

Alternative Transportation Systems in America's National Parks

"The primary duty of the National Park Service is to protect the national parks and national monuments under its jurisdiction and keep them as nearly in their natural state as this can be done in view of the fact that access to them must be provided in order that they may be used and enjoyed." *Stephen Mather (First National Park Service Director, 1917-1929), February 1925.*

A visit to any one of America's 388 units of the National Park System affects visitors on many different levels. Americans frequently visit national parks to connect with and learn about their natural and cultural heritage. Visitors from abroad come to see what has been called, "the greatest idea America ever had." People want to commune with and be inspired by the majestic beauty of the great natural areas conserved by the National Park Service and learn from and bond with the treasured cultural and historic sites maintained by the Service.

As America has grown and the nationwide interstate highway system expanded, we have become a nation of automobile drivers. Visitors to national parks, more often than not, arrive by some form of private mechanized transportation, and as a result, some parks find the resources they are mandated to protect in peril. The popularity and accessibility to national parks, combined with the increasing numbers of automobiles have stretched park roadways beyond their limits. Vehicle congestion in many national parks causes traffic delays as well as noise and air pollution that significantly detracts from the visitor's experience and threatens the parks ability to protect the resource. Ultimately, the visitor's ability to fully appreciate the serenity of the parks and enjoy recreational opportunities can be impaired.

Alternative forms of transportation, from buses to railroads, have always played an important role in the American park experience. Today, alternative transportation systems in national parks are helping to relieve traffic congestion, improve the visitor experience, and protect our natural and cultural heritage resources. Transit systems in the parks vary in size from single vehicle vans to bus fleets. These alternative transportation systems are helping to solve a growing congestion problem throughout the National Park System.

The National Park Service launched *The Alternative Transportation Program in 1988* to coordinate policies, projects and activities related to planning, partnering, and implementing alternative transportation systems within and to National Park System units. The introduction of visitor transit systems has gone a long way toward alleviating traffic problems in many parks. Park roads and visitor transit systems are intended to enhance the visitor experience, and at the same time, protect park resources. Environmentally friendly transportation is, in many ways, the vital connection between the National Park Service mission of resource protection and visitor enjoyment.

Listed below are some of the major achievements of the National Park Service Alternative Transportation Program and additional information about alternative fuel systems currently in use. There is also a list provided of NPS sites that have alternative transportation programs or partnerships that provide transportation. Visitors can learn more about what the National Park Service is doing to enhance their experiences in parks and to conserve the resources they are mandated to protect by visiting our ***Alternative Transportation in America's National Parks*** website at:
http://www.nps.gov/pub_aff/trans.htm

National Park Service Alternative Transportation Systems Highlights and Facts

Many units of the National Park units are working with partners to develop Alternative Transportation Systems (ATS) to address shared problems. At many park units, shuttle buses, trams, ferries, and other types of alternative transportation reduce traffic congestion and improve the visitor experience and the quality of life in surrounding communities.

Partnering helps provide NPS units with the staff, technical expertise, and diverse and stable financial support structure it needs to address transportation challenges. The National Park Service works with a variety of partners to develop ATS, and as a result, these systems benefit visitors and local residents.

Program Highlights and Achievements:

Acadia National Park, ME: A strong cooperation led to the successful development of the Acadia National Park Island Explorer shuttle bus system in the summer of 1999. To develop the system of propane-fueled buses, Acadia worked with Bar Harbor and other local towns, the Mount Desert Island League of Towns, the Friends of Acadia, Downeast Transportation, Inc., local businesses, and state and federal transportation agencies. Acadia National Park, area businesses, and local municipalities contribute funding so that visitors can ride free of charge during the Memorial Day to Labor Day season. To enhance the Island Explorer system, L.L. Bean gave the Friends of Acadia a \$1 million grant in 2002.

Mount Rainier National Park, WA: Mount Rainier National Park has implemented alternative transportation solutions that rely on strong relationships with many different partners — concessionaires, transportation providers, local residents and business owners, local governments and tribal councils, non-profit organizations, the Washington Department of Transportation, the Washington Tourism Department, and the U.S. Forest Service. Design charrettes and technical planning sessions reached out to local communities to consider different transportation options, the Forest Service's regional office identified additional partners, and all partners were informed as to available funding options. Three operators now provide transportation services between the park and nearby towns. Mount Rainier National Park has a long history of alternative-transportation partnerships.

Lowell National Historical Park, MA: At Lowell National Historical Park, canal boats and historic trolleys transport visitors to historic buildings, museums, the park visitor center, and the center of the city of Lowell. Lowell is now partnering with local residents, the city of Lowell, the Lowell Regional Transit Authority, the local Metropolitan Planning Organization, and the New England Electric Railway Company to expand the historic trolley system, including connecting the system to regional buses and the commuter rail system. In addition, the partners are looking to create a new national

trolley museum. These partnerships build on the initial public-private partnership that led to the park's creation by Congress in 1978. Lowell National Historical Park has hosted many one-on-one meetings with local and state legislators to discuss the possibility of expanding its historic trolley service.

Zion National Park, UT: In 2002, Zion National Park restricted vehicle use on Zion Canyon Scenic Drive from April through October. Instead of allowing unrestricted access, visitors and local residents now use a fleet of 30 propane-powered shuttle buses to visit attractions in Zion Canyon and the local town of Springdale. Zion National Park worked closely with the community of Springdale, local businesses, Zion Natural History Association, Springdale Visitors Bureau, Utah Department of Transportation, Federal Highway Administration, and park concessionaires to develop its ATS. To help keep communities informed and to represent park interests in transportation planning, park representatives attend monthly meetings of the Springdale Visitors Bureau. In addition, the park supports an "Ambassadors' Training" program that allows trained businesses to put a shield in their windows stating that they can answer questions about the park and provide park information. Zion National Park involved local residents, leaders, and businesses in its ATS planning efforts from the start.

Glacier National Park, MT: In 2001 and 2002, the National Park Service worked with the National Park Foundation and the Ford Motor Company to restore 34 of the park's legendary red touring buses and added modern safety features and engines that run on clean-burning propane. The unique canvas-topped buses give visitors a sense of the park's history and a one-of-a-kind panoramic view of the park's natural beauty.

Yellowstone National Park, ID/MT/WY: In ????, the historic Yellow buses were modernized versions of the park's historic yellow touring buses.

Great Smoky Mountains National Park, TN.NC: In 2004, the park Maintenance Division began converting a large portion of its diesel vehicles, including road graders, dump trucks, front end loaders and tractors, to biodiesel fuel with low NOx additive. At Cades Cove, thanks to the generous donation by TVA in November 2004, the Park now owns and utilizes some 14 electric utility vehicles. The Cades Cove Maintenance staff mainly uses them to perform campground maintenance operations. The donation provided electric motor cars, electric John Deere Gators, electric club cars, electric bikes, and an electric mower. In addition, the Great Smoky Mountains Institute at Tremont has one of the utility vehicles for use at the Institute. These vehicles have proven to be very efficient for the types of activities they are used for in the campground and at Tremont Institute.

Alternative Fuels Used in the NPS:

Electric Vehicles

Grand Canyon National Park, AZ: Visitors can ride electric buses to park attractions. In 2001, along with park buses fueled by compressed natural gas and

liquefied natural gas, these buses had approximately 4.5 million visitors. Electric buses and trams are also used at **Gateway National Recreation Area, NY**, **Cumberland Island National Seashore, GA**, and **Lyndon B. Johnson National Historic Park, TX**.

Ethanol-Powered Snowmobiles

Yellowstone National Park, ID/MT/WY: In 1998, the park began fueling all of its snowmobiles with a 10 percent ethanol/90 percent diesel fuel mix called E10. Using E10 reduces toxicity, smoke, unpleasant odors, and emissions of hydrocarbons, carbon monoxide, particulate matter, and pollutants that cause smog. As a result, Yellowstone requires that E10 be used in all of its gasoline-powered park vehicles. Yellowstone's use of alternative fuels is part of its "Greening the Environment" program, which looks at making all facets of the park, including transportation, cleaning products, laundry, and facility maintenance, more environmentally sustainable.

Propane-Powered Shuttle Buses

Zion National Park, UT: Zion uses a shuttle bus system to take visitors to both stops in the nearby community of Springdale and to park attractions. During the peak visitation months of April through October, personal vehicle use is restricted in the most visited area of the park, Zion Canyon. The shuttle bus system has reduced noise near park roadways by 9.6 decibels, which is the same reduction that would result from building a 12- to 15-foot-tall noise barrier along the road. Thanks to this increased quiet, Zion park staff report that visitors are now able to hear rushing streams and can even, occasionally, spot cougars. In 2000, the 30 propane shuttle buses at Zion eliminated 42,000 vehicle trips and allowed visitors to get out and enjoy the park instead of searching for a parking space.

Natural Gas Vehicles

Many units of the NPS system use compressed natural gas (CNG), which is gas that has been pressurized so that upon its release it creates energy, or liquefied natural gas (LNG) to power a variety of vehicles.

Grand Canyon National Park, AZ: uses both CNG and LNG to fuel some of its shuttle buses.

George Washington Memorial Parkway, VA: operates several maintenance trucks powered by CNG.

Water Vehicles Fueled by Biodiesel

Hawaii Volcanoes National Park, HI: In 2000, the park launched a three-year demonstration program to fuel all of its land and water vehicles with biodiesel. The first park to use only biodiesel to power its entire fleet, Hawaii Volcanoes was one of 32 park areas selected to receive U.S. Department of Energy funding to promote the development and use of alternative fuels.

Channel Islands National Park, CA: Biodiesel is used to power the entire park fleet of water vehicles, including its research and crew boats. Park staff use the boats daily to transport supplies and staff and to monitor park resources – including 145 types of plants and animals that are found only in the park. Channel Islands is now working to have all the generators, vehicles, and equipment located on one of the park’s islands powered by biodiesel by the end of 2003. Channel Island’s 58-foot boat Sea Ranger II is a “green” vehicle, complete with biodiesel-compatible engines, non-toxic hull paint, a sustainably grown teak interior, recycled flooring, and components that rely on vegetable-based hydraulic and lubricating fluids.

Facts and Figures:

Air Pollution and Haze: Pollutants endanger the health of park visitors, wildlife, plants, waters, and soils. Carbon monoxide, volatile organic carbons, nitrogen oxides, sulfur dioxide, and particulate matter also cause acid rain and haze, which impairs the visibility of scenic vistas.

Impacts to Roadsides: When parking areas are full, many visitors park their cars on road shoulders or in other undesignated areas, damaging plants, animal habitats, and historic monuments. At Gettysburg National Military Park in Pennsylvania, undesignated parking has damaged signs and historic monuments and endangered Civil War artifacts possibly buried in road shoulders.

Noise Pollution: Motor vehicle noise can drown out natural quiet and the sounds of waterfalls, native birds, and other park wildlife. Since most animals use their sense of hearing to avoid predators, find food, and communicate, noise may also lead to wildlife injuries and cause species to abandon their habitat, eat less, and have fewer offspring. By relieving traffic congestion, ATS help protect sensitive park resources. What’s more, many ATS use vehicles that run on alternative fuels like electricity, natural gas, or propane. Compared to gasoline or diesel vehicles, alternative fuel vehicles produce fewer pollutants and less noise.

National Parks with Alternative Transportation Systems

Acadia National Park, ME: Bus transit. The Island Explorer consists of 17 propane powered, mid size, transit buses that operate on eight routes that connect campgrounds and motels with destinations in Acadia NP and the adjacent communities. The buses which are operated by Downeast transportation Inc, a nonprofit transit provider, are owned by the NPS and the Maine Department of Transportation.

Adams National Historical Park, MA: Historic Trolley & Public Transit. A trolley bus provides regularly scheduled shuttle service between the park visitor center and the historic homes. The trolley is free of charge and departs approximately every thirty minutes on the quarter hour from 9:00 a.m. to 5:00 p.m. during the season. The park visitor center can be reached via the MBTA "T" Subway System from Boston.

Apostle Islands National Lakeshore, WI: Water Transit (Tour Boat). The headquarters visitor center is accessible by road; most other facilities are accessible only by water. Excursion boat trips leave from Bayfield daily from late May to mid-October. The Apostle Islands Cruise Service offers a variety of excursion trips and a camper and hiker shuttle to several islands. Cruises provide views of most of the islands, as well as close looks at dramatic sandstone cliffs and historic lighthouses. The Cruise Service also operates a water taxi service between Bayfield and any island for up to six passengers per trip.

Arches National Park, UT: Four-Wheel Drive Vehicle Tours. Tours are offered on designated backcountry roads. This is managed under 3 concessions contracts.

Big South Fork National River and Recreation Area, TN: Rail System (Scenic Railway Excursions). Big South Fork Scenic Railway utilizes a 1950's era rail engine to transport passengers from Stearns, KY into Big South Fork National River and Recreation Area with a 1.5 hour stop at the Blue Heron Mining Community. The line operates from early April through October. The railway offers an alternative means of entry into the park.

Biscayne National Park, FL: Water Transit (Tour Boat). Since the park is 95% marine, water transit (Concession Tour Boats and Island Transportation) is a primary mode of access. The park offers year-round, daily snorkeling and ranger-guided glass-bottom boat trips to the coral reef, along with weekend SCUBA trips. During winter (usually December through April) a shuttle transports campers to Elliott Key. Ranger-guided island tours are offered every Sunday during winter. For more information contact the park's concessioner at 305-230-1100.

Blue Ridge Parkway, VA/TN/NC: Bus Transit.

Boston Harbor Islands National Recreation Area, MA: Water Transit (Passenger Ferries). Passenger ferries link the islands to the mainland at several locations. The Massachusetts Bay Transit Authority connects to the major departure points for the

islands. Passenger Ferries connect to Georges Island where water shuttles take visitors to other islands. Access is from downtown Boston and also from Hingham, Hull and Quincy on the South Shore. In season, regularly scheduled ferries connect to Georges Island where water shuttles take visitors to other islands.

Boston National Historical Park including Boston African-American National Historical Park, MA: Public Transit. The visitor center is at the State Street stop of the Blue and Orange subway lines. Water transportation runs frequently between downtown Boston and the Charlestown Navy Yard. The park is accessible by a water taxi and regularly scheduled water shuttles, busses, and the “T” (underground rail).

Bryce Canyon National Park, UT: Bus Transit. Upon arriving at Bryce Canyon, Utah, visitors can use the Bryce Canyon Shuttle to enter and visit Bryce Canyon National Park. The shuttle is available May through September and buses run every 12-15 minutes. The Bryce Canyon Shuttle is voluntary with shuttle stops at the shuttle staging area, Ruby's Inn and Ruby's Campground, Visitor Center, Bryce Canyon Lodge, Sunset and North campgrounds, and view points in the main amphitheater. Riding the shuttle is free with payment of park entrance fees. Although not required, use of the Bryce Canyon Shuttle helps protect this world class resource, minimizing vehicle congestion and emissions. The Contract operated buses are currently powered by diesel fuel. For more information about using the shuttle service, go to <http://www.nps.gov/brca/shuttle.html>.

Cabrillo National Monument, CA: Public Transit. A San Diego Transit bus travels from the Old Town San Diego transit center to the park throughout the day. The transit center is the connecting point for the non-polluting electric trolley system, which serves visitors staying at Mission Valley and downtown hotels, and the Coaster, which transports visitors staying in the beach communities north of San Diego. The San Diego Transit buses use clean, compressed natural gas.

Canyon De Chelly National Monument, AZ: Truck Tours. Truck Tours are offered to the Canyon Bottom using 4 & 6 wheel trucks. Park does not contract with vehicle provider - Thunderbird Lodge which provides the service.

Canyonlands National Park, UT: Four-Wheel Drive Vehicle Tours. Tours are offered on designated backcountry roads. This is managed under 3 concessions contracts. Calmwater tours, backpacker drop-off, cargo hauling, and canoe haul-out service is provided by two concessioners.

Cape Cod National Seashore, MA: Bus Transit. Bicycle. Shuttle buses are owned by the NPS but are operated by the Cape Cod Transit Authority. The Cape Cod Rail Trail bicycle trail extends from Dennis, MA to South Wellfleet, MA (mid-point in the National Seashore). There are three additional paved bicycle trails within the park.

Cape Lookout National Seashore, NC: Water Transit (Passenger & Vehicle Ferry). Private ferry service to the park is offered mid-March to the first weekend in December. Cape Lookout National Seashore is accessible only through private ferries leaving from

Harkers Island, Davis, Atlantic, Beaufort, Morehead City and Ocracoke or your personal boat. Ferries leaving from the communities of Harkers Island, Beaufort, Morehead City and Ocracoke, NC carry passengers only. The ferries from Davis and Atlantic, NC can transport passengers and 4-wheel drive vehicles. For additional information call (252)728-2250, 8:30 AM - 4:30 PM ET.

Channel Islands National Park, CA: Water Transit & Air Transit. Island Packers is the park's concessionaire for boat travel departing from Ventura and Channel Islands Harbors to all of the islands. A variety of trips, from half-day to multi-day, are offered. For prices, schedules, and reservations, call: (805) 642-1393 or go to <http://www.islandpackers.com>. Truth Aquatics is the park's concessionaire for boat travel departing from Santa Barbara Harbor to all of the islands. A variety of trips, from one to multi-day, are offered. For prices, schedules, and reservations, call : (805) 962-1127. Channel Islands Aviation, located at the Camarillo airport, is the park's concessionaire for air travel to Santa Rosa Island. Trips vary from one-day to multi-day camping excursions. For prices, schedules, and reservations, call: (805) 987-1301.

Chesapeake & Ohio Canal National Historical Park, MD, VA, D.C.: Canal Boat, Bicycle. Seasonal historic canal barge tours. This is a mule-drawn boat ride at Georgetown or Great Falls. One-hour roundtrip rides are available on Wednesdays through Sundays at 11 a.m. and 3 p.m. On Saturdays and Sundays, there will be an additional trip at 1:30 p.m. Hiking, bicycling, and horseback riding (from mile 16.6 to mile 184.5) are the most popular ways to travel through the park. There are many access points to the park.

Chiricahua National Monument, AZ: Van Transit. Vans pick up and drop off hikers at a designated trailhead. This hiker shuttle service provides visitors with alternative hiking opportunities as well as mitigating parking problems at busy trailheads and reducing the overall level of vehicle traffic along an important wildlife corridor.

Crater Lake National Park, OR: Water Transit (Tour Boat). Ranger guided boat tours are offered of Crater Lake. The transportation system consists of 3 tour boats used for supporting interpretive tours on Crater Lake. The 48-passenger, fiberglass-hull, open boats are operated by the park's concessioner. Tickets for the boats are available for a fee--the interpretation is free.

Cumberland Island National Seashore, GA: Water Transit (Passenger Ferry). Cumberland Island is located seven miles east of St. Marys, Georgia, and is accessible by a concession operated passenger ferry. The ferry does not transport pets, bicycles, kayaks, or cars. Charter services are available through an NPS concessionaire.

Curecanti National Recreation Area, CO: Water Transit. Tour Boats are available.

Cuyahoga Valley National Park, OH: Scenic Rail. Visitors can tour CVNP by train. Cuyahoga Valley Scenic Railroad offers several different excursions, from 1.75-hour round-trip rides to day-long adventures. The train, operated by Cuyahoga Valley Scenic Railroad, (www.cvsr.com) operates year round.

Dayton Aviation Heritage National Historical Park, OH: Public Transit. The Greater Dayton Regional Transit Authority provides bus service to the park. The RTA is the region's public transportation leader. More than 4,400 RTA bus stops are located countywide. The RTA fleet is comprised of diesel buses and electric trolley buses.

Denali National Park and Preserve, AK: Access to Denali is available during the summer season from Anchorage and Fairbanks with daily railroad, bus and van services. Off season service is limited to a weekly train schedule (from Anchorage to Fairbanks on Saturdays; from Fairbanks to Anchorage on Sundays). During the summer season area hotels provide shuttle service from the Alaska Railroad depot, to area hotels and the Park Wilderness Access Center and the Denali Visitor Center. Free buses operate in the Entrance Area and to the Savage River. Road restrictions on private vehicles are in place beyond Mile 15. Travel by bus provides better wildlife viewing opportunities and fewer disturbances to wildlife along the road than the use of private vehicles. The Denali Visitor Transportation System and Tour Buses operate into the interior of the Park. Advance reservations can be made for both systems. For more information, see: www.nps.gov/dena.

Devils Postpile National Monument, CA: Bus Transit (Shuttle Service). From late June to early September day-use visitors to the Devils Postpile/Reds Meadow area must ride the shuttle bus. Managed in cooperation with the U.S. Forest Service/Forest Service Permit and using Forest Service Rec Fee Demo funds.

Dinosaur National Monument, CO: Tram. The National Park provides a contract tram to move visitors from a tram station near the largest parking area to Dinosaur Quarry Visitor Center. The service is free and operates from Labor Day to Memorial Day, seven days per week. The tram picks up and drops off approximately every 15 minutes.

Dry Tortugas National Park, FL: Public Transit (Ferry or Seaplane). The only way to reach Dry Tortugas National Park is by boat or seaplane.

Eugene O'Neill National Historic Site, CA: Van Shuttle. Transportation to the park is provided by a free shuttle. Private vehicles do not have access to the park due to its location. Tour pick-up times are Wednesday-Sundays at 10:00 a.m. and 12:30 p.m. all year. Closed Thanksgiving, Christmas and New Year's Day. This shuttle must be taken to see the historic site.

Everglades National Park, FL: Tram Transit & Water Transit. There is a Shark Valley tram tour offered. The park's concessioners offer several options, including boat tours and tram tours.

Fire Island National Seashore, NY: Water Transit (Passenger Ferry). When on Fire Island, water taxis can shuttle you from point to point.

Fort Matanzas National Monument, FL: Water Transit (Tour Boat). The only way to reach the fort is by way of the ferry.

Fort McHenry National Monument & Historic Shrine, MD: Public Transit. Commercial shuttles (through Incidental Business Permit) brings passengers from Baltimore's Inner Harbor area and drops off passengers at the visitor center. Water Taxis drop passengers off at a city dock located adjacent to park grounds. Fort McHenry is considered a key attraction for most Inner Harbor Baltimore shuttle systems and in 2004 approximately 50,000 of the park's 610,000 visitor arrived by boat. This number is expected to increase in 2005 as two competing water taxis have partnered for only one operation.

Fort Sumter National Monument, SC: Water Transit (Tour Boat). Fort Sumter is located 3.3 miles via water from downtown Charleston, and must be reached by boat. Fort Sumter Tours, Inc., an authorized National Park Service concessionaire, is the current operator. Two concession ferry departure sites are currently available to Fort Sumter. The primary site is located at the Fort Sumter Visitor Education Center at Liberty Square in downtown Charleston. The secondary departure site is located at Patriot's Point in Mt. Pleasant at the Patriots Point Maritime Museum. Fort Sumter Tours is the only commercial boat transportation to Fort Sumter, the island fort where the Civil War began. The tour is fully narrated and explains many points of interest and historic significance.

Gates of the Arctic National Park & Preserve, AK: Public Transit. Air Taxis from Fairbanks & Charter flights. Bush charters are available from Bettles and Coldfoot into the park. Scheduled air taxis from Fairbanks serve Anaktuvuk Pass, Bettles, and Coldfoot. Charter flights may also be arranged.

Gateway National Recreation Area including Jamaica Bay, Staten Island, & Sandy Hook Units, NY/NJ: Water Transit (Passenger Ferries).

Gettysburg National Military Park including Eisenhower National Historic Site, PA: Bus Transit. Bus tours of the park are available. A shuttle bus leaving from the Gettysburg National Military Park Visitor Center takes visitors to Eisenhower NHS.

Glacier National Park, MT/WY: Bus Tours, Public Transit, Water Transit, hiking tours and horseback tours. Sun Tours and Glacier Park, Inc., offer interpretive motor vehicle tours in Glacier. Glacier Park, Inc. offers tours on gasoline and propane fueled, refurbished, historic 1930s vintage buses. They also offer a hiker shuttle service on the Going to the Sun Road and up the east side of the park from East Glacier to St. Mary, Many Glacier and Waterton, Canada. Waterton Inter Nation Shoreline Cruise Company offers water transit from Waterton Lakes National Park in Canada to Goat Haunt in Glacier National Park. Lake tours are also available on biodiesel fueled vessels from Glacier Park Boat Company on Lake McDonald, Two Medicine Lake, St. Mary Lake, Swiftcurrent Lake and Lake Josephine. Glacier Wilderness Guides provides guided hiking, backpacking and porter services. Horseback rides and packing services are provided by Mule Shoe Outfitters. Limited shuttle and taxi service are available from

Kalispell airport and train stations in West Glacier and East Glacier to the park. AMTRAK's Empire Builder stops at East and West Glacier daily. The Going-to-the-Sun Road rehabilitation will also include a robust visitor shuttle to begin service in 2007 along with a variety of information services and expanded public information to ensure the public has an accurate understanding of the status of the Going-to-the-Sun Road rehabilitation as well the enhanced visitor services including transit opportunities along the road.

Glacier Bay National Park & Preserve, AK: Water Transit (Tour Boat and Passenger Ferries) & Air Transit. Water transportation is provided via concession operated tour and charter vessels and passenger ferries which provide access to the park from surrounding communities and to the park backcountry. A daily camper/kayak transportation service is operated by Glacier Bay Lodge & Tours from late May to early September offering drop-off & pick-up at selected backcountry sites. Bus and van transportation between Gustavus and Bartlett Cove is provided by late May through early September. Air-taxi service is available via small float and wheel planes operating out of local and regional airports.

Glen Canyon National Recreation Area, UT: Water Transit & Shuttle Service. Boat Tours are offered. The primary form of transportation within the park is by boat. In-park shuttle services are available at Wahweap, Bullfrog, Halls Crossing, and Hite.

Golden Gate National Recreation Area, CA: Public Transit. Southside (SF and San Mateo Counties) – SF MUNI and SamTrans service via standard buses, electric trolley buses and LRV's to many park sites during most hours, seven days a week, throughout the year. Northside (Marin County) – SF MUNI (one route – Sundays only), Golden Gate Transit and the West Marin Stagecoach service via mini-buses and standard buses to some park sites during limited hours; weekends or seven days a week, throughout the year.

Private Transit (water transit). Blue and Gold passenger ferry to Alcatraz Island, seven days a week throughout the year.

Governors Island National Monument, NY: The only access is by Water Transit – passenger and vehicle ferry. There are plans to develop to develop additional to-island and on-island transportation for visitors. On-island transportation for visitors is not yet available. Electric carts are used by park staff for transportation on the island.

Grand Canyon National Park, AZ: Bus Transit (free shuttle), Public Transit (for fee) and Tour Bus (for fee). Year round contractor operated (Paul Revere Transportation) free shuttle system on the South Rim on three routes (two to scenic overlooks and trailheads; one within Village to visitor facilities). Shuttles for fee into South Rim (Grand Canyon Coaches & Grand Canyon Eco-Shuttle) and between South and North Rims (Trans Canyon Shuttle). Concessioner (Xanterra) operated tours for fee on South Rim. Grand Canyon Railway operates daily from Williams, AZ to the park. SOUTH RIM: Free shuttle service is available year round throughout Grand Canyon Village and out to the South Kaibab Trailhead.

Grand Teton National Park (includes John D. Rockefeller, Jr. Memorial Parkway), WY: Bus Transit & Shuttle Service. The Grand Teton Lodge Company offers tour bus and shuttle service.

Great Smoky Mountains National Park, NC/TN: Historic Trolley which is part of Gatlinburg/Hay Ride. The City of Gatlinburg (Trolley Department) provides trolley service to the Park for three locations -- Sugarlands Visitor Center, Laurel Falls Trailhead, and Elkmont campground. Service is seasonal starting in June and running through the end of October. Daily headways are 90 minutes with service beginning at 9:00 a.m. at the Aquarium/Mass Transit Center in Gatlinburg and ending with the final return trip back to Gatlinburg from Elkmont campground at 6:20 p.m. Annual ridership for 2004 was just over 12,000 passengers. All Gatlinburg trolleys are running on a B-20 biodiesel mix. Visitors to Cades Cove, a popular destination, can participate on a hayride as an alternative to traveling by vehicle. The hayride, operated by the Cades Cove horse stable concessioner, travels around the 11-mile, one-way Cades Cove Loop Road which becomes very congested during peak months.

Gulf Islands National Seashore, MS/AL/FL: Water Transit (Passenger Ferry).

Harpers Ferry National Historical Park, WV: Bus Transit (Shuttle Service), A shuttle system connects the park visitor center with the lower town district. The Harpers Ferry System has operated since June 1990 and was one of the first modern prototype ATS. In June 2005, after extensive investigation of alternative technologies and bus configurations, the original buses were replaced with 37 passenger busses that operate on modern diesel technology. The new n buses are very quiet and with the use of bio-diesel fuel, much more effective in preserving cleaner park air.

Hot Springs National Park, AR: Public Transit (Public Trolley). The City of Hot Springs runs a trolley to the tower on Hot Springs Mountain and to the Gulpha Gorge Campground. May-October.

Independence National Historical Park, PA: Public Transit. Public transportation options are available within walking distance of the park, as well as privately owned, tourist-oriented transportation including carriages, duck boats, trolleys and double-decker buses.

Indiana Dunes National Lakeshore, IN: Railroad Transit. South Shore Railroad operates a passenger service through the park between South Bend and Chicago.

Isle Royale National Park, MI: Water Transit (Passenger Ferry) & Air Transit (Seaplane). Passenger ferries from Houghton, Michigan; Copper Harbor, Michigan; and Grand Portage, Minnesota provide boat access to Isle Royale. Seaplane service is provided from Houghton, Michigan. One ferry service is operated by the NPS and the remaining are managed and operated through park concession contracts. The seaplane is operated through a park concession contract.

Jefferson National Expansion Memorial, MO: Public Transit. Jefferson National Expansion Memorial is located at the Laclede's Landing Metro stop.

Johnstown Flood National Memorial, PA: Van Transit. A 12 passenger gas powered van transports visitors to the South Fork Hunting and Fishing Club, the Johnstown Flood Museum and the Grand View Cemetery. The park provides thematic interpretation about other flood related sites during the van ride. Staffing for this program has been funded by the National Park Foundation and the Ford Company, Proud Partner Transportation Interpreter Program.

Kalaupapa National Historical Park, HI: Bus Transit. A commercial tour company offers tours.

Katmai National Park & Preserve, AK: Float Plane, Ground and Water Transit. The concessioner offers a tour bus service and backpacker shuttle service at Brooks Camp. Daily ranger-guided bus tours are given from Brooks Camp to the Valley of 10,000 Smokes. Brooks Camp can only be reached via small float plane. The Katmai coast can only be reached by small float plane or boat. Commercial airlines provide daily flights into King Salmon, Homer, and Kodiak. Several commercial airlines provide daily flights into King Salmon as there is no road access. Brooks Camp, along the Brooks River approximately 30 air miles from King Salmon, is a common destination for visitors to the Park. Aniakchak National Monument and Preserve is accessible only by Air Taxi. Alagnak Wild River Air Taxis provide fly-in rafting trips down the river and access to numerous fishing lodges on the River

Kennesaw Mountain National Battlefield Park, GA: Bus Transit. A shuttle service is offered.

Keweenaw National Historical Park, MI: Cog-rail Tramway & Public Transit. The Cog-rail tramway is the park's only operating Alternative Transportation System and is located in the Quincy unit. It provides visitor access between the historic Quincy Host and the Quincy Mine. Charter bus service is available through Superior Coaches and Delivery of Houghton. Intercity bus service is provided by Greyhound Bus Lines.

Lake Mead National Recreation Area, NV: Boat Tours.

Lowell National Historical Park, MA: Lowell National Historical Park interpretive sites are dispersed along a 5.6-mile historic canal system which winds it way through a densely built city. An integrated transportation system of canal boats, trolleys and walkway allow visitors to experience the Park's resources without requiring them to drive by car to the various points of interest. The system makes use of the network of canals and industrial railroad tracks that crisscross the city.

Visitors can ride on a replica trolley of the early 1900's from site to site during their visit. The trolley provides transportation to the Visitor Center, Boott Cotton Mills Museum,

Mill Girls and Immigrant Exhibit, Suffolk Mill Turbine Exhibit, and other attractions in Lowell. The trolleys run daily from March through November. Canal boat tours along the Pawtucket Canal and Merrimack River are provided daily throughout the summer season.

Lewis and Clark National Historical Park, OR: Shuttle Bus. The Sunset Empire Transit District and the National Park Services' Fort Clatsop National Memorial is in partnership together for the Lewis and Clark Explorer Shuttle. During the summer months (June through Labor Day) the parking lot in front of the visitor center at Fort Clatsop is accessible by shuttle bus only. Visitors may drive to the park to arrive at Netul Landing, where they board a shuttle bus to the visitor center and Fort Clatsop. Netul Landing also serves as the ends of the 147 mile long Lower Columbia Water Trail and has a kayak/canoe launch and day use facility to support the trail. The Explorer Shuttle connects the communities of Astoria, Warrenton, and Seaside in Oregon, Ilwaco and Long Beach in Washington with the units of the Lewis and Clark National Historical Park, including Fort Clatsop, Fort Stevens State Park (OR), Ecola State Park (OR), and the Lewis and Clark Interpretive Center in Cape Disappointment State Park (WA). The Explorer Shuttle buses are ultra-quiet diesel powered vehicles. The buses feature a special interpretive audio program produced by the National Park Service in conjunction with the Clatsop Nehalem Confederated Tribe.

Lyndon B. Johnson National Historical Park, TX: The National Park Service provides an interpretive bus tour of the LBJ Ranch at Lyndon B. Johnson National Historical Park. The 1 1/4 hour ranger-narrated tour is the only way to see most of the features at the LBJ Ranch, including the Texas White House, LBJ Birthplace and other historic structures. The bus fleet is propane-fueled and the transportation system has been in operation since 1973. Approximately 80% of the park's visitors take advantage of the bus tour, which is operated in partnership with the neighboring LBJ State Park and Historic Site.

Mammoth Cave National Park, KY: Bus Transit (Passenger) & Water Transit (Vehicle Ferry). The NPS operates two vehicle ferries that cross the Green River, both are fueled by Biodiesel. There is no charge for the ferry. The Green River nearly cuts the park in two and the ferries are necessary to access nearly 60 miles of back country trails. The Bus Transit supports the park's interpretive program by providing transportation to and from the outlying cave entrances. Forever-Resorts LLC owns and operates this system which is paid for by visitors at the same time the cave tour tickets are purchased. Of the fleet of 10 buses (school bus style) 6 are fueled by propane and 4 are fueled by gasoline. These buses transport more than 300,000 visitors yearly.

Manhattan Sites (St. Paul's Church National Historic Site), NY: Public Transit. The #55 bus lets off directly in front of St. Paul's Church.

Mesa Verde National Park, CO: Tram

Minute Man National Historical Park, MA: Bus & Rail Transit. MBTA Commuter Rail stops at the Concord Depot. From the Depot, the North Bridge Unit is a 1.5-mile

walk. Also, new this year! Liberty Ride, a guided bus tour of Lexington and Concord (the first of its kind) makes a scheduled stop at the Concord Depot. Tickets may be purchased on the bus.

Mount Rainier National Park, WA: Van Transit. The park works with two IBP (Incidental Business Permit) holders who provide van transportation to the public (usually hikers or climbers) on an on-demand responsive basis from outside of the park boundary. Guided summit climb services on the Emmons-Winthrop Glaciers (under *incidental business* permits) provide van service from the outlying areas to the White River Campground and climb trailhead: Alpine Ascents International (206-378-1927); American Alpine Institute (360-671-1505); Cascade Alpine Guides (800-981-0381); and Mount Rainier Alpine Guides (360-569-2889). The park's hospitality concessioner transports employees throughout the park and the guided mountaineering concessioner transports clients and guides on shuttles. There is a short term plan to provide shuttle services (operated by an unknown entity) for hikers on a section of non-public road.

Muir Woods National Monument: Public Transit. Golden Gate Transit / Marin County pilot project FREE shuttle service via small standard buses, weekends only Memorial Day to Labor Day. Private Transit. Several private operators use small standard buses or special tourist coaches to serve the park, seven days a week, throughout the year.

Natchez National Historical Park, MS: Historic Trolley. The City of Natchez operates a Trolley throughout town and takes visitors to the William Johnson House unit of the park. The trolley does not run on a regular schedule.

National Mall and Memorial Parks, D.C.: Bus Transit. Tourmobile Sightseeing offers daily narrated shuttle tours to 18 major sites on the National Mall and in Arlington National Cemetery. One ticket allows unlimited free re-boarding throughout the day. You will find boarding locations throughout the National Mall, at the major monuments and memorials, and at the Arlington National Cemetery Visitor Center.

National Park of American Samoa, American Samoa: Public Transit. Local "AIGA" buses travel Tutuila from dawn to dusk.

North Cascades National Park includes Ross Lake National Recreation Area and Lake Chelan National Recreation Area, WA: Water Transit & Bus Transit. Ross Lake NRA has a concessioner operated water taxi service. At Lake Chelan NRA, commercial ferry services are offered through private entities. In the summer, a shuttle bus system is offered. This shuttle service originates in Lake Chelan NRA and travels into North Cascades NP. It does not go to Ross Lake NRA. The "LINK" public bus system in Chelan County connects to the passenger ferry at Chelan (Lake Chelan Boat Company) which goes to Stehekin Landing in Lake Chelan National Recreation Area at the opposite end of the lake.

Organ Pipe Cactus National Monument, AZ: Van Transit. The park rents a van and offers a ranger-led ride along the Ajo Mountain Drive. This is a seasonal service, offered once a day from January through mid-March. The drive takes 2 1/2-3 hrs; there is no charge for this ranger-led program.

Perry's Victory & International Peace Memorial, OH: Public Transit (Passenger Ferry & Plane). Access to the island is by public ferry or plane only. There is a bus line on the island. There is no public transportation on the 25-acre grounds of Perry's Victory and International Peace Memorial. In order to travel to South Bass Island, the site of the Monument, there are two scheduled public ferries and commercial air service. On the island there are buses, taxis as well as bike, moped, and golf cart rentals. The island's golf cart fleet is largely battery operated. All public transportation uses fossil fuels. During the winter ice-up, airboat service is offered as an alternative, but the Monument is closed to the public except by appointment.

Pictured Rocks National Lakeshore, MI: Bus and Water Transit. Altran offers a shuttle service to backpackers in the summer. Privately owned (nonconcession operated) tour boat gives tours of the Lakeshore.

Pinnacles National Monument, CA: Bus Transit (Shuttle Service) A visitor shuttle service for the east district is available on weekends during the peak season.

Point Reyes National Seashore, CA: Bus Transit. The park provides an airport bus to shuttle people from Drakes Beach to the lighthouse area for whale watching. Elephant seals and spring wildflowers can be seen from late December through mid-April, on weekends and holidays.

Rocky Mountain National Park, CO: Bus Transit & Public Transit. A shuttle bus in the Moraine Park and Bear Lake Areas is offered during the peak summer season. A private shuttle service is offered to the park as part of public transportation.

Saint Croix National Scenic River, WI: Van and Bus Transit. This service is offered for canoe trips.

Salem Maritime National Historic Site, MA: Water Transit. There are commercial transportation companies within Salem, including trolleys, pedicabs, and horsedrawn carriages.

San Antonio Missions National Historical Park, TX: Public Transit. The City of San Antonio operates a shuttle service that drops/pickups passengers at the park.

San Francisco Maritime National Historical Park, CA: Public Transit. The MUNI bus stops at the site.

San Juan National Historic Site, Puerto Rico: Tram.

San Juan Island National Historical Park, WA: Public Transit (Ferry or Charter Plane). The only way to the Island is by way of the Washington State Ferry or a small charter plane. Shuttle buses stop at both camps daily during the summer season with an abbreviated schedule during spring and fall.

Santa Monica Mountains National Recreation Area, CA: Public Transit. A three year demonstration ParkLink shuttle runs from 8am-8pm in the summer on weekends and holidays. A fare of \$1 or a transfer from connecting Los Angeles MTA buses allows visitors to access the scenic 35-mile route through the heart of the mountains and Malibu coast, including nine popular recreation destinations. The buses are powered by low-sulphur diesel fuel and were funded by the ATP program. Planning is underway to enhance the service by providing addition public transportation links to underserved communities in Los Angeles.

Scotts Bluff National Monument, NE: Van Transit (Shuttle Service). Free shuttle service from the visitor center to the summit is offered in the summer.

Shenandoah National Park, VA: Van Transit. A van travels to Rapidan Camp.

Sleeping Bear Dunes National Lakeshore, MI: Water Transit/Passenger Ferry.

Statue of Liberty National Monument and Ellis Island National Monument, NY: Water Transit (Passenger Ferry) Public Transportation does stop at the location to pick-up the passenger ferries.

Steamtown National Historic Site, PA: Historic Rail. The park operates a steam locomotive that takes visitors throughout the park. The train generally operates 10 months of the year.

Tallgrass Prairie National Preserve, KS: Bus Transit. A bus tour of the Tallgrass Prairie is available.

USS Arizona Memorial, HI: Water Transit. A Tour Boat is offered which is operated by the US Navy in conjunction with the NPS.

Valley Forge National Historical Park, PA: Bus Transit. Valley Forge Bus tours offer daily tours of the park from May through October.

Virgin Islands National Park includes Buck Island Reef National Monument, Virgin Islands: Water Transit/Tour Boat.

Voyageurs National Park, MN: Water Transit (Tour Boat and canoe programs). The headquarters office and three park visitor centers are accessible by road. All overnight sites are accessible only by water. Trailheads are accessible by water or road.

Wolf Trap Farm Park for Performing Arts, VA: Bus Transit. Metro operates shuttle bus from West Falls Church Metro Rail Station. This service begins 2 hours before the concert begins and stops running once the concert begins. It then picks up passengers at the end of the concert with the last shuttle leaving at 11pm.

Wright Brothers National Memorial, NC: Air Tours.

Yellowstone National Park, WY: Bus Transit & Public Transit. Xanterra Parks & Resorts provides bus tours within the park during the summer season. The Lower Loop Tour departs from locations in the southern part of the Park only. The Upper Loop Tour departs from Lake Hotel, Fishing Bridge RV Park, and Canyon Lodge to tour the northern section of the park only. The Grand Loop Tour departs from Gardiner, MT and Mammoth Hot Springs Hotel to tour the entire park in one day. During the winter season, they provide several snowcoach tours from various locations. Please call (307) 344-7311 for information or reservations.

Yosemite National Park, CA: Bus Transit. Yosemite NP offers several concession operated transportation systems. Yosemite Valley Shuttle, Tuolumne Meadows, Wawona, and Badger Pass (Ski Area) are all free systems. Valley Floor Tram, Big Trees Tram and Grand Tours are offered at a cost to the rider. Yosemite Area Regional Transportation System (YARTS), which is joint power of authority operated, is offered at a cost to the rider. This system provides service between the gateway communities and Yosemite NP.

Yukon - Charley Rivers National Preserve, AK: Air Transit & Boat Transit. Air taxis from Fairbanks serve Eagle and Circle. There are no roads into the preserve. Access is via plane or boat.

Zion National Park, UT: Bus Transit (Shuttle Service). The Zion Canyon Scenic Drive is accessible by shuttle bus only from April-October. The shuttles operate in two loops, one making six stops in the town of Springdale and the other making eight stops at points of interest in the park. The shuttle is free. Each bus is fully accessible and can carry two bicycles. There is room onboard for packs, coolers, and strollers.

National Park Service web sites that provide information about Alternative Transportation in the National Parks

Alternative Transportation (Park Facility Management)

<http://www.nps.gov/transportation/alt/index.htm>

<http://www.nps.gov/transportation/alt/wwwa.htm>

<http://www.nps.gov/transportation/alt/brochure.htm>

Alternative Fueled Transportation

<http://www.nps.gov/renew/transportation.htm>

<http://www.nps.gov/transportation/alt/vehicletech.htm>

http://www.nature.nps.gov/sustainabilitynews/Fall_2002/Fall_02_Innovations/Transportation.htm

<http://www.nps.gov/renew/>