

# **YOUR DRIVING COSTS**

How much are you really paying to drive?





### **How Much Does It Cost to Drive?**

Shown below are average per-mile costs as determined by AAA, based on the driving costs for nine vehicle categories weighted by sales. Detailed driving costs for each category are provided on pages 6 through 9.

### **AAA Average Costs Per Mile**

Miles per year	10,000	15,000	20,000
Composite Average	73.54 cents	56.46 cents	49.44 cents

Driving costs in each vehicle category are based on average costs for five top-selling 2017 models selected by AAA.
By category, they are:

- ► Small sedan Chevrolet Cruze, Ford Focus, Honda Civic, Hyundai Elantra and Toyota Corolla.
- Medium sedan Chevrolet Malibu, Ford Fusion, Honda Accord, Nissan Altima and Toyota Camry.
- Large sedan Chevrolet Impala, Chrysler 300, Ford Taurus, Nissan Maxima and Toyota Avalon.
- Small SUV Chevrolet Equinox, Ford Escape, Honda CR-V, Nissan Rogue and Toyota RAV4.
- Medium SUV Chevrolet Traverse, Ford Explorer, Honda Pilot, Jeep Grand Cherokee and Toyota Highlander.
- Minivan Dodge Grand Caravan, Kia Sedona, Honda Odyssey, Nissan Quest and Toyota Sienna.
- Pickup truck Chevrolet Silverado 1500, Ford F-150, Nissan Titan, Ram 1500 and Toyota Tundra.
- Hybrid car Ford Fusion, Honda Accord, Hyundai Sonata, Toyota Prius Liftback and Toyota RAV4.
- ► Electric car BMW i3, Chevrolet Bolt, Fiat 500e, Kia Soul and Nissan Leaf.

### 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.

**Fuel** – Fuel costs are based on average prices for the 12 months ending May 31, 2017, as reported by AAA Gas Prices at www.GasPrices.AAA.com. During this period, regular grade gasoline averaged \$2.329 per gallon. Fuel economy is based on Environmental Protection Agency ratings for 55 percent city and 45 percent highway driving.

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.

**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.

**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.

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.



# **Figuring Your Costs**

To figure your fuel cost, begin with a full tank of fuel and write down the odometer reading. Each time you fill up, note the number of gallons, how much you paid and the odometer reading. These figures can then be used to calculate average miles per gallon and cost of fuel per mile. For example:

### **Gas Cost Per Mile**

Gallons	Cost*	Odometer
Full Tank		8,850
12.4	\$28.88	9,136
9.5	\$22.13	9,355
15.7	\$36.57	9,717
37.6	\$87.58	9,717
		-8,850

Miles Driven = 867

Miles per gallon: 867 ÷ 37.6 = 23.1 mpg Gas cost per mile: \$87.57 ÷ 867 = 10.10 cents

<sup>\*</sup> price per gallon \$2.329



To determine your driving costs accurately, keep personal records on all the costs listed below. Use this worksheet to figure your total cost to drive.

Annual Cost Per Mile	
Costs	Yearly Totals
<b>Operating Costs</b>	
gas per mile	
total miles driven	×
total gas	=
maintenance, repair and tires	+
<b>Total Operating Costs</b>	+ =
Our well's Conta	
Ownership Costs depreciation	
insurance	+
license, registration and taxes	÷ ——
finance charges	+
Total Ownership Costs	+ =
Other Costs	+
(parking, tolls, washing, etc.)	<del></del>
	_
Total Driving Costs	
Total Miles Driven	<u>•</u>
Total Miles Dilveil	• =====
Cost Per Mile	=

	Small Sedan <sup>†</sup>	Medium Sedan†
<b>Operating Costs</b>		
fuel	7.18 cents	9.03 cents
maintenance, repair and tires	6.83 cents	7.94 cents
Cost Per Mile	14.01 cents	16.97 cents
Ownership Costs		
full-coverage insurance	\$1,288	\$1,202
license, registration, taxes	\$454	\$639
depreciation	\$2,114	\$3,187
(15,000 miles annually)		
finance charge	\$396	\$597
Cost Per Year	\$4,252	\$5,625
Cost Per Day	\$11.65	\$15.41
T		
Total Cost Per Mile		
10,000 total miles per year	Per Year	Per Year
cost per mile x 10,000 miles	\$1,401	\$1,697
cost per day x 365 days	\$4,252	\$5,625
decreased depreciation**	-\$145	-\$159
Total Cost Per Year	\$5,508	\$7,163
Total Cost Per Day	\$15.09	\$19.62
Total Cost Per Mile*	\$0.5508	\$0.7163
15,000 total miles per year	Per Year	Per Year
cost per mile x 15,000 miles	\$2,102	\$2,546
cost per day x 365 days	\$4,252	\$5,625
Total Cost Per Year	\$6,354	\$8,171
Total Cost Per Day	\$17.41	\$22.38
Total Cost Per Mile*	\$0.4236	\$0.5447
20,000 total miles per year	Per Year	Per Year
cost per mile x 20,000 miles	\$2,802	\$3,394
cost per day x 365 days	\$4,252	\$5,625
increased depreciation***	\$375	\$405
Total Cost Per Year	\$7,429	\$9,424
Total Cost Per Day	\$20.35	\$25.82
Total Cost Per Mile*	\$0.3715	\$0.4712

Total cost per year ÷ total miles per year.

<sup>\*\*</sup> Decreased depreciation for mileage under 15,000 miles annually averaged over 5 years.



Large Sedan <sup>†</sup>	Small SUV (FWD)†	Medium SUV (4WD) <sup>†</sup>
11.14 cents	8.68 cents	11.76 cents
8.44 cents	8.09 cents	8.27 cents
19.58 cents	16.77 cents	20.03 cents
\$1,200	\$1,076	\$1,089
\$757	\$607	\$831
\$3,799	\$2,840	\$3,720
. ,	, ,	. ,
\$706	\$567	\$806
\$6,462	\$5,090	\$6,446
\$17.70	\$13.95	\$17.66
Per Year	Per Year	Per Year
\$1,958	\$1,677	\$2,003
\$6,462	\$5,090	\$6,446
-\$198	-\$194	-\$241
\$8,222	\$6,573	\$8,208
\$22.53	\$18.01	\$22.49
\$0.8222	\$0.6573	\$0.8208
Per Year	Per Year	Per Year
\$2,937	\$2,516	\$3,005
\$6,462	\$5,090	\$6,446
\$9,399	\$7,606	\$9,451
\$25.75	\$20.84	\$25.89
\$0.6266	\$0.5070	\$0.6300
Per Year	Per Year	Per Year
\$3,916	\$3,354	\$4,006
\$6,462	\$5,090	\$6,446
\$501	\$479	\$589
\$10,879	\$8,923	\$11,041
\$29.81	\$24.45	\$30.25
\$0.5440	\$0.4462	\$0.5521

<sup>\*\*\*</sup>Increased depreciation for mileage over 15,000 miles annually averaged over 5 years.

<sup>†</sup> See page 2 for a listing of vehicle makes and models used for driving cost calculations.

S Like	###			
30 Sminshing				No.
DRIVING CO	OSTS			OFFICE
		1	/2-Ton, Crew-	

	pe		æ:.		~		
u	ne	na	ТΗ	пр		0.5	TS.

maintenance, repair and tires	7.81 cents	8.33 cents
Cost Per Mile	18.76 cents	22.21 cents

Minivan<sup>†</sup>

Cab Pickup (4WD)<sup>†</sup>

Ownership Costs		
full-coverage insurance	\$1,075	\$1,229
license, registration, taxes	\$726	\$984
depreciation	\$3,839	\$3,587
(15,000 miles annually)		
finance charge	\$692	\$922
Cost Per Year	\$6,332	\$6,722
Cost Per Day	\$17.35	\$18.42

Total Cost Per Mile		
10,000 total miles per year	Per Year	Per Year
cost per mile x 10,000 miles	\$1,876	\$2,221
cost per day x 365 days	\$6,332	\$6,722
decreased depreciation**	-\$185	-\$279
Total Cost Per Year	\$8,023	\$8,664
Total Cost Per Day	\$21.98	\$23.74
Total Cost Per Mile*	\$0.8023	\$0.8664
15,000 total miles per year	Per Year	Per Year
cost per mile x 15,000 miles	\$2,814	\$3,332
cost per day x 365 days	\$6,332	\$6,722
Total Cost Per Year	\$9,146	\$10,054
Total Cost Per Day	\$25.06	\$27.54
Total Cost Per Mile*	\$0.6097	\$0.6702
20,000 total miles per year	Per Year	Per Year
cost per mile x 20,000 miles	\$3,752	\$4,442
cost per day x 365 days	\$6,332	\$6,722
increased depreciation***	\$459	\$671
Total Cost Per Year	\$10,543	\$11,835
Total Cost Per Day	\$28.88	\$32.42
Total Cost Per Mile*	\$0.5272	\$0.5918

Total cost per year ÷ total miles per year.

<sup>\*\*</sup> Decreased depreciation for mileage under 15,000 miles annually averaged over 5 years.



Hybrid Vehicle <sup>†</sup>	Electric Vehicle†	Average
5.59 cents	3.68 cents	10.26 cents
6.99 cents	6.55 cents	7.91 cents
12.58 cents	10.23 cents	18.18 cents
\$1,208	\$1,185	\$1,178
\$667	-\$656	\$718
\$3,301	\$5,704	\$3,172
\$624	\$671	\$674
\$5,800	\$6,904	\$5,742
\$15.89	\$18.92	\$15.73
Per Year	Per Year	Per Year
\$1,258	\$1,023	\$1,818
\$5,800	\$6,904	\$5,742
-\$170	-\$191	\$(206)
\$6,888	\$7,736	\$7,354
\$18.87	\$21.19	\$20.15
\$0.6888	\$0.7736	\$0.7354
Per Year	Per Year	Per Year
\$1,887	\$1,535	\$2,726
\$5,800	\$6,904	\$5,742
\$7,687	\$8,439	\$8,469
\$21.06	\$23.12	\$23.20
\$0.5125	\$0.5626	\$0.5646
Per Year	Per Year	Per Year
\$2,516	\$2,046	\$3,635
\$5,800	\$6,904	\$5,742
\$426	\$473	\$510
\$8,742	\$9,423	\$9,887
\$23.95	\$25.82	\$27.09
\$0.4371	\$0.4712	\$0.4944

<sup>\*\*\*</sup>Increased depreciation for mileage over 15,000 miles annually averaged over 5 years.

See page 2 for a listing of vehicle makes and models used for driving cost calculations.

### **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 some general checks to keep your vehicle in tip-top 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.

### **Fluids**

- ▶ 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.
- 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.
- Brake fluid Critical to proper brake system performance. 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 each oil change.
- Power steering fluid Transfers hydraulic pressure to reduce steering effort. Check the level 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.

**Air Filter** – Captures dirt particles and ensures clean airflow to the engine. Inspect at every oil change.

**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.

**Hoses** – Circulate vital liquids such as engine coolant, transmission fluid and power steering fluid. Inspect at every oil change.



**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.

**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.

### **AAA Car Care Resources**

AAA offers a number of resources to complement information found in your owner's manual. They include:

- AAA.com Provides a variety of vehicle maintenance and operating tips. Online content varies by AAA club.
- 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 and deliver exceptional service. AAA members receive priority service when their car is towed in, assistance in obtaining alternate transportation (if necessary), repair cost discounts, written estimates, free maintenance inspections, a minimum 24-month/24,000-mile parts and labor warranty and AAA arbitration to resolve repair disputes.
- AAA.com/AutoRepair This site features a search tool to help users locate nearby AAA Approved Auto Repair facilities and provides information about their services, hours, appointments and more. The site also has numerous articles that discuss various aspects of car care.

### **Behind the Numbers**

AAA is a federation of motor clubs serving more than 57 million members in the United States and Canada through nearly 1,100 offices.

Founded in 1902, AAA is a not-for-profit, fully taxpaying corporation. Its purpose is twofold: give members a full range of automotive and travel-related services and promote the interests of motorists and travelers through legislative and educational activities.



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 analyze the costs of owning and operating a new vehicle in the United States, using data from a variety of sources, including Vincentric LLC. AAA significantly enhanced the methodology used to calculate Your Driving Costs for 2017. Therefore, driving cost numbers in this edition are not directly comparable to those in earlier brochures.

The AAA methodology incorporates standardized criteria designed 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 individual driving habits, location, operating conditions and other factors.

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



AAA Association Communication 1000 AAA Drive Heathrow, FL 32746-5063

Contents may be reprinted in part or in their entirety with attribution.

©AAA 2017 • Stock 2717 • Printed in USA

AAA.com AAA.com/PublicAffairs