



# Partnering for Transportation Success at Acadia National Park

## A Case Study of the Island Explorer Shuttle Bus System at Mount Desert Island and Acadia National Park



NATIONAL PARK SERVICE  
ALTERNATIVE TRANSPORTATION PROGRAM

## **ACKNOWLEDGEMENTS**

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## EXECUTIVE SUMMARY

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This report presents the first in a series of case studies on lessons learned from planning and implementing alternative transportation systems (ATS) and from developing partnerships with local and regional communities. The report is supported by the National Park Service's Alternative Transportation Program (ATP), which promotes the introduction of transportation services that ease the impact of vehicle traffic on national park resources and the visitor experience. Results from these case studies illustrate the specific benefits that units of the National Park Service (NPS) can realize through partnering and help to build knowledge and expertise across NPS for planning and implementing ATS.

Ensuring accessibility to and within NPS units is at the core of the NPS mission to preserve the natural landscape of America for public appreciation, education, and benefit. Since the 1940's, the automobile has been the leading mode of visitor access in NPS units. This reality, coupled with increasing visitation levels, has caused congestion on park roadways and in parking facilities. In turn, traffic congestion has led to impacts on natural and cultural resources, increased pressure on limited park staff resources, hazardous conditions for pedestrians and bicyclists and, ironically, reduced visitor accessibility. In response to these challenges, NPS launched the ATP in 1998.

Enabled by the Transportation Equity Act for the 21st Century (TEA-21), the mission of the ATP is to "preserve and protect resources while providing safe and enjoyable access to and within NPS units by using sustainable, appropriate and integrated transportation solutions." The ATP promotes the integration of all modes of travel within an NPS unit and encourages the introduction of a range of technologies, facilities, and management strategies to support the use of alternative ways of getting to and traveling within units of the NPS. As of 2003, 101 ATS exist at over 90 NPS units.

Transportation challenges at a given NPS unit affect and are influenced by a diverse set of stakeholders—the unit itself, its visitors, gateway community residents, area businesses, regional and state planning agencies, and more. To be effective, alternative transportation solutions should be developed so that the perspectives of these stakeholders are incorporated. Moreover, making these stakeholders partners helps ensure the availability of resources needed to plan, implement, and sustain an alternative transportation system.

Lessons from case studies of NPS units planning for and developing alternative transportation solutions demonstrate the usefulness of partnerships in implementing ATS. The case studies highlight successful examples of where partnerships with regional and local stakeholders have helped NPS managers integrate ATS with surrounding transportation activities while achieving the core NPS goals of protecting resources and creating a positive visitor experience. Case studies include an in-depth account of the Mount Desert Island and Acadia National Park Island Explorer Shuttle Bus System and a study of the partnering techniques used at Cape Cod National Seashore, Grand Canyon National Park, Great Smoky Mountains National Park, Golden Gate National Recreation Area, Lowell National Historical Park, Mt. Rainier National Park, Yosemite National Park, and Zion National Park.

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## I. ATS PARTNERING AT ACADIA NATIONAL PARK

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This report presents a case study of the partnerships that supported the implementation of the Island Explorer Shuttle Bus System (herein referred to as the Island Explorer), which was designed to respond to growing traffic congestion both in Maine's Acadia National Park (Acadia NP) and in the adjacent towns on Mount Desert Island (MDI), especially Bar Harbor. The system, which began operating in 1999 with six buses, is now comprised of 17 shuttle buses that in 2001 carried nearly 240,000 passengers. The Island Explorer is one of the most successful recent ATS within NPS. The Coalition for Sensible Energy reported that, in its first year of operation, the system replaced nearly 43,000 cars and recreational vehicles on MDI, effectively eliminating two tons of pollutants that create haze.<sup>1</sup>

This report is based on a review of documents and data relating to the park and the Island Explorer and on interviews with 17 individuals who participated in one or more phases of system planning, implementation, and operations. The variables that have contributed to the success of the Island Explorer are in many ways particular to the circumstances of Acadia NP and MDI. But generalizations can be made that may help other NPS units as they consider options for developing alternative transportation.

### Benefits of Partnering

Partnerships between Acadia NP and other stakeholders yielded particular benefits without which the Island Explorer likely would not have succeeded. Partnerships produced the financial support necessary to plan the system, purchase the first fleet of buses, and operate the system for four years without making service mandatory or requiring riders to pay a fare. The regional transit system produced through partnerships also fostered operational efficiencies that would not have been possible with multiple, parallel systems. Partnerships also made technical expertise at each phase of the system's evolution possible as NPS was not required to provide this element alone. Finally, partnerships have been essential in generating the kind of widespread public support that removes potential barriers before they are established and helps keep an alternative transportation system afloat.

### How Did They Do It?

Partnerships at the local, state, and Federal levels have been crucial to the Island Explorer's success. Perhaps the overriding lesson supported by Acadia NP's experience is simply that **ATS is unlikely to get off the ground with only the support of an NPS unit**. Acadia NP had a transit system concept, supported by a feasibility study, in place as of 1992. But the concept did not move forward until local communities became sufficiently frustrated by the level of traffic congestion to take action. Acadia NP was prepared to offer its transit system concept, a critical element that enabled all partners to move forward expeditiously with planning what eventually became the Island Explorer.

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<sup>1</sup> CSE News, February, 2000, <http://www.downeast.net/nonprof/cse/wtsp00news.html>

A related lesson is that **ATS planners and operators must involve local communities to ensure system viability.** Since the implementation of an alternative transportation system in a NPS unit will usually have implications for surrounding communities, obtaining their support—in a variety of forms—is crucial. For Acadia NP, the Mount Desert Island League of Towns (MDILOT) was a linchpin in the planning process. MDILOT provided a mechanism for bringing towns together and conducted public outreach, including focus groups and public meetings. Once a system is operating, local involvement must continue. This requires communicating on a regular basis with residents, elected leaders, and local organizations. The Island Explorer managers conduct a public forum at the end of each season, where anyone may attend a presentation on the system’s performance, make comments, and raise questions.

**A project champion is an essential partner and one who attracts the support and resources of other partners.** An NPS unit that wishes to implement an alternative transportation system should identify and support such a champion as that person will contribute energy, credibility, and understanding of local conditions. The champion for the Island Explorer was a local resident with leadership experience in the community and transit planning expertise. It is important to note, however, that although the professional qualifications of the Island Explorer’s project champion may have helped convince some partners to support the system, project champions can come from any stakeholder segment so long as they are credible and have the necessary amount of “infectious enthusiasm” to secure the commitment of others.

**The partnership between a NPS unit and regional or state transportation planning organizations is particularly important.** A positive, flexible relationship with planning partners smoothes the planning process and facilitates the flow of financial support from Federal and other programs. For Acadia NP, its relationship with the Maine Department of Transportation (Maine DOT) was essential to the efficient application for and receipt of Congestion Mitigation and Air Quality Improvement (CMAQ) program funds, which were used to procure the initial fleet of buses.

**The 1997 Federal Memorandum of Understanding (MOU) between the U.S. Department of the Interior (USDOI) and the U.S. Department of Transportation (USDOT) makes partnering easier and more productive.** The MOU includes a provision that “the DOT and DOI shall develop a personnel exchange program. This exchange program shall make available and encourage the temporary interdepartmental assignment of individuals.” NPS units may, through project-specific agreements, find innovative ways to obtain the experience and expertise needed to get ATS in place. In the case of Acadia NP, Federal Transit Administration (FTA) and other Federal transportation representatives regularly participated in meetings of Island Explorer stakeholders, providing invaluable technical expertise for planning and operations.

**To work with partners, NPS units developing ATS should dedicate at least one full time staff person to participate in planning, implementation, and management activities.** As Acadia NP was unable to do this, a significant portion of the Acadia NP’s Deputy Superintendent’s time was dedicated to work related to the Island Explorer. By dedicating a staff person to transportation work, a NPS unit also can **take advantage of all funding opportunities early in the planning process.** Early on, Acadia NP requested permission to use fee demonstration funds to help support the development and implementation of the Island Explorer. As a result, the park received funding in a timely manner. Acadia NP also recommends applying

early to establish transit fees on top of park entrance fees in order to secure a guaranteed source of revenue that can support transportation activities. Though Acadia NP did not request permission to add transit fees when the Island Explorer first began running, the park will be able to add transit fees to its daily, weekly, and annual passes beginning in 2004. Acadia NP is now in the process of briefing the public about these transit fees.

A complete discussion of these and other lessons learned is provided in Section VI of this report. Sections II through V discuss the advantages of partnering, explain the transportation issues confronting Acadia NP and MDI, describe the Island Explorer and its impact on those issues, and review the benefits yielded by the partnerships that supported the Island Explorer's development.

## II. WHY PARTNER?

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The principle of partnering to support the implementation of an alternative transportation system is evident at the Federal level in the 1997 MOU between the USDOJ and the USDOT. This MOU brings together the expertise and resources of the two agencies on the issue of alternative transportation within NPS units. Through innovative transportation planning, interagency project agreements, personnel exchange, and the development of innovative policy, guidance, and coordination procedures, the two departments support the implementation of safe and efficient transportation systems that are help to protect and preserve park resources.

While the Federal MOU provides a helpful framework, the most effective partnerships are those that a NPS unit forms with those stakeholders closest to the unit itself. These partnerships represent the interdependence of NPS units, surrounding communities, and other stakeholders. The influence of any NPS unit extends well beyond its geographical boundaries. In most circumstances, park users are visiting not only the NPS unit but also the surrounding communities. Any transportation issues are therefore likely to affect both the NPS unit and neighboring communities, making it necessary to pursue joint transportation solutions. Pursuing issues separately would be at best inefficient and at worst counter-productive. Decisions regarding a NPS unit's transportation system and operations affect its environment and resources, the experiences of visitors, the life of gateway communities, and the plans of regional and local governments. Stakeholders representing these interests are potential partners; their perspectives should be heard and, as much as possible, incorporated. In the case of a transportation planning project, seeking partner perspectives avoids alienating partners, which can slow a project's progress.

Few NPS units can independently conceive, plan, implement, and operate a fully effective alternative transportation system serving visitors both in and around the unit.

Partnering also enables NPS to stretch its limited resources. Cooperative transportation planning supports the development of a wide range of alternatives to access park amenities and services. It also provides visitors before they even reach the NPS unit with information on intermodal transportation options, which benefits surrounding communities. Few NPS units can

independently carry out transportation planning activities. Taking on a transportation planning project requires that park staff time be supplemented with additional energy and skills. Similarly, park financial resources are unlikely to fully support either the capitalization or operation of a new transportation system. As a result, establishing a diverse, stable financial support structure among partners is often crucial. A NPS unit also benefits greatly from its partners' technical and other expertise in areas that historically have not been a central part of the NPS mission, such as transportation planning, traffic management, and transit operations.

Thus, partnering can help NPS cooperatively develop goals and objectives, collect data, and develop a complete set of transportation alternatives as part of the transportation planning process. If the preferred alternative is to build an alternative transportation system, then partnering can help NPS develop the following components of a successful transportation planning project:

1. System approval and buy-in from all major stakeholders.
2. Skills and expertise needed to conceive, plan, and implement the system.
3. Financial resources necessary to capitalize and operate the system.
4. Incorporation of the expertise and perspectives necessary to appropriately address relevant transportation challenges.

Though the Island Explorer is a single case, its success reveals lessons that other NPS units may use to help them realize the many benefits of collaborative partnerships.

### III. MOUNT DESERT ISLAND'S TRANSPORTATION CHALLENGES

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One of the most visited national parks in the United States, Acadia NP covers more than 46,000 acres of the eastern coast of Maine and provides visitors with opportunities to hike, bike, camp, horseback ride, boat, fish, and ski against a landscape of largely unspoiled forest and coastline. Established as a national park in 1929, Acadia NP was created through private donations of land, money, and expertise, and today sits within a day's travel of a few major East Coast cities and the Canadian provinces of New Brunswick and Nova Scotia. The majority of the acreage of Acadia NP is located on MDI, with additional facilities on the Schoodic Peninsula and the island of Isle au Haut.



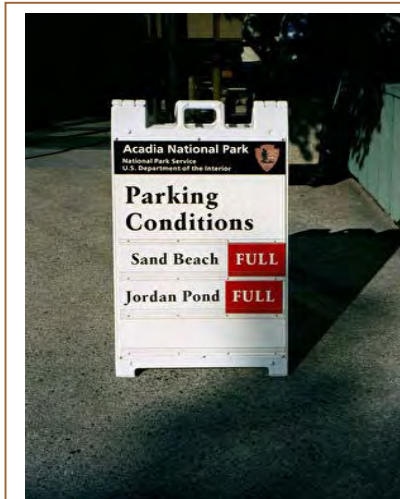


Today Acadia NP hosts more than 2.5 million visitors per year, 90% of whom visit during the summer months. This level of visitation profoundly strains the park's transportation infrastructure and adversely affects the region's ecosystems. Emissions of air pollutants contribute to acid precipitation that damages the rocky soils characteristic of the Acadia NP area; one park lake is chronically acidified. Emissions also contribute to the development of haze that impairs scenic views from Cadillac Mountain and elsewhere in the area. <sup>2</sup>

Acadia National Park hosts approximately 2.8 million visitors annually, most of whom arrive by automobile.

The impact of this level of visitation is also felt in the park's gateway communities. Acadia NP is unusual among national parks in its close connection to and association with the four townships that surround it. Unlike those national parks that have clearly defined boundaries, Acadia NP is closely intertwined with its surrounding towns, seamlessly sharing MDI. Visitors for whom Acadia NP is the primary destination spend almost as much time in local towns as they do in the park since most of the overnight accommodations and support facilities are outside of the park.

One of the most noticeable and consequential impacts of heavy automobile traffic is congestion. The roads on MDI and in the park are few and narrow. They include the Acadia Loop Road,



Parking Availability Sign at Halls Cove Visitor Center

designed more for the scenic appreciation of the forests and coastline than for the efficient movement of thousands of vehicles each day. The towns themselves, particularly Bar Harbor, have narrow, crowded streets, lined with shops and filled with pedestrians and bicyclists. At peak traffic hours on MDI, in the late afternoon and early evening, as residents and visitors return to their homes and places of lodging the roads become congested and traffic at key intersections exceeds maximum capacity. The problems of excessive traffic are compounded by oversized vehicles, including mobile homes, boat trailers, and other recreational vehicles, which have trouble navigating the narrow lanes and tight curves of the mountainous terrain. Congestion increases the time that vehicles are idling, contributing to regional emission problems. It also detracts from the visitor experience as the ability of visitors and residents to move predictably throughout the park and local communities is compromised.

Finally, congestion threatens visitor safety as motorists try to navigate the difficult traffic conditions while remaining alert to the proximate pedestrians and bicyclists.

In addition to the limitations of the local road network, MDI is significantly constrained in its ability to offer adequate parking during the peak summer season. Acadia NP has one main parking area, which is located at the Halls Cove Visitors Center, and several smaller parking areas located at the most popular sites within the park. However, all of these parking areas

<sup>2</sup> Code Red America's Five Most Polluted Parks 2002, NPCA, page 2.

cannot accommodate the automobiles of every park visitor. Many of Acadia NP's parking areas are very small, in some cases accommodating as few as six cars. What's more, many parking areas serve multiple purposes, including acting as scenic overlooks or staging areas for one or more trails. Consequently, the park has experienced substantial overflow parking along the shoulders of roads and in the right lane of the park's historic loop road. Overflow parking detracts from the visitor experience and the park's scenic beauty, adversely impacts natural and cultural resources, and affects the safety of motorists, bicyclists, and pedestrians.

Demand for parking in gateway communities also often exceeds supply, especially during summer months. By local ordinance, all places of lodging in the area are required to provide sufficient parking for their guests. However, this does not help the park's many day visitors. The towns themselves maintain municipal parking areas and curbside parking, but both are limited and in demand.

It is important to note that automobiles are not the only modes of transportation creating the transportation-related challenges at Acadia NP. Sitting along the coast of Maine, the park is also accessible by water and a popular stop for cruise ship operators. On a single holiday weekend, cruise ships may bring more than 10,000 visitors to the area. The vast majority of these visitors will not have a vehicle of any kind. Having an efficient way to move these visitors throughout the area is important, both to enhance the visitor's park experience and to balance travel demand at key sites (including the Bar Harbor downtown) so that no one site is overwhelmed with use.

#### IV. THE ISLAND EXPLORER SHUTTLE BUS SYSTEM AND ITS IMPACT

The interconnectedness of MDI communities and Acadia NP fostered the regional partnerships that led to the successful implementation of the Island Explorer. From a transportation perspective, the towns and park are utterly intertwined, their roadways at points indistinguishable.

Implemented in 1999, the Island Explorer includes 17 clean-fuel, propane buses that run on seven routes and efficiently link the hotels, motels, and campgrounds of the area with park attractions and the Bar Harbor Airport. The shuttle buses have bicycle racks and provide full access for disabled passengers. The Island Explorer runs from the end of June through the middle of October, and each route runs on its own pre-established schedule.

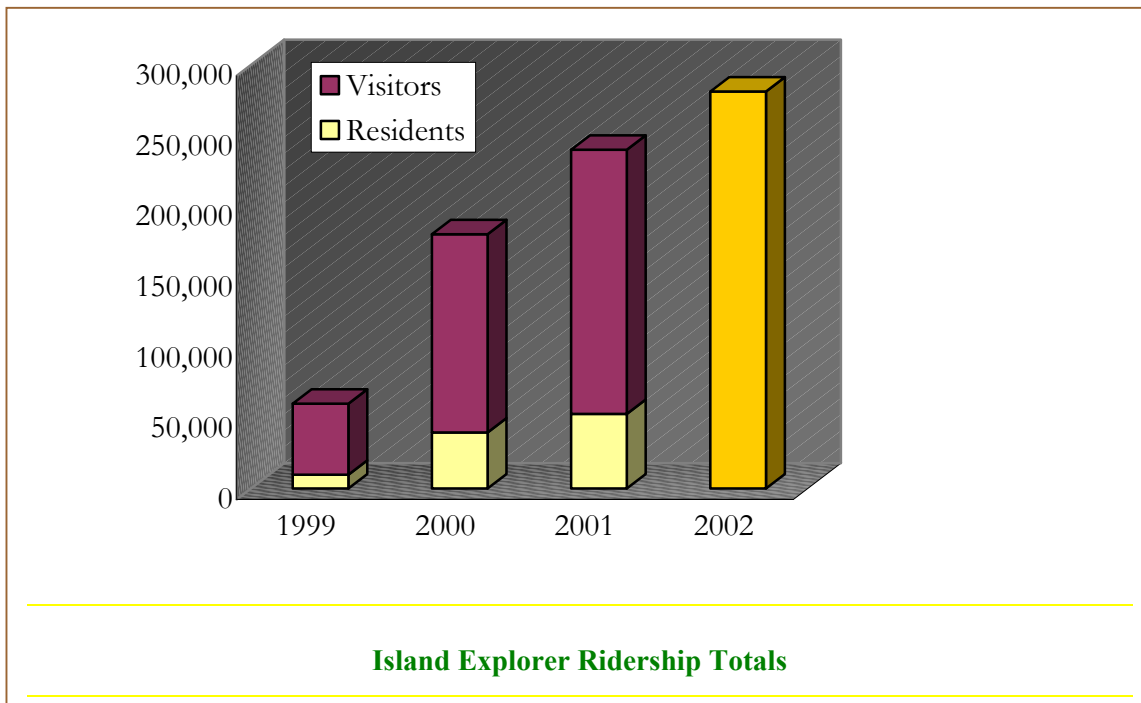
The Island Explorer is available not only to



Island Explorer Route Map

park visitors but also to area residents and other visitors. Although available to everyone, the Island Explorer is not mandatory for anyone; park visitors and area residents alike are permitted to bring automobiles onto MDI. Riders are not required to pay a fare to board the shuttle.

While it was established to carry park visitors and thus relieve congestion in the park and surrounding areas, the Island Explorer is providing an unanticipated benefit—serving local residents. In 2001, 22% of the Island Explorer riders were residents, and that percentage is expected to continue to rise. These riders include local employees, particularly those who work in the tourism-related industries of lodging, food service, and small retail. The system has also become a significant mode of transportation for local youth, allowing them to move around the island safely.



During its inaugural season in 1999, the Island Explorer carried over 142,000 riders. In 2000, nine buses were added to the system, and the number of routes was increased from six to seven. Ridership for the next two seasons increased first to 193,000 and then to nearly 240,000. In 2002, the Island Explorer carried a record-breaking total of 281,142 riders—an 18% increase over 2001.\* The four-year trend represents a 107% ridership increase.

If vehicles removed from local roads through ridership of the Island Explorer shuttle bus system were lined up bumper-to-bumper, the line would extend 133.4 miles for 1999 alone.  
*Ellsworth American, September 23, 1999*

\* A breakdown of 2002 riders by visitors and residents was unavailable at the time of this study. A small survey conducted the first week of August 2002 found that 12% of participating groups were year-round residents and 9% were summer residents, including seasonal workers and residents with summer homes in the area. (Source: Tom Crikelair, Crikelair Associates, May 8, 2003.)

The Island Explorer contributes to the park visitor experience, the environmental quality of MDI, the safety and comfort of both citizens and visitors, and the state tourist economy. For example, in 2001 more than 200,000 visitors rode the buses, keeping approximately 88,000 vehicles off park and MDI roads. As a result, emissions of carbon monoxide (CO) were reduced by 33 percent and emissions of volatile organic carbons (VOCs) were reduced by 25 percent. What's more, the Island Explorer reduce noise near park roadways by 6.3 decibels – the same reduction that would result from building a 12- to 15-foot-tall noise barrier along a road.\*

More buses will be purchased in 2003 to support additional ridership, and a new storage facility for vehicles may be leased or constructed. Acadia NP is also considering the possibility of constructing a second visitor center, which would include sufficient parking for daily visitors and a pick-up/drop-off point for shuttle buses. Acadia NP and its partners expect to have more riders—and subsequently more buses—in the future. As a result, the Island Explorer will continue to ease pressure on local natural resources.

## V. HOW PARTNERING MADE A DIFFERENCE

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A diverse team, including NPS, USDOT, Maine DOT, town governments, the Friends of Acadia (FOA), and a myriad of other public and private organizations came together to create and support the Island Explorer, which has altered the experience of visiting MDI and Acadia NP. The timeline shown in Appendix A summarizes the system's evolution from an initially modest system to the current successful system. The five factors described below were especially important in bringing about the system's successful partnerships, which in turn resulted in a variety of benefits.

### 1. Cooperative Working Relationships at All Levels

Development of a transit service requires information, resources, and

#### Major Benefits of Partnering at Acadia

- ✓ Open, problem-solving relationships among agencies
- ✓ Technical expertise for planning and operations
- ✓ Understanding of local/regional transit context
- ✓ Ability to test the transit system market
- ✓ Expedited system planning and implementation
- ✓ Mechanism for local involvement in system planning
- ✓ Trust and credibility with key stakeholders
- ✓ Increased awareness of financial support options
- ✓ Guidance on application for funding
- ✓ Financial support for capital acquisition, operations, and maintenance
- ✓ Greater financial sustainability
- ✓ Energy to keep project moving forward
- ✓ Distribution of information to the public
- ✓ Local support
- ✓ Reduced burden of getting new service operational
- ✓ Operational efficiencies from single transit service
- ✓ Service that meets the needs of park and communities
- ✓ Fare-free service
- ✓ Enhanced park visitor experience

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\* These estimates come from the report "Noise and Air Quality Implications of Alternative Transportation Systems: Acadia and Zion National Park Case Studies," prepared by the John A. Volpe National Transportation Systems Center of the USDOT, 2002. Air sources used include the EPA MOBILE Model and NPS traffic data; emissions projections were based on 2000 VMT data using conservative park estimates. Noise sources used include FHWA traffic noise model runs and Volpe Center analysis.

expertise from a large number of different institutions and individuals whose interests may not always coincide. In addition, information, resources, and expertise often come via varying processes and procedures. Altogether, these factors indicate that cooperative relationships in which partners are oriented to problem solving are essential. At Acadia NP, benefits were realized through a series of collaborative relationships at the local, state, and Federal levels.

At the Federal level, benefits were realized through the 1997 MOU between USDOJ and USDOT. Although the MOU provided no direct funding for the planning and implementation of the Island Explorer, Acadia NP staff and other stakeholders observed that the MOU brought expertise and attention to the area's transportation issues. FTA and other Federal transportation agencies participated in stakeholder meetings and provided technical expertise for planning and operations. Partners interviewed for this report also emphasized the less quantifiable benefits of the MOU, which include **opening inter-agency communication** at state and Federal levels, **encouraging problem-solving relationships** between those agencies, and **increasing awareness of financial support options** among NPS units and their local partners.

At the state level, Maine DOT has proven to be a steady and reliable partner. The agency believed that the Island Explorer would be an important element of a larger effort to promote car-free tourism in Maine and strived to find creative ways to fund the system. From the beginning, Maine DOT has worked closely with the park and MDILOT, **advising on MDILOT's application for funding** through its 1996 T2000 Program, **acting as the agent for purchasing the first eight buses**, and **providing financial support for Island Explorer operations**.

Maine DOT has been a vital partner, supporting a regional transportation vision and innovative local transit solutions.

Recognizing their interdependence, Acadia NP, Maine DOT, MDILOT, and other partners **adopted a regional perspective** on developing transportation solutions. This perspective led the partners to create a single transit system that serves both residents and visitors to the park and local communities. This single system provides transportation solutions with **greater efficiency** and a **higher chance of sustainability** than systems serving park visitors and community residents separately could.

While institutional cooperation has been vital to the success of the Island Explorer, personal relationships among partners have also been important in fostering the speed and relative ease with which the system has been established. In many cases, leaders in MDI communities, at the park, and at state agencies had worked together on previous transportation and planning projects. The strength of these personal relationships produced an **atmosphere of personal trust and respect**, fostered **efficient communication**, and helped the partners **surmount potential barriers between institutions and agencies**.

## 2. Strong Leadership

The success of the Island Explorer is a testament to not only the partnerships that built and sustain it, but also to the consistent, dedicated, and thoughtful leadership the project required to make it a reality. The best leaders are those individuals and groups who understand the local environment, are connected to and able to communicate with other partners and sources of influence, and have a strong and persuasive vision for a project. The Island Explorer has been fortunate to have several key leaders backing it from the beginning, including Acadia NP's deputy superintendent, a local transit planner, and the FOA.

The Acadia NP deputy superintendent has been a key player in the Island Explorer's evolution, having been personally involved in the planning and development of the system throughout his time at the park. The deputy superintendent represents Acadia NP as a voting member of MDILOT and works cooperatively with town representatives and other local stakeholders to help devise transportation solutions for MDI. He also **initiated planning for the Island Explorer** using the park's 1992 GMP, which included funding for studying the feasibility of developing an island-wide transit system.

The success of the Island Explorer is due not only to the leadership of the Acadia NP deputy superintendent, but also to the vision, energy, commitment, and local expertise of a local project champion. In the case of the Island Explorer, the project champion was a local transportation planner who was the first manager of Downeast Transportation, Inc. (DTI) and a council member for the town of Bar Harbor. MDILOT hired him to plan the Island Explorer using the Acadia NP concept as a starting point. As a resident of the region, this individual had a **high level of trust and credibility with key stakeholders**. This benefit was compounded by the individual's **understanding of the potential for public transit on MDI**. Due in part to his stake in the community, this individual brought the kind of **energetic commitment** that is needed to see a project through its inevitable ups and downs over many years. This local project champion is still involved with the system and continues to participate in stakeholder meetings and planning sessions.

A local transit planner emerged as the Island Explorer's project champion, providing vision and energy in partnership with Acadia NP, the Friends of Acadia and the MDI League of Towns.

A strong park friends group has also supported the Island Explorer. Established in 1986, FOA is a powerful advocacy group with strong, long-standing financial support in the community. The commitment and resourcefulness of FOA have been essential to the system's development and financial sustainability. In 1997, FOA **enabled a critical test of the market for a transit system** when it subsidized operation of the campground shuttle so that the \$2 fare could be eliminated. The success of eliminating the rider fare (ridership jumped 600% the year after the fare was eliminated with no change to the service or route) encouraged Acadia NP, MDILOT, and other partners to pursue planning and implementation of an island-wide transit service. FOA has **provided financial support for the operations and maintenance of the Island Explorer** during its first four seasons. Most recently, FOA helped the system move toward long-term sustainability when it **negotiated and received on behalf of the Island Explorer a \$1 million donation from L.L. Bean**. The donation, which FOA secured with its own funds, will be used

primarily to extend operations from Labor Day through Columbus Day, beginning in 2003. Finally, FOA has been a prominent and passionate advocate of the Island Explorer, **providing information and promoting the system** in communication with its members, in meetings with the community, and on the FOA web site.

### 3. Local Involvement

While the Island Explorer has benefited from the involvement of key state and Federal partners, its success is due in large part to the involvement of local individuals and organizations. Local residents, organized by MDILOT, have led system planning, contributed financially to operations and maintenance, and received annual public updates on system performance. Local support not only attracts funding but also helps to make the system viable over the long term as NPS units respond to local needs and meet local expectations.

MDI communities and local stakeholders (including FOA) managed and funded the planning of the Island Explorer. Individuals and groups working on MDI and within Acadia NP developed the mechanics of the system, including hours of operation, routes, and individual bus stops. As a result, system characteristics have stayed close to the needs and preferences of the local communities. MDILOT was central to this effort. A non-legislative body, MDILOT is comprised of the managers of the four island towns, one representative from Acadia NP, and one representative from each of the three communities that surround MDI. MDILOT functioned as a **mechanism for town leaders to discuss and do system planning**. As a public body, MDILOT also provided a **forum for public input and outreach**. Finally, MDILOT brought together the various communities, thus **providing Acadia NP with a single local governance organization with which to work**.

The MDI League of Towns became the forum for local involvement, thereby helping to make the system sustainable and responsive to local needs.

Each of the four towns on MDI contributes financially to the Island Explorer, and each must receive annual approval from its town meeting members before it can commit funds. Local financial investment helps not only to support the system but also to demonstrate local commitment. In this way, **local financial support represents local popular support** for the Island Explorer, a key component of its success.

The Island Explorer has been able to document its growth and success through regular gathering and sharing of system performance data with stakeholders and the public. Collecting and disseminating reliable information about the system's ridership, rider demographics, and on-time performance have multiple benefits, including **attracting financial and political support** from local communities and state and Federal agencies. In addition, partners can make **informed modifications to the service** based on these data, rider surveys, and local input.

### 4. Conservative Planning Approach

The Island Explorer is a success in part because of the care partners took at the concept and planning stages. The system has evolved at a pace suitable to the various stakeholders and has been designed conservatively to maximize use. This conservative approach has allowed the Island Explorer to maintain the crucial support of both local residents and visitors.

One example of the conservative approach used to develop the system was Acadia NP's decision to wait for local communities to initiate planning. With its 1992 GMP, the park had a system concept in place that was backed by a feasibility study. Recognizing the importance of local involvement, Acadia NP held the concept until 1995, when MDILOT chose to take action on the problem of traffic congestion. During the intervening three years, the park continued to communicate and work with local communities on transportation and other issues. Acadia NP's approach to partnering ensured success. When the local communities were ready to act, the park stepped up with its system concept, **enabling planning to move forward much more expeditiously**. More important still, this approach resulted in a **broader and more committed set of partners** than would have been possible had the park forced the issue.

A conservative planning approach was followed even after local communities accepted Acadia NP's system concept. MDILOT and the park began partnering with the Maine DOT and DTI, the transit service provider already serving the region. The Island Explorer was established on the foundation of the earlier campground shuttle system provided by DTI. A not-for-profit transit provider founded in 1979 primarily to provide poor and disabled residents of Hancock County with transportation, DTI operates under contract to the state. The fact that DTI was already a known and trusted service provider made it **easier to get local support and acceptance of the Island Explorer**. In addition, implementing the Island Explorer as an expansion of an existing service **reduced the burden of getting a new transit service off the ground**. Most of the agreements, licenses, and coverage necessary for DTI to start operating the Island Explorer were already in place. Infrastructure, management, and much of the operations personnel were also already established.

Partnerships between Acadia NP, FOA, and DTI brought about one of the most distinctive aspects of the Island Explorer: fare-free service. The partners took a conservative approach to the issue of rider fares as they first wanted to be sure that there would be demand for the system. Conscious of the primary goal of the system—to reduce automobile traffic in the park and on Mount Desert Island—the partners concluded that the best way to incite drivers to get out of their cars was to make the shuttle bus system fare-free. Support for this conclusion was developed through partnering. After three years of service, the campground shuttle was averaging 3,000 riders annually. FOA approached DTI and offered to subsidize operations in order to eliminate the \$2 fare. In the next year, with no other changes made to the service, ridership increased 600%. In addition to cementing the partners' belief in fare-free service, this ridership jump **demonstrated the ridership potential of the Island Explorer and built momentum for its development**.

The vision and commitment of the Friends of Acadia helped demonstrate demand for the Island Explorer shuttle bus system and led to fare-free service for all riders.

The partners believe that fare-free service has helped to make the Island Explorer an accepted and popular summertime presence, and, as a result, **the system has remained fare-free**. The partners are committed to this aspect of service and have designed, operated, and managed it accordingly. In addition, the partnering that brought about and sustains fare-free service has many secondary benefits. Making reliable and safe transportation available even to those of modest means, including young people, has helped to **maintain the support of local residents**. From an operations standpoint, the lack of a fare speeds boarding by eliminating the logistical



difficulties associated with collecting and counting coins. In turn, this speeding boarding has **enhanced the visitor experience**. Park visitors can board and re-board the Island Explorer as often as they like without having to fumble for cash to pay a fare. This aspect of the system helps visitors move easily and efficiently throughout the park.

## 5. Diverse Financial Support

No transportation system can run well without sufficient funding for planning, equipment, and operations. Financial commitments from stakeholders not only help to make a system viable, but they also provide visibility and credibility to attract additional supporters and larger contributions. However, maintaining stable financial support for operations and maintenance is possibly the single greatest challenge for any alternative transportation system. To date, one defining strength of the Island Explorer

is that it has received capital and operations funding from a variety of sources, including NPS, USDOT, Maine DOT, MDILOT, the individual towns on MDI, FOA, L.L. Bean, area businesses, and voluntary donations. These financial partnerships have yielded a variety of benefits.

### Island Explorer Shuttle Bus System Funding Sources

- ✓ National Park Service
- ✓ U.S. Department of Transportation
- ✓ Maine Department of Transportation
- ✓ Mount Desert Island League of Towns
- ✓ Mount Desert Island towns
- ✓ Friends of Acadia
- ✓ L.L. Bean
- ✓ Area businesses
- ✓ Voluntary donations

Acadia NP, MDILOT, and FOA supported system planning costs. Once the Maine DOT approved the MDILOT transit system through its T2000 program, CMAQ funding and a 20% local match from Acadia NP, FOA, and local towns, were used to purchase eight buses. A NPS challenge grant provided supplementary funding that enabled the Maine DOT to purchase and lease to DTI propane-fueled buses. As a result of this financial partnering, Island Explorer shuttle buses are clean-burning, dramatically **reducing negative environmental effects and enhancing the visitor experience**. DTI remained responsible for all liability and debt. The NPS Alternative Transportation Program (ATP) then funded the purchase of an additional nine buses. Acadia NP purchased the buses with this funding and loaned them to the Maine DOT through a cooperative agreement. These buses are also on lease to DTI.

Much of the operational funding for the Island Explorer comes from government sources, including NPS. Acadia NP currently funds half of the \$500,000 - \$600,000 cost of operating the system each year using a portion of the 80% share of visitor entrance fees that are returned to the park through the fee demonstration program. From 1999 to 2001, the system received \$150,000 in operations funding through the CMAQ program. In 2002, U.S. Representative John Baldacci (D-ME) secured a one-time TEA-21 earmark that effectively offset the lost CMAQ funding. The Maine DOT has committed to replace the TEA-21 earmark from its rural roadway improvement program. As noted earlier, MDI towns also provide operations support, which must be approved at annual

Financial support from MDI residents and businesses improves system sustainability while enhancing the community's sense of ownership and commitment to the Island Explorer.

town meetings. In 2004, Acadia NP will add a transit fee onto its park entrance fees, providing a secured source of funding for the Island Explorer. For example, the cost of a seven-day visitor's fee will increase from \$10 to \$20. The extra funds will be used to help support park transportation activities, including the Island Explorer.

In addition to the funding it receives from government agencies, the Island Explorer also earns fees through service to local businesses. The Island Explorer offers front-door service to some of the area's hotels, motels, and campgrounds. In return, these businesses pay the Island Explorer to transport their guests to park and local attractions. The Acadia Corporation, one of Acadia NP's concessionaires, and Bay Ferries, the operator of an international ferry on MDI, also pay to have shuttle buses make stops directly in front of their establishments. These fee-for-service arrangements not only provide convenient service for passengers and revenue for the Island Explorer, but they also help to **promote the system to visitors**.

Although FOA has also provided operational support for the Island Explorer, it may stop subsidizing the system now that L.L. Bean's has made a \$1 million donation. The partners funding the system wanted to develop a relationship with the corporate world in order to help to provide consistent and sustainable support. L.L. Bean's \$1 million donation will provide the financial support and credibility needed to **expand shuttle bus service into October** and to seek other corporate and institutional supporters. In exchange for its financial support, L.L. Bean has been granted permission to include stewardship messages in the interior of Island Explorer shuttle buses and to stencil its logo on the shuttle buses' exterior. L.L. Bean, a well-known retailer of clothing and other items for outdoor recreation, is a natural partner for Acadia NP. The stewardship messages on the shuttle buses reflect their shared respect for the natural environment. L.L. Bean is a vital and appropriate corporate partner for the Island Explorer, and this new partnership **illustrates the growing confidence in the strength and future of public transit on MDI**.

The diversity of financial support for the Island Explorer **may help to reduce financial vulnerability**: the loss of any one source of funding is not necessarily crippling as other sources exist. Diverse financial support also fosters a **widely shared sense of ownership that helps to make the system resilient**. Although the size and type of funding differ from stakeholder to stakeholder, the sense of involvement and responsibility that each stakeholder feels in funding the Island Explorer binds them together. Over time, this diverse group of funding sources may unify into a single, strong network.

## **VI. PARTNERING LESSONS**

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As with any case study, not all of the factors that made for success in Acadia NP can be replicated in other NPS units. Some of these factors are specific to Acadia NP, the surrounding communities, the region, and the state. For example, the park and its gateway communities are geographically intertwined to a much larger extent than at most other NPS units. This interconnectedness encouraged, if not outright compelled, cooperative working relationships between communities and the park. What's more, these cooperative relationships were enhanced by the familiarity that already existed among a handful of individuals. This familiarity was

essential to the development of other cooperative working relationships, efficient decision-making, and flexible system administration. Many factors produced this familiarity, including the relatively small regional and state population.

Despite these and other distinguishing characteristics of the Acadia NP experience, the Island Explorer case does yield a number of lessons that other NPS units may be able to adapt to their own situations.



**Island Explorer Shuttle Bus**

**1. Ensure that local interests—including town leaders, businesses, and other organizations—play a prominent role in the ATS planning process.**

These partners have expertise in meeting local needs and conditions. Moreover, they have substantial power to expedite or slow a project's progress. As a result, their participation and buy-in are essential. For the Island Explorer, MDILOT was a linchpin in the planning process. For example, MDILOT provided a mechanism for bringing local towns together and conducted public outreach, including focus groups and public meetings.

**2. Identify and support a project champion.**

There are no substitutes for the energy, public trust, and understanding of the local environment that a project champion can bring to the project planning process. Such a champion's credibility can be instrumental in attracting other partners and obtaining the support of key stakeholders. In the Acadia NP case, this champion was a local transit planner who first envisioned the Island Explorer and later developed the routing and schedule for the system. A long-time resident of the area, he had served on a local town council and worked for DTI. This planner was – and still is – the leading point of communication between the Island Explorer and the MDI community.

**3. Design alternative transportation system operations to respond to the needs of gateway communities and others who may be directly affected by the system.**

Meeting the needs of those directly affected by an alternative transportation system requires communicating on a regular basis with residents, elected leaders, and local organizations, and regularly providing opportunities for the community to comment on the system. The Island Explorer partners conduct a public forum at the end of each summer season to report on system performance and receive comments. The Acadia NP case also highlights the importance of providing data on operations. The ability to generate ridership information by route and by town has been crucial to maintaining and expanding support for the system among town leaders and businesses.

**4. Work closely with the state DOT or other relevant transportation planning organizations from concept through deployment and beyond.**

A NPS unit alternative transportation system does not exist in isolation; it is part of a much larger network of transportation infrastructure in the region and state. As such, any organizations that determine transportation planning priorities, including the state DOT, should be involved as partners. NPS units should cultivate a positive working relationship with the state DOT from the earliest stages of project planning. Developing this partnership will help to smooth the process of project approval, identify and secure additional sources of funding, and bring expertise to the planning effort. In the Acadia NP case, the park benefited from an open, flexible, and cooperative relationship with a team from the Maine DOT.

**5. Plan for one full-time position devoted to ATS planning and deployment.**

Acadia NP's experience indicates that NPS units should plan for one staff person to oversee the planning and implementation of ATS. At Acadia NP, the deputy superintendent provided most of the support, which required him to sacrifice time needed for other elements of park operations and planning.

**6. Take advantage of opportunities provided by the MOU between the USDOJ and the USDOT.**

Dedicating one full-time staff position to a single project is likely to be difficult for most NPS units. Instead, NPS units can take advantage of opportunities provided by the 1997 MOU on alternative transportation in NPS units between the USDOJ and the USDOT. The MOU includes a provision that *"the DOT and DOJ shall develop a personnel exchange program. This exchange program shall make available and encourage the temporary interdepartmental assignment of individuals."* NPS units may, through project-specific agreements, find innovative ways to obtain the experience and expertise needed to develop ATS. In the case of Acadia NP, FTA and other Federal transportation representatives regularly participated in meetings of Island Explorer stakeholders, providing invaluable technical expertise for planning and operations.

**7. Take a conservative approach to system concept and deployment.**

Starting with a modest system that can be expanded in phases can help to attract and gain the support of partners in two ways. First, a smaller system is more manageable and more likely to be successful. As a result, a smaller system is more likely to attract support. Second, a conservative approach is also less likely to arouse partners' anxiety over issues such as financial cost and environmental impact.

**8. Examine closely the provision of fare-free service.**

The Acadia NP experience suggests that fare-free service to riders can contribute to the momentum for planning and to successful operations. In the process of planning for ATS, NPS units should examine closely their options for providing service at very low or no cost to riders. Such service is likely to encourage a broader range of use, thereby expanding the potential circle of partners who may contribute financially and in other ways. However, not all NPS units may be able to follow Acadia NP's fare-free service example. Critical elements that enable fare-free service to be successful for the Island

Explorer include the availability of parking at hotels and motels, the ability to route shuttle buses to serve those establishments, the geographic interconnectedness of the park and local communities, and the diversity and limited duration of support sources for system operations. NPS units should request permission early during ATS planning to use fee demonstration funds to help support ATS development and implementation. In addition, NPS units should apply early to establish transit fees on top of park entrance fees, thus providing a guaranteed source of ATS funding.

**9. Identify mechanisms for working with potential corporate sponsors.**

In partnering with corporate sponsors, park staff may face a variety of issues that they are not trained to address. Therefore, working through other partners to form a corporate partnership may make sense. The Acadia NP experience suggests that a park friends group is a viable avenue through which to establish this kind of relationship. The Acadia NP experience also suggests the tremendous benefits that such a relationship can offer a NPS unit and its ATS.

**10. Have a transit/transportation concept ready to go.**

Most NPS units cannot establish an alternative transportation system on their own, nor can they compel other partners to share their sense of urgency about the need for alternative transportation. However, a NPS unit can, and should, work closely with potential partners on issues of common interest, including transportation. In addition, a NPS unit should be prepared with information and expertise so that when other stakeholders recognize the importance of establishing an alternative transportation system, planning and implementation can move forward with relatively little delay. In Acadia NP's case, the park had completed a feasibility study of a transit concept, which it provided to the MDILOT once MDILOT and other partners were ready to take action.

## APPENDIX A: THE ISLAND EXPLORER DEVELOPMENT TIMELINE

1992	Acadia National Park (Acadia NP) adopts a general management plan (GMP) that recommends that the National Park Service (NPS) work with Mount Desert Island (MDI) municipalities and others to implement an island-wide transportation system. The GMP includes a system concept that is based on a feasibility study.
1993	Downeast Transportation, Inc. (DTI), a non-profit transit provider operating in the region, introduces seasonal shuttle service between local campgrounds and Acadia NP. The system has one route and is supported by Congestion Mitigation and Air Quality Improvement (CMAQ) funds. Users pay a \$2 fare to ride.
1995	Congestion problems in MDI communities become severe enough that the Mount Desert Island League of Towns (MDILOT) begins to explore options. As a voting member of MDILOT, Acadia NP participates and presents the transit concept from its GMP as a possible solution.
1996	MDILOT submits an application for funding of an island-wide transit system to the Maine Department of Transportation's (DOT) T2000 Program, an initiative designed to encourage innovative local transportation projects.
1997	<p>With financial support from the Friends of Acadia (FOA), DTI eliminates the \$2 fare for riders on the campground route. The system experiences a 600% increase in use, from 3,000 riders in 1996 to 12,000 riders in the first year of fare-free service.</p> <p>Maine DOT awards funding to the Island Explorer Shuttle Bus System (Island Explorer) project through the T2000 Program and includes the proposed system in its biennial transportation improvement program (TIP). Acadia NP and its partners begin working closely with Maine DOT in order to implement the approved system.</p>
1998	Maine DOT purchases eight propane buses with funding from the Federal CMAQ program, a local match provided by Acadia NP, and a NPS grant.
1999	DTI begins operating the Island Explorer on six routes from June 23 through Labor Day. Operations and maintenance funding is provided by the CMAQ program, Acadia NP entrance fees (through the NPS fee demonstration program), FOA, MDI towns, and businesses with shuttle stops. The system remains voluntary and without fare and carries more than 142,000 riders in its first season of operation.
2000-2001	The Island Explorer expands to seven routes in 2000. Nine buses are added, purchased by NPS with funds procured through the NPS Alternative Transportation Program. The buses are loaned to the Maine DOT through a cooperative agreement with NPS. In its first three years of service, the system experiences a 75% increase in ridership, with the largest increases on routes that serve campgrounds.
2002	L.L. Bean pledges \$1 million in the form of a qualified sponsor agreement to support the Island Explorer. FOA is the designated recipient of the funding, 99% of which will support system operations in order to extend service past Labor Day to Columbus Day.

## **APPENDIX B: CONTACT INFORMATION**

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## APPENDIX C: GLOSSARY

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Acadia NP	Acadia National Park
ATP	Alternative Transportation Program
ATS	Alternative Transportation Systems
CMAQ	Congestion Mitigation and Air Quality Improvement Program
DTI	Downeast Transportation, Inc.
FOA	Friends of Acadia
GMP	General Management Plan
MDI	Mount Desert Island
MDILOT	Mount Desert Island League of Towns
MOU	Memorandum of Understanding
NPS	National Park Service
Maine DOT	Maine Department of Transportation
TEA-21	Transportation Equity Act for the 21st Century
USDOI	U.S. Department of Interior
USDOT	U.S. Department of Transportation
Volpe Center	John A. Volpe National Transportation Systems Center



## **APPENDIX D: RESOURCES FOR FURTHER RESEARCH**

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The National Park Service	<a href="http://www.nps.gov">www.nps.gov</a>
U.S. Department of Interior	<a href="http://www.doi.gov">www.doi.gov</a>
U.S. Department of Transportation	<a href="http://www.dot.gov">www.dot.gov</a>
Maine Department of Transportation	<a href="http://www.state.me.us/mdot/">www.state.me.us/mdot/</a>
ATS and the National Park Service	<a href="http://www.nps.gov/transportation/alt">www.nps.gov/transportation/alt</a>
National Park Foundation	<a href="http://www.nationalparks.org/index.html">www.nationalparks.org/index.html</a>
Acadia National Park	<a href="http://www.nps.gov/acad/home.htm">www.nps.gov/acad/home.htm</a>
Island Explorer Shuttle Bus	<a href="http://www.nps.gov/acad/bus.htm">www.nps.gov/acad/bus.htm</a>
Friends of Acadia	<a href="http://www.friendsofacadia.org">www.friendsofacadia.org</a>
Bar Harbor Chamber of Commerce	<a href="http://www.barharborinfo.com">www.barharborinfo.com</a>
Mount Desert Island	<a href="http://www.mtdesertisland.com/">www.mtdesertisland.com/</a>
Hancock County Planning Commission	<a href="http://www.hcpcme.org">www.hcpcme.org</a>