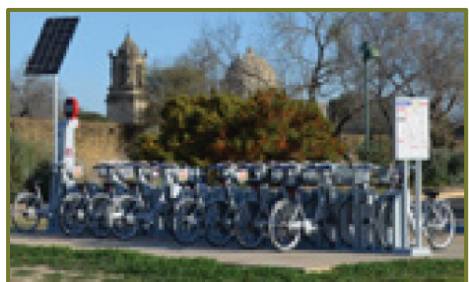




GREEN RIDES — SHARING OUR STORIES

Within the NPS, almost 50 percent of greenhouse gas (GHG) emissions are attributable to transportation activities, including vehicle fleet and equipment operations and staff commuting. This calculation does not include emissions attributable to NPS partners or visitors. When visitors, concessioners, partners, and neighboring communities are taken into account, the GHG footprint multiplies. These stories show how NPS staff and partners are working together to reduce emissions and fuel use to get around, still accomplish our jobs, and collaborate with visitors on greener approaches to transportation.



Clean Cities Initiative Takes New Approach to Alternative Fuel Vehicles at San Antonio Missions National Historical Park

From a bicycle fleet to
propane-powered mowers,

San Antonio Missions National Historical Park takes sustainable transportation to the next level. In 2012, the park partnered with the City of San Antonio and B-cycle (a bike share company) to initiate the “B-cycle Mission Reach Expansion Project.” Incorporating eight miles of non-motorized recreation paths, the project encourages visitors to explore the park while reducing their carbon footprint. Additionally, the park’s grounds team has taken steps to lower GHG emissions by purchasing three propane mowers (which are used to mow 85 acres in the park), to reduce petroleum use, and to achieve a 50 percent savings in fuel costs annually. This initiative enabled the ground’s team to reach the goal of reducing GHG emissions from park operations by 20 percent and fleet consumption of petroleum by 30 percent. The park’s partnership with the U.S. Department of Energy (DOE) Clean Cities National Parks Initiative also helped reduce GHG emissions by replacing two gasoline-powered vehicles with propane and electric vehicle trucks and installing two public access electric vehicle charging stations. By 2014, 40 percent or more of the park’s fleet will be comprised of alternative fuel vehicles. See the “San Antonio Missions National Historical Park Propane Case Study” under Additional Resources in the [Green Rides Toolkit](#) to read about other green rides initiatives underway at the park. For more information, contact David Vekasy at david_vekasy@nps.gov or Krista Sherwood at krista_sherwood@nps.gov or 210-534-8875.

NPS Green Parks Plan: Green Our Rides Goal

As part of the Green Parks Plan, the NPS committed to transforming fleet operations and adopting greener transportation methods. To do so, the NPS will:

- Evaluate and transform the size, types of vehicles, and technologies used in park fleets;
- Increase the use of high-efficiency and low-GHG-emitting vehicles and reduce fossil fuel consumption;
- Support alternative commuting practices, including employee telework; and
- Reduce GHG emissions attributed to official travel.

Park No-Idling Policies Gain Momentum

Several parks have begun addressing vehicle idling within park boundaries and are encouraging sustainable and low-emission driving habits. Sleeping Bear Dunes National Lakeshore instituted a [no-idling policy](#) in the spring of 2013 that is applicable to all employees, interns, and volunteers; partners, contractors, and concessioners are also encouraged to adopt the policy. The policy memo highlights the importance of cutting idling emissions and addresses idling myths and facts. North Cascades National Park implemented a park-wide no-idling policy and has offered guidance to other western parks. Yellowstone National Park and Grand Teton National Park have educated visitors about the benefits of reducing idle time and provided information on how to visit park sites by biking, walking, or using park shuttles. Yosemite National Park has also adopted a NPS vehicle no-idling policy within the park. Other parks can take advantage of their lessons learned and the materials they have developed to reduce idling. For more information on Sleeping Bear’s no-idling policy, contact Tom Ulrich at tom_ulrich@nps.gov or 231-326-5134. Also see additional resources and templates in the [Green Rides Toolkit](#) such as idle reduction posters, newspaper inserts, leadership letters, and decals.



Electric Hybrid Shuttle Systems at Sequoia & Kings Canyon National Parks

In 2012, Sequoia & Kings Canyon National Parks and the City of Visalia, CA received the NPS Environmental Achievement Award honorable mention for their efforts in 2010 to provide park visitors hybrid-electric shuttle bus services back and forth to the park. The city leased two hybrid-electric buses for the job and called the operation the Sequoia Shuttle. The buses were so successful that the community later sought and was awarded funds to purchase six additional hybrid-electric buses that were put into operation in May 2013. The summer shuttle service in the Giant Forest Area of Sequoia National Park ran from May 23 to September 8, 2013, and offered a free, simple way to travel through the park without a personal motorized vehicle. These buses employ state-of-the-art technology to minimize air pollutants in a region that is known for poor air quality. For more information, contact Dana Dierkes at dana_dierkes@nps.gov or 559-565-3131.

Simple Spreadsheet Reduces Missouri National Recreational River’s Fuel Consumption

Like every park, Missouri National Recreational River is committed to reducing its use of fossil fuels. An easy first step was to make sure it was using the most fuel-efficient vehicles it had in its fleet. The park’s staff thought they were already doing that, but after some investigation they realized they were wrong. Staff made a spreadsheet of all of the vehicles in the park’s fleet that includes make/model, drivetrain, and EPA-estimated fuel economy. They used published fuel economy numbers rather than “field tested” figures because they felt these would be more reliable given the diversity of fuel efficiency attained by different drivers in different situations. Park employees discovered that the vehicles they chose to drive most often were not the most fuel efficient. The spreadsheet is posted on the park’s key cabinet for quick reference and the most frequently driven vehicles are now the most fuel-efficient options—reducing the park’s fuel consumption and saving money. For more information, contact Brian Korman at brian_korman@nps.gov or 605-665-0209.



Mississippi National River and Recreation Area Expands Alternative Transportation System

The Mississippi National River and Recreation Area in Minnesota has received funding to improve the Alternative Transportation System (ATS) and enable park visitors and area residents to travel throughout the park without a car. The funds, granted through the DOE Clean Cities National Parks Initiative, will build on existing public transit, provide a total of 50 bike share stations (in partnership with Nice Ride MN), and improve river access. The ATS will also include Americans

with Disability Act (ADA) improvements to bus pads, new signage and marketing efforts for the evolving ATS, and pedestrian connections to a 72-mile segment of the Mississippi River Trail. The Mississippi River Trail begins at the Mississippi's headwaters in northern Minnesota and passes through 14 national parks and wildlife refuges. In conjunction with the ATS expansion, the park will install 12 electric vehicle charging stations at partner facilities in the park (with 100 percent of the electricity generated from wind power). A recent survey conducted by Nice Ride MN identified 19 percent of daily bike share users use a bicycle instead of driving a car. It is estimated that the additional 12,400 new Nice Ride MN users will reduce the average number of annual motorized vehicle miles traveled by 72,635 and these bike share stations will avert 7,440 car trips to the park and an additional 37,202 bike share trips. According to the Transit for Livable Communities, this mode change equates to 199 vehicle miles traveled averted per day, which translates to 58,954 pounds of CO₂ each year. For more information, contact Susan Overson at susan_overson@nps.gov or 651-293-8436.



Plug-In Electric Vehicle (PEV) Chargers at Golden Gate National Recreation Area

Golden Gate National Recreation Area has partnered with Adopt a Charger, a non-profit organization dedicated to accelerating the adoption of PEVs via "sponsored" public car chargers. The inaugural project at Crissy Field was installed in February 2012 with sponsorship by the National Parks Conservation Association. More recently two PEV chargers have been installed at Muir Woods National Monument with sponsorship from Pacific Gas and Electric Company. The chargers

in both locations will be free to the public for the first three years of the sponsorship. The park also received a grant through the DOE Clean Cities National Parks Initiative to purchase five PEVs and chargers for the park fleet. These five vehicles will replace GSA-leased sedans and save the park \$15,000 per year in fuel costs. To date, the park has purchased a Mitsubishi iMiEV and a Chevy Volt, in addition to two Nissan LEAFs leased through a GSA pilot project. Technical assistance with selecting appropriate charger locations and navigating the growing selection of electric vehicles has been provided by the San Francisco Clean Cities Coalition. For more information, contact Laura Castellini at laura_castellini@nps.gov or 415-561-4789.



Glacier Bay National Park Alternative Transportation Program

In April 2010, Glacier Bay National Park launched a new employee incentive program with the goal of reducing GHG emissions from employee commuting. Participating employees earn credits when they commute to work using alternative transportation methods such as carpooling, bicycling, or

moped/motorcycling. The program has been a great success, saving more than 15 tons of carbon dioxide from entering the atmosphere while also offering substantial fuel savings to employees and increasing employee health and wellness. In addition, employees are enjoying cash and time-off awards from credits earned. To date, 53 Glacier Bay National Park employees have participated in the Alternative Transportation Program. For more information, contact Janet Neilson at janet_neilson@nps.gov or 907-697-2658.



Concessioner Contract Enables Visitors to Use Pedal Power to Experience Grand Canyon National Park

Grand Canyon National Park now has a concessioner that rents bicycles to park visitors who can experience the park using pedal power. The addition of a visitor bicycle rental operation was envisioned in the park's 1995 General Management Plan and was included as part of the park's 2008 [South Rim Visitor Transportation Plan](#). Bright Angel Bicycles started renting

bicycles and running bike tours under a one-year contract in May 2010. More than 6,000 bicycles were rented that first year. The NPS granted this small business a second year to refine the rental program and prepare for a bid on a 10-year contract that would begin in 2012. Bright Angel won the bid and was awarded Grand Canyon's first bicycle rental and café concession contract under which it will operate until 2022. Cycling visitors can ride on portions of the park's multi-use greenway trail system that are open to bicycles, on all park roads open to public vehicular traffic, and on park roads open only to shuttle bus traffic. Visitors with bikes can also make use of the park's shuttle bus system. Providing visitors with the option to experience the park by bike encourages a sustainable lifestyle; reduces the number of motorized visitor vehicles on park roads, and at attractions, scenic pullouts, and parking lots; and reduces carbon emissions due to visitor transportation. Bright Angel Bicycles provides a ride share for volunteer groups working in the canyon and is looking into setting up a more general ride share for local residents. Bright Angel is committed to implementing sustainable business practices. For more information contact Wes Neal or Wendy Robertson of Bright Angel Bicycles at babrentals@gmail.com or 928-638-3055.

Carpooling Meets Intent of Call to Action Goal #23 at Petrified Forest National Park

An effective carpool system at Petrified Forest National Park showcases a best practice related to Call to Action #23: Go Green. Initiated in 2012, two carpool vans transport nine employees to and from park housing in Holbrook five days a week. The carpool collectively saved approximately 90,700 miles driven and some 3,700 gallons of fuel in 2012 (averaging 25 miles per gallon). Superintendent Brad Traver stated, "I'm very happy to see our employees work together to respond to various calls to action, including this one." This carpool program follows all



guidelines established by the Intermountain Regional Office. For more information, contact Brad Traver at brad_traver@nps.gov or 928-524-6228 x225.

Denali National Park and Donyon/ARAMARK Collaborate on Sustainable Vehicle Management

The concessioner Donyon/ARAMARK Joint Venture plays a major role in Denali National Park, providing more than 75 percent of bus transportation in the park and accommodating more than 400,000 park visitors a year. Because private vehicles are prohibited in most of the park due to its wilderness status, buses are key to getting around. The concessioner has implemented a wide range of sustainable transportation initiatives such as using recycled antifreeze in its buses that is not attractive to animals and installing diesel particulate filtration systems to mitigate the extent its fleet contributes to regional air pollution. Donyon/ARAMARK has also taken precautionary steps to ensure safe management of park vehicles by offering continuing education for proper engine and vehicle maintenance, making sure all non-administrative vehicles are equipped with universal spill kits, and that petroleum-based dispensary systems are replaced and repaired to reduce drips and spills in the bus shop. The concessioner conducted a six-week test of a new hybrid bus with a rechargeable battery and an electric motor that is coupled to a diesel engine, reducing carbon dioxide emissions by up to 40 percent while also cutting other noxious air pollutants. Given that the park's existing 110-vehicle fleet puts in more than a million miles a year shuttling visitors, the potential benefit of these hybrids buses could be substantial. Donyon/ARAMARK has helped achieve a 20 percent reduction in greenhouse gas emissions at Denali since 2008 by designing and implementing programs and processes that minimize the operation's overall environmental footprint at the park. For more information, contact Lilly Capell of ARAMARK at capell-lilly@aramark.com or 907-978-3894.

There are many ways to share success stories. Visit the [Submit Your Best Practice Idea](#) link on the Best Practices page of the My Green Parks website, or e-mail GreenParksPlan@nps.gov with your story for sharing.