

Innovative Transit Partnership to Enhance National Parks and Gateway Communities

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Introduction

Exploring national parks and other federal lands is a major past time for Americans and international visitors. Transportation and the national parks are intrinsically linked. Park roads, scenic overlooks, hiking trails, and related facilities are the focal points of many visits. Traffic congestion, vehicle-generated noise and air pollution, and deteriorating roadways are concerns at many national parks and other public lands.

The federal land management agencies, the U.S. Department of Transportation, state governments, local communities, foundations, regional organizations, businesses, and other groups are all responding to these concerns and challenges. The implementation and operation of new transit services within national parks, as well as between national parks and gateway communities, represents one approach to addressing these concerns.

At the federal level, the Intermodal Surface Transportation Efficiency Act (ISTEA), the Transportation Equity Act for the 21st Century (TEA-21), the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), presidential directives, and interagency agreements established new directions for transportation within national parks and other federal lands during the 1990s and 2000s.

This paper examines the innovative partnerships among national parks, gateway communities, and other groups to introduce new transit services. Case studies are presented, highlighting new transit services in and around Acadia, Zion, Rocky Mountain, and Glacier national parks. The information presented in this paper should benefit staff and policy makers with the national parks, transportation agencies, gateway communities, and other groups interested in developing and operating transit services in, and adjacent to, national park and other federal lands.

The remainder of this paper is divided into three sections. The case studies are presented next, focusing on the innovative institutional arrangements, service delivery methods, and experience to date with the transit partnerships. The common themes emerging from the case studies are highlighted in the third section. The paper concludes with a discussion of areas for additional research.

Case studies

Acadia National Park. Acadia National Park comprises some 40,000 acres along the coast of Maine, Mount Desert Island, and other islands. Established initially as a National Monument in 1916, and given park status in 1929, Acadia represents one of the older parks in the system. Bar Harbor is the primary gateway community for Acadia, although there are smaller communities located throughout the park, and Ellsworth serves as the main entrance point on the mainland.

Private individuals and groups built much of the infrastructure in the area, including 44 miles of carriage roads constructed under the direction of John D. Rockefeller. Concerns arose in the 1980s about the ability of these roads, small parking lots, and other facilities to accommodate the ever-increasing number of visitors and vehicles.

In response to these concerns, a coordinated approach involving the Acadia National Park, the Maine Department of Transportation, regional organizations, local communities, local businesses, Friends of Acadia, and other groups was undertaken. A general management planning process for the park, initiated in 1987, resulted in agreement to pursue an area-wide transportation system.

The Island Explorer transit system was implemented in the summer of 1999, with eight propane buses operating on six routes, linking hotels and businesses with key destinations in the park. The system has been expanded over the years, with service currently provided on eight routes. Operating from late June to early September, Island Explorer provides free service daily from 7:30 a.m. to 11:00 p.m. Downeast Transportation, a non-profit organization located in the Ellsworth area, operates the service. Real-time information on the status of buses is provided to riders at key locations through an Intelligent Transportation System field operational test, funded by the U.S. Department of Transportation.

Ridership on the Island Explorer has grown from 142,000 passengers during the first year of operation in 1999 to approximately 405,000 riders in 2008. The system averages some 4,980 passengers per day during the peak season. The highest one-day total in 2008 was 8,440 riders.¹

The results from the on-board surveys, conducted every year, show strong support for the service and high levels of satisfaction among riders. Driver friendliness and helpfulness, clean buses, and free fares all generate high levels of satisfaction. The vast majority of riders indicate that the Island Explorer improves the quality of their visit to the Acadia region. While park visitors represent the majority of riders, local residents also use Island Explorer, including going to and from work.²

The 1999 agreement establishing the system included 22 signatories, representing the cooperative efforts of Acadia National Park, the Maine Department of Transportation, Mount Desert Island towns, Friends of Acadia, regional organizations, local businesses, and other groups. Funding for capital and operating expenses has come from a wide range of sources, including traditional and new National Park Service programs, Federal Highways Administration (FHWA), and Federal Transit Administration (FTA) programs and funds from the state, Friends of Acadia, local communities, and other groups and businesses.

The Island Explorer gained a new sponsor in 2002, when L. L. Bean became the single corporate underwriter. With close to 3 million annual visitors to its store in Freeport, L. L. Bean and Acadia share honors as the most popular destinations in the state. Announced as its 90th anniversary gift to the state, the sponsorship reflects the company's values to promote recreation, sound stewardship of the nation's natural resources, and their corporate consciousness to help address local issues. The contribution, which has totaled \$2 million since 2002, was made to Friends of Acadia, which in turn provides the funds to support the Island Explorer. The funding from L. L. Bean has been used to extend service later in the fall, to introduce a bicycle express service, and to match federal funds.

Planning activities and service enhancements continue, using the same partnership approach employed to develop and implement the Island Explorer. A short-range transit plan was prepared for the Island Explorer in 2007. The planning process involved the partner agencies and groups. A number of the recommendations from the plan, including development of the Acadia Gateway Center intermodal facility on the mainland, are being pursued.³

Zion National Park. Zion National Park encompasses 229 square miles of cliff-and-canyon landscape in southwestern Utah. The drive through the canyon is the main highlight of the park for most visitors. Springdale is the gateway community for the park. Traffic congestion on the six-mile dead-end road in the main canyon and lack of parking lead to the consideration of transit options.

A free shuttle bus system has been the only means of transportation for summer visitors to Zion Canyon since 2000. Buses traverse the roadway from 6:30 a.m. to 9:30 p.m., providing access to hiking trails, scenic view points, and Zion Lodge. Overnight guests at Zion Lodge are the only visitors allowed to drive private vehicles on the roadway.

A second shuttle bus route serves the gateway community of Springdale. The Springdale loop includes stops at hotels and activity centers. The two routes connect at the Zion Canyon visitor center allowing passengers to transfer between the two loops. Additional parking spaces were constructed at the center as part of the shuttle bus system. Frequent service, averaging six minutes or less during peak times, is provided on both loops using propane-powered buses and trailers.

Ridership on the shuttles has increased since 2000. In 2001, some 2.13 million trips were made on the shuttles. In 2008, 3 million trips were taken on the shuttle buses.⁴ It is estimated that visitors on the Canyon Loop average 3 to 4 trips a day on the shuttle. Informal feedback from visitors has been positive. The results from an on-board ridership survey, conducted in 2008, should be available soon.

Planning, funding, and implementing the shuttle system in the park and Springdale represent the coordinated efforts of Zion National Park, the National Park Service Denver Service Center, Springdale, the Utah Department of Transportation (UDOT), FHWA, Zion National History Association, local businesses, and other groups. Zion National Park purchased the shuttle buses with McDonald Transit Associates, Inc., to operate the service. Funding options for both vehicle replacement and ongoing operations continue to be explored.

Springdale obtained federal Transportation Enhancement program funds through UDOT for the bus shuttle stops and related streetscape improvements, which were matched by city and Zion National Historical Association funds. The shuttle stops were designed to compliment the communities' road and streetscape elements, which had been constructed by the Works Project Administration in the late 1930s.

Rocky Mountain National Park. Established in 1915, Rocky Mountain National Park is located in north central Colorado. The park encompasses 416 square miles of the Rocky Mountains. Hiking, camping, and wildlife viewing are major visitor activities in the park. Estes Park is the gateway community for the park.

A limited shuttle bus system was implemented in the park in 1978. An expanded free

shuttle bus service was initiated in 2001 to help address the shortage of parking spaces at trailheads and to ease traffic congestion on the park roadways. The shuttle service operates from May to September. The Bear Lake Shuttle operates between Park and Ride and Bear Lake every 10–15 minutes from 7:00 a.m. to 7:00 p.m. The Moraine Park Shuttle provides service between Park and Ride and Fern Lake every 30 minutes from 7:00 a.m. to 7:00 p.m. The Estes Park Hiker Shuttle provides service between the Estes Park Visitor Center and Park and Ride each hour from 6:30 a.m. to 7:30 p.m. An Estes Park Shopper Shuttle also operates from July to September, linking major destinations in the town.

Response to the shuttle bus system has been very positive. Total 2008 ridership for the three routes operating in the park was approximately 337,300.⁵ The system appears to be popular with hikers, and other visitors wishing to view the park without driving.

Planning, implementing, and operating the shuttle bus service represent the coordinated efforts of Rocky Mountain National Park, the Colorado Department of Transportation, the town of Estes Park, and the U.S. Department of Transportation. McDonald Transit Associates, Inc. operates the shuttle service under contract to the park. The partners have worked together to share resources. For example, the park provided three vehicles to the town to initiate the Shopper Shuttle. The town is leasing additional vehicles this year for the Shopper Shuttle. Additional service enhancements and routes are being explored.

Glacier National Park. Established as a National Park in 1910, Glacier includes 1 million acres of glaciated landscape, lakes, forests, and alpine meadows. Gateway communities include Kalispell, Whitefish, Columbia Falls, Browning, and St. Mary.

The Going-to-the-Sun-Road traversing the park opened in 1932, after 11 years of construction. Traveling the road by automobile or the restored historic red buses is a focal point for park visitors. Planning for needed rehabilitation of the historic alpine road began in the 1990s. The planning process involved representatives from Glacier National Park, the Montana Department of Transportation, and FHWA. A Citizens Advisory Committee was actively involved to ensure the perspective of local communities, businesses, Tribal governments, and other groups were considered. To help reduce traffic on the Sun Road during the 8-to-10 year rehabilitation period, the implementation of a shuttle bus system was recommended.

A unique aspect of implementing the shuttle system was the signing of a cooperative interagency agreement among Glacier National Park, the Montana Department of Transportation, and Flathead County. The agreement provided for the purchase and shared use of 22 12-passenger and eight 23-passenger buses. The buses are used on the Sun Road Shuttle service in the summer, and by Flathead County's Eagle Transit and other service providers in the state during the remainder of the year. A combination of Sun Road mitigation funds, FTA funds to the state, and Montana Department of Transportation funds were used to purchase the vehicles.

Approximately 132,100 passengers rode the shuttle buses in the first summer of operation in 2007. Ridership levels declined slightly to 105,640 during the summer of 2008. Reactions from riders and visitors to the park have been positive.⁶ Planning activities for service enhancements and ongoing funding for the shuttle continue.

Common themes

A number of common themes emerge from the four case studies. First, all the projects focus on the characteristics, needs, and unique aspects of each park and local area. There is no one best approach to transit service design, funding, operation, and management.

Second, the case studies highlight the importance of partnerships. These partnerships involve the parks, federal, state, and local governments, and local foundations, organizations, businesses, and corporations. It takes time to establish trust and build strong working relationships among these diverse groups. This time is well spent, however, and is critical to the ongoing success of transit services in the parks.

Although not all parks have an L. L. Bean in their backyard, involving the business community is important to obtaining support, and possibly funding, for transit projects. Local park foundations and other groups also play key roles in providing funding, managing funds from other sources, and providing expertise.

Finally, the case studies highlight the importance of leveraging resources and expertise. Given budget constraints at all levels of government and the sluggish economy, innovative financing and maximizing funding from multiple sources is critical. Leveraging staff resources and expertise among agencies and groups is also important.

Additional research

The four case studies presented in this paper also highlight areas for further research. First, examining the experience with transit systems in other national parks and federal lands would be beneficial to further explore the common themes identified in these case studies, as well as identifying additional themes.

Second, additional research on visitor capacity is needed. The park transit systems accommodate more visitors in fewer vehicles, increasing the number of people at key park locations. The potential for visitor overcrowding due to lifting the previous capacity controls imposed by limited parking should be explored in more detail. Although easing traffic congestion, reducing noise and air pollution levels, and improving wildlife-viewing opportunities all enhance the experience of visitors at national parks and federal lands, overcrowding concerns need to be considered.

Additional research examining the effects of new park transit systems on the economy of gateway communities is also needed. Finally, initial assessments of bus services in Zion and other parks indicate positive environmental impacts, including reducing vehicle emissions and noise levels. Additional research is needed to better understand the full impact of transit system on reducing vehicle emissions, improving air quality, reducing noise levels, and enhancing animal habitats.

Endnotes

1. Downeast Transportation, *Island Explorer News*. On-line at www.exploreacadia.com/news.htm. Accessed 31 March 2008.)
2. Tom Crikelair, "Island Explorer Passenger Survey, 2007" (26 February 2008). Tom Crikelair Associates, memorandum.

3. Tom Crikelair Associates, "Island Explorer Short Range Transit Plan" (21 May 2007). On-line at www.exploreacadia.com/IEX_SRTP.pdf.)
4. National Park Service, "Zion Canyon Shuttle System." On-line at www.nps.gov/zion/planyourvisit/zion-canyon-shuttle-system.htm. Accessed 31 March 2008.
5. McDonald Transit Associates, Inc., "Rocky Mountain National Park Shuttle Service Passenger Statistics" (September 2008).
6. National Park Service, "Going-to-the-Sun Road Shuttle System Ends First Session on April 3rd" (news release, 29 August 2007); National Park Service, "Going-to-the-Sun Road System Ends Second Season" (news release, 11 September 2008).