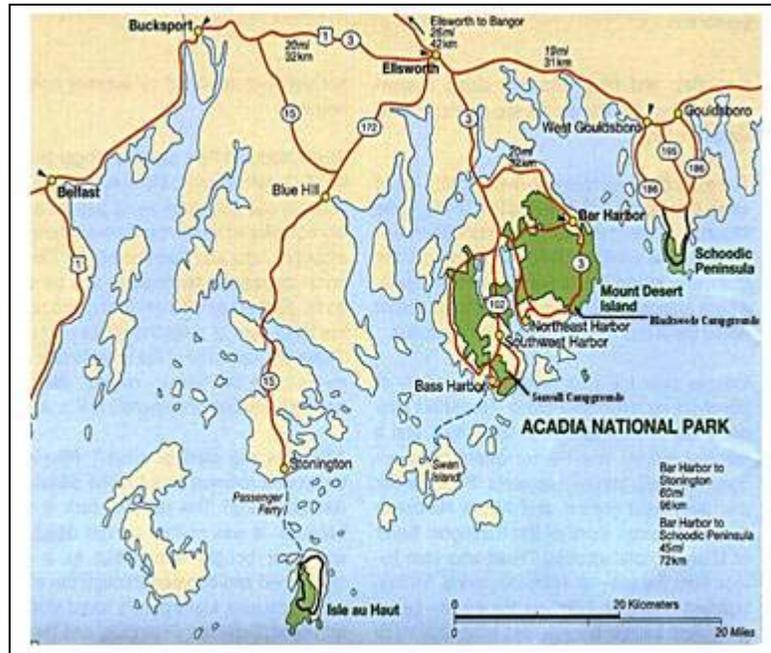


# ACADIA NATIONAL PARK ITS FIELD OPERATIONAL TEST

## KEY INFORMANT INTERVIEWS



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## **Executive Summary**

The objective of this document is to reflect the ideas and opinions of a selected group of key informants and stakeholders involved in the Field Operational Test of ITS components in and around Acadia National Park from 1999 through 2002. The stakeholders were involved in the planning and design of the system, and in some cases, the deployment and operation. The other key informants were management and operational staff for the Island Explorer bus and at Acadia National Park.

The interviews with key informant management and staff were conducted live, from script, and by the same interviewer. The stakeholder interviews were conducted by telephone, from script, by the same interviewer. All interviews were conducted between November 2002 and January 2003.

The aggregate opinion of all groups interviewed is that the ITS FOT at Acadia is a success in accomplishing the goals and objectives of the project. It should be noted that all of the participants interviewed formed a large community that is familiar with each other and has a long history of cooperation. Throughout the project, the participants and stakeholders exhibited a high degree of agreement, mutual support, and technical competency in their respective roles. As a result, their perceptions were largely in agreement and reflected satisfaction with the outcome of the FOT.

### **Island Explorer Interviews**

Island Explorer management believed the FOT was a success despite some technical difficulties. The major obstacle encountered was a topographically influenced communications problems that affected GPS and radio signals. This is largely a technology problem that is location specific. The management otherwise felt the design and execution of the FOT was well done.

The operations personnel (drivers) were well pleased with the ITS FOT. As noted by the managers, the communications problems did cause minor malfunctions of route announcements, departure sign schedules, and passenger counters. Voice communications were also blacked out in certain “shadows” caused by topography. In general, the drivers were positive about the technology deployed and the managerial interaction relating to the deployment.

### **Acadia National Park Interviews**

ANP managers believed that the deployment was a net success despite several shortfalls. One manager commented on the lack of continuity in engineering project management from the Federal Lands staff. This manager recognized that changes in personnel due to transfer, promotion, etc. are inevitable; however there were three successive supervisory engineers overseeing roadbed equipment installation. It was also recognized that engineering support for installation of pavement imbedded traffic counters was new to this agency. This manager felt that the delays incurred in this FOT will be avoided as Office of Federal Lands gains experience with traffic related equipment installations.

Another concern voiced was that a clear understanding of the phases and effects of the entire FOT was needed, and that these were not always available to disseminate to the rangers and other staff. This manager recognized that the management and staff of the Park are very heavily tasked, especially during the tourist season. The suggestion was made that someone on the deployment team could have written a brief project summary for e-mail distribution, and then project updates could have been issued to keep Park staff informed.

### **Stakeholder Interviews**

The stakeholders were uniformly enthusiastic about the FOT and its results. As noted before, this group is characterized by a high degree of cooperation and mutual support in many aspects outside of the ITS FOT. They did, therefore, feel that much of the consensus building and planning that they went through was unnecessary. Virtually all stakeholders recognized the need for consensus building and an iterative planning process; they did however feel that in this project, the early attainment of consensus and universally accepted goals was not recognized by the project team, resulting in needless time and resources spent on planning. Several stakeholders also commented that they felt some of the technology solutions initially offered for the FOT reflected the vendor's previous experience, and were not necessarily best for this application. Again, the stakeholders did not feel their expertise and technical acumen was recognized. The stakeholders also suggested that more effort be applied to "marketing" ITS in FOT's to emphasize its role as a congestion problem solver.

### **Conclusion**

In the views of the key informants the Acadia FOT was a positive demonstration of the efficacy of the deployed ITS components, the potential for addressing transportation problems in a challenging National park setting, and the potential for stakeholder groups to work positively and efficiently to design and deploy an ITS. The stakeholders agreed that the ITS system as deployed is a success, and fully supports the goals and objectives as formulated prior to system design. The stakeholders felt that the customer satisfaction, safety, and efficiency goal areas were especially well supported. Thus, based on the experience of members of the FOT project team most closely involved with the ITS technologies, the FOT overall appears to have been a positive demonstration of ITS capabilities that holds useful lessons for future park-related ITS deployments.

# ACADIA NATIONAL PARK ITS FIELD OPERATIONAL TEST

## RESULTS OF KEY INFORMANT INTERVIEWS

### 1.0 INTRODUCTION

This document presents the opinions of people directly involved in the planning, deployment, and operation of the ITS FOT at Acadia National Park from 1999 to 2002. The participants in these interviews were employees of DownEast Transportation Incorporated, who are the owners and operators of the Island Explorer bus service; employees of Acadia National Park; and key stakeholders from the Mount Desert Island community that were involved in the entire lifecycle of the project.

This report is one of in a series that examines the impact of the ITS deployment. It documents interviews conducted in November and December of 2002 by Battelle. This report provides input to the final evaluation report. The perceptions, experiences, and observations of the key informants help to identify critical elements of success and recommendations for future ITS deployments.

#### 1.1 Overview of the Overall Evaluation Strategy

The Intelligent Transportation Systems deployed at Acadia National Park integrates different components that support the region's needs for transit management, traffic management, and traveler information. The components are interrelated and depicted in Figure 1.1. The relationship between the individual system components, the functional requirements, the system elements, and the needs addressed are shown in Table 1.1. Further elaboration can be found in the Acadia National Park ITS Field Operational Test: Strategic Plan.<sup>1</sup> Based on the collective feedback of the stakeholders, the overriding impact of the ITS technologies should be to reduce vehicle congestion in Acadia National Park. Reduced congestion will have the added benefits of increased mobility of visitors and residents, aesthetic and environmental benefits of fewer vehicles parked on roads, and safety benefits of less traffic and better emergency response.

The evaluation strategy was developed in cooperation with local partners and representatives from the state and federal Departments of Transportation. Despite the broad range of backgrounds and points of view of this group, their conclusions were very similar. There was considerable agreement among the project team that customer satisfaction and mobility were higher in priority than the other goals. However, other evaluation goal areas (safety, efficiency, productivity and economic vitality, and energy and environment) also held some level of importance among the stakeholder organizations.

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<sup>1</sup> Acadia National Park ITS Field Operational Test Evaluation Strategic Plan, July 2000. Available at the ITS JPO evaluation Website: [http://www.its.dot.gov/eval/docs\\_stateregion1.htm](http://www.its.dot.gov/eval/docs_stateregion1.htm).



**Table 1.1: ITS System Components**

<b>System Component</b>	<b>Functional Requirements</b>	<b>System Elements</b>	<b>Needs Addressed</b>
Island Explorer Two-way Voice Communications	Transmit and receive to/from/between vehicles and dispatch center	Transceivers; vehicle and base station Repeater to amplify signal	Improved efficiency Improved safety Real time traffic information for park staff, reduce crush load conditions, incident detection
AVL for Island Explorer	Compute and transmit vehicle location Integrate vehicle locations with departure signs, display vehicle locations <sup>2</sup> , integrate into enunciator	Vehicle transmitter TCP/IP Network Connectivity, GPS Transceiver, GIS Applications, Travel Time Applications	Improved efficiency and performance Decreased use of POV's Improved safety and response Real time updates Increase ridership
Departure Sign for Island Explorer	Transmit location Compute departure Transmit to departure signs	Display sign, Software, Wireless/Wireline Communications	Improved scheduling information Increase ridership
Automated Annunciator for Island Explorer	Determine location Automatically play next stop and other pertinent announcements	Vehicle annunciator	Improve efficiency Reduce delays Increase safety Improve visitor experience
Passenger Counter for Island Explorer	Auto-count boardings/dismounts at selected stops, Store information	Sensor to perform counts Data storage	Increase efficiency Improve planning Increase data options Reduce vehicle crush loads
Parking Lot Monitoring <sup>3</sup>	Record number of vehicles entering and exiting, provide slow scan video of parking area <sup>4</sup> , transmit data, display video, store data from vehicle counts	Counting sensor Video camera Display monitor Wireless/wireline communications TCP/IP network connectivity	Decreased use of POV's Provide planning data Information for Rangers Decreased Response times
Automatic Ranger/Vehicle Geo-Location <sup>5</sup>	Determine location +/-10 meters, transmit same to server, display locations on map	Transmitting unit GPS Transceiver Repeater for signal GPS/GIS Software	Information for Rangers Exact locations of Rangers Decreased response times Improved visitor safety, security
Entrance Traffic Volume Recorder <sup>6</sup>	Record and transmit number of vehicles entering and exiting, store data	Counting sensor Transmission unit	Count vehicles Provide Planning Data Decrease use of POV's
Traveler Information System	Collect and integrate data, disseminate data to appropriate audience	Interactive telephone messaging system <sup>7</sup> , Web page, parking status signs	Increase availability and display options of information, Decrease use of POV's, Improve visitor experience

<sup>2</sup> Not operational during the Field Operational Test

<sup>3</sup> Observation was used as an alternative to automated parking monitors as a way to communicate parking lot status to visitors through the website and specially created parking status signs

<sup>4</sup> Eliminated from the Field Operational Test

<sup>5</sup> Eliminated from the Field Operational Test

<sup>6</sup> Not operational during the Field Operational Test

<sup>7</sup> Not operational during the Field Operational Test

## **2.0 PARTICIPANTS INTERVIEWED**

The interviews were conducted in two groups. The first group consisted of the two organizations directly involved in operation of the ITS technologies: management and operational personnel of the Island Explorer and management and operational personnel from Acadia National Park. The Island Explorer personnel included the operations manager, lead dispatcher (who was also an experienced driver), two veteran drivers, and two first year drivers. The Acadia National Park personnel consisted of the Assistant Superintendent, Visitor Center personnel, rangers stationed at entrance stations and campgrounds, and law enforcement rangers.

The second group of interviewees was the key stakeholder representatives. These were representatives from organizations identified at the beginning of the FOT as key stakeholders. This group of individuals was involved very closely throughout the FOT, and was very active in every phase of planning and deployment. The stakeholder representatives included Maine Department of Transportation, Maine Department of Tourism, DownEast Transportation (operators of the Island Explorer), a local Chamber of Commerce representative, and a representative from Friends of Acadia, a local advocacy group.

It should be noted that the representatives of the stakeholder group were very familiar with each other, and most had collaborated with each other on other projects, including transportation projects. Consequently, this group of stakeholders was able to arrive at consensus almost immediately, and did not have any major disagreements of note during the planning, execution, and test phases of this project. This point is remarkable in that it will probably be the exception to most other ITS deployments.

## **3.0 INTERVIEW METHODOLOGY**

All of the agency personnel were interviewed singly, in person, by one Battelle interviewer. The interviews were conducted over a three-day period in October 2002. The interviews were conducted from a script (Appendix 1A-1D). There were four separate scripts; one each for Island Explorer Management, Island Explorer Operations (drivers), Acadia National Park Managers, and Acadia National Park Rangers.

The stakeholder interviews were conducted over the telephone by one Battelle interviewer in November and December of 2002. The interviews were conducted from a scripts contained in Appendices A-C. The scripts provided a framework around which the interview was structured. However, rather than rigorous adherence to the script, the interview was conducted in a flexible manner so that the perceptions could emerge in areas of most significance to the interviewees.

All interviewees were told that their answers were non-attributable, and their identities would not be revealed. It should be noted that all of the interviewees in both groups felt comfortable speaking frankly, and did not care if they were personally identified.

## 4.0 INTERVIEW RESULTS

The interviewees were asked a series of questions as shown in the appendices. For several of the questions both qualitative responses were gathered along with a quantitative rating to summarize the interviewee’s overall response and to provide a comparative measure of respondent satisfaction with particular ITS components. Quantitative questions were only asked in the Island Explorer and Acadia National Park interviews. The ratings shown in the tables below are the mean for respondents in each category.

As shown in Table 4.1, the ratings from the Island Explorer interviewees indicate a high degree of satisfaction with the performance of the Voice Communicator, Automatic Vehicle Locator, Departure Signs, Annunciator, and Passenger Counter. On a 5-point scale with 5 being very satisfied and 1 being not at all satisfied, an average rating of 4 or better was given by both managers and drivers. Although some problems were noted by the interviewees, managers and drivers felt that the ITS components did function as designed and were a very positive contribution to operating the Island Explorer.

**Table 4.1: Average Ratings of Satisfaction with ITS Components by Island Explorer Staff**

	Voice Communicator	AVL	Departure Sign	Annunciator	Passenger Counter	N =
IE Managers	4.5	4.75	4	4.5	4.5	2
IE Drivers	4.5	Not rated	4	4	4	2

Ratings are averages based on a scale of 1 to 5, with 1 very dissatisfied, 2 dissatisfied, 3 neither satisfied nor dissatisfied, 4 satisfied, and 5 very satisfied.

The quantitative ratings of the Acadia National Park managers and rangers were not as positive as the Island Explorer staff. In Table 4.2 the average rating on the 5-point scale ranged from 3.0 to 3.75, indicating a somewhat neutral attitude regarding satisfaction with the two ITS components deployed within the Park. The original ITS design envisioned automated parking status signs located at the Visitor Center and at a Park entrance. This capability was not deployed, but a manual “tent sign” was displayed at campground entrances and the Visitor Center. This required manual updating during very busy periods, something that was not always possible for the busy staff. In general, ANP staff believed that parking status signs, if automated, would be a welcome congestion management tool. Staff felt that the electronic bus departure signs that located at the Visitor Center and Jordan Pond House were good features, but their utility was diminished somewhat by the fact that the signs could not be turned off after the season was over, resulting in visitor frustration with waiting for buses that were not running. The rangers were somewhat more critical in their assessment because they were responsible for updating the parking status signs and answering visitor frustration with post-season bus inquiries. Table 4.2 reflects this impression.

**Table 4.2: Ratings of Satisfaction with the ITS Components by Acadia National Park Staff**

	Parking Status Sign	Departure Sign	N =
Park Managers	3.0	3.75	2
Rangers	3.0	3.0	5

Ratings are averages based on a scale of 1 to 5, with 1 very dissatisfied, 2 dissatisfied, 3 neither satisfied nor dissatisfied, 4 satisfied, and 5 very satisfied.

The following questions and comment summaries document the interviewed participants' experiences with, and opinions of, the Acadia FOT. The results are presented in the following order:

- Island Explorer: Summary of Manager and Driver Responses
- Acadia National Park: Summary of Manager and Ranger Responses
- Key Stakeholders: Summary of Responses

Interviewees were encouraged to make ad-hoc comments or expand on any questions. What follows are summaries of the responses grouped by topic within each set of interviews.

#### **4.1 Island Explorer: Summary of Manager and Driver Responses (Operations Manager and Lead Dispatcher)**

The Island Explorer bus system consists of three managerial staff, one of whom is year-round, and a seasonal staff of eleven to fourteen drivers. The Operations Manager and Lead Dispatcher represented the managerial staff that was interviewed. Two drivers were interviewed, one new driver and one veteran driver from previous seasons of the Island Explorer.

##### Awareness and Use of ITS Technologies

- Both managerial respondents were familiar with all technologies; one had prior experience with all of them, and one had experience only with radios. Neither of the drivers were previously familiar with the ITS components used in the FOT.

##### Voice Communications

The Island Explorer managers viewed the use of the radios as a very bare minimum for Island Explorer operation. The radios were used constantly to communicate such information as accidents, large passenger loads, hurt animals, and blocked roads. According to the managers, both dispatch personnel and drivers seemed comfortable with radio use. There were some persistent operational problems with blackouts that were due to topographical features on Mount Dessert Island. On a scale of 1 to 5, the Island Explorer managers rated the voice communications technologies was 4.5.

According to the two drivers interviewed, driver reaction to radios was mixed; some drivers thought they were essential, others saw them as contingency tools for extraordinary use. The experienced driver was less reliant on the radio, but both drivers agreed that communications with dispatch were important to report full buses, accidents, hazardous parking, etc. The ability to communicate directly with other drivers is seen as desirable, especially if a dual system channel selection is available. On a scale of 1 to 5, the Island Explorer Drivers rated the Voice Communications 4.5.

### Automatic Vehicle Locator

According to the Island Explorer managers, topographical features on MDI created some transmission problems that affected both radio and global positioning system signals. Problems experienced included “disappearing” buses, and GPS “wobble” that may trigger an Annunciator announcement other than the next stop, or premature announcements. The locator system was seen as extremely valuable in route management, schedule adherence, driver behavior (speeding), and vehicle location in the system. The Operations Manager is also working on a SQL toolkit that will enable historical route analysis to determine peak passenger loads. On a scale of 1 to 5, the Island Explorer managers rated the automatic vehicle locator 4. (Island Explorer drivers were not asked about the automatic vehicle locator, as they were not directly involved in its use.)

### Electronic Bus Departure Sign

The departure sign relies on synchronization with the AVL on buses to compute arrival and departure times. This function occasionally did not work for some buses, resulting in incorrect departure information being posted. Likewise, occasionally a driver would “log in” to an incorrect route number, resulting in a software distortion of the displayed schedule. This error could be overridden from the dispatch office, but sometimes a 90-minute schedule distortion would result. Other than these problems, the signs performed as designed according to the Island Explorer managers.



**Figure 4.1: Electronic Bus Departure Sign At Village Green**

The actual presence of the sign was a big issue, perhaps the largest point of controversy in the entire FOT. The local town council was reluctant to grant permission for erection of the sign on the Bar Harbor Village Green. After much discussion and redesign, permission was granted, and an aesthetically pleasing and useful, but somewhat inconspicuous sign was erected. In the course of conducting the interviews for this report, the evaluation team learned that the Village Green departure sign was probably the most controversial issue surrounding the FOT. It was reported that natives of Bar Harbor, whether they were involved in Island Explorer operations, Acadia National Park, or as stakeholders, objected to the sign as a foreign and inappropriate intrusion on the Village Green. Conversely, other project team members and additionally passengers who were not natives overwhelmingly approved of and relied upon the sign for information. On a scale of 1 to 5, the Island Explorer managers rated the departure signs 4.

Drivers were generally receptive to the departure sign, but felt it did not directly impact their role. One driver did comment that when the sign was “off schedule” due to system problems, passengers were prone to berate drivers, despite on-time adherence to printed schedules. On a scale of 1 to 5, the Island Explorer drivers rated the Departure Sign 4.

#### Automated Annunciator

The annunciator on-board the buses was viewed as a positive feature by the Island Explorer managers. Management kidded that the recorded voice, dubbed “Elvira” was largely appreciated. There were some signal problems that would result in double announcing of a stop, or announcing a stop that was across the street. This occurred in the downtown Bar Harbor hotel district where the stops were close together. The communications consulting company is working on this problem.

Management personnel believed that the menu of announcements could be expanded to include safety, non-smoking, and Park pass purchase announcements. On a scale of 1 to 5, the Island Explorer managers rated the Annunciator 4.5, demonstrating their satisfaction with this ITS component.

Drivers were mixed in their reaction to the recorded voice on the annunciator. Suggestions included reprogramming with natural voices, having several versions of the announcements to offer variety, or to enable drivers to record or customize announcements. The drivers felt that announcements were wrong or premature about 10% of the time. On a scale of 1 to 5, the Island Explorer drivers rated the Annunciator 4.

#### Automatic Passenger Counter

Management believed the passenger counters worked well, and that the counts were about 90% accurate. Some errors were introduced by sensor placement in stairwells and communication problem causing automatic resets in the middle of runs. On a scale of 1 to 5, the Island Explorer managers rated the Passenger Counter 4.5.

The passenger counter was seen as largely irrelevant to drivers, and they did not use data from it. Some problems were encountered as a result of “bad” GPS readings, which triggered a start/end of a route passenger count in the middle of a route and resulted in dropped or doubled passenger counts. Despite this problem, on a scale of 1 to 5, the Island Explorer Drivers rated the Passenger Counter 4.

#### The Suite of ITS Technologies

Both the Operations Manager and Lead Dispatcher were enthusiastic in their belief that the ITS technologies improved operations of the Island Explorer. Specifically, they believed that ITS made the bus easier to use, but were not sure if ITS directly increased ridership. They also believed the communication system greatly improves safety, especially to send text messages if the voice features were inoperable (this occurred in one instance), and to passively locate the vehicle in an emergency. The combination of technologies was seen as valuable in managing the cost effectiveness of operations, but not especially helpful in maintenance of vehicles. The strongest benefit of ITS technology was perceived to be the combination of geographical and

ridership data to enhance route design. Both respondents strongly believed that ITS facilitated good operations and contributed to overall customer satisfaction.

Both managers believed that the deployed suite of technologies was an effective ITS package. Suggested improvements were:

- Provide real-time updates of locations of the buses on the automatic location system rather than the present two minute pulses
- In the Island Explorer office provide visibility of vehicle monitoring information such as oil pressure, engine temperature, and trip duration
- Equip the departure signs system to enable the office to override the messages when necessary.

All drivers agreed that deployed technologies made their job easier and enabled them to cope with increasing traffic and ridership. Specific comments included:

- Modify the radio/public address microphone so that it may be used “hands free” on mountainous routes
- Change the screen design on the monitor so that the screen could be read in bright sunlight or twilight
- Departure messages could be sent as green/red “go/wait” messages.

#### Traffic on Mount Desert Island

Drivers felt that traffic is increasing despite increased Island Explorer ridership. Likewise, they feel that increased visitor use of bicycles presents a challenge with picking up passengers who wish to stow bicycles on the bus. Both drivers believed that there is also an increased traffic hazard with more bicycles on the road. Despite these concerns, the drivers felt that ITS deployments have enabled them to cope better with traffic. (Managers were not asked about their perceptions of traffic.)

#### Interaction with Bus Passengers

Both drivers mentioned that passengers commented favorably about departure signs. The veteran driver believed that the sign at the Village Green and Jordan Pond House did eliminate a lot of route schedule questions that passengers waiting for a bus had asked in previous years.

## **4.2 Acadia National Park: Summary of Manager and Ranger Responses**

The evaluation team interviewed two senior Park managers and a total of five rangers, two in law enforcement and three in interpretative positions. The following summarizes their responses by topic area.

## Familiarity with ITS Components

Both Park managers were familiar with these technologies; none had prior experience with them. The rangers interviewed also were familiar with these technologies, and they also had no prior experience with the ITS technologies.

## Parking Lot Status Signs

The parking lot status signs were located at two campgrounds and at the Visitor Center. They were sandwich type signs that were changed manually. Several respondents felt the design and appearance of the signs could be improved. Changes in parking status had to be conveyed by telephone, and were not usually updated in a timely manner. While this was perceived to be a good concept, Park personnel did not believe a manual system was workable. On a scale of 1 to 5, the Acadia National Park managers rated the parking lot status Sign 3.



**Figure 4.2: Parking Lot Information Sign at the Visitor Center**



**Figure 4.3: Parking Lot Information Sign at Seawall Campground**



**Figure 4.4: Electronic Bus Departure Sign at Visitor Center**

Only one of the rangers had direct experience with updating the parking lot signs. This ranger felt that while the signs were a good idea but that the telephone notification system used was cumbersome. The rangers were largely neutral as to whether or not the signs were a benefit to visitors. On a scale of 1 to 5, the Acadia National Park Rangers rated the Parking Lot Status Sign 3.

## Electronic Bus Departure Signs

The departure signs experienced initial problems with power interruptions. Park managers were largely neutral on the utility of the departure signs at the two

locations within the Park, as they were out of the way of the Visitor Center and Jordan Pond House personnel. One common comment was that the sign continued to show a schedule long after the buses had stopped running for the season. On a scale of 1 to 5, the Acadia National Park managers rated the departure sign 3.75.

The rangers were neutral about the worth of departure signs. They did comment that they were surprised the signs had not been vandalized. On a scale of 1 to 5, the Acadia National Park rangers rated the departure signs 3.

### Web Components

Only one respondent had seen the web parking status page, which was linked to the Acadia National Park main website. That manager's comment was that the page should be more prominently linked, and have a better design. (The web page was not rated by the managers and the rangers, who did not experience it in their jobs, were not asked about the web page.)

### Suite of ITS System Components

One manager had direct experience in the design and deployment of the parking lot loop detectors and the radio antennae system. This manager had the following observations:

- There were three different Contracting Officers and two different highway engineers on this project. The lack of continuity caused delays and other problems.
- The Loop detectors system was designed for analog modems, but digital ones were specified
- Park personnel could have been of valuable assistance if specific component requirements (antennae) were identified up front

### Other Comments from Acadia National Park Staff

When asked about their perception of the impact of ITS on visitors to Acadia, both managers who were interviewed felt that the net impact of ITS was positive, especially from a traffic congestion management standpoint. Park managers believed that parking lot and departure signs do have a positive influence on congestion near attractions, parking behavior, and traffic by facilitating bus travel.

On the other hand, the rangers who were interviewed felt that bus departure and parking lot status signs as deployed did not materially affect congestion near attractions, parking behavior, or traffic. Nevertheless, all rangers interviewed believed that traffic congestion was a problem and that the Island Explorer, with ITS-enhancements, is helping to alleviate it. Thus, they believe that ITS components that will further enhance the Island Explorer would be worthwhile. For example, automation of real time information about parking lots (rather than the manually-changed signs) together with a suggestion to "Take the Bus" when these lots are full were suggested by the rangers as meaningful improvements to the present system.

The managers did not suggest any specific additional ITS improvements, but both managers were very adamant that training in systems technology, operation, and maintenance should be provided in conjunction with any ITS installation or deployment.

### 4.3 Key Stakeholders

Stakeholder representatives were from five organizations that have been active members of the FOT project team and have worked together closely throughout all phases of the FOT. Five interviews were conducted with one person from the following organizations: Maine Department of Transportation, Maine Department of Tourism, DownEast Transportation, a member of the local business community, and Friends of Acadia.

#### ITS Technologies in the FOT

All stakeholders had experienced most of the technologies that were deployed except for the webpage. All reported experiences were positive. They agreed that the appropriate mix of technologies was identified. Several commented that during the initial planning sessions, the consultant team that was determining requirements seem to be “pushing” a technology profile that was not appropriate for MDI. This was eventually overcome to the stakeholders’ satisfaction. All stakeholders agreed that full deployment of the parking lot loop detectors and sign displays should be pursued. There was also universal agreement that the webpage should be completed and prominently linked to ANP/MDI web sites.

#### Stakeholder Involvement

It should be noted that the group of stakeholders for this FOT were previously acquainted, and most had collaborated on other projects, including regional transportation projects. Additionally the group was composed of highly motivated and politically neutral professionals. Accordingly, they communicated often and informally. The stakeholder group felt that they were aware of transportation needs and possible solutions before this FOT was started.

The group felt that the composition and size of the stakeholder group were correct. The stakeholders all commented that in the beginning of the project, they believed they were being “talked down to”, but not listened to. They felt that as a result, time and project money were wasted on superfluous discussions of goals and measures that were decided and agreed to very early. All of the stakeholders recognized that deployments and FOT’s might require iterative consensus building; however, in this instance, they felt the project team was ignoring stakeholder ability and consensus.

The stakeholders agreed that all organizations worked well together. The local stakeholders, (Maine Departments of Transportation/Tourism, DownEast Transportation, Chamber of Commerce, and Friends of Acadia) felt they held fast to what they believed system requirements to be, despite some initial fiscal and technology pressure to leave some components out of initial architecture. The stakeholders identified the Maine Department of Transportation representative, Susan Moreau, as the leader that held the group together and moved the project forward.

#### Efficacy of Internal Processes

Despite the perception of stakeholders who felt that the project planning was repetitive at first, they agreed that the project was well planned and executed. It was also agreed that creating a procurement sub-group was efficient and responsive to project needs, and did not needlessly involve stakeholders who had no interest in procurement. The stakeholder cohort also had

independent experience with several of the vendors, enabling efficient communication when necessary.

### Did the FOT Meet Its Project Goals?

The stakeholder group unanimously agreed that their experience was very positive and reinforced their willingness to support ITS and collaborate with other organizations in the future. They believed that project goals evolved during the FOT, and accepted that their perceptions of goals were often personally biased. Goals identified were:

- Smooth functioning of transit operations
- Delivery of quality products to happy customers
- Increase in car free visitation to MDI
- Establishing a reputation as a quality visitor destination
- Making the Island Explorer more “user friendly”
- Successful technology deployment

These goals were seen as successful, but some concerns about the FOT did emerge during the interviews. First, was a lack of marketing for the ITS components. ITS could have been marketed as a congestion problem solver but it was not. Second were shortcomings in specific ITS components. There was a shortfall in traveler information on the web, as only parking lot status information was available on a link to the Acadia National Park website. Moreover, stakeholders remarked that kiosks for disseminating information to visitors were planned but not deployed. Another disappointment was the lack of real time parking status signs as goals that “got lost”. The real-time parking signs were placed in three sites within the Park. However, they were not electronic and required Park rangers to update the data manually.

### Lessons Learned

While all stakeholders agreed that the FOT was a success, they identified the following as lessons learned and important advice to a colleague in a similar role:

- *“Get issues on the table early.”*
- *“Someone else’s solution that worked somewhere else may not work for you; stick to your beliefs”*
- *“Include everyone needed in stakeholder groups and do this at the start”*
- *“Know the project, know the people, know the technology”*
- *“Where’s the money?”*
- *“Expect good results and demand them”*
- *“Design from requirements back”*
- *“Go in with your eyes wide open, and keep them wide open”*
- *“Make everyone listen in the beginning, don’t give in to the process”*
- *“Shared vision is the key to success: create it”*
- *“Select a leader”*
- *“Ask what do we want? Make sure there is a specific reason for every element”*

## 5.0 DISCUSSION

The results from the key informant interviews provided quantitative and qualitative information to evaluate the effectiveness of the FOT. One measure of the relative success of the FOT is to consider the initial hypotheses identified by the stakeholder groups in planning sessions. Initially, six evaluation goal areas were defined. These areas were: customer satisfaction, mobility, productivity and economic vitality, efficiency, energy and the environment, and safety. In the course of conducting the interviews, each of these areas was discussed to some degree, but three areas were of particular interest in the interviewees. Customer satisfaction, safety, and efficiency were more widely discussed by the respondents, and indeed these areas were targeted by the interviews. Table 5.1 below lists the evaluation goal areas, the objectives that the FOT was expected to accomplish, and the hypotheses related to the goal and objective.

**Table 5.1: Evaluation Goal Areas, Objectives, and Hypothesis**

Evaluation Area	Objective	Hypotheses
<b>Customer Satisfaction</b>	To provide useful and timely information for the transportation provider	ITS technologies will have positive benefits/effects on IE drivers jobs, IE operations, and interagency relationships
<b>Safety</b>	To increase transportation safety in ANP and MDI	ITS will reduce hazardous conditions by better management of transportation resources
<b>Efficiency</b>	To increase the number of customers served	ITS provides better operating information, which allows for more efficient deployment of resources
	To distribute the demand on ANP resources more evenly	Better information allows for visitor pre- and on-trip planning

The interviews generally supported the hypotheses stated. In the customer satisfaction evaluation area, both the Island Explorer and Acadia National Park respondents felt the ITS communication technologies were absolutely essential to operation of the bus system, and greatly increased internal customer satisfaction (IE and ANP Staff) and external customer satisfaction (riders).

For the safety evaluation area, the respondents felt that ITS did increase transportation safety by carrying more riders on the buses, and therefore avoiding vehicle congestion. Although vehicle congestion remains a problem at times in the towns and in ANP, the bus drivers felt that it has not gotten worse as a result of a higher percentage of visitors riding the bus.

ITS was a clear benefit in increasing efficiency. Island Explorer management felt the data provided from the system enabled much more effective and efficient route scheduling and equipment and driver allocation, thereby enabling more passengers to be served. Both ANP staff

and Island Explorer drivers also felt that departure sign information was an incentive for people to wait for the bus, again increasing ridership.

The results of the interviews with Island Explorer managers and operational staff revealed strong approval of the ITS components that were fielded. The voice communicator was praised as the single most important element in the ITS suite. It would have received a perfect effectiveness rating except for transmission difficulties that are due to the topography of Mount Desert Island. These same transmission problems also had an occasional impact on AVL updates, concordance with the departure schedule, the stops announced by the voice annunciator, and resets to the passenger counter. Despite these “bugs”, which were mostly solved in the course of the deployment, both Island Explorer management and operations staff rated all components between “satisfied” and “very satisfied”.

The opinions of the management and operational staff of Acadia National Park were somewhat more muted concerning the Parking Status Sign and the Departure Sign. Both groups rated these “neither satisfied nor dissatisfied” in relation to their perception of effectiveness. All ANP personnel agreed that they viewed these as peripheral to their daily mission. Comments were made that the parking status signs would be useful if they were automated and displayed in prominent points. Some resignation was expressed by park personnel that there will always be overflow parking at peak periods, and the status sign alone is not a significant deterrent. All park personnel did agree that the FOT was an overall success, and felt that the other ITS components deployed on the Island Explorer greatly contributed to the operation of the bus and to “moving visitors” in a safe and enjoyable manner.

Stakeholder opinions of the FOT were overwhelmingly positive. The only caveat that was repeatedly expressed was that the planning was too drawn out, and that the planning team did not recognize when consensus was reached. Several members who have ITS experience on the regional and state level appreciate the role of “form” in the ITS planning process, but felt that “too much time and money were wasted by repeating the same things over again.” It is worthy to note that some stakeholder groups may be more congruent in outlook and technically adept than others. The wise planner will therefore recognize when consensus is reached.

# Appendix A1

## Island Explorer Manager Interview Questions

(Audience is Operations Manager and Lead Dispatcher)

Thank you for taking the time to talk with me today. I would like to take a few minutes to discuss your experience with, and perceptions of the technologies implemented on the Island Explorer and their impact on traveler behavior on MDI. As part of the evaluation of these technologies, we are interested in your managerial perspective of the effect these technologies had on the Island Explorer operation.

1. As of 2002, The Island Explorer was operating with the following technologies:

- **Two-way voice communicators**
- **Automatic Vehicle Locator**
- **Departure Signs at the Village Green, Hull's Cove Visitor Center, and Jordan Pond**
- **Automated Annunciator**
- **Passenger Counter**

Were you aware of all of these technologies?

2. Have you had experience with any of these technologies other than with the Island Explorer? If so, which technologies?

3. Voice Communications:

- How has the addition of the two-way voice communicators effected your operation?
- What were your initial expectations? Were they met?
- Did you use it to dispatch additional buses to cover peak loads?
- Did you use the system to report any safety-related information (vehicle accident, visitor accident/illness, natural occurrence such as storm/fire, etc.)? If so, what and how often?
- Have you used the voice communication system to communicate with park staff? Please explain.
- Have you used the voice communication system for bus emergencies, such as contacting local police, fire, wrecker, or ambulance personnel? Please explain
- Did you experience any installation difficulties? How easily were these resolved?
- Were there any unusual or unforeseen problems with operation of the voice communicators?
- "Overall, how satisfied were you with the performance of the voice communicator on a scale of 1 (not at all satisfied) to 5 (very satisfied)?"
- How could the voice communication system be improved?

4. Automatic Vehicle Locator

- Did the AVL operate as expected?
- How did you use AVL information?
- Did the AVL enable you to make management decisions such as adding another bus or making dynamic or schedule changes?
- Did you find, or could you suggest any uses of AVL data that were not identified/used this year?
- Did you experience any installation difficulties? How were these difficulties resolved?
- Were there any unusual or unforeseen problems with operation of the AVL?
- What benefits did you expect from using the AVL? Were they realized?
- “Overall, how satisfied were you with the performance of the AVL on a scale of 1 (not at all satisfied) to 5 (very satisfied)?
- How could the AVL system be improved?

5. Departure Sign

- Did the departure signs function as expected?
- How reliable was the information on the sign? Did the departure sign interface correctly with the AVL?
- Do you think the departure sign has had an effect on ridership? If so, how?
- Can you think of enhancements or changes that could be made to the display of information?
- How often was information other than departure times displayed? What was this information?
- Did you experience any installation difficulties? How were these difficulties corrected?
- Were there any unusual or unforeseen problems with operation of the departure sign?
- “Overall, how satisfied were you with the performance of the departure sign on a scale of 1 (not at all satisfied) to 5 (very satisfied)?
- How could departure signs be improved? Do you have any ideas about alternative locations or displays?

6. Annunciator

- Did the annunciator function to your expectations?
- How accurate were the announcements (wrong stops/premature/late)?
- How often (give percentage) were the announcements not accurate/ timely? How easy was this to fix? (did this require cycling of the entire script, or just reset one announcement)
- Do you think the annunciator made the driver’s job easier?
- Did the annunciator make training drivers easier? (not having to train drivers about landmarks, etc.)

- Do you think the annunciator enabled the driver to better adhere to schedule, and avoid distracting questions?
- Can you think of other uses for the annunciator?
- Are there different messages that could be announced?
- Did you experience any installation difficulties? How were these resolved?
- Were there any unusual or unforeseen problems with operation of the voice annunciators?
- “Overall, how satisfied were you with the performance of the annunciator on a scale of 1 (not at all satisfied) to 5 (very satisfied)?
- Can you recommend any improvements in this system?

7. Passenger Counter

- Did the passenger counter operate as expected?
- Do you use data collected by the passenger counter? How?
- Do you think the passenger counts were accurate? If not, what factors introduced errors?
- Can you think of different uses for this technology?
- Did you experience any installation difficulties? How were these resolved?
- Were there any unusual or unforeseen problems with operation of the passenger counters?
- “Overall, how satisfied were you with the performance of the passenger counter on a scale of 1 (not at all satisfied) to 5 (very satisfied)?
- Can you recommend any improvements in this system?

8. Systems Suite

- Do you think the technologies of the Island Explorer improved? Hindered?
  - Ridership
  - Safety
  - Cost effectiveness of operation
  - Maintenance of vehicles
  - Efficiency of routing
  - Customer satisfaction
  - Other?

9. Overall, how do you feel that these new technologies fit with the Island Explorer Bus System? Are there any others that you think would be helpful?

## Appendix A2

### Island Explorer Driver Interview Questions

**Drivers:** (Suggested audience at least one veteran (IE veteran) driver and at least one new driver)

Thank you for taking the time to talk with me today. I would like to take a few minutes to discuss your experience with, and perceptions of, several technologies and their impact on traveler behavior on MDI. As part of the evaluation of technology deployment, and how it has effected the Island Explorer operation, the evaluation team is particularly interested in your experience and opinion as an Island Explorer driver.

1. Which routes did you drive? How long have you driven these routes?
2. As of 2002, The Island Explorer was operating with the following technologies:
  - **Two-way voice communicators**
  - **Automatic Vehicle Locator**
  - **Departure Signs at the Village Green, Hull's Cove Visitor Center, and Jordan Pond**
  - **Automated Annunciator**
  - **Passenger Counter**

Were you aware of all of these technologies?

3. Have you had experience with any of these technologies other than with the Island Explorer? If so, which technologies?
4. Voice Communications:
  - How has the two-way voice communicators effected your driving? Are they distracting? Helpful?
  - What did you expect to be the benefits of having the two-way voice communicators? Did they meet your expectations?
  - How much do you use the radio? What is its best benefit? What is its worst drawback?
  - Did you use the system to communicate with other drivers?
  - Did you use the system to request additional buses when your bus became full?
  - Did you use the system to report any safety related information to the IE Operations Center (vehicle accident, visitor accident/illness, natural occurrence such as storm/fire, etc.)? If so, what and how often?
  - Have you used the voice communication system to communicate with park staff? Please explain.
  - Have you used the voice communication system for emergencies such as contacting local police, fire, wrecker, or ambulance personnel? Please explain.

- Did you experience any operational difficulties? How were these resolved?
- Were there any unusual or unforeseen problems with operation of the voice communicators?
- “Overall, how satisfied were you with the performance of the voice communicator on a scale of 1 (not at all satisfied) to 5 (very satisfied)?
- How could the voice communication system be improved?

5. Departure Sign

- Did you get a chance to experience the departure signs?
- What did you hear from your passengers about the departure sign?
- Do you think the departure signs contributed to an increase in ridership?
- How reliable was the information on the sign?
- What comments or feedback did you receive about the departure sign?
- Did the departure signs reduce requests from passengers for route and schedule information?
- Do you think the departure signs improved the visitor experience?
- How could the departure sign be used differently? Can you think of enhancements to the display of information?
- How could this component be improved?
- Overall, how satisfied were you with the performance of the departure sign? On a scale of 1 (not at all satisfied) to 5 (very satisfied)?

6. Annunciator

- What is your opinion of the automated annunciator? Was it distracting? Helpful?
- What did you expect the benefits to be from the addition of the automated annunciator? Were they realized?
- How accurate were the announcements (wrong stops/premature/late)?
- How often (give percentage) were the announcements not accurate/timely? How easy was this to fix? (did this require cycling of the entire script, or just reset one announcement)
- Do you think the annunciator made your job easier?
- Did the annunciator make your training easier? (not having to learn about landmarks, etc)
- Do you think the annunciator enabled you to better adhere to schedule, and avoid distracting questions from passengers?
- Can you think of other uses for the annunciator?
- Are there different messages that could be announced?
- Would you like to customize any announcements on your route?
- Were there any unusual or unforeseen problems with operation of the annunciator?
- Did you experience any operational difficulties? How were they corrected?
- Overall, how satisfied were you with the performance of the annunciator? On a scale of 1 (not at all satisfied) to 5 (very satisfied)?
- Can you recommend any improvements in this system?

## 7. Passenger Counter

- Do you use data collected by the passenger counter? How?
- Did the passenger counter operate without problems?
- Do you think the passenger counts were accurate? If not, what factors introduced errors?
- Did you have to make adjustments for passenger counts, such as your exiting the bus, or possible multiple counts of the same passenger?
- Did you experience any operational difficulties?
- Were there any unusual or unforeseen problems with operation of the passenger counters?
- Overall, how satisfied were you with the performance of the passenger counter on a scale of 1 (not at all satisfied) to 5 (very satisfied)
- Can you think of different uses for this technology?
- Can you recommend any improvements in this system?

## 8. Traffic

- Do you think that vehicle traffic congestion is increasing or decreasing on your route? Where?
- Is the mix of traffic (pedestrian/cars/RVs/tour buses/bicycles/motorcycles) changing?
- Is pedestrian traffic more or less than in years past? Where is it worse? Have you noticed an increase or decrease around parking areas?
- Have you noticed an increase or decrease in bicycle traffic on your routes?
- How many bicycles do you carry in a typical day? Did that change during the season?
- If you have driven more than one route, which routes carried the most bicycles?
- Do you think the Island Explorer is actually creating more bicycle traffic on MDI?
- Do you feel that carrying bicycles may have negative impacts (delays in routes/damage to vehicles/injuries loading or unloading)
- What would you do to resolve the bike issues on the IE Buses?

## 9. Passengers

- Do you think you drove more passengers this year than last year? (if applicable)
- Did passengers ask you more route/schedule/attraction-related questions than last year?
- Did any passengers mention any ITS technologies to you, including the IE/ANP web pages, ANP telephone system, or parking status signs?

## 10. System Questions

- Do you think the technologies improved your ability to perform your job?
- If so, which ones?
- What would you change in the technologies?

- What would you add to the technologies?
- Do you have any safety concerns about the technologies?

# Appendix B1

## ANP Manager Interview Questions

### Park Managers:

(Two senior ANP managers with long-term involvement with this FOT)

Thank you for taking the time to talk with me today. I would like to take a few minutes to discuss your experience with, and perceptions of, several technologies and their impact on traveler behavior on MDI. As part of the evaluation of technology deployment, and how it has affected visitor behavior to Acadia National Park operation, the evaluation team is particularly interested in your managerial perspective.

1. In addition to a number of technology enhancements of the Island Explorer bus, the following technology tie-ins have been deployed to provide traveler information for Park visitors:
  - Parking lot status signs
  - Departure signs
  - Webpage with parking lot status

Were you aware of all of these technologies?

2. Have you had experience with any of these technologies other than here at Acadia National Park? If so, which technologies?
3. Parking Lot status signs
  - Are you involved in the operation of the parking lot status signs? (Specify which one: Blackwoods/Seawall/Visitor Center)
  - What benefits did you expect from them? Were they realized? Benefits to employees? Self?
  - Have you encountered difficulties in getting the signs (sandwich board/cone sign) updated?
  - Have the signs made a difference in traveler behavior? How?
  - Have the parking lot signs system eliminated staff time needed to answer questions or provide information?
  - Have you encountered difficulties with the installation of the system?
  - Were there operational difficulties with the system?
  - Overall, how satisfied were you with the performance of the parking lot signs on a scale of 1 (not at all satisfied) to 5 (very satisfied)?
  - How could the parking lot status signs be improved?

4. Departure signs

- Did you have experience with, or knowledge of the departure signs at Jordan Pond and the Visitor Center?
- Did you find the signs were helpful to your staff by eliminating questions?
- Do you think the times displayed were reliable?
- Would you like to be able to display ANP information on these signs?
- Can you suggest improvements to the information display on these signs?
- Overall, how satisfied were you with the performance of the departure signs on a scale of 1 (not at all satisfied) to 5 (very satisfied)?

5. Web Components

The technology deployment team provided a web page entitled “Trip Planning Assistant” which was linked to the ANP website. (Show interviewee picture of the web page)

- Were you aware of this page?
- Did you visit this page?
- Do you think displaying parking information here is a good idea?
- What other information should be displayed?
- Do you think this should be a permanent part of the ANP website?

6. System Components

- Were you involved in any aspect of designing or deploying any other transportation technology, such as the parking lot loop detectors? Of the radio antennae?
- What went well with the deployment of the radio antennae, and what problems did you encounter? For example, issues affecting the radio antennae might have included:
  - Procurement
  - Legal
  - Institutional
  - Technical
  - Other
- What went well with the deployment of the loop detectors, and what problems did you encounter? For example, issues affecting the loop detectors might have included:
  - Procurement
  - Legal
  - Institutional
  - Technical
  - Other
- What suggestions do you have for deploying similar technologies in the future?

7. Have visitors mentioned any ITS technologies to you? Which ones? What was the nature of their comments?
8. Would you add any other technology component to those already deployed? Which ones would you suggest?
9. Do you think the departure signs, parking lot status signs, or web page have affected:
  - Congestion on or near attractions
  - Parking behavior
  - Traffic
10. Do you have any “lessons learned” to offer?

## Appendix B2

### Acadia National Park Ranger Interview Questions

#### Rangers:

(Veteran full time staff including two law enforcement rangers, one Visitor Center staff, one interpretative ranger, and one camp ground supervisor ranger)

Thank you for taking the time to talk with me today. I would like to take a few minutes to discuss your experience with, and perceptions of, several technologies and their impact on traveler behavior on MDI. As part of the evaluation of technology deployment, and how it has affected visitor behavior to Acadia National Park operation, the evaluation team is particularly interested in your field observations and perspective.

1. In addition to a number of technology enhancements of the Island Explorer bus, the following technology tie-ins have been deployed to provide traveler information for Park visitors:

- Parking lot status signs
- Departure signs

Were you aware of all of these technologies?

2. Have you had experience with any of these technologies other than here at Acadia National Park? If so, which technologies?

3. Parking Lot status signs

- Are you involved in the operation of the parking lot status signs? (Specify which one: Blackwoods/Seawall/Visitor Center)
- What benefits did you expect from them? Were they realized? Benefits to other employees? Self?
- Have you encountered difficulties in getting the signs (sandwich board/cone sign) updated?
- Have the signs made a difference in traveler behavior? How?
- Have the parking lot signs system eliminated staff time needed to answer questions or provide information?
- Were there operational difficulties with the system?
- Overall, how satisfied were you with the performance of the parking lot signs on a scale of 1 (not at all satisfied) to 5 (very satisfied)?
- How could the parking lot status signs be improved?

4. Departure Signs

- Did you have experience with, or knowledge of the departure signs at Jordan Pond, Visitor Center, and Village Green?
- Did you find the signs were helpful to your staff by eliminating questions?
- Do you think the times displayed were reliable?
- Would you like to be able to display ANP information on these signs?
- Can you suggest improvements to the information display on these signs?
- Overall, how satisfied were you with the performance of the parking lot signs on a scale of 1 (not at all satisfied) to 5 (very satisfied)?

5. Have visitors mentioned any ITS technologies to you? Which ones? What was the nature of their comments?

6. Would you add any other technology component to those already deployed? Which ones would you suggest?

7. Do you think the departure signs and parking lot status signs have effected:

- Congestion on or near attractions
- Parking behavior
- Traffic

8. Do you have any “lessons learned” to offer?

## Appendix C

### Stakeholder Interview Script

Thank you for taking time from your hectic schedule to talk with me today. I would like to take a few minutes to discuss your perceptions of the recent field operational test of the Intelligent Transportation System components deployed over the last several years to assist the Island Explorer and Acadia National Park personnel with transportation problems on Mount Desert Island. We are interested in your perceptions and experience with the process of implementing the ITS, and your suggestions on improvements for the future.

Your responses will be included in our analysis of the project, but will not be attributed to you. Thus, your candor is welcome, as it will provide useful input to similar projects in the future.

To remind, the technologies deployed were:

- Island Explorer two-way voice communicators
- Island Explorer Automatic Vehicle Locators
- Automated Annunciator onboard the Island Explorer
- Passenger counter onboard the Island Explorer
- Departure Signs at the Village Green, Hull's Cove Visitor Center, and Jordan Pond
- Webpage with status of parking lots (open or full)

Other technologies were not fully deployed in time for the tourist season:

- Interactive voice response telephone system
- Loop detectors for counting vehicles at park entrances and selected parking lots

1. Did you have any direct experience with any of the technologies and if so please briefly describe that experience?
2. Do you think that the mix of technologies identified were responsive to the MDI community's needs? Was any lacking?
3. Do you think there was sufficient stakeholder involvement from the very beginning of this project? Were there too many (or too few) stakeholders involved? Do you think the correct stakeholders were identified? Was there any part of the process that may have inhibited stakeholder involvement or contribution of ideas?
4. How well did the organizations (USDOT/NPS/ANP/Federal Lands/DTI/Friends of Acadia/Chambers of Commerce) work together?
5. How well did the internal processes work, such as project planning and procurement? Are there any changes you would recommend?

6. Did you have any reason to contact the Park or other organization during the project about concerns with the project? What were your concerns? Were they addressed?
7. Has this experience influenced your willingness to:
  - Support use of similar technologies (aka intelligent transportation systems) to address transportation problems in the future?
  - Desire to collaborate or form partnerships to work on issues such as demonstration projects, grant proposals, staffing issues, or other organization functions?
8. What do you view as the major goals of the project and do you think they were achieved? What is your general perspective on the success or failure of this project?
9. What “lessons learned” would you glean from this experience? What were the most important ingredients for the success (or failure) of the project? What advice would you give a colleague who was in a similar position?
10. Any additional comments or suggestions?

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