National Park Service
U.S. Department of the Interior

Federal Lands Transportation Program Fact Sheet

Intelligent 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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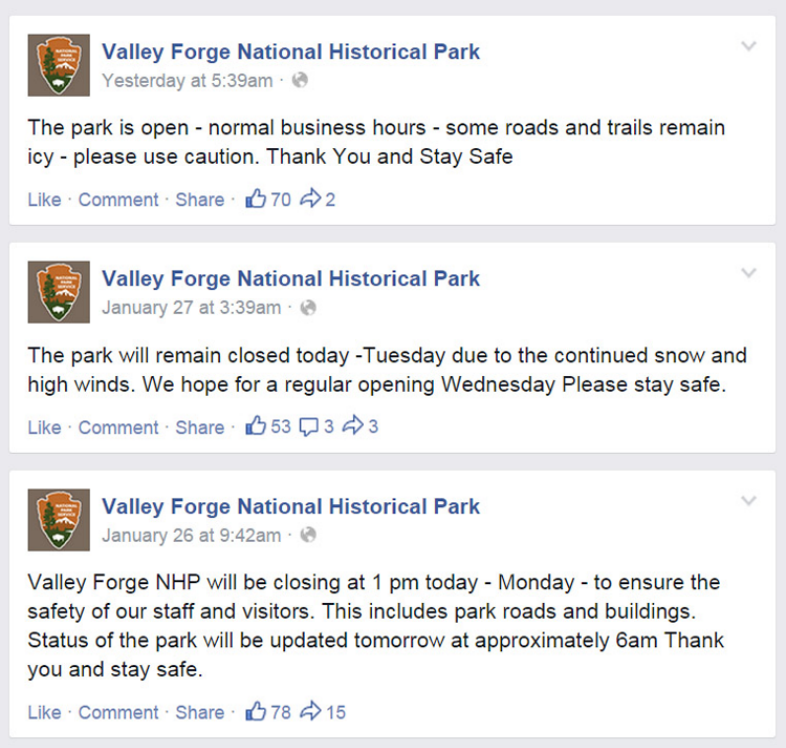
March 2015
EXPERIENCE YOUR AMERICA™

National Park Service units use new technologies to improve the visitor experience, reduce traffic congestion, protect natural and cultural resources, and provide traveler information.



Valley Forge National Historical Park uses social media to provide useful travel information such as storm closures.

Visitation to national park units is expected to grow over the coming years, leading to increased traffic congestion on park roads and in parking areas. Along with causing visitor frustration, traffic congestion can result in air and noise pollution, haze, and impacts to fragile natural and cultural resources.

To help improve the visitor experience, the NPS uses Intelligent Transportation Systems, or ITS. This is the umbrella term for numerous technologies deployed to manage transportation networks.

The goals of ITS efforts are to make better use of existing transportation systems by providing users with information to make more-informed travel decisions while increasing the efficiency and safety of traffic operations. ITS technologies include traffic detectors, weather sensors, computer databases, and variable message signs.

The use of social media applications is seeing the most vigorous activity among all ITS technologies today. Popular social networking sites such as Facebook and Twitter have permitted units to share both interpretive and traveler-related information to visitors at off-site locations. This allows visitors to receive important information related to traffic delays, detours, alternative transportation options, and parking information. For conditions which can change on short-term notice, disseminating information through social media applications can be especially valuable, as mobile devices are becoming an increasingly common means of accessing this data.

ITS allows NPS units to provide visitors and local residents with up-to-the-minute information on roadway congestion, parking and lodging availability, shuttle bus schedules, and other useful information. ITS helps visitors make informed travel decisions in a variety of ways, including:

- Rerouting traffic to available parking areas and to alternative transportation options during times of congestion.
- Directing visitors to less crowded entrances, attractions, and parking areas.
- Monitoring and reporting emergency incidents in order to clear them quickly and reroute traffic.

Rocky Mountain National Park in Colorado

Rocky Mountain National Park, in collaboration with FHWA-Central Federal Lands Highway Division, the Town of Estes Park, Colorado, and the Colorado Department of Transportation tested dynamic message signs (DMS) during the 2011, 2012, and 2013 peak seasons. The purpose of the DMS in the 2011 season was to reduce crowding in the Bear Lake Corridor and in downtown Estes Park, by encouraging visitors to use a Park and Ride and shuttle buses.

This dynamic message sign was located in the Lyons, Colorado area in 2011 to intercept visitors as they traveled to the Rocky Mountain National Park. (FHWA photo)

In the 2012 and 2013 seasons the DMS also became vital to inform visitors about access restrictions on Bear Lake Road during construction. DMS signs were deployed on the major highways leading into Estes Park, all relaying messages to use the Park and Ride and take shuttle buses into Rocky Mountain National Park. In the 2012 and 2013 seasons the signs also said that shuttle buses were the only way to access Bear Lake during construction.

Evaluations were performed each year. Overall findings showed DMS did have a significant impact on the use of the Park and Ride, with over 70% of the riders reporting they saw the messages on the DMS. Both the Park and the Town have expressed interest in pursuing more permanent installations.

Zion National Park In Utah

Facebook is an effective way to share information with park followers.

Zion National Park uses social media to provide visitors and residents with a variety of useful travel information, including shuttle service details.

The park's staff keeps the Facebook page updated on a daily basis with new images, weather forecasts, news of upcoming events, current travel restrictions, and more. The page currently has more than 225,000 "likes," so each posting has the potential to reach a wide audience.