



## How Much Does it Really Cost to Own a New Car?

Shown to the right are average per-mile costs for 2021 as determined by AAA, based on the driving costs for nine vehicle categories weighted by sales.

### AAA Average Ownership Costs Per Mile

Miles per Year	10k	15k	20k
Average Cost	83¢	64¢	55¢

Detailed driving costs in each vehicle category are based on average costs for five top-selling 2021 models selected by AAA and can be found on pages 5 and 6. By category, they are:

- ▶ **Small Sedan** — Honda Civic, Hyundai Elantra, Nissan Sentra, Toyota Corolla, Volkswagen Jetta
- ▶ **Medium Sedan** — Chevrolet Malibu, Honda Accord, Hyundai Sonata, Nissan Altima, Toyota Camry
- ▶ **Subcompact SUV** — Chevrolet Trax, Honda HR-V, Hyundai Kona, Jeep Compass, Subaru Crosstrek
- ▶ **Compact SUV** — Chevrolet Equinox, Ford Escape, Honda CR-V, Nissan Rogue, Toyota RAV4
- ▶ **Medium SUV** — Chevrolet Traverse, Ford Explorer, Subaru Outback, Jeep Grand Cherokee, Toyota Highlander
- ▶ **Midsize Pickup** — Chevrolet Colorado, Ford Ranger, Honda Ridgeline, Jeep Gladiator, Toyota Tacoma
- ▶ **Half-Ton Pickup Truck** — Chevrolet Silverado, Ford F-150, Nissan Titan, Ram 1500, Toyota Tundra
- ▶ **Hybrid Vehicle** — Ford Explorer, Honda CR-V, Hyundai Ioniq, Toyota Prius Liftback, Toyota RAV4
- ▶ **Electric Car** — BMW i3, Chevrolet Bolt, Hyundai Kona Electric, Nissan Leaf, Tesla Model 3

## How to Calculate Your Own Driving Costs

For gas-powered vehicles, start by figuring your gas cost per mile. To do this, you'll need to keep track of your fueling habits over the course of one year. When your gas tank is full, write down the number of miles on your odometer. Then each time you fill up note the number of gallons, how much you paid and the miles on your odometer. You will use these numbers to calculate your average miles per gallon as well as your gas cost per mile.

Electric vehicle rates will vary depending on the state you live in and where you charge. You can learn more about rates by either contacting your local utility company or visiting the [EIA's site](#). Calculating your charging costs will be the same as fuel once you know how much you are paying on average to charge your electric vehicle and how many miles you are getting per charge.

Miles Per Gallon	Gas Cost Per Mile
total miles driven _____	total cost of gas _____
gallons used ÷ _____	total miles driven ÷ _____
miles per gallon: = _____	gas cost per mile: = _____

**Example:** You drove a total of 867 miles and used 37.6 gallons of gas, which cost \$100.73. Miles per gallon:  $867/37.6 = 23.1$  mpg. Gas cost per mile:  $\$100.73/867 = 11.62$  cents.

Miles Per Charge	Charge Cost Per Mile
total miles driven _____	average charge cost _____
charge used ÷ _____	total miles driven ÷ _____
miles per charge: = _____	charge cost per mile: = _____

Now you can determine the driving costs of your vehicle. Just like with your gas/charging costs, you'll need to keep track of the total miles driven as well as any cost associated with your car for one year. This includes everything from routine maintenance to insurance to miscellaneous costs like parking and tolls. You'll use these numbers to determine your operating costs, ownership costs and cost per mile for your vehicle. If you have questions, detailed explanations are provided for each cost category on the next page.

Operating Costs per Year	
gas cost per mile	_____
total miles driven	x _____
total gas	= _____
maintenance, repair & tires	+ _____
other costs (parking, tolls, washing, etc.)	+ _____
operating cost: = _____	

Ownership Costs per Year	
depreciation	_____
insurance	+ _____
license, taxes & registration	+ _____
finance charges	+ _____
ownership cost: = _____	

Cost per Mile	
operating cost	+ _____
ownership cost	+ _____
	= _____
total miles driven	÷ _____
cost per mile	= _____

## What's Covered

AAA's analysis covers vehicles equipped with standard features and optional equipment including automatic transmission, air conditioning, power steering, antilock brakes and cruise control, to name a few.

**Depreciation** — Depreciation is based on the difference between new-vehicle purchase price and estimated trade-in value at the end of five years and 75,000 miles.

**Fuel** — Costs are based on average prices for the 12 months ending May 21, 2021, as reported by AAA at [www.GasPrices.AAA.com](http://www.GasPrices.AAA.com). During this period, regular grade gasoline averaged \$2.362 per gallon. Fuel economy is based on Environmental Protection Agency ratings for 55 percent city and 45 percent highway driving. Electric vehicle charging costs are based on a rate of 13.1 cents per kilowatt hour.

**Insurance** — Costs are based on a full-coverage policy for personal use of a vehicle by a driver who is under 65 years of age, has more than six years of driving experience, no accidents and lives in a suburban/urban location. The policy includes discounts for passive restraints and an anti-theft system, and provides \$100,000/\$300,000 personal liability, \$25,000 medical, \$100,000 property and \$25,000/\$50,000 uninsured/underinsured motorist coverage. A \$500 deductible applies to all collision and comprehensive claims.

**License, Registration and Taxes** — Costs include all governmental taxes and fees payable at time of purchase, as well as fees due each year to keep the vehicle licensed and registered. Costs are computed on a national average basis.

**Maintenance, Repair and Tires** — These costs include retail parts and labor for routine maintenance specified by the vehicle manufacturer, a comprehensive extended warranty, repairs to wear-and-tear items that require service during five years of operation and one set of replacement tires of the same quality, size and rating as those that came with the car. Sales tax is included on a national average basis.

**Finance** — Costs are based on a five-year loan, with 10 percent down, at the national average interest rate for five credit rating categories weighted by market share. The loan amount includes taxes and the first year's license fees, both computed on a national average basis.





## Vehicle Maintenance

Driving costs are affected by how well your vehicle runs. Performing regular maintenance can ensure more efficient operation and help prevent costly repairs down the road. Below are general checks to keep your vehicle in good operating shape. Read your owner's manual for more detailed information on your vehicle's specific requirements. When performing "do-it-yourself" maintenance, always take appropriate safety precautions.

Electric vehicles do not need as much maintenance as their gas-powered counterparts. Monthly, electric vehicle owners should check the condition and pressure of their tires (adding air as needed) and windshield wiper fluid. Every so often, electric vehicle owners should also have their tires rotated, brakes checked and an overall general inspection by a trusted repair shop.

**Air Filter** — The engine air filter captures dirt particles and ensures clean airflow to the engine. Inspect at every oil change.

**Battery** — The vehicle's battery powers the starter motor, acts as a voltage stabilizer for the electrical system and makes up any shortfall when the alternator cannot meet the vehicle's electrical demands. Inspect the battery cable connections at every oil change and clean as needed. Always wear eye protection and gloves when servicing a battery.

**Belts** — Most vehicles use a single serpentine belt to operate under-hood accessories such as the alternator, although V-belts still are used in some applications. Inspect at every oil change.

**Gasoline** — Use gasoline with the octane rating recommended by the vehicle manufacturer — a higher fuel grade will not provide additional benefits. Gasolines that meet TOP TIER™\* standards do a better job of preventing and removing internal engine deposits.

**Hoses** — A vehicle's hoses circulate vital liquids such as engine coolant, transmission fluid and power steering fluid. Inspect at every oil change.

**Tires** — As the only part of your vehicle in contact with the road, tires have a major effect on ride, handling, braking and safety. For optimum performance, tires must have adequate tread depth, show no signs of physical damage and be properly inflated. Inspect tires and check inflation pressures at least once a month.

### Fluids

- ▶ **Brake Fluid** — Critical to proper brake system performance. Check the level at every oil change.
- ▶ **Engine Coolant** — Prevents engine freeze-up in winter and boil-over in summer, and protects the cooling system from rust and corrosion. Check the level at every oil change.
- ▶ **Engine Oil** — Lubricates and cools the engine while cleaning internal parts. Running your car low on oil can cause serious engine damage. Check the level at least once a month.
- ▶ **Power Steering Fluid** — Transfers hydraulic pressure to reduce steering effort. Check the level at every oil change.
- ▶ **Transmission Fluid** — Helps transfer engine power to the wheels, lubricates internal parts, maintains seals and acts as a coolant. Check the level at every oil change.

\*The TOP TIER™ fuel program is a performance standard for gasoline that enables vehicle manufacturers to ensure the engines they design and produce will meet the emissions and performance criteria for which they are designed. Fuels that are part of the TOP TIER™ program must undergo testing to ensure the engine does not develop excessive carbon deposits on the intake valve, within the combustion chamber, or on the fuel injector that can impact emissions and drivability.

## Driving Costs

Please note the figures in each vehicle category are the average costs for five top-selling 2021 models selected by AAA for this year's Your Driving Costs study.

	Small Sedan	Medium Sedan	Subcompact SUV	Compact SUV (FWD)	Medium SUV (4WD)
<b>Operating Costs</b>					
<b>fuel</b>	6.84¢	7.79¢	8.32¢	7.87¢	10.23¢
<b>maintenance</b>	8.83¢	10.43¢	9.91¢	9.93¢	10.01¢
<b>cost per mile</b>	<b>15.67¢</b>	<b>18.22¢</b>	<b>18.23¢</b>	<b>17.79¢</b>	<b>20.25¢</b>
<b>Ownership Costs</b>					
<b>full-coverage insurance</b>	\$1,353	\$1,403	\$1,298	\$1,292	\$1,296
<b>license, registration, taxes</b>	\$421	\$603	\$487	\$541	\$705
<b>depreciation (15k mi/yr)</b>	\$2,687	\$3,996	\$3,004	\$3,432	\$4,186
<b>finance charges</b>	\$419	\$632	\$494	\$561	\$744
<b>cost per year</b>	<b>\$4,880</b>	<b>\$6,633</b>	<b>\$5,283</b>	<b>\$5,825</b>	<b>\$6,931</b>
<b>cost per day</b>	<b>\$13.37</b>	<b>\$18.17</b>	<b>\$14.47</b>	<b>\$15.96</b>	<b>\$18.99</b>
<b>Total Cost - 10k mi/yr</b>					
<b>operating cost</b>	\$1,567	\$1,822	\$1,823	\$1,779	\$2,025
<b>ownership cost</b>	\$4,880	\$6,633	\$5,283	\$5,825	\$6,931
<b>depreciation<sup>1</sup></b>	-\$217	-\$241	-\$233	-\$286	-\$371
<b>total cost per year</b>	<b>\$6,229</b>	<b>\$8,214</b>	<b>\$6,873</b>	<b>\$7,319</b>	<b>\$8,584</b>
<b>total cost per day</b>	<b>\$17.07</b>	<b>\$22.50</b>	<b>\$18.83</b>	<b>\$20.05</b>	<b>\$23.52</b>
<b>total cost per mile<sup>2</sup></b>	<b>\$0.6229</b>	<b>\$0.8214</b>	<b>\$0.6873</b>	<b>\$0.7319</b>	<b>\$0.8584</b>
<b>Total Cost - 15k mi/yr</b>					
<b>operating cost</b>	\$2,350	\$2,733	\$2,734	\$2,669	\$3,037
<b>ownership cost</b>	\$4,880	\$6,633	\$5,283	\$5,825	\$6,931
<b>total cost per year</b>	<b>\$7,230</b>	<b>\$9,366</b>	<b>\$8,017</b>	<b>\$8,494</b>	<b>\$9,968</b>
<b>total cost per day</b>	<b>\$19.81</b>	<b>\$25.66</b>	<b>\$21.96</b>	<b>\$23.27</b>	<b>\$27.31</b>
<b>total cost per mile<sup>2</sup></b>	<b>\$0.4820</b>	<b>\$0.6244</b>	<b>\$0.5345</b>	<b>\$0.5663</b>	<b>\$0.6645</b>
<b>Total Cost - 20k mi/yr</b>					
<b>operating cost</b>	\$3,133	\$3,644	\$3,645	\$3,559	\$4,049
<b>ownership cost</b>	\$4,880	\$6,633	\$5,283	\$5,825	\$6,931
<b>depreciation<sup>1</sup></b>	+\$235	+\$261	+\$252	+\$311	+\$400
<b>total cost per year</b>	<b>\$8,249</b>	<b>\$10,538</b>	<b>\$9,180</b>	<b>\$9,695</b>	<b>\$11,381</b>
<b>total cost per day</b>	<b>\$22.60</b>	<b>\$28.87</b>	<b>\$25.15</b>	<b>\$26.56</b>	<b>\$31.18</b>
<b>total cost per mile<sup>2</sup></b>	<b>\$0.4124</b>	<b>\$0.5269</b>	<b>\$0.4590</b>	<b>\$0.4847</b>	<b>\$0.5690</b>

<sup>1</sup>Depreciation for mileage under or over 15,000 miles annually averaged over 5 years.

<sup>2</sup>Total cost per year ÷ total miles per year.



## Driving Costs

Please note the figures in each vehicle category are the average costs for five top-selling 2021 models selected by AAA for this year's Your Driving Costs study.

	Midsize Pickup	1/2 Ton/Crew-Cab Pickup	Hybrid Vehicle	Electric Vehicle	2021 Weighted Average
<b>Operating Costs</b>					
<b>fuel</b>	11.64¢	15.81¢	5.93¢	3.66¢	10.72¢
<b>maintenance</b>	9.94¢	9.15¢	8.78¢	7.70¢	9.55¢
<b>cost per mile</b>	<b>21.58¢</b>	<b>24.96¢</b>	<b>14.71¢</b>	<b>11.36¢</b>	<b>20.28¢</b>
<b>Ownership Costs</b>					
<b>full-coverage insurance</b>	\$1,313	\$1,379	\$1,365	\$1,381	\$1,342
<b>license, registration, taxes</b>	\$715	\$889	\$649	\$155	\$669
<b>depreciation (15k mi/yr)</b>	\$3,405	\$4,630	\$4,108	\$5,362	\$3,900
<b>finance charges</b>	\$746	\$945	\$681	\$692	\$712
<b>cost per year</b>	<b>\$6,178</b>	<b>\$7,844</b>	<b>\$6,803</b>	<b>\$7,589</b>	<b>\$6,624</b>
<b>cost per day</b>	<b>\$16.93</b>	<b>\$21.49</b>	<b>\$18.64</b>	<b>\$20.79</b>	<b>\$18.15</b>
<b>Total Cost - 10k mi/yr</b>					
<b>operating cost</b>	\$2,158	\$2,496	\$1,471	\$1,136	\$2,028
<b>ownership cost</b>	\$6,178	\$7,844	\$6,803	\$7,589	\$6,624
<b>depreciation<sup>1</sup></b>	-\$394	-\$453	-\$298	-\$370	\$344
<b>total cost per year</b>	<b>\$7,942</b>	<b>\$9,887</b>	<b>\$7,975</b>	<b>\$8,356</b>	<b>\$8,307</b>
<b>total cost per day</b>	<b>\$21.76</b>	<b>\$27.09</b>	<b>\$21.85</b>	<b>\$22.89</b>	<b>\$22.76</b>
<b>total cost per mile<sup>2</sup></b>	<b>\$0.7942</b>	<b>\$0.9887</b>	<b>\$0.7975</b>	<b>\$0.8356</b>	<b>\$0.8307</b>
<b>Total Cost - 15k mi/yr</b>					
<b>operating cost</b>	\$3,237	\$3,744	\$2,206	\$1,704	\$3,042
<b>ownership cost</b>	\$6,178	\$7,844	\$6,803	\$7,589	\$6,624
<b>total cost per year</b>	<b>\$9,415</b>	<b>\$11,588</b>	<b>\$9,009</b>	<b>\$9,293</b>	<b>\$9,666</b>
<b>total cost per day</b>	<b>\$25.79</b>	<b>\$31.75</b>	<b>\$24.68</b>	<b>\$25.46</b>	<b>\$26.48</b>
<b>total cost per mile<sup>2</sup></b>	<b>\$0.6277</b>	<b>\$0.7725</b>	<b>\$0.6006</b>	<b>\$0.6196</b>	<b>\$0.6444</b>
<b>Total Cost - 20k mi/yr</b>					
<b>operating cost</b>	\$4,315	\$4,992	\$2,941	\$2,272	\$4,056
<b>ownership cost</b>	\$6,178	\$7,844	\$6,803	\$7,589	\$6,624
<b>depreciation<sup>1</sup></b>	\$428	\$496	\$324	\$400	\$374
<b>total cost per year</b>	<b>\$10,922</b>	<b>\$13,332</b>	<b>\$10,068</b>	<b>\$10,262</b>	<b>\$11,054</b>
<b>total cost per day</b>	<b>\$29.92</b>	<b>\$36.53</b>	<b>\$27.58</b>	<b>\$28.11</b>	<b>\$30.28</b>
<b>total cost per mile<sup>2</sup></b>	<b>\$0.5461</b>	<b>\$0.6666</b>	<b>\$0.5034</b>	<b>\$0.5131</b>	<b>\$0.5527</b>

<sup>1</sup>Depreciation for mileage under or over 15,000 miles annually averaged over 5 years.

<sup>2</sup>Total cost per year ÷ total miles per year.



## Behind the Numbers

AAA provides more than 62 million members with automotive, travel, insurance and financial services through its federation of 30 motor clubs and over 1,000 branch offices across North America. Since 1902, the not-for-profit, fully tax-paying AAA has been a leader and advocate for safe mobility. Drivers can request roadside assistance, identify nearby gas prices, locate discounts, book a hotel or map a route via the AAA Mobile app.

AAA has published Your Driving Costs since 1950. That year, driving a car 10,000 miles cost 9 cents a mile, and gasoline sold for 27 cents per gallon.



## Methodology

The Your Driving Costs study employs a proprietary AAA methodology to calculate the costs of owning and operating a new vehicle in the United States. Due to changes in the methodology for this year's calculations, the overall cost cannot be directly compared to previous years.

The AAA methodology uses data from a variety of sources, including Vincentric LLC, and incorporates standardized criteria to estimate the costs of using a new vehicle for personal transportation over five years and 75,000 miles of ownership. The use of standardized criteria ensures AAA estimates are consistent when comparing the driving costs of different vehicle types. Actual driving costs will vary based on driving habits, location, operating conditions and other factors.

The AAA Your Driving Costs estimates are provided to help consumers make informed vehicle purchase decisions and budget for annual automotive expenses.





## ***AAA Car Care Resources***

AAA offers several resources to complement information found in your owner's manual.

### ***AAA.com/autorepair***

This site features a search tool to help users locate nearby AAA Approved Auto Repair (AAR) facilities. It also has a tool for estimating repair costs and articles that discuss various aspects of car care.

### ***AAA Approved Auto Repair***

The AAR network includes nearly 7,000 shops across North America that are visited regularly and inspected annually by AAA to ensure they meet AAA's rigorous quality standards. AAA members receive priority service when their car is towed in, assistance in obtaining alternate transportation (if necessary), repair discounts, written estimates, free maintenance inspections, a minimum 24-month/24,000-mile warranty and AAA arbitration to resolve repair disputes.

### ***AAA Mobile App***

Available for both Apple and Android devices, AAA's app provides AAA Approved Auto Repair shop locations and information, along with a variety of other useful benefits.



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