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
- the environment in which it is driven.

That's good news. It means you may be able to improve your vehicle's gas mileage through proper maintenance and driving habits. In fact, studies suggest the average driver can improve his/her fuel economy by roughly 10 percent.

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 percent at highway speeds and by 5 percent around town. Anticipate traffic situations and maintain adequate spacing between vehicles to avoid unnecessary braking and acceleration. When you do accelerate, accelerate smoothly at a moderate rate. Sensible driving is also safer, so you may save more than gas money.

Fuel Economy Benefit: *5–33%*
Fuel Cost Savings: *$0.18–$1.18/gallon*

Remove Excess Weight

Avoid keeping unnecessary items in your vehicle, especially heavy ones. An extra 100 pounds in your vehicle could reduce your MPG by up to 2 percent. 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: *1–2%/100 lbs*
Fuel Cost Savings: *$0.04–$0.07/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. Turning your engine on and off excessively, however, may increase starter wear.

Fuel Cost Savings: *$0.01–0.03/min. (AC off)*
$0.02–0.03/min. (AC on)

Clean Cities
U.S. Department of Energy

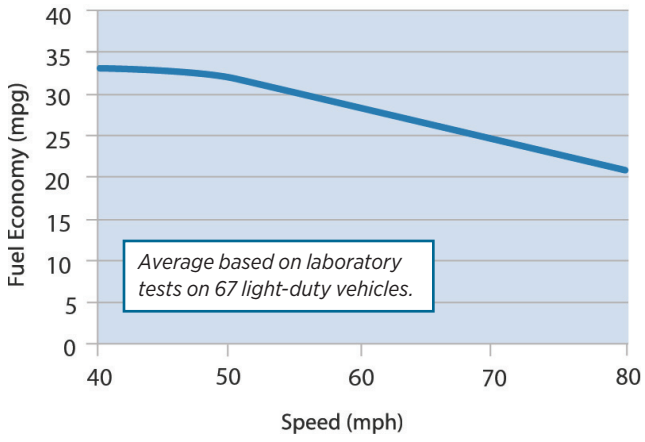
Our gas-saving tips can help you use less fuel and save money.

Courtesy of istockphoto.com

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 each 5 mph you drive over 50 mph is the same as paying an additional $0.25 per gallon for gas. Observing the speed limit is also safer.

Fuel Economy Benefit: *7–14%*
Fuel Cost Savings: *$0.25–$0.50/gallon*



Use Cruise Control

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

Lose the Roof Rack

A loaded roof rack can decrease your fuel economy by around 5 percent. Reduce aerodynamic drag and improve your fuel economy by placing items inside the trunk whenever possible.

Use Overdrive Gears

When you use overdrive gearing, your car's engine speed decreases. Using overdrive saves fuel and reduces engine wear.

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 percent. However, results vary based on the type of repair and how well it is done.

Fuel Economy Benefit: *4%*
Fuel Cost Savings: *$0.14/gallon*

Keep Tires Properly Inflated

You can improve your gas mileage by up to 3.3 percent by keeping your tires inflated to the proper pressure. Under-inflated tires can lower gas mileage by 0.3 percent for every 1 psi drop in pressure of all four 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: *up to 3%*
Fuel Cost Savings: *up to $0.11/gallon*

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			
PART NO. : MR491176 E			

Sample tire pressure label

Use the Recommended Grade of Motor Oil

You can improve your gas mileage by 1 to 2 percent 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 to 2 percent. Using 5W-30 in an engine designed for 5W-20 can lower your gas mileage by 1 to 1.5 percent.

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: *$0.04–$0.07/gallon*

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

A recent U.S. Department of Energy (DOE) study shows that replacing a clogged air filter on a car with a fuel-injected, computer-controlled gasoline engine does not improve fuel economy but it can improve acceleration time by around 6 to 11 percent. This kind of engine is prevalent on most gasoline cars manufactured from the early 1980s onward.

Tests suggest that replacing a clogged air filter on an older car with a carbureted engine, however, may improve fuel economy 2 to 6 percent under normal replacement conditions or up to 14 percent if the filter is so clogged that it significantly affects drivability.

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*.

Cost savings are estimated based on an assumed fuel price of $3.57/gallon.

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

For more information, visit:
www.fueleconomy.gov

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