Green Your Ride



The National Park Service (NPS) is working to address climate change though a number of different strategies, including sustainable transportation efforts. Learn how you can make an impact through meaningful actions in your approach to transportation.

Climate Change and Transportation

The transportation sector is responsible for a significant portion of U.S. greenhouse gas (GHG) emissions. Highway vehicles release about 1.6 billion metric tons of GHGs into the atmosphere each year, mostly in the form of CO₂. Each gallon of gasoline burned creates 20 pounds of CO2, while a typical vehicle produces about five to nine tons per year.1 Within the NPS fleet, about 40% of GHG emissions (approximately 128,000 tons in 2014) are attributable to transportation. When visitors, concessioners, partners, and neighboring communities are taken into account, our GHG footprint multiplies many times over. A focus on the reduction of transportationrelated emissions can significantly improve the NPS' GHG footprint.

The National Park Service is Taking Action

Service-wide, thousands of NPS employees are working to shrink the GHG footprint of our transportation-related activities every day, and we are inviting partners and visitors to join in our efforts. Through a partnership with the U.S. Department of Energy's Clean Cities program, parks now have resources for better educating and promoting green transportation strategies to visitors. Many parks have adopted idle-reduction policies, and a vast majority of parks have significantly increased communication on climate change and green transportation strategies, encouraging



Visitors at Grand Canyon National Park leave their vehicles behind and travel on the park's natural gas buses. Photo courtesy of NREL

biking, walking, and use of shuttles and mass transit. Dozens of parks are incorporating alternative fuels and advanced vehicles into their fleet operations, and a few are even providing electric vehicle charging stations for visitor use.

Be Part of the Progress

All visitors can join the Green Your Ride effort by driving more efficiently, reducing idling time, participating in climate-friendly commuting, or taking advantage of the many other opportunities for action. The approaches listed below are some preferred strategies, and many can be implemented immediately.

NPS 2014 GHG emissions (128,000 MTCO₂e)

GHG emissions from in-park visitor travel (1,200,000 MTCO₂e)

GHG reduction potential if NPS visitors reduced their personal GHGs by 5 percent (200,000,000 MTCO₂e)

¹ DOE, EPA: fueleconomy.gov/feg/climate.shtml

Idle Reduction: Idling a vehicle literally gets you nowhere: It reduces fuel economy, produces air pollutants, and wastes resources. Researchers estimate that vehicle idling in the United States wastes about six billion gallons of fuel annually. That translates to 60 million tons of CO₂ and \$22 billion per year.²

Contrary to some myths, modern vehicles do not need to idle, even to warm up. Even on the coldest day, computerized controls in today's vehicles bring the engine up to operating temperature faster when the vehicle is moving than when it is idling. If you must idle your vehicle, try to limit yourself to no more than 30 seconds. Turn off your car when taking pictures of wildlife or waiting in line at an entrance station.

Fuel-Efficient Driving: Efficient driving practices can improve your fuel economy by more than 30 percent.³ There are a number of tactics you can implement to cut your fuel use and emissions. For example:

- Use other means of transportation: Carpool, travel by foot or bicycle, use shuttles or other transit systems
- Drive sensibly: Avoid jackrabbit starts, hard braking, and rapid acceleration
- Keep your tires inflated: Check the sticker on the inside of your vehicle door or glove box for the proper pressure
- Go alternative: Use alternative fuels if they are compatible with your vehicle or replace your car with an alternative fuel or higher-efficiency vehicle

Park staff and visitors can use the U.S. Department of Energy's online Alternative Fueling Station Locator to find stations that offer biodiesel, natural gas, electricity, ethanol, hydrogen, and propane. Users can sort by fuel, find all stations near a given location, and map out driving routes with stations identified along the way. All the data is downloadable, and the tool can be easily embedded on other websites. Visit **afdc.energy.gov/stations** online or download the station locator iPhone app to find an alternative fueling station near you.



Since 2010, the Clean Cities Program and NPS have partnered on 30 projects to deploy alternative fuel and fuel-efficient vehicles on the road, cut vehicle idling, and improve vehicle efficiency. The electric vehicle charging station pictured is available for visitor use in San Antonio Missions National Historical Park. Photo courtesy of David Vekasy, National Park Service

• Observe the speed limit: Fuel economy generally drops at speeds above 50 miles per hour (mph).

Alternative Fuels and Advanced Vehicles:

Many alternative fuels and advanced vehicles can significantly reduce emissions, fuel costs, and reliance on petroleum. The NPS has teamed up with Clean Cities to support projects that explore alternative fuels and technologies in parks. Across the country, parks are operating buses that run on compressed natural gas, biodiesel, or propane; conventional ranger vehicles are being replaced with fuel-efficient hybrid electric vehicles; and plug-in electric vehicles are being deployed within parks in Tennessee, California, and other states. 5

Find ways to save fuel, reduce idling, and take advantage of alternative fuels or technologies at *fueleconomy.gov.*

⁵ DOE Clean Cities: eere.energy.gov/cleancities/national_parks.html





An alternative fuel partnership between the U.S. Department of Energy's Clean Cities program and the National Park Service

Learn More About How to "Green Your Ride"

For more information, see the Green Rides video and infographic at *nps.gov/subjects/climatechange/getinvolved.htm*. Or, to find a national park near you, visit *findyourpark.com*.

² DOE's Clean Cities. Idling is Not the Way to Go: afdc.energy.gov/uploads/publication/light_duty_fs_6-2013_.pdf

³ EPA, DOE. FuelEconomy.gov: fueleconomy.gov/feg/driveHabits.shtml

⁴ DOE, Alternative Fuels Data Center: afdc.energy.gov