

TEST PLAN :

**Branson TRIP (Travel and
Recreational Information Program)
Tourist Intercept Survey**



May 29, 1998

Prepared for:

**U.S. Department of Transportation
ITS Joint Program Office, HVH-1
Room 3400
400 Seventh Street, SW
Washington, D.C. 20590**



U.S. Department
of Transportation
**Federal Highway
Administration**

Prepared by:

**Battelle
505 King Avenue
Columbus, OH 43201**

 **Battelle**
... Putting Technology To Work

TEST PLAN

Branson TRIP (Travel and Recreational Information Program) Tourist Intercept Survey

May 29, 1998

Principal Authors:

Bennett Pierce (Battelle)
John Orban (Battelle)
Matt Burt (BRW Inc.)
Hugh Clark (CJI Research)
Diane Burkorn (Battelle)

Prepared for:

U.S. Department of Transportation

Notice

This document is disseminated under the sponsorship of the Department of Transportation in the interest of information exchange. The United States Government assumes no liability for its contents or use thereof.

PREFACE

This document is part of a series of planning documents for the evaluation of Field Operational Tests of Traveler Information Services in Rural Tourism Areas (Branson TRIP and I-40 TTIS) prepared by Battelle, along with subcontractors BRW Incorporated and CJR Research, for the U.S. Department of Transportation's ITS Joint Program Office (DOT/JPO). Electronic versions of these documents are available through the ITS Electronic Document Library (EDL):

<http://www.its.fhwa.dot.gov/cyberdocs/welcome.htm>

As indicated below, selected documents were published by DOT and are available through the National Technical Information Service (NTIS). Questions or comments concerning the documents in this series are encouraged and can be directed to:

Joseph I. Peters
 ITS Joint Program Office
 Federal Highway Administration (HVH-1)
 400 Seventh Street, SW
 Washington, DC 20590
 (202) 366-2202
 E-mail: joe.peters@fhwa.dot.gov

Title	Date	DOT Report No.
Evaluation Plan: The I-40 Traveler and Tourist Information System Field Operational Test	February 25, 1998	FHWA-JPO-99-028
Test Plan: I-40 TTIS Tourist Intercept Survey	May 18, 1998	FHWA-JPO-99-029
Test Plan: I-40 TTIS Focus Groups and Personal Interviews	May 18, 1998	
Test Plan: I-40 TTIS System/Historical Data Analysis	May 20, 1998	
Test Plan: I-40 TTIS Route Diversion Study	May 20, 1998	
Evaluation Plan: The Branson Travel and Recreational Information Program Field Operational Test	February 25, 1998	FHWA-JPO-99-027
Test Plan: Branson TRIP Tourist Intercept Survey	May 29, 1998	
Test Plan: Branson TRIP Focus Groups and Personal Interviews	May 29, 1998	
Test Plan: Branson TRIP System/Historical Data Analysis	June 1, 1998	
Test Plan: Branson TRIP Travel Time/Data Accuracy Test	June 1, 1998	
Executive Summary: Evaluation Plan (for the) National Advanced Rural Transportation Systems Field Operational Tests of Traveler Information Services in Tourism Areas	July 1998	

TABLE OF CONTENTS

	Page
1.0 Introduction	1
2.0 Approach	1
3.0 Schedule	2
4.0 Pre-Test Activities	3
4.1 Data Collection Design	3
4.2 Training	4
4.3 Procurement of Required Equipment	5
4.4 Additional Resources and Facilities	6
5.0 Test Activities	6
5.1 Sampling Locations and Schedule	6
5.1.1 Sample Locations and Schedule for the Pilot Data Collection Phase	6
5.1.2 Sample Locations and Schedule for the Main Data Collection Phase	7
5.2 Intercept Protocol/Sampling Approach	10
5.2.1 Responsibilities of Screening Interviewer	12
5.2.1.1 Interception and Recruitment of Tourists	12
5.2.1.2 Determination of Eligibility	12
5.2.1.3 Recruitment	13
5.2.2 Responsibilities of the Questionnaire Administrator	13
5.2.2.1 Completion of the Main Questionnaire	13
5.2.2.2 On-Site Data Quality Procedures	13
5.2.2.3 Distribution of Incentives	14
5.2.2.4 Identification of Participants for Focus Groups/Personal Interviews	14
6.0 Post-Test Activities	15
7.0 Data Requirements and Analysis	15
7.1 Data Requirements	15
7.1.1 Sample Size Requirements for Pilot Phase of Data Collection	16
7.1.2 Sample Size Requirements for Main Phase of Data Collection	16
7.2 Data Analysis	17
8.0 Report Format	19
9.0 Required Resources	20
Appendix A - Draft Questionnaires	A - 1

List of Tables

Table 1. Anticipated Schedule for Test	3
Table 2. Agenda for Training	4
Table 3. Sampling Locations and Schedule for the Pilot Phase of Data Collection	7
Table 4. Sampling Collection Sites at Each Sampling Location	8
Table 5. Anticipated Sample Locations and Schedule for the Main Phase of Data Collection	9

TABLE OF CONTENTS
(continued)

	Page
Table 6. Branson Area Attractions	12
Table 7. Sample Size Requirements for Pilot Data Collection Phase	16
Table 8. Sample Size Requirements for Main Data Collection Phase	17
Table 9. Hypotheses and Evaluation Measures Related to the Tourist Intercept Surveys	18
Table 10. Example of Perceived Satisfaction with Driving Experience	19
Table 11. Approximate Level of Effort	20

List of Figures

Figure 1. Sampling Approach for Surveying Tourists	11
--	----

TEST PLAN: BRANSON TRIP TOURIST INTERCEPT SURVEY

FOR

THE BRANSON TRAVELER AND RECREATIONAL INFORMATION PROGRAM FIELD OPERATIONAL TEST

1.0 INTRODUCTION

The Branson Travel and Recreational Information Program (TRIP) in Branson, Missouri, and the I-40 Traveler and Tourist Information System (TTIS) in the I-40 corridor of northern Arizona are two Field Operational Tests (FOTs) of Traveler Information Services in Tourism Areas funded through the National Advanced Rural Transportation Systems Program. The evaluation of Branson TRIP and the I-40 TTIS is being conducted by Battelle under the Program Assessment Support contract with the Department of Transportation's ITS Joint Program Office.

As part of the overall evaluation, several tests have been planned. This document serves as a detailed test plan for one such test: tourist surveys. Section 2.0 presents an overview of the approach, and the remaining sections present specific details for implementing the approach.

The rural ITS test site programs (I-40 TTIS and Branson TRIP) have five central objectives: to improve mobility, increase awareness, reduce congestion, stimulate economic development, and improve safety. To evaluate the extent to which the ITS deployment has fulfilled these objectives, information will be collected from tourists, the target population of the ITS deployments.

The intercept surveys are designed to obtain specific information on each of the five central evaluation objectives (mobility, access, congestion, economic impact, and safety). For example, the survey will obtain from tourists measures of the perceived ease of travel (mobility), trip times (mobility), awareness of travel options (access), the perceived number and duration of delays (congestion), intent to return (economic impact), and perceived improvements to safety (safety). The questionnaires that will be used to obtain this and additional information are presented in Appendix A.

2.0 APPROACH

Information will be collected from tourists using three different survey instruments: a screening instrument (screener questionnaire), a more extensive questionnaire (main questionnaire), and a qualitative supplement. The screening questionnaire will be short, interviewer administered, and completed by a large portion of the population. The main questionnaire will be self-administered, will collect more information, but will be given only to a subset of tourists (during the pilot test, all intercepted tourists will be given the main questionnaire). The qualitative supplement will be used to obtain in-depth information from a small number of tourists.

Tourists will be surveyed during two separate data collection periods. The first collection period (Phase I) will be conducted shortly after deployment of ITS (June) and will serve as a pilot study. The pilot phase will be used to refine the survey instruments, gather information that can be used to refine sample size estimation, assess the level of cooperation from tourists and local businesses, and provide a limited amount of information on awareness of ITS shortly after deployment. The main data collection period will be held in August.

In both data collection periods, information from tourists will be collected using an “intercept” approach. In this survey technique, information is collected by “intercepting” tourists as they enter or leave a pre-specified attraction or location. In particular, tourists will be intercepted as they arrive at a site, or arrive at their vehicles prior to leaving, during their stay at a local hotel, and at information centers. At each site, a systematic sampling scheme will be employed to identify tourists for participation. That is, every nth person will complete a screening questionnaire (only one person from each traveling party or vehicle will complete a screening questionnaire). Everyone who indicates that they are aware of a component of the ITS deployment will be asked to complete a main questionnaire. For each person who is aware of ITS, the next “unaware” person will also complete a main questionnaire.

In the pilot phase, tourists will be intercepted both at attractions and at hotels. Using hotels has the advantage that it will likely increase the willingness of tourists to participate in the study since they can provide information while in a comfortable environment. Intercepting tourists at attractions allows information to be collected from the portion of the population not using hotels (i.e., day-trippers or campers). If the results of the pilot phase reveal that a large component of the tourist population is not using hotels, more emphasis will be placed on intercepting potential participants as they enter/leave attractions and less emphasis will be placed on hotel-based intercepts. Conversely, if the pilot phase demonstrates that a large proportion of the tourist population are overnight travelers, then more emphasis will be placed on hotel-based intercepts and less on attraction-based intercepts.

The collected questionnaires will be reviewed on-site and again prior to data entry for completeness, accuracy, and consistency. Following the review, information from the questionnaires will be entered and converted to a database suitable for analysis. The resulting data will be analyzed using Statistical Analysis Software (SAS) and SURvey DATA ANALYSIS software (SUDAAN).

As with any field test, several underlying conditions that must be met before this test can be conducted. First and foremost, there must be a large enough population of aware and non-aware tourists to sample. Scheduling the main data collection activities for August assumes that the ITS deployment has been completed (or nearly completed) and that a significant number of people are aware of the components of the ITS system. An underlying condition that affects the generalization of the test results is that tourists during the data collection time frame are “typical” tourists to the FOTs (e.g., not all computer experts from Microsoft visiting the FOT en masse).

3.0 SCHEDULE

As discussed in the previous section, there will be two data collection phases in this test. The first phase of data collection will occur on June 26-27 and the second phase of data collection will occur on August 14–17, 1998. Table 1 presents the anticipated schedule for the completion of all activities related to this test.

Table 1. Anticipated Schedule for Test

Activity	1998										1999			
	A	M	J	J	A	S	O	N	D	J	F	M	A	
Pre-Test Activities Design Training Equipment Facilities	X	X	June 25	X	August 13									
	X	X		X		X								
Test Activities Pilot Phase Main Phase			June 26-27		August 14-17									
Post-Test Activities				X		X	X							
Analysis and Reporting				X			X	X	X	X	X	X	X	

4.0 PRE-TEST ACTIVITIES

Before collecting data from tourists, several pre-test activities will be conducted. In particular, the following activities will be conducted: development of the data collection design, training of local data collection staff, procurement and placement of equipment, and securing of additional resources and facilities.

4.1 Data Collection Design

In Section 2.0 we presented an overview of the data collection design. The remaining sections present additional details on activities related to collecting data from tourists. Highlights to the data collection are:

- # Five teams of two interviewers each will be used to intercept tourists as they enter or leave an attraction or hotel.
- # Each team will intercept tourists at one or more locations (different locations for each team).
- # Tourists will be intercepted during a two-day period in June and a four-day period in August.
- # Each team will intercept tourists for 6-8 hours each day, with the goal of obtaining 10 completed main questionnaires per hour.
- # We anticipate collecting 600 screener and 150 main questionnaires during the two-day collection period in June and 1200 screener and 600 main questionnaires during the four-day data collection period in August. However, irrespective of the data collection efforts, the anticipated number of completions also depends on weather, tourist flow, and cooperation rates. The combined effect of these factors may result in fewer completions than anticipated.

4.2 Training

All data collection team members will undergo a four-hour training session from 1:00-5:00 p.m. on the afternoon of June 25, and again on the afternoon of August 13. The Battelle project director for survey operations will conduct the training along with a study supervisor. The training program will be structured to ensure that each interviewer acquires adequate background knowledge of the study, fully comprehends all field procedures, and successfully develops the skilled interviewing techniques required for this project. All local staff will be tested toward the end of training, and those not meeting an acceptable level of performance will not be allowed to interview tourists. The agenda for each four-hour training session is presented in Table 2.

Table 2. Agenda for Training

Component	Estimated Completion Time
Introductions	10 minutes
Background and Purpose of the Study	20 minutes
Screening Activities How to approach tourists How to complete the screening form Who qualifies to receive a questionnaire Handling special situations Paired role plays	75 minutes 15 minutes 10 minutes 10 minutes 10 minutes 30 minutes
BREAK	15 minutes
Questionnaire How to administer Understanding each item Incentives	45 minutes 10 minutes 25 minutes 10 minutes
Editing of completed forms	15 minutes
Supervisor role play for validation	30 minutes
Administration How to complete a time sheet Assignments and distribution of supplies	30 minutes 10 minutes 20 minutes

During the sessions on screening activities and administering the questionnaire, each data collection team member will be instructed in specific interviewing rules that are critical in obtaining quality data:

- # Ask questions exactly as printed.
- # Ask questions in the order in which they appear in the questionnaire.
- # Ask every question specified in the instructions and read the entire question.
- # Read questions slowly in a normal, conversational tone.
- # Repeat questions that are misunderstood.
- # Avoid behavior that influences the person's response.
- # Use neutral probes when needed to obtain more information or clarify a response.
- # Record answers in pencil. Do not erase. Mark through errors and circle the correct response.

Even though the questionnaire is designed to be self-administered by the tourist, local data collectors will be given question-by-question instructions on the form so that they can give informed answers to questions the tourist may ask.

During paired role play, one trainee will take the role of a data collection team member while the other plays the tourist. Data collection supervisors will observe the pairs in order to answer questions and check progress. Trainees are encouraged to try to create a *true* situation. During the validation role plays, the supervisors will verify that every staff member is comfortable with all study materials, can easily approach tourists and elicit their cooperation in the study, and understands the responsibilities of a data collector.

Training is also expected to be ongoing during the data collection process. During data collection, data collection team members are required to conduct their activities in the manner prescribed at training. The data collection supervisors will monitor all data collection activities and the quality of the data produced. Supervisors will travel to all data collection points each day to observe a period of data collection. Data collection team members will be given feedback by the supervisory staff on any errors detected and how to correct them. They will also be kept up-to-date on possible changes that need to be made in the study procedures as the data collection progresses.

4.3 Procurement of Required Equipment

During the training sessions, the following equipment will be required:

- # Nametags
- # Training manuals with sample forms for each data collector
- # Extra forms for role plays
- # Pencils, paper, post-its
- # Maps of data collection points
- # Schedules with assigned data collection times and places
- # Snacks for break time.

The following equipment will be obtained for use during each data collection phase:

- # **Clipboards.** Four clipboards for each data collection team, 20 in all. The clipboards will be given to the interviewers immediately before initiating data collection.
- # **T-shirts and Nametags.** Each data collection team member will be required to wear a T-shirt that clearly identifies them as study personnel. Fifteen T-shirts are needed for each data collection phase. The T-shirts will be given to the data collection team members following the completion of the training session. The Data collection team members will also wear nametags.
- # **Writing Instruments.** Each data collection team will be supplied with a box of #2 lead pencils and a sharpener each morning before data collection. In addition, each Data collection team will receive several green pencils to be used to edit the questionnaires.
- # **Survey Forms.** Following the training session, each night, and periodically throughout the day, the data collection supervisor will distribute pre-printed copies of the screener and main questionnaires to each data collection team.

- # **Tote Bags.** Each data collection team will receive a tote bag for storing supplies and completed questionnaires.

4.4 Additional Resources and Facilities

Prior to the data collection portion of the test, an attempt will be made to obtain donated incentives from local FOT partners, local restaurants, hotels, etc. If incentives are not donated, then coupons at local restaurants or gift certificates at local stores will be purchased and utilized as incentives. For example, a possible incentive that may be used is a discount coupon for a local restaurant.

An additional activity will be to investigate the appropriateness of each sampling location and to identify the specific sites within each location where tourists should be intercepted. Also, letters of authorization and other required documents (e.g., parking pass, gate tickets, etc.) will be obtained from the appropriate authorities for each location. The authorization letters and any other required documents will be given to the data collection team the day before sampling is to occur at the location.

5.0 TEST ACTIVITIES

This chapter provides details on the logistical aspects of the field test. As discussed in Chapter 2.0, the field test will be conducted in two phases. The pilot phase will be conducted on Friday, June 26, 1998, and Saturday, June 27, 1998. The main data collection phase will be conducted on August 14–August 17, 1998. The sections in this chapter present details outlining “where” (Section 5.1) and “how” (Section 5.2) tourists will be sampled.

5.1 Sampling Locations and Schedule

This section provides details on the specific sampling locations and schedule for the data collection activities that will be conducted. Section 5.1.1 presents the sampling locations and schedule for the pilot data collection phase. Section 5.1.2 presents the associated information for the main data collection phase.

5.1.1 Sample Locations and Schedule for the Pilot Data Collection Phase

One objective of the pilot phase is to obtain the maximum amount of information on unknown issues surrounding sampling tourists at locations in the Branson area. As such, it is desirable to maximize the learning experience by conducting intercept sampling under a variety of conditions and at several locations. These experiences will then be used to ensure that the main phase of data collection collects the correct information from appropriate locations.

In both the main and the pilot phases of data collection, five teams of two interviewers each will be used to obtain information from tourists. Each data collection team will interview tourists at a separate location.

The first column in Table 3 presents the locations where tourists will be intercepted during the pilot phase. The second column presents the specific times at each location that the interviewer teams will attempt to intercept tourists. The last two columns of Table 3 present the number of interviewer teams for each day of data collection.

Table 3. Sampling Locations and Schedule for the Pilot Phase of Data Collection

Location	Times	Interviewer Teams	
		June 26, 1998	June 27, 1998
Corps of Engineers (Dewey Short/Table Rock Dam) Visitor Center	8:00-4:30		Team 1
Chamber of Commerce Visitor Center	9:00-5:30	Team 1	
Shepherd of the Hills Homestead	9:00-5:30	Team 2	Team 2
Best Western Music Capital Inn Best Western Knights Inn	9:00-1:30 1:30-5:30	Team 3	
Comfort Inn Cinnamon Inn	9:00-1:30 1:30-5:30		Team 3
Silver Dollar City	9:30-6:00	Team 4	Team 4
Branson Scenic Railway Depot Dick's 5 & 10	8:00-12:00 12:00-4:30		Team 5
76 Music Hall/Mall Grand Palace Theater/Shopping Area	8:00-1:30 1:30-4:30	Team 5	

The sampling locations for the pilot phase of data collection were selected to reflect the anticipated sampling locations for the main phase of data collection. A discussion of why each sampling location was selected is presented in the next section. As in the main phase, there is an emphasis on conducting the tourist intercepts at the two largest tourist attractions, Silver Dollar City and Shepherd of the Hills. Only two sampling locations that will be used in the main phase of data collection will not be utilized during the pilot phase: Showboat Branson Belle Landing and Factory Merchants Mall. Our data collection team members are intimately familiar with both of these locations and have intercepted tourists at these locations for a separate study conducted by the Branson Chamber of Commerce. Table 4 presents the specific sites at each location where the data collection team will be located.

5.1.2 Sample Locations and Schedule for the Main Data Collection Phase

The main data collection phase will be conducted over four consecutive days in August (Friday–Monday, August 14–17). As in the pilot phase, five data collection teams of two interviewers each will collect information from tourists.

Table 4. Sample Collection Sites at Each Sampling Location

Sampling Location	Sample Collection Site
Corps of Engineers (Dewey Short/Table Rock Dam) Visitor Center	Immediately inside or outside the entrance to the visitor center
Chamber of Commerce Visitor Center	Immediately inside or outside the entrance to the visitor center
Shepherd of the Hills Homestead	Immediately inside or outside the entrance to the visitor center
Best Western Music Capital Inn	Lobby across from registration desk
Best Western Knights Inn	Breakfast room adjacent to lobby
Comfort Inn	Lobby across from registration desk
Branson Scenic Railway Depot	Outside, adjacent to the ticket office
Dick's 5 & 10	Sidewalk corner immediately outside of the store
76 Music Hall/Mall	Central location in mall
Cinnamon Inn	Breakfast room adjacent to lobby, and in lobby across from registration
Silver Dollar City	Between the ticket booths and the actual entry gates
Grand Palace Theater/Shopping Area	Central location in shopping area

The exact sampling locations and the number of data collection teams at each location for the main data collection phase will depend, in part, upon the results of the pilot phase. For example, if the pilot phase results reveal that sampling tourists at hotels is infeasible due to logistical issues, then data collection in the main phase will be shifted to place more emphasis on intercepting tourists at attractions or at tourist information centers. Therefore, we will finalize the locations for data collection activities, the number of data collection teams at each location, and the times during the day that tourists will be intercepted at each location for the main phase following the pilot study. However, it is anticipated that intercept surveys will be conducted at the attractions, theaters, and hotels presented in Table 5.

Table 5. Anticipated Sample Locations and Schedule for the Main Phase of Data Collection

Location	Interviewer Teams			
	Friday, August 14	Saturday, August 15	Sunday, August 16	Monday, August 17
Corps of Engineers (Dewey Short/Table Rock Dam) Visitor Center		Team 1		
Chamber of Commerce Visitor Center	Team 1			
Silver Dollar City	Team 2	Team 2	Team 1	
Shepherd of the Hills Homestead		Team 3	Team 2	Team 1
76 Music Hall/Mall	Team 3			Team 2
Grand Palace Theater/ Grand Village Shopping Area	Team 4			Team 3
Best Western Music Capital Inn Best Western Knights Inn	Team 5	Team 4		
Comfort Inn Cinnamon Inn		Team 5	Team 3	
Hotel 5 Hotel 6				Team 4
Branson Scenic Railway Depot Dick's 5 & 10			Team 4	Team 5
Showboat Branson Belle Landing Factory Merchants Mall ("Red Roof Mall")			Team 5	

Several sampling locations for this study were selected with certainty (Visitor Centers, Silver Dollar City, Shepherd of the Hills Homestead, 76 Music Hall, Grand Palace Theater, and Hotels 5 and 6). Others were selected randomly (additional hotels, Scenic Railway Depot, Dick's 5 & 10, Showboat Branson Belle Landing, and Factory Merchants Mall). The overall objectives in selecting the sampling locations were to (1) maximize the likelihood that a representative sample is obtained, and (2) maximize the likelihood that intercepted tourists have had the opportunity to observe and use a component of the ITS deployment.

The Corps of Engineers Visitor Center (also known as the Dewey Short or Table Rock Dam Visitor Center) and the Chamber of Commerce Visitor Center were selected as sampling locations because they both will contain an information kiosk (one of the ITS components). Since these locations contain a component of the ITS deployment and tourists are likely to use the component, intercepting tourists at these two locations will ensure that some information is collected from tourists who are aware of and using at least one component of the ITS deployment. At both locations, the data collection team members will be located immediately inside or outside of the main entrance to the visitor center.

Silver Dollar City and Shepherd of the Hills Homestead were also selected with certainty. Although it is anticipated that information kiosks will be deployed at Silver Dollar City, these attractions were selected because they are the two largest attractions in the Branson area. Further, many different types of tourists visit both of these attractions (e.g., families with children, young adults, senior citizens, etc.) enabling a

representative sample of tourists to be obtained at each. Finally, Silver Dollar City staff, and the Chamber of Commerce, frequently conduct surveys of tourists visiting the Silver Dollar City theme park. Sampling at the Silver Dollar City theme park will permit a comparison between the survey conducted for this study and previous/future surveys. This will be important in determining whether tourists intercepted during the data collection period can be considered “typical” or if they have different characteristics that set them apart from the “historical” or “typical” tourist to the Silver Dollar City theme park (and to the Branson area in general).

The 76 Music Hall/Mall Complex and the Grand Palace Theatre/Grand Village Shopping were also selected with certainty for sampling. Like Silver Dollar City, tourists visiting these locations are often surveyed by the Branson Chamber of Commerce. Further, it may be possible that there is a subpopulation of tourists visiting Branson that only visit theaters and no other attractions. The Grand Palace is the largest theater in Branson and the 76 Music Hall is also one of the larger theaters. Like all of the theaters in Branson, both of these theaters have limited show times (i.e., opportunities to intercept tourists). However, unlike the other theaters in Branson, these two locations have a large shopping area that attracts tourists independently of the shows. Therefore, we chose these theaters, rather than randomly selecting two theaters, to increase the productivity of the data collection team with respect to intercepting tourists while a show is in progress.

The four hotels identified in Table 5, Best Western Music Capital Inn, Best Western Knights Inn, Comfort Inn, and Cinnamon Inn were selected as potential sampling locations because they represent typical “mid-priced” hotels (i.e., \$50 to \$80 per night). Previous surveys of tourists conducted by the Branson Chamber of Commerce indicate that 75 to 80 percent of all Branson visitors stay in “mid-priced” hotels. In addition, the managers of these hotels have expressed a willingness to participate in the study. Should the results of the pilot phase indicate that tourists staying at these four hotels are not “typical” Branson tourists (compared to results of historical surveys), then four other mid-priced hotels will be selected for sampling during the main phase of data collection. Further, two additional hotels will be selected as sampling locations for the main phase of data collection. At all of the hotels, the data collection teams will be located either in the lobby across from the registration desk, or in a breakfast room adjacent to the lobby.

The remaining sampling locations were selected randomly from approximately 28 remaining attractions in the Branson area (see Table 6). Although specific information on the volume of visitors for each of these attractions was not available, attractions with large numbers of visitors were identified by contacting Tom Ryan, the Rural ITS Coordinator, and representatives from the Branson Chamber of Commerce. For the selection process, attractions with higher tourist volumes were weighted approximately twice that of the other attractions. The four selected attractions were: Branson Scenic Railway Depot, Dick’s 5 & 10, Showboat Branson Belle Landing, and Factory Merchants Mall (“Red Roof Mall”). These selected locations may be revised if additional information on tourist visitation becomes available.

5.2 Intercept Protocol/Sampling Approach

As described in Section 2.0, an intercept approach will be used to identify and collect information from tourists. As illustrated in Figure 1, each data collection team will employ a seven step process to survey tourists: (1) interception, (2) determining eligibility, (3) recruitment, (4) completion of the main questionnaire, (5) on-site data quality procedures, (6) distribution of incentives, and (7) identification of participants for qualitative interviews and/or focus groups. In the Pilot phase participants will be identified only for personal qualitative interviews. During the main phase, participants will be identified for both personal interviews and focus groups (details on the focus groups and personal interviews that will be

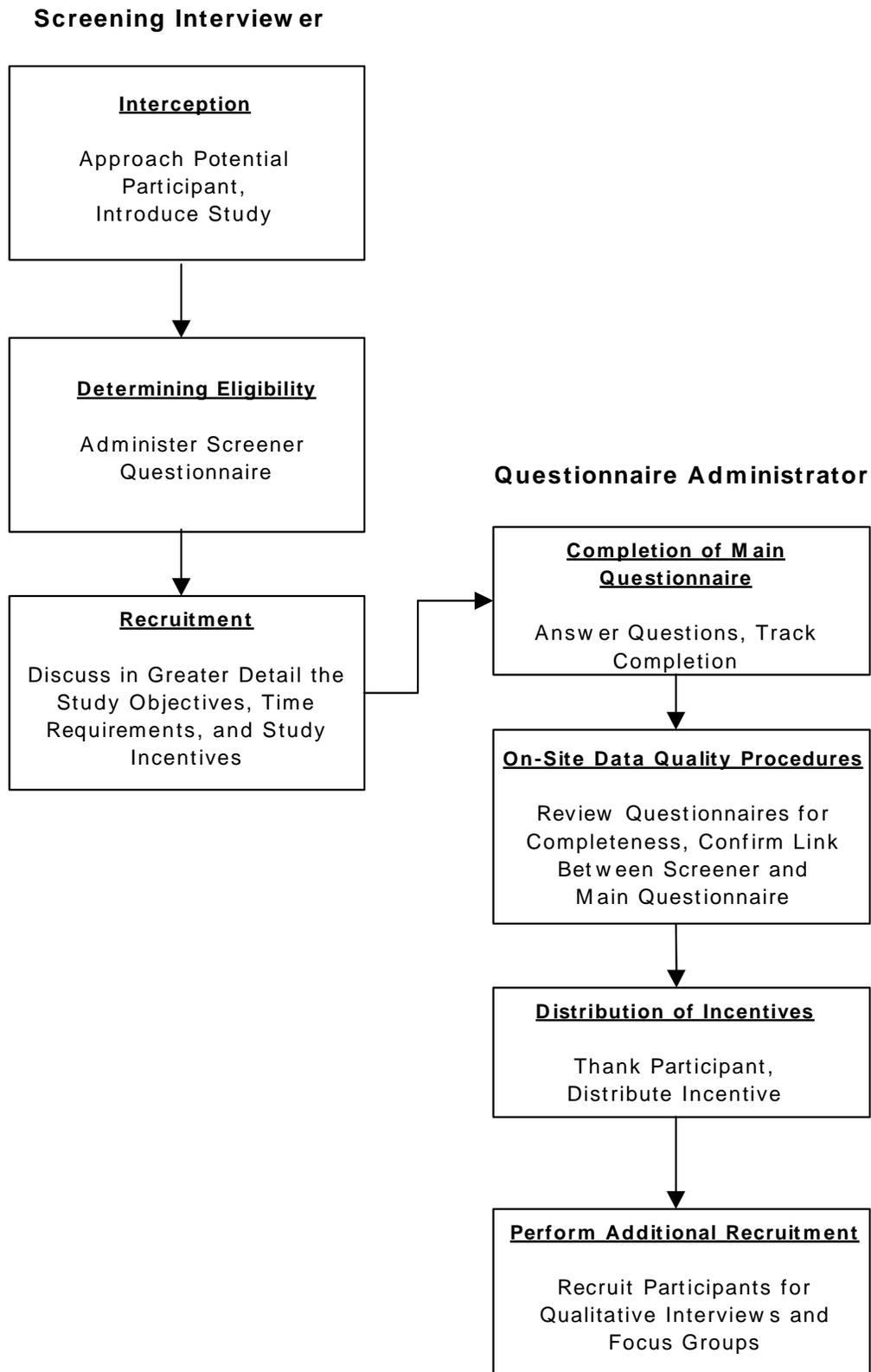


Figure 1. Sampling Approach for Surveying Tourists

Table 6. Branson Area Attractions

Victorian Mall Factory Stores of America* Factory Merchants Mall (Red Roof Mall)* White Water* Boxcar Willie Museum The Ducks* Pirate Cruise & Lake Queen Branson Scenic Railway Depot* Dick's 5 & 10* Tanger Mall Outlet Center* Factory Shoppes at Branson Meadows* Showboat Branson Belle Landing* Taneycomo Lakefront Stone Hill Winery*	Thunder Road Trout Hatchery Bonniebrook Park Bumper Boats Amusement Center Cool Off Water Chutes Fantastic Caverns Hollywood Wax Museum Indoor Mini-Golf Pirates Cove Adventure Golf & Games Ralph Foster Museum Ridge Runner Family Fun Center Ripleys's Believe It or Not Table Rock State Park* The Track
---	---

* Believed to have large tourist visitation

completed during the main phase of data collection are presented in a separate test plan). The two team members will have separate responsibilities. One team member will serve as a “screening interviewer” and will intercept tourists, determine eligibility, and recruit tourists, while the other team member (the “questionnaire administrator”) will oversee the completion of the main questionnaire, perform on-site data quality procedures, distribute the incentives, and identify participants for personal interviews/focus groups. The specific responsibilities of each team member are described in greater detail in the following sections.

5.2.1 Responsibilities of Screening Interviewer

5.2.1.1 Interception and Recruitment of Tourists

The screening interviewer will be responsible for “interception” and the initial recruitment of tourists. That is, the team member will be responsible for approaching and holding the initial contact with potential participants. Initially, interviewers will intercept every 5th person, with the goal of obtaining 10 completed questionnaires per hour. However, this protocol may be revised based upon the actual sampling conditions at each location.

Upon approaching a potential participant, the screening interviewer will introduce himself or herself and give a brief explanation of the study. Generally, the Screening Interviewer will be expected to follow a pre-determined script for this initial contact. However, the Screening Interviewer is allowed to expand upon the information in the script if necessary to promote participation.

5.2.1.2 Determination of Eligibility

Following the initial interception and recruitment of a tourist, the screening interviewer will administer a brief screener questionnaire. The objectives of this questionnaire are to determine eligibility and to collect information that can be used to characterize the tourist population. A copy of the screener questionnaire is contained in Appendix A.

Each question will be read to the participant and the screening interviewer will record the participant’s responses on the questionnaire form. In the pilot phase, tourists will be eligible for completion of the main questionnaire if they are tourists and drove into the area. For the main data collection phase, tourists will be eligible for completion of the main questionnaire if they are tourists, drove into the area,

and (1) indicate that they are “aware of” components of the ITS deployment or (2) are the first “non-aware” tourist intercepted after an “aware,” eligible tourist. In addition to survey responses, language problems or any other difficulties that would prohibit the completion of the main questionnaire will result in ineligibility.

Regardless of the eligibility determination, a “disposition” code will be entered onto each form to indicate the results of the screening. Examples of disposition codes are:

- 01 Ineligible Due to Questionnaire Responses
- 02 Eligible Due to Questionnaire Responses
- 03 Eligible Because Followed an “Aware” Participant
- 04 Refused Screener
- 05 Eligible Due to Questionnaire Responses but Refused Main Questionnaire
- 06 Eligible Because Followed an “Aware” Participant but Refused Main Questionnaire
- 07 Ineligible Due to Language Barrier
- 08 Ineligible Due to Other (specify other)

A tracking number will be assigned to each tourist intercepted. This number will serve as the unique identifier that links the responses on the screener questionnaire to responses on the main questionnaire.

5.2.1.3 Recruitment

Once the eligibility of the tourist has been determined, the screening interviewer will endeavor to recruit eligible participants to complete the main questionnaire. In general, this will not be a scripted dialog, but the team member will cover key elements. The key elements include: additional details on the study, an estimated time for completion (it is anticipated that the main questionnaire will take less than 10 minutes to complete), and mention of the incentives.

If the screening interviewer is successful in recruiting the tourist, the next action is to direct the tourist to the questionnaire administrator waiting at a nearby table.

5.2.2 Responsibilities of the Questionnaire Administrator

5.2.2.1 Completion of the Main Questionnaire

The questionnaire administrator is responsible for all aspects related to the completion of the main questionnaire. This consists of: (1) receiving the eligible tourists identified by the Screening interviewer at a pre-determined location, (2) transferring the unique identifier from the screener form to a main questionnaire form, (3) directing the tourist on how to complete the form and what to do with it once they are finished, and (4) answering questions from participants in the process of completing a questionnaire.

5.2.2.2 On-Site Data Quality Procedures

After completion of the questionnaire, the questionnaire administrator will review all screening and questionnaire forms for completeness and accuracy. This review will be conducted to ensure that the respondent did not inadvertently miss survey questions. If missing questions are identified, the questionnaire administrator will attempt to question the respondent to obtain the response.

5.2.2.3 Distribution of Incentives

Following the successful completion of a main questionnaire and subsequent review, the questionnaire administrator will be responsible for distributing the appropriate incentives.

5.2.2.4 Identification of Participants for Focus Groups/Personal Interviews

After the participant has completed the self-administered questionnaire and while they are receiving the incentive, the questionnaire administrator will identify participants for the personal interviews and focus groups. Personal interviews will be used during the pilot data collection phase as a pre-test for the focus groups, which will be conducted during the main phase of data collection. Details on the focus groups are presented in a separate test plan.

The purpose of the personal interviews during the pilot phase is not to achieve a random subsample of the sampled populations, but rather to obtain anecdotal, qualitative information from a group of tourists likely to provide depth to our understanding of how tourists perceive and relate to ITS. Specifically, these personal interviews will be conducted with the objectives of:

- # Obtaining information on how well tourists respond to our request to participate in a step after the self-administered survey and to the incentives offered for their participation.
- # Assessing whether there are gaps or revisions that need to be made to the quantitative survey instrument. For example, revisions to the survey instrument would need to be made if many respondents give answers that indicate they have concerns or experiences not addressed in the survey instrument, or if awareness of information systems proves extremely low, or if it proves difficult for respondents to distinguish between the officially deployed systems and other systems (e.g., distinguishing between AAA information and Interactive Voice Response telephone information or distinguishing among Web sites).

During the Pilot data collection period, an attempt will be made to recruit as many participants as possible to complete the personal interviews (see Appendix A). The data collection supervisor will administer the qualitative interviews. The number of participants who complete a qualitative interview will depend upon three key factors: (1) the willingness of tourists to spend additional time providing information, (2) use of an ITS component by the tourist, and (3) the availability of the data collection supervisor.

At the pilot data collection phase, we anticipate low awareness of ITS deployment since the ITS systems will be very new. Thus, when the data collection supervisor is on site at a sampling location, the supervisor will interview all respondents who have *used* a component of the ITS systems. They will also interview every fifth person who is defined as aware of (but not using) ITS.

During the main data collection phase, the additional recruitment will be focused on identifying and recruiting tourists to participate in both focus groups and personal interviews. Initial identification of tourists will be based upon several questions in the main questionnaire. The questionnaire administrator will be given a quota for each focus group, and recruitment will occur until the quota has been reached. A separate staff member who is not part of the survey data collection team will conduct the focus groups. Further details on the focus groups and personal interviews that will be conducted during the main data collection phase are described in a separate test plan.

6.0 POST-TEST ACTIVITIES

Following each field collection phase, the completed questionnaires will be mailed to a Battelle Survey Operations office, where editors who have been trained specifically for this project will manually edit them for completeness, accuracy, and consistency. This editing will be verified by a 10 percent re-edit of each editor's work. The collected data will then be electronically keyed with double entry and 100 percent verification.

A data preparation manager will be responsible for maintaining documentation on all data preparation activities. The data preparation manager will work together with a programmer to produce file layouts with clear column specifications, data types, missing value codes, and editing specifications (range of value, logic checks, and automatic filling of skip patterns). A codebook will be produced for each data collection instrument. This codebook will describe the computer data file in terms of the instrument used to collect the data and will provide documentation to be used by coders, programmers, and investigators. The codebook also serves as a vehicle to maintain documentation on editing and coding decisions.

After entry, data will be checked by electronic data cleaning using a menu-driven software package called CROSSBOW. The CROSSBOW system can be used to perform numerous operations including:

- # Define variables for a raw data set (ASCII file) in terms of type, location within the data file, and field width, and assign labels up to 40 bytes in length to describe each variable.
- # Define acceptable values with associated description labels for each variable along with skip patterns within the data file.
- # Establish formal documentation in the form of a formatted codebook containing variable locations, variable descriptions and labels.
- # Create a cleaning program to check range of acceptable values for fields and to check that skip patterns are generated from the specifications defined for each variable and executed from within the system. Error listings are produced.
- # Modification of fields within a data set can be made through transactional updates. Only fields verified by re-keying can be updated. A record of all changes made is produced.
- # The specification files for creating SAS data sets, including input/output statements, variable labels, and value formats are automatically generated from the raw data set.
- # Automatic audit trails are maintained of all activities performed on the codebook, all programs executed against a data file, and all changes made to a data file.

All errors flagged during the electronic data cleaning effort will be researched and the correct answer entered into the database.

7.0 DATA REQUIREMENTS AND ANALYSIS

7.1 Data Requirements

Several requirements need to be met to ensure that the test results in statistically sound estimates. First, as discussed in Section 3.0, there must be a large enough population of aware and non-aware tourists to

sample. The sample size requirements for each phase of data collection are presented in the following two sections.

7.1.1 Sample Size Requirements for Pilot Phase of Data Collection

One of the primary objectives of the pilot data collection phase is to obtain preliminary information on the awareness of tourists about certain components of the ITS deployment. This criterion is used to develop the target sample size.

Table 7 provides sample size requirements for the pilot data collection phase under various assumptions. Assuming that 10 tourists are screened each hour (for approximately six hours) and that 25 percent of those screened will meet the eligibility protocol and agree to complete a longer questionnaire, it is anticipated that 600 screener and 150 main questionnaires will be completed. From Table 7, this will allow for the simultaneous estimation of the proportion of tourists at various levels of awareness within ± 5 percent at an overall confidence level of 95 percent (awareness is asked in the screener questionnaire). For questions asked in the main questionnaire (e.g., use of a particular ITS component), 150 completed questionnaires will permit the simultaneous estimation of the proportion of tourists at various usage levels within ± 10 percent at an overall confidence level of 95 percent.

Table 7. Sample Size Requirements for Pilot Data Collection Phase

Overall Confidence Level	Sample Size Required for All Estimates Within $\pm 5\%$	Sample Size Required for All Estimates Within $\pm 7\%$	Sample Size Required for All Estimates Within $\pm 10\%$
80%	299	153	75
90%	403	206	101
95%	510	260	128

7.1.2 Sample Size Requirements for Main Phase of Data Collection

The objectives of the main phase of data collection differ somewhat from those of the pilot phase. Like the Pilot, one objective of the main phase of data collection is to simultaneously estimate the proportion of tourists that are at various levels of awareness. However, the primary object of the main phase of data collection is to obtain information that can be used to compare the questionnaire responses between tourists who are “aware of and using” components of the deployment to those tourists who are “unaware of or not using” deployed components. Therefore, this second objective will be used to establish the required sample sizes for the main data collection phase.

Table 8 presents sample size requirements for detecting a difference in the proportion of “aware of and using” and “unaware of or not using” tourists responding affirmatively to a particular question (e.g., comparing the proportion of “aware of and using” vs. “unaware of or not using” tourists who indicated that they were highly satisfied with their driving experience). Assuming that 10 tourists are screened each hour (for approximately six hours on four days) and that 25 percent of those screened will meet the eligibility protocol and agree to complete a longer questionnaire, it is anticipated that 1200 screener and 600 main questionnaires (300 from aware tourists and 300 from unaware tourists) will be completed.

Table 8. Sample Size Requirements for Main Data Collection Phase

Confidence Level	Detectable Difference in Proportions		
	Sample Size in Each Group Required to Detect Difference of $\pm 7.5\%$	Sample Size in Each Group Required to Detect Difference of $\pm 10\%$	Sample Size in Each Group Required to Detect Difference of $\pm 12.5\%$
80%	399	224	143
90%	548	307	196
95%	696	390	249

Thus, using only the information from the main data collection phase, a difference of ± 12.5 percent can be detected with 95 percent confidence or a difference of ± 10 percent can be detected with 90 percent confidence.

7.2 Data Analysis

The survey will provide valuable information on Advanced Traveler Information Systems (ATIS) awareness, use, and resulting behavior in rural environments. It will also provide information on the tourists' travel experiences, satisfaction with various aspects of the transportation system, travel characteristics, and general demographic information. This information will be used to assess tourists' awareness and use of ITS and to test specific hypotheses related to the primary evaluation goals. The hypotheses to be tested and the survey-related measures that will be used to address these hypotheses are presented in Table 9.

The statistical analysis of the information collected from tourists as part of this test will be performed using SAS and SUDAAN.

The analyses will be performed using data collected during both data collection phases. For each question in the questionnaire, means and standard deviations (for continuous responses) or contingency tables (for categorical responses) will be prepared. In addition, graphical summaries (histograms, mean and confidence interval plots, etc.) will be prepared for select questions. Statistical procedures will be used to create confidence intervals and to compare responses for a particular question.

Where appropriate, sampling weights will be used to develop area-wide estimates. In particular, visitation counts to the Branson area during the time of data collection will be used to weight the results of participants. These weights will be used to develop area-wide estimates of awareness and usage of ITS.

The analysis will also compare the responses of tourists who are aware of and using components of ITS to those who are unaware of or not using components of the ITS system. For example, it is of interest to determine whether the perception of tourists who are aware of and using ITS on their ease of travel differs from the perception of tourists who are unaware of or not using ITS. Comparisons will be made within each evaluation goal area (mobility, access, congestion, economic impact, and safety).

Table 9. Hypotheses and Evaluation Measures Related to the Tourist Intercept Surveys

Evaluation Area	Hypotheses	Evaluation Measures
ITS Awareness and Use	At least 25% of tourists are aware of at least one ITS component	Percentage of respondents reporting awareness
	At least 10% of tourists use at least one ITS component	Percentage of respondents reporting usage
	Over 80% of tourists using a specific component receive accurate, understandable, and easy to obtain information	Percentage of respondents indicating that the system is accurate, understandable, and easy to use
Mobility	Tourists using ITS components will have a more satisfying travel experience than those who do not	Proportion of respondents indicating satisfaction with travel conditions
	Using ITS components will save time for tourists	Proportion of respondents indicating that the information saved time
	Using ITS components will make travel easier for tourists	Proportion of respondents agreeing that ITS made it easier to travel and avoid congestion Reported number of stops for directions
Access	Tourists will use alternative routes as a result of obtaining information from a deployed ITS component	Percentage of respondents who indicate use of alternative route
	Tourists will visit alternative attractions as a result of obtaining information from a deployed ITS component	Percentage of respondents indicating a change in attractions due to ITS
	Tourists using a deployed component of ITS will be more aware and able to visit more attractions than will non-users	Reported number of attractions visited
Congestion	The ITS components will help tourists avoid congestion	Percentage of respondents indicating that congestion was avoided
	Tourists using ITS will experience fewer and shorter delays	Reported number and length of delays
Economic Development	Tourists using an ITS component are more likely to return than tourists who do not use ITS	Percentage of respondents indicating an intent to return
	Tourists using components of the ITS will stay longer and spend more than will tourists who do not use an ITS component	Reported number of overnight stays and expenditures
	Tourists using ITS components will use them again and would be willing to pay a fee for such information	Percentage of respondents agreeing that they would use the source again and would pay a fee for use
Safety	ITS will improve travelers' perceptions of safety	Percentage of respondents agreeing that the highways are safer

Several statistical techniques will be used to compare the responses of the two groups of tourists. In particular, t-tests, χ^2 tests, log-linear models, and general linear models will be employed. Table 10 presents an example of the type of information that will be obtained and used to compare the overall satisfaction with driving experiences between the two groups. Using the numbers presented in Table 10 yields an estimated odds ratio of 2.14 (95% confidence interval of 1.55 to 3.45). That is, tourists who are aware of and using ITS components are 2.14 times more likely to be satisfied with their driving experience than are tourists who are unaware of or not using components of ITS. Log-linear models will be used to examine the association between use of ITS and categorical responses with more than two levels. General linear models will be used to compare the responses between the two groups for questions with continuous responses.

Table 10. Example of Perceived Satisfaction with Driving Experience

Use of ITS	Number That Report an Unsatisfactory Driving Experience	Number That Report an Satisfactory Driving Experience	Total
Aware and Using	75	225	300
Unaware or Not Using	125	175	300
Total	200	400	600

Similar techniques will be used to compare the results of the main data collection phase to those obtained in the pilot data collection phase. Again, a comparison of the proportions and means of responses to various questions will be performed.

8.0 REPORT FORMAT

The results of this test, along with the corresponding test at the I-40 FOT, will be summarized in a technical report. The report will contain the following sections:

- 1.0 Executive Summary
- 2.0 Introduction and Background
- 3.0 Summary of the Approach
- 4.0 Summary of Results
- 5.0 Statistical Analysis
- 6.0 Conclusions
- 7.0 Recommendations for Future Evaluations

9.0 REQUIRED RESOURCES

Table 11 presents the approximate level of effort needed to conduct this test.

Table 11. Approximate Level of Effort

Project Role	Task				
	Pre-Test Activities	Test Activities	Post-Test Activities	Analysis and Reporting	Total
On-Site Evaluator	90	50	5	50	195
Other Professional Staff	5	10	2	103	120
Data Collection Supervisor	25	95	0	0	120
Data Collection Crew	0	488	232	0	488
Data Processing Staff	0	0	232	0	232

APPENDIX A

DRAFT QUESTIONNAIRES

(Note: The draft questionnaires originally prepared for this test plan were revised prior to the pilot and main surveys. This appendix contains the final versions of the questionnaires.)



BRANSON MAIN TEST SCREENER

Mini label

REC 01

01

1. Are you a tourist here or do you live and work in the area?	Tourist..... 1 Passing through but stopping to tour. 2 Passing through. Not stopping to sightsee/tour in Branson3	CVO(SKIP TO 9)4 Live/work.....(SKIP TO 9)5	09
2. In coming here to the Branson area, did you drive, take a tour bus, or how did you get here? INTERVIEWER NOTE: IF RESPONDENTS SAY THEY FLEW, ASK IF THEY THEN RENTED A CAR AND DROVE TO THIS SITE		Drove1 Other(SKIP TO 9)2	10
3. How many people are travelling in your party?	1 (SKIP TO 5) 2 3 4 5 6 7 8 9 10 _____		11
4. In your party, who was the person mostly in charge of figuring out how to get here and how to get around here?		Respondent.....1 Other.. SPEAK TO THAT PERSON. IF NOT AVAILABLE, CONTINUE WITH R2	13
5. Are you staying overnight within an hour's drive of this location?		Yes.....1 No(SKIP TO 6)2	14
A. Are you staying in:	A hotel or lodge? 1 An RV? 2	A tent campground?.....3 With friends or relatives?.....4	15
6. What state or country are you from?	_____		16
7. Have you heard of a special system used in the Branson area to provide travel and traffic information to tourists, such things as traffic and construction delays on routes into town, the hotels and shows available, and other tourist information?		Yes.....1 No(SKIP TO B)2	36
A. Do you happen to remember the name of the system?		TRIP.....(SKIP TO 8).....1 No/Other name2	37
B. The system is called TRIP. Have you heard of that?		Yes.....1 No2	38
8. Either before you left on your visit or while driving here, were you aware of any of the following items, regardless of whether you actually used them?			
A. First is a toll-free number, 877-4-TRIPINFO, specifically to get traffic and road conditions for the <u>Branson</u> area. Before I just asked, were you aware of that number?		Aware..... 1 Not Aware..(SKIP TO B) 2	39
1) Did you actually use that toll-free number?	YES, NUMBER.....1	No.....(SKIP TO B) 2	40
2) Did you call before you left on your visit or since you got to Branson?	Before 1 Since.....2	Both 3	41
B. There is an Internet website called "Branson.tripusa" which you access from a computer. It gives information on traffic, routes, and attractions specifically in the <u>Branson</u> area. Before I mentioned it now, were you aware of this specific Branson website?		Aware..... 1 Not Aware..(SKIP TO C) 2	42
1) Did you actually use the website?	YES, WEBSITE1	No.....(SKIP TO C) 2	43
2) Did you do that before you left on your visit or since you got to Branson?	Before 1 Since.....2	Both 3	44
C. Before this, were you aware of interactive computer screens in kiosks that give traffic and attraction information and that are located in <u>Branson</u> tourist information facilities and attractions, like the one shown in the picture?		Aware..... 1 Not Aware..(SKIP TO D) 2	45
1) Did you actually use one of those kiosks?	YES, KIOSK1	No..... 2	46
D. In the <u>Branson</u> area, did you happen to notice electronic road signs like the one in the picture that have changing messages and provide information on weather, traffic, or alternate routes?		Aware..... 1 Not Aware..(SKIP TO E) 2	47
1) Did you actually make use of the message on one of those signs?	YES, ROADSIGN1	No..... 2	48
E. Did you see a road sign in the <u>Branson</u> area like the one in the picture that tells drivers to tune into radio station 1610 AM for traffic advisories?		Aware..... 1 Not Aware..(SKIP TO F).... 2	49
1) Did you actually tune into that station?	YES, RADIO.....1	No..... 2	50
F. In and around <u>Branson</u> , traffic authorities use color codes for alternate routes so when traffic is bad on one route they could say, for example, "Traffic on the blue route is slow now, please take the red route." Before I mentioned it, were you aware of that color coded system in Branson?		Aware..... 1 Not Aware..(SKIP TO 9).... 2	51
1) Did you actually take an alternate route by following the color codes?	Yes..... 1	No..... 2	52
9. DISPOSITION:	CONTINUING.....(GO TO SAQ)1 LANGUAGE PROBLEM.....2 BEGAN, THEN REFUSED SCREENER3	REFUSED SAQ4 COOPERATIVE BUT NOT QUALIFIED AT ITEM (1,2).....5	53

END 01



Branson Travel Survey

1. How strongly do you agree or disagree with the following? *Please circle your responses on the scale from 1–5.*

	TOLL-FREE NUMBER					WEBSITE					KIOSK					MESSAGE ROAD SIGN					RADIO ADVISORY 1610 AM									
	STRONGLY DISAGREE		STRONGLY AGREE			STRONGLY DISAGREE		STRONGLY AGREE			STRONGLY DISAGREE		STRONGLY AGREE			STRONGLY DISAGREE		STRONGLY AGREE			STRONGLY DISAGREE		STRONGLY AGREE							
a. The information was accurate	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
b. The information was understandable	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
c. It was easy to obtain the information	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
d. The information saved you time	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
e. The information helped you choose:																														
i. A route	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
ii. Attractions to visit	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
iii. A place to stay.....	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
f. The information let you know what problems to expect while driving here.....	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
g. The information helped you to avoid traffic congestion	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
h. The information made it easier to get here.....	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
i. You would use this source of information again	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
j. You would be willing to pay a fee such as \$1 to \$3 for such information.....	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	NOT APPLICABLE					NOT APPLICABLE									
k. The information confirmed you took the right route	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO						
l. The information changed the routes you took	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO						
m. The information changed which attractions you decided to visit	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO						

2. Did you use any of the following sources of travel and traffic information in addition to the ones we asked about on page one? *Please ✓ all that you used.*

- Maps
- Stopped while driving and asked directions
- Travel organizations like AAA
- Other: _____
- Asked directions at a hotel

3. As a result of getting information before or during your visit, which of the following did you do? *Please ✓ all that you did.*

- Chose a route to get to area sites
- Chose a time to visit a site or attend a show
- Chose to go to one or more sites or attractions you had not known about
- Chose an alternate method of transportation to the site such as taking a shuttle to the site instead of driving

4. During this visit to the Branson area, about *how many times*, if at all, have you experienced serious traffic congestion such as sitting still in traffic or moving slowly and below normal speed, delaying you for ten minutes or more? *Please circle one number.*

- no delays (SKIP TO 9)
- 1 2 3 4 5 6 7 8 9 10 OR MORE

5. While *coming to Branson*, about how long in total do you think you were delayed by such problems? *Please ✓ one answer.*

- 0/Not at all
- 5 min.
- 10 min.
- 20 min.
- 30 min.
- 40 min.
- 50 min.
- 60+

6. While driving here, once you were in the Branson area, about how long in total do you think you were delayed by such problems? *Please ✓ one answer.*

- 0/Not at all
- 5 min.
- 10 min.
- 20 min.
- 30 min.
- 40 min.
- 50 min.
- 60+

7. If you experienced congestion either getting here or once in this general area, did you always stay on the same route and wait out the delay, or get off and use an alternate route?

- Waited it out (SKIP TO 9)
- At least once, took an alternate route

8. If you checked directions and/or took an alternate route one or more times during this visit, which, if any, of the following did you use to find that alternate route? *Please ✓ all that you used.*

- Saw a sign advising an alternate route
- Called the 877-4-TRIPINFO traffic number
- Listened to local traffic radio 1610 AM
- Used a map
- Followed color codes for an alternate route
- Stopped to ask directions
- Used a computer screen at an information kiosk
- Knew alternate route from past experience
- Just followed your sense of direction

9. Please circle a number to show how strongly you agree or disagree with each statement.

	STRONGLY DISAGREE									STRONGLY AGREE
a. It was easy to find your way to the attractions you are visiting today	1	2	3	4	5	6	7	8	9	10
b. It was easy to find your way to a parking lot today	1	2	3	4	5	6	7	8	9	10
c. It was easy to avoid traffic congestion today	1	2	3	4	5	6	7	8	9	10
d. The highways you used to get here to Branson were safe	1	2	3	4	5	6	7	8	9	10
e. Overall, you are pleased with travel conditions on this trip (such as traffic, safe conditions, clear routes and so forth).....	1	2	3	4	5	6	7	8	9	10
f. Overall, you were pleased with travel conditions on a <i>previous</i> trip to this area	1	2	3	4	5	6	7	8	9	10
		<input type="checkbox"/> no previous trip								

10. How many overnights are you staying here in this area or within a one-hour drive? *Please circle one number.*

- 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14+

11. Today is which day of your total visit? *Please circle one answer.*

1st 2nd 3rd 4th 5th 6th 7th More

12. How many separate attractions do you plan to see during this visit to Branson? (For example, Silver Dollar City would be one attraction, the Osmond Family Theater a second attraction, Table Rock State Park a third, etc.) *Please circle one number.*

1 2 3 4 5 6 7 8+

13. In getting around the parks, hotels, and attractions you are visiting here, how many times, if at all, have you been unable to find your way and had to stop and use a map or ask directions? *Please circle one number.*

0 1 2 3 4 5+

14. How likely are you to return Branson in the next two or three years? Will you: *Please ✓ one answer.*

- Definitely return (SKIP TO 15)
- Probably return (SKIP TO 15)
- Probably not return
- Definitely not return

A. If you would probably not return, how important are the following as reasons not to return?

	NOT IMPORTANT								VERY IMPORTANT	
1. Traffic.....	1	2	3	4	5	6	7	8	9	10
2. Parking	1	2	3	4	5	6	7	8	9	10
3. Other road conditions..	1	2	3	4	5	6	7	8	9	10
4. Other reasons	1	2	3	4	5	6	7	8	9	10

15. Not including hotel or rental car costs, but including restaurants, purchases such as film, souvenirs, tickets, admissions, tours, rentals and other expenses, how much do you estimate you and your immediate travelling party will spend during your visit here and places within one hour from here? *Please ✓ one box.*

- Less than \$25 \$51-\$75 \$101-\$200 \$301-\$500
- \$26-\$50 \$76-\$100 \$201-\$300 More than \$500 \$ _____

16. Prior to making this visit, how familiar would you say you were with each of the following electronic highway traffic management technologies?

VERY FAMILIAR SOMEWHAT FAMILIAR NOT FAMILIAR

- a. Live video of freeway conditions on local TV news
- b. Electronic message signs with changing messages on freeways and other major highways.....
- c. Highway on-ramps that use red/green traffic signals to control traffic flow onto freeways
- d. Computerized navigation systems inside vehicles
- e. Highway information on the Internet.....

17. In what year were you born? 19

18. What is the highest level of education you have completed?

- Elementary 1-3 years of college 4-year college degree
- High School (incl. 2-year degree) Graduate degree

19. What is your home zip code in the U.S.? _____ Not in USA

20. Do you regularly access the world-wide-web/Internet once a week or more often either at home or at work? Yes No

21. Are you: Female Male

22. Is there other information you did not get that would have been helpful in avoiding traffic problems or finding your way?
