ZETA

**THIS NEW YEAR,
THE NUMBERS ARE CLEAR:**

It's cheaper to drive an EV than a gas-powered car.

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Overview

This analysis compares the operating costs of gas-powered vehicles and electric vehicles (EVs) in various states that captures the costs across the country. The three gas-powered cars featured in the analysis represent the most popular vehicles in the pickup truck, SUV, and sedan vehicle segments in the United States. The EVs included in this analysis are approximate analogues to the highlighted gas-powered vehicles. While they are imperfect corollaries to the gas-powered vehicles, these electric models nevertheless illustrate the substantial cost savings.

Key Takeaways on Cost to Drive an EV vs. a Gas-Powered Vehicle

EVs are cheaper to drive right now than gas-powered vehicles. Overall, as of January, 2022, it is cheaper to charge an EV battery than it is to fill up a gas-powered vehicle's tank. Additionally, EVs are cheaper to drive per mile than driving a gas-powered vehicle nationally in each state we analyzed.

EVs are getting cheaper, and will reach sticker price parity with gas-powered cars in just two years, if not sooner. EV sticker price parity with gas-powered cars is likely to occur between 2024–2025 for shorter-range and 2026–2028 for longer-range EVs, according to the International Council on Clean Transportation. However, more battery cost breakthroughs are expected, which will lead to a further reduction in battery costs resulting in EVs reaching price parity even sooner. These projected EV sticker price decreases do not include any potential federal or state EV tax incentives, which will further lower EVs' sticker prices. In addition to their fuel cost savings, EVs require less maintenance than gas-powered vehicles. Most EVs save drivers between $6,000 and $10,000 on operating costs, according to Consumer Reports.

EVs will cost less to buy with The Build Back Better Act. The Build Back Better Act's proposed EV tax credit expansion could further lower EV sticker prices by up to $12,500, making it cost less to both buy and drive an EV.

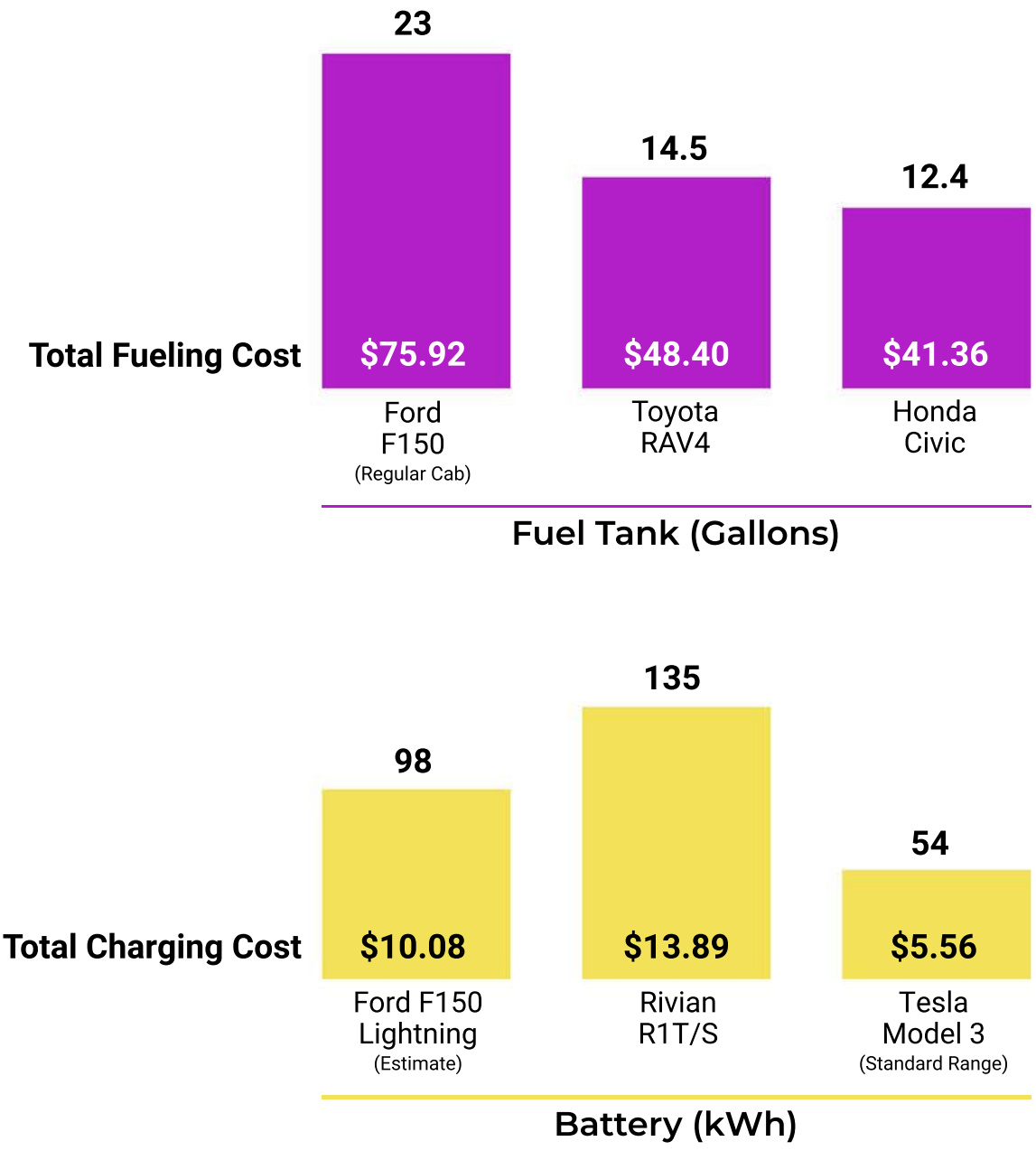
Comparing the Operating Costs of Gas-Powered and Electric Vechicles

National Average Gas Price Per Gallon
(As of Dec 2021)

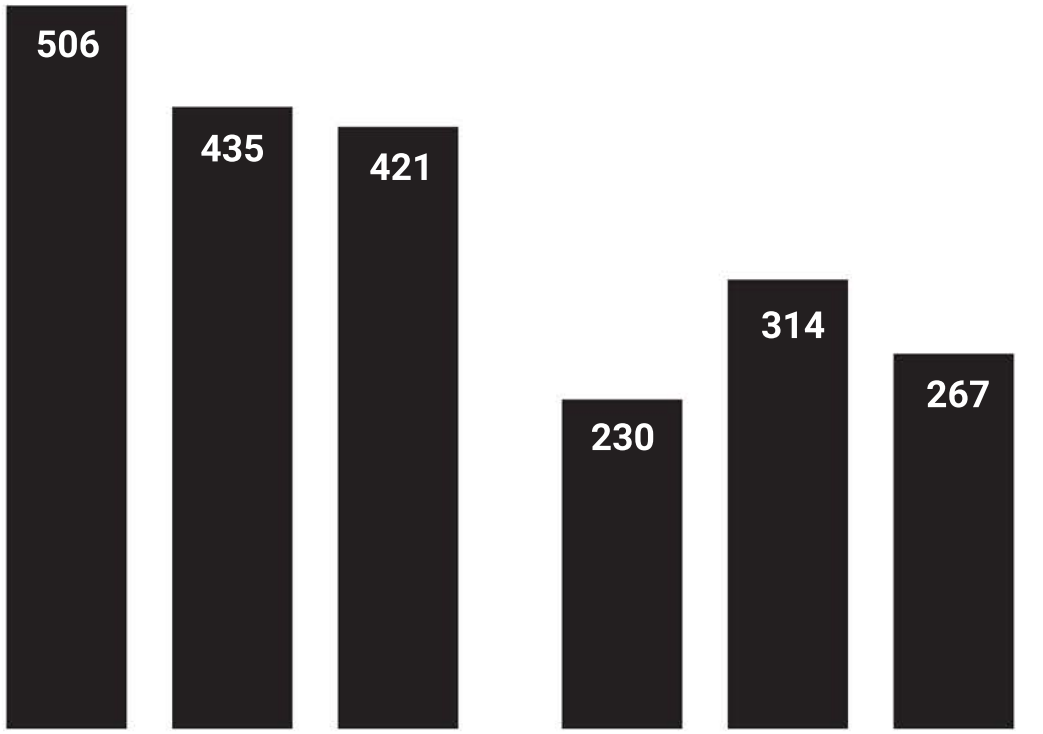
$3.34

National Average Electricity Price Per Kilowatt-hour
(As of Sep 2021)

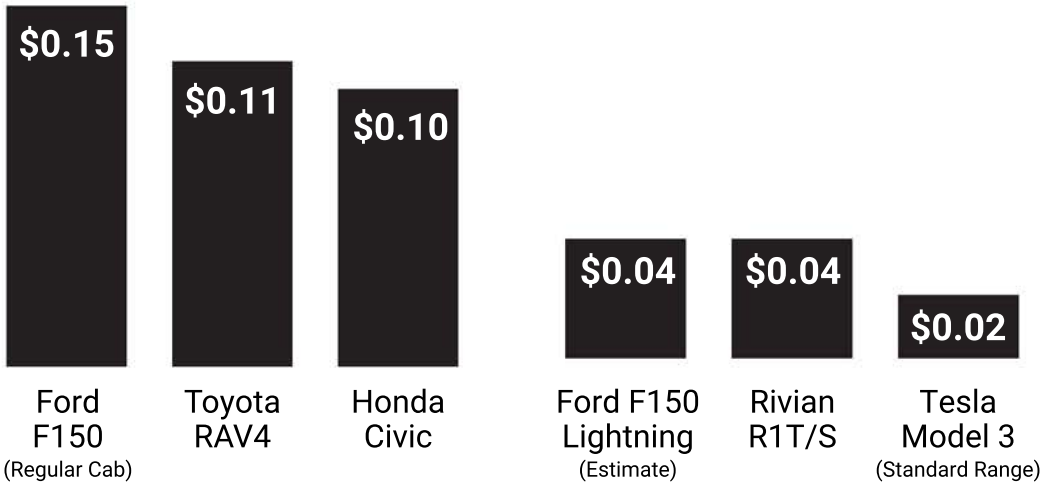
$0.14



Comparing The Operating Costs of Gas-Powered And Electric Vehicles



Estimated Mileage

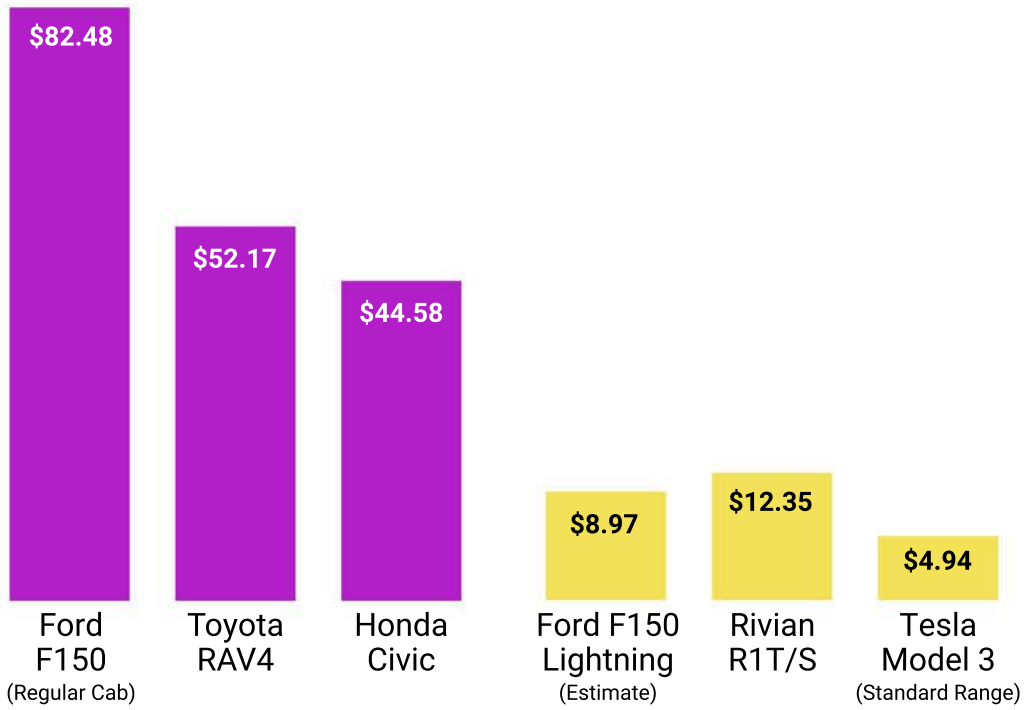


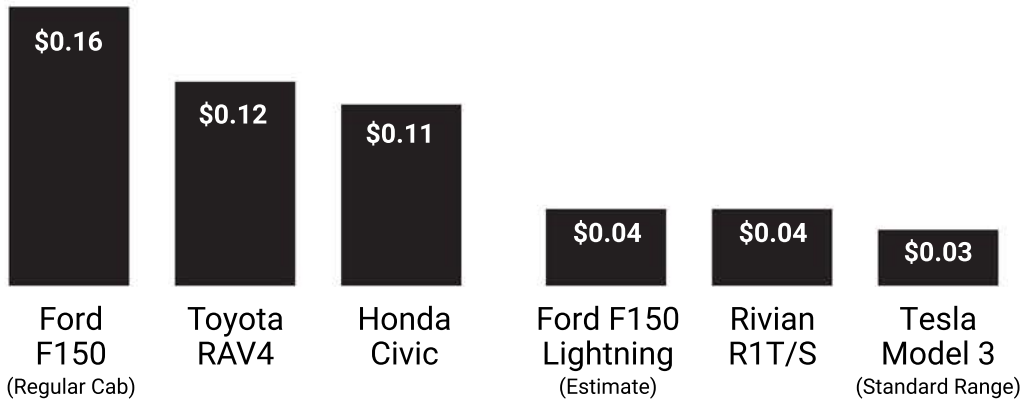
Total Cost Per Mile

Arizona

Average Energy price for Gallon of Gasoline
$3.60

Average Energy price for kWh in Electricity
$0.09

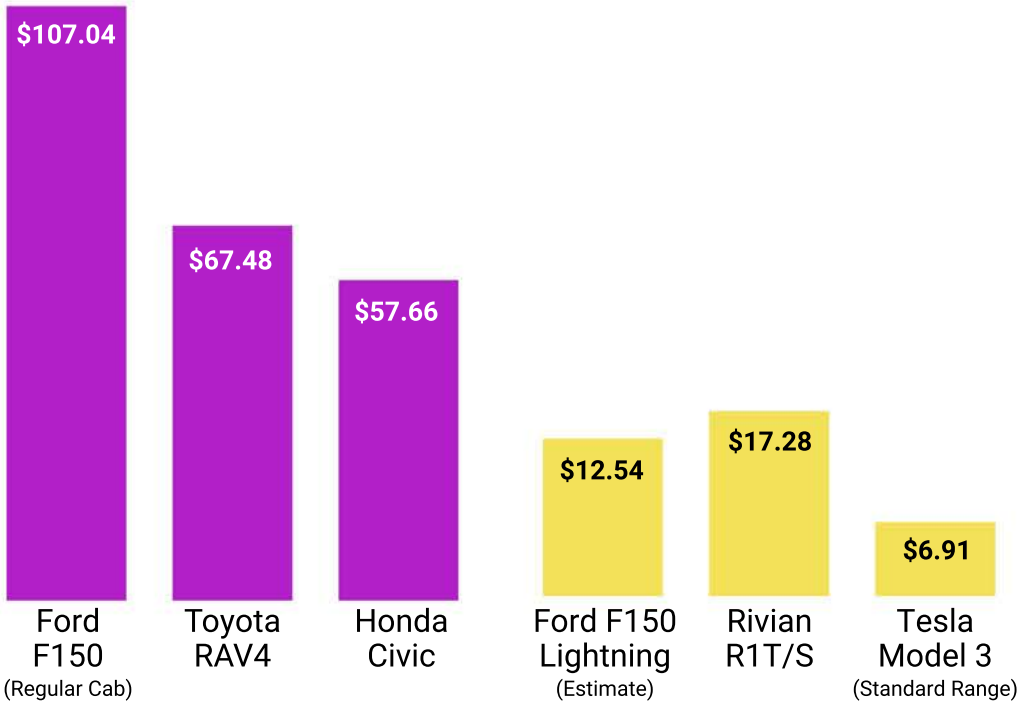




California

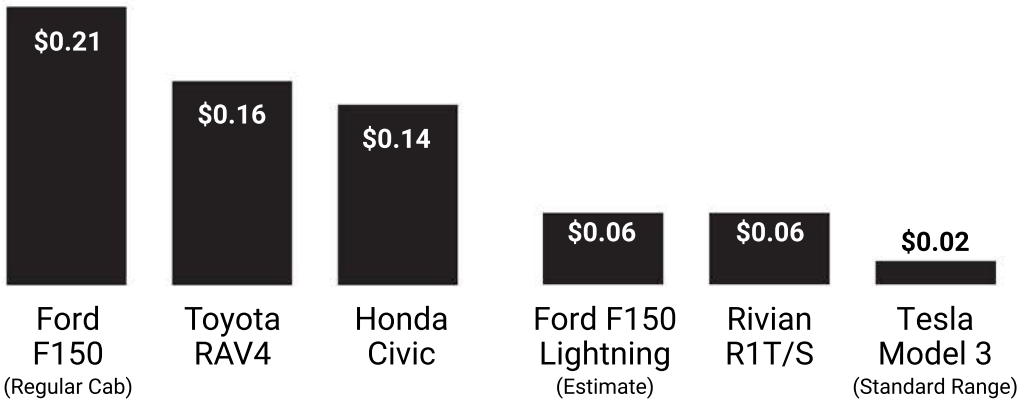
Average Energy price for Gallon of Gasoline
$4.65

Average Energy price for kWh in Electricity
$0.13



Total fueling cost

Total charging cost

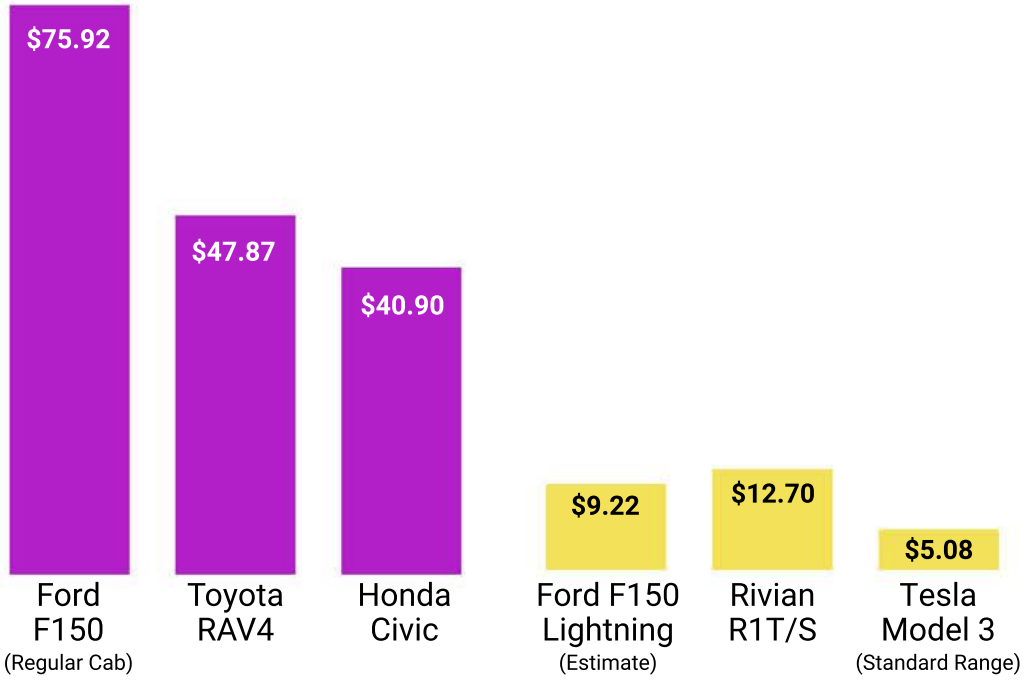


Total Cost Per Mile

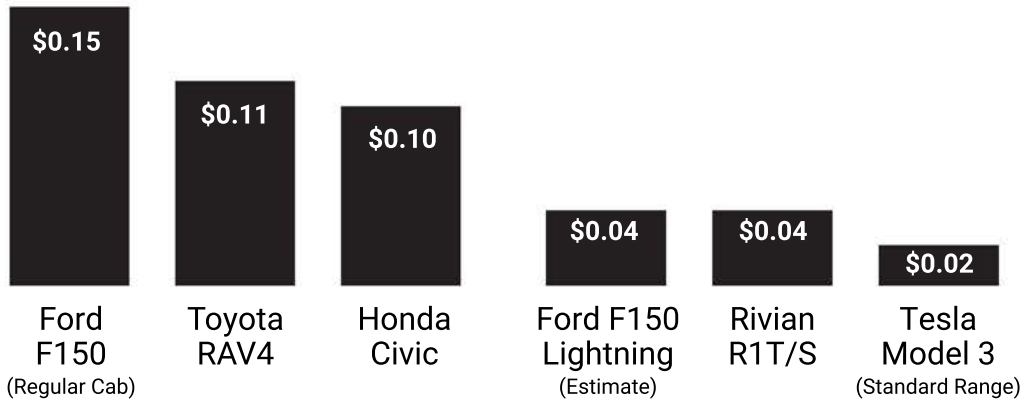
Colorado

Average Energy price for Gallon of Gasoline
$3.30

Average Energy price for kWh in Electricity
$0.09



Total fueling cost | **Total charging cost**

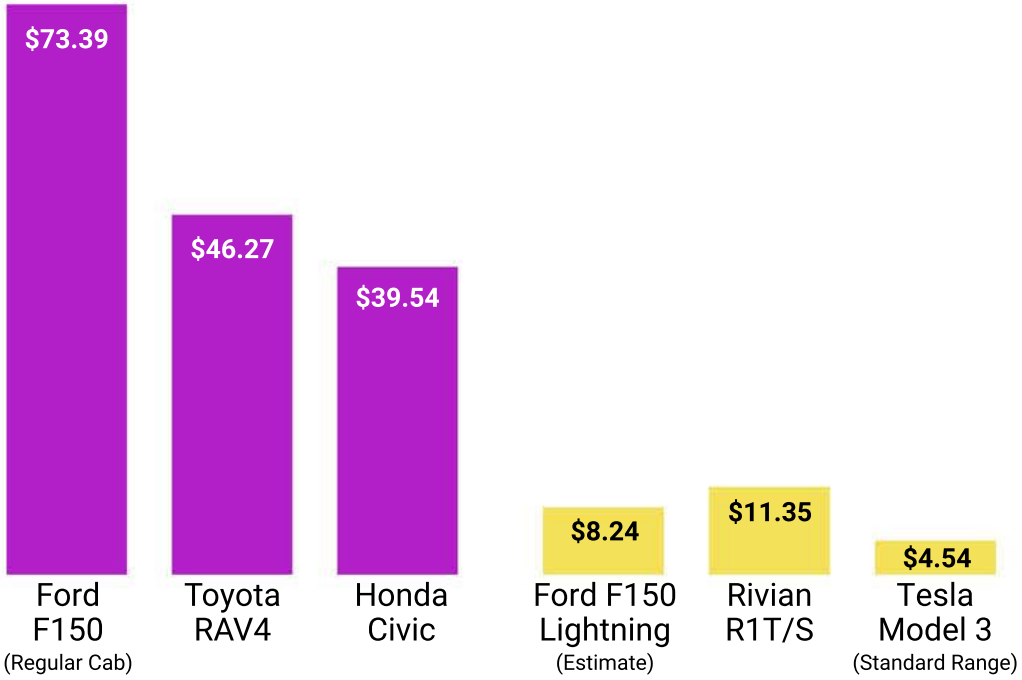


Total Cost Per Mile

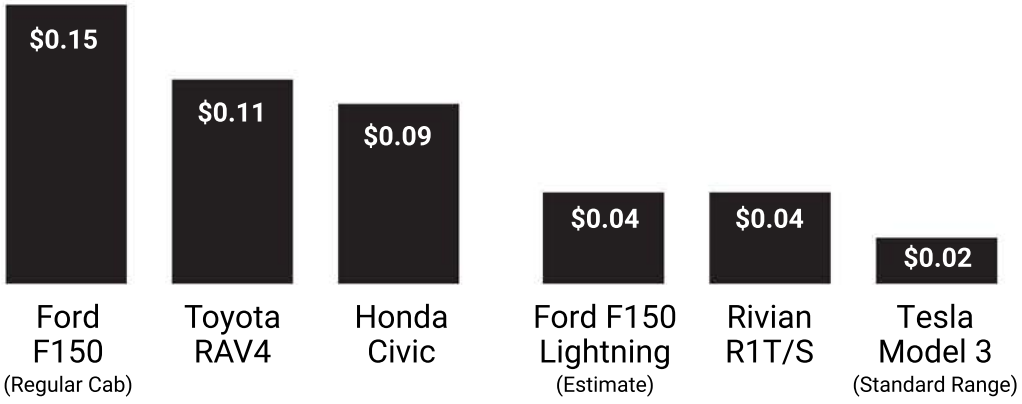
Florida

Average Energy price for Gallon of Gasoline
$3.19

Average Energy price for kWh in Electricity
$0.08



Total fueling cost | **Total charging cost**

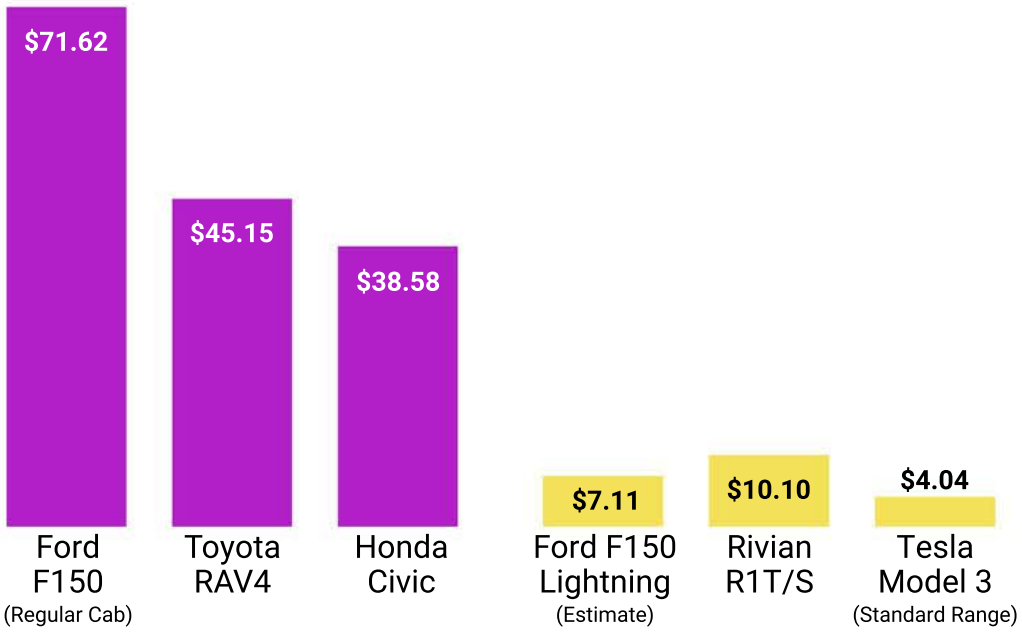


Total Cost Per Mile

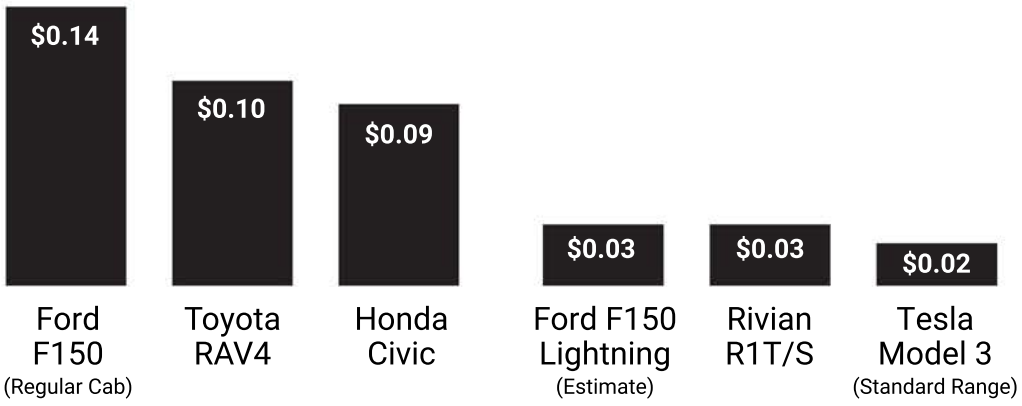
Georgia

Average Energy price for Gallon of Gasoline
$3.11

Average Energy price for kWh in Electricity
$0.07



Total fueling cost | **Total charging cost**

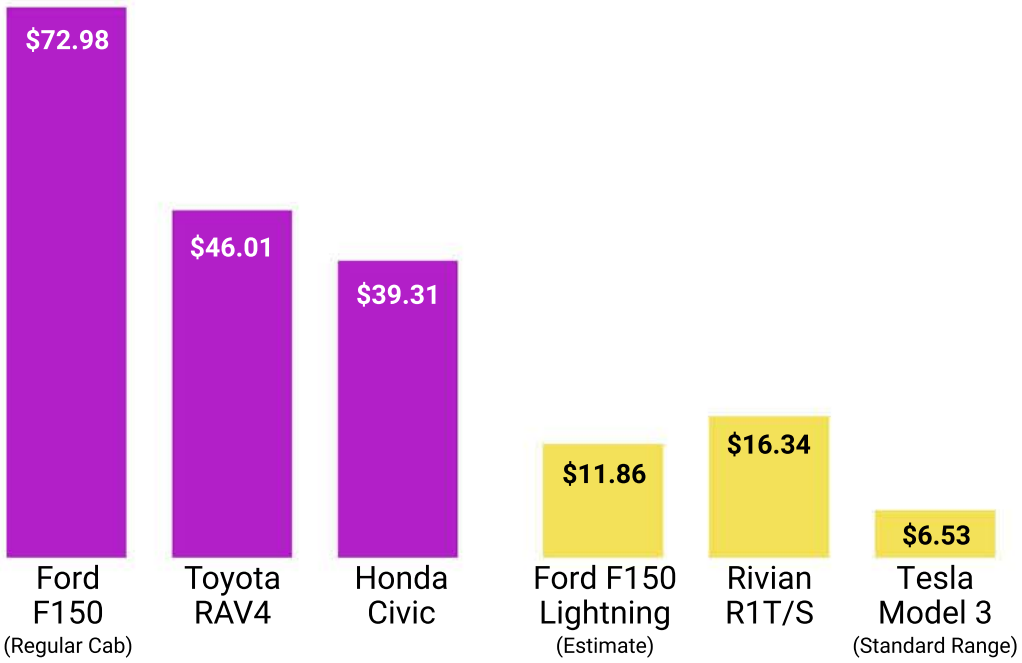


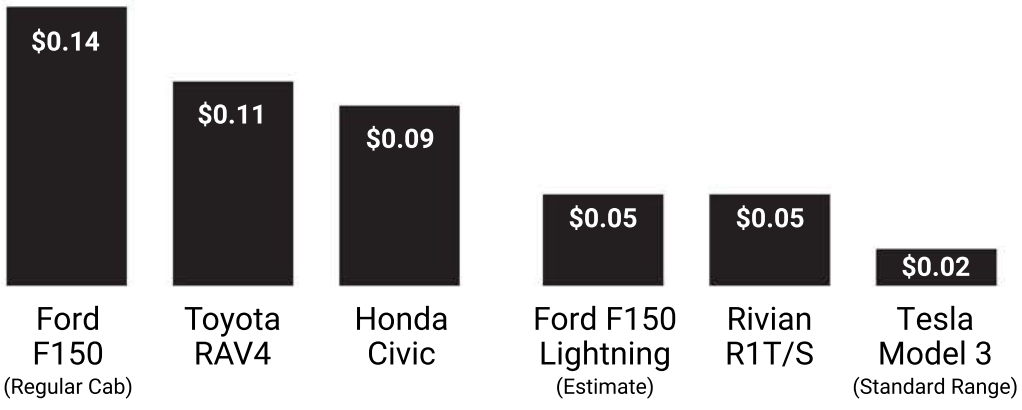
Total Cost Per Mile

Michigan

Average Energy price for Gallon of Gasoline
$3.17

Average Energy price for kWh in Electricity
$0.12

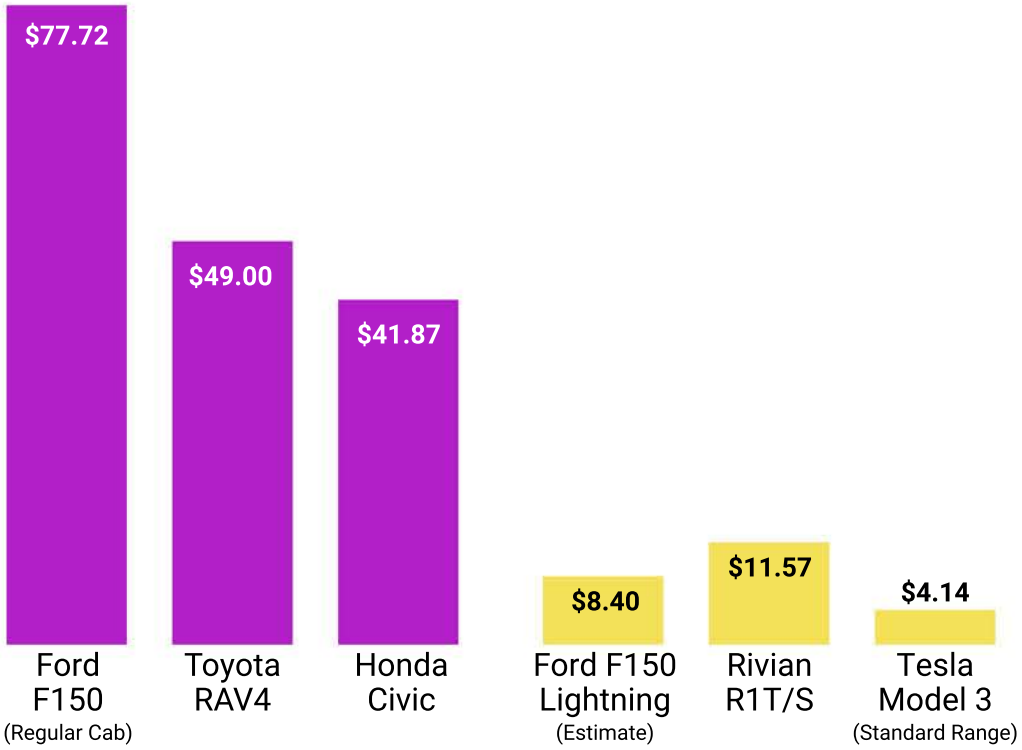




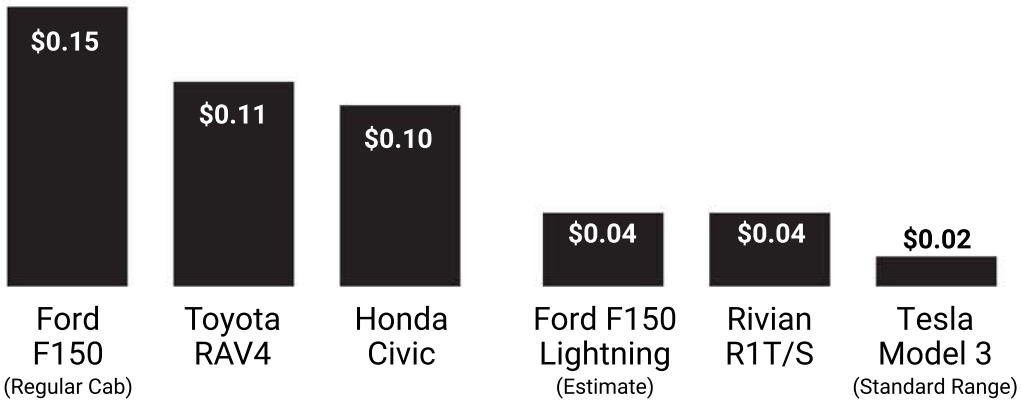
New Jersey

Average Energy price for Gallon of Gasoline
$3.38

Average Energy price for kWh in Electricity
$0.09



Total fueling cost | **Total charging cost**

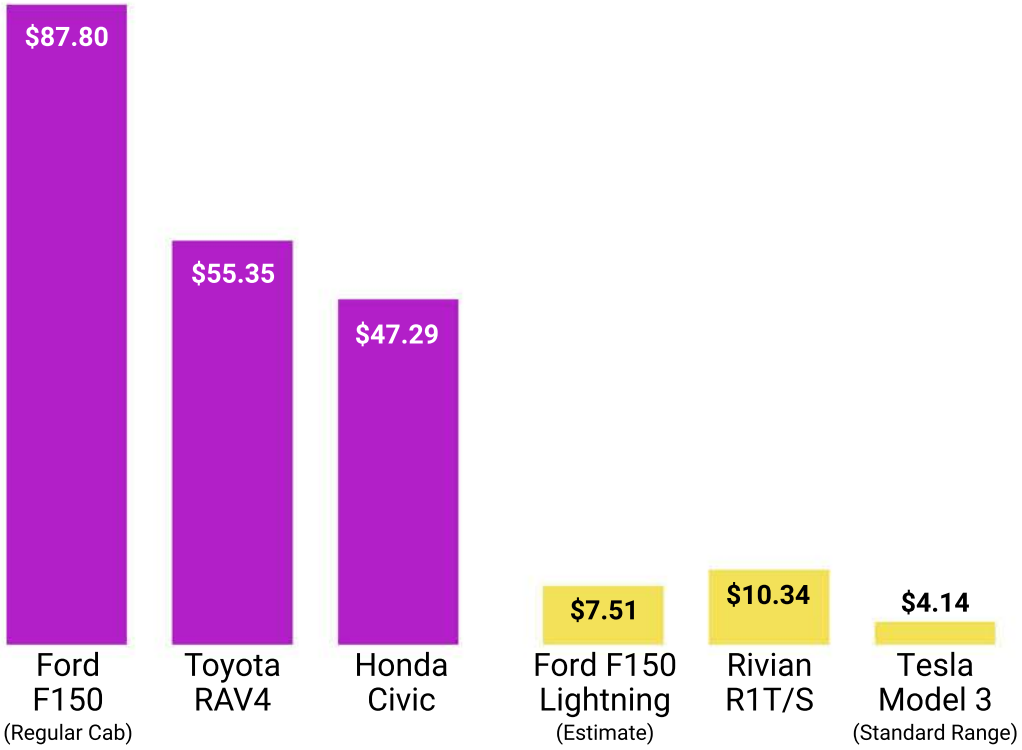


Total Cost Per Mile

Nevada

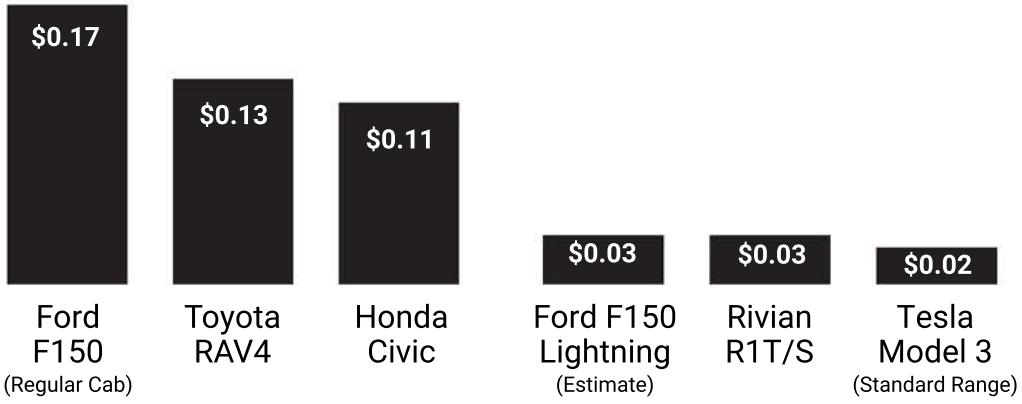
Average Energy price for Gallon of Gasoline
$3.82

Average Energy price for kWh in Electricity
$0.08



Total fueling cost

Total charging cost

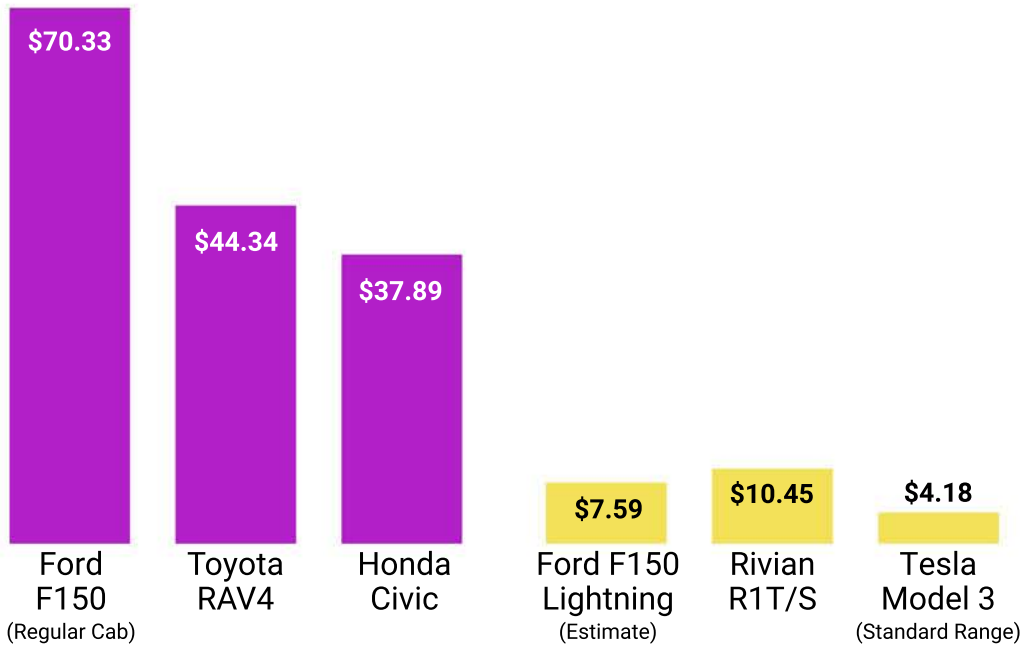


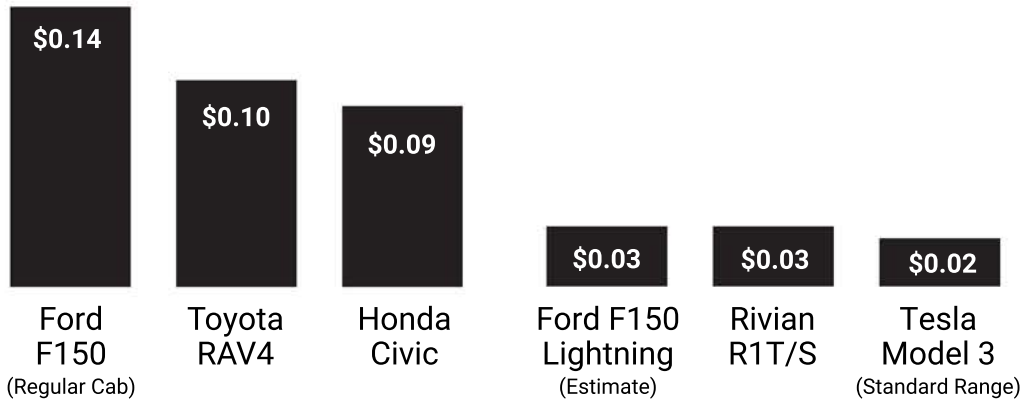
Total Cost Per Mile

North Carolina

Average Energy price for Gallon of Gasoline
$3.06

Average Energy price for kWh in Electricity
$0.08

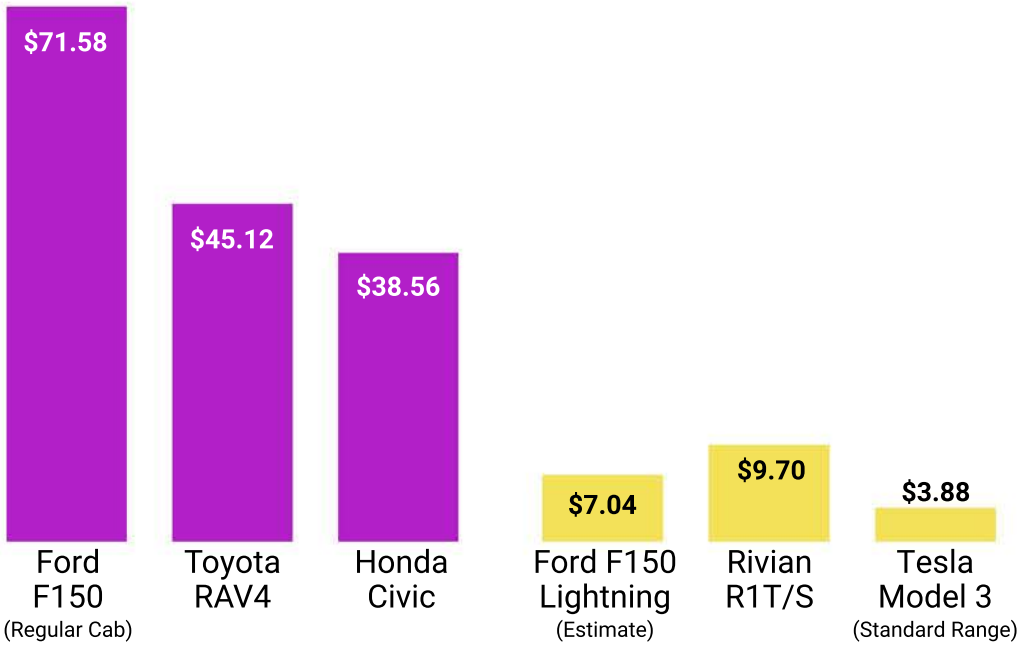




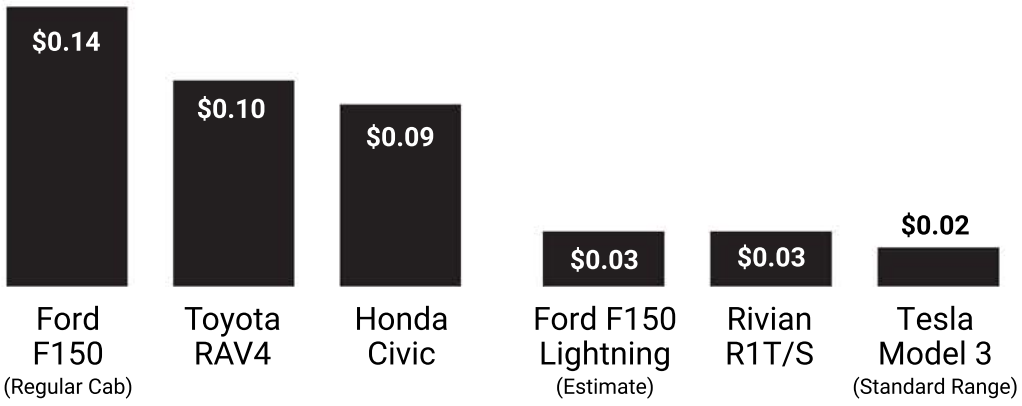
Ohio

Average Energy price for Gallon of Gasoline
$3.11

Average Energy price for kWh in Electricity
$0.07



Total fueling cost | **Total charging cost**

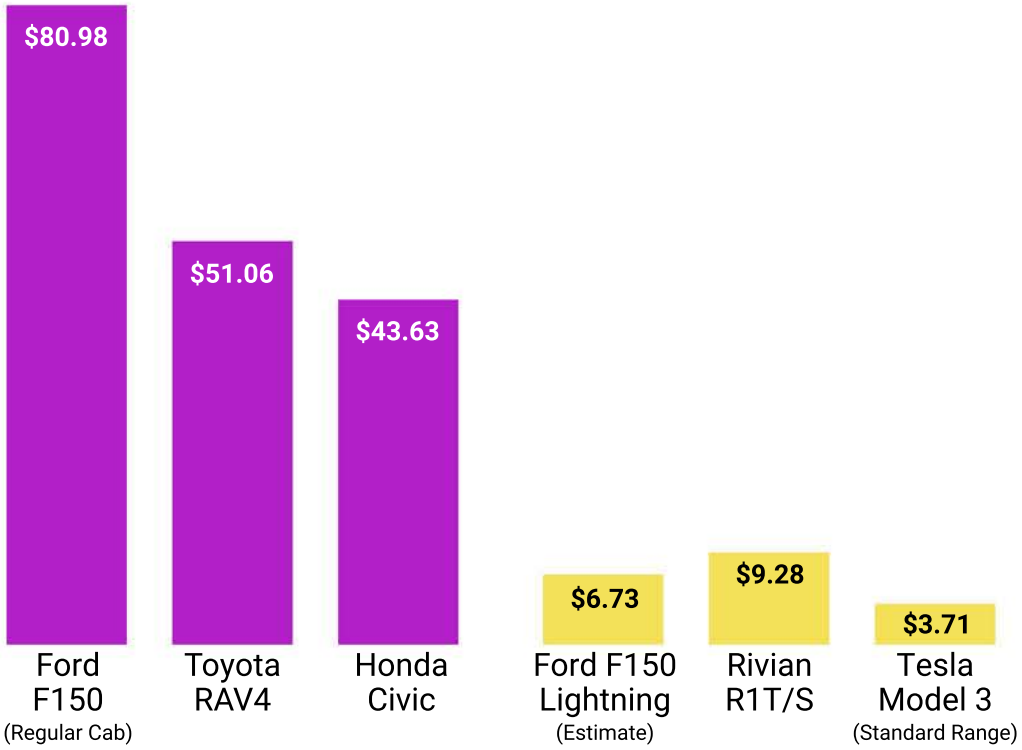


Total Cost Per Mile

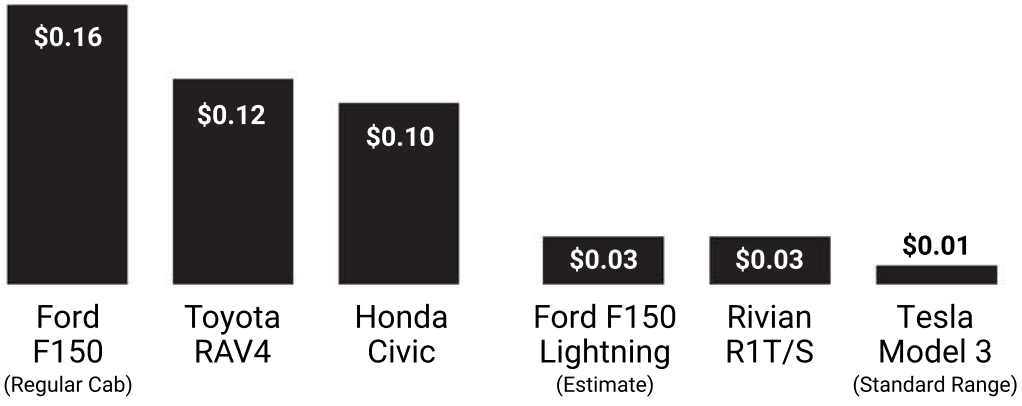
Pennsylvania

Average Energy price for Gallon of Gasoline
$3.52

Average Energy price for kWh in Electricity
$0.07



Total fueling cost | **Total charging cost**

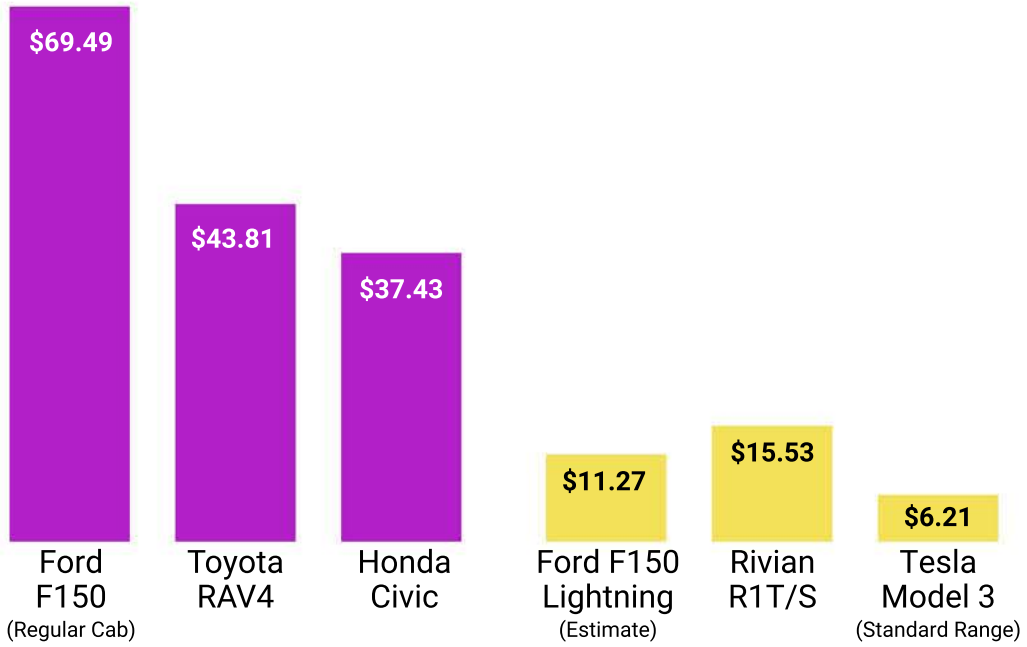


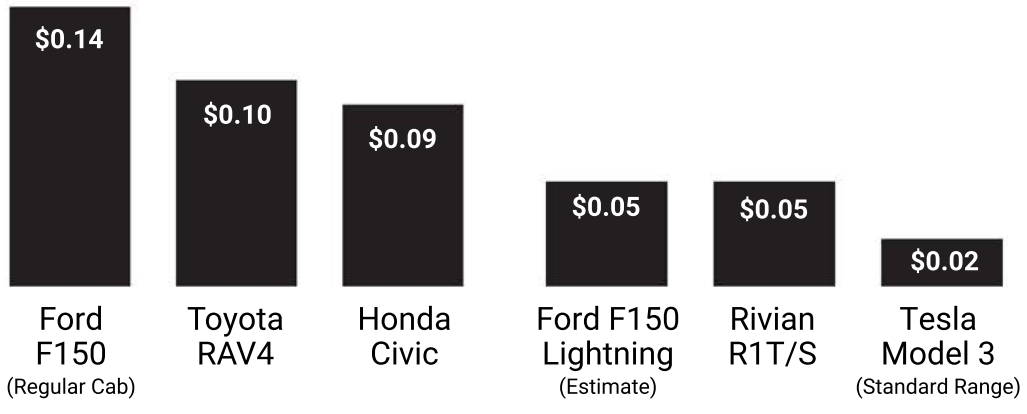
Total Cost Per Mile

Tennessee

Average Energy price for Gallon of Gasoline
$3.02

Average Energy price for kWh in Electricity
$0.12

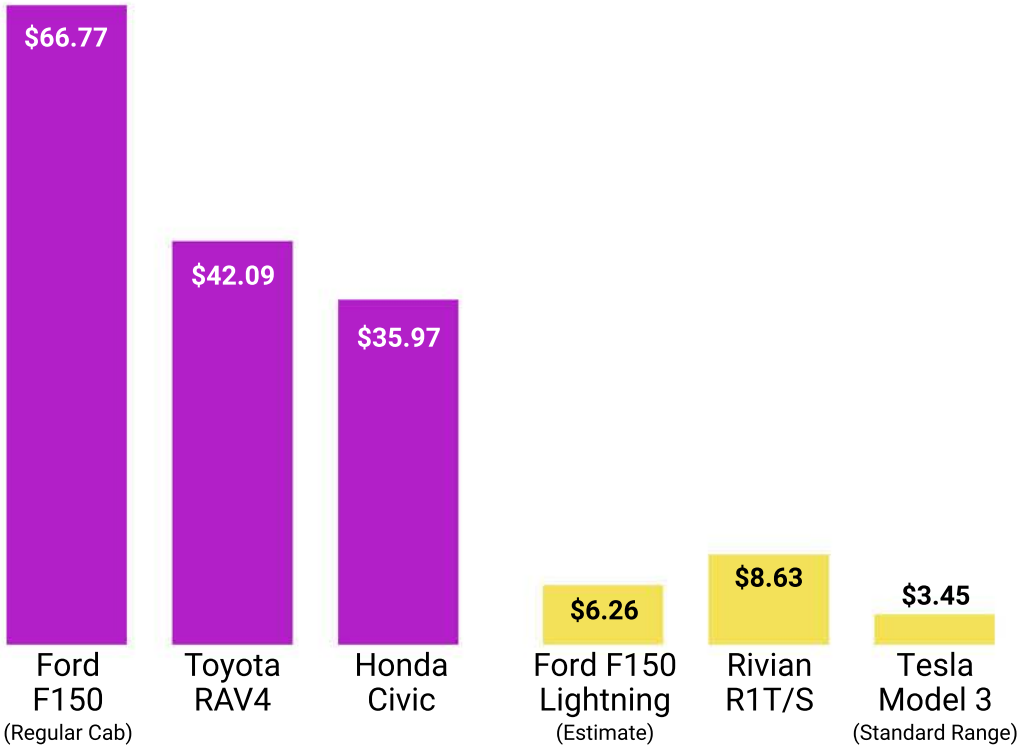




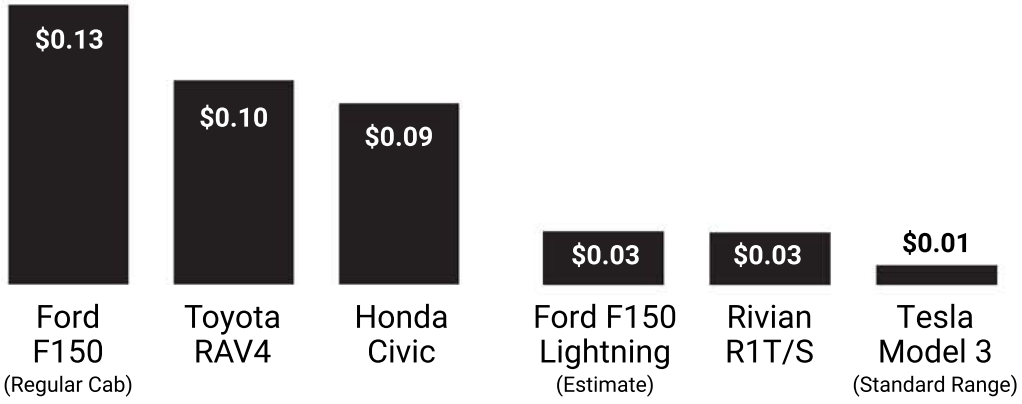
Texas

Average Energy price for Gallon of Gasoline
$2.90

Average Energy price for kWh in Electricity
$0.06



Total fueling cost | **Total charging cost**

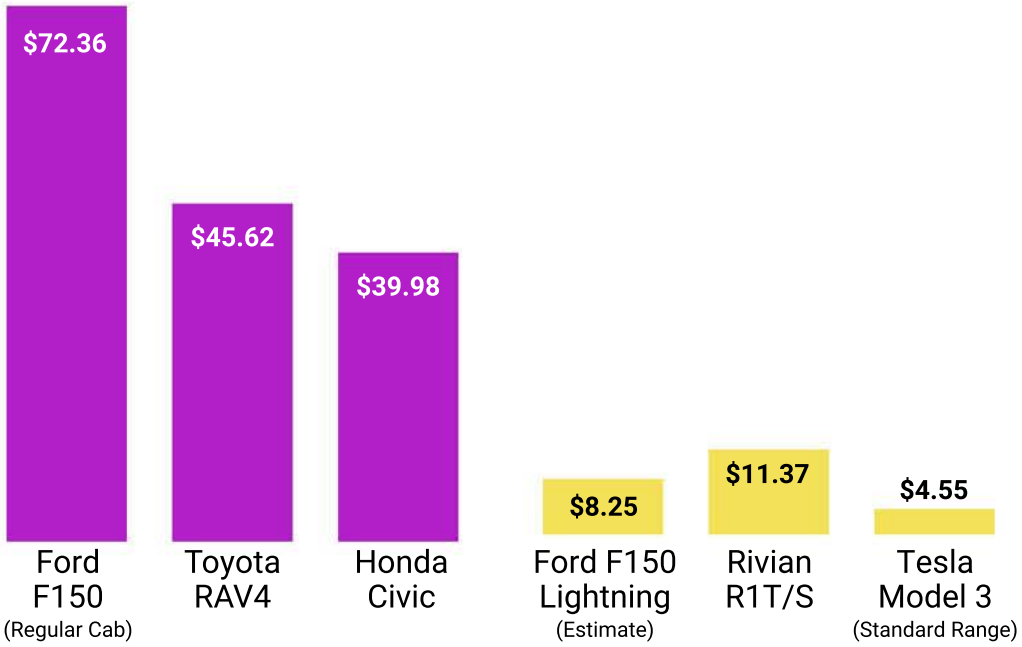


Total Cost Per Mile

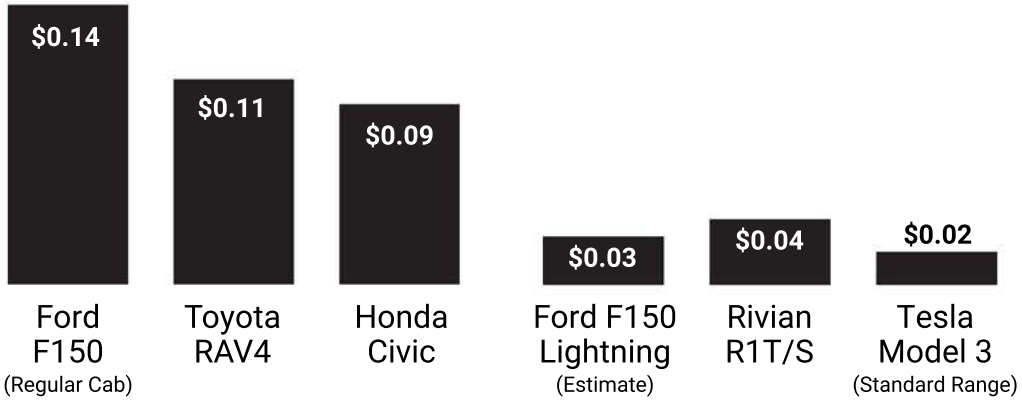
Virginia

Average Energy price for Gallon of Gasoline
$3.15

Average Energy price for kWh in Electricity
$0.08



Total fueling cost | **Total charging cost**

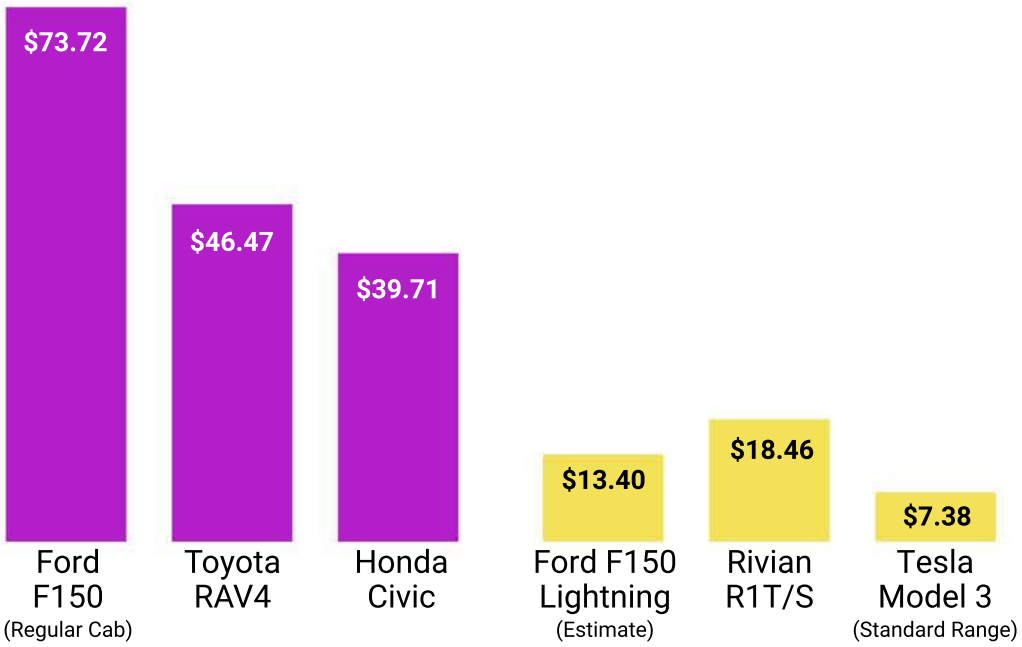


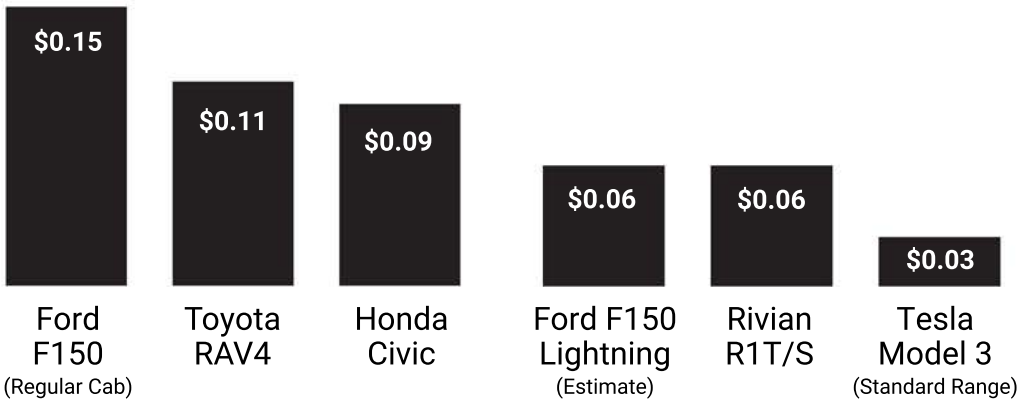
Total Cost Per Mile

West Virginia

Average Energy price for Gallon of Gasoline
$3.21

Average Energy price for kWh in Electricity
$0.14

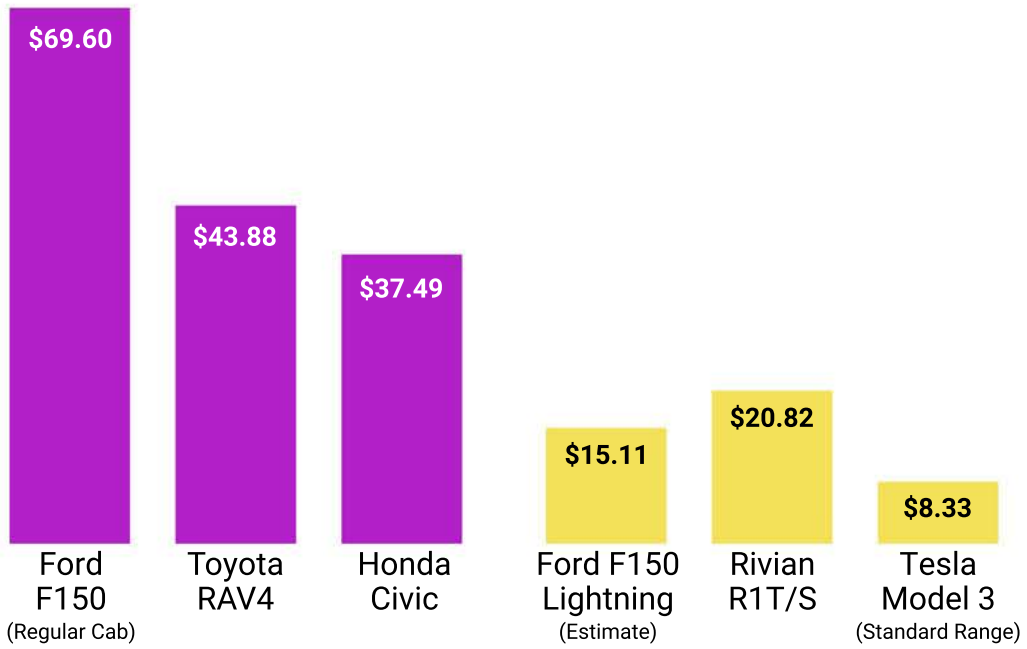


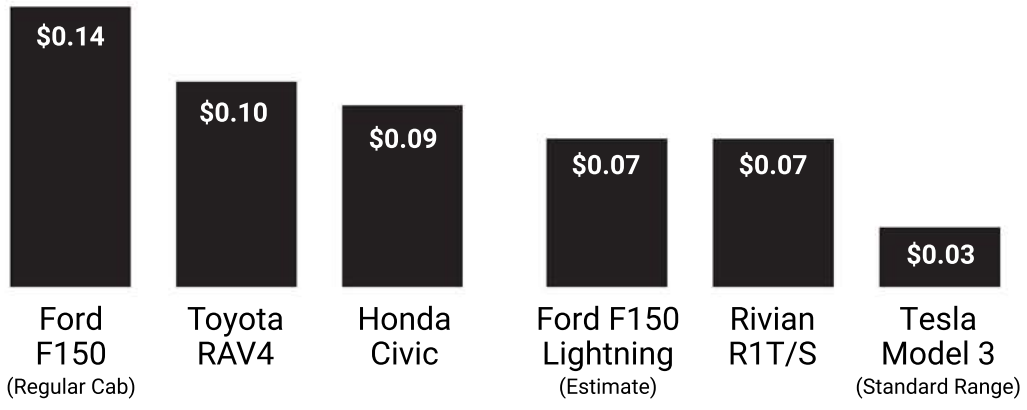


Wisconsin

Average Energy price for Gallon of Gasoline
$3.03

Average Energy price for kWh in Electricity
$0.15





Sources

***Gasoline prices are based on December 2021 data, and electricity prices are based on September 2021 data. In both cases, these are the most recent available data.**

Gas Prices as of Jan 11, 2022: https://gasprices.aaa.com/
Electricity Prices in Transportation End-Use Sector in Oct 2021 (most recent data available) :
https://www.eia.gov/electricity/monthly/epm_table_grapher.php?t=epmt_5_6_a
Ford F150: https://www.ford.com/trucks/f150/models/f150-xl/
Toyota RAV4: https://www.toyota.com/rav4/features/mpg/4430
Honda Civic:
https://hondanews.com/en-US/honda-automobiles/releases/release-abdd33728c044217ba85db3c233b2483-2020-civic-hatchback-specifications-features
Ford F150 Lightning:
https://www.greencarreports.com/news/1134532_ford-confirms-f-150-lightning-ev-battery-pack-details-range-estimates
Rivian R1T + R1S:
https://www.caranddriver.com/news/a37500438/rivian-r1t-r1s-epa-range/
Tesla Model 3: https://www.evspecifications.com/en/model-driving-range/cc48e0

Additional Resources

Gas Gallons vs. Electricity E-Gallons: https: //www.energy.gov/maps/egallon
Vehicle Fueling Cost Calculator: https://afdc.energy.gov/calc/

About ZETA

The **Zero Emission Transportation Association** (ZETA) is a federal coalition focused on advocating for 100% EV sales by 2030. ZETA is committed to enacting policies that drive EV adoption, create hundreds of thousands of jobs, secure American global EV manufacturing leadership, drastically improve public health, and significantly reduce carbon pollution.