Gas-Saving Tips

Some consumers believe fuel economy ratings are a fixed number, like engine size or cargo volume. However, a vehicle's fuel economy can vary significantly due to several factors, including how the vehicle is driven, the vehicle's mechanical condition, and the environment in which it is driven. Fortunately, you may be able to improve your vehicle's gas mileage through proper maintenance and driving habits.

Studies suggest the average driver can improve his/her fuel economy by roughly 10%. Here are a few simple tips to help you get the best possible fuel economy from your vehicle and reduce your fuel costs.

Adopt Good Driving Habits

Drive Sensibly

Aggressive driving (speeding, rapid acceleration and braking) can lower your gas mileage by 33% at highway speeds and by 5% around town. Anticipate traffic situations and maintain adequate spacing between vehicles to avoid unnecessary braking and acceleration. When you do accelerate, do so smoothly at a moderate rate. Sensible driving is also safer, so you may save more than gas money.

Driver feedback devices can help you drive more efficiently, leading to behavioral changes that can improve fuel economy by up to 10%.

Fuel Economy Benefit:	5%–33%
Fuel Cost Savings:	$0.11–$0.71/gallon

Remove Excess Weight

Avoid keeping unnecessary items in your vehicle, especially heavy ones. An extra 100 pounds in your vehicle could reduce your fuel economy by around 1%. The reduction is based on the percentage of extra weight relative to the vehicle's weight and affects smaller vehicles more than larger ones.

Fuel Economy Benefit:	1%/100 lbs
Fuel Cost Savings:	$0.02/gallon

Avoid Excessive Idling

Idling can use a quarter to a half gallon of fuel per hour, depending on engine size and air conditioner (AC) use. Turn off your engine when your vehicle is parked. It only takes a few seconds worth of fuel to restart your vehicle.

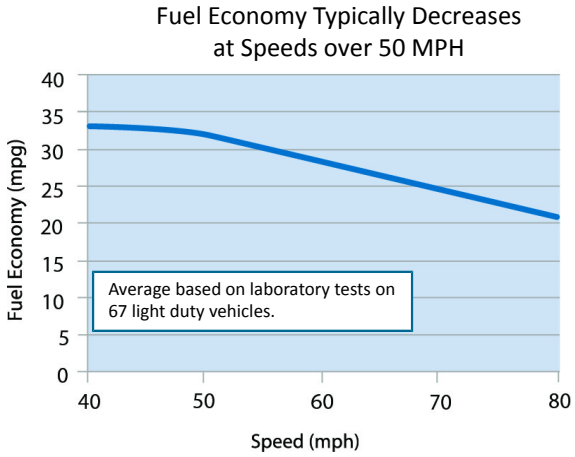
Fuel Cost Savings:	$0.01–$0.02/gallon

Our gas-saving tips can help you use less fuel and save money.
Photo from iStock/5267755

Observe the Speed Limit

While each vehicle reaches its optimal fuel economy at a different speed (or range of speeds), gas mileage usually decreases rapidly as speeds climb above 50 mph. You can assume that for every 5 mph you drive over 50 mph, you are paying an additional $0.18 per gallon for gas. Observing the speed limit is also safer.

Fuel Economy Benefit:	7%–14%
Fuel Cost Savings:	$0.15–$0.30/gallon



Carrying Cargo on Your Roof

A large, blunt roof-top cargo box, for example, can reduce fuel economy by 2%–8% in city driving, 6%–17% on the highway, and 10%–25% at Interstate speeds (65 mph–75 mph). Rear-mount cargo boxes or trays reduce fuel economy by much less—1%–2% in city driving and 1%–5% on the highway.

Fuel Economy Benefit:	2%–17%
Fuel Cost Savings:	$0.04–$0.37/gallon

Use Cruise Control

Using cruise control on the highway helps you maintain a constant speed and, in most cases, will save gas.

Clean Cities
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Keep Your Car in Shape

Keep Your Engine Properly Tuned

Fixing a car that is noticeably out of tune or has failed an emissions test can improve its gas mileage by an average of 4%. However, results vary based on the type of repair and how well it is done.

Fuel Economy Benefit: 4%
Fuel Cost Savings: $0.09/gallon

Keep Tires Properly Inflated

You can improve your gas mileage by 0.6% on average—up to 3% in some cases—by keeping your tires inflated to the proper pressure. Under-inflated tires can lower gas mileage by about 0.2% for every 1 psi drop in the average pressure of all tires. Properly inflated tires are safer and last longer.

The proper tire pressure for your vehicle is usually found on a sticker in the driver's side door jamb or the glove box, as well as in your owner's manual. Do not use the maximum pressure printed on the tire's sidewall.

Fuel Economy Benefit: 0.6%
Fuel Cost Savings: $0.01/gallon

Sample Tire Pressure Sticker

Tire Size		TIRE INFLATION PRESSURE kPa (psi) FRONT	REAR
P255/70R16 109S	Ⓐ	180 (26)	180 (26)
	Ⓑ	180 (26)	180 (26)
Ⓐ: TO 5 PASSENGERS			
Ⓑ: Ⓐ TO MAX LOAD OR TRAILER TOWING			

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Use the Recommended Grade of Motor Oil

You can improve your gas mileage by 1%–2% by using the manufacturer's recommended grade of motor oil. For example, using 10W-30 motor oil in an engine designed to use 5W-30 can lower your gas mileage by 1%–2%. Using 5W-30 in an engine designed for 5W-20 can lower your gas mileage by 1%–1.5%.

Also, look for motor oil that says "Energy Conserving" on the API performance symbol to be sure it contains friction-reducing additives.

Fuel Economy Benefit: 1%-2%
Fuel Cost Savings: $0.02–$0.04/gallon

Replacing a Clogged Air Filter on Modern Cars Improves Performance but Not Fuel Economy

Replacing a clogged air filter on vehicles with fuel-injected, computer-controlled gasoline engines—such as those manufactured from the early 1980s to the present—or diesel engines does not improve fuel economy, but it can improve acceleration.

Replacing a clogged air filter on an older vehicle with a carbureted engine can improve both fuel economy and acceleration by a few percent under normal replacement conditions.

Other Ways to Save Fuel

- *Combine errands into one trip. Combining trips can reduce the distance you drive, and it allows you to travel more miles when your engine is warm. Your engine runs more efficiently when it is warmed up.*
- *Stagger your work hours to avoid peak rush hours so that you spend less time in stop-and-go traffic.*
- *Drive your most fuel efficient vehicle.*
- *Telecommute (work from home) if your employer permits it.*
- *Participate in carpools and ride-share programs.*
- *Walk or cycle short distances when possible.*
- *Use public transit if it is available and convenient for you.*
- *Buy a more fuel efficient vehicle.*

If questions remain, contact: FuelEconomy@ornl.gov.

For more tips on improving fuel economy, such as cold-weather tips, hot-weather tips, and tips for hybrids, plug-in hybrids, and all-electric vehicles, visit fueleconomy.gov. ■

Cost savings are estimated based on an assumed fuel price of $2.16/gallon.

U.S. DEPARTMENT OF ENERGY
Energy Efficiency & Renewable Energy

For more information, visit: fueleconomy.gov

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