 Kia Niro		2022 Volvo XC40		2022 Nissan			
	SEL	Electric SEL	Limited	Electric Limited	XL	Lightning Pro	EX Premium	EV EX Premium	Inscription	Recharge Plus	Versa S Xtronic CVT	LEAF
Alabama	\$724	\$686	\$804	\$826	\$905	\$819	\$816	\$860	\$1,027	\$1,044	\$568	\$582
Alaska	\$736	\$678	\$813	\$813	\$927	\$831	\$813	\$847	\$1,035	\$1,036	\$575	\$581
Arizona	\$755	\$676	\$836	\$819	\$950	\$810	\$841	\$853	\$1,068	\$1,040	\$588	\$570
Arkansas	\$731	\$694	\$814	\$838	\$914	\$825	\$828	\$872	\$1,041	\$1,059	\$573	\$587
California	\$802	\$690	\$885	\$834	\$1,021	\$851	\$876	\$871	\$1,129	\$1,072	\$620	\$585
Colorado	\$725	\$633	\$804	\$772	\$907	\$765	\$814	\$805	\$1,026	\$988	\$568	\$530
Connecticut	\$743	\$680	\$825	\$823	\$932	\$838	\$835	\$860	\$1,055	\$1,058	\$581	\$576
Delaware	\$721	\$610	\$798	\$745	\$905	\$738	\$804	\$777	\$1,017	\$955	\$565	\$511
District of Columbia	\$754	\$680	\$836	\$824	\$949	\$816	\$842	\$858	\$1,068	\$1,046	\$588	\$574
Florida	\$742	\$677	\$824	\$820	\$930	\$809	\$834	\$854	\$1,053	\$1,041	\$580	\$570
Georgia	\$719	\$685	\$799	\$826	\$897	\$817	\$813	\$859	\$1,021	\$1,043	\$565	\$581
Hawaii	\$772	\$740	\$853	\$880	\$979	\$924	\$848	\$918	\$1,087	\$1,126	\$600	\$641
Idaho	\$752	\$682	\$834	\$825	\$945	\$810	\$840	\$859	\$1,065	\$1,044	\$587	\$575
Illinois	\$755	\$690	\$837	\$834	\$950	\$826	\$843	\$868	\$1,069	\$1,057	\$589	\$584
Indiana	\$744	\$700	\$827	\$844	\$933	\$837	\$838	\$879	\$1,057	\$1,069	\$582	\$593
Iowa	\$733	\$685	\$815	\$828	\$917	\$819	\$828	\$862	\$1,042	\$1,049	\$574	\$578
Kansas	\$731	\$691	\$814	\$835	\$914	\$826	\$828	\$869	\$1,041	\$1,058	\$573	\$584
Kentucky	\$731	\$675	\$813	\$818	\$914	\$806	\$827	\$852	\$1,040	\$1,038	\$573	\$569
Louisiana	\$726	\$665	\$807	\$806	\$907	\$793	\$819	\$839	\$1,030	\$1,022	\$569	\$560
Maine	\$743	\$663	\$824	\$805	\$932	\$807	\$833	\$840	\$1,053	\$1,032	\$581	\$558
Maryland	\$745	\$680	\$827	\$824	\$935	\$816	\$836	\$858	\$1,057	\$1,046	\$582	\$574
Massachusetts	\$745	\$679	\$827	\$823	\$935	\$840	\$837	\$859	\$1,057	\$1,059	\$582	\$576
Michigan	\$745	\$703	\$828	\$846	\$936	\$850	\$836	\$881	\$1,057	\$1,075	\$583	\$598
Minnesota	\$736	\$692	\$819	\$837	\$921	\$830	\$832	\$871	\$1,047	\$1,061	\$577	\$586
Mississippi	\$733	\$694	\$816	\$838	\$917	\$827	\$831	\$872	\$1,044	\$1,061	\$575	\$586
Missouri	\$722	\$671	\$803	\$812	\$902	\$801	\$816	\$845	\$1,026	\$1,029	\$567	\$567
Montana	\$719	\$641	\$796	\$776	\$901	\$765	\$802	\$807	\$1,013	\$984	\$563	\$541
Nebraska	\$732	\$676	\$814	\$819	\$916	\$806	\$826	\$852	\$1,040	\$1,037	\$574	\$570
Nevada	\$777	\$680	\$860	\$824	\$984	\$812	\$859	\$858	\$1,098	\$1,046	\$604	\$572
New Hampshire	\$718	\$669	\$795	\$804	\$900	\$815	\$802	\$838	\$1,013	\$1,024	\$563	\$571
New Jersey	\$748	\$588	\$831	\$723	\$939	\$726	\$839	\$756	\$1,061	\$938	\$584	\$489
New Mexico	\$736	\$677	\$818	\$819	\$923	\$813	\$828	\$853	\$1,044	\$1,040	\$576	\$572
New York	\$741	\$662	\$822	\$803	\$931	\$812	\$828	\$838	\$1,048	\$1,030	\$579	\$560
North Carolina	\$729	\$679	\$810	\$820	\$912	\$809	\$822	\$854	\$1,035	\$1,038	\$572	\$574
North Dakota	\$731	\$677	\$812	\$819	\$914	\$806	\$824	\$852	\$1,037	\$1,036	\$573	\$572
Ohio	\$735	\$695	\$817	\$837	\$920	\$829	\$829	\$871	\$1,044	\$1,059	\$576	\$589
Oklahoma	\$724	\$669	\$805	\$810	\$905	\$801	\$818	\$844	\$1,029	\$1,028	\$568	\$565
Oregon	\$737	\$629	\$814	\$764	\$929	\$754	\$814	\$796	\$1,036	\$972	\$575	\$529
Pennsylvania	\$750	\$672	\$832	\$815	\$942	\$809	\$839	\$850	\$1,062	\$1,038	\$585	\$566
Rhode Island	\$747	\$716	\$830	\$861	\$937	\$876	\$840	\$897	\$1,061	\$1,097	\$584	\$612
South Carolina	\$732	\$686	\$814	\$829	\$915	\$821	\$827	\$863	\$1,040	\$1,051	\$574	\$580
South Dakota	\$731	\$669	\$812	\$810	\$915	\$801	\$822	\$844	\$1,037	\$1,028	\$573	\$564
Tennessee	\$738	\$688	\$821	\$832	\$924	\$819	\$834	\$866	\$1,050	\$1,054	\$578	\$580
Texas	\$732	\$644	\$815	\$787	\$916	\$777	\$828	\$821	\$1,042	\$1,008	\$574	\$537
Utah	\$749	\$673	\$830	\$814	\$943	\$800	\$835	\$847	\$1,060	\$1,031	\$585	\$567
Vermont	\$746	\$701	\$828	\$844	\$936	\$852	\$836	\$879	\$1,058	\$1,074	\$583	\$596
Virginia	\$732	\$673	\$812	\$814	\$917	\$804	\$822	\$847	\$1,037	\$1,031	\$573	\$569
Washington	\$763	\$649	\$846	\$784	\$963	\$771	\$849	\$816	\$1,080	\$991	\$594	\$549
West Virginia	\$738	\$694	\$820	\$837	\$925	\$827	\$831	\$871	\$1,048	\$1,058	\$578	\$588
Wisconsin	\$731	\$688	\$813	\$830	\$915	\$826	\$824	\$864	\$1,038	\$1,052	\$573	\$583
Wyoming	\$734	\$680	\$814	\$820	\$920	\$808	\$823	\$853	\$1,039	\$1,036	\$574	\$575

Table 3: Monthly Ownership Costs by Vehicle

Kia Niro financing and operating costs are cheaper for the gasoline version in most states because of its high fuel efficiency: The Kia Niro gasoline hybrid car gets 49 MPG, lowering the estimated fuel savings between gasoline and EV versions.

The same subset of states, with higher electricity prices and/or lower gasoline prices, tend to be the ones where gasoline vehicles remain more economic including Alaska, Georgia, Hawaii, Michigan, New Hampshire, Rhode Island, and Vermont.

Figure 5 shows the average monthly cost of ownership during the finance term by vehicle across the U.S.

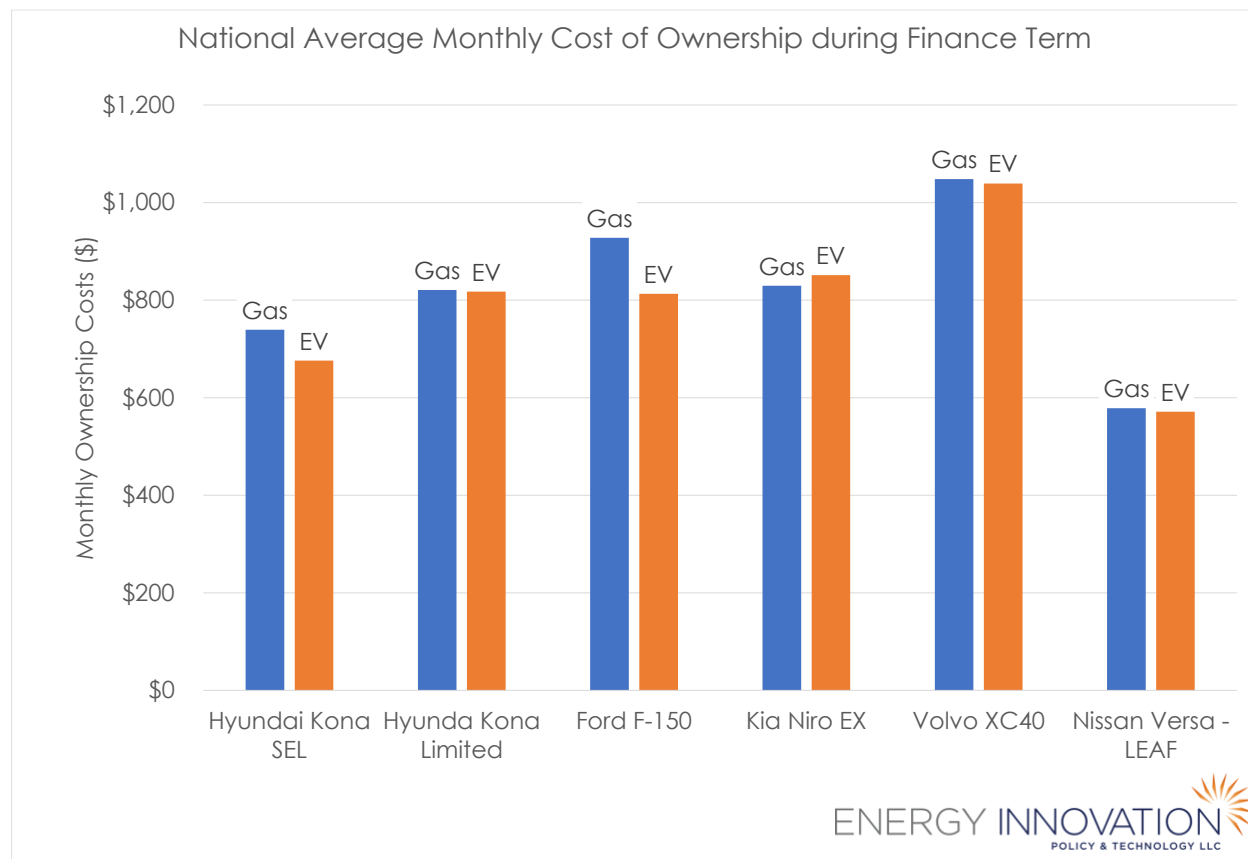


Figure 5: National Average Monthly Cost of Ownership during Finance Term

The Importance of Federal Tax Credits

The federal government offers a \$7,500 tax credit for EVs sold by qualifying manufacturers that have sold fewer than 200,000 EVs. Tesla and General Motors already passed this threshold, and their vehicles are no longer eligible for the tax credit. Toyota, Ford, and Nissan are all likely to pass this threshold in 2022 or early 2023.²⁴ For example, Toyota recently announced it will pass the threshold this year and the tax credit will soon be phased out for its vehicles.²⁵ Federal tax credits are critical to maintaining competitive EV financing and ownership costs during the financing term. Without them, purchasing an EV becomes significantly more expensive on a monthly basis.

Monthly Ownership Cost during Financing Term without Federal Tax Credits													
States	2022 Hyundai Kona		2022 Hyundai Kona		2022 Ford F-150		2022 Kia Niro		2022 Volvo XC40		2022 Nissan		
	SEL	Electric SEL	Limited	Electric Limited	XL	Lightning Pro	EX Premium	EV EX Premium	Inscription	Recharge Plus	Versa S Xtronic CVT	LEAF	
Alabama	\$724	\$790	\$804	\$930	\$905	\$923	\$816	\$964	\$1,027	\$1,149	\$568	\$686	
Alaska	\$736	\$782	\$813	\$917	\$927	\$935	\$813	\$952	\$1,035	\$1,140	\$575	\$685	
Arizona	\$755	\$780	\$836	\$923	\$950	\$914	\$841	\$957	\$1,068	\$1,144	\$588	\$675	
Arkansas	\$731	\$798	\$814	\$942	\$914	\$929	\$828	\$976	\$1,041	\$1,163	\$573	\$691	
California	\$802	\$794	\$885	\$939	\$1,021	\$955	\$876	\$975	\$1,129	\$1,177	\$620	\$689	
Colorado	\$725	\$737	\$804	\$876	\$907	\$869	\$814	\$909	\$1,026	\$1,092	\$568	\$634	
Connecticut	\$743	\$784	\$825	\$928	\$932	\$942	\$835	\$964	\$1,055	\$1,162	\$581	\$680	
Delaware	\$721	\$715	\$798	\$850	\$905	\$842	\$804	\$881	\$1,017	\$1,059	\$565	\$615	
District of Columbia	\$754	\$785	\$836	\$928	\$949	\$920	\$842	\$962	\$1,068	\$1,150	\$588	\$679	
Florida	\$742	\$781	\$824	\$924	\$930	\$913	\$834	\$958	\$1,053	\$1,145	\$580	\$675	
Georgia	\$719	\$789	\$799	\$930	\$897	\$921	\$813	\$963	\$1,021	\$1,147	\$565	\$685	
Hawaii	\$772	\$844	\$853	\$985	\$979	\$1,028	\$848	\$1,023	\$1,087	\$1,230	\$600	\$746	
Idaho	\$752	\$787	\$834	\$930	\$945	\$914	\$840	\$963	\$1,065	\$1,148	\$587	\$680	
Illinois	\$755	\$795	\$837	\$938	\$950	\$931	\$843	\$972	\$1,069	\$1,161	\$589	\$688	
Indiana	\$744	\$804	\$827	\$948	\$933	\$941	\$838	\$983	\$1,057	\$1,173	\$582	\$697	
Iowa	\$733	\$789	\$815	\$932	\$917	\$923	\$828	\$966	\$1,042	\$1,154	\$574	\$683	
Kansas	\$731	\$795	\$814	\$939	\$914	\$930	\$828	\$973	\$1,041	\$1,162	\$573	\$688	
Kentucky	\$731	\$779	\$813	\$922	\$914	\$911	\$827	\$956	\$1,040	\$1,142	\$573	\$673	
Louisiana	\$726	\$769	\$807	\$910	\$907	\$898	\$819	\$943	\$1,030	\$1,126	\$569	\$664	
Maine	\$743	\$767	\$824	\$909	\$932	\$912	\$833	\$944	\$1,053	\$1,136	\$581	\$662	
Maryland	\$745	\$785	\$827	\$928	\$935	\$920	\$836	\$962	\$1,057	\$1,150	\$582	\$679	
Massachusetts	\$745	\$783	\$827	\$927	\$935	\$944	\$837	\$963	\$1,057	\$1,163	\$582	\$680	
Michigan	\$745	\$807	\$828	\$951	\$936	\$954	\$836	\$986	\$1,057	\$1,179	\$583	\$703	
Minnesota	\$736	\$797	\$819	\$941	\$921	\$934	\$832	\$975	\$1,047	\$1,165	\$577	\$690	
Mississippi	\$733	\$798	\$816	\$943	\$917	\$931	\$831	\$977	\$1,044	\$1,165	\$575	\$691	
Missouri	\$722	\$776	\$803	\$916	\$902	\$905	\$816	\$949	\$1,026	\$1,133	\$567	\$671	
Montana	\$719	\$745	\$796	\$880	\$901	\$869	\$802	\$912	\$1,013	\$1,088	\$563	\$645	
Nebraska	\$732	\$781	\$814	\$923	\$916	\$910	\$826	\$956	\$1,040	\$1,141	\$574	\$674	
Nevada	\$777	\$784	\$860	\$928	\$984	\$916	\$859	\$962	\$1,098	\$1,150	\$604	\$677	
New Hampshire	\$718	\$773	\$795	\$908	\$900	\$920	\$802	\$942	\$1,013	\$1,128	\$563	\$676	
New Jersey	\$748	\$692	\$831	\$827	\$939	\$830	\$839	\$860	\$1,061	\$1,042	\$584	\$594	
New Mexico	\$736	\$781	\$818	\$923	\$923	\$917	\$828	\$957	\$1,044	\$1,144	\$576	\$676	
New York	\$741	\$766	\$822	\$907	\$931	\$916	\$828	\$942	\$1,048	\$1,134	\$579	\$664	
North Carolina	\$729	\$783	\$810	\$925	\$912	\$913	\$822	\$958	\$1,035	\$1,142	\$572	\$678	
North Dakota	\$731	\$781	\$812	\$923	\$914	\$910	\$824	\$956	\$1,037	\$1,140	\$573	\$676	
Ohio	\$735	\$799	\$817	\$941	\$920	\$933	\$829	\$975	\$1,044	\$1,163	\$576	\$693	
Oklahoma	\$724	\$773	\$805	\$914	\$905	\$905	\$818	\$948	\$1,029	\$1,133	\$568	\$669	
Oregon	\$737	\$734	\$814	\$869	\$929	\$858	\$814	\$900	\$1,036	\$1,076	\$575	\$633	
Pennsylvania	\$750	\$776	\$832	\$919	\$942	\$913	\$839	\$954	\$1,062	\$1,143	\$585	\$670	
Rhode Island	\$747	\$820	\$830	\$965	\$937	\$980	\$840	\$1,001	\$1,061	\$1,202	\$584	\$716	
South Carolina	\$732	\$790	\$814	\$933	\$915	\$925	\$827	\$967	\$1,040	\$1,155	\$574	\$684	
South Dakota	\$731	\$773	\$812	\$914	\$915	\$905	\$822	\$948	\$1,037	\$1,132	\$573	\$669	
Tennessee	\$738	\$792	\$821	\$936	\$924	\$923	\$834	\$970	\$1,050	\$1,158	\$578	\$684	
Texas	\$732	\$748	\$815	\$891	\$916	\$881	\$828	\$925	\$1,042	\$1,113	\$574	\$641	
Utah	\$749	\$777	\$830	\$919	\$943	\$905	\$835	\$952	\$1,060	\$1,135	\$585	\$671	
Vermont	\$746	\$805	\$828	\$948	\$936	\$956	\$836	\$983	\$1,058	\$1,179	\$583	\$700	
Virginia	\$732	\$777	\$812	\$918	\$917	\$908	\$822	\$951	\$1,037	\$1,136	\$573	\$673	
Washington	\$763	\$754	\$846	\$889	\$963	\$875	\$849	\$920	\$1,080	\$1,095	\$594	\$653	
West Virginia	\$738	\$798	\$820	\$941	\$925	\$931	\$831	\$975	\$1,048	\$1,162	\$578	\$692	
Wisconsin	\$731	\$792	\$813	\$934	\$915	\$930	\$824	\$968	\$1,038	\$1,156	\$573	\$687	
Wyoming	\$734	\$784	\$814	\$924	\$920	\$912	\$823	\$957	\$1,039	\$1,140	\$574	\$679	

Table 4 shows monthly cost comparisons without any federal tax credits, making EVs considerably more expensive on a monthly basis than gasoline counterparts.

Monthly Ownership Cost during Financing Term without Federal Tax Credits												
States	2022 Hyundai Kona		2022 Hyundai Kona		2022 Ford F-150		2022 Kia Niro		2022 Volvo XC40		2022 Nissan	
	SEL	Electric SEL	Limited	Electric Limited	XL	Lightning Pro	EX Premium	EV EX Premium	Inscription	Recharge Plus	Versa S Xtronic CVT	LEAF
Alabama	\$724	\$790	\$804	\$930	\$905	\$923	\$816	\$964	\$1,027	\$1,149	\$568	\$686
Alaska	\$736	\$782	\$813	\$917	\$927	\$935	\$813	\$952	\$1,035	\$1,140	\$575	\$685
Arizona	\$755	\$780	\$836	\$923	\$950	\$914	\$841	\$957	\$1,068	\$1,144	\$588	\$675
Arkansas	\$731	\$798	\$814	\$942	\$914	\$929	\$828	\$976	\$1,041	\$1,163	\$573	\$691
California	\$802	\$794	\$885	\$939	\$1,021	\$955	\$876	\$975	\$1,129	\$1,177	\$620	\$689
Colorado	\$725	\$737	\$804	\$876	\$907	\$869	\$814	\$909	\$1,026	\$1,092	\$568	\$634
Connecticut	\$743	\$784	\$825	\$928	\$932	\$942	\$835	\$964	\$1,055	\$1,162	\$581	\$680
Delaware	\$721	\$715	\$798	\$850	\$905	\$842	\$804	\$881	\$1,017	\$1,059	\$565	\$615
District of Columbia	\$754	\$785	\$836	\$928	\$949	\$920	\$842	\$962	\$1,068	\$1,150	\$588	\$679
Florida	\$742	\$781	\$824	\$924	\$930	\$913	\$834	\$958	\$1,053	\$1,145	\$580	\$675
Georgia	\$719	\$789	\$799	\$930	\$897	\$921	\$813	\$963	\$1,021	\$1,147	\$565	\$685
Hawaii	\$772	\$844	\$853	\$985	\$979	\$1,028	\$848	\$1,023	\$1,087	\$1,230	\$600	\$746
Idaho	\$752	\$787	\$834	\$930	\$945	\$914	\$840	\$963	\$1,065	\$1,148	\$587	\$680
Illinois	\$755	\$795	\$837	\$938	\$950	\$931	\$843	\$972	\$1,069	\$1,161	\$589	\$688
Indiana	\$744	\$804	\$827	\$948	\$933	\$941	\$838	\$983	\$1,057	\$1,173	\$582	\$697
Iowa	\$733	\$789	\$815	\$932	\$917	\$923	\$828	\$966	\$1,042	\$1,154	\$574	\$683
Kansas	\$731	\$795	\$814	\$939	\$914	\$930	\$828	\$973	\$1,041	\$1,162	\$573	\$688
Kentucky	\$731	\$779	\$813	\$922	\$914	\$911	\$827	\$956	\$1,040	\$1,142	\$573	\$673
Louisiana	\$726	\$769	\$807	\$910	\$907	\$898	\$819	\$943	\$1,030	\$1,126	\$569	\$664
Maine	\$743	\$767	\$824	\$909	\$932	\$912	\$833	\$944	\$1,053	\$1,136	\$581	\$662
Maryland	\$745	\$785	\$827	\$928	\$935	\$920	\$836	\$962	\$1,057	\$1,150	\$582	\$679
Massachusetts	\$745	\$783	\$827	\$927	\$935	\$944	\$837	\$963	\$1,057	\$1,163	\$582	\$680
Michigan	\$745	\$807	\$828	\$951	\$936	\$954	\$836	\$986	\$1,057	\$1,179	\$583	\$703
Minnesota	\$736	\$797	\$819	\$941	\$921	\$934	\$832	\$975	\$1,047	\$1,165	\$577	\$690
Mississippi	\$733	\$798	\$816	\$943	\$917	\$931	\$831	\$977	\$1,044	\$1,165	\$575	\$691
Missouri	\$722	\$776	\$803	\$916	\$902	\$905	\$816	\$949	\$1,026	\$1,133	\$567	\$671
Montana	\$719	\$745	\$796	\$880	\$901	\$869	\$802	\$912	\$1,013	\$1,088	\$563	\$645
Nebraska	\$732	\$781	\$814	\$923	\$916	\$910	\$826	\$956	\$1,040	\$1,141	\$574	\$674
Nevada	\$777	\$784	\$860	\$928	\$984	\$916	\$859	\$962	\$1,098	\$1,150	\$604	\$677
New Hampshire	\$718	\$773	\$795	\$908	\$900	\$920	\$802	\$942	\$1,013	\$1,128	\$563	\$676
New Jersey	\$748	\$692	\$831	\$827	\$939	\$830	\$839	\$860	\$1,061	\$1,042	\$584	\$594
New Mexico	\$736	\$781	\$818	\$923	\$923	\$917	\$828	\$957	\$1,044	\$1,144	\$576	\$676
New York	\$741	\$766	\$822	\$907	\$931	\$916	\$828	\$942	\$1,048	\$1,134	\$579	\$664
North Carolina	\$729	\$783	\$810	\$925	\$912	\$913	\$822	\$958	\$1,035	\$1,142	\$572	\$678
North Dakota	\$731	\$781	\$812	\$923	\$914	\$910	\$824	\$956	\$1,037	\$1,140	\$573	\$676
Ohio	\$735	\$799	\$817	\$941	\$920	\$933	\$829	\$975	\$1,044	\$1,163	\$576	\$693
Oklahoma	\$724	\$773	\$805	\$914	\$905	\$905	\$818	\$948	\$1,029	\$1,133	\$568	\$669
Oregon	\$737	\$734	\$814	\$869	\$929	\$858	\$814	\$900	\$1,036	\$1,076	\$575	\$633
Pennsylvania	\$750	\$776	\$832	\$919	\$942	\$913	\$839	\$954	\$1,062	\$1,143	\$585	\$670
Rhode Island	\$747	\$820	\$830	\$965	\$937	\$980	\$840	\$1,001	\$1,061	\$1,202	\$584	\$716
South Carolina	\$732	\$790	\$814	\$933	\$915	\$925	\$827	\$967	\$1,040	\$1,155	\$574	\$684
South Dakota	\$731	\$773	\$812	\$914	\$915	\$905	\$822	\$948	\$1,037	\$1,132	\$573	\$669
Tennessee	\$738	\$792	\$821	\$936	\$924	\$923	\$834	\$970	\$1,050	\$1,158	\$578	\$684
Texas	\$732	\$748	\$815	\$891	\$916	\$881	\$828	\$925	\$1,042	\$1,113	\$574	\$641
Utah	\$749	\$777	\$830	\$919	\$943	\$905	\$835	\$952	\$1,060	\$1,135	\$585	\$671
Vermont	\$746	\$805	\$828	\$948	\$936	\$956	\$836	\$983	\$1,058	\$1,179	\$583	\$700
Virginia	\$732	\$777	\$812	\$918	\$917	\$908	\$822	\$951	\$1,037	\$1,136	\$573	\$673
Washington	\$763	\$754	\$846	\$889	\$963	\$875	\$849	\$920	\$1,080	\$1,095	\$594	\$653
West Virginia	\$738	\$798	\$820	\$941	\$925	\$931	\$831	\$975	\$1,048	\$1,162	\$578	\$692
Wisconsin	\$731	\$792	\$813	\$934	\$915	\$930	\$824	\$968	\$1,038	\$1,156	\$573	\$687
Wyoming	\$734	\$784	\$814	\$924	\$920	\$912	\$823	\$957	\$1,039	\$1,140	\$574	\$679

Table 4: Monthly Ownership Costs by Vehicle without Federal Tax Credits

Extending and enhancing the EV tax credit could make even more EVs economic during a six-year loan term. For example, Table 5 below shows how the economics would change with a \$10,000 federal tax credit, where only three states have any vehicles in the analysis that aren't economic, confined to the Kia Niro with a 50 MPG fuel efficiency gasoline version.

Monthly Ownership Cost during Financing Term with \$10,000 Federal Tax Credit													
States	2022 Hyundai Kona		2022 Hyundai Kona		2022 Ford F-150		2022 Kia Niro		2022 Volvo XC40		2022 Nissan		
	SEL	Electric SEL	Limited	Electric Limited	XL	Lightning Pro	EX Premium	EV EX Premium	Inscription	Recharge Plus	Versa S Xtronic CVT	LEAF	
Alabama	\$724	\$651	\$804	\$791	\$905	\$784	\$816	\$825	\$1,027	\$1,010	\$568	\$547	
Alaska	\$736	\$643	\$813	\$778	\$927	\$796	\$813	\$813	\$1,035	\$1,002	\$575	\$546	
Arizona	\$755	\$642	\$836	\$784	\$950	\$775	\$841	\$818	\$1,068	\$1,005	\$588	\$536	
Arkansas	\$731	\$659	\$814	\$803	\$914	\$791	\$828	\$837	\$1,041	\$1,024	\$573	\$552	
California	\$802	\$655	\$885	\$800	\$1,021	\$816	\$876	\$836	\$1,129	\$1,038	\$620	\$550	
Colorado	\$725	\$598	\$804	\$737	\$907	\$730	\$814	\$770	\$1,026	\$953	\$568	\$495	
Connecticut	\$743	\$645	\$825	\$789	\$932	\$803	\$835	\$825	\$1,055	\$1,024	\$581	\$541	
Delaware	\$721	\$576	\$798	\$711	\$905	\$703	\$804	\$743	\$1,017	\$920	\$565	\$476	
District of Columbia	\$754	\$646	\$836	\$789	\$949	\$781	\$842	\$823	\$1,068	\$1,011	\$588	\$540	
Florida	\$742	\$642	\$824	\$785	\$930	\$775	\$834	\$819	\$1,053	\$1,006	\$580	\$536	
Georgia	\$719	\$651	\$799	\$791	\$897	\$783	\$813	\$824	\$1,021	\$1,009	\$565	\$546	
Hawaii	\$772	\$705	\$853	\$846	\$979	\$889	\$848	\$884	\$1,087	\$1,091	\$600	\$607	
Idaho	\$752	\$648	\$834	\$791	\$945	\$776	\$840	\$824	\$1,065	\$1,009	\$587	\$541	
Illinois	\$755	\$656	\$837	\$799	\$950	\$792	\$843	\$833	\$1,069	\$1,022	\$589	\$549	
Indiana	\$744	\$665	\$827	\$809	\$933	\$802	\$838	\$844	\$1,057	\$1,034	\$582	\$558	
Iowa	\$733	\$650	\$815	\$793	\$917	\$784	\$828	\$827	\$1,042	\$1,015	\$574	\$544	
Kansas	\$731	\$656	\$814	\$800	\$914	\$792	\$828	\$834	\$1,041	\$1,023	\$573	\$549	
Kentucky	\$731	\$640	\$813	\$783	\$914	\$772	\$827	\$817	\$1,040	\$1,004	\$573	\$534	
Louisiana	\$726	\$630	\$807	\$771	\$907	\$759	\$819	\$804	\$1,030	\$988	\$569	\$525	
Maine	\$743	\$628	\$824	\$770	\$932	\$773	\$833	\$805	\$1,053	\$997	\$581	\$523	
Maryland	\$745	\$646	\$827	\$789	\$935	\$781	\$836	\$823	\$1,057	\$1,011	\$582	\$540	
Massachusetts	\$745	\$645	\$827	\$788	\$935	\$805	\$837	\$825	\$1,057	\$1,024	\$582	\$541	
Michigan	\$745	\$669	\$828	\$812	\$936	\$815	\$836	\$847	\$1,057	\$1,040	\$583	\$564	
Minnesota	\$736	\$658	\$819	\$802	\$921	\$795	\$832	\$837	\$1,047	\$1,027	\$577	\$551	
Mississippi	\$733	\$659	\$816	\$804	\$917	\$792	\$831	\$838	\$1,044	\$1,026	\$575	\$552	
Missouri	\$722	\$637	\$803	\$777	\$902	\$766	\$816	\$810	\$1,026	\$994	\$567	\$532	
Montana	\$719	\$606	\$796	\$741	\$901	\$731	\$802	\$773	\$1,013	\$949	\$563	\$506	
Nebraska	\$732	\$642	\$814	\$784	\$916	\$771	\$826	\$817	\$1,040	\$1,002	\$574	\$535	
Nevada	\$777	\$645	\$860	\$789	\$984	\$777	\$859	\$823	\$1,098	\$1,011	\$604	\$538	
New Hampshire	\$718	\$634	\$795	\$769	\$900	\$781	\$802	\$803	\$1,013	\$989	\$563	\$537	
New Jersey	\$748	\$553	\$831	\$689	\$939	\$691	\$839	\$721	\$1,061	\$903	\$584	\$455	
New Mexico	\$736	\$642	\$818	\$784	\$923	\$778	\$828	\$818	\$1,044	\$1,006	\$576	\$537	
New York	\$741	\$628	\$822	\$768	\$931	\$777	\$828	\$803	\$1,048	\$995	\$579	\$525	
North Carolina	\$729	\$644	\$810	\$786	\$912	\$774	\$822	\$819	\$1,035	\$1,003	\$572	\$539	
North Dakota	\$731	\$643	\$812	\$784	\$914	\$771	\$824	\$818	\$1,037	\$1,001	\$573	\$537	
Ohio	\$735	\$660	\$817	\$803	\$920	\$794	\$829	\$837	\$1,044	\$1,024	\$576	\$554	
Oklahoma	\$724	\$634	\$805	\$776	\$905	\$766	\$818	\$809	\$1,029	\$994	\$568	\$530	
Oregon	\$737	\$595	\$814	\$730	\$929	\$719	\$814	\$761	\$1,036	\$938	\$575	\$495	
Pennsylvania	\$750	\$637	\$832	\$781	\$942	\$775	\$839	\$815	\$1,062	\$1,004	\$585	\$532	
Rhode Island	\$747	\$681	\$830	\$826	\$937	\$841	\$840	\$863	\$1,061	\$1,063	\$584	\$577	
South Carolina	\$732	\$651	\$814	\$794	\$915	\$786	\$827	\$828	\$1,040	\$1,016	\$574	\$545	
South Dakota	\$731	\$634	\$812	\$776	\$915	\$766	\$822	\$809	\$1,037	\$994	\$573	\$530	
Tennessee	\$738	\$653	\$821	\$798	\$924	\$785	\$834	\$831	\$1,050	\$1,019	\$578	\$545	
Texas	\$732	\$609	\$815	\$752	\$916	\$742	\$828	\$786	\$1,042	\$974	\$574	\$502	
Utah	\$749	\$638	\$830	\$780	\$943	\$766	\$835	\$813	\$1,060	\$996	\$585	\$533	
Vermont	\$746	\$666	\$828	\$809	\$936	\$817	\$836	\$845	\$1,058	\$1,040	\$583	\$561	
Virginia	\$732	\$638	\$812	\$779	\$917	\$769	\$822	\$812	\$1,037	\$997	\$573	\$534	
Washington	\$763	\$615	\$846	\$750	\$963	\$736	\$849	\$781	\$1,080	\$956	\$594	\$514	
West Virginia	\$738	\$659	\$820	\$802	\$925	\$792	\$831	\$836	\$1,048	\$1,023	\$578	\$553	
Wisconsin	\$731	\$653	\$813	\$795	\$915	\$791	\$824	\$829	\$1,038	\$1,017	\$573	\$549	
Wyoming	\$734	\$645	\$814	\$785	\$920	\$773	\$823	\$818	\$1,039	\$1,001	\$574	\$540	

Table 5: Monthly Ownership Costs by Vehicle with a \$10,000 Federal Tax Credit

Annual Ownership Costs

Over the course of a year, savings can add up to thousands of dollars. The Hyundai Electric SEL is nearly \$800 less a year than the gasoline version, and the Ford F-150 Lightning Pro is nearly \$1,400 less a year. Though it varies by vehicle make, model, and state, consumers purchasing an EV instead of a gasoline model frequently begin accruing substantial savings from their day the car is driven off the lot. Table 6 shows annual ownership costs by vehicle and state.

Annual Ownership Cost during Financing Term												
States	2022 Hyundai Kona		2022 Ford F-150		2022 Kia Niro		2022 Volvo XC40		2022 Nissan			
	SEL	Electric SEL	Limited	Electric Limited	XL	Lightning Pro	EX Premium	EV EX Premium	Inscription	Recharge Plus	Versa S Xtronic CVT	LEAF
Alabama	\$8,683	\$8,229	\$9,650	\$9,914	\$10,855	\$9,828	\$9,795	\$10,315	\$12,322	\$12,533	\$6,813	\$6,982
Alaska	\$8,830	\$8,137	\$9,759	\$9,758	\$11,125	\$9,975	\$9,759	\$10,169	\$12,416	\$12,435	\$6,896	\$6,972
Arizona	\$9,054	\$8,115	\$10,037	\$9,826	\$11,402	\$9,718	\$10,091	\$10,232	\$12,814	\$12,475	\$7,061	\$6,846
Arkansas	\$8,774	\$8,327	\$9,766	\$10,052	\$10,966	\$9,903	\$9,938	\$10,458	\$12,489	\$12,702	\$6,881	\$7,042
California	\$9,624	\$8,275	\$10,623	\$10,012	\$12,252	\$10,209	\$10,518	\$10,454	\$13,551	\$12,868	\$7,438	\$7,017
Colorado	\$8,696	\$7,591	\$9,652	\$9,258	\$10,887	\$9,178	\$9,768	\$9,655	\$12,314	\$11,851	\$6,818	\$6,358
Connecticut	\$8,913	\$8,159	\$9,903	\$9,882	\$11,179	\$10,052	\$10,024	\$10,317	\$12,657	\$12,700	\$6,971	\$6,909
Delaware	\$8,653	\$7,324	\$9,581	\$8,945	\$10,855	\$8,859	\$9,644	\$9,328	\$12,198	\$11,459	\$6,780	\$6,127
District of Columbia	\$9,048	\$8,165	\$10,034	\$9,882	\$11,388	\$9,790	\$10,100	\$10,291	\$12,815	\$12,550	\$7,058	\$6,892
Florida	\$8,901	\$8,121	\$9,888	\$9,838	\$11,165	\$9,712	\$10,004	\$10,244	\$12,635	\$12,487	\$6,962	\$6,844
Georgia	\$8,626	\$8,223	\$9,593	\$9,908	\$10,769	\$9,808	\$9,759	\$10,308	\$12,252	\$12,519	\$6,776	\$6,974
Hawaii	\$9,268	\$8,879	\$10,236	\$10,564	\$11,747	\$11,089	\$10,178	\$11,022	\$13,043	\$13,512	\$7,195	\$7,697
Idaho	\$9,019	\$8,188	\$10,006	\$9,906	\$11,344	\$9,724	\$10,081	\$10,306	\$12,780	\$12,525	\$7,039	\$6,906
Illinois	\$9,057	\$8,286	\$10,046	\$10,008	\$11,400	\$9,917	\$10,115	\$10,418	\$12,832	\$12,683	\$7,065	\$7,010
Indiana	\$8,926	\$8,395	\$9,922	\$10,129	\$11,191	\$10,042	\$10,054	\$10,542	\$12,687	\$12,825	\$6,981	\$7,110
Iowa	\$8,792	\$8,215	\$9,779	\$9,932	\$10,999	\$9,828	\$9,933	\$10,340	\$12,500	\$12,594	\$6,891	\$6,941
Kansas	\$8,776	\$8,290	\$9,768	\$10,016	\$10,968	\$9,915	\$9,939	\$10,426	\$12,491	\$12,692	\$6,882	\$7,011
Kentucky	\$8,774	\$8,101	\$9,761	\$9,818	\$10,971	\$9,677	\$9,921	\$10,223	\$12,478	\$12,459	\$6,879	\$6,823
Louisiana	\$8,707	\$7,978	\$9,679	\$9,671	\$10,887	\$9,521	\$9,826	\$10,068	\$12,362	\$12,267	\$6,830	\$6,719
Maine	\$8,911	\$7,952	\$9,893	\$9,662	\$11,185	\$9,689	\$9,994	\$10,080	\$12,636	\$12,381	\$6,967	\$6,699
Maryland	\$8,940	\$8,165	\$9,927	\$9,883	\$11,224	\$9,790	\$10,030	\$10,292	\$12,682	\$12,550	\$6,987	\$6,893
Massachusetts	\$8,941	\$8,152	\$9,930	\$9,873	\$11,222	\$10,076	\$10,038	\$10,311	\$12,689	\$12,706	\$6,989	\$6,907
Michigan	\$8,944	\$8,439	\$9,931	\$10,157	\$11,230	\$10,197	\$10,032	\$10,578	\$12,687	\$12,895	\$6,990	\$7,180
Minnesota	\$8,831	\$8,310	\$9,826	\$10,042	\$11,047	\$9,954	\$9,987	\$10,455	\$12,567	\$12,735	\$6,919	\$7,027
Mississippi	\$8,800	\$8,326	\$9,796	\$10,060	\$10,998	\$9,921	\$9,971	\$10,469	\$12,531	\$12,729	\$6,899	\$7,036
Missouri	\$8,667	\$8,056	\$9,637	\$9,745	\$10,828	\$9,610	\$9,793	\$10,142	\$12,308	\$12,343	\$6,803	\$6,801
Montana	\$8,622	\$7,689	\$9,551	\$9,310	\$10,808	\$9,184	\$9,623	\$9,689	\$12,160	\$11,802	\$6,760	\$6,488
Nebraska	\$8,781	\$8,116	\$9,763	\$9,826	\$10,988	\$9,666	\$9,910	\$10,226	\$12,476	\$12,444	\$6,882	\$6,843
Nevada	\$9,328	\$8,157	\$10,323	\$9,889	\$11,806	\$9,743	\$10,311	\$10,296	\$13,179	\$12,550	\$7,244	\$6,868
New Hampshire	\$8,617	\$8,029	\$9,546	\$9,650	\$10,800	\$9,785	\$9,620	\$10,054	\$12,154	\$12,283	\$6,757	\$6,856
New Jersey	\$8,973	\$7,058	\$9,966	\$8,679	\$11,268	\$8,708	\$10,072	\$9,073	\$12,737	\$11,255	\$7,011	\$5,873
New Mexico	\$8,833	\$8,126	\$9,812	\$9,829	\$11,072	\$9,755	\$9,931	\$10,236	\$12,532	\$12,483	\$6,915	\$6,866
New York	\$8,891	\$7,947	\$9,859	\$9,633	\$11,173	\$9,739	\$9,932	\$10,051	\$12,579	\$12,355	\$6,949	\$6,721
North Carolina	\$8,750	\$8,147	\$9,724	\$9,844	\$10,948	\$9,707	\$9,864	\$10,243	\$12,421	\$12,455	\$6,859	\$6,885
North Dakota	\$8,768	\$8,127	\$9,745	\$9,828	\$10,973	\$9,670	\$9,884	\$10,227	\$12,449	\$12,434	\$6,872	\$6,860
Ohio	\$8,821	\$8,334	\$9,805	\$10,048	\$11,046	\$9,946	\$9,944	\$10,455	\$12,531	\$12,703	\$6,909	\$7,064
Oklahoma	\$8,690	\$8,030	\$9,663	\$9,724	\$10,861	\$9,611	\$9,817	\$10,124	\$12,343	\$12,341	\$6,820	\$6,774
Oregon	\$8,845	\$7,552	\$9,773	\$9,173	\$11,147	\$9,049	\$9,769	\$9,553	\$12,434	\$11,667	\$6,906	\$6,351
Pennsylvania	\$8,994	\$8,066	\$9,981	\$9,784	\$11,306	\$9,711	\$10,065	\$10,194	\$12,749	\$12,462	\$7,023	\$6,795
Rhode Island	\$8,965	\$8,594	\$9,961	\$10,328	\$11,250	\$10,509	\$10,079	\$10,767	\$12,734	\$13,169	\$7,007	\$7,338
South Carolina	\$8,780	\$8,227	\$9,767	\$9,944	\$10,980	\$9,853	\$9,925	\$10,353	\$12,485	\$12,613	\$6,883	\$6,954
South Dakota	\$8,770	\$8,030	\$9,743	\$9,723	\$10,983	\$9,610	\$9,869	\$10,123	\$12,441	\$12,340	\$6,872	\$6,774
Tennessee	\$8,855	\$8,253	\$9,851	\$9,987	\$11,082	\$9,831	\$10,007	\$10,395	\$12,599	\$12,646	\$6,935	\$6,961
Texas	\$8,789	\$7,723	\$9,778	\$9,444	\$10,991	\$9,318	\$9,939	\$9,851	\$12,502	\$12,100	\$6,889	\$6,443
Utah	\$8,988	\$8,074	\$9,964	\$9,773	\$11,311	\$9,605	\$10,023	\$10,170	\$12,717	\$12,370	\$7,015	\$6,808
Vermont	\$8,947	\$8,408	\$9,933	\$10,125	\$11,234	\$10,218	\$10,034	\$10,552	\$12,690	\$12,893	\$6,992	\$7,155
Virginia	\$8,779	\$8,076	\$9,749	\$9,766	\$10,998	\$9,650	\$9,868	\$10,165	\$12,447	\$12,376	\$6,877	\$6,822
Washington	\$9,161	\$7,793	\$10,153	\$9,414	\$11,555	\$9,253	\$10,191	\$9,790	\$12,965	\$11,887	\$7,133	\$6,588
West Virginia	\$8,855	\$8,326	\$9,842	\$10,044	\$11,095	\$9,922	\$9,974	\$10,450	\$12,578	\$12,696	\$6,932	\$7,051
Wisconsin	\$8,773	\$8,254	\$9,750	\$9,956	\$10,981	\$9,910	\$9,888	\$10,364	\$12,455	\$12,622	\$6,875	\$6,999
Wyoming	\$8,803	\$8,155	\$9,771	\$9,840	\$11,039	\$9,697	\$9,874	\$10,235	\$12,471	\$12,428	\$6,892	\$6,902

Table 6: Annual Ownership Costs by Vehicle

Total Cost of Ownership

The analysis above focuses on monthly costs during the financing term, which includes monthly loan repayment. However, after a vehicle loan is paid off, monthly savings for EVs grow dramatically. For example, Table 7 below shows monthly ownership costs after loan repayment. At this point, consumers save on average anywhere from \$1,500 to \$2,000 per year, with some vehicle-state combinations as high as \$3,000 per year.

Monthly Ownership Cost after Financing Term													
States	2022 Hyundai Kona		2022 Hyundai Kona		2022 Ford F-150		2022 Kia Niro		2022 Volvo XC40		2022 Nissan		
	SEL	Electric SEL	Limited	Electric Limited	XL	Lightning Pro	EX Premium	EV EX Premium	Inscription	Recharge Plus	Versa S Xtronic CVT	LEAF	
Alabama	\$363	\$257	\$370	\$267	\$443	\$298	\$327	\$273	\$416	\$300	\$307	\$252	
Alaska	\$391	\$272	\$398	\$282	\$486	\$336	\$345	\$290	\$451	\$328	\$326	\$269	
Arizona	\$388	\$238	\$394	\$249	\$481	\$278	\$343	\$254	\$447	\$281	\$324	\$234	
Arkansas	\$361	\$251	\$368	\$261	\$440	\$287	\$326	\$267	\$414	\$292	\$306	\$246	
California	\$429	\$281	\$435	\$291	\$543	\$346	\$370	\$299	\$497	\$337	\$350	\$279	
Colorado	\$369	\$245	\$375	\$255	\$451	\$285	\$331	\$260	\$423	\$288	\$311	\$240	
Connecticut	\$373	\$269	\$380	\$279	\$458	\$332	\$334	\$287	\$428	\$324	\$314	\$267	
Delaware	\$376	\$238	\$383	\$249	\$463	\$278	\$336	\$254	\$432	\$281	\$316	\$234	
District of Columbia	\$386	\$240	\$392	\$251	\$478	\$281	\$342	\$256	\$444	\$284	\$322	\$236	
Florida	\$374	\$237	\$380	\$247	\$459	\$275	\$334	\$252	\$429	\$278	\$314	\$232	
Georgia	\$359	\$256	\$365	\$267	\$436	\$296	\$324	\$272	\$410	\$299	\$304	\$252	
Hawaii	\$412	\$311	\$418	\$321	\$518	\$403	\$359	\$332	\$476	\$382	\$339	\$312	
Idaho	\$383	\$242	\$390	\$253	\$474	\$276	\$340	\$257	\$441	\$282	\$321	\$237	
Illinois	\$386	\$249	\$392	\$259	\$477	\$290	\$342	\$265	\$444	\$293	\$322	\$244	
Indiana	\$372	\$254	\$378	\$264	\$456	\$296	\$333	\$270	\$427	\$298	\$313	\$249	
Iowa	\$365	\$245	\$371	\$255	\$445	\$284	\$328	\$260	\$418	\$287	\$308	\$240	
Kansas	\$361	\$248	\$368	\$258	\$440	\$288	\$326	\$264	\$414	\$291	\$306	\$243	
Kentucky	\$363	\$235	\$369	\$245	\$443	\$272	\$327	\$251	\$416	\$276	\$307	\$230	
Louisiana	\$364	\$233	\$370	\$244	\$444	\$269	\$327	\$249	\$417	\$274	\$308	\$228	
Maine	\$376	\$253	\$383	\$263	\$463	\$304	\$336	\$270	\$432	\$302	\$316	\$250	
Maryland	\$377	\$240	\$383	\$251	\$464	\$281	\$336	\$256	\$433	\$284	\$316	\$236	
Massachusetts	\$376	\$273	\$382	\$283	\$463	\$338	\$335	\$291	\$432	\$329	\$316	\$271	
Michigan	\$377	\$263	\$384	\$273	\$465	\$315	\$336	\$280	\$433	\$312	\$317	\$260	
Minnesota	\$364	\$248	\$371	\$258	\$445	\$289	\$328	\$264	\$418	\$291	\$308	\$243	
Mississippi	\$361	\$248	\$368	\$258	\$440	\$286	\$326	\$264	\$414	\$290	\$306	\$243	
Missouri	\$361	\$241	\$367	\$251	\$440	\$278	\$326	\$257	\$413	\$282	\$306	\$236	
Montana	\$374	\$234	\$380	\$244	\$459	\$270	\$334	\$250	\$429	\$275	\$314	\$229	
Nebraska	\$366	\$239	\$372	\$249	\$447	\$274	\$329	\$254	\$419	\$279	\$309	\$234	
Nevada	\$406	\$235	\$412	\$245	\$508	\$272	\$355	\$250	\$469	\$276	\$335	\$230	
New Hampshire	\$374	\$263	\$380	\$273	\$459	\$320	\$334	\$280	\$429	\$315	\$314	\$260	
New Jersey	\$377	\$251	\$384	\$261	\$465	\$300	\$336	\$268	\$433	\$299	\$317	\$247	
New Mexico	\$371	\$242	\$378	\$252	\$456	\$284	\$332	\$258	\$426	\$286	\$313	\$237	
New York	\$381	\$261	\$387	\$271	\$470	\$318	\$338	\$279	\$438	\$313	\$319	\$258	
North Carolina	\$366	\$246	\$372	\$256	\$447	\$283	\$329	\$261	\$419	\$287	\$309	\$241	
North Dakota	\$366	\$243	\$373	\$253	\$448	\$278	\$329	\$258	\$420	\$283	\$310	\$237	
Ohio	\$368	\$256	\$374	\$266	\$450	\$296	\$330	\$272	\$422	\$299	\$311	\$251	
Oklahoma	\$362	\$238	\$368	\$248	\$441	\$276	\$326	\$253	\$415	\$280	\$307	\$233	
Oregon	\$392	\$244	\$399	\$254	\$488	\$280	\$346	\$259	\$452	\$284	\$327	\$238	
Pennsylvania	\$381	\$243	\$388	\$253	\$471	\$285	\$339	\$259	\$438	\$287	\$319	\$238	
Rhode Island	\$375	\$271	\$381	\$281	\$461	\$335	\$335	\$289	\$431	\$326	\$315	\$268	
South Carolina	\$364	\$246	\$370	\$256	\$444	\$286	\$327	\$261	\$417	\$289	\$308	\$241	
South Dakota	\$369	\$237	\$375	\$248	\$451	\$276	\$331	\$253	\$423	\$280	\$311	\$233	
Tennessee	\$366	\$242	\$372	\$252	\$447	\$278	\$329	\$258	\$419	\$283	\$309	\$237	
Texas	\$363	\$237	\$370	\$247	\$443	\$275	\$327	\$252	\$416	\$279	\$308	\$232	
Utah	\$385	\$239	\$392	\$249	\$477	\$273	\$342	\$254	\$443	\$279	\$322	\$234	
Vermont	\$377	\$261	\$384	\$271	\$465	\$317	\$336	\$278	\$434	\$312	\$317	\$258	
Virginia	\$370	\$242	\$377	\$253	\$454	\$281	\$332	\$258	\$425	\$284	\$312	\$237	
Washington	\$393	\$243	\$400	\$253	\$489	\$276	\$347	\$258	\$453	\$282	\$327	\$237	
West Virginia	\$370	\$254	\$376	\$264	\$453	\$292	\$331	\$269	\$424	\$296	\$312	\$249	
Wisconsin	\$367	\$253	\$373	\$264	\$449	\$298	\$329	\$270	\$421	\$299	\$310	\$249	
Wyoming	\$373	\$251	\$380	\$261	\$459	\$287	\$334	\$266	\$429	\$291	\$314	\$245	

Table 7: Monthly Ownership Cost by Vehicle after Loan Repayment

Because EVs are so much more efficient with significantly lower maintenance costs, vehicle TCO over average lifetimes are significantly lower today for EVs than for gasoline vehicles. Table 8 below shows TCO during the vehicle lifetime, estimated at 12 years based on national data,²⁶ and Figure 6 compares average national TCO across each pair of vehicle comparisons.

Even though EVs are often cheaper to own on a monthly basis even during loan repayment and much lower on a TCO basis higher purchase costs can dissuade potential EV owners from purchasing. Better understanding around the costs of EV ownership is needed to overcome this information barrier.

Total Cost of Ownership over 12 Years												
States	2022 Hyundai Kona		2022 Hyundai Kona		2022 Ford F-150		2022 Kia Niro		2022 Volvo XC40		2022 Nissan	
	SEL	Electric SEL	Limited	Electric Limited	XL	Lightning Pro	EX Premium	EV EX Premium	Inscription	Recharge Plus	Versa S Xtronic CVT	LEAF
Alabama	\$60,729	\$54,522	\$66,497	\$64,095	\$75,368	\$64,898	\$66,247	\$66,777	\$83,174	\$80,035	\$48,461	\$47,173
Alaska	\$62,443	\$54,350	\$68,016	\$63,597	\$78,212	\$66,760	\$66,699	\$66,411	\$84,845	\$80,281	\$49,515	\$47,503
Arizona	\$63,459	\$53,091	\$69,306	\$62,794	\$79,437	\$63,438	\$68,297	\$65,497	\$86,711	\$78,859	\$50,270	\$45,623
Arkansas	\$61,117	\$54,813	\$67,007	\$64,589	\$75,816	\$64,920	\$66,918	\$67,283	\$83,927	\$80,605	\$48,755	\$47,255
California	\$67,758	\$55,138	\$73,685	\$64,976	\$85,892	\$68,060	\$71,380	\$67,943	\$92,183	\$82,572	\$53,105	\$47,825
Colorado	\$60,982	\$50,409	\$66,697	\$59,893	\$75,819	\$60,730	\$66,229	\$62,554	\$83,366	\$75,706	\$48,609	\$43,133
Connecticut	\$62,237	\$54,102	\$68,120	\$63,867	\$77,532	\$66,731	\$67,624	\$66,793	\$85,289	\$81,226	\$49,485	\$46,823
Delaware	\$61,037	\$48,801	\$66,610	\$58,048	\$76,069	\$58,806	\$65,781	\$60,638	\$83,114	\$73,437	\$48,597	\$41,699
District of Columbia	\$63,353	\$53,408	\$69,219	\$63,143	\$79,253	\$63,919	\$68,295	\$65,867	\$86,625	\$79,332	\$50,208	\$45,929
Florida	\$62,191	\$53,745	\$68,057	\$62,792	\$77,482	\$63,298	\$67,536	\$65,491	\$85,194	\$78,836	\$49,449	\$45,549
Georgia	\$60,281	\$54,489	\$66,049	\$64,062	\$74,686	\$64,750	\$65,954	\$66,733	\$82,624	\$79,940	\$48,168	\$47,127
Hawaii	\$65,378	\$59,515	\$71,147	\$69,088	\$82,453	\$74,745	\$69,283	\$72,224	\$88,897	\$87,641	\$51,497	\$52,680
Idaho	\$63,126	\$53,056	\$68,992	\$63,481	\$78,907	\$63,548	\$68,146	\$66,139	\$86,345	\$79,288	\$50,059	\$46,191
Illinois	\$63,396	\$54,429	\$69,274	\$64,185	\$79,303	\$64,982	\$68,364	\$66,916	\$86,705	\$80,418	\$50,240	\$46,937
Indiana	\$62,251	\$55,202	\$68,166	\$65,019	\$77,515	\$65,854	\$67,742	\$67,771	\$85,378	\$81,372	\$49,504	\$47,666
Iowa	\$61,326	\$53,875	\$67,192	\$63,611	\$76,163	\$64,295	\$66,971	\$66,326	\$84,129	\$79,750	\$48,884	\$46,386
Kansas	\$61,130	\$54,416	\$67,021	\$64,192	\$75,836	\$64,910	\$66,926	\$66,922	\$83,944	\$80,416	\$48,764	\$46,899
Kentucky	\$61,182	\$52,899	\$67,048	\$62,635	\$75,944	\$63,021	\$66,877	\$65,322	\$83,953	\$78,614	\$48,790	\$45,379
Louisiana	\$60,862	\$52,229	\$66,652	\$61,838	\$76,546	\$62,143	\$66,409	\$64,484	\$83,388	\$77,569	\$48,555	\$44,798
Maine	\$62,336	\$52,540	\$68,178	\$62,235	\$77,732	\$63,957	\$67,547	\$65,036	\$85,318	\$78,867	\$49,535	\$45,193
Maryland	\$62,498	\$53,411	\$68,364	\$63,147	\$77,950	\$63,924	\$67,736	\$65,871	\$85,572	\$79,336	\$49,649	\$45,932
Massachusetts	\$62,471	\$54,158	\$68,349	\$63,914	\$77,988	\$67,032	\$67,760	\$66,862	\$85,566	\$81,397	\$49,635	\$46,912
Michigan	\$62,532	\$55,691	\$68,398	\$65,427	\$78,001	\$67,258	\$67,758	\$68,249	\$85,614	\$82,184	\$49,671	\$48,324
Minnesota	\$61,513	\$54,471	\$67,422	\$64,278	\$76,398	\$65,105	\$67,239	\$67,026	\$84,456	\$80,610	\$49,020	\$46,942
Mississippi	\$61,249	\$54,659	\$67,164	\$64,476	\$76,164	\$64,896	\$67,087	\$67,189	\$84,145	\$80,605	\$48,850	\$47,079
Missouri	\$60,575	\$52,971	\$66,354	\$62,562	\$75,121	\$62,979	\$66,184	\$65,213	\$83,010	\$78,324	\$48,364	\$45,566
Montana	\$60,793	\$50,793	\$66,366	\$60,041	\$75,697	\$60,484	\$65,621	\$62,601	\$82,814	\$75,260	\$48,437	\$43,658
Nebraska	\$61,308	\$53,200	\$67,149	\$62,895	\$76,164	\$63,133	\$66,875	\$65,558	\$84,052	\$78,728	\$48,864	\$45,696
Nevada	\$65,465	\$53,183	\$71,373	\$62,988	\$82,422	\$63,355	\$69,816	\$65,692	\$89,318	\$79,068	\$51,601	\$45,607
New Hampshire	\$60,753	\$53,496	\$66,326	\$62,744	\$75,636	\$65,254	\$65,595	\$65,497	\$82,765	\$79,075	\$48,411	\$46,580
New Jersey	\$62,680	\$47,593	\$68,576	\$56,840	\$78,190	\$58,513	\$67,959	\$59,515	\$85,864	\$72,721	\$49,778	\$40,588
New Mexico	\$61,773	\$53,266	\$67,597	\$62,931	\$76,895	\$63,841	\$67,117	\$65,648	\$84,584	\$79,077	\$49,162	\$45,857
New York	\$62,385	\$52,790	\$68,154	\$62,364	\$77,893	\$64,693	\$67,329	\$65,188	\$85,213	\$79,125	\$49,543	\$45,603
North Carolina	\$61,160	\$53,647	\$66,965	\$63,282	\$75,983	\$63,690	\$66,654	\$65,944	\$83,788	\$79,108	\$48,755	\$46,209
North Dakota	\$61,269	\$53,431	\$67,087	\$63,086	\$76,135	\$63,329	\$66,767	\$65,738	\$83,950	\$78,856	\$48,830	\$45,959
Ohio	\$61,591	\$55,018	\$67,445	\$64,734	\$76,581	\$65,430	\$67,102	\$67,445	\$84,428	\$80,847	\$49,052	\$47,547
Oklahoma	\$60,723	\$52,632	\$66,516	\$62,245	\$75,332	\$62,844	\$66,327	\$64,920	\$83,223	\$78,141	\$48,466	\$45,229
Oregon	\$62,560	\$50,369	\$68,133	\$59,616	\$78,390	\$60,079	\$66,775	\$62,178	\$84,989	\$74,846	\$49,591	\$43,236
Pennsylvania	\$62,929	\$52,894	\$68,795	\$62,629	\$78,606	\$63,563	\$68,018	\$65,368	\$86,103	\$78,903	\$49,931	\$45,432
Rhode Island	\$62,558	\$56,623	\$68,473	\$66,440	\$77,983	\$69,397	\$67,942	\$69,390	\$85,756	\$83,935	\$49,705	\$49,313
South Carolina	\$61,229	\$53,965	\$67,095	\$63,701	\$76,016	\$64,488	\$66,907	\$66,426	\$84,010	\$79,895	\$48,820	\$46,487
South Dakota	\$61,358	\$52,625	\$67,151	\$62,239	\$76,299	\$62,833	\$66,741	\$64,913	\$84,004	\$78,132	\$48,880	\$45,222
Tennessee	\$61,686	\$54,026	\$67,601	\$63,843	\$76,655	\$64,123	\$67,373	\$66,543	\$84,683	\$79,897	\$49,135	\$46,431
Texas	\$61,265	\$50,752	\$67,143	\$60,508	\$76,056	\$61,022	\$66,973	\$63,213	\$84,082	\$76,589	\$48,848	\$43,230
Utah	\$63,041	\$53,006	\$68,851	\$62,649	\$78,843	\$62,815	\$67,899	\$65,290	\$86,114	\$78,358	\$49,985	\$45,536
Vermont	\$62,552	\$55,335	\$68,418	\$65,071	\$78,031	\$67,320	\$67,771	\$67,932	\$85,638	\$82,053	\$49,684	\$48,012
Virginia	\$61,454	\$53,101	\$67,237	\$62,698	\$76,457	\$63,270	\$66,771	\$65,366	\$84,101	\$78,553	\$48,940	\$45,708
Washington	\$64,187	\$51,783	\$70,077	\$61,031	\$80,494	\$61,195	\$68,922	\$63,565	\$87,705	\$76,100	\$50,760	\$44,618
West Virginia	\$61,827	\$54,908	\$67,693	\$64,644	\$76,927	\$65,186	\$67,298	\$67,346	\$84,746	\$80,707	\$49,211	\$47,404
Wisconsin	\$61,313	\$54,418	\$67,130	\$64,073	\$76,201	\$65,209	\$66,795	\$66,808	\$84,003	\$80,324	\$48,859	\$47,041
Wyoming	\$61,687	\$53,932	\$67,456	\$63,505	\$76,829	\$63,857	\$66,873	\$66,145	\$84,354	\$79,202	\$49,087	\$46,535

Table 8: Total Cost of Ownership during Vehicle Lifetime

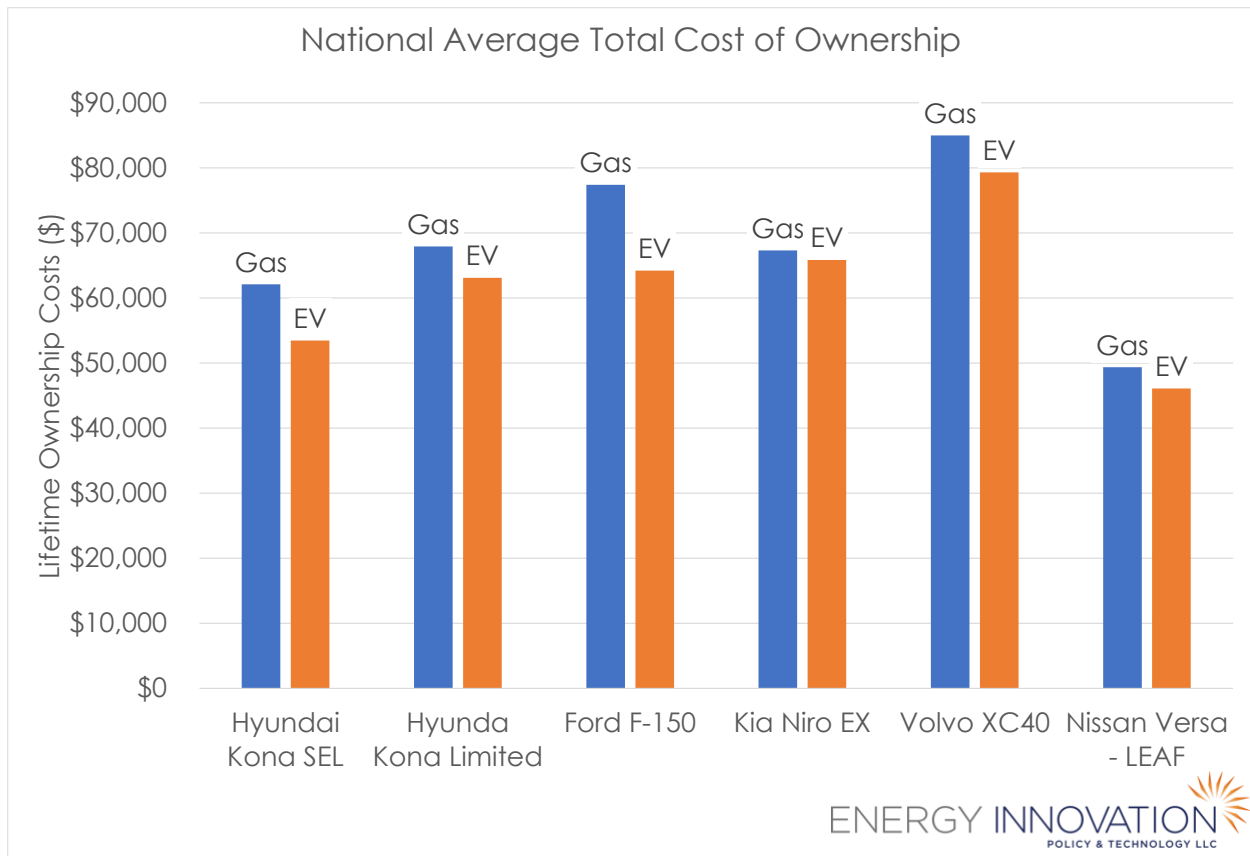


Figure 6: National Average Total Cost of Ownership over Vehicle Lifetime

CONCLUSION

Many studies show that operating costs and TCO are lower for EVs. But the more relevant factor in influencing consumer decision-making at the time of purchase is the *monthly cost of paying for and owning* an EV during a period of loan repayment.

Today, EVs have higher upfront prices, leading some consumers to think owning an EV is only available to higher-income earners. Failure to translate purchase price differences to monthly loan repayment costs also makes purchase price differences seem greater, especially when combined with fuel and maintenance savings. **However, in many states and across multiple vehicle models today, it is cheaper to buy an EV than a gasoline vehicle.**

This analysis is good news for consumers who want protection from high oil prices, but EVs should be available to all Americans looking to purchase a new car. The EV incentives currently under consideration in Congress would help ensure millions more American drivers can access EVs to help families deal with pain at the pump in nearly every state.

These impressive consumer savings are contingent on continued federal support for EV adoption, in particular the federal tax credit of at least \$7,500. GM and Tesla have already exceeded the sales cap under this program, and Nissan and Ford will likely hit the cap this year. Without this incentive, it would cost consumers more per month during loan repayment to purchase an EV for nearly all vehicle-state comparisons we evaluated.

EV purchase costs will continue to decline over time, making their economic case even stronger. Furthermore, because electricity prices are subject to state utility regulation, they tend to change slowly over time, but gasoline prices are highly variable and dependent on global oil markets and volatile geopolitics. As more Americans grapple with the high price of gasoline, continued federal policy support for EVs will help get more people driving EVs and reaping savings the minute they drive off the lot.

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