



Air and Noise Benefits of Alternative Transportation Systems

Access to and within the National Park System has been a defining experience for generations of visitors.

The National Park Service (NPS) coordinates the planning and implementation of transportation systems that improve the visitor experience and care for national parks by:

- Preserving natural and cultural resources.
- Enhancing visitor safety and security.
- Protecting plant and animal species.
- Reducing congestion.
- Decreasing pollution.

NPS is committed to being a leader in pursuing strategies that can help make park units more enjoyable, cleaner, quieter, and more sustainable for present and future generations.

For more information, visit nps.gov/transportation

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EXPERIENCE YOUR AMERICA™

Many visitors come to National Parks to breathe fresh air and surround themselves with natural peace and quiet.

Many national parks have significant sound and air pollution as well as traffic congestion similar to that found on the city streets that visitors left behind. In some national parks traffic congestion causes lengthy delays that substantially detract from visitor experience.

The NPS has taken steps to alleviate air and noise pollution by implementing alternative transportation systems such as buses, trains, and shuttles. These systems provide relief by reducing the number of pollution-emitting vehicles on park roads.

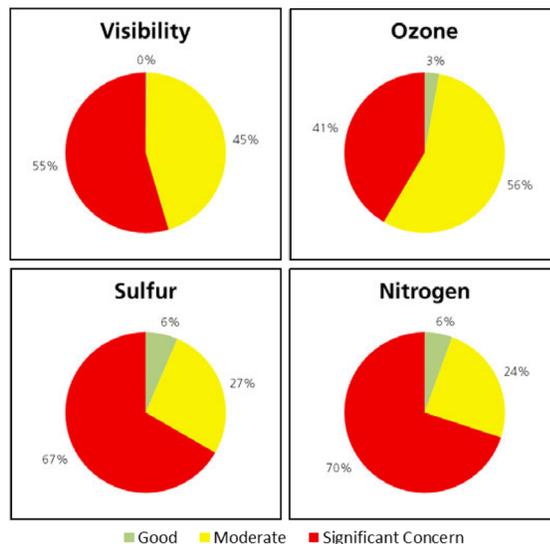
Air

Air quality is important for human health as well as natural and cultural resources. Air pollution includes gases and particles in the air that are emitted by power plants, factories, automobiles, and other sources. This can have serious effects on air quality, wildlife, vegetation, lakes, streams, soils, and visibility. Air pollution impacts the entire National Park System, a major challenge because the mission of the service is to manage and protect resources unimpaired for the enjoyment of future generations.

Many non-attainment areas warrant significant concern for each of the air quality indicators, and very few parks have air quality that is considered to be in good condition. (Source: www.nature.nps.gov/air/aqbasics/index.cfm)

Noise

Our world is getting more noisy. With dramatic increases in traffic, the explosion of digital gadgets and our increasing capacity to reach once-remote areas, solitude is becoming a diminishing resource. Not surprisingly then, many visitors come to parks with silence and tranquility in mind. In fact, 72% of Americans say one of the most important reasons for preserving national parks is to provide opportunities to experience natural peace and the sounds of nature (Haas & Wakefield, 1998). Often, however, cars, buses, and other motorized vehicles are among the most dominant and pervasive sound sources in national park units.



Park air quality summary showing the percentage of parks with specific air quality concerns. (Source: http://www.nature.nps.gov/air/Pubs/pdf/gpra/AQ_Trends_In_Parks_2013.pdf)



A microphone records the sounds of Great Sand Dunes National Park and Preserve in Colorado. (NPS Photo.)

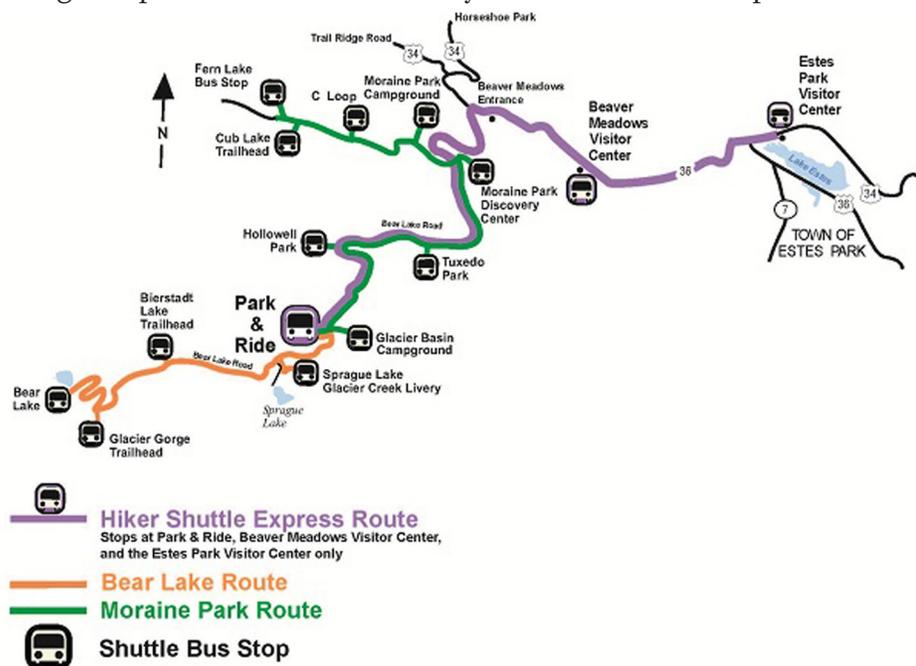
Zion National Park in Utah

At Zion National Park between 1982 and 1997, as many as 5,000 cars a day were lining up on holiday weekends to enter the canyon. Park managers established a shuttle system through the most popular portions of the park in order to mitigate the congestion and noise during peak visitation times. Though the change was initially controversial, today park staff members report an overwhelmingly positive public response. Visitors frequently comment that the park is much more serene and quiet without the presence of cars.

Source: <http://www.nature.nps.gov/sound/sources.cfm>

Rocky Mountain National Park in Colorado

Research and monitoring show the park's air quality is affected by air pollution coming from a variety of human made sources. Air pollution in the park reduces visibility, increases ozone levels, and causes excess nitrogen deposition. Reduced visibility is a basic indicator of pollution



2014 shuttle bus route in Rocky Mountain National Park in Colorado. (NPS graphic)

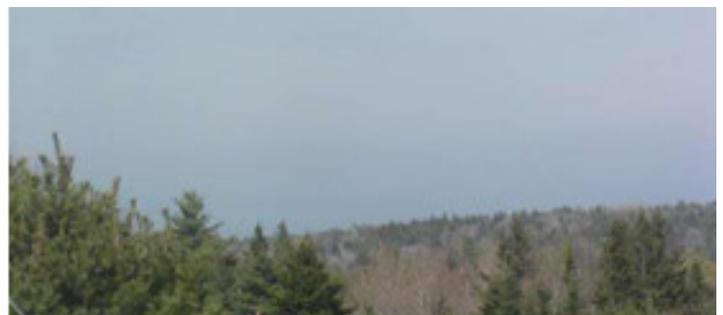


The Zion shuttle creates a positive visitor experience while reducing air and noise pollution in the park. (NPS photo)

in the air. Current visibility in the park varies between 30 to 90 miles, however, there are days when visibility is more than 200 miles. The State of Colorado is working to reduce air pollution attributed to the booming growth of Front Range communities through strategies including engine regulations, vehicle standards, and power plant controls which should improve visibility conditions in the park. The park has also taken action. From late May through early October, the park operates a free shuttle bus along popular corridors. The shuttles connect with the shuttle system in Estes Park, the gateway community for Rocky Mountain National Park.

Acadia National Park in Maine

Acadia National Park is downwind from large urban and industrial areas in the states to the south and west. Polluted air coming from these areas is trapped by the park's steep slopes and high peaks. Air pollutants can harm resources in the park such as surface waters, plants, soils, fish, birds, and visibility. So, what is the National Park Service doing about air pollution at the park? Among other things, they are partnering to provide the environmentally friendly Island Explorer bus system for park visitors, reducing the number of vehicles on some of the busiest roads in the park. The Island Explorer transit system began operations in 2001. The fleet of 29 clean-fuel buses serves Acadia National Park and its surrounding communities. The system operates June to October, and connects campgrounds and lodging with the county airport, municipal harbors, business areas, and the park.



View from McFarland Hill looking northeast showing the difference between clear and hazy days at Acadia (NPS Photo)