

TEST PLAN:

**Branson TRIP (Travel and
Recreational Information
Program) System/
Historical Data Analysis**



June 1, 1998

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Prepared for:

U.S. Department of Transportation

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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 CJI 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):

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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:

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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
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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	

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TEST PLAN: BRANSON TRIP SYSTEM/HISTORICAL DATA ANALYSIS

FOR

THE BRANSON TRAVEL 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 ITS 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: system/historical data. Section 2.0 of this plan summarizes 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: improve mobility, increase awareness, reduce congestion, stimulate economic development, and improve safety. This test uses data generated by the TRIP, referred to throughout this Test Plan as "system" data, to document the functioning of the data collection and dissemination functions of the TTIS, functions which must successfully be accomplished in order to achieve the ultimate objectives listed above. System input analysis will include quantification of the type of information, quantity, source, and time of input. The same data, including type, source (e.g., kiosk, telephone line, etc.), quantity and timing, will be documented for system outputs.

This test utilizes historical data in two ways. First, the results of the survey conducted for this evaluation will be compared to the results of two recent surveys that include data on travelers' awareness and use of various information sources.

2.0 APPROACH

The sections that follow describe the overall approach for the analysis of various system and historical data. Generally, data for this test will be collected on a periodic basis over the course of the evaluation period; and no major data collection exercises, such as a survey or field analysis, will occur. The data will be analyzed first in October 1998, and the results will be documented in the November 1998 Summary of Preliminary Results report. Data will be collected through February 1999, and the final analysis and results will be documented in the April 1999 Final Evaluation Report.

2.1 System Data

2.1.1 System Inputs

The number and type of inputs to the TRIP central database will be documented. The type of information input to the system will be identified according to a number of categories, e.g., congestion, incidents, etc. Additionally, the time and day of the week that messages of different types are input will be identified.

Documentation of system inputs will verify the functioning of the data collection component of the TRIP. Data collection is a critical TRIP function and one which enables, or disables, the performance and impact of the other subsequent functions, including data processing/integration, and dissemination to users.

2.1.2 System Outputs

Table 1 identifies the information on TRIP outputs that will be collected. The analysis of this data set will identify which sources of information were used most frequently, what types of information were accessed most frequently and when.

2.2 Historical Data

2.2.1 Previous Traveler Surveys

The results of the TRIP evaluation traveler surveys will be compared to the results of two previous surveys of Branson area travelers that have been conducted over the last several years. It is not expected that these comparisons will necessarily provide definitive information relative to the effectiveness of TRIP. However, they will help place the TRIP survey results within a broader context, may aid in interpretation of TRIP survey results, and will add to the body of knowledge on Branson area traveler attitudes. Each of the historical surveys and planned comparisons are summarized below.

Stone County, Taney County, and City of Branson Intermodal Transportation Study

This regional transportation study was conducted several years ago and, as part of its needs identification activities, included interviews with transportation system providers, residents, and visitors regarding transportation issues. At the time of publication of this test plan, this data set has been requested but has not been obtained or reviewed. If this data set includes information on traveler information and satisfaction with the transportation system, it will be compared to equivalent information obtained through the TRIP evaluation survey and focus group activities.

Table 1. System Outputs Data to be Collected

User Interface	Information to be Collected
Changeable Message Signs	<ul style="list-style-type: none"> • Total number of messages by type, by location, month and week • Average number of messages by type, by location, month and week • Average duration of messages by type by location • Total percentage of time that messages were displayed by location by month
Interactive Voice Response System (Telephone)	<ul style="list-style-type: none"> • Total number of calls by month • Total number of messages by route and by month • Number of data requests by route and by month • Number of calls by time of day and day of week • Average number of routes that information was requested for • Average duration of telephone calls
Internet Web Site	<ul style="list-style-type: none"> • Total number of "hits" on main pages by month, time of day and day of week • Average duration of session by time of day • Average duration of session by day of week • Total Number of "hits" on sub-pages by month, time of day and day of week • Number of total site visits by country of origin • Number of total visits by state of origin • Number of total visits by city of origin
Kiosks	<ul style="list-style-type: none"> • Total number of "hits" by location, month, time of day and day of week • Average duration of session by time of day • Average duration of session by day of week • Total number of "hits" on sub-pages/screens by location, month, time of day and day of week
Cable Television	<ul style="list-style-type: none"> • Number of hotel/motel rooms with access • Broadcast hours • TRIP content
Highway Advisory Radio	<ul style="list-style-type: none"> • Total number of unique announcements by type, by location, month and week • Average number of unique announcements by type, by location, month and week • Total number of announcements by type, by location, month and week • Average number of announcements by type, by location, month and week • Average duration of announcements by type by location • Total percentage of time that announcements were played by location by month

Branson-Lakes Area Chamber of Commerce In-Market Survey Results

The Branson-Lakes Area Chamber of Commerce conducts surveys of Branson area visitors on a monthly basis. Between 10 and 40 surveys are administered monthly at each of 22 different attractions, including outlet malls, Silver Dollar City, the Chamber of Commerce Visitor Center, music theaters, and the IMAX theater. A total of 400 surveys are collected each month. Starting in May 1998, the survey questionnaire was expanded to include several questions relative to trip planning and perceptions of the travel environment. The May survey results will be compared with the TRIP survey results as detailed in Table 2.

Table 2. Potential Comparisons Between TRIP Survey and Chamber of Commerce Survey

TRIP Survey Question ⁽¹⁾	Chamber of Commerce Survey Question ⁽¹⁾⁽²⁾	Analysis
#42-(Rate on a scale of 1-10) Overall, how pleased are you with the travel conditions on this trip (such as traffic, safe conditions, clear routes, etc.)?	#27-On a scale of 1-5, how would you rate the road system in and around Branson?	Perceptions of the overall road/transportation system will be compared.
#6 (kiosk), #24 (phone system) & #33 (variable message signs)-On a scale of 1-10, how useful was the information?	#28-On a scale of 1-5, how would you rate the usefulness of the directions and road signs in and around Branson?	Perceptions of the usefulness of traveler information will be compared.

(1) Questions may be paraphrased for brevity and/or clarity out of context.

(2) Question numbers refer to the questions on the May 1998 In-Market survey questionnaire.

3.0 SCHEDULE

Table 3 presents the anticipated schedule for the completion of all activities related to this test.

Table 3. Anticipated Schedule for Test (person hours)

Activity	1998									1999			
	A	M	J	J	A	S	O	N	D	J	F	M	A
Pre-Test Activities (design)	X	X											
Test Activities (data collection)			X	X	X	X	X	X	X	X			
Post-Test Activities											X		
Analysis and Reporting								X				X	X

4.0 PRE-TEST ACTIVITIES

Between the acceptance of this Test Plan and the start of the evaluation, sample input and output data will be collected and necessary analysis tools, such as spreadsheets, will be developed. Also, the Intermodal Transportation Study survey and interview results, which were not available at the time of publication of this test plan, will be collected and analyzed to determine whether any comparisons to TRIP survey data are warranted.

5.0 TEST ACTIVITIES

During the evaluation test period, from June 1, 1998 through February 28, 1999, information on system inputs and outputs will be collected on a monthly basis and input into spreadsheets or other analysis tools.

6.0 POST-TEST ACTIVITIES

The data through September 1998 will be analyzed and results will be documented in the November 1998 Summary of Preliminary Results Report. Data from October 1998 through February 1999 will be analyzed in conjunction with the June - September data and results for the entire June 1998–February 1999 period will be presented in the April 1999 Final Evaluation Report.

7.0 DATA REQUIREMENTS AND ANALYSIS

The documentation of system inputs will verify the functioning of the data collection portion of the Branson TRIP. The documentation of outputs will verify the functioning of the information dissemination portion of the TRIP by identifying the volume, sources, content and timing of information made available to travelers. The documentation of outputs will also identify the actual use of the TRIP system, in terms of the sources consulted, and the type, quantity, and timing of information received. The comparison of TRIP survey results to previous surveys will help place the results within the broader context and history of traveler perceptions in the Branson area. The May 1998 Chamber of Commerce survey results may be suitable as a “pre-TRIP” baseline for comparison.

8.0 REPORT FORMAT

The results of this test 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 Results
- 5.0 Conclusions
- 6.0 Recommendations for Future Analysis

9.0 ESTIMATED RESOURCES

Table 4 presents the required allocation of hours for personnel to conduct the test.

Table 4. Estimated Allocation of Project Staff Hours

Staff	Task				Total
	Pre-Test Activities	Test Activities	Post-Test Activities	Analysis and Reporting	
Task Manager and Evaluation Leader	0	0	0	2	2
On-Site Evaluator	10	12	6	16	44
Statistician	0	0	0	8	8
ATIS Specialist	0	0	0	2	2
Support/Administrative	0	0	0	4	4
Total	10	12	6	32	60