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comprehensive trail plan / environmental assessment

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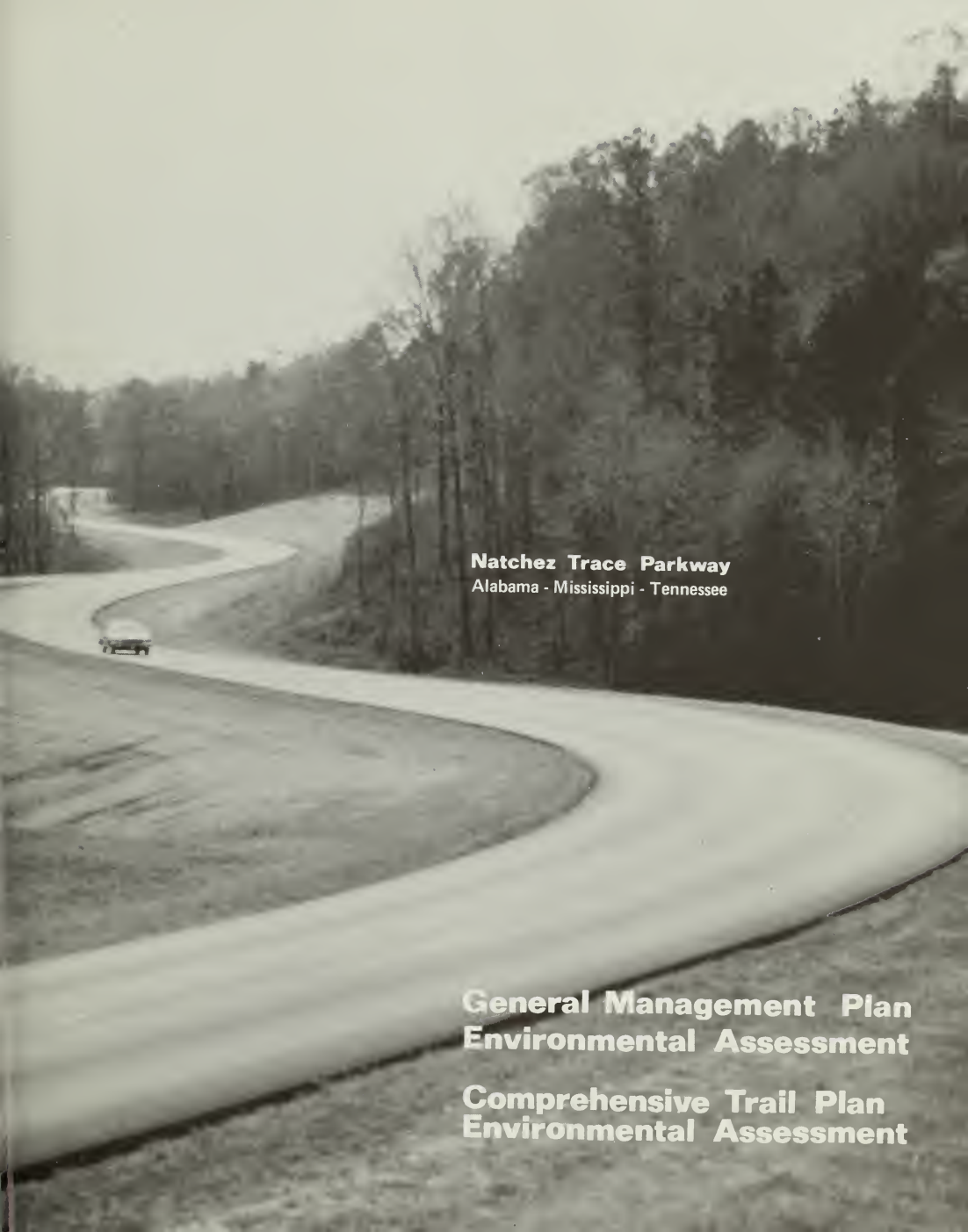
Draft / February 1986
U.S. Department of the Interior / National Park Service



Natchez Trace Parkway

Alabama - Mississippi - Tennessee

General Management Plan
Environmental Assessment

Comprehensive Trail Plan
Environmental Assessment

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SUMMARY

The proposals presented in this document constitute the National Park Service's proposed general management plan and comprehensive trail plan for Natchez Trace Parkway. Alternatives and environmental consequences for each plan are also presented.

GENERAL MANAGEMENT PLAN

The parkway will be managed to interpret resources and to commemorate the old Natchez Trace. Natural resources will be managed to protect cultural resources and to enhance scenic, interpretive, and recreational opportunities for visitors. Parkway management will emphasize serving those visitors who come to the parkway because of their interest in the parkway's interpretive story. Development will be provided to support appropriate visitor use and improvements for the interpretive program. These improvements will be undertaken in two phases because of the need to determine visitor use levels before implementing all interpretive and development actions.

Phase 1 actions will include the following:

- collecting visitor use data so that facility and interpretive needs can be evaluated
- preparing a parkwide interpretive prospectus to determine specific media for presenting orientation information and to identify off-parkway sites that are particularly relevant to the parkway and should be mentioned in visitor orientation programs
- providing 11 information/orientation waysides and constructing pulloff parking at the Jackson wayside
- removing five ineffective waysides
- constructing 22 miles of hiking/horseback-riding trail south of Nashville (see "Comprehensive Trail Plan" summary below)
- constructing a subdistrict headquarters building at Leipers Fork
- finishing the remaining 47 miles of the parkway motor road
- preparing a cultural resource base map and an archeological synthesis report

If visitor use data collected in phase 1 show significant visitor use patterns other than local driving on the parkway, then the following actions will be undertaken in phase 2:

- updating, replacing, or removing wayside exhibits, as outlined in the interpretive prospectus

redesigning exhibits and audiovisual media at the Tupelo visitor center and the Ridgeland visitor contact center

rehabilitating or expanding an existing structure at Ridgeland just north of Jackson, Mississippi, for use as an interim interpretation/ contact station, with possible future construction of a Mississippi cultural center at milepost 105.6

constructing staffed visitor contact stations at both the northern and southern entrances to the parkway

upgrading two staging areas associated with the new 22-mile national scenic trail segment near Nashville

expanding visitor facilities at Colbert Ferry (Alabama) and the Gordon House site (Tennessee)

redesigning visitor access and parking areas at Emerald Mound and at Tupelo and Brices Cross Roads national battlefields

In addition to the proposal, two alternatives are presented in this document. Alternative 1 is the minimum requirements alternative, and it would provide only the basic parkway staffing and facilities needed to accommodate current visitor use. Alternative 2 would continue existing management policies, and it is also referred to as the no-action alternative. However, in this case no action does not mean stopping action or maintaining the status quo, rather it would allow parkway managers to respond to future needs and to implement previously approved plans. Alternative 2 is based on the assumption that completing the parkway and significantly expanding five recreation development areas along the parkway (Coles Creek, Rocky Springs, River Bend, Colbert Ferry, and Meriwether Lewis) would generate sufficient recreational use to justify such extensive development.

The proposal and both alternatives include similar strategies for the management of the parkway's natural and cultural resources. The major differences involve the number of resource sites required to support visitor use and interpretation, the level of research needed to support interpretation, and the extent of archeological survey work required to clear construction projects.

Neither alternative nor the proposal is expected to have significant impacts on the environment.

COMPREHENSIVE TRAIL PLAN

The proposed comprehensive trail plan addresses the development and management of the congressionally designated Natchez Trace National Scenic Trail. The plan provides specific objectives and guidelines to be followed in the identification, development, and management of the trail.

The proposals are based on the visitor use and interpretive objectives of the general management plan and on a systematic ranking of resource values along the entire parkway. The trail plan includes the following proposals:

- development of one 22-mile trail segment of high use potential for hiking and horseback riding (originating near Nashville and extending to Duck River)

- continued hiking along the entire length of the parkway, existing and proposed trail segments, and the parkway motor road shoulder

- continued horseback riding on existing and proposed trails designated for such use

- continued bicycling along the entire developed length of the parkway motor road

- elimination of motorized vehicles on existing or proposed trails that are parallel with or adjacent to the parkway (based on PL 90-543)

Only lands within the authorized boundary of Natchez Trace Parkway will be used for the national trail. No additional lands will be acquired for trail development. All existing hiking and horseback-riding trails and the proposed Nashville trail segment will be developed and maintained by the National Park Service, with maintenance assistance from user groups and trail organizations. Any future trail construction will be based on user demand, and the development and maintenance of such trails will be accomplished with funds and resources provided by the private sector. The resource analysis and development criteria in this plan will guide the selection of any future trail locations and developments.

Two trail plan alternatives were considered in addition to the proposal. Under alternative A (no action), there would be no national scenic trail route designation, but all existing hiking and horseback-riding trails would be maintained. Hiking would continue along the entire length of the parkway, using existing trails and the parkway road shoulder. Horseback riding would continue only along existing trails designated for this use. Bicycling would still occur along the developed portions of the parkway but would not be encouraged. No new support facilities would be developed.

Under alternative B three trail segments would be developed--the Nashville area segment, plus the Jackson and Natchez trail segments. All segments would be developed to accommodate both hiking and horseback riding.

The impacts of the proposal or the alternatives on the environment would be minimal. Under the proposal and alternative B, a segment of trail would be in the floodplain, but floodplain values would not be affected. Endangered or threatened plant or wildlife species would not be affected, nor would any known site listed on or eligible for listing on the National

Register of Historic Places. However, there is potential for the discovery of additional cultural resources along the Nashville trail segment alignment. If a complete survey of the alignment located sites eligible for the National Register, the alignment would be adjusted to avoid them, or disturbance of the sites would be mitigated by data recovery.

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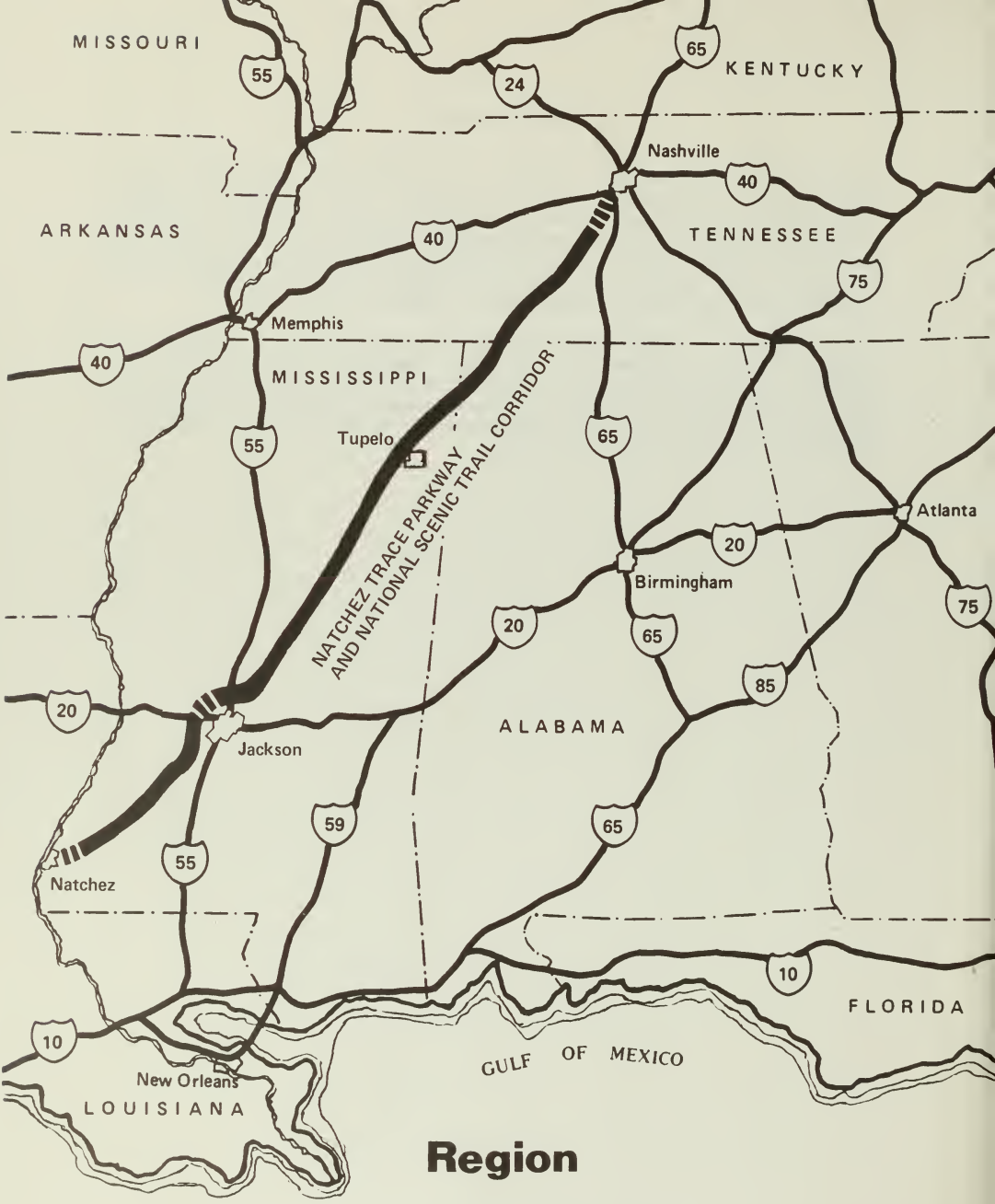
INTRODUCTION

Natchez Trace Parkway was included in the national park system in 1938, but a general management plan for the parkway has never been approved. The goal of this current planning effort is to prepare a general management plan that will guide management, development, and use of the parkway. Associated with the general management plan is a comprehensive trail plan that focuses on the development and management of the congressionally designated Natchez Trace National Scenic Trail.

This document is organized in two parts: the first part presents the proposed general management plan, plus alternatives and environmental consequences; the second part includes the proposed comprehensive trail plan, as well as its alternatives and environmental impacts. The following section briefly describes the significance of Natchez Trace Parkway to explain the context for the two plans.



Region

NATCHEZ TRACE PARKWAY

United States Department of the Interior / National Park Service
DSC / JUNE 1983 / 604/40,081

SIGNIFICANCE OF THE PARKWAY

Natchez Trace Parkway was established to memorialize the importance of the old Natchez Trace, but it is also significant as a resource in and of itself. The concept of including parkways in the national park system emerged late in 1933. Natchez Trace Parkway was planned as an elongated park to accommodate visitors who wanted to "ride awhile, stop awhile." The road was designed for pleasure travel, and the parkway encompasses significant scenic, prehistoric, historic, and recreation features. Route selection was based on the old Natchez Trace, and facility locations were determined by topography, rural scenery, and points of educational value.

The parkway is visually defined by three landscape elements--the parkway roadside, agricultural fields, and forests. These elements interact to provide parkway travelers with a continuum of grassy road shoulders, forest enclosures, and distant views across open agricultural fields.

Upon completion, the Natchez Trace Parkway motor road will extend 449 miles northeast from Natchez, Mississippi, to Pasquo near Nashville, Tennessee (see Region map). Currently some 400 miles have been completed. It is believed that only a small percentage of people who visit the parkway drive the entire constructed length. Most people are going to other destinations, and they choose portions of the parkway as an alternative to driving on other state and federal highways. Few highways in the United States provide for pleasure driving on a scale equal to the Natchez Trace, where one can drive at a leisurely pace without the annoying presence of trucks, traffic congestion, and billboards.

Three major sites have been developed for recreation by the National Park Service--Rocky Springs, Jeff Busby, and Meriwether Lewis. A fourth site, Colbert Ferry, is proposed for additional development. All four sites are readily accessible from the major population centers of Natchez, Jackson, Tupelo, and Nashville. Parkway headquarters and the main visitor center are at Tupelo, Mississippi.

The primary resources along the parkway include the old Natchez Trace, prehistoric archeological sites, and historic structures and sites. The story of the old trace is significant to the parkway's interpretive program. Initially, the story appears to be about the Kentucky boatmen, "Kaintucks," who followed this route when they returned to their homes in the Ohio River valley after delivering trade goods to Natchez and New Orleans. However, that scenario represents only one chapter in the history of a trail that had a variety of names--the Chickasaw Trace, the Path to the Choctaw Nation, the Notchy Trace, and of course the Natchez Trace.

Running through flats and over ridges between the Big Black and Tombigbee rivers, and connecting the prairie of northeastern Mississippi with the fertile Nashville Basin, the Natchez Trace had as many varied

alignments as names. It probably evolved from the repeated use of meandering game trails by the earliest human inhabitants. Over time these paths were gradually linked and used for transportation, communication, and trade--first by Indians and later by European explorers.

Archeological sites date from the Paleo-Indian period (12,000 B.C. - 8000 B.C.) through historic Natchez, Choctaw, and Chickasaw Indian settlements (A.D. 1540 - 1837). These sites include campsites, village sites, stone quarry sites, rock shelters, shell heaps, and burial sites. The most visually obvious are burial and ceremonial earthen mounds associated with the Woodland and Mississippian periods. The latter period may represent the highest level of prehistoric cultural development in the United States. The Mississippians were highly skilled farmers and artists who may have traded with people from as far away as Mesoamerica. They held elaborate political and social beliefs, and they lived in large permanent towns that were often fortified with a stockade.

Up to the time of the American Revolution, European contact with the Indian tribes who lived along the trace was primarily for trade purposes, but it was not uncommon for the Spanish, French, and English, as well as the colonists, to ally with the tribes against their respective European enemies. After the Revolution, adventurers from the Ohio River valley began floating trade goods down the Mississippi River to Natchez and New Orleans for shipment around the world. These hardy adventurers returned home either by rowing or towing their boats upstream against the current of the Mississippi, or by walking or riding a horse overland along what came to be known as the Natchez Trace. Mount Locust, an early plantation house that probably served as a wayside inn, is the oldest remaining structure associated with this period of Natchez Trace history.

With westward expansion, the need became apparent for better communication between the government in Washington, D.C., and the settlements of the Old Southwest (basically the area east of the Mississippi River, including the states of Mississippi, Louisiana, and Alabama). In 1800 Congress designated the Natchez Trace as an official post road and directed the postmaster general to establish scheduled service and way stations along the route to ensure safe and rapid (two-week) delivery of mail between Nashville and Natchez.

When the use of steamboats became common in the 1820s, travel along the overland corridor was no longer necessary. The growing population of the Old Southwest and the need to connect the new settlements reduced the importance of the Natchez Trace as the principal transportation route. Slowly the route became little more than a series of local roads.

In 1934 Congress commissioned the National Park Service to make "a survey of the old Indian Trail known as Natchez Trace . . . with a view to constructing a national road on this route to be known as the Natchez Trace Parkway." The first sections of the road were completed in 1939, and the last 50-mile section is expected to be completed by 1990. The

parkway right-of-way varies in width from 400 feet to 1,000 feet, with "bulges" at irregular intervals to provide land for associated recreation, interpretation, and management developments. Visitor facilities include comfort stations, picnic areas, and campgrounds; and there are parking pulloffs at trailheads, overlooks, sections of the old trace, and interpreted sites of prehistorical, historical, and natural interest.

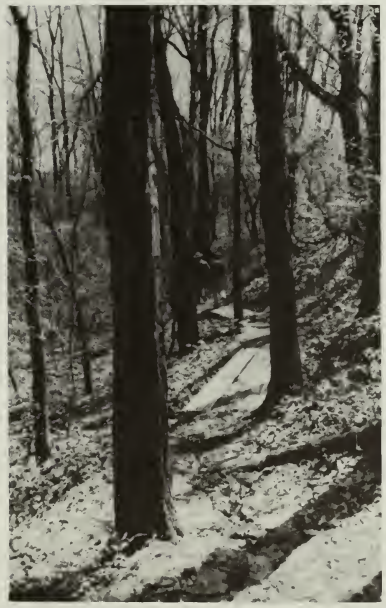
In addition to its rich cultural history, the parkway represents a transect of the physiographic and natural communities of the midsouth. Beginning east of Natchez, the parkway runs through a beech and oak forest of the Loess Bluffs province, enters the Southern Pine Hills near Raymond, Mississippi, and passes through the Jackson Prairie, now occupied by the Jackson metropolitan area and Ross Barnett Reservoir. From the northeastern tip of the reservoir, the road crosses pine and dry oak forests in Mississippi's North Central Hills, Flatwoods, and Pontotoc Ridge provinces. The alluvial agricultural soils around Tupelo are part of the Black Belt Prairie and were an important resource to the Chickasaw and prehistoric Indians. North of Tupelo, the parkway cuts through a mixture of pine and hardwood forests in the hills above the Tombigbee and Tennessee rivers and traverses primarily oak- and hickory-dominated forests on the Highland Rim in Tennessee. The parkway terminus at Pasquo is on the western edge of the Nashville Basin, which was historically similar to the open bluegrass region of Kentucky.

Natural Resources

Cultural Resources

Scenic Resources

Recreation Resources



General Management Plan
Environmental Assessment

INTRODUCTION

PURPOSE OF AND NEED FOR THE PLAN

The purpose of the general management plan is to provide guidance for Natchez Trace Parkway development and management actions that will resolve current issues and concerns, fulfill legislative requirements (see appendix A), and achieve management objectives (see appendix B). The resources at Natchez Trace Parkway are managed to contribute to scenic quality and interpretation through sound site preservation, protection, and maintenance. Understanding and evaluating these relationships are important steps in developing a parkway management strategy. Central to the planning process is the identification of parkway purposes, which provide the basis for the overall management objectives.

Over the last 50 years the course of management and development of the parkway has changed notably. The intent of the 1934 legislation was to survey a route for constructing an interregional road to link the northern and eastern parts of the country with Natchez and New Orleans, but little direction was given for the actual development of the parkway. The survey, which was completed in 1935, established the purpose of the parkway as a route to commemorate for the motoring public the historical significance of the Natchez Trace. As the parkway was constructed, each segment was planned and developed with sufficient visitor facilities to function independently of the other segments. As the separate segments were joined to form a continuous route, the result was a high level of development all along the parkway. By the 1970s the parkway was being managed as a highly developed recreational park where visitors could come to spend several days participating in a variety of activities. Recent development concept plans have supported this perception of the parkway.

Now that the parkway has nearly been completed, this general management planning effort provides an opportunity to look at the parkway as a whole and to reevaluate these past management and development directions. If the parkway is viewed only as an interregional road, then few facilities are needed aside from periodic rest stops, and interpretive media are only needed to orient motorists. If the parkway is viewed only as a memorial to the old Natchez Trace, then interpretive programs must play a greater role, and facilities need to be expanded to provide opportunities for visitors to learn about and appreciate significant resources. And if the parkway is viewed as a recreational destination park, then extensive overnight facilities are required, along with support facilities for activities such as water sports, long-distance hiking, and in-depth interpretive programs.

At the beginning of this current planning effort it was evident to park managers and planners that there was a disparity between visitor use and the level of existing and proposed developments along the parkway. Most visitors use the parkway as a local and regional transportation route rather than as a recreational destination. Consequently, even though the large number of visitors seems to justify a high level of development, visitor use patterns do not substantiate the need for such extensive development. A major goal of this plan is to establish a new direction for parkway management, in response to realistic assessments of visitor use patterns and today's funding priorities.

Specific issues and management concerns to be addressed by the general management plan were identified through scoping sessions with the staff of the park and the Southeast Regional Office, and a review of the parkway's legislative history and management plans. The following issues and concerns relate to visitor use/interpretation, general development, and the management of cultural and natural resources.

Visitor Use/Interpretation

Interpretive themes will play a major role in establishing parkway management priorities. The themes need to be identified and prioritized.

Criteria and direction are needed for evaluating requests from non-NPS operators of visitor facilities for access points on federal land and for the endorsement of off-parkway facilities or services.

General Development

Many previously proposed recreation facilities are not appropriate to the existing level of visitor use. Developments need to be evaluated in terms of realistic visitor use levels and site-specific interpretive needs.

Cultural Resources

Many cultural resources need to be evaluated in the context of their significance to the parkway's interpretive story. A strategy is needed for the identification, interpretation, protection, and management of these resources.

Natural Resources

Objectives and criteria are needed to guide long-range vegetation management and the protection of rare species.

RELATED PLANS

NPS Plans

A draft Master Plan for the parkway was prepared in 1971, but was never approved, and a Development Concept Plan was prepared and approved in 1970. Both plans called for levels of development appropriate for a recreational destination park. Most of the major facilities proposed in these plans have not been funded, nor has visitor demand justified managing the parkway as a major recreation resource.

In 1978 a Final Environmental Impact Statement was approved to complete the parkway motor road. It proposed the construction of 115 miles of road (sections 1A, 1B, 1C, 1D, 2D, 3A2, 3B, 3P, 3U2, 3V, 3X), the development of associated public use and management facilities, the expansion of recreation facilities along the existing motor road, the construction of 161 miles of hiking trails, and the elimination of grade crossings. It was determined that although these actions could cause noise and locally degrade lands, waters, and air during construction, adverse effects would not be significant or long-term.

An access plan is being prepared for the parkway to analyze the relationship between parkway traffic patterns and the location of entrance and exit points. The plan will determine the minimum actions needed to ensure resource protection, visitor safety, and essential public access to parkway lands. The directions outlined in the general management plan for management, visitor use, and interpretation will be used to develop the criteria for the access plan. The access plan is further discussed in the "Land Protection" section.

Development concept plans for Colbert Ferry and the Gordon House site are incorporated in this plan by reference. The Colbert Ferry plan is modified as explained in the "General Development" section. Copies of these plans are available at park headquarters in Tupelo, the Washington Office, and the Southeast Regional Office. The addresses of these offices are as follows:

Office of the Superintendent
Natchez Trace Parkway
Rural Route 1, NT-143
Tupelo, Mississippi 38801

Office of the Director
National Park Service
19th & C Streets, NW
Washington, D.C. 20240

Office of the Regional Director
National Park Service
75 Spring Street, SW
Atlanta, Georgia 30303

U.S. Army Corps of Engineers Plan

A Draft Environmental Impact Statement and Interim Report on Flood Control within the Pearl River Basin, Hinds and Rankin Counties, Mississippi, was prepared in 1984 by the U.S. Army Corps of Engineers and contains a proposal for constructing a dry dam near the Cypress Swamp, one of the parkway's significant natural areas. The proposed Shoccoe dry dam would destroy the Cypress Swamp, as well as flood portions of the parkway at times.

Three alternatives are being considered for mitigating adverse effects to the swamp: filling in the swamp, acquiring another oxbow lake similar to Cypress Swamp, or shifting the right abutment of the dam away from the Cypress Swamp site. To mitigate the adverse effect of flooding the parkway, four alternatives are being considered: raise the existing grade of the parkway; leave the parkway where it is, but establish a cleanup fund; relocate the entire section of affected parkway; or implement a combined plan of relocating the parkway and raising its grade.

The National Park Service will continue to review project plans and to cooperate with the U.S. Army Corps of Engineers to mitigate to the extent possible any adverse impacts to the Cypress Swamp and the parkway motor road. Information about the Draft Environmental Impact Statement may be obtained from the following office:

Chief, Environmental and Resources Branch
Attn: Environmental Studies and Evaluation Section
U.S. Army Corps of Engineers, Mobile District
P.O. Box 2288
Mobile, Alabama 36628

PROPOSAL

PLANNING PERSPECTIVE

For this general management plan the National Park Service has determined that the most appropriate purpose for the parkway is the commemoration and interpretation of the old Natchez Trace. The plan also takes into account the presence of cultural resources significant in their own right, the current level of facility development, funding parameters, and previous agency commitments.

The proposal outlines a strategy for interpreting park resources and for providing information and orientation services. The objectives of the interpretive program are described, and interpretive themes and their relative importance are identified. Interpretive media, that is, how the themes will be presented, will be determined in an interpretive prospectus, which will be prepared after the general management plan has been approved.

Existing pulloff sites along the parkway have been evaluated to see how closely they relate to visitor use and major interpretive themes. Pulloffs will be retained or further developed if they meet the following criteria:

> They are representative of prehistoric or historic resources, and they support interpretive themes.
>
> Pulloffs are near major parkway accesses and support visitor information and orientation services.
>
> They have visually dominant features or distant views.
>
> The sites support recreational or visitor needs, and they provide a convenient place to stop.

The alternatives that were considered in addition to the proposal are described in the "Environmental Assessment" section. Alternative 1 views the parkway as an interregional road, and it represents a minimum development plan, which would require the removal of many existing facilities. Alternative 2 would continue the trend toward developing a destination recreational park, and already approved development plans would be implemented, with minor revisions.

The proposal for the parkway is presented in five sections:

> interpretation and visitor use
>
> general development
>
> management of cultural resources
>
> management of natural resources

land protection methods, including management zoning

A cost schedule and summary table for the proposal follows the text.

VISITOR USE AND INTERPRETATION

Visitor Use

At Natchez Trace two general groups of visitors have been identified--those who use the parkway as a means to go to and from destinations off the parkway and those who come expressly to drive the parkway and participate in interpretive and recreational opportunities along it.

A recent analysis of monthly visitation records for Natchez Trace Parkway has indicated that information about visitors is insufficient to use for cost-effective, informed planning decisions (see appendix C for a discussion of shortcomings in data collection and recommended improvements). Consequently, this plan is based on observations by the park staff and the planning team. The actions will be implemented in two phases; all actions in phase 1 are needed to accommodate existing visitor use or to meet documented management needs. But before any actions in phase 2 are implemented, additional visitor use information will be gathered by using improved recording techniques, and it will be carefully analyzed. This information will help determine whether the actions proposed for phase 2 should be undertaken. Additional information that needs to be documented includes the following:

entrance and exit points for parkway visitors

where visitors go and what they do once they enter the parkway

proportional use by types of visitors on various segments of the parkway

general visitor characteristics

expectations of visitors with respect to services, programs, and facilities

length of time spent on the parkway by visitors

use of pulloffs in proportion to total visitation

estimation of how all the above may change once the entire parkway has been completed

The park staff will be able to collect the needed visitor use data in a number of ways, so it is anticipated that within one year after the general management plan has been approved, the recommended visitor counting procedures will have been implemented (see appendix C). Also,

a specific study design and methodology will be developed by the National Park Service to be implemented by the park staff, other NPS offices, or an outside consultant to determine existing travel patterns in the region and the effect that completing the parkway will have on those patterns.

With the updated counting procedures in place and an understanding of travel patterns, the NPS regional director and staff will determine whether or not to implement phase 2 actions, and they will identify any required modifications to the approved general management plan.

Information and Interpretation

Interpretive Themes. The interpretive significance of Natchez Trace Parkway resources is twofold. First is the history of the Natchez Trace itself and its role in the development of the Old Southwest. Second, and of equal importance, are the prehistoric mounds and other archeological sites that are both visually dominant and scientifically significant. With this diversity of themes and resources it is tempting to try to interpret everything that visitors may encounter along the parkway, but this is not recommended for two reasons: 1) interpretive programs would have to include more information than most visitors are willing or able to absorb, and 2) ideas about the parkway's primary significance are frequently overshadowed by large quantities of less important information. The parkway's interpretive program must be focused by developing a thematic outline, and then by determining the relative importance of each portion of the outline.

Recently, the Southeast Regional Office of the National Park Service undertook a pilot study to develop a regionwide profile of cultural resources. The purpose of the profile was to determine the categories of significance for each park's primary prehistoric and historic resources and their level of significance (that is, state, regional, national, or international). The study listed the following categories and levels of significance for cultural resources at Natchez Trace Parkway (numbers refer to themes listed in History and Prehistory in the National Park System and the National Historic Landmarks Program):

Category of Significance	Level of Significance
1. The Original Inhabitants	
Archaic Indian Horizons	Regional
Eastern United States	Regional
Changes in Native Life due to Contact	National
Subsistence Techniques	Regional
Trade	National
Arts and Ceremonialism	Regional

4.	Major American Wars	
	War of 1812	
	Eastern and Southern Theaters	Regional
	Civil War	
	War in the West	National
5.	Political and Military Affairs	
	Early Federal Period, 1787-1800	National
	Jeffersonian Period, 1800-1815	National
	Post-War Nationalism, 1815-1830	National
6.	Westward Expansion, 1763-1898	
	Trails and Roads East of the Mississippi	National
	Advance to 95th Meridian, 1780s-1840s	Regional
7.	America at Work	
	Era of Specialized Agriculture	State/local
	Plantation Agriculture since 1607	Regional
	Industry	State/local
	Transportation	National
	Communication	National
	Architecture	
	Federal	State/local
	Landscape Architecture	National
	Transportation Systems	National
8.	The Contemplative Society	
	Higher Education	National
	Sculpture	State

Based on this profile and a review of existing history studies of the Natchez Trace, interpretive themes were identified. These themes are included in table 1. Table 2 shows a possible scheme for presenting these themes at various sites along the parkway.

Phase 1. A primary objective for the information/interpretive program is to enable visitors to plan their stays at Natchez Trace Parkway. Visitors need to know what the parkway is, why it is significant, what services and activities are available to them along the route, and how to select interpreted sites of special interest to them. The parkway already has some orientation waysides at major points, but additional ones are needed, and existing panel exhibits require replacement or supplementation to ensure that enough information is offered to help visitors. (For a complete list of proposed orientation sites, see table 3 and the "General Development" section.) Each orientation site will present the following information: an overview of the significance of the Natchez Trace and the kinds of resources visitors will encounter along the way (that is, historic, prehistoric, and natural); a map of the parkway showing major sites, trails, facilities, and a "you are here" indicator; and places where visitors can obtain additional information. A parkwide compreshensive interpretive prospectus will be prepared to determine specific media for presenting orientation information. The interpretive prospectus will also

determine which, if any, off-parkway sites are particularly relevant to the parkway's interpretive program and should be included in visitor orientation.

As part of the realignment of the interpretive program, existing wayside signs that are of limited relevance and effectiveness will be removed (see table 3 for a list of waysides). Removal of these signs will help simplify the program and reorient visitor interest toward more significant resources.

A second objective for the interpretive program is to present the wealth of information about the Natchez Trace and other resources in such a way that visitors can comprehend and remember key elements of the story. Several sites along the parkway are inappropriate for on-site interpretation, either because substantial background information is needed to understand them, or because the resources associated with the sites are no longer extant (although subsurface remains may be present). However, these sites relate to the parkway's interpretive story and will be of interest to some visitors.

In realigning the parkway's interpretive program around major themes, the preparation of a road guide publication should be considered by the interpretive planning team. Such a publication could contain a great amount and range of subject matter in an understandable form, would cost less than rehabilitating a large number of wayside exhibits, and would be better suited to interpreting parts of the story for which there are few on-the-ground resources. A road guide would need to be well planned to ensure continuity in telling the complex parkway story, to make it easy for visitors to understand, and to give visitors enough information to plan their interpretive stops. Some of the sites that could be included in the road guide include Baker Bluff and its view of the highland rim; sites of She Boss, Doak's, and other stands; the Old Town overlook; Robinson and Red Dog roads; the upper and lower Choctaw boundaries; the West Florida boundary; the Elizabeth Female Academy site; and the Tenn-Tom waterway. The interpretive planning team may also consider publications to interpret natural history features and various specific aspects of the history of the Natchez Trace.

Table 1: Interpretive Themes

The Natchez Trace played a significant role in the development of the Old Southwest region of the United States.

A. It was significant in different ways over time:

1. as a network of Indian trails

2. as the return route for boatmen traveling to Mississippi River trade centers

3. as a post and military road

4. as a catalyst for settlement

B. The Natchez Trace was a route for transportation, but also for communication, exchange of cultural traits and trade goods, and as a political/cultural link to the developing southwestern frontier of the United States.

The Natchez Trace was not a single trail, rather it was a transportation corridor.

A. The Natchez Trace was the route of least resistance--i.e., it avoided upstream travel, lengthy ocean travel, and swampy lowlands--and its location was defined by topographic and other natural resource features.

1. The southern part is high ground between the Big Black and Pearl rivers.

2. The northern part follows ridges to the bluegrass country of the Nashville Basin.

3. The corridor cuts across a variety of resource "provinces":

a. Mississippi Alluvial Plain (south entrance)

b. Central Mississippi Hills

c. Black Belt Prairie

d. Highland Rim

e. Nashville Basin

B. Travel on the Natchez Trace was primitive and sometimes dangerous:

1. Topographic/environmental conditions, stream and river crossings made travel difficult.

2. Stands, or inns, represented civilization in the wilderness.

3. Indians and whites (English and French) interacted historically in a number of ways on the Natchez Trace.

4. Many kinds of people used the Natchez Trace for many different purposes--some individuals described their journeys in diaries.

III. Prehistoric mounds along the parkway are representative of the Woodland and Mississippian periods, the latter possibly the most highly developed prehistoric culture in North America.

A. Different types of sites represent different periods and different functions:

1. temple mounds, burial mounds

2. other kinds of sites

3. relationship of mounds to village sites, sense of layout, and surrounding lands

B. These people were not "primitive"--they exhibited a high degree of sophistication:

1. They showed a high level of social/political development (chiefdom is one level behind concept of state).

2. They had a high level of religious/ceremonial development.

3. They were not totally dependent on agriculture because of the variety and abundance of available resources.

4. The Mississippian period culture exhibits Mesoamerican influences in art forms and a near comparable level of social, political, and religious development

IV. The parkway commemorates the old Natchez Trace by following the corridor and thus representing part of a transportation continuum.

A. The parkway is not the historic Natchez Trace, but it provides access to sections of the old trace and to sites associated with its history and prehistory.

B. Parkways are scenic and recreational in concept and are managed to maintain a landscape of pastoral quality.

Table 2: Interpretive Sites and Themes

Milepost	Orientation or Interpretive Site	Interpretive Themes*
--	Natchez (southern entrance)	General orientation for northbound traffic; overview of trace significance (I, IA, IA1-4, II, III, IV)
8.7	Old Natchez Trace exhibit shelter (interim visitor contact facility until construction of southern entrance facility)	
10.3	Emerald Mound	Overview of significance of Mississippian period; function of temple mounds (III, IIIA, IIIA1, IIIA3, IIIB, IIIB1-4)
15.5	Mount Locust	Overview of Natchez Trace significance; what travel was like; role of stands (IA4, IB, II, IIB, IIB2, IIB4)
17.5	Coles Creek picnic area (old trace trail)	Trail orientation (both ends of trail)
41.5	Sunken Trace	What travel was like on the Natchez Trace (II, IIB, IIB1, IIB4)
45.7	Grindstone Ford	What travel was like; farthest extent of civilization--the crossing into wilderness (IIB, IIB1, IIB4)
45.7	Mangum Site	"Southern Death Cult" of the Mississippian period (IIIA1)
54.8	Rocky Springs	Natchez Trace as a catalyst for settlement (IA4); trail orientation (both ends of trail from Owens Creek to Rocky Springs)
86.6	Jackson entrance	General orientation for southbound traffic; overview of Natchez Trace significance (I, IA, IA1-4, II, III, IV)
102.4	Ridgeland Crafts Center	General orientation for northbound traffic; overview of Natchez Trace significance (I, IA, IA1-4, II, III, IV)
106.9	Boyd Mounds	Function of Woodland burial mounds (IIIA, IIIA1)
180.8	French Camp	Natchez Trace as a catalyst for settlement (IA4)
193.1	Jeff Busby	Story of the parkway (IV, IVA, IVB)
198.6	Old Natchez Trace	What travel was like (IIB4)
204.1	US Route 82 entrance	General orientation for northbound and southbound traffic; overview of Natchez Trace significance (I, IA, IA1-4, II, III, IV)
221.4	Old Natchez Trace	Trail orientation
232.4	Bynum Mounds	Significance of Woodland period; function of burial mounds (III, IIIA1, IIIA3, IIIB, IIIB1-4)
251.9	Black Belt Prairie overlook	General orientation for southbound traffic
261.8	Chickasaw Village	Significance to historic Indian civilization along Natchez Trace and as part of a trail network (IA1, IB3)
266.0	Tupelo visitor center	General orientation; overview of Natchez Trace significance (I, IA, IA1-4, II, IIA, IIA1-3, IIB, III, IV)
269.4	Old Natchez Trace/Confederate graves	Natchez Trace during Civil War (IA3)
286.7	Pharr Mounds	Overview of significance of Woodland period; function of burial mounds (III, IIIA, IIIA1, IIIB1-4)
308.8	Bear Creek Mound	Significance of Mississippian period; function of temple mounds; continuum of occupation--Paleo-Indian to Mississippian (III, IIIA1)
320.3	Buzzard Roost (US Route 72 entrance)	General orientation for northbound and southbound traffic; overview of Natchez Trace significance (I, IA, IA1-4, II, III, IV)
327.3	Colbert Ferry	Overview of Colbert story (IIB3,4); general orientation for northbound and southbound traffic; overview of Natchez Trace significance (I, IA, IA2, II, III, IV)
350.5	Old Natchez Trace	What travel was like (II, IIB, IIB1, IIB4)
369.9	US Route 64 entrance	General orientation for northbound and southbound traffic; overview of Natchez Trace significance (I, IA, IA1-4, II, III, IV)
375.8	Old Natchez Trace drive	What travel was like (IIB4)
385.9	Grinder's Inn/Meriwether Lewis	Overview of Lewis story (IIB4)
403.7	Old Natchez Trace walk	What travel was like (IIB4)
--	Butler Ridge (old trace trail)	Trail orientation (both ends of trail)
--	Gordon House site	Overview of Gordon story (IIB1, IIB4)
--	Gordon House site (interim visitor contact facility until construction of northern entrance facility)	General orientation for soutbound traffic; overview of Natchez Trace significance (I, IA, IA1-4, II, III, IV)
--	Pasquo (northern entrance)	

*See table 1 for interpretive themes.

Phase 2. The region and park will evaluate the comprehensive program of interpretive media rehabilitation proposed by the interpretive planning team in phase 1 to determine if it is still appropriate. If it is, all existing media sites evaluated in the interpretive prospectus will be redesigned as necessary to ensure a coherent program. Existing media that are determined to be inappropriate by the interpretive planning team will be phased out to avoid diluting the parkway's interpretive story, as well as "visitor burnout" caused by presenting too much extraneous information.

Exhibits at major contact centers will also be upgraded under phase 2. The exhibits and film at the Tupelo visitor center will be redone to offer visitors a more comprehensive overview of the Natchez Trace's significance and to provide more complete orientation services. To provide interim visitor services in the Jackson area, a staffed contact center with orientation services and exhibits will be constructed at Ridgeland either as a separate building near the existing craft's center or as an addition to that building. The Mississippi Craftsmen's Guild has requested a relocation of the crafts center to milepost 105.6, which would be accomplished by outside funding. The proposed cultural center will provide for indoor/outdoor cultural events, exhibits on Mississippi culture, craft sales, an auditorium, restrooms, and space for an NPS-staffed information facility, with orientation exhibits. This facility will provide services to Jackson residents and parkway motorists. When completed, this facility will replace the current crafts center at milepost 102.4, which will be removed or used for some other purpose. Additional staffed contact stations will be developed at Natchez and Pasquo, the southern and northern entrances to the parkway.

Visitors will be further assisted in planning their parkway stays by new site signs that clearly and consistently identify the purpose of each pulloff and the facilities provided there. The signs will be placed well ahead of the turnout to allow people ample time to decide whether to stop. Interpreted sites will be identified not only by the name of the area but also by its classification as a prehistoric, historic, or natural site (for example, "Emerald Mound Archeological Site," "Rocky Springs Historic Area," "Cypress Swamp Nature Trail"). Symbols will be used to indicate restrooms, picnic areas, camping areas, trails, and other facilities that are available at each pulloff. All orientation sites will be clearly identified as such by the signs. The plan proposes the installation of 186 site signs, but the actual number will depend on the specific proposals of the interpretive prospectus and the subsequent wayside exhibit plan.

Private organizations and local public agencies occasionally express an interest in establishing museums, craft centers, visitor centers, or other facilities along the parkway. Such proposals will be considered appropriate if they contribute to the parkway's interpretive themes (see table 1), provide needed visitor services not already provided by the park, and are consistent with the level of anticipated visitor use. Existing facilities and services will not be duplicated, nor will the interpretive program be diluted with extraneous themes. Projects

approved by the park will not be funded or operated by the Park Service, but the responsible party will coordinate activities with the Park Service to ensure that architecture, landscaping, and interpretation are in keeping with parkway programs.

One proposal by local historians and Indian organizations in Alabama is to establish a museum to commemorate the historic Indian tribes of the Natchez Trace region. This is considered an appropriate activity because there are few extant resources that are representative of historic Indians along the parkway. Such a museum could interpret this important part of the parkway's interpretive story.

GENERAL DEVELOPMENT

Little new development is needed on the Natchez Trace Parkway. Parking areas and most wayside structures required for the proposed interpretive program have already been constructed adjacent to major or visually dominant prehistoric and historic resources. Other visitor facilities, such as pulloff parking and scenic overlooks, comfort stations, and short loop trails, are in place along each section of the parkway. Three major recreation areas--Rocky Springs, Jeff Busby, and Meriwether Lewis--complement the smaller developed sites.

This plan evaluates the function of existing visitor use facilities, and it proposes upgrading some site plans and identifying parkway entrances where new orientation waysides are needed. Types of development described in this section include the parkway motor road, orientation/information waysides, and trails. Development concept plans (DCPs) for Emerald Mound, Brices Cross Roads and Tupelo national battlefield sites, Colbert Ferry, Gordon House site, and the Leipers Fork subdistrict headquarters are also discussed. Sites, resources, existing facilities, and proposed development actions are shown in table 3. Specific sizes and costs of new facilities or changes to existing facilities are shown in table 6 at the end of the "Proposal" section.

Phase 1

Phase 1 development proposals include completing the parkway, constructing orientation/information pulloff parking sites, and constructing the subdistrict headquarters building at Leipers Fork. In 1978 the National Park Service committed itself to completing the parkway motor road when the states of Mississippi, Alabama, and Tennessee acquired and deeded the remaining lands to the federal government for that purpose. Recently, the Office of Management and Budget has directed the Park Service to complete the parkway, and 47 miles of road construction remain. Completion of sections 1A, 1B, 3P, and 3X will make the motor road a continuous parkway, will eliminate the present 64 miles of detours, and will provide ready access for parkway visitors to Nashville and Natchez.

Orientation/Information Waysides. A key objective in phase 1 is to provide orientation/information waysides at the following 11 sites to help visitors plan their stays and select places to stop:

Old Trace Parking Area (milepost 8.7) - Existing structures will be redesigned to orient visitors to the parkway. This will be the southernmost orientation facility until parkway section 3X and the Natchez contact station have been completed.

Jackson Entrance (milepost 86.6) - New pulloff parking and wayside structures will be built to orient southbound visitors in the Jackson, Mississippi, area near the intersection of the parkway and Interstate 20.

Ridgeland Crafts Center (milepost 102.4) - Installation of new wayside panels near the parking area or in the proposed visitor contact area at Ridgeland will orient northbound visitors in the Jackson area until the Mississippi cultural center is constructed.

Kosciusko Chamber of Commerce Visitor Center (milepost 159.9) - New orientation panels will be included in the visitor center.

US Route 82 Entrance (milepost 204.1) - The existing wayside structure will be fitted with new panels to orient northbound and southbound visitors.

Black Belt Prairie Parking Area (milepost 251.9) - New orientation waysides will be installed to orient southbound visitors.

Tupelo Visitor Center (milepost 266.0) - Redesigned orientation panels will be included in the visitor center.

Buzzard Roost (milepost 320.3) - The existing wayside structure will be fitted with new panels to orient northbound and southbound visitors.

Colbert Ferry (milepost 327.3) - Orientation panels will be redesigned and installed in the existing contact station to orient northbound and southbound visitors.

US Route 64 Entrance (milepost 369.9) - The existing wayside structure will be fitted with new panels to orient northbound and southbound visitors.

Gordon House Site (milepost unassigned) - Orientation will be provided by new panels until a proposed contact station is constructed near the Nashville entrance.

Operations and Maintenance Facilities. Maintenance and visitor protection activities on the parkway are divided into northern and southern districts. These two districts are further divided into nine maintenance and five visitor protection subdistricts. All but the Nashville subdistrict have maintenance shops, offices, and storage buildings.

TABLE 3

SITES, EXISTING FACILITIES, RESOURCES, AND PROPOSED DEVELOPMENT ACTIONS

MAP KEY	SITES	RES
1.	Southern Entrance Natchez MP --	
2.	Elizabeth Female Academy MP --	○
3.	Old Trace MP 8.7	○
4.	Emerald Mound MP 10.3	○
5.	Turpin Creek MP 12.1	
6.	Loess Bluff MP 12.4	○
7.	Mount Locust MP 15.5	○
8.	Coles Creek MP 17.5	○
9.	Bullen Creek MP 18.4	○
10.	Mud Island Overlook MP --	○
11.	Old Greenville MP --	○
12.	Coon Box MP --	○
13.	Port Gibson Ranger Station MP 39.2	
14.	Sunken Trace MP 41.5	○
15.	Grindstone Ford MP 45.7	■
16.	Mangum Site MP 45.7	○
17.	Owens Creek MP 52.4	○
18.	Rocky Springs MP 54.8	○
19.	Lower Choctaw Boundary MP 61.0	
20.	Dean's Stand MP 73.5	
21.	Battle of Raymond MP 78.3	
22.	Jackson Entrance MP 86.6	
23.	Ridgeland Crafts Center MP 102.4	
24.	Brashears Stand & Old Trace MP 104.5	○
25.	Overlook Reservoir MP 105.6	■
26.	Boyd Mounds MP 106.9	○
27.	West Florida Boundary MP 107.9	

V

EXISTING RESOURCES

- H — Historic
- N — Natural
- A — Archeological
- S — Scenic
- ○ — Resource on Site

EXISTING FACILITIES

- Ranger Station
- Information/Orientation Exhibit
- Comfort Station
- Interpretive Exhibit
- Wayside Structure
- Trail
- Picnic Area
- Campground
- V — Visitor Contact Station / Center

PROPOSED DEVELOPMENT ACTIONS / IMPROVEMENTS

- Ranger Station
- Information/Orientation Exhibit
- Comfort Station
- P — Parking Area
- Interpretive Exhibit
- No On-site Interpretation (Remove Existing Exhibits)
- Remove Wayside Structure
- * — Remove Wayside Exhibits in Phase One
- Trail
- V — Visitor Contact Station / Center

Note: All existing facility sites have parking areas that will be retained.

Facilities for the Nashville subdistrict will be constructed on parkway section 1B near Leipers Fork, and vehicle access will be provided from Hillsboro Pike and Tennessee Highway 96. A new maintenance building will be constructed to provide office space for ranger and maintenance supervisors, limited covered shop and storage space, and firefighting equipment storage. The structure will be small because minimal space is required for the few interpretive and recreation facilities proposed along this section of parkway. The potential for contracting out maintenance services also limits the amount of on-parkway facility space that may be needed (see Leipers Fork Development Concept Plan map).

Development plans approved in the early 1970s called for two 3-bedroom residences to be built adjacent to the Nashville subdistrict facility. These will not be built because housing is now available in the local community. As long as housing continues to be available and response times for emergencies are not affected, housing will not be required in this subdistrict.

Phase 2

In phase 2 the number and function of pulloff sites along the parkway will be adjusted, based on visitor use data gathered in phase 1 (see table 3 for existing visitor use sites and proposed development actions). It is anticipated that wayside exhibits will be removed at approximately 43 sites, and new exhibits will be provided at approximately 29 of those sites. (Table 3 should be used in conjunction with the General Development map--inside back cover--to locate visitor use sites along the parkway.) If warranted by visitor use, the following actions, which were recommended in previously approved development concept plans, will also be implemented.

Emerald Mound. The purposes of the proposed developments are to provide a more appropriate setting, to develop direct access, and to better control use of the site. A short section of county road will be relocated, and a spur road will lead to a parking area for 10 cars and two buses/RVs. A trail will lead from the parking area to a new interpretive shelter and from there to the mound. Development proposals are shown on the Emerald Mound Development Concept Plan map.

Brices Cross Roads and Tupelo National Battlefield Sites. The battle stories at both sites are told on large map/text panels mounted vertically near the centers of the sites. Although the text and graphics communicate well, the size and location of the panels make them intrusive on the sites. Replacing the large vertical panels with smaller, low-level, tilted wayside panels, and locating them nearer the parking areas where visitors enter the sites, will be less intrusive and more beneficial to visitors. Walkways will be redesigned to lead from the parking areas to the wayside exhibits and then to the battle markers and other areas of interest (see DCP maps).

NO SCALE

Proposal

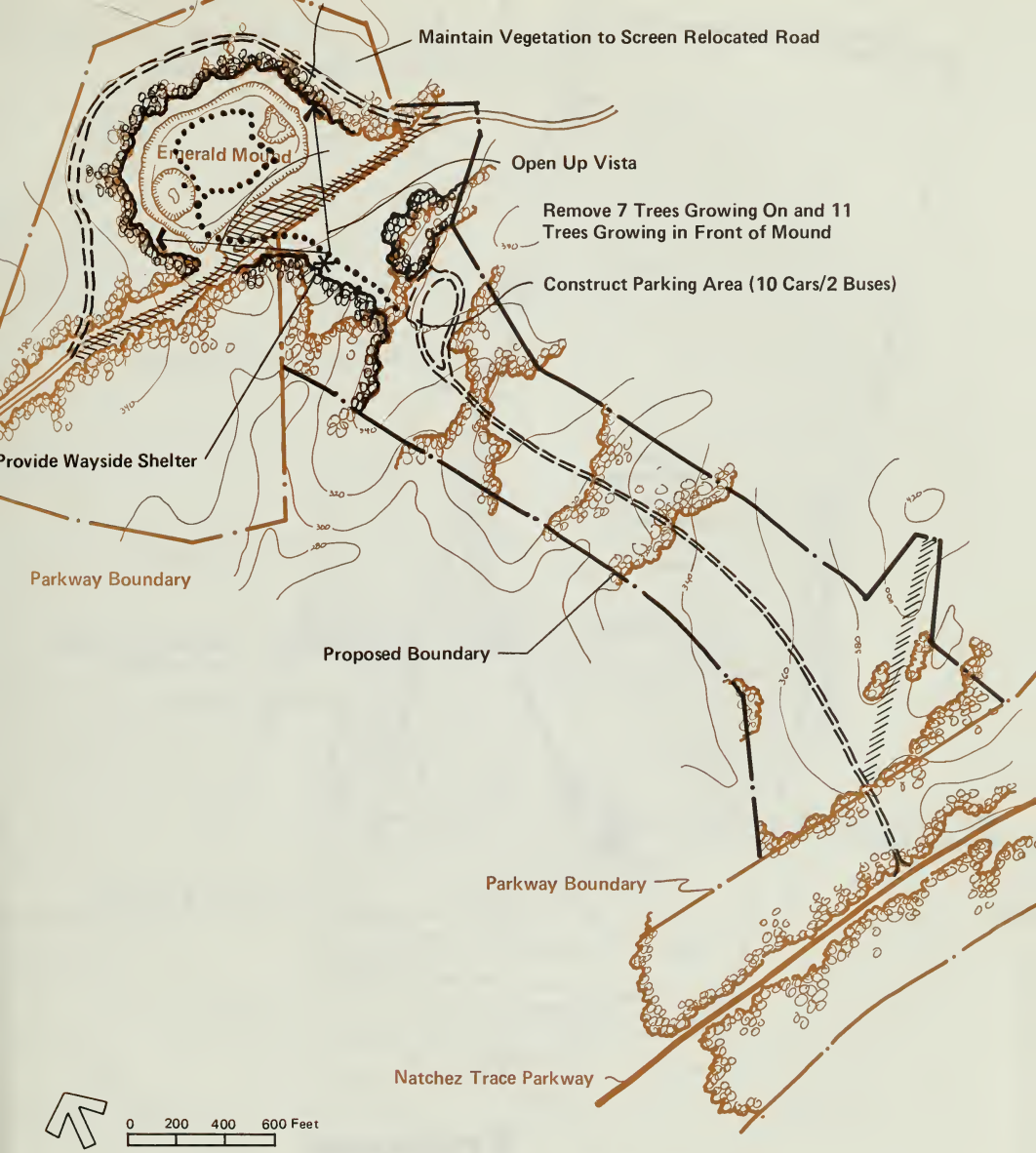
Leipers Fork Subdistrict Headquarters

Development Concept Plan

Natchez Trace Parkway

U.S. Department of the Interior
National Park Service

604	20047C
DSC	NOV 85



PROPOSED ACTIONS

- NEW FOOT TRAIL
- OBLITERATE ROAD
- NEW ROAD
- OPEN UP VISTA

Proposal

Emerald Mound

Development Concept Plan

Natchez Trace Parkway

U.S. Department of the Interior
National Park Service

604	20042C
DSC	JAN 86

Proposal

Brices Cross Roads

National Battlefield Site

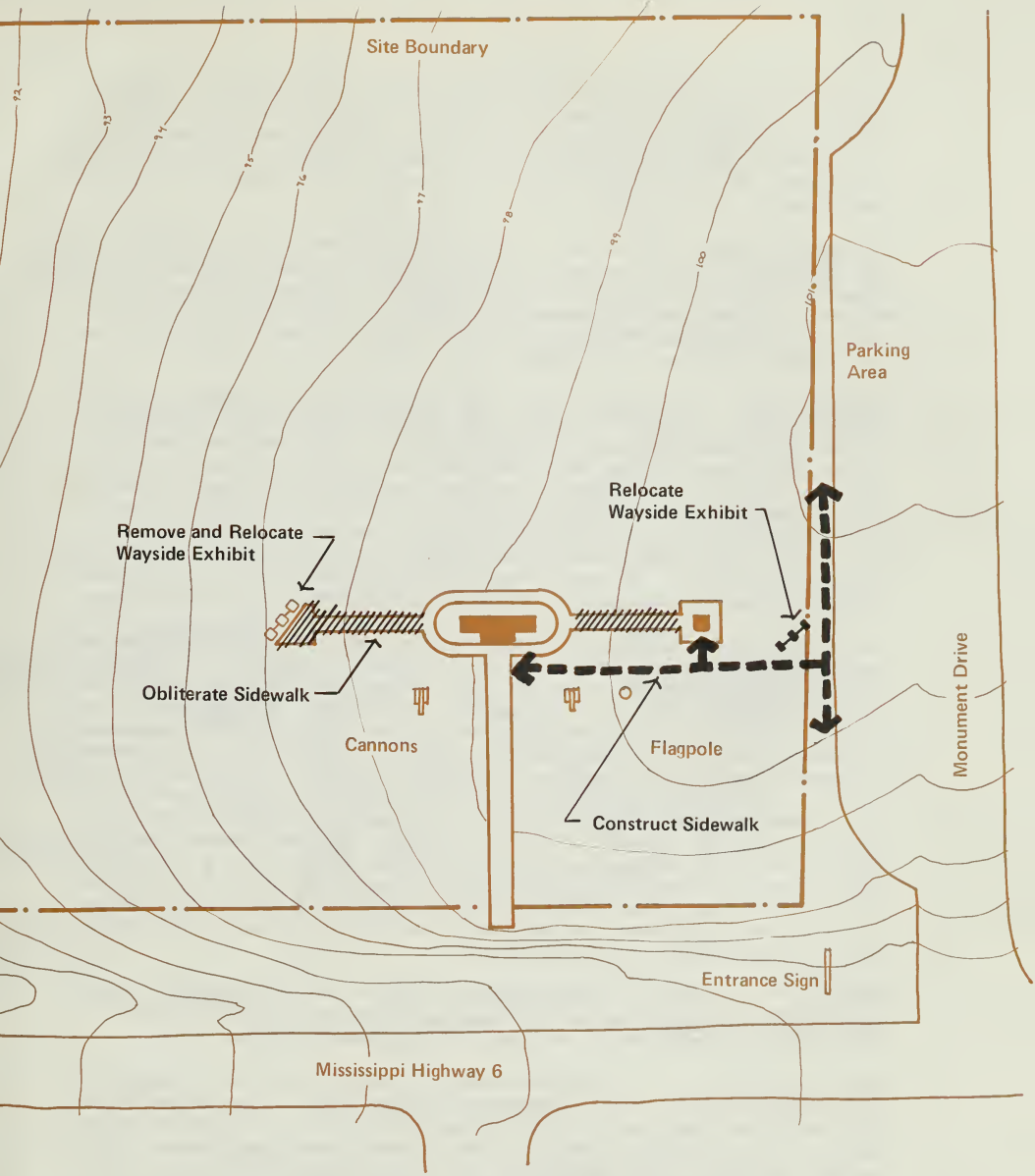
Development Concept Plan

Natchez Trace Parkway

U.S. Department of the Interior
National Park Service

0 20 40 Feet

604 | 20043C
DSC | JAN 86



Proposal

Tupelo National Battlefield

Development Concept Plan

0 20 40 Feet

Natchez Trace Parkway
U.S. Department of the Interior
National Park Service

604 | 20044B
DSC | NOV 85

Several stone markers (erected by the state of Mississippi) along the approach highway to Brices Cross Roads explain the progression of events associated with the battle. The Park Service will cooperate with the state to post a sign before the markers to alert visitors about the significance of the markers and to encourage more visitors to stop and read them.

Meriwether Lewis. Except for a campground comfort station 1½ miles from the parkway, there is no public comfort station at the Meriwether Lewis site. A visitor contact station, with restrooms, a ranger office, and an exhibit area, will be constructed adjacent to the entrance road and within view of the parkway motor road. A spur road will lead to a parking area for 10 cars and three buses or RVs.

Colbert Ferry. The Colbert Ferry Development Concept Plan, approved November 1983, proposed extensive day and overnight facilities that would be developed and operated by a concessioner. A full-service, year-round resort (including a lodge and cabin complex, with restaurants, meeting rooms, swimming pools, and an activity center), an 18-hole golf course with clubhouse and pro shop, a service station/information center, a 200-site campground with three group campsites and a camp store, and a 15-slip boat dock were proposed, along with a maintenance area to service the entire complex. It was believed that this combination of amenities would provide an economically feasible opportunity for a concessioner.

In 1984 the Park Service solicited private sector interest in implementing the DCP proposals at Colbert Ferry by issuing a request for proposal. Only one response was received, and it was not accepted, indicating limited private interest in the proposed development. Consequently, the National Park Service has reduced the level of visitor facilities proposed at Colbert Ferry. Proposed facilities will now be developed and operated by the National Park Service. Overnight facilities to be constructed include a 100-site campground with electricity and water hookups, a walk-in campground with 10-15 sites, and a group campground with three 25-person group sites. A trailer sanitary disposal station will be provided near the campgrounds for convenient access, and a combination gas station and store will be constructed along the parkway motor road just south of the Colbert Ferry entrance road. If future visitor demand at Colbert Ferry warrants expansion of the 100-site campground, then an additional 50 sites will be constructed.

Specific interpretive recommendations made in the Colbert Ferry Development Concept Plan will be reevaluated by the interpretive planning team to ensure consistency with the overall parkway program.

Gordon House Site. The Gordon House site and Duck River historic area were addressed in a 1984 Development Concept Plan. The Gordon House site will serve temporarily as the primary visitor contact and orientation point for the northern portion of the parkway until the Pasquo visitor contact station is constructed. A spur road and parking area will be constructed south of the house, and a short trail between the parking area and house will provide for pedestrian access. Specific interpretive

NO SCALE

EXISTING

ROAD AND PARKING AREA

HISTORIC TRACE

PROPOSED

ROAD

CAMPGROUND

Proposal

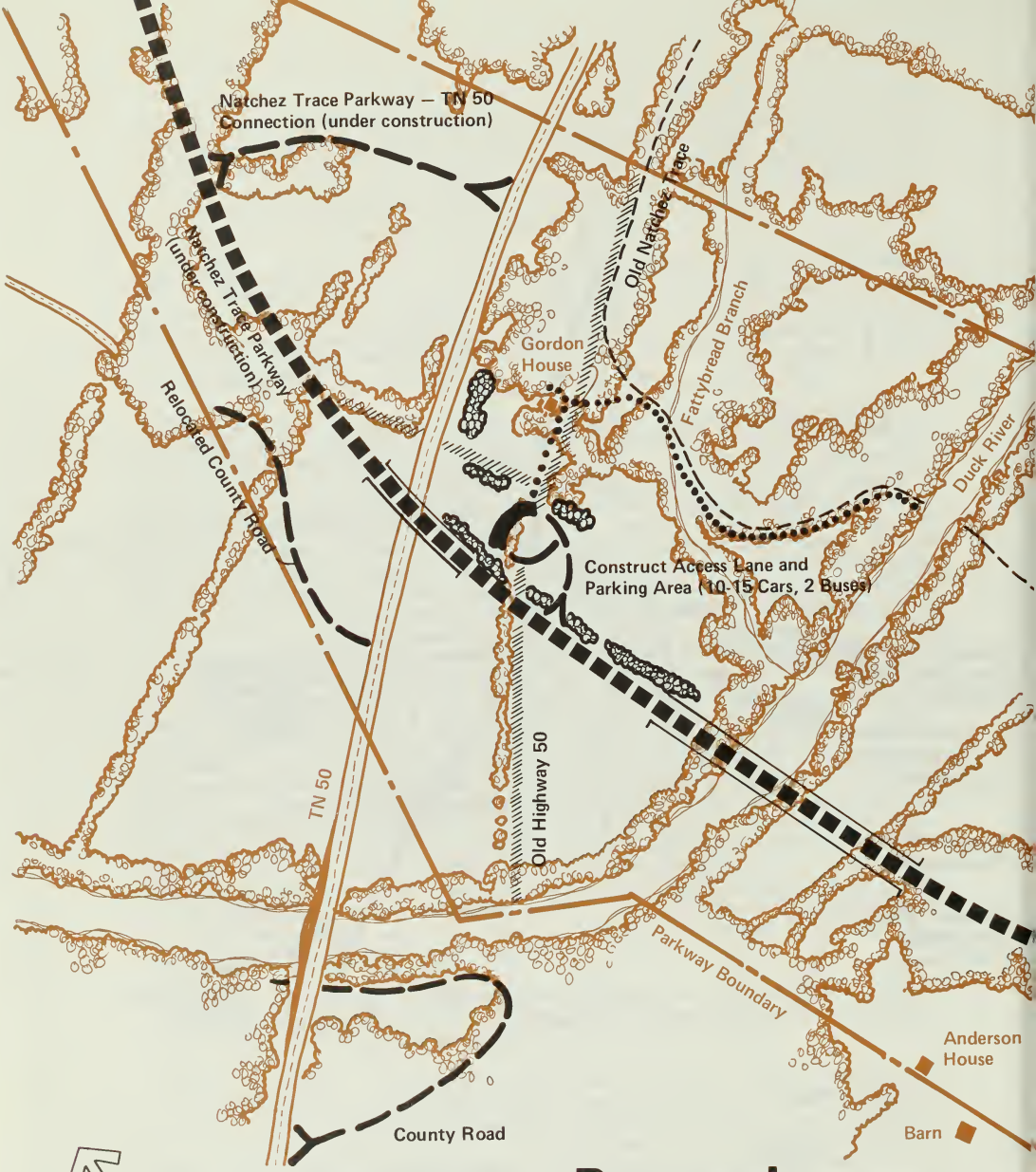
Colbert Ferry

Development Concept Plan

Natchez Trace Parkway

U.S. Department of the Interior
National Park Service

604	20046C
DSC	NOV 85



Proposal

Gordon House Site

Development Concept Plan

Natchez Trace Parkway

U.S. Department of the Interior

National Park Service

604	20045C
DSC	JAN 86

recommendations in the plan will be reevaluated by the interpretive planning team to ensure consistency with the overall parkway program.

Trails. Driving along the parkway is the primary experience for most visitors; however, those who stop their automobiles and walk the many existing trails will benefit more from their parkway experience. At several points, visitors may walk along sections of the old Natchez Trace or through natural resource areas such as streamsides, swamplands, ridgetops, and forests. Trails of various lengths have been developed at picnic and pulloff parking areas. Longer hiking and horseback-riding trails (total of 15.5 miles) have been developed in or near the major recreation sites (see Existing Trails map).

For the congressionally designated Natchez Trace National Scenic Trail, the comprehensive trail plan makes the following recommendations: designate the scenic trail route within the boundaries of Natchez Trace Parkway; retain trails already existing along the parkway as initial scenic trail components; develop 22 miles of hiking/horseback-riding trail in the Nashville area; and continue to accommodate bicycle use on the roadway. (For location of the proposed Nashville area trail, see the "Comprehensive Trail Plan" part of this document.)

Additional trails have been proposed in the Development Concept Plan for the Gordon House site (shown on the DCP map in this section). Trails are also proposed for the Fall Hollow pulloff parking area.

To ensure that visitors are aware of hiking and horseback-riding opportunities along the parkway, trail orientation signs will be provided at 40 trailhead locations. Information on the signs will include trail length and level of difficulty; a brief description of resources and kinds of scenery along the trail; any relevant safety information or special messages; and in the case of longer trails, a map of the route.

The Park Service will not pursue any further trail development unless visitor use data collected in phase 1 show a need for additional hiking or horseback-riding trails. Hikers will be allowed to travel the entire length of the parkway on the road shoulder, but horse use will be restricted to designated trail segments.

CULTURAL RESOURCE MANAGEMENT

Currently, no major cultural resources on the parkway are in danger of being lost because they receive routine preservation maintenance, which should ensure their long-term protection. Although certain improvements are recommended in the maintenance program, the critical cultural resource management concerns relate to the proper identification, evaluation, and interpretation of the parkway's cultural resources. For example, Rocky Springs is interpreted as a former townsite on the Natchez Trace. Little attempt has been made, however, to locate any extant subsurface remains. Locating sites of the town's structures would allow the interpretation of the town's beginnings as a stand on the

Natchez Trace, its subsequent growth because of the cotton boom in the antebellum south, and its later demise as a result of poor land-use practices and the fall of "king cotton."

Over 200 archeological sites have been located by numerous surveys performed since the 1940s. It is the opinion of the National Park Service that 35 to 40 percent of the total acreage will not require additional survey because the acreage has been surveyed to a sufficient intensiveness to record all but the most unobtrusive sites, or the acreage has been badly disturbed by construction activities. Approximately 60 to 65 percent of the parkway will require additional surveys. Sections 1C, 1D, 2D, 3U, 3V, and 3W have been adequately surveyed. Portions of 1A and 1B may require additional reconnaissance, as may section 3P.

Surveys for sections that were developed earlier may not be adequate because detailed records were not required as part of the survey standards in the 1940s, 1950s, and 1960s. Sections 3A to 3O and 3Q to 3T are in this category and also areas within the corridor.

As the survey work is completed and earlier survey work is verified, the total number of known sites within the parkway will increase considerably. Approximately 168 sites (85 percent) have been revisited to ascertain exact location or site condition.

With the exceptions of the highly visible prehistoric Indian burial and ceremonial mounds and approximately 115 segments of the old Natchez Trace, few tangible remains have survived to help relate the Natchez Trace story (see Cultural Resources map). The Natchez Trace Parkway was established by Congress to commemorate the intangible elements of the Natchez Trace story, rather than to preserve and protect specific cultural resources. Based on this premise, the protection of significant resources within the parkway boundaries was not a critical factor when the final parkway alignment and subsequent land acquisition were determined. Furthermore, land acquisition policies in effect at the time required that lands purchased by the states for parkway rights-of-way be cleared of all standing structures before being transferred to the Park Service.

The lack of tangible cultural resources on the parkway complicates the interpretation of cultural resources in several ways. First, those resources that have survived represent such diverse chapters of the parkway's interpretive story that it is difficult to place them into cohesive thematic categories. Second, the problem is compounded because the story of the Natchez Trace is so comprehensive that its themes include prehistoric and historic exploration, along with settlement and development of the Old Southwest and, ultimately, the trans-Mississippi west. Third, historic sites on the parkway are interpreted in and of themselves, with little or no attempt to tie each particular story to the much larger story of the Natchez Trace as a national road and its role in the settlement of the west. This problem is compounded because a great deal of effort has been made to tell the stories of many cultural resources whose precise locations are not known and are often miles from the

Existing Trails

Natchez Trace Parkway

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Existing Trails

Natchez Trace Parkway

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DSC | NOV 85

604 | 20040B
DSC | NOV 85

Cultural Resources

Natchez Trace Parkway
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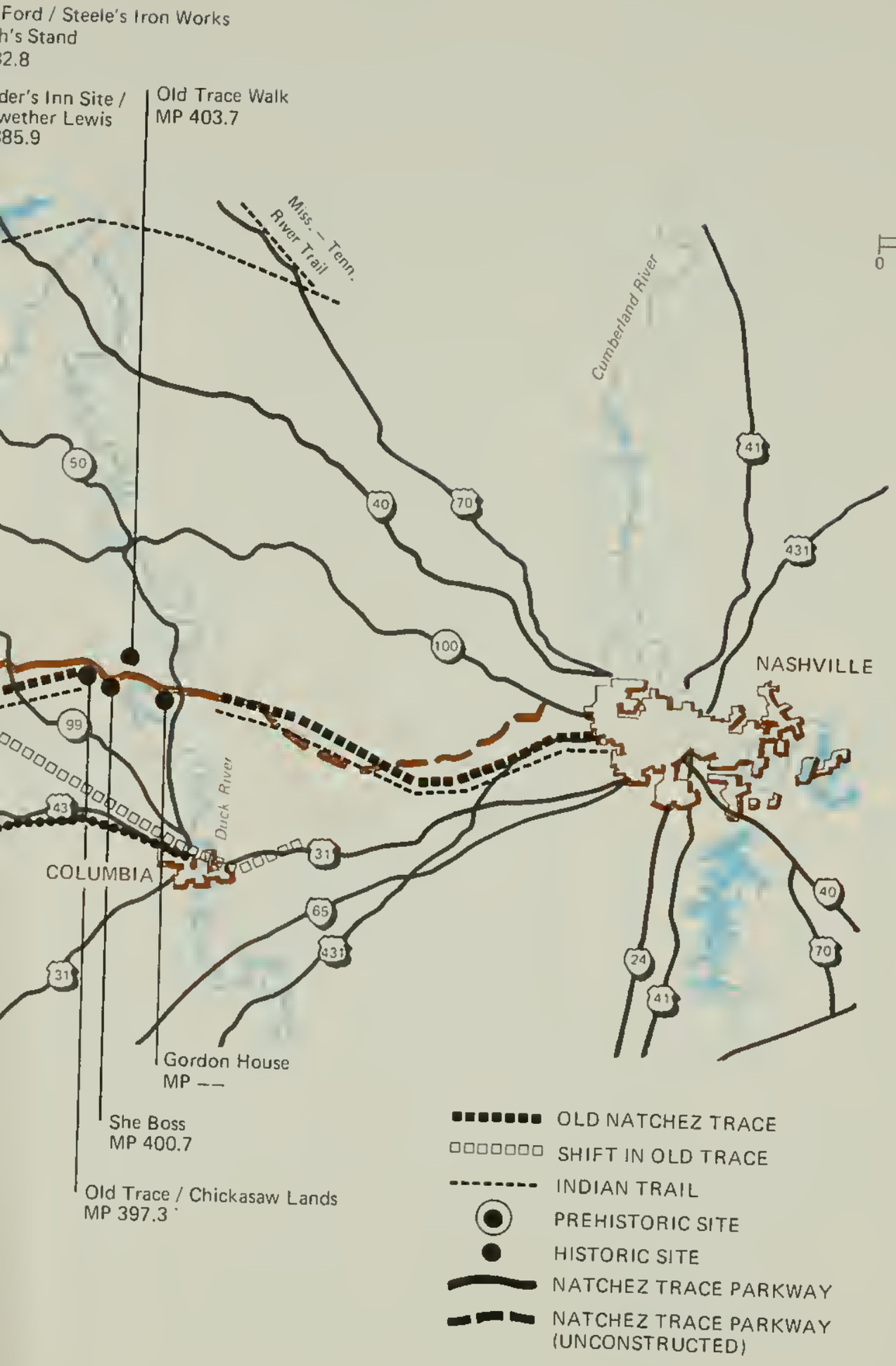

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DSC | NOV 85

Cultural Resources

Natchez Trace Parkway
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parkway. Finally, it appears that lands within the parkway boundaries contain some of the more significant prehistoric Indian cultural resources known to exist in the United States, but past research has not determined how or if prehistoric sites are related to the Natchez Trace corridor or if they are distributed with direct relationship to other systems.

The parkway presents unlimited opportunities for interpretation and research because it involves a variety of cultural remains, physiographic areas, and microenvironments; however, direction for these activities is needed. Until now specific parkway themes have not been used to establish research questions, goals, and criteria for evaluating site significance, so it has not been clear which sites should be selected for interpretation or should be preserved for future study. By establishing specific themes and their resulting research questions in this general management plan (see tables 1 and 2), a consistent framework can be followed to evaluate sites and to develop recommendations for preservation management. The highest priority for funding archeological research and survey projects will be given to those sites threatened by construction or environmental conditions. Because funding is limited and because interpretive programs are important in managing the parkway, research that supports the interpretive program will be given the next highest priority. When additional funding is available, other research questions not directly related to interpretation will be evaluated and selected for study.

The museum collection is stored at the Tupelo visitor center. The collection currently consists of 1,400 objects, all of which have been accessioned and cataloged. Selected items are displayed at Mount Locust and the Tupelo visitor center. Archeological artifacts unearthed during construction projects are stored at the Southeast Archeological Center. This procedure will continue. A collection management plan will be developed to provide guidance in the care and preservation of these collections.

In summary, cultural resource management goals at the parkway are threefold: continue, with some improvements, the present cyclic preservation maintenance program; properly identify and evaluate the significant cultural resources; and relate the extant resources to relevant themes to ensure that each resource's individual story is interpreted, as well as the parkway's overall interpretive story. To meet these goals, the following cultural resource management strategies are proposed. The cultural resource management program will be implemented in phases that correspond with phases of the proposed interpretive program (see table 4) because of the complexity of the issues involved and the need to reevaluate existing data and acquire new information.

Management Strategies

Through NPS internal policies and guidelines and the federal historic preservation laws and regulations, the Park Service is mandated to

Table 4: Proposed Management of Cultural Resources

Milepost	Resource	Description/Significance	Management Strategy	Phase 1	Phase 2
	Prehistoric Sites				
10.3	Emerald Mound	Ceremonial mound; period interpreted--late Mississippian, A.D. 1300-1600	Preserve, maintain, and interpret	Remove all trees from top of mound; pull tree line back on southwest and southeast sides of mound base to provide clear visibility of mound from both base and top; continue present mowing schedule and modify mowing techniques at mound top edges to avoid scalping.	Relocate parking lot to provide better viewing perspective; construct trail on top of mound to provide access to secondary mound and six mound areas located along edges of mound top. Survey and test all areas of disturbance before construction or surface disturbance.
45.7	Mangum Site	Burial site; period interpreted--Mississippian ("Southern Death Cult"), A.D. 1500s	Preserve, maintain, and interpret	Continue present mowing schedule.	Clear all trees and shrubs from base and top of knoll and from south end of parking lot to enhance visibility; maintain tree buffer to screen county road southeast of site and to provide erosion control and slope stabilization.
106.9	Boyd Mounds	Burial mounds (six) and small village site; period interpreted--Woodland, A.D. 300-700	Preserve, maintain, and interpret	Remove large tree from top of mound 4 to enhance visibility and to prevent root disturbance; continue present mowing schedule.	Move treeline that surrounds two mounds back 50 feet to enhance visibility; provide signs that discourage walking on top of mounds.
232.4	Bynum Mounds	Burial mounds (two); period interpreted--Woodland, 100 B.C. and A.D. 200	Preserve, maintain, and interpret	Continue present mowing schedule; prepare soil by loosening compacted soils and reseed with low-growing turf grass along backsides of both mounds where grass currently exists; use smaller mowing equipment and undertake contour mowing to prevent compaction, tire tracks, bald patches, erosion, and scalping; mow under dry conditions whenever possible; relocate treeline periphery to encourage grass growth and to enhance visibility; leave treeline buffer east of mound B to screen county road.	Same as phase 1.
261.8	Chickasaw Village	Subsurface outlines of Chickasaw fortification and three house structures; period interpreted--A.D. 1731-45	Preserve maintain, and interpret	Remove concrete curbing from fortification and house structures and replace with earth-toned "concrete" type material which shows surface extent of structures, post-mold patterns, and other features; remove concrete "skirts" from around structure locations, and replace with trail or path that connects locations.	Same as phase 1.

Milepost	Resource	Description/Significance	Management Strategy	Phase 1	Phase 2
286.7	Pharr Mounds	Woodland burial mounds and Mississippian village site; period interpreted--0-A.D. 200	Preserve, maintain, and interpret	Continue present mowing schedule; remove existing weeds, herbaceous plants, and shrubs from mounds by using chemicals or possibly prescribed burning; then reseed with low-growing turf grass; use smaller mowing equipment and undertake contour mowing to prevent compaction, tire tracks, bald patches, erosion, and scalping; attempt to mow only under dry conditions; remove vegetation from mound G to enhance its visibility and to prevent disturbance of resources by roots.	Construct trail throughout site area adjacent to mounds and to village and trash dump areas (build trail without surface disturbance; if not feasible, test trail site and recover data before surface disturbance).
308.8	Bear Creek Mound	Ceremonial mound and village area, Woodland and Mississippian; period interpreted--0-A.D. 1200	Preserve maintain, and interpret	Continue present mowing schedule; use smaller mowing equipment and do contour mowing of mound to prevent tire tracks, degradation of grass cover, and erosion.	Same as phase 1.
--	Other Sites		Unknown	Until archeological synthesis and evaluation of site significance against interpretive themes are completed, disposition of remaining sites is unknown. However, it is anticipated that no other sites will be proposed for further interpretation management, and the majority of sites will be recorded and managed under a benign neglect option. An archeological synthesis will provide a list of sites for preservation management, including specific recommendations for each site. Until final disposition of remaining sites is determined, no action will be taken by the Park Service that will threaten them or preclude them from interpretive or preservation management categories.	
	Historic Sites				
--	Elizabeth Female Academy	Standing walls, well, potential subsurface remains; established in 1818 as girls finishing school and closed in 1845	Preserve, maintain, and interpret	Continue present cyclic preservation maintenance of ruins and control vegetation growth near them. Undertake archeological investigations of site to identify any further remains.	Continue cyclic preservation maintenance of all identified features; expand area of vegetative control consistent with visitor use subzone to enhance visibility of standing remains.
15.5	Mount Locust	Restored house and outbuildings, long segment of old Natchez Trace; late 18th century farm/plantation house	Preserve, maintain, and interpret	Continue existing cyclic preservation maintenance program. Locate and identify cultural sites on Mount Locust grounds.	Same as phase I, plus establish landscape manipulation consistent with the 1980 historic grounds report to soften existing nonhistoric appearance. Develop interpretive prospectus for the site.
45.7	Grindstone Ford	Crossing of Bayou Pierre for northbound travelers, jumping-off point into wilderness; for southbound travelers, return to civilization	Preserve, maintain, and interpret	Continue existing cyclic preservation maintenance program.	Same as phase 1, plus remove concrete bridge abutments that remain from a later bridge crossing.

MilePost	Resource	Description/Significance	Management Strategy	Phase 1	Phase 2
54.8	Rocky Springs	Significantly eroded townsite, potential subsurface remains; once a thriving rural community serving local farmers; met its demise when cotton ceased to be "king"	Preserve, maintain, and interpret	Stabilize soil and clear vegetation to avoid further deterioration of site from erosion; initiate archeological investigations to determine presence or absence of subsurface remains; stabilize ruins as necessary.	Expand programs to stabilize soil and clear vegetation, consistent with visitor use subzone, to enhance interpretive experience.
135.5	Robinson Road	Old roadbed crossing parkway; established in 1821 as alternative alignment to Natchez Trace after expanded development of Old Southwest	Preserve, maintain, and interpret	Continue present maintenance and mowing program.	Same as phase 1.
--	Tupelo National Battlefield	Small acreage set aside to memorialize Civil War battle of July 13-15, 1864	Preserve, maintain, and interpret	Continue present maintenance and mowing program.	Same as phase 1, plus undertake any actions necessary to implement proposed interpretive program.
--	Brices Cross Roads National Battlefield Site	Small acreage set aside to memorialize Civil War battle of June 10, 1864	Preserve, maintain, and interpret	Continue present maintenance and mowing program.	Same as phase 1, plus undertake any actions necessary to implement proposed interpretive program.
320.3	Buzzard Roost Stand site	Potential subsurface remains of stand along old Natchez Trace	If remains present, preserve, maintain, interpret; if absent, abandon	Initiate archeological investigations to determine presence or absence of extant remains of stand or other structures.	Depending on results of phase 1, stabilize, preserve, maintain, and interpret; or abandon site.
327.3	Colbert Ferry Crossing/Stand site	Potential subsurface remains; 1,305-foot-long segment of old Natchez Trace; site of famous stands along old trace; and crossing of Tennessee River	Preserve, maintain, and interpret	Continue present maintenance and mowing program.	Same as phase 1.
385.9	Grinder's Inn site/ Meriwether Lewis Monument	Subsurface remains; location of mysterious death of Captain Lewis in 1809; grave and grave marker for Captain Lewis; CCC reconstruction of inn; another stand site on old Natchez Trace	Preserve, maintain, and interpret; adaptively use CCC reconstruction	Continue present maintenance and mowing program; initiate archeological investigations to determine presence or absence of subsurface remains.	Same as phase 1 plus relocate 1930s CCC reconstructed stand off-site to function as visitor contact station; repair Meriwether Lewis Monument; rehabilitate pioneer cemetery by locating and identifying gravesites.
--	Anderson House	19th century modified dogtrot log structure that is typical of many similar structures that once dotted Old Southwest and other frontier areas	Benign neglect	Continue minimal maintenance program.	Same as phase 1.

Milepost	Resource	Description/Significance	Management Strategy	Phase 1	Phase 2
--	John Gordon House	Two-story brick structure, built in 1818 by John Gordon, politician/scout/confidant of Andrew Jackson and operator of Gordon's Ferry Crossing/Stand on Duck River	Preserve, maintain, and interpret; adaptively use as visitor contact station	Continue existing cyclic preservation maintenance program.	Implement approved DCP proposals for Duck River historic area and Gordon House site.
--	Middle Tennessee Railroad Tunnel	Tunnel is 150 feet long by 25 feet in diameter, partially collapsed; remaining vestige of railroad chartered in 1907, abandoned in 1928	Record structure to Historic American Engineering Record standards	Record before destruction that will result from construction of section 1C of the parkway.	Same as phase 1.
--	Segments of old Natchez Trace	Physical remains ranging from a few feet to 3 miles in length and from being barely discernible to the impressive sunken Natchez Trace portions	Locate and evaluate as to integrity/interpretive value; preserve, maintain, or interpret, or record and allow benign neglect.	Continue present cyclic maintenance program (mowing, clearing, etc.).	Depending on level of integrity, place in either interpretive management or preservation management category.
--	Sites of other stands, towns, schools, missions, etc.	Potential remains of development that sprang up along Natchez Trace	No action	Do nothing.	Following completion of research proposals, undertake recommended on-site investigations of specified sites; stabilize, mark, and identify extant features for interpretive purposes if applicable; and establish cyclic maintenance program for site.
--	Cemeteries	Mostly small, fewer than 10 graves each, several no longer used for burials	Preserve/maintain	Continue present mowing and headstone maintenance program.	Same as phase 1.
--	Boundaries (historic)	With one exception, indiscernible lines that once denoted various political and tribal subdivisions of Old Southwest area	Preserve/maintain treeline that marks old upper Choctaw boundary	Preserve and maintain present treeline that denotes upper Choctaw boundary; no action at other boundary crossing sites.	Same as phase 1.
	Sites unrelated to Natchez Trace Story				
	Ridgeland Crafts Center	Built by CCC during 1930s	Preserve and maintain.		
	NPS Employee Housing at the Tupelo headquarters area	Originally known as Government Hills, this complex of houses was reportedly the first public housing project undertaken by the U.S. government			

provide for the preservation, restoration, protection, interpretation, use, study, and management of significant cultural resources within the parkway. Although the goal of these mandates is to ensure the preservation and protection of these resources, the Park Service does have some flexibility in developing park-specific options to meet these goals in concert with other specific management needs. At Natchez Trace Parkway, the following optional strategies, related to the role of each individual resource within the parkway's interpretive program, are available to park management:

> Interpretive Management--Perform all necessary stabilization, restoration, or reconstruction of the resource's physical elements. Possibly manipulate the landscape to improve visitor understanding of the resource and its role in the parkway's interpretive story.
>
> Preservation Management--Use appropriate preservation techniques to ensure a resource's long-term preservation, but do not manage it for interpretive purposes.
>
> Benign Neglect--Allow the resource's surface and subsurface remains to naturally deteriorate and eventually be reclaimed by natural processes.

Table 4 indicates the overall management strategy, recommended use, and specific management actions for each cultural resource. (For additional information on the parkway's cultural resources refer to appendix D.)

The Anderson house is the only known cultural resource that will be placed in the benign neglect category during phase 1. The decision to place other sites in that category will be made pending an evaluation of each particular site's integrity and significance after the phase 1 elements of the cultural resource research needs, detailed below, have been completed.

Depending on the individual resource and the particular management strategy, certain prerequisite studies and reports will be needed. Before a specific strategy can be implemented, study requirements will be determined by NPS specialists. Needs could include additional architectural/engineering data; further site-specific historical or archeological research; development of historic landscape plans; special restoration, preservation, and maintenance data or needs; or in the case of benign neglect, drawings, records, and photographs of the resource before it is allowed to deteriorate.

Research Needs

Phase 1. Under the 1982 resource management program, the parkway staff identified a critical need for a study of historic and archeological resources that would assist the staff in telling the parkway's interpretive story. During this general management planning effort, the planning team identified over 100 historical studies related to the Natchez Trace

story that have been researched and written by NPS historians from the 1930s through the 1960s. A recent review of these studies indicated that a comprehensive history study is not necessary. Rather, the critical need was for a historical overview that summarized the data currently available. This historical overview has been completed as a part of the GMP effort and has been made available to the park staff.

Most archeological research at the parkway has been done in advance of construction projects. This has resulted in a great number of site- or project-specific reports, each with its own research design and objectives. There is a critical need to establish specific parkway themes and their associated research goals and questions to assess past research efforts and direct future ones.

Several important research projects would provide information to support the proposed interpretive themes (see tables 1 and 2). For example: 1) Research relating to diet and nutrition of various samples of the populations found in the corridor could answer questions about subsistence, procurement strategies, environmental status and change, and health and disease; 2) research into the effects of contact could be conducted on two major prehistoric cultures--the classic Hopewellian and the introduction of the Mississippian culture into a Woodland population; 3) the historical relationship between the Chickasaw and English cultures and the Natchez and French cultures could be studied; and 4) whether the archeological sites are clustered along the Natchez Trace because of their association with the corridor or whether their distribution was determined by other factors.

As previously stated, research in support of the interpretive themes will be given the highest priority. However, if funds are available that would allow for the development and study of research questions not related to the interpretive themes, then other questions will be proposed, evaluated as to their merits, and studied.

A comprehensive archeological synthesis will be produced and will include the following:

maps identifying areas that have been intensively surveyed and those areas that remain to be surveyed

known sites that will be evaluated to determine which ones relate to or will yield important data for interpretive themes (see tables 1 and 2); a list of these sites will be developed to indicate whether a site will be actively preserved (preservation management) or receive no active preservation measures (benign neglect)

specific management techniques for those sites selected for preservation and a justification of each site's interpretive value

requirements for field investigations if site type, function, and cultural affiliation are not known (however, these investigations should be limited to determining the relevance of specific resources to the parkway's interpretive story)

requirements for field verification of the location, state of preservation, and potential impacts for all known sites (those sites that have been identified as crucial to the interpretive themes will be verified first; other sites that do not specifically relate to themes will be of secondary priority)

preliminary predictive models for site locations within the parkway, which will be used to design the survey

Concurrent with the preparation of the archeological synthesis, a parkwide cultural resource base map that clearly denotes the location of all extant historic and prehistoric cultural resources within the parkway boundaries will be prepared. The cultural resource base map will be a difficult task because of the required research and field verification work. However, this map is critical in assisting park staff in the responsible and prudent identification, preservation, interpretation, and management of the park's significant cultural resources. Because of the work that will be required to complete the base map, the following priorities for mapping are recommended:

lands to be disturbed by roadway or other facility construction

locations that are identified in the historical overview and the archeological synthesis and that may contain significant cultural resources whose proper identification and evaluation is critical to developing the parkway's interpretive story

lands where secondary impacts on cultural resources could occur, for example, areas adjacent to newly established hiking trails or other visitor use facilities or lands currently under agricultural leases

other parkway lands where no impacts are anticipated

Phase 2. By using the historical overview, archeological synthesis, and parkwide cultural resource base map, park managers will have the necessary information to update and revise the National Register nomination forms for the parkway and its cultural resources. So many nomination forms currently exist in various stages of completion that it is difficult to ascertain what is listed on or has been determined eligible for listing on the National Register, or how the significance of these resources relate to one another or to the significance of the Natchez Trace. To alleviate further confusion, the completion of the proper National Register forms must be a high priority for park managers. The parkway staff anticipates the completion and submittal of nomination forms to the keeper of the National Register before parkway construction is finished, as required by the ratified Natchez Trace Parkway memorandum of agreement.

A concerted effort should be made to more widely distribute the historical research reports that have already been completed by NPS historians. Because these research efforts represent good, scholarly historical research and writing, they should be edited and published in a special

NPS series for the general public so that the many complex stories of the Natchez Trace can be better understood.

NATURAL RESOURCE MANAGEMENT

The purpose of natural resource management, besides protecting a few rare or unusual species (see the discussion on protected natural resources), is to support cultural and visitor use programs rather than to perpetuate inherent natural values. Vegetation visually dominates the landscape at Natchez Trace and is a key element affecting visitor experiences. Vegetation is also the single greatest influence on the stability of cultural sites. Consequently, vegetation must be intensively manipulated in the parkway corridor. The first natural research objective is the production of a vegetation map for the parkway; this task is basic to any systematic management effort.

Components of the natural resource management program follow. Other programs, including exotic and native pest species control, will continue as described in the 1982 "Resources Management Plan."

Vegetation Management for Scenic Quality

Visual variety, an important element of the scenic environment, is achieved through the intermixing of landscaped roadsides, agricultural fields, and forest. Parkway roadsides consist of intensively manipulated strips of land immediately adjacent to the motor road. Within this strip, vegetation is managed to provide a parklike foreground as a visual transition from the road surface to the surrounding scene. This strip also provides a safe travel corridor. Vegetative management tools include selective mowing and cutting, prescribed burning, natural reforestation, and plantings of native species. Although these tools may be used intensively, the primary objective is to provide a scenic setting representative of the region through which the parkway passes. For instance, mowing and cutting lines will reflect ecological or cultural boundaries, and plantings will be from local stocks and placed on sites that will naturally support the chosen species.

Agricultural areas along the parkway include cultivated fields, pastures, hayfields leased through special use permits to private operators, and large fields maintained by the National Park Service. Such fields provide visual variety in the foreground and middle ground, as well as openings for long-distance views, and they create scenes suggestive of traditional regional agriculture. Modern agricultural techniques will continue to be allowed on these fields, which will help lessees run financially viable operations. Controls on plowing depth, fertilizer and pesticide applications, stocking densities, rotation schedules, and other practices will also continue. These practices help maintain scenic quality and protect archeological, soil, and water resources. No new filling, grading, drainage of lands, or other ground-disturbing activities will be permitted without intensive surveys for archeological resources and an assessment

of potential impacts on water quality and soils. Prescribed burns will be investigated as a way of maintaining large fields and grass bays not leased for agriculture. If this management technique proves to be less costly than mowing, it will be applied to parkway lands (see "Fire Management" below).

Forests, abandoned fields, and wetlands are scenic resources that characterize the ecological communities of the region. Within the parkway right-of-way, these resources provide further visual variety by complementing agricultural lands and by presenting various vegetation types in different stages of succession. Natural succession will be controlled in selected forest stands to maintain various communities, thereby enhancing the scenic quality of the parkway. Forest types and communities to be managed will be chosen according to the need for scenic diversity along each particular stretch of parkway. Existing forest composition and structure, information on the historic vegetation, and the potential response of the existing communities to management applications will also be considered.

Vegetation Management at Cultural Sites

At interpreted prehistoric or historic sites, vegetation will be managed to provide a semblance of the cultural scene. Completely accurate restoration of former landscapes is rarely possible because of limited information about the historic landscape and vegetation and practical management concerns. However, where evidence about the probable landscape of the interpreted period is sufficient, an effort will be made to give visitors a feeling for the historic or prehistoric setting. Generally the historic and prehistoric scenes were more open because of habitation patterns and agriculture; therefore, the goal at most cultural sites will be to provide a feeling of openness so that visitors' imaginations can fill in the details of the former landscape. In most cases management will consist of removing forest vegetation and maintaining open grassland or agricultural fields. A historic grounds report has been produced for Mount Locust, and a similar report is proposed for the Gordon House site. At these and other interpreted sites where historical descriptions are available, the historic landscape will be restored to the extent practicable.

Sites where historic or prehistoric archeological resources need protection, and where visitor use is not encouraged, will be screened by vegetation. Adequate cover will be maintained to prevent soil erosion; trees or other plants that may cause root disturbance to subsurface materials will be removed (unless necessary to control soil erosion); and other soil erosion measures (for example, fill material for control structures) will be initiated as needed. Vegetation management for archeological sites is further discussed in the "Cultural Resource Management" section.

Protected Natural Resources

At all sites where the perpetuation of a rare or protected species or ecological community is the primary objective, sites will be protected from development, vandalism, and inappropriate visitor use. At such sites the Park Service will continue to have primary management responsibility but will cooperate with other agencies when appropriate to further promote resource protection. At some sites, periodic disturbance by prescribed burning or mowing will be necessary to maintain or benefit the resource, but systematic monitoring will be conducted to ensure the protection of the resource. Site-specific needs are described in table 5.

Fire Management

Historical accounts by travelers on the Natchez Trace describe open grasslands, canebreaks, savannahs, and pine-dominated forest stands. Because all these vegetation types are supported by periodic burning, it is apparent that fire was formerly a significant factor in the natural history of the region. The use of fire by native Americans for clearing agricultural land and village sites, running game, encouraging berry production, improving wildlife habitat, and other purposes is well documented. The extensive influence of fire in the region probably reaches back to prehistoric time.

However, since the establishment of the parkway 45 years ago, all fires have been considered a threat to natural resources, and they have been successfully controlled on parkway lands. Consequently, vegetation types dependent on fire have declined, and many forests that historically and probably prehistorically had open understories now have dense tangles of undergrowth.

All wildfires (that is, uncontrolled fires started by arson or accident) will continue to be rapidly suppressed; however, prescribed burns (that is, fires intentionally set and strictly controlled for management purposes) will be initiated along the parkway to meet the following objectives:

Create and maintain scenic variety by opening forest understories and encouraging growth of selected forest and grassland communities.

Create and maintain a semblance of the prehistoric or historic scene at selected interpreted sites.

Maintain open space for recreation at some visitor use sites.

Maintain protective vegetation and control destructive vegetation at archeological sites.

Perpetuate outstanding natural communities dependent on fire.

Reduce fuel levels to preemptively control wildfire.

Table 5: Proposed Management for Protected Natural Resources

Site	Resource Values	Management Needs	Cooperating Agencies
Little Swan Creek Bottoms Lewis County, Tennessee	Habitat for Tennessee yellow-eyed grass (federal category 2 candidate*)	Annual monitoring	Tennessee Dept. of Conservation
Meriwether Lewis Monument - Oak Barren Lewis County, Tennessee	Regionally rare plant community (no special legislative protection)	Annual monitoring; may benefit from prescribed burning	Tennessee Dept. of Conservation
Little Buffalo River Bottoms Lewis County, Tennessee	Habitat for Indian plantain (state threatened)	Annual monitoring	Tennessee Dept. of Conservation
Sweetwater Creek Bottoms Wayne County, Tennessee	Habitat for golden seal (state threatened)	Annual monitoring and intermittent observations by enforcement personnel to protect from collecting	Tennessee Dept. of Conservation
Ephemeral Drainage near Cypress Inn Wayne County, Tennessee	Breeding habitat for the slackwater darter (federal endangered; state endangered)**	Annual monitoring, roadside mowing limited to nonbreeding periods, cleared culverts, no pesticide use	Tennessee Dept. of Conservation U.S. Fish and Wildlife Service
Georgetown Cave Colbert County, Alabama	Gray bat habitat (federal endangered; state endangered)	Maintenance of appropriate fencing and no disturbance to the cave	U.S. Fish and Wildlife Service
Cave Spring Tishomingo County, Mississippi	Habitat for the cave salamander and northern spring salamander (both state endangered)	Annual monitoring and intermittent observations by enforcement personnel to protect from collecting	Mississippi Natural Heritage Program
Bayou Pierre Claiborne County, Mississippi	Habitat for the bayou darter (federal endangered; state endangered) and crystal darter (federal category 2 candidate*; state endangered)	Prevention of siltation or pesticide contamination from adjoining parkway lands	Mississippi Natural Heritage Program U.S. Fish and Wildlife Service
Little Bayou Pierre Claiborne County, Mississippi	Habitat for the crystal darter (federal category 2 candidate*; state endangered)	Prevention of siltation or pesticide contamination from adjoining parkway lands	Mississippi Natural Heritage Program

* Federal category 2 - designation by U.S. Fish and Wildlife Service of species that may be threatened or endangered but for which there is currently insufficient data for listing under the Endangered Species Act.

**The portions of the parkway traversing the Cypress Creek and Buffalo River drainages in Tennessee and Alabama will be surveyed for other slackwater darter habitat, and if any new sites are found, they will be placed in this management category.

Maintain clearings for operational needs (for example, parkway boundary clearing).

Remove trash or other debris.

Prescribed burning is a very attractive management tool because of its versatility, effectiveness, and low cost. Although prescribed burning has been used only recently on NPS lands, it has a long history of use by other governmental agencies and private land managers in the southeastern United States. Considerable research and practical working experience are available on which to base a fire management program, and the parkway will cooperate with regional agencies for mutual training and fire management needs. All prescribed burns will be set and controlled by parkway managers.

Prescribed natural fires (that is, lightning-caused fires that are allowed to burn under prescribed conditions) will not be used for the following reasons:

The frequency of lightning ignition along the narrow strip of parkway is not sufficient to produce the desired vegetative effects.

The unpredictability of lightning ignition does not permit the protection of private lands and homes adjacent to the parkway boundary.

Early historic accounts in the region indicate that prehistoric fires were predominantly man-caused.

A fire management plan, based on the NPS "Fire Management Guideline" (NPS-18), will be prepared. Under the guideline, Natchez Trace Parkway will be classified as a category 4 park, where all wildfires will be suppressed but prescribed burning will be used. The fire management plan will describe the fire history of the region, determine fire management units based on the vegetation map and management zoning, detail prescriptions for management fires, assign decision-making and operational roles to the park staff, and meet the other requirements of NPS-18.

LAND PROTECTION

Management Zoning

The Natchez Trace Parkway consists of 45,549 acres in fee-simple title, including the two 1-acre battlefield sites at Tupelo and Brices Cross Roads. In addition, scenic easements that contain restrictive covenants have been obtained on 5,861.28 acres of land adjoining the parkway to retain the historic, cultural, and rural character of the scenic corridor.

Parkway lands are zoned to indicate which park operations and management functions, visitor uses, and developments are appropriate in

different locations. These management zones are based on the parkway's authorizing legislation, NPS policies, the nature of the park's resources, desired visitor experiences, and established uses. Four zones are designated: development, natural, cultural resource, and special use. Within each zone, subzones have been designated to more specifically indicate how resources will be managed.

The following section describes the various zones within the Natchez Trace Parkway boundary and indicates their approximate acreages. Typical management zones are depicted on the Management Zoning graphic.

Development Zone (12,495 acres). The development zone contains lands and facilities that serve the needs of visitors and parkway managers. The zone encompasses administrative buildings, visitor use facilities, the parkway motor road, and agricultural fields. The management objectives for the development zone are to provide an aesthetically pleasing, interesting, and safe experience for visitors, and to ensure efficient park operations. Following is a description of five subzones within the development zone.

Administrative Subzone (35 acres)--Lands within this subzone are developed to serve park management needs. They include NPS-owned utilities, water treatment plants, offices, maintenance areas, park residence areas, radio buildings, and other support facilities. They are heavily used areas with paved driving surfaces and intensively maintained grounds and road shoulders. Most areas are not intended for public use and are visually screened from the roadway.

Visitor Use Subzone (70 acres)--This subzone includes lands managed to support interpretive programs and visitor enjoyment of the parkway. Development includes orientation and interpretation facilities, such as visitor contact stations, museums, exhibit shelters, nature trails, and amphitheaters; interpreted cultural and natural resource sites; recreation sites such as picnic areas and campgrounds; and parking pulloffs. At sites where cultural resources are interpreted, the visitor use subzone overlaps the cultural resource zone; even though visitation is encouraged at such sites, the protection of cultural resources will have priority over visitor activities.

In both administrative and visitor use development subzones, natural hazards will be removed, forest undergrowth may be cleared, intensive forest insect disease controls will continue to be practiced, and nuisance and vector insects will be controlled.

Access/Circulation Subzone (2,438 acres)--This subzone includes the roadway, shoulders, foreslopes, and ditches for 371 miles of parkway and 65 miles of other roads. The width of the subzone averages 24 feet either side of the road centerline and is referred to as the roadway prism. Aside from the paved roadway and some drainage ditches, the roadway prism consists of grassed areas. Grassed

OLD TRACE

PARKWAY BOUNDARY

SCENIC EASEMENT

BOUNDARY MARKER

PASTURE FENCE

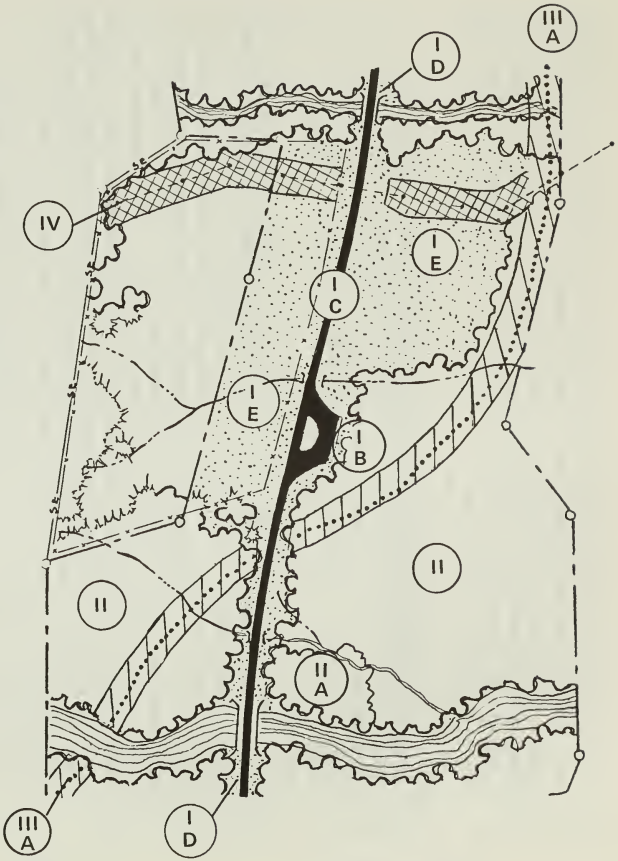
POWER TRANSMISSION LINE

I DEVELOPMENT ZONE
- A. Administrative
- B. Visitor Use
- C. Access/Circulation
- D. Landscape Management
- E. Agricultural Management

II NATURAL ZONE
- A. Protected Natural Resource

III CULTURAL RESOURCE ZONE
- A. Preservation
- B. Commemoration

IV SPECIAL USE ZONE



Management Zoning

Natchez Trace Parkway

United States Department of the Interior / National Park Service

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areas are mowed approximately eight times during the growing season to provide a manicured parklike appearance for aesthetics and safety. Road shoulders are stabilized with turf that provides adequate support for vehicles without paving. Drainage ditches are cleared of debris on a regular basis. In the road prism area, all fallen branches and trees are removed as soon as possible. Few trees and shrubs are allowed to grow in the road prism.

Landscape Management Subzone (4,452 acres)--This subzone is a landscaped area composed of vegetated slopes, drainages, and streambanks. It is a man-made strip that extends laterally from the road prism to the mowing line, treeline, or lease tract line. This area provides park visitors with a constantly changing visual experience of undulating vegetation lines and bay areas with individual or masses of specimen native trees and shrubs. The management objective for this subzone is to create a balance of open areas and wooded areas, with views of forests, wildflowers, mowed grass bays, meadows, swamps, and agricultural lands. Openings in vegetation are maintained by mowing and selective-cutting or clear-cutting to provide scenic vistas that extend beyond this subzone and often past the parkway boundary. The combination of near and far views and scenic quality is important, because seeing the rural and pastoral setting of the region is primary to the parkway experience. Where views are affected by incompatible land uses adjacent to the parkway, reforestation or selective plantings are used for screening.

Agricultural Management Subzone (5,500 acres)--These lands are designated for the agricultural leasing program and are maintained to perpetuate the agricultural and pastoral scene. The lands are leased under special use permits to adjoining or nearby farmers who have, or can arrange, access to the fields by means other than the parkway motor road. Lands are leased for pasture, hay, and row crops.

All special use permits have conditions for the use of the land, and the allowed crops are specified in the permit. These conditions specify fertilization and other agricultural practices that protect the lands from depletion and prevent pollution of water resources. Permittees are required to carry out certain approved agricultural practices, which include liming, fertilizing, pasture improvement, and erosion control.

Soil types are identified for all agricultural tracts, and this information is used to classify land use. Only those lands with soil capable of supporting agricultural uses are leased. Rental rates are established by the National Park Service and are reviewed periodically.

Natural Zone (22,039 acres). Most undeveloped parkway lands are included in the natural zone. Often natural processes are allowed to take place with little or no alteration. Forest insect and disease control

measures are restricted to epidemic outbreaks that endanger adjoining lands or that would cause visually unacceptable impacts. Wildfires are extinguished, but prescribed burning, selective cutting, or understory clearing may be used to provide successional variation within the unit. Parkway boundaries are cut and marked and are periodically patrolled to deter land use violations.

Protected Natural Resource Subzone (approximately 3 acres)--Habitat for federally listed endangered or threatened species, areas with concentrations of state protected species, or ecological communities of relative rarity in the region are included in this subzone. The perpetuation of the species or communities is the management objective.

Cultural Resource Zone (647 acres). Significant prehistoric or historic sites that require management actions for protection are included in this zone. Site significance is based on relevance to interpretive themes, recommendations of the historic overview and the proposed archeological synthesis, and eligibility for the National Register of Historic Places. Sites within this zone are managed to prevent vandalism and deterioration from human use or natural processes, such as root disturbance. Where cultural resources are interpreted and public access is encouraged, the cultural resource zone overlaps the development zone/visitor use subzone. Following is a description of the two cultural resource subzones.

Preservation Subzone (644 acres)--This subzone includes 139 separate historical structures or sites, for a total of 566 acres, and 28 cemeteries, comprising an additional 78 acres. Individual tracts vary in size from 0.07 acre to 118 acres. Of the 139 separate structures or sites, 115 are individual isolated sections of the old Natchez Trace for a total of 114 acres, 12 are archeological sites on a total of 255 acres, three are historic houses with 67 acres, and the remaining nine are historic sites and structures that occupy 130 acres.

Grounds adjacent to historic structures and Indian mounds are mowed regularly during the growing season. Additionally, lands within the preservation subzone may be maintained through agricultural leases to perpetuate a desired scene.

Commemoration Subzone (3 acres)--Three commemorative historic areas administered by the National Park Service are included in this subzone: Meriwether Lewis Monument at Lewis's gravesite, and two separate 1-acre national battlefield sites that commemorate the Civil War battles of Tupelo and Brices Cross Roads.

Special Use Zone (1,000 acres). Lands in the special use zone include transportation and utility corridors used by other governmental agencies or private interests for service to areas outside the parkway. Easements are allowed either by permit or deed reservations for electrical power transmission lines, gas and oil pipelines, railroads, and road and highway rights-of-way.

Parkway Crossings

A primary objective of land protection on the Natchez Trace Parkway is to eliminate hazardous at-grade road crossings. A Land Protection Plan prepared by the National Park Service identifies five hazardous crossings and recommends the immediate acquisition of the lands needed to construct grade separation structures at three of those sites. The remaining two hazardous crossings and other at-grade road crossings will be evaluated in detail in a plan of access, which will be prepared after the general management plan has been completed.

The plan of access will assess the relationship between the motor road and points of entrance and exit, and it will determine the minimum actions needed to ensure resource protection, visitor safety, and essential public access to parkway lands. Appropriate management actions for at-grade crossings will be determined by evaluating each of the 87 such crossings along the parkway. Criteria such as engineering, traffic data, deed reservations, land use, visual quality, and socioeconomic factors will be used to analyze the need for access. A time frame for separating at-grade crossings will also be established.

A working policy statement regarding access and grade separations now says that access to the Natchez Trace Parkway will be provided at numbered state and federal highways and those county roads where access is reserved by deed. Furthermore, when at-grade crossings that do not meet these criteria become hazardous or threaten resource values, they will be replaced by grade separations without access. This policy will be specifically applied as each of the existing crossings is evaluated in the access plan.

The plan of access will be prepared by gathering comprehensive traffic data, such as volumes, accidents, patterns, projected demands, socioeconomic conditions, land use, and visual quality. This effort will provide baseline information for monitoring change and predicting problems. Deeds will be reviewed to determine reservations and other factors that may not allow grades to be separated without providing access. The overall relationship of the parkway to existing county, state, and regional transportation systems will be analyzed. Finally, grade separations will be analyzed so that the most hazardous crossings can be eliminated.

Scenic Quality

Another objective of land protection is to maintain scenic quality along the parkway. In the 1980 Threats to the Parks program, the National Park Service identified unplanned developments and inappropriate land uses as the greatest threats to the parkway's scenic environment. Scenic intrusions from residential and commercial developments, utility lines, billboards, and nontraditional land uses have increased as a result of rapid urban growth in Nashville, Florence, Tupelo, Jackson, and Natchez.

Two tools are currently available to parkway managers to mitigate or avoid scenic intrusions--vegetation screening and the enforcement of existing scenic easements owned by the National Park Service. Extensive use of vegetative screening contributes to a tunnel effect and therefore will be used sparingly. The Park Service will carefully monitor activities on scenic easements and will cooperate with landowners to prevent inappropriate developments and land uses.

To protect scenic quality on other non-NPS lands, the Park Service will encourage and cooperate with state and local governments to recognize the parkway as a valuable recreational and economic resource and to develop land use plans and regulations supportive of the scenic values on which the parkway depends. For example, the state of Tennessee's Scenic Highway System Act of 1971 prohibits billboards, junkyards, and structures over three stories or 35 feet tall within 1,000 feet of a designated state scenic highway. The Park Service will explore with the state the possibility of such designation or other protection under state law for the Natchez Trace Parkway. Similar protection will be discussed with the states of Alabama and Mississippi.

Future revisions to the parkway's Land Protection Plan will assess and identify scenic vistas of major importance to the visitor experience. The plan will designate areas where the Park Service will work with private landowners and local governments. In protecting these vistas through means such as donation of scenic easements, the donations may be tax deductible to contributing landowners.

Lands required to implement the Emerald Mound Development Concept Plan will also be addressed in the revised Land Protection Plan. Some 60 acres of lands that are now privately owned are required to construct the proposed spur road, parking area, wayside shelter, and trail. Plan implementation will eliminate visitor traffic along a winding county road with hazardous road intersections. It will also enhance visitor use and interpretation, consolidate parkway lands, and most importantly, improve resource protection and preservation of this very impressive ceremonial mound. (It is the third largest Indian mound of any type and the second largest ceremonial mound in the United States.)

COSTS

Development, interpretation, and resource management actions will be accomplished in two phases. Table 6 presents locations, proposed actions, and estimated costs by phase, and table 7 summarizes the costs and includes charges for planning, project supervision, and contingencies.

While this plan reaffirms the commitment to complete the Natchez Trace Parkway previously proposed in the 1978 Final Environmental Impact Statement, the $170 million associated with constructing the remaining 47 miles is not included in table 6 or 7 as a cost item. This cost is the same for all alternatives and does not affect the comparison of their cost.

Also, the appropriation of funds for completing the parkway is not dependent on the general management plan.

Annual operations and maintenance costs, including salaries, materials, and equipment, are expected to increase from $4,555,000 (current annual costs) to $4,962,000 (annual cost with implementation of the general management plan, in 1985 dollars). This is an increase of $407,000. A comparison of current and proposed staffing requirements is shown table 8.

Table 6: GMP Cost Schedule (1985 Dollars)

Phase One

General Development	Cost
Natchez Trace Parkway	
Provide orientation/information wayside site at Jackson and pave pulloff parking area (8 cars, 2 buses/RVs)	$ 17,000
Conduct archeological survey--1 acre	*
Provide orientation exhibits at 11 sites (fabricate and install 3 panels/site)	66,000
Remove interpretive wayside panels at 5 sites	5,000
Subtotal	$ 88,000
Natchez Trace Scenic Trail (Nashville area)--see "Comprehensive Trail Plan"	
Construct hiking/horseback-riding trail (22 miles of unsurfaced tread, parking, tethering poles, and signing)	$ 116,000
Conduct archeological survey (30 acres)	5,000**
Subtotal	$ 121,000
Leipers Fork Subdistrict Headquarters	
Construct entrance roads (1,200 lin ft)	$ 120,000
Construct maintenance court and parking area (3,000 sq yds)	60,000
Provide maintenance area security fence (700 lin ft)	14,000
Construct offices, shop, and covered storage (4,000 sq ft)	320,000
Provide gas pumps and tanks (2 each)	28,000
Reforest disturbed area (15 acres)	45,000
Complete landscaping and site development (15% of construction cost)	96,000
Provide water (1,400 lin ft, tie in with community water system)	56,000
Provide on-site sewage treatment	50,000
Provide electricity and telephone lines (500 lin ft)	8,000
Conduct archeological survey (2 acres)	4,000
Subtotal	$ 801,000
Interpretation	
Conduct transportation/visitor use study	$ 50,000
Subtotal	$ 50,000
Cultural Resource Management	
Prepare archeological synthesis	$ 47,000
Prepare cultural resource base map	87,000
Subtotal	$ 134,000
Natural Resource Management	
Prepare vegetation base map	$ 35,000
Prepare fire management plan	25,000
Subtotal	$ 60,000
Phase 1--Total Net Cost	$1,254,000

Note: See table 3 for proposed orientation sites and interpretive sites, as well as wayside exhibits suggested for removal or replacement.

* Costs covered by Southeast Archeological Center operating funds.

**Archeological survey costs do not include data recovery.

Phase Two

General Development

Natchez Trace Parkway Interpretive Sites	
Remove wayside panels at 43 sites	$ 40,000
Fabricate and install wayside panels at 29 sites	160,000
Fabricate and install 186 site signs	56,000
Subtotal	$ 256,000
Southern Parkway Entrance (Natchez) Visitor Contact Station	
Construct contact station (1,500 sq ft)	$ 225,000
Pave pull-off parking area (10 cars, 3 buses/RVs)	23,000
Provide orientation/interpretive exhibit (fabricate and install 5 panels)	10,000
Conduct archeological survey (1 acre)	*
Subtotal	$ 258,000
Emerald Mound	
Construct entrance road (3/4 mile, two-way traffic)	$ 375,000
Pave parking area (10 cars, 2 buses/RVs)	20,000
Obliterate county road and parking area (7,000 sq yds)	42,000
Relocate 3/4 mile of road	375,000
Provide fill material (3,000 cu yds)	45,000
Pave walk (200 sq yds)	4,000
Pave trail (900 sq yds)	18,000
Construct wayside structure (200 sq ft, open air)	8,000
Provide 2 wayside exhibits (fabricate and install 6 panels total)	12,000
Complete landscaping and site development (15% of construction)	135,000
Conduct archeological survey (10 acres)	20,000**
Subtotal	$1,054,000
Ridgeland	
Rehabilitate interior of crafts center or add on to existing structure (1,000 sq ft)	$ 200,000***
Subtotal	$ 200,000
Brices Cross Roads National Battlefield Site	
Pave walk (80 sq yds)	$ 2,000
Provide 1 wayside exhibit (fabricate and install 4 panels)	8,000
Remove 2 interpretive panels	2,000
Conduct archeological survey (1 acre)	*
Subtotal	$ 12,000
Tupelo National Battlefield	
Pave walk (40 sq yds)	$ 1,000
Provide 1 wayside exhibit (fabricate and install 3 panels)	6,000
Remove 2 panels	2,000
Conduct archeological survey (1 acre)	*
Subtotal	$ 9,000
Tupelo Visitor Center	
Fabricate and install new exhibits	$ 100,000
Produce film (15-20 min)	50,000
Subtotal	$ 150,000

***Construction costs for the Mississippi cultural center are not included because funding will come from the private sector.

Colbert Ferry	
Construct entrance road (1,500 lin ft)	$ 150,000
Develop campground (100 sites with water and electricity hookups, and 3 comfort stations)	1,240,000
Develop walk-in campground (10-15 sites and 1 comfort station)	95,000
Develop group campground (three 25-person group sites and 1 comfort station)	98,000
Provide trailer sanitary disposal station (including roads and signs)	45,000
Provide gas station and store (1,500 sq ft)	240,000
Provide orientation/interpretive exhibits (fabricate and install 5 panels)	10,000
Conduct archeological site evaluation and data recovery	54,000
Subtotal	$1,932,000
Meriwether Lewis Visitor Contact Station	
Construct contact station	$ 225,000
Construct and pave pulloff parking area (10 cars, 3 buses/RVs)	23,000
Provide wayside exhibit (fabricate and install 5 panels)	10,000
Conduct archeological survey (1 acre)	*
Subtotal	$ 258,000
Gordon House Site	
Detailed costs are not included here; however, they are included in the approved Development Concept Plan. A subtotal cost for interpretive and visitor use facilities and site development is provided. (The 1982 net costs shown in the DCP have been increased to reflect 1985 costs.)	$ 450,000
Subtotal	$ 450,000
Northern Parkway Entrance (Pasquo) Visitor Contact Station	
Construct contact station (1,500 sq ft)	225,000
Construct and pave pulloff parking area (10 cars, 3 buses/RVs)	$ 23,000
Provide 1 wayside exhibit (fabricate and install 5 panels)	10,000
Conduct archeological survey (1 acre)	*
Subtotal	$ 258,000
Natchez Trace Scenic Trail (Nashville area)--see "Comprehensive Trail Plan"	
Construct 2 staging areas for trail users and primitive camping area	$ 80,000
Conduct archeological survey (3 acres)	*
Subtotal	$ 80,000
Interpretation	
Amend interpretive prospectus as needed	$ 15,000
Subtotal	$ 15,000
Cultural Resource Management	
Prepare National Register forms	$ 19,000
Subtotal	$ 19,000
Phase 2--Net Total Cost	$4,951,000
Grand Total	$6,205,000

Table 7: GMP Cost Summary

	Net Cost	Contingency and Project Supervision (31%)	Project Planning (15%)	Gross Amount
Phase 1				
General Development	$1,010,000	$ 313,000	$ 152,000	$1,475,000
Interpretation	50,000	16,000	8,000	74,000
Cultural Resource Management	134,000	42,000	20,000	196,000
Natural Resource Management	60,000	19,000	9,000	88,000
Totals	$1,254,000	$ 390,000	$ 189,000	$1,833,000
Phase 2				
General Development	$4,917,000	$1,524,000	$ 738,000	$7,179,000
Interpretation	15,000	5,000	2,000	22,000
Cultural Resource Management	19,000	6,000	3,000	28,000
Totals	$4,951,000	$1,535,000	$ 743,000	$7,229,000

Table 8: Current and Proposed Staffing Requirements (Person-Years)

	Permanent/Seasonal		
	Current	Proposed	Increase
Administration	11.7/0.5	11.7/0.5	0
Resource Management and Visitor Services	35.4/6.4	37.1/6.7	2.0
Interpretation and Visitor Services	5.7/2.0	13.7/2.0	8.0
Maintenance	72.8/5.8	79.0/6.8	7.2
Total	125.6/14.7	141.5/16	17.2

ENVIRONMENTAL ASSESSMENT

In compliance with the National Environmental Policy Act (NEPA) two alternatives to the proposal are considered, and environmental consequences of implementing the proposal or either alternative are described in this section.

ALTERNATIVES CONSIDERED

Alternative 1

Under this alternative, the parkway would be managed as a scenic transportation route for regional and interregional travel, and less emphasis would be placed on recreational activities and the interpretation of resources. A majority of visitors use the parkway as a travel route, driving portions of the parkway because it is more attractive than standard highways. Developments and services would be limited to those needed by traveling visitors. Because these travelers make only occasional, if any, stops along the way, fewer interpreted sites and pulloff parking areas would be needed. Interpretation would be limited to roadway orientation and some basic information about the historical significance of the old Natchez Trace; a minimum number of sites would be used for these purposes. Interpretation/orientation sites would be combined with restrooms, short loop trails, and other facilities that serve the needs of parkway travelers.

Development actions would include completing the parkway motor road, providing orientation/information waysides at 11 sites, and constructing a new pulloff parking area at one of those sites. Also any ineffective or unnecessary interpretive waysides would be removed, exhibits and audiovisual media at the Tupelo visitor center would be redesigned, and 184 site signs would be installed.

This alternative was not selected even though it would accommodate a major portion of existing visitor use, and implementation would require a minimum of change in present parkway staffing and facilities. The alternative was considered inadequate because of the limited interpretive program that would not allow in-depth presentation of the prehistory or history of the old Natchez Trace.

Alternative 2

Under this alternative, previously approved development and management plans would be implemented, and the parkway would be managed as a recreational destination park. This alternative is based on the assumption that the completion of the parkway and the significant expansion of five recreational nodes along the parkway (Coles Creek, Rocky Springs, River Bend, Colbert Ferry, and Meriwether Lewis) would generate a sufficient increase in recreational use to justify that level of recreation and

interpretive development. It is further assumed that visitors would come to one or more of the developed nodes and spend several days engaging in resource-oriented recreation.

The interpretive program would be planned so that visitors could have a comprehensive experience by taking side trips within a few miles of any recreational node. Interpretive actions would include replacing 27 interpretive wayside exhibits, removing any ineffective wayside exhibits, redesigning exhibits and audiovisual media at the Tupelo visitor center, constructing a visitor contact station at Ridgeland, and installing 194 site signs. This alternative was considered undesirable because the proposed level of recreation facility development and anticipated cost were far above that which could be justified for recorded or projected visitor use demands.

Comparison of Proposal and Alternatives

The proposal and alternatives for managing the parkway are summarized in tables 9 and 10. Table 9 summarizes parkwide management and interpretation strategies, while table 10 compares general development actions of the proposal and the alternatives.

Many elements of the general management plan are common to the proposal and alternatives. These include parkway completion, orientation waysides, the concept of the site sign system, and management programs for natural and cultural resources. (These elements are described in the "Proposal" section and are omitted from the summary table.)

IMPACTS OF THE PROPOSAL AND ALTERNATIVES

The 1978 Final Environmental Impact Statement documented the environmental consequences of completing the parkway motor road and related facilities. Similarly, the environmental assessments for the Colbert Ferry and Gordon House development concept plans documented the impacts of those approved plans. Therefore, this environmental assessment addresses only those elements of the proposal and alternatives not described in previous documents.

Impacts on Visitor Use

The interpretive program and the visitor experience would be improved under the proposal and alternatives. Increased orientation services under both alternatives and the proposal would help visitors plan their parkway visits so they could take advantage of available facilities and activities. Further, a simplified interpretive program and thematic presentation would provide interested visitors with a better understanding of the Natchez Trace story. Frequent visitors, however, could be dissatisfied if their favorite interpretive signs were removed.

Table 9: Parkway Management and Interpretation Strategies, Proposal and Alternatives

	Proposal	Alternative 1	Alternative 2 (No Action)
Park Purpose	Parkway would be a means for interpreting resources and commemorating old Natchez Trace.	Parkway would be a means for regional and interregional transportation.	Parkway would be a recreational destination park.
Management Direction	Interpretation of cultural resources and events would be emphasized.	Existing management programs and facilities would continue to support nonrecreational use.	Previously approved development plans would be implemented, with continuing emphasis on recreation.
Visitor Use	Programs would emphasize and support visitors coming to the parkway because of their interest in its educational value and significant resources.	Programs would be geared toward the local and regional driving public, using the parkway as a convenient means for transportation.	Programs would promote resource-oriented recreation for visitors, with an emphasis on long-term stays.
Orientation/Information	The parkway experience would be the primary focus; visitors would be assisted in planning their visits and selecting stops of special interest.	Orientation would facilitate safe, enjoyable travel and constitute a primary interpretive opportunity.	Orientation would emphasize the parkway, recreation nodes, and recreational opportunities.
Interpretive Program	A comprehensive program would include a range of resource sites so that many aspects of prehistory and history could be interpreted.	An abbreviated program would include an overview of resource significance to commemorate the old Natchez Trace.	An expanded program would include more interpretive sites, greater variety of in-depth stories,and guided walks and talks.
Site-Specific Interpretation	A range of resources would be interpreted to expose visitors to many aspects of the Natchez Trace Parkway interpretive story.	Only the most significant or visually dominant resources would be interpreted.	Resources clustered around each recreation node would be interpreted.
General Development	First priority would be to maintain and provide facilities, second priority would be to support interpretation with facilities related to driving experiences. Cost $9,062,000*	First priority would be to maintain facilities supporting the scenic driving experience, and second priority would be to maintain some related interpretive sites. Cost $2,487,000*	Expansion of existing recreation development sites would be primary, with secondary emphasis on maintaining interpretive sites. Cost $35,220,000*
Cultural Resource Management	Representative sites would be chosen for interpretation and preservation management. Research would emphasize direct impacts associated with construction, collection of visitor use data, and research sufficient to support or complement the interpretive program.	A minimum number of sites would be placed in interpretation and preservation management categories because of a minimal interpretive program. Research would be the same as for the proposal except that very limited research would be conducted to complement the interpretive program.	Because of the comprehensive interpretive program, more representative sites would be in interpretation and preservation management categories. Research would be the same as the proposal except that research to complement the interpretive program would be greatly expanded and very comprehensive.
Natural Resource Management	Roadside forests and fields, areas surrounding recreation facilities, and selected cultural resources would be more extensively managed for aesthetics, recreation values, and cultural resource interpretation and protection. Certain habitats supporting federal or state protected species would receive special management. Prescribed burning would be initiated, and wildfires would continue to be suppressed.	Current management actions would continue, with intensive management of roadside and agricultural fields and minimal management of forests or recreation and cultural resource sites. Disturbance of protected species would be avoided. All wildfires would be suppressed.	The management direction would be the same as the proposal except more area would be affected because recreational development would be more expansive.

*Costs exclude funds required to complete construction of motor road.

Table 10: General Development Actions, Proposal and Alternatives

General Development Map Key	Specific Sites	Mile-post	Proposal	Alternative 1	Alternative 2
1	Southern Entrance	0.0	Construct parking area and staffed visitor contact station.	Same as proposal.	Same as proposal.
4	Emerald Mound	10.3	Remove and relocate county road and parking area. Construct spur road, parking area, interpretive structure, and trail.	Same as proposal.	Same as proposal.
8	Coles Creek	17.5			Expand picnic area and paved trail. Construct residence, campground roads, contact station, comfort stations, sanitary disposal station, campfire circle, and hiking trails.
18	Rocky Springs	54.8			Expand picnic area and campground. Construct service station, snack bar, reservoir, beach boating center, group campground, comfort station, environmental study area, and hiking trails.
22	Jackson Entrance	86.6	Construct parking pull-off, wayside structure, and exhibits.	Same as proposal.	Same as proposal.
23	Ridgeland Crafts Center	102.4	Rehabilitate building interior or expand structure for visitor contact area.		Same as proposal.
29	River Bend	122.6			Expand picnic area. Construct campground, roads, checking station, boat launching area, and hiking trails.
60	Brices Cross Roads National Battlefield Site	--	Construct sidewalk and relocate wayside exhibit and entrance signs.	Same as proposal.	Same as proposal.
60	Tupelo National Battlefield	--	Construct sidewalk and relocate wayside exhibit.	Same as proposal.	Same as proposal.

General Development Map Key	Specific Sites	Mile-post	Proposal	Alternative 1	Alternative 2
63	Tupelo Visitor Center, Headquarters	266.0	Redesign exhibits and audiovisual media.	Same as proposal.	Same as proposal.
79	Colbert Ferry	327.3	Provide orientation/information exhibits for existing visitor contact station. Construct 100-site campground (water, electricity, dump station, comfort stations), 15-site walk-in campground, three-site group campground, gas station, and store; if needed, add 50 more campsites.	Same as proposal.	Same as proposal.
96	Meriwether Lewis	385.9	Construct visitor contact station.		Same as proposal.
106	Gordon House Site	--	Construct comfort station, walkway, and interpretive exhibits.		Same as proposal.
--	Leipers Fork Subdistrict Headquarters	--	Construct maintenance shops, offices, covered storage, and entrance roads.	Same as proposal.	Same as proposal.
109	Northern Entrance	--	Construct parking area and staffed visitor contact station.	Same as proposal.	Same as proposal.
--	Parkway General*		Construct orientation/information wayside pulloff parking site.	Same as proposal.	Same as proposal.
			Produce orientation/information wayside exhibits (11 sites).	Same as proposal.	Same as proposal.
			Remove interpretive wayside exhibits (43 sites).	Remove interpretive wayside exhibits (64 sites).	Same as proposal.
			Replace interpretive wayside exhibits (29 sites).	Replace interpretive wayside exhibits (10 sites).	Same as proposal.
			Install 186 site signs.	Install 184 site signs.	Install 194 site signs.

*See table 3 for locations of proposed orientation sites and interpretive sites, along with wayside exhibits suggested for removal or replacement.

Alternative 2 would provide the greatest number and variety of interpretive opportunities; however, visitation is not expected to increase sufficiently to justify substantial new development. Alternative 1 would meet the needs of the majority of parkway users but would not adequately serve those visitors truly interested in learning about the significance of resources related to the prehistoric or historic Natchez Trace. Under the proposal, the number of interpretive opportunities and the subject matter presented would be appropriately balanced with the anticipated level of use so that development expenditures would be justifiable.

Impacts on Natural Resources

The effects of prescribed burning or additional mechanical thinning on forests and grasslands at selected interpretive, recreational, or roadside areas would vary depending on existing vegetative composition, site factors, the intensity of burning or thinning, and the frequency and seasonality of management actions. Generally, such management would decrease the volume of woody stems and vines in the understory (including Japanese honeysuckle) and would increase grasses and forbs, particularly legumes. In pine or pine/oak stands, mature and seedling pines would survive burning better than hardwoods, and they would remain a component of the community longer than without fire. In oak-dominated communities there would be an overall thinning of the canopy and an increase in oak sprouting. Fire would tend to return forest stands to a parklike condition reminiscent of historical descriptions.

To some extent, forest and grassland management would increase habitat for deer, quail, turkey, and other common wildlife species, while habitat for tree-cavity nesting animals (for example, owls, southern flying squirrels, pileated woodpeckers) might decrease slightly. Neither effect is likely to be regionally significant because relatively little acreage would be involved.

Prescribed burning schedules would be consistent with local air quality regulations, so that effects of increased particulates, carbon monoxide, and other smoke factors would be localized and temporary. No significant impact on water quality is anticipated from a controlled burning program.

Because of the limited area involved (less than 5 acres), monitoring and habitat management for protected species would have no significant environmental consequences beyond the beneficial effect of perpetuating rare species.

Current lease restrictions on agricultural practices, including fertilizer and pesticide use, are consistent with regulations of the Environmental Protection Agency and Soil Conservation Service. Fertilizers and pesticides have limited impacts on natural resources but unknown impacts on archeological resources.

Table 11 lists the amount of area that would be affected at each development site. Totaling all acreages to be disturbed by new

development and subtracting the total amount of acreage to be returned to a more natural state (for example, a parking area that is removed and planted with grass), would give the net increase or decrease in developed acres. Under the proposal the total developed area would be decreased by 7 acres, and this area would be returned to a more natural state. Under alternative 1, 21 acres would be returned to a more natural state, and under alternative 2, a net increase of 135 acres would be disturbed by development and visitor activity. In all cases, the areas affected are open fields or second-growth forests typical of the region, and no special habitats would be affected by any of the alternative development actions.

Impacts on Cultural Resources

The management of cultural resource sites would be the same under the proposal and both alternatives. Cultural resources selected for interpretation or preservation management would be protected through structural stabilization, cyclic maintenance, and other preservation treatments. Tree removal, improved mowing practices to prevent turf removal, reseeding for soil stabilization, and other erosion control measures would help protect archeological resources. Cultural resources selected for benign neglect would deteriorate by natural weathering processes.

On parkway agricultural leases, archeological resources could be affected by land leveling, row cropping, and cumulative soil erosion, which could destroy or disturb site integrity or the potential for data recovery. Such impacts to significant resources would be either avoided by lease restrictions or mitigated by data recovery, although recovery would never be complete and some data loss would be unavoidable. Although the uses of fertilizers and pesticides on agricultural leases are within limits established by the Environmental Protection Agency and the Soil Conservation Service, the impacts of such chemicals on archeological resources are unknown.

Site-specific consequences of the development actions under the proposal and alternatives are described in table 11.

COMPLIANCE STATUS

The 1978 Final Environmental Impact Statement documented compliance with most federal regulations governing development, including the National Environmental Policy Act (NEPA), the Federal Water Pollution Control Act, and the Council on Environmental Quality's directive on assessing impacts on prime and unique farmlands. Further compliance procedures were necessary to meet the requirements of the National Historic Preservation Act, the Endangered Species Act, and Executive Orders 11988 ("Floodplain Management") and 11990 ("Wetland Management"). Documentation of compliance with these requirements is given below.

Table 11: Site-Specific Consequences of Development Actions

Site	Proposal	Alternative 1	Alternative 2
Emerald Mound	Approximately 3 acres of second-growth mixed pine/hardwood forest would be removed for the access road, parking area, and vista clearing. About 1.3 acres of pine/oak and mixed hardwood forests would be removed for rerouting the existing county road. Impacts on wildlife, water, and air quality are not expected to be significant. Removing trees and realigning the interpretive trail would decrease existing erosion of the mound. Impacts on other archeological resources are unknown, pending proposed surveys and testing. It is probable that archeological materials, due to the proximity to Emerald Mound, would be affected by road construction, and although mitigating actions would be taken, the loss of some data might be unavoidable. More visitors would be better informed of the significance of the site and the culture it represents. The setting of the mound would better relate to the probable prehistoric scene. However, less shade would be available for visitors.	No new impacts.	Same as proposal.
Mangum Site Boyd Mounds Bynum Mounds	No new impacts.	Approximately 1.5 acres at the Mangum site, 1.5 acres at Boyd Mounds, and 2 acres at Bynum Mounds would be converted from pavement and grass lawns to open fields. Visitors would no longer be informed of the sites. There would be less potential for vandalism. If, after the archeological synthesis was completed, the mounds received preservation maintenance, there would be no further impacts. If the mounds were permitted to revegetate, root disturbance and other deterioration would occur.	No new impacts.

	Proposal	Alternative 1	Alternative 2
Coles Creek	No new impacts.	No new impacts.	Approximately 200 acres of privately owned land would be purchased. About 2.5 acres of mixed pine/hardwood forest would be removed for roads and other facilities, and an additional 30 acres would be affected by camping, picnicking, and hiking activities. During construction there would be some temporary siltation of the South Fork of Coles Creek; however, no permanent significant impacts on wildlife, water, or air quality are anticipated. Effects on archeological resources would be unknown pending survey and site testing. Although mitigating actions would be taken, the loss of some data might be unavoidable. New camping and picnicking facilities would increase recreational opportunities, but based on existing visitor use in the area, it is doubtful the facilities would be fully utilized.
Rocky Springs	No new impacts.	No new impacts.	Approximately 33 acres of existing mixed hardwood forest would be removed and replaced by a reservoir. Approximately 26 acres of mixed hardwood and pine/oak forests would be removed for roads, trails, and buildings, and an additional 30 acres would be disturbed by visitor activities. Constructing the reservoir would convert approximately 0.75 mile of the Little Sand Creek from a natural stream community to a managed lake. There would be temporary siltation in the stream and reservoir during construction. Deer, turkey, quail, and other wildlife species would be locally displaced, but impacts would not be regionally significant. The presence of prehistoric and historic archeological resources is likely, but impacts on such resources would be unknown pending surveys and testing. Although mitigating actions would be taken, the loss of some data would be unavoidable. Visitors would be provided with more, varied recreational opportunities, but based on current use it is doubtful that new facilities would be fully utilized.

	Proposal	Alternative 1	Alternative 2
River Bend	No new impacts.	No new impacts.	Approximately 10 acres of second-growth loblolly pine forest would be removed for roads, trails, buildings, and parking areas, and an additional 10 acres would be disturbed by visitor activities. Impacts on wildlife would be minor. During construction there would be a temporary localized increase in the silt load in Ross Barnett Reservoir. Effects on archeological resources would be unknown pending a site survey and testing. New camping and boat launching facilities would increase recreational opportunities in the area; however, several such facilities are already established nearby, and the need for additional facilities along the parkway is unknown.
	Note: If the Shoccoe Dam (proposed by the U.S. Army Corps of Engineers) is constructed, the River Bend site and the nearby Cypress Swamp nature trail would be within the impoundment area, and both sites would have to be abandoned.		
Colbert Ferry	Potential cumulative impacts on cultural resources have not been determined, but based on existing surveys, impacts might be significant. Surveys have located seven sites eligible for the National Register of Historic Places. Estimates for mitigation range from $45,000 to $65,000.	Same as proposal.	Same as proposal.
Water Valley Overlook	A maximum of 2.5 acres of existing pasture and second-growth oak forest would be removed for a loop road and parking area. Impacts on wildlife, air, and water quality would be minimal. Impacts on archeological resources would be unknown pending a site survey and testing. Visitors would be provided with a panoramic view of the Highland Rim, the Leipers Creek valley, and the community of Water Valley, Tennessee.	Same as proposal.	Same as proposal.

National Historic Preservation Act

The Natchez Trace Parkway contains properties listed on, or eligible for listing on, the National Register of Historic Places; consequently, actions that affect them (such as approval and implementation of the proposed general management plan) are subject to review and comment by the Advisory Council on Historic Preservation and the appropriate state historic preservation officer, in accordance with the "Regulations for the Protection of Historic and Cultural Properties" (36 CFR 800).

Pursuant to those regulations, the Advisory Council, the National Park Service, and the National Conference of State Historic Preservation Officers have executed a programmatic memorandum of agreement related to the NPS planning process. In acccordance with that memorandum of agreement, the Advisory Council and the Mississippi, Alabama, and Tennessee state historic preservation officers have participated in the development of this plan through informal consultations and reviews. Those consultations and reviews will continue throughout the planning process, and at the appropriate time, the Advisory Council and historic preservation officers will be given an opportunity to formally review and comment on the proposed plan before it is approved by the regional director. Evidence of compliance with section 106 of the National Historic Preservation Act, as applicable to this plan, will be included in the plan's final NEPA document.

In 1980 the National Park Service, the Advisory Council, and the state historic preservation officers for Tennessee, Alabama, and Mississippi executed a joint memorandum of agreement for Natchez Trace Parkway. This agreement sets forth specific stipulations to ensure that adverse effects on significant cultural resources that could result from completion of the parkway are either avoided or satisfactorily mitigated. It is the intent of this general management plan to ensure that those site-specific requirements are followed as stipulated, unless they are superseded through compliance with the programmatic memorandum of agreement.

Endangered Species Act

The U.S. Fish and Wildlife Service has advised the National Park Service that 12 endangered species, three threatened species, and 15 species under review for federal protection are potentially in the area of the parkway (see appendix E for a biological assessment). Of these, only the endangered gray bat, the threatened slackwater darter and bayou darter, and Tennessee yellow-eyed grass (a review species) are known to be within the parkway. In addition, critical habitat for the slackwater darter has been designated for portions of Tennessee and Alabama through which the parkway passes.

The gray bat, bayou darter, and Tennessee yellow-eyed grass will be protected by continuing existing management programs. However, there is insufficient information concerning slackwater darter distribution along

the parkway, and special precautions are needed to ensure that roadside maintenance and pesticide use on agricultural leases within the parkway will not adversely affect the slackwater darter or its critical habitat. Proposed research and roadside management revisions within the slackwater darter critical habitat have been described above (see "Natural Resource Management" section and appendix E). Implementing these actions will better protect the species.

Therefore, it is the conclusion of the National Park Service that neither the proposal, nor the alternatives, will adversely affect any federally protected species or critical habitat.

Floodplains and Wetlands Management

In keeping with Executive Orders 11988 and 11990 there will be no new modification or occupation of floodplains or wetlands under the proposal or either alternative. All facilities potentially within the 100-year floodplain--roads, trails, picnic areas, and campgrounds--are excepted actions under NPS guidelines. Although flood hazard surveys are unavailable for the great majority of the parkway, none of the parkway's facilities appears to be within areas subject to flash floods.

Comprehensive Trail Plan Environmental Assessment

INTRODUCTION

PURPOSE OF AND NEED FOR THE TRAIL PLAN

The National Trails System Act of 1968 established policies and procedures for a nationwide system of scenic trails, historic trails, and recreation trails. The Natchez Trace, running from Nashville, Tennessee, to Natchez, Mississippi, was one of the first trails designated for study for potential inclusion in the national trails system. The study report, entitled The Natchez Trace: A Potential Addition to the National Trails System, was published by the National Park Service in August 1979. As a result of the findings and recommendations of the study, the Natchez Trace National Scenic Trail was established by Congress in March 1983, and the National Park Service was directed to designate a route. Expenditure of up to $500,000 was authorized to acquire lands and interests in lands for the trail, and up to $2 million was authorized for trail development.

The National Trails System Act also calls for a comprehensive trail plan to be prepared once a national trail has been established. This plan has been prepared in response to that requirement, and it addresses the acquisition, management, development, and use of the national scenic trail. The trail corridor is to be located totally within the Natchez Trace Parkway boundary. A proposal and two alternatives are presented for development of the trail, and their potential environmental impacts are assessed and compared.

The secretary of the interior was assigned responsibility for the overall administration of the Natchez Trace National Scenic Trail. The National Park Service will carry out the secretary's responsibilities and coordinate the development and management of the trail. Volunteer trail groups will be encouraged to participate in the development and maintenance of trail segments. Additionally, the National Trails System Act called for an advisory council to be established for each trail, to be made up of federal, state, and private sector representatives. In this case the existing Natchez Trace Parkway Association will serve in the advisory function and will be consulted by the National Park Service in matters relating to trail development and management.

TRAIL CORRIDOR OVERVIEW

The historic Natchez Trace was a primitive trail stretching some 500 miles through the wilderness from Nashville to Natchez. The story of the old Natchez Trace is the story of a region and of the people who developed this trail into a vital road through the Old Southwest frontier. Although

generally thought of as one trail, the Natchez Trace was actually a number of closely parallel wilderness routes. When the first Europeans arrived in the area about 1700, they found the Natchez, Choctaw, and Chickasaw Indians already using these rough trails into the interior of the lower Mississippi Valley. As American settlement expanded toward the southwest, boatmen used the trace to walk back to their homes after disposing of their trade goods and boats in the Mississippi River towns of Natchez and New Orleans.

Today, the Natchez Trace Parkway, which commemorates the old trace, roughly parallels the historic route between Natchez and Nashville. Slated for completion in the 1990s, the 449-mile motor road includes a right-of-way that averages 825 feet in width, with "bulges" at irregular intervals to provide land for associated recreation, interpretive, and management developments. Visitor facilities include comfort stations, picnic areas, campgrounds, marked sections of the old Natchez Trace, and interpreted sites of prehistorical, historical, and natural interest.

The Natchez Trace corridor passes through a transect of midsouthern physiographic and natural communities. North from Natchez, the corridor passes through beech and oak forests of the Loess Bluffs province, the southern pine hills near Raymond, Mississippi, and the Jackson Prairie. From the northeastern tip of Ross Barnett Reservoir, the corridor crosses pine and dry oak forest in Mississippi's north central hills, and the Flatwoods and Pontotoc Ridge provinces. The alluvial agricultural soils around Tupelo are part of the Black Belt province and were an important resource to the Chickasaw and prehistoric Indians. North of Tupelo the corridor cuts through a mixture of pine and hardwood forests in the hills above the Tombigbee and Tennessee rivers and traverses oak- and hickory-dominated forests on the Highland Rim in Tennessee. The corridor ends just south of Nashville, Tennessee, on the western edge of the Nashville Basin, which historically was similar to the open bluegrass region of Kentucky.

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Natural and Cultural Resources Trail Plan

Natchez Trace Parkway
United States Department of the Interior / National Park Service

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RESOURCE ANALYSIS

A ranking system was developed to assess resource values along the entire Natchez Trace Parkway corridor and to identify those sections of the corridor that have the highest resource values. Critical factors for assessing resource values and determining appropriate trail recommendations were proximity to populated areas, scenic quality (focusing on the parkway corridor as well as the adjacent viewshed), and proximity to parkway visitor use areas where cultural, natural, or recreational features are present. These factors and their order of importance were based on the National Trails System Act, which states that "trails should be established primarily near urban areas and secondarily within scenic areas along historical travel routes of the Nation." The same act also states that national scenic trails should "provide for the conservation and enjoyment of the nationally significant scenic, historic, natural or cultural qualities [features] of the areas through which such trails may pass."

After the critical factors were identified, they were incorporated into a survey form (see the sample form in this section) and assigned a numerical rating based on their level of importance. During a two-week field trip, the planning team systematically applied this survey to 10-mile segments along the entire parkway. Although the scores assigned to the segments are subjective, they do represent a consensus opinion of the team members who participated in the survey.

Numerical scores for specific factors were derived in several ways. For the first factor--proximity to urban populations--three scores were used in the rating. Those parkway segments within or adjacent to standard metropolitan statistical areas (SMSAs) were given the highest score. A moderate score was given to trail segments that passed through cities (not SMSAs) and rural towns. The lowest score was given to trail segments that passed through sparsely populated rural areas.

The second factor--scenic quality--was rated using a modified version of the scenic quality inventory/evaluation in the Visual Resource Management Program, developed by the Bureau of Land Management (1980). Numerical ratings that reflected high, moderate, and low values were used in scoring landform, vegetation, water, color, adjacent scenery, resource scarcity (for example, wildlife or wildflowers), and cultural modifications (see sample survey form). The overall scenic quality score for each 10-mile segment was derived by adding the individual scores assigned to the seven categories.

The third factor--proximity to cultural, natural, or recreational features--was rated using the same high, moderate, and low rating scheme. Any cultural, natural, or recreational feature that was thought to be of primary significance to the parkway was given the highest rating. Features thought to be of moderate or minimal significance to the parkway received correspondingly lower scores.

SAMPLE RESOURCE ANALYSIS SURVEY FORM

SCENIC QUALITY SCORE: 21

Mile 380 to Mile 390

	Landform	Vegetation	Water	Color	Adjacent Scenery	Resource Scarcity	Cultural Modification
High Values	High vertical relief; prominent cliffs, mountains, or massive rock formations; severe surface features, or dominant and exceptionally striking and intriguing features 5	A variety of vegetation types; high contrast in form, texture, and patterns 5	Clean and clear water; still, flowing, or cascading; and a dominant and contributing factor to the landscape 5	High contrast; a variety of vivid colors, which contributes to extraordinary views 5	Great enhancement of visual quality 5	One-of-a-kind; rare within the region; memorable 6	Free from aesthetically undesirable or intrusive sights and influences; or modifications add favorably to visual variety 2
Moderate Values	Moderate relief; rolling hills or undulating landscape; some interesting landform patterns; detail features present and interesting but not dominant or exceptional 3-2	Some variety of vegetation, but only one or two types 3-2	Water present but not dominant in the landscape 3-2	Moderate contrast; some variety of colors 3-2	Moderate enhancement of overall visual quality 3-2	Distinctive, but somewhat similar to others within the region 2	Inharmonious intrusions, but not so extensive that they are entirely negated; or modifications add little or no visual variety to the area 0
Low Values	No relief; a flat landscape; few features or none 1	Little or no variety or contrast in vegetation 1	Water absent or not noticeable 0	Subtle color variations; low contrast 1	Little or no influence on overall visual quality 0	Interesting within its setting but fairly common within the region 1	Extensive modifications that impair or substantially reduce scenic qualities -4

Scenic Quality Score	User Potential Score*	Cultural Resource Score**		Natural Resource Score**	Recreation Resource Score**	
21	0	Buffalo River Iron Works Historic Site	1	English Camp Water Falls 1	Meriwether Lewis Recreation Area 10	
		Napier Mine Historic Site	1			
		Meriwether Lewis Monument	5			
		Old Trace Hiking Trail	5			
21	0		12	1	10	Total: 44

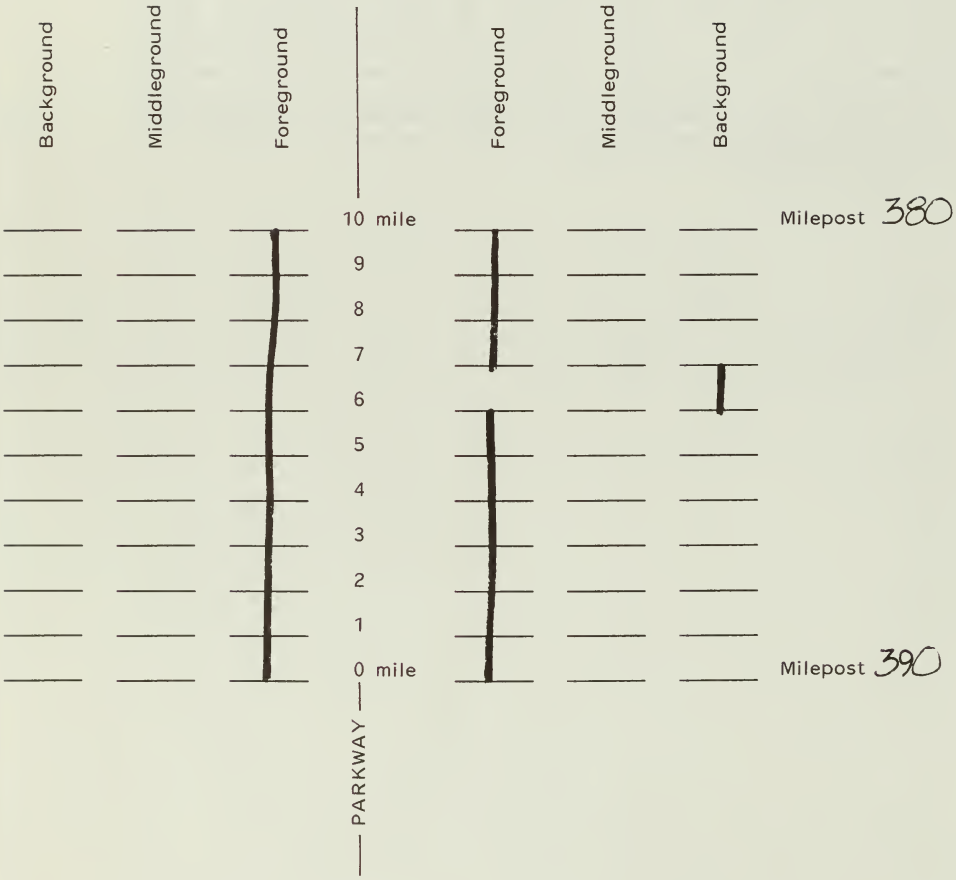
* User Potential
20 - Near major urban population
10 - Near major rural population
0 - Minimal population area

**Cultural, Natural, and Recreation Score Key
10 - High or of primary significance or value
5 - Moderate significance and of some value
1 - Low significance and of little value

After numerical scores were assigned for each of the three factors, the scores were totaled to provide a composite score for each 10-mile segment of the parkway (see table 1). Parkway segments that scored higher than 45 were designated as high potential segments for trail development. The four segments that met these values are in or near Natchez and Jackson, Mississippi; Colbert Ferry (Pickwick Lake), Alabama; and Nashville, Tennessee (see Resource Analysis map).

An additional viewshed survey form was also used for each 10-mile segment to supplement the composite resource analysis scores. Viewing distances from both sides of the parkway, in terms of foreground, middle ground, and background, were recorded for each mile along the entire length of the parkway. Unobstructed viewing distances of approximately 100 feet from the parkway (foreground), 2,500 feet from the parkway (middle ground), and more than 2,500 feet from the parkway (background) were mapped to ensure that national trail locations and other trails along the parkway would provide a variety of landscape views (see sample viewshed survey form).

SAMPLE VIEWSHED SURVEY FORM



Resource Analysis and High Potential Segments

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Natchez Trace Parkway
United States Department of the Interior / National Park Service

LEGEND

VIEWSHED
existing view

RESOURCE VALUES
low
medium
high

LAND MANAGEMENT

Scenic Easements
none
less than 60 acres/10 miles
60–120 acres/10 miles
more than 120 acres/10 miles

Agricultural Leases
none
1–3 miles/10 miles
3–6 miles/10 miles
more than 6 miles/10 miles

Table 1: Natchez Trace Parkway Segment Scores

Mile Segment	Location	Urban Score	Scenic Quality Score	Natural, Cultural, Recreational, Features Score	Total
0-10	Natchez, MS	10	15	10	35
10-20		0	15	33	48
20-30		0	18	0	18
30-40		0	9	0	9
40-50		0	17	20	37
50-60		0	19	25	44
60-70		0	13	1	14
70-80		0	12	2	14
80-90	Clinton, MS	20	14	0	34
90-100	Clinton, MS	20	14	0	34
100-110	Jackson/Reservoir	20	13	41	74
110-120	Jackson/Reservoir	20	26	25	71
120-130		10	20	21	51
130-140		0	13	1	14
140-150		0	15	2	17
150-160	Koscuisko, MS	10	14	1	25
160-170		0	13	1	14
170-180		0	16	12	28
180-190		0	16	15	31
190-200		0	16	15	31
200-210		0	19	2	21
210-220		0	16	1	17
220-230		0	16	10	26
230-240		0	16	21	37
240-250		0	16	21	37
250-260	Tupelo, MS	10	13	2	25
260-270		10	13	18	41
270-280		0	15	2	17
280-290		0	15	11	26
290-300		0	13	5	18
300-310		0	19	11	30
310-320		0	20	10	30
320-330	Colbert Ferry	20	20	12	52
330-340		0	16	11	27
340-350		0	19	7	26
350-360		0	16	1	17
360-370		0	19	8	27
370-380		0	21	6	27
380-390		0	21	23	44
390-400		0	21	12	33
400-410		0	21	12	33
410-420		0	24	30	54
420-430		0	24	20	44
430-440	Nashville	20	24	10	54
440-450		20	18	0	38

PROPOSAL

NATIONAL TRAIL ROUTE

A substantial amount of time, energy, and resources are expended in most national trail implementation efforts to provide for a continuous hiking path. The various land protection strategies that are often required in establishing continuous trails may take years and millions of dollars to implement. The Natchez Trace National Scenic Trail is unique in that the 449-mile, 825-foot-wide parkway corridor is entirely federally owned. Although there is no conclusive data to demonstrate the level of need for trails, the opportunity offered by an existing, continuous corridor across federal land is unparalleled. Because of this opportunity, and because of the scenic quality and historical significance of the Natchez Trace, the entire parkway corridor will be designated as the route of the Natchez Trace National Scenic Trail.

The trail proposal has been developed in concert with the general management plan for the parkway, and all trails proposed in that plan will be components of the designated national trail system. Interpretive centers, wayside exhibits, and orientation stops will serve both general parkway visitors and trail users.

Hiking will continue along the entire length of the parkway, using existing trails and the motor road shoulder. Horseback riding will be permitted only on trails designated for such use (see Existing Trails map in the "General Management Plan" section and the Proposed Hiking/ Horseback-Riding Trail map in this section). Bicycling will continue along the entire developed length of the parkway; however, no separate path or paved motor road shoulder will be developed to accommodate bicycle users.

NASHVILLE TRAIL SEGMENT

Of the four high potential segments identified during the resource analysis phase of planning, only the Nashville segment will be developed as a combined hiking and horseback-riding trail at this time. The Nashville segment was selected because of its proximity to the largest urban population along the parkway and because it is not known if there is a high demand for additional trails at this time. The new trail will be maintained with the assistance of user groups and trail organizations, and it will serve as a prototype for any future trail development along the parkway. Undertaking trail development as part of the larger parkway construction project will also have economic benefits.

The Nashville trail segment will be developed in two phases. The first phase will involve establishing the trail tread, graveling the parking areas at both ends of the trail, installing tethering posts, and providing signs at parking areas and along the trail. No further development of this segment will occur until use is sufficient to warrant completion.

osed Hiking / Horseback-Riding Trail
Potential Segment / Nashville

Parkway
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The second phase (if warranted) will entail paving the parking areas at staging areas, bringing waterlines into the staging areas, installing fire rings, and developing a primitive campsite along the trail. The campsite will consist only of a pit toilet and a water supply (if feasible).

A new Duck River trailhead staging area will be the southern entrance to the Nashville trail segment (see Proposed Trail map). This new development will be on the east side of the parkway and north of Tennessee Highway 50. A short hiking trail will connect the trail staging area with the Gordon House site. Plans for the Gordon House site have been approved, but construction has not begun. A designated slow-speed zone for traffic and a crosswalk will be provided for pedestrians to cross Tennessee 50. Waterlines will be extended from Tennessee 50 to provide potable water at the staging area.

The trail will cross under Tennessee 50 and continue along the west side of the boundary to milepost 422. This western alignment will use existing county roads within the parkway boundary. The terrain and landforms are similar along both sides of the parkway for this section of the trail route. A primitive corral and tethering poles will be provided on the west side of the parkway at milepost 418 so that riders can hitch their horses and cross the parkway on foot to visit the Water Valley overlook. At milepost 420 the trail will cross the proposed access road from Tennessee Highway 46. An underpass will provide trail access to the west side at milepost 422.

The trail will cross the parkway at milepost 424.5 by means of an underpass, continue on the west side of the parkway by using a 2-mile stretch of existing county roads, and again cross the parkway by means of an underpass at milepost 427. From this point the trail will remain on the east side of the parkway to the Leipers Fork interchange because of the steep slopes on the west side of the parkway north of Duck River Ridge. This alignment follows one of the longest and most discernible sections of the historic Natchez Trace, and it will also incorporate the Butler Ridge overlook. An underpass will provide trail access to the Leipers Fork staging area (milepost 435). The staging area will be on the west side of the parkway in an area where the parkway boundary has been expanded to provide for the proposed Leipers Fork maintenance area. Potable water will be provided at the trail staging area.

Up to $500,000 has been authorized by PL 98-11 for land acquisition for the Natchez Trace National Scenic Trail. However, because the proposed trail segment will be entirely within the boundaries of the Natchez Trace Parkway, no land acquisition will be required.

In accordance with the National Trails System Act, uniform markers will be erected and maintained along the national trail segments. The design will be the official Natchez Trace National Scenic Trail symbol. This symbol, also used along the parkway, depicts one of the post riders who were frequent users of the historic trace. The symbol will be registered with the U.S. Patent Office, and the National Park Service will monitor and protect the symbol's use.

INFORMATION/INTERPRETATION

Information about hiking opportunities is not now widely available along the parkway. Information/orientation wayside exhibits proposed in the "General Management Plan" section will include information about parkway trails. In addition, a brochure or pamphlet about parkway trails is recommended. This publication would serve as an aid for hikers, bicyclists, and horseback riders, helping them select specific trails and organize their trips. Parkway visitors should be aware of the following:

- the location of trails along the parkway, their length, and their level of difficulty
- the various types of scenery or special resources along the route
- rules of visitor behavior and safety on trails
- the location of trail facilities and services

Trail users should also have the opportunity to learn about and appreciate prehistoric resources and the historic significance of the Natchez Trace. From its earliest role as a network of Indian trails to its use by boatmen on their return trip up the Mississippi, the corridor played an important role in our country's development. Specific proposals to implement the objectives of this information/interpretive program are discussed in the "General Management Plan" section and will be more fully developed in the interpretive prospectus for Natchez Trace Parkway.

COSTS

Specific sizes and costs of new facilities are shown in table 2.

FUTURE TRAIL DEVELOPMENT

Once the Nashville trail segment has been developed as a prototype, any future trail development will be based on demonstrated user demand and the ability of private user groups to provide development funding and maintenance. The National Park Service may provide technical assistance in trail planning and implementation or in the preparation of orientation and interpretive materials relating to trails, but no further NPS funding will be anticipated for the national trail. Sample costs for future private sector trail development are shown in table 3. This trail plan will, however, continue to serve an important function as a guide for future trail development efforts.

To ensure continuity and quality of the trail system, memorandums of agreement or understanding will be required between any trail developers and the National Park Service. All future trail development will be subject to NPS approval and should be consistent with objectives and guidelines contained in this planning document and recommended trail management handbooks (see the Bibliography).

Table 2: Trail Cost Summary

Development Costs	Cost
Phase 1:	
Develop 22 miles of hiking/horseback riding trail (16 mi new, 6 mi existing)	$ 80,000
Provide gravel for two staging areas and turnaround	20,000
Bring waterline into staging areas	4,000
Install tethering posts and signs	2,000
Prepare trail guide publication	10,000
Conduct archeological survey	5,000*
Subtotal	$121,000
Phase 2:	
Complete development of two staging areas--pave parking lots and turnarounds and install fire rings	$ 59,000
Install primitive camping area (pit toilet and tethering poles)	21,000
Subtotal	$ 80,000
Total	$201,000

Contingency, Supervision, and Planning Costs

	Net Cost	Contingency and Project Supervision (31%)	Project Planning (15%)	Gross Amount
Phase 1	$121,000	$ 37,500	$ 18,000	$176,500
Phase 2	80,000	25,000	12,000	117,000
Total	$201,000	$ 62,500	$ 30,000	$293,500

Annual Operation and Maintenance Costs - $15,000

*Archeological costs do not include data recovery.

Future trail routes will be based on a visitor experience concept that takes into account the presence and relative significance of the following resource factors: water (clean streams and lakes, rapids and white water, springs, wetlands, stream confluences, waterfalls), landforms (high points, rock outcrops, high contrast topographic edges), vegetation (unique species, prominent edges), and man-made features and land uses (prehistoric archeological sites, historic landscapes and structures, transportation and recreation features, residential development, agricultural land uses, commercial land uses). When trail routes and locations for trailheads and staging areas are selected, the following requirements should be met:

Trails should be located on NPS lands.

Staging areas and access points should be located so that users can choose different trip lengths.

Scenic overlooks in the parkway should be part of the route.

The trail should be routed to take advantage of natural and cultural features, and specifically the trail should follow the historic trace where feasible.

The trail should pass through a variety of landforms and vegetation types.

Visual intrusions that would detract from a trail experience should be avoided.

Critical or sensitive animal or plant habitat areas should be avoided.

Damage to sites listed on or eligible for listing on the National Register of Historic Places should be avoided.

Areas that are subject to flooding or poor drainage should be avoided.

Previously disturbed areas and developed sites, facilities, and structures should be used whenever possible for trailheads and staging areas.

Views of creeks, streams, rivers, and lakes should be provided.

The parkway motor road should be crossed only when necessary.

Additionally, any new trail plans will comply with the following general design guidelines:

Disturbance of the ground surface to obtain a trail base will be minimized, and trail surfacing will be used only if needed for erosion control.

Most trail sections will maintain a grade of 10 percent or less, and where major elevation changes occur, switchback construction will be required to reduce erosion potential and maintain a proper grade.

A 10-foot-high and 8-foot-wide clearance will be maintained on trails that accommodate both hikers and horseback riders.

Staging areas (1 to 2 acres) will be developed at each end of a trail and will include two pit toilets, two fire rings for picnic use, tethering poles (horse trails only), a trailhead sign/brochure dispenser, and a potable water supply if feasible.

Staging areas within the parkway right-of-way will accommodate parking for standard vehicles and, in the case of horseback-riding trails, back-in parking bays for vehicles with horse trailers. Areas for horse trailers and automobiles should be paved; however, the surface of the horse-tethering or -staging areas should be grass, pea gravel, or wood chips.

Vehicle access spurs and parking areas will be paved, and appropriate turning radii, road widths, and unloading areas will provide easy access and use; parking will accommodate 10 standard vehicles plus 10 horse trailer units for horseback-riding trails.

Primitive camping areas will be provided on those trails that are longer than a normal day's hike; camping sites will take advantage of points of interest, but will not be accessible from the roadway; pit toilets will be provided; and potable water may be provided if feasible.

Trails will be aligned to minimize or avoid impacts on parkway lands under private agricultural leases.

Cooperative agreements with appropriate authorities may be required if trail alignments follow county roads.

All trails will be marked by posting the Natchez Trace National Scenic Trail symbol; markers will be available from the National Park Service in two sizes--a 9-inch size for use at trailheads and a 3½-inch size for periodic route confirmation signs; where appropriate, blazes may also be used to assist in trail route location.

In addition to trails within the national trail corridor, there is potential for side trails that would provide access to significant sites or recreational facilities away from the parkway. Examples could include U.S. Forest Service recreation areas, state parks and wildlife areas, or cultural sites relevant to Natchez Trace history. Side trails and associated facilities would be funded, developed, and maintained by private user groups or the respective land-managing agency or owner. The National Park Service would provide orientation signs where side trails intersected national trail segments, and spur trails within the parkway boundary would be developed to connect the national hiking trail with any designated side trail.

Some example costs for trail development by the private sector are shown in table 3.

Table 3: Example Costs for Future Private Sector Trail Development (1985 Dollars)

Typical Staging Area	Cost
Ten trailer parking units (2 horses per trailer)	$ 15,000
Ten standard parking units	8,000
Two vault pit toilets	20,000
Two fire rings for picnic use	1,000
Central water supply (well) and pump/housing/treatment	21,000
Tethering poles	500
Trailhead sign	500
Roadway into staging areas (600 lin ft)	30,000
Turnaround	6,000
Total	$102,000

Trail	
Average cost per mile of hiking trail	$ 10,000
Average cost per mile of horse trail	20,000

ENVIRONMENTAL ASSESSMENT

ALTERNATIVES CONSIDERED

Two alternatives to the proposed trail plan were considered: a no-action alternative and an alternative to construct additional trail segments. A maximum development alternative, recommended in the 1979 trail study, was rejected because of the excessive cost ($30 million).

Alternative A--No Action

Under this alternative, no national scenic trail route would be designated, but all existing hiking and horseback-riding trails would be maintained. Hiking would continue along the entire length of the parkway, utilizing existing trails and the parkway road shoulder. Horseback riding would be allowed only on existing trails designated for this use. Bicycling would still occur along the developed portions of the parkway but would not be encouraged. No new support facilities would be developed.

Alternative B--Additional Trail Segment Development

This alternative is the same as the proposal, except that three of the four high potential segments would be developed to accommodate both hiking and horseback riding. In addition to the Nashville area segment, both the Jackson and the Natchez trail segments would be developed (see Resource Analysis map). The Colbert Ferry high potential segment would not be developed because the resource values and viewshed qualities both north and south of this segment are low.

IMPACTS OF THE PROPOSAL AND ALTERNATIVES

Impacts on Visitor Use

The proposal would provide parkway visitors, particularly those from middle Tennessee, with new opportunities for hiking and horseback riding.

There would be no new impacts under alternative A.

Under alternative B, in addition to the impacts described for the proposal, there would be increased riding and hiking opportunities, particularly for visitors from the Jackson and Natchez/Port Gibson areas.

Impacts on Natural Resources

Approximately 20 acres of second-growth forest (predominantly oak and pine) would be disturbed under the proposal. No unusual plant or animal

species are expected to be affected. There would be no significant, long-term impacts on water or air quality; however, some temporary and localized increases in turbidity and fecal coliform could occur in watercourses adjacent to the trail. Minor water problems associated with soil erosion would be mitigated by periodic trail maintenance. No floodplain or wetland values would be affected.

No new impacts would occur as a result of continuing present conditions under alternative A.

A total of approximately 30 acres of second-growth pine, pine/oak, and mixed hardwood forests would be disturbed under alternative B. Other natural resource impacts would be the same as those described for the proposal.

Impacts on Cultural Resources

No known sites eligible for or listed on the National Register of Historic Places would be affected by trail construction under the proposal or alternative B. However, the entire parkway has not been completely surveyed, so there may be unknown cultural material within trail alignments. A complete survey of trail alignments would be done, and if sites were located that were eligible for listing on the National Register, trail routes would be adjusted or site disturbance would be mitigated through data recovery.

Four previously recorded archeological sites (sites NATR 21 - 24), which may lie within or adjacent to the Nashville trail segment alignment, were recently located and reevaluated (NPS, Atkinson 1985b). Site NATR 21 was found outside the parkway boundary, and site NATR 22 apparently does not exist. Testing of sites NATR 23 and 24 (lithic scatters) revealed no subsurface remains, and neither site is believed to be eligible for listing on the National Register of Historic Places. Both sites, however, will be monitored during the construction of the parkway and trail.

No new impacts would occur under the no-action alternative.

COMPLIANCE STATUS

This plan is in compliance with the National Historic Preservation Act of 1966 and in accord with the provisions of the programmatic memorandum of agreement between the Advisory Council on Historic Preservation, the National Conference of State Historic Preservation Officers, and the National Park Service. Additionally, the National Park Service has concluded that no federally protected plant or animal species or critical habitat would be adversely affected, nor would any modification or occupation of floodplains or wetlands occur as a result of this plan.

For a detailed discussion of compliance procedures, see the "General Management Plan/Environmental Assessment" section of this document.

An Act To provide for an appropriation of $50,000 with which to make a survey of the Old Indian Trail known as the "Natchez Trace", with a view of constructing a national road on this route to be known as the "Natchez Trace Parkway", approved May 21, 1934 (48 Stat. 791)

Natchez Trace Parkway.

Preamble.

Whereas the Natchez Trace was one of the most ancient and important Indian roads leading from the territory in the section of Tennessee about Nashville in a southwest course, crossing the Tennessee River at Colbert Shoals a few miles below Muscle Shoals, thence passing in a southwest course through the Chickasaw and Choctaw Indian lands in what is now Mississippi, in an almost direct course by Jackson, Mississippi, to Natchez; and

Whereas the Natchez Trace is located throughout almost its entire length on highlands between watersheds on the most suitable route over which to establish the national parkway through a section of the country greatly in need of such road facilities from a national standpoint to connect the North and East directly with the Natchez, New Orleans, and southwest section of the country; and

Whereas the Natchez Trace was made famous for the service it rendered in affording General Jackson a route over which much of his forces moved to take part in Jackson's famous victory over the British at New Orleans, and also by reason of the fact that General Jackson returned with his army over this Trace to Nashville after the Battle of New Orleans; and

Whereas the Natchez Trace is known as one of the Nation's most famous old roads, and has been marked by handsome boulders with suitable inscriptions by the Daughters of the American Revolution at great expense, these boulders being placed every few miles from one end of the Trace to the other; and

Whereas unusual interest is being manifested in the building of a national parkway by the Government, Natchez Trace organizations having been perfected in almost every county through which the Trace passes; and

Whereas the Government has recently adopted a policy and set up a division in the Department of the Interior, known as the "National Park Service" to engage in a national way in laying out parks, reservations, and building parkways: Therefore

Appropriation authorized for surveying.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled. That there is hereby authorized to be appropriated out of the Treasury of the United States, a sum not exceeding $50,000 to be used by the Department of the Interior through the National Park Service with which to make a survey of the Old Natchez Trace throughout its entire length leading from the section of Tennessee about Nashville to Natchez, Mississippi, the same to be known as the "Natchez Trace Parkway." The said survey shall locate the Natchez Trace as near as practicable in its original route. An estimate of cost of construction of an appropriate national parkway over this route, and such other data as will be valuable shall be obtained by said survey with the objective of determining matters concerning the construction of the Natchez Trace Parkway.

Cost of construction to be estimated.

An Act To provide for the administration and maintenance of the Natchez Trace Parkway, in the States of Mississippi, Alabama, and Tennessee, by the Secretary of the Interior, and for other purposes, approved May 18, 1938 (52 Stat. 407)

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That all lands and easements heretofore and hereafter conveyed to the United States by the States of Mississippi, Alabama, and Tennessee for the right-of-way for the projected parkway between Natchez, Mississippi, and Nashville, Tennessee, together with sites acquired or to be acquired for recreational areas in connection therewith, and a right-of-way for said parkway of a width sufficient to include the highway and all bridges, ditches, cuts, and fills appurtenant thereto, but not exceeding a maximum of two hundred feet through Government-owned lands (except that where small parcels of Government-owned lands would otherwise be isolated, or where topographic conditions or scenic requirements are such that bridges, ditches, cuts, fills, parking overlooks, and landscape development could not reasonably be confined to a width of two hundred feet, the said maximum may be increased to such width as may be necessary, with the written approval of the department or agency having jurisdiction over such lands) as designated on maps heretofore or hereafter approved by the Secretary of the Interior, shall be known as the Natchez Trace Parkway and shall be administered and maintained by the Secretary of the Interior through the National Park Service, subject to the provisions of the Act of Congress approved August 25, 1916 (39 Stat. 535), entitled "An Act to establish a National Park Service, and for other purposes", the provisions of which Act, as amended and supplemented, are hereby extended over and made applicable to said parkway: *Provided,* That the Secretary of Agriculture is hereby authorized, with the concurrence of the Secretary of the Interior, to connect with said parkway such roads and trails as may be necessary for the protection, administration, or utilization of adjacent and nearby national forests and the resources thereof: *And provided further,* That the Forest Service and the National Park Service shall, insofar as practicable, coordinate and correlate such recreational developments as each may plan, construct, or permit to be constructed, on lands within their respective jurisdictions, which, by mutual agreement, should be given special treatment for recreational purposes. (16 U.S.C. sec. 460.)

Natchez Trace Parkway, Miss., Ala., and Tenn.

Administration and maintenance of right-of-way, etc.

Sites for recreational areas.

Right-of-way width.

Name.

16 U.S.C. sec. 1-4.

Provisos.

Connection of roads and trails with parkway.

Coordination of recreational developments with Forest Service.

SEC. 2. In the administration of the Natchez Trace Parkway, the Secretary of the Interior may issue revocable licenses or permits for rights-of-way over, across, and upon parkway lands, or for the use of parkway lands by the owners or lessees of adjacent lands, for such purposes and under such nondiscriminatory terms, regulations, and conditions as he may determine to be not inconsistent with the use of such lands for parkway purposes. (16 U.S.C. sec. 460a.)

Revocable licenses of permits for rights-of-way, etc.

Excerpt from "An Act To amend the Act of June 30, 1936 (49 Stat. 2041), providing for the administration and maintenance of the Blue Ridge Parkway, in the States of Virginia and North Carolina, by the Secretary of the Interior, and for other purposes," approved June 8, 1940 (54 Stat. 250)

Acceptance by U. S. of lands, etc., for Blue Ridge or Natchez Trace Parkways.

SEC. 3. The Secretary of the Interior is hereby authorized, in his discretion, to approve and accept, on behalf of the United States, title to any lands and interests in land heretofore or hereafter conveyed to the United States for the purposes of the Blue Ridge or the Natchez Trace Parkways, or for recreational areas in connection therewith. (16 U.S.C. sec. 460a-1.)

An Act To permit the relinquishment or modification of certain restrictions upon the use of lands along the Natchez Trace Parkway in the village of French Camp, Mississippi, approved January 7, 1941 (54 Stat. 1227)

Natchez Trace Parkway.

Use of privately owned lands in village of French Camp.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of the Interior, in his discretion, is hereby authorized to relinquish or modify certain restrictions upon the use of privately owned lands in the village of French Camp along the Natchez Trace Parkway, which restrictions have been imposed thereon by the scenic easement deed dated May 19, 1938, which is recorded in book 24, pages 333-336, of the Record of Deeds in the office of the clerk of the chancery court of Choctaw County, Mississippi, said lands being situated in section 31, township 17 north, range 9 east, Choctaw County, Mississippi.

Execution of instruments of conveyance. Cost of recording.

SEC. 2. The Secretary of the Interior is authorized to execute such instruments of conveyance as may be necessary for the purposes of this Act. The cost of recording such instrument shall be paid out of any funds available for the Natchez Trace Parkway. (16 U.S.C. sec. 460 note.)

An Act To authorize the Secretary of the Interior to enter into an agreement for relocating portions of the Natchez Trace Parkway, Mississippi, and for other purposes, approved August 25, 1958 (72 Stat. 839)

Natchez Trace Parkway, Miss. Relocation.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of the Interior is authorized to enter into an agreement with the Pearl River Valley Water Supply District which shall provide for the district, upon terms and conditions which the Secretary determines are in the public interest, to relocate those portions of sections 3-0 and 3-N of the Natchez Trace Parkway in Madison County, Mississippi, required in connection with the Pearl River Reservoir.

SEC. 2. To cooperate in the relocation, the Secretary of the Interior is authorized to transfer to the Pearl River Valley Water Supply District the aforesaid portions of the existing Natchez Trace Parkway lands and roadway in exchange for the contemporaneous transfer to the United States of relocated parkway lands and roadway situated and constructed in accordance with the terms and conditions of the agreement authorized by the first section of this Act: *Provided*, That such exchange shall be made on the basis of approximately equal values.

SEC. 3. The Secretary of the Interior is authorized to accept and to use until expended without additional authority any funds provided by the district for the purpose of this Act pursuant to agreement with the Secretary of the Interior, and any such funds shall be placed in a separate account in the Treasury which shall be available for such purpose. (16 U.S.C. § 460 note.)

An Act To authorize the purchase and exchange of land and interests therein on the Blue Ridge and Natchez Trace Parkways, approved June 30, 1961 (75 Stat. 196)

Blue Ridge and Natchez Trace Parkways. Land acquisition.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That, in order to consolidate, on the Blue Ridge Parkway and the Natchez Trace Parkway, the land forming each such parkway, to adjust ownership lines, and to eliminate hazardous crossings of and accesses to these parkways, the Secretary of the Interior is authorized to acquire, by purchase or exchange, land and interests in land contiguous to the parkways. In consummating exchanges under this Act, the Secretary may transfer parkway land, interests therein, and easements: *Provided*, That the property rights so exchanged shall be approximately equal in value. (16 U.S.C. § 460a–5.)

An Act To include Ackia Battleground National Monument, Mississippi, and Meriwether Lewis National Monument, Tennessee, in the Natchez Trace Parkway, and to provide appropriate designations for them, and for other purposes, approved August 10, 1961 (75 Stat. 335)

Natchez Trace Parkway, Miss.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That to facilitate the administration of two areas of the national park system, known as Ackia Battleground National Monument, Mississippi, and Meriwether Lewis National Monument, Tennessee, those areas are included in the Natchez Trace Parkway, which they adjoin; and they shall be administered as a part of the parkway. In order to provide continued recognition of the significance of these portions of the parkway, the Secretary of the Interior shall provide them with appropriate designations in accordance with the historical events which occurred on them. (16 U.S.C. § 460–1.)

APPENDIX B: MANAGEMENT OBJECTIVES
NATCHEZ TRACE PARKWAY

GENERAL

Manage the parkway in a manner consistent with the purposes of preservation, enjoyment, and benefits to humankind through the safe use of its distinctive combination of man-made, natural, and cultural resources.

MANAGEMENT, ADMINISTRATION, AND SUPPORT

Ensure efficient use of financial and human resources.

Ensure personnel management programs are fairly and consistently applied in accordance with NPS policies.

Keep the public well informed of parkway plans and programs.

NATURAL RESOURCE MANAGEMENT

Protect and perpetuate the significant natural resources within the parkway, consistent with legislative and executive mandates and NPS "Management Policies."

Encourage a variety of natural ecosystems in various stages of development.

Perpetuate the historical farm scene and ensure that lands designated for agricultural use are maintained in a balanced, productive condition.

Minimize, to the extent possible, the adverse impact of exotic plants (e.g., mimosa, kudzu, and Japanese honeysuckle) and animals (e.g., fire ant) on the parkway's natural resources and processes.

Cooperate with neighbors in the control of natural developments (e.g., beaver and insect activity) which adversely impact adjacent land.

Minimize the impact on natural resources where parkway land is essential for utility and transportation corridors and other development.

CULTURAL RESOURCE PRESERVATION

Identify, evaluate, protect, and preserve the parkway's cultural resources in a manner consistent with legislative and executive requirements and the National Park Service's historic preservation policies.

Identify all remnants of the historic Natchez Trace within the boundaries of the parkway, and restore and maintain them as nearly as practicable to their 1810 appearance.

Reduce, to the degree possible, deterioration of historic structures that are determined, through objective evaluation, to merit long-term preservation for interpretive or other purposes. This includes the preservation and maintenance of the interior, exterior, and grounds of the Mount Locust historic house (1820) as an example of a typical old Natchez Trace stand and the grounds of the Gordon House (1818) to their appearance at the time the house was built.

Protect all other National Register properties and maintain each to the extent necessary to ensure its continued preservation, including the eight major interpreted archeological sites to reflect their historically authentic appearance at the time that they were occupied by native Indian tribes.

Protect and maintain within the parkway boundaries all cemeteries no longer being used for burials and restore those cemeteries accessible for public viewing and interpretation.

Ensure that cultural resources and settings are maintained in a manner compatible with natural resource management objectives.

INTERPRETATION AND VISITOR SERVICES

Adequately inform visitors and potential visitors of the opportunities and limitations presented by the parkway before and during their visits; inform visitors of the means of using the parkway safely and responsibly.

Provide public educational services designed to foster increased awareness, understanding, and appreciation of the scenic, cultural, and natural resources of the parkway.

Develop and provide public programs and services in order to support identified management needs and to enhance public relations.

Develop programs and services designed to offer both safe activities for visitors and minimum impact on the resource.

Preserve the cultural and natural resources accessioned into the parkway museum collection.

VISITOR USE

Make available opportunities for resource-related visitor activities which optimize the visitor's appreciation of the parkway's natural, cultural, and aesthetic values.

Promote visitor activities at appropriate locations, levels, and times so as to minimize adverse impacts on parkway resources and the visitor experience.

Evaluate and control as necessary parkway use (including hiking, water-based activities, camping, and horse use) and its impact on the parkway's resources and the quality of visitor experiences (including sanitation and health conditions).

Minimize the potential for user conflicts which impair the quality of the parkway experience (e.g., conflicts between motorists and bicyclists or joggers; hikers and horseback riders).

VISITOR PROTECTION AND SAFETY

Provide a safe, limited access roadway, and identify and correct all hazards which could result in injuries or loss of resources.

Provide a safe environment for visitors and employees.

Protect visitors and employees from anti-social and criminal acts.

CONCESSIONS

Provide high-quality commercial services on the parkway where necessary and where not provided in the local communities.

Ensure that such visitor services as are appropriately provided by concessioners or permittees are operated in a safe, sanitary, and environmentally acceptable manner; are reasonably priced; and meet NPS standards of quality. Also, encourage the provision of commercial facilities and services at appropriate locations outside the parkway.

MAINTENANCE

Provide a clean, well-maintained park.

Maintain the parkway water systems in accordance with the Safe Drinking Water Act.

Maintain the park sanitary facilities in accordance with the requirements of the Federal Water Pollution Control Act.

Maintain all facilities in the park in accordance with the Air Quality Act.

Maintain all roads, trails, buildings, and other developments in a safe and aesthetically pleasing condition and prevent deterioration that would render them unsightly, unsafe, or beyond efficient repair.

Ensure a readily identifiable boundary.

PLANNING AND CONSTRUCTION

Complete the construction of the parkway motor road and associated developments.

Ensure that all developments for park administration, visitor use, and concessioner operations are the minimum necessary for safe, efficient park administration and essential visitor services, consistent with other parkway objectives and NPS policies; and ensure for each visitor an attractive, safe, and sound environment.

Provide in developed areas public health measures such as safe surfaces, traffic control, sanitation, and other amenities normally expected in heavily used public places.

Provide the handicapped access to existing and proposed park facilities in accordance with PL 90-480.

Plan and construct additional trails within the Natchez Trace Parkway right-of-way, commensurate with public needs.

LAND ACQUISITION

Identify and acquire lands for parkway development, elimination of hazardous grade crossings, and preservation of the scenic integrity of the parkway.

APPENDIX C: VISITOR USE ANALYSIS AND RECOMMENDATIONS FOR COUNTING VISITORS

It is believed that only a small percentage of people visit the parkway to drive its entire length as currently constructed; rather, people going to other national, regional, and local destinations choose portions of the parkway as an alternative to other state and federal highways. It appears that a substantial number of parkway users are local commuters who use the parkway to drive to and from work.

The average annual visitation to the Natchez Trace Parkway for the last 10 years has been approximately 15.1 million visitors (see table C-1). However, a recent analysis of the monthly visitation records reveals that these annual visitation figures should be viewed with some skepticism. The earlier counting procedure consisted of counting all cars entering the parkway, multiplying this by an estimated number of people per car, and allocating 33 percent of this count to nonrecreation visits. The multiplier is now judged to be too high, and the amount allocated to nonrecreation too low.

Over the last 10 years, an average visitation increase of 3 percent per year has been recorded at the parkway. Shiloh and Vicksburg national military parks, both near the parkway, are following a declining visitation trend, showing a 3 percent and a 2.5 percent decrease in visitation respectively over the last 10 years.

Comparing parkway visitation patterns to those at Shiloh and Vicksburg (see tables C-2, C-3, and C-4), the two battlefield sites show seasonal patterns common to many national parks. Visitation peaks during the summer vacation season and drops dramatically during the cold weather months. However, the parkway receives more continuous year-round use, again supporting the belief that the parkway serves as a nonrecreational transportation route. The only indicators of any seasonal use are recorded overnight campground stays and visitation to the visitor centers at Tupelo, Mount Locust, and the Ridgeland Crafts Center. Because commuters seldom camp along the parkway and few stop at the visitor centers, it is assumed that the overnight stay and visitor center figures reflect a more accurate recreational user pattern. This analysis indicates that April, May, June, and October constitute the recreational peak use months, with December and January representing low use periods. Hot summers and an abundant variety of insects probably account for July and August not being peak use months. Spring and fall colors and the accompanying cooler temperatures make these two seasons more attractive to campers and other recreation visitors.

On weekdays, the parkway receives its peak use during the early mornings and late afternoons when commuters are driving to and from work. On weekends, those parkway segments near urban centers tend to receive heavy use, with people participating in leisure driving, picnicking, bicycling, walking, and jogging. There are 72 campsites in the parkway, and this number seems adequate since overnight stays have remained well below capacity for the last 10-year period.

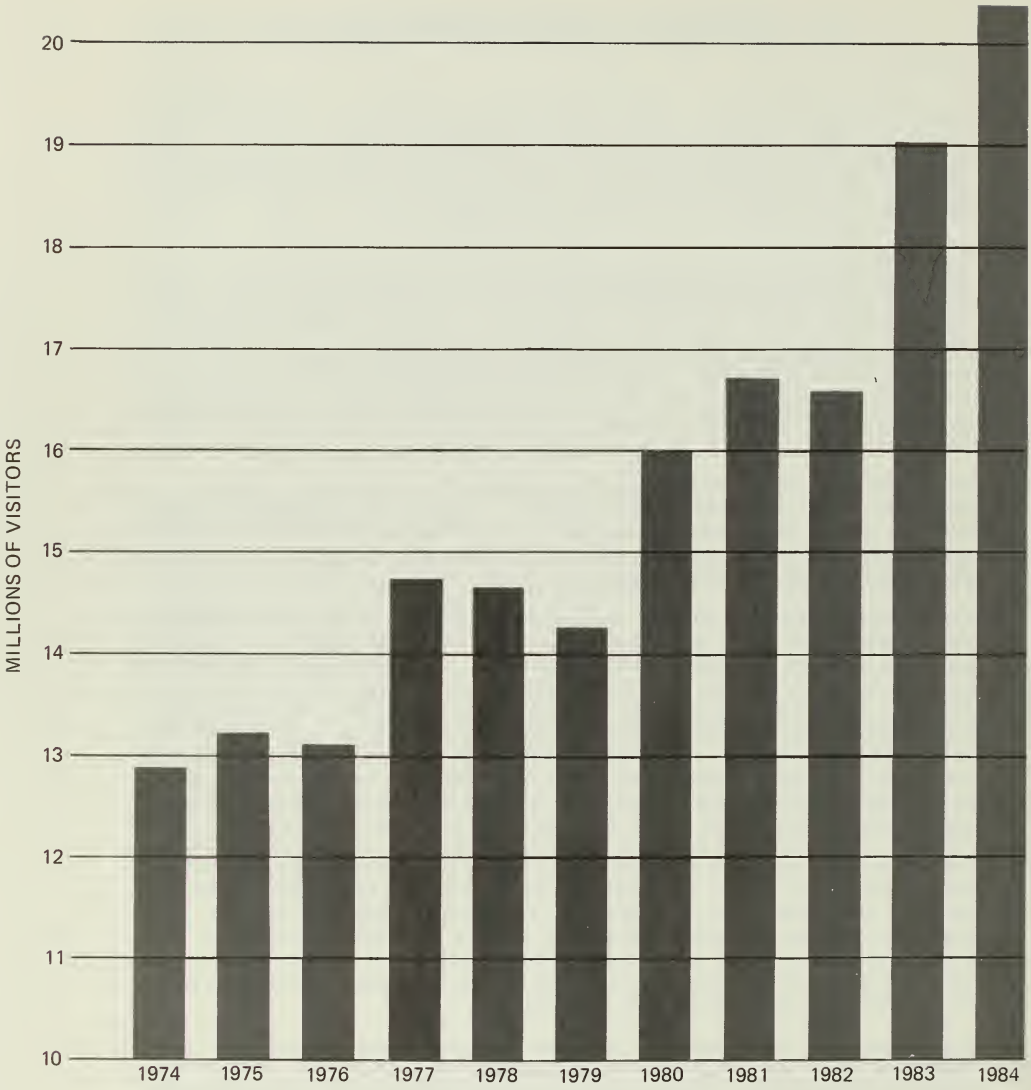

Table C-1: Reported Total Annual Visits to Natchez Trace Parkway

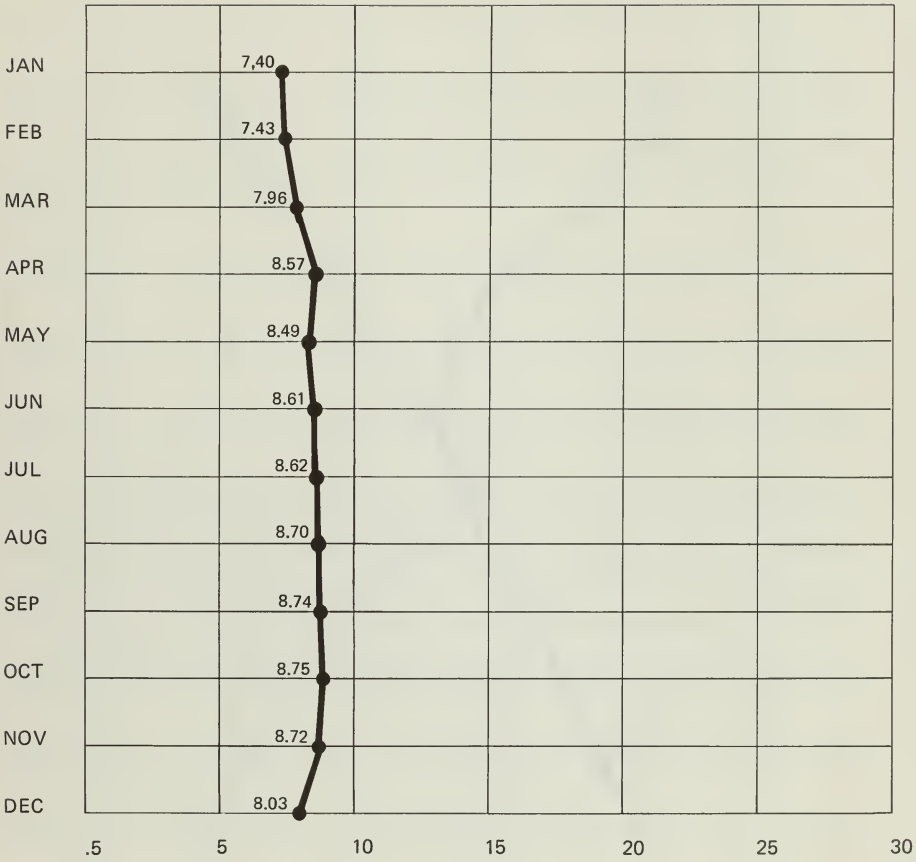

Table C-2: Proportion of Annual Visits (in percent) by Month 1980-1982

Natchez Trace Parkway

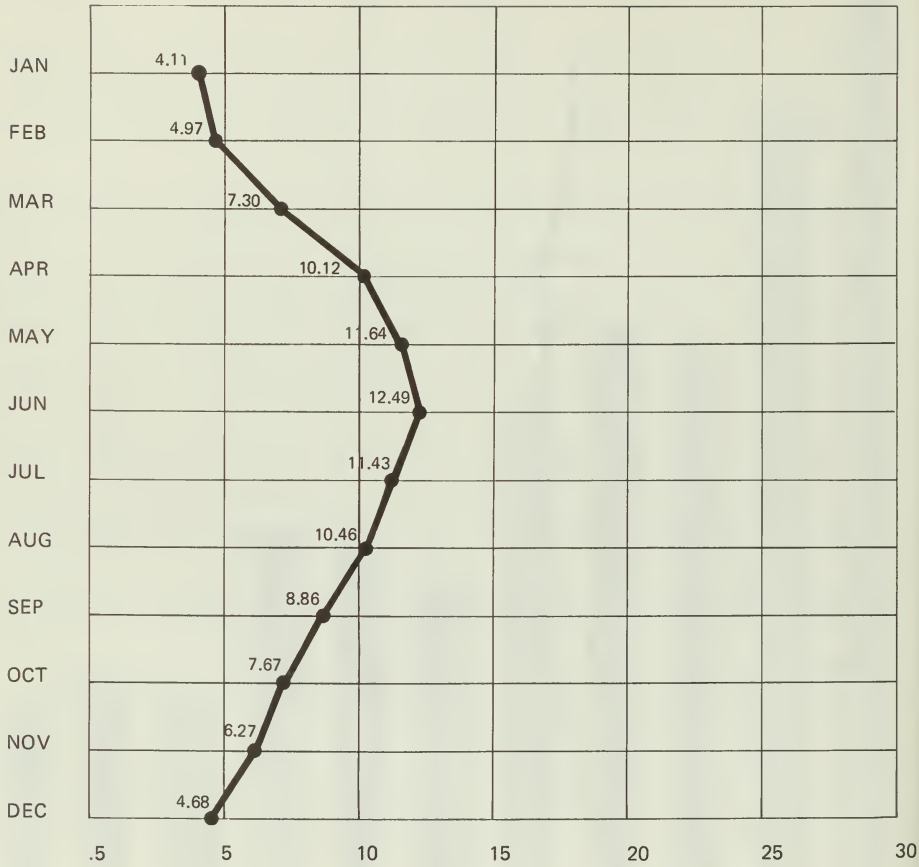

Table C-3: Proportion of Annual Visits (in percent) by Month 1980-1982

Shiloh NMP

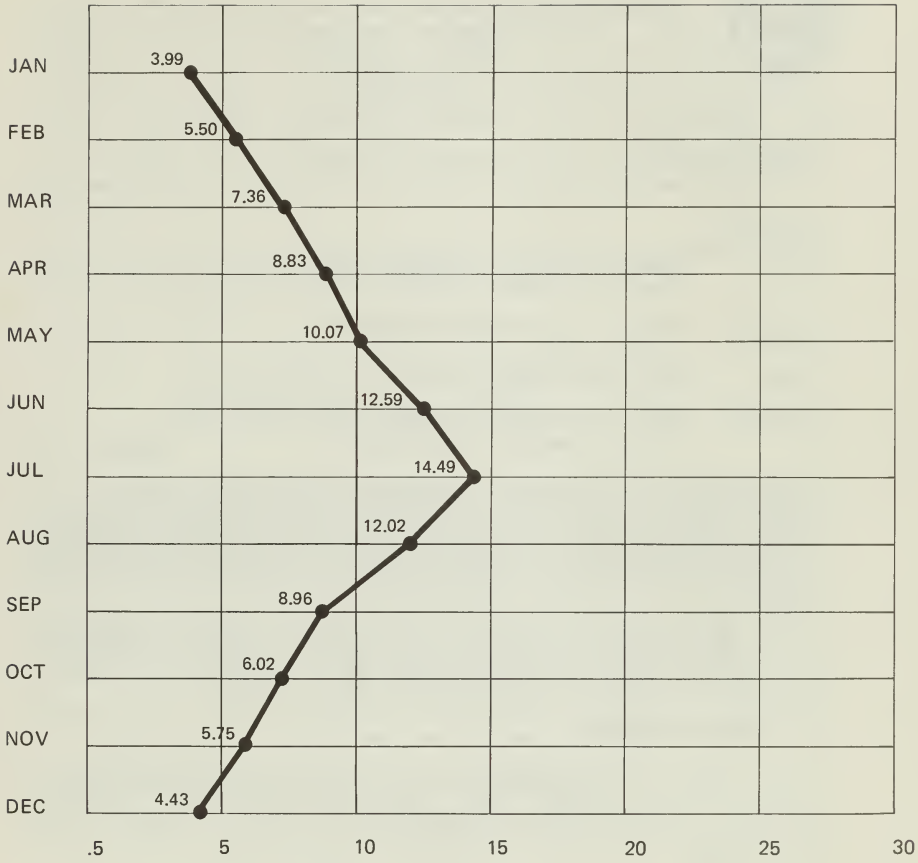

Table C-4: Proportion of Annual Visits (in percent) by Month 1980-1982

Vicksburg National Military Park

United States Department of the Interior
NATIONAL PARK SERVICE
DENVER SERVICE CENTER
755 Parfet Street
P.O. Box 25287
Denver, Colorado 80225

IN REPLY REFER TO:

N4615 (DSC-PNT)

NOV 13 1984

Memorandum

To: Regional Director, Southeast Region
Attention: Superintendent, Natchez Trace Parkway

Through: Manager, Denver Service Center

From: Chief, Statistical Office

Subject: Report of Findings, Natchez-Trace Parkway Audit of Public Use Reporting Program

The purpose of a park audit is to establish documentation that a conscientious effort is being made to count public use according to the common terms in use by all outdoor recreation land management agencies, to adhere to consistent and reasonable practices of data collection, and to make timely and acurate reports to central offices, Congress, and the public.

During the last week of October, 1984, field survey statistician Edward Newlin visited the Natchez Trace Parkway for the purpose of examining the method of measuring, compiling, and reporting public use.

I. Current Practices

Total vehicular count at the park is measured by 85 pneumatic tube counters located at access lanes. The counters measure one half count per pulse or one count per two axle vehicle. Counters are read monthly by sub-district personnel. Readings are telephoned into park headquarters.

The calls are taken by clerical staff who prepare the Monthly Public Use Report (10-157). A 1% reduction is made to correct for non-reportable use. The resulting number is multiplied by 2.8 as a persons-per-car multiplier to obtain total visits.

Sometime before 1971 a study was made of the amount of public use which was recreational and non-recreational (A2615-SEK((CP, January 4, 1971). We are told a study was conducted by a local university but no documentation could be produced. Doubt was expressed that the results (in use for 14 years now) continue to be valid and may not have been valid to begin with because interviews could only be conducted at service stations and other areas where people were stopped. The result was one third non-recreational and two thirds recreational public use and the 2.8 figure mentioned above and the visitor hour estimates mentioned below.

Occupancy of campground sites is counted daily by the park personnel. The persons per campsite multiplier in use is three.

The visitor hours are estimated as follows:

Recreation Visits. . . . 3 hours
Non-recreation Visits. . 1 hour
Overnight Stays . . . .15 hours

II. Findings

A brief survey of traffic was conducted (334 vehicles) during the week of the audit in Cherokee, Koscuisko, and Tupelo ranger districts. The average persons-per-vehicle was found to be 1.485 and gives cause for doubt that the figure in use since 1971 (2.8) is current or correct for all areas of the parkway. Over 56% of the vehicles carried only the driver. The number of vehicles carrying 3 or more persons was under 11%. Single occupant vehicles are not believed to be in the park for recreational purposes according to the bulk of studies of outdoor recreation which suggest it is a group activity.

The park has a small but consistent seasonality pattern as is indicated by it one measure of recreational use, overnight stays.

Average Percent of Annual ONS, by Month (1971-1982).

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec Total
2.0	2.8	8.6	12.8	13.2	10.5	9.2	8.3	9.0	13.8	7.0	2.6/99.8

This suggests that the recreational counts will also vary by month. The recommended method of counting will automatically correct for this.

The nature of public use of the park can be expected to change over the years, especially the years since 1978. Private driving patterns have been changing nationally and in the region which is the park's ecology. According to the Denver Service Center planning team the following illustrates the degrees of social change which have surrounded the park over the years:

	1960-70 Population Change	1970-1980 Population Change	Percent Urban 1970	1980
Natchez	-4.8	0.4	26.4	33.9
Port Gibson	3.9	39.9	55.1	66.4
Ridgeland	9.2	28.4	32.0	28.2
Koscuisko	-5.5	6.0	18.3	18.6
Dancy	0	6.9	26.4	27.3
Tupelo	9.2	21.7	22.2	26.4
Cherokee	8.6	14.0	54.0	54.0

If the park is to have data which can be used for management and planning it would be beneficial to maintain the quality of public use data.

III. Corrective Measures-Park

A. Accurate Counters

Pneumatic tube counters are unreliable and should be replaced over time or calibrated to estimate and correct for the degree of error they create. Replacement at high counting areas like Koscuisko and Tupelo are especially important. The Statistical Office is willing to help start conversion in 1985 (see IV. A. below).

B. Counting Recreation Visits

Mention has been made of park use that does not disembark in the park but enjoys the area by passing through the park. The statistical policy of the National Park Service is that "commuters, inholders, and other through traffic" is nonrecreational in nature (Reports Management Handbook, page 5, enclosed). Pass through is specifically excluded from the recreational category. Only pullout and related counts can be accepted as recreational public use.

Ranger patrols pass pullouts daily and observe or even stop at these sites. We recommend a log be kept of the date, time, and number of vehicles and occupants at each pullout, picnic area, visitor center parking lot, or other area where people use the park for recreational purposes. These counts would also enhance the level of monitoring at these areas and serve as a reasonable supervisory control as well as yield good recreational use data.

These counts, multiplied times the persons-per-vehicle ratio for these areas, would be subtracted from the total count from the traffic counters to give actual recreational use. The number remaining is nonrecreational use.

C. Nonrecreation Count

The National Park Service definitions of public use do not allow for repeat counts of same day use, i.e. entry of the same party more than once each day. A large amount of the use of the park is commuter traffic which uses the parkway going to and returning from work which amounts to a double count. A certain amount of traffic will be interstate travel.

Spot surveys need to be made of the number of out-of-state licenses to create an estimate of the percentage which can be taken to be interstate traffic and nonrecreational persons-per-vehicle multiplier (a copy of the Statistical Surveys Handbook has been left with the park staff to assist accomplishing these surveys). The spot surveys will also enable the park to discover the extent to which multi-axle corrections need to be made in the noncommuter part of nonrecreational use.

The percentage out-of-state can be reported directly under the assumption the majority of this use does not include the double counting which would be associated with commuter use. The remainder of the total count would be commuter use and should be cut in half and reported.

IV. Corrective Measures-Statistical Office

A. The Statistical Office will acquire a limited number of magnetic loop counters for Natchez Trace in 1985 if the park provides a simple plan for their location in the Tupelo and Koscuisko Ranger Districts and is willing to install the equipment.

B. If the park wishes, we will schedule an additional audit of the Natchez Trace in 1985 to further assist with the implementation of correction measures.

V. Certification of Public Use

The Statistical Office is asked to certify as correct public use data which is a part of National Park Service documents. The figures reported by the Natchez Trace Parkway cannot be certified correct and should not be used in administrative, planning, or management applications of the National Park Service until corrections can be made.

VI. Conclusion

Credibility of public data reported through the Statistical Office is the responsibility of each superintendent. If people are skeptical of park data, bids for needed resources may be overlooked. If a park's data are credible, the park's needs are much more likely to be acknowledged.

Data resulting from corrective action suggested here may be reported after January 1, 1985.

/s/ Kenneth Hornback

Kenneth E. Hornback

Enclosure

APPENDIX D: CULTURAL RESOURCE SITES

PREHISTORIC SITES

Emerald Mound - Milepost 10.3

Emerald Mound is a very impressive ceremonial mound that has an associated village area. The latter has eroded away. It is the third largest Indian mound of any type and the second largest ceremonial mound in the United States. The mound was constructed and used during the Mississippian period, approximately A.D. 1300-1600. Two secondary mounds are located on either end of the mound top. Archeological evidence indicates that six tertiary mounds were built between the secondary mounds. All of the secondary and tertiary mounds probably supported wooden ceremonial structures. Trees currently grow on the top and sides of the mound and obscure its visibility.

Mangum Site - Milepost 45.7

The Mangum site is an extensive burial site that lies on top of an isolated, natural knoll. The burials are representative of the "Southern Death Cult" era of the Mississippian period, and the site was an active burial ground about A.D. 1500 for a village or villages which have not yet been located. Natural weathering processes have probably softened the contour of the knoll from its original appearance.

Boyd Mounds - Milepost 106.9

The Boyd site consisted of six burial mounds and a small village site. The village site and one mound have been cleared of trees to make them visible to the public. Of the remaining mounds, one cannot be located; three are so diffuse as to not be readily visible; and the last mound (mound 4), located near the mound which is currently interpreted, is still visible but obscured by the growth of a large tree. The mounds were built by the accretion of burials and not one large effort. The village site is eroded and was occupied during the period A.D. 300-1,000. There is evidence of earlier activity at the site and of historic Choctaw presence.

Bynum Mounds - Milepost 232.4

Bynum Mounds originally consisted of a village site and six burial mounds, four of which have been destroyed by road construction and cultivation. The remaining two mounds are well defined and clearly visible (55 feet in diameter by 10 feet high and 80 feet in diameter by 14 feet high). These mounds represent six "status" burials, with attendant grave goods. Of interest are the copper "wrist" spools, filled with

galena, which were located with one of the Woodland burials and which evidence the cold working of copper. The site was first occupied during the Woodland period around 100 B.C. but was later reoccupied by the historic Chickasaw.

Chickasaw Village - Milepost 261.8

Chickasaw Village is displayed as a fortification and three house structures. Additional houses and other features are probably present in unexcavated portions of the village area. No above-surface remains are visible. The outlines of the fortification and houses are shown on the ground by concrete curbing. The site is representative of the defensive system of the Chickasaw and of their residential structures. Investigations indicate that this was a small village site that was occupied during the early part of the 18th century.

Pharr Mounds - Milepost 286.7

Pharr Mounds is an impressive site that consists of eight large burial mounds and a village area that was occupied after the mounds were constructed. The site was intensively occupied A.D. 0-200 (Woodland) but had both an earlier and later (Mississippian) occupation. The palisaded village was occupied during the Mississippian period. Village sites that are contemporary with the burial mounds have been located in the vicinity, and some believe that the Pharr Mounds may have served as a burial site for these villages. The mounds are highly visible because trees and other shrubs have been cleared from the area.

Bear Creek Mound - Milepost 308.9

The Bear Creek Mound is a restored temple mound and a cleared village area. It measures 85 feet on each side and 10 feet high. Although the site area shows occupation as early as the Paleo-Indian and as late as the Mississippian period, it was during the later period that the ceremonial mound was constructed. The earlier occupations were transitory in nature. The mound is cleared of trees and shrubs so that it is visible.

Other Sites

Although only 40-50 percent of the parkway lands have been archeologically surveyed, over 200 sites have been located. This number of sites within the parkway will expand considerably as the survey work is completed and as earlier survey work is verified.

As previously stated, the prehistoric resources that have been located present not only an extremely variable array of site types/function (shell middens, camp sites, lithic quarries, village sites, burial mounds, and ceremonial mounds), but the entire continuum of prehistoric times (Paleo-Indian to protohistoric Indian).

HISTORIC SITES

Elizabeth Female Academy - Milepost (unassigned)

Located approximately one-fourth mile southeast of Washington, Mississippi, are the ruins of the Elizabeth Female Academy, named in honor of its founder, Mrs. Elizabeth Roach. Here from 1818 to 1845 young ladies from the surrounding region furthered their learning in the arts and sciences. The academy, along with Jefferson College in Washington, were evidence that the quiet, agrarian community was determined to bring knowledge and culture to its children, rather than "sending them off" to engage in such pursuits elsewhere. Although founded by the Mississippi Methodist Conference, both the faculty and student body were interdenominational. The ruins consist of a partial wall and the remnants of a cistern and well. The ruins have been somewhat stabilized.

Mount Locust - Milepost 15.5

Perhaps the most significant remaining historic structure on the Natchez Trace Parkway, Mount Locust dates from the last quarter of the 18th century when the Spanish still occupied the Natchez area. Contrary to what is often true of frontier structures, the oldest portion of this recently restored early plantation house exhibits convincing evidence of a high order of craftsmanship, thereby sustaining a widely held belief in Natchez that the region was settled by people of property, taste, and skill.

Although never advertised as such, Mount Locust evidently served as a stand on the old Natchez Trace and is directly associated with every phase of the history of the Natchez Trace. Later developed to profit from the vastly increased traffic of a post road and nationally important highway, it was a well-known landmark for more than half a century. It continued to shelter guests when this part of the trace was little more than a road from Natchez to Jackson. The site is currently preserved and managed as an interpreted historical site.

Grindstone Ford - Milepost 45.7

This site marks the crossing of the Natchez Trace over Big Bayou Pierre. For the northbound traveler it meant the "jumping off point" in the wilderness of Indian country. For the southbound traveler it signified a return to civilization after crossing the wilderness.

Rocky Springs - Milepost 54.8

Located within the Rocky Springs developed area is a portion of the community bearing that name. Rocky Springs was a rural community of approximately 25 square miles, and it was only a town in the sense of a

New England town, a colonial Virginia parish, or a medieval English village. As the name implies, a spring was present, and around it grew religious, trade, educational, social, and some residential services associated with the community.

Settlement began in the late 1790s, and the community provided a resting place for travelers on the Natchez Trace. Being an agrarian community that served "king cotton," it nearly died when cotton ceased to be the dominant crop. The dreaded boll weevil did the final damage, and the last store closed during the 1930s.

Other than the Methodist Church, located on adjoining private land and dating from the mid-19th century, no extant structures associated with Rocky Springs remain. However, the trail leading from the campground to the townsite does follow a well-preserved section of the old Natchez Trace.

Robinson Road - Milepost 135.5

Constructed in 1821, the Robinson Road functioned within the same corridor between the Big Black and Tombigbee rivers, running from Columbus, Mississippi, to a point on the Natchez Trace between Doak's and Brashears stands. Because the Natchez Trace was primarily a ridge road, conditions near it were not conducive to large settlements that tended to spring up elsewhere. The presence of such larger communities meant better overnight facilities and food services than could be found at the isolated stands on the old road. Thus, the opening of the Robinson Road helped reduce travel on the Natchez Trace, and it represented one more factor leading to the eventual demise of the Natchez Trace as a national road. At milepost 135, where the Robinson Road crosses the parkway, the east-west road prism is easily detectable.

Red Dog Road - Milepost 140.0

Opened in 1824, this spur off the old Natchez Trace ran to Canton, Mississippi. Named for a Choctaw chief, the road is still in use today because it has been incorporated into the Madison County road system.

Line Creek - Milepost 213.3

Line Creek once served as a boundary line between the lands claimed by the Chickasaw and those claimed by the Choctaw.

Tupelo National Battlefield - Off the Parkway

Tupelo National Battlefield is comprised of a 1-acre site along Mississippi Highway 6, within the urban limits of Tupelo. Administered by the Natchez Trace Parkway staff, this unit of the national park system is a

memorial to the battle of Tupelo, fought between Union and Confederate forces July 13-15, 1864. The battle was significant in that it virtually destroyed the confederate mounted infantry under General N.B. Forrest, thereby ending its effectiveness as a fighting unit.

Brices Cross Roads National Battlefield Site - Off the Parkway

Brices Cross Roads National Battlefield Site commemorates the battle of June 10, 1864, one of many engagements between Union and Confederate forces fought in the area during the waning months of the Civil War. The battle was significant in that it illustrated the effectiveness of a smaller mounted infantry (Confederate) against a much larger force (Union) of nonmounted infantry. The site is administered by the parkway staff.

Buzzard Roost Stand - Milepost 320.3

The site of this stand and any subsurface remains are within the parkway boundaries near milepost 320 in Lauderdale County, Alabama. The stand was operated from 1812 to 1815 by Levi Colbert and subsequently by his son-in-law, Kilpatrick Carter.

Colbert Ferry/Stand - Milepost 327.3

Within the parkway's Colbert Ferry developed area is the remaining foundation of what is purported to have been Colbert's Stand. George Colbert operated this stand in conjunction with his ferry across the Tennessee River between the years 1801 and 1819. The interpretive trail to the stand site follows an easily distinguishable section of the Natchez Trace, and it also leads to a point near the ferry crossing. The site of the ferry crossing was flooded by the construction of Pickwick Dam by the Tennessee Valley Authority.

Grinder's Stand - Milepost 385.9

Located within the parkway's Meriwether Lewis developed area are the foundation remains and a 1930s reconstruction of Grinder's Stand. First appearing in Natchez Trace travel journals and advertisements as early as 1812, Grinder's Stand was originally opened around 1808 or 1809. It was here in 1809 that Captain Meriwether Lewis, of Lewis and Clark expedition fame, met his untimely death under suspicious circumstances. At Captain Lewis's grave is a monolithic marker erected by the state of Tennessee in 1848.

John Gordon House - Milepost (unassigned)

This recently stabilized two-story brick house was built in 1818. It served as home for its namesake for only a short time because Gordon died in 1819 of pneumonia, which he contracted while fighting the Seminoles in Florida with Major General Andrew Jackson. Following John Gordon's death, his widow lived in the house until her death in 1859.

The designation of the post road in 1800 provided an opportunity for Gordon to use the experience he gained in the Indian wars and trade to capitalize on the benefits associated with travel on the Natchez Trace. He soon realized the need for a ferry crossing, a trading post, and a stand associated with Duck River. Allied with the chief of the Chickasaws, William Colbert, Gordon made a verbal contract to operate a trading establishment and ferry at Duck River. In 1805 the United States entered into a treaty agreement with the Chickasaw for the Duck River lands. Although Gordon was unsuccessful in securing some reservation lands for his use, by an act of September 13, 1806, the Tennessee General Assembly gave him 640 acres to thank him for previous efforts. In accordance with the Development Concept Plan, approved in 1984, the Gordon House site will serve as the main point of visitor contact at the northern end of the parkway, pending completion of the roadway into the Nashville area.

Anderson House - Milepost (unassigned)

Approximately 1 mile west of the Gordon house site, across Duck River, is the Anderson house. Little is known about the history of this one-story, modified dogtrot house that represents an interesting vestige of an early way of Tennessee life. It is known to have been built sometime in the 19th century when the dogtrot architectural style was very common. The referenced modifications include a room added on the southeast corner of the house, thereby giving the overall appearance of an ell.

Middle Tennessee Railroad Tunnel - Milepost (unassigned)

The tunnel passes beneath the proposed parkway, which is to be constructed on the crest of a narrow ridge (the parkway and old Natchez Trace are contiguous with the unimproved county road). It is about 150 feet long and 25 feet in diameter and is partially collapsed. The railroad hauled phosphate from strip mines to the west, which were chartered on October 25, 1907, and abandoned in 1928.

BOUNDARIES

As previously mentioned, the route of the parkway and the old Natchez Trace cross several historic boundaries that delineated ever-changing territories in the Old Southwest. The most noteworthy are listed below:

Lower Choctaw boundary (milepost 61.0) - separated the settled areas to the south and the beginning of Indian territory to the north

West Florida Boundary (milepost 107.9) - separated the territory under control of the United States from Spanish-controlled Florida

Upper Choctaw boundary (milepost 128.4) - marked by a line of trees that separated Choctaw territory to the south from Chickasaw territory to the north

Except for the line of trees along the upper Choctaw boundary, nothing remains to make the boundaries discernible.

CEMETERIES

Scattered along the entire length of the parkway are numerous historic cemeteries, some of which date to the early years of the 19th century. Currently, these cemeteries receive custodial care by parkway maintenance staff.

SITES OF OTHER STANDS, MISSIONS, VILLAGES, SETTLEMENTS, ETC.

Because the Natchez Trace was used to explore, settle, and develop the Old Southwest, it is only natural that many related activities would occur adjacent to or near the various routes of the old trace. Sites of some of these activities (e.g., Brashears Stand, McLish's Stand, the town of Union) are believed to be within the boundaries of the parkway. No aboveground features remain at these locations, although the possibility exists that subsurface features could be located.

APPENDIX E: BIOLOGICAL ASSESSMENT FOR ENDANGERED SPECIES

PURPOSE

In compliance with section 7 of the Endangered Species Act, the National Park Service has conducted an assessment of the probable impacts on endangered or threatened species or designated critical habitat that would result from implementing the proposed general management plan and comprehensive trail plan for the Natchez Trace Parkway. Data relating to studies of threatened or endangered species are presented below, as well as the conclusions of the National Park Service concerning impacts of the plans.

THE PROPOSED PLAN

The general management plan will guide resource management, visitor use, and development at Natchez Trace Parkway. The plan calls for maintaining most existing developed sites, completing the parkway (Mississippi--Madison, Hinds, Claiborne, Jefferson, and Adams counties; Tennessee--Hickman, Maury, Williamson, and Davidson counties), redesigning visitor access and parking at Emerald Mound (MS), providing small parking areas at four locations on the parkway, expanding visitor facilities at Colbert Ferry (AL) and Gordon House (TN) developed areas, and constructing or rehabilitating 22 of the sites in Tennessee. Alternatives considered in the plan are similar to the proposal but, as a maximum, would further expand visitor facilities at Coles Creek, Rocky Springs, River Bend, and Jeff Busby developed areas, all in Mississippi.

Natural resource management will emphasize managing parkway vegetation for scenic quality and cultural resource protection. However, sites providing habitat for federally or state protected species or unusual plant communities will receive special management consideration to ensure perpetuation of the biological resources.

LISTED SPECIES

The U.S. Fish and Wildlife Service's endangered species field offices in Jackson, Mississippi, and Asheville, North Carolina, were contacted concerning protected species in the parkway region. They advised that the following endangered species and threatened fish species could potentially be affected:

Mammals
Gray bat - *Myotis grisescens* (E)
Indiana bat - *Myotis sodalis* (E)

Birds
Bald eagle - *Haliaeetus leucocephalus* (E)
Red-cockaded woodpecker - *Picoides borealis* (E)

Reptiles
American alligator - Alligator mississippiensis (E)

Fishes
Slackwater darter - Etheostoma boschungi (T)
Bayou darter - Etheostoma rubrum (T)
Spotfin chub - Hybopsis monacha (T)

Clams
Birdwing pearly mussel - Conradilla caelata (E)
Cumberland monkeyface pearly mussel - Quadrula intermedia (E)
Orange-footed pearly mussel - Plethobasis cooperianus (E)
Pale lilliput pearly mussel - Toxolasma cylindrella (E)
Turgid-blossom pearly mussel - Epioblasma turgidula (E)
Yellow-blossom pearly mussel - Epioblasma florentina florentina (E)
Tan riffle shell - Epioblasma walkeri (E)

In addition to these federally protected species, the Asheville field office also listed 15 species in the region that are under status review for federal protection. Status review species are not currently protected under the Endangered Species Act but could be listed in the future. These species are listed below:

Plants
Water stitchwort - Arenaria fontinalis
Tennessee milk-vetch - Astragalus tennesseensis
Prairie-clover - Dalea foliosa
Tennessee glade cress - Leavenworthia exigua var. exigua
Pasture glade cress - Leavenworthia exigua var. lutea
Short's bladderpod - Lesquerella globosa
Gattinger's lobelia - Lobelia appendiculata var. gattingeri
Harbison haw - Cartaegus harbisonii
Eggert's sunflower - Helianthus eggertii
Tennessee yellow-eyed grass - Xyris tennesseensis
Yellow leaf-cup - Polymnia laevigata
Limestone flameflower - Talimun calcaricum

Amphibians
Hellbender - Cryptobranchus alleganiensis

Birds
Bachman's sparrow - Aimophila aestivalis
Appalachian Bewick's wren - Thryomanes bewickii altus

SURVEYS CONDUCTED AND STUDY METHODS

Data were collected by reviewing NPS files and environmental documents, and informal consultations were held with personnel from the Fish and Wildlife Service, the Mississippi Natural Heritage Program, the Alabama Natural Areas Inventory, the Tennessee Department of Conservation's Division of Ecological Services, and the Tennessee Valley Authority.

Informal interviews were conducted with Dr. Herbert Boschung, aquatic biologist at the University of Alabama and author of the Slackwater Darter Recovery Plan. Other scientific literature was reviewed, and field observations were made.

RESULTS OF SURVEYS

Gray Bat

The only gray bat habitat close to the parkway is Georgetown Cave at Colbert Ferry in Alabama. Protective measures described in the 1983 biological assessment for the Colbert Ferry Development Concept Plan will be continued, and no new effect on the habitat is anticipated.

Indiana Bat

No habitat supporting the Indiana bat will be affected.

Bald Eagle

Eagles are migrants in the Natchez Trace region and are infrequently seen near reservoirs and larger rivers. There will be no effect on eagles from any of the proposed or alternative actions.

Red-Cockaded Woodpecker

A red-cockaded woodpecker clan formerly inhabited a mature pine tree at milepost 128 in Madison County, Mississippi. The nest was abandoned approximately five years ago, apparently because of clear-cutting of a privately owned, mature pine forest adjacent to the parkway. No other clans are known to be near the parkway, and there will be no new effects on the bird's habitat due to proposed construction. It is possible that proposed vegetation management activities (e.g., prescribed burning) may improve potential habitat for the red-cockaded woodpecker in the long term. However, habitat within the narrow right-of-way of the parkway will continue to be affected by non-NPS activities on adjacent private lands, making systematic management for the red-cockaded woodpecker impracticable.

American Alligator

The historic range of the American alligator included southern and central Mississippi, as far north as Clay County on the Natchez Trace. There have been very infrequent sightings of alligators along portions of the parkway in the Pearl River and Bayou Pierre drainages. No nesting sites are known from the parkway, and no incidents of poaching or road kills have been reported. There are no apparent threats to alligators from parkway activities.

Slackwater Darter

The parkway traverses designated critical habitat for the slackwater darter between mileposts 335 and 351 on the Cypress Creek drainage in Lauderdale County, Alabama, and Wayne County, Tennessee, and between mileposts 372 and 375 on the Buffalo River drainage in Lawrence County, Tennessee. According to Dr. Herbert Boschung, the darter has been collected along the parkway only at a temporary seepage area which provides breeding habitat near Cypress Inn, Tennessee. The Slackwater Darter Recovery Plan recommends that the Park Service protect the breeding site by (1) identifying the site to all personnel likely to come in contact with it; (2) barring heavy machinery from the site during the breeding season, categorically from January through May; (3) banning the use of pesticides, herbicides, or any other toxins at all times; (4) posting the area with signs prohibiting any kind of access to the area; (5) allowing mowing machinery on the site only during dry periods when the groundwater is fully receded; and (6) doing nothing to cause disturbance of the adjacent stream.

After further consultation, Dr. Boschung advised that recommendation 4 should not be carried out because posting the area may invite vandalism or illegal collecting at the otherwise inconspicuous site. He also advised that use of pesticides and other toxins should be avoided within the entire designated critical habitat. A systematic survey for slackwater darter habitat should be undertaken for those portions of the parkway in the Cypress Creek and Buffalo River drainages. If any new darter sites are located, the site-specific recovery plan recommendations should then be applied. Dr. Boschung's comments and the recovery plan recommendations have been incorporated in the general management plan.

Bayou Darter

The Mississippi Natural Heritage Program reports that the bayou darter has been collected within the parkway right-of-way at the Bayou Pierre crossing in Claiborne County. The bayou darter has been adversely affected throughout its range by siltation and poor agricultural practices. The U.S. Fish and Wildlife Service advised that current agricultural activity on parkway lands within the Bayou Pierre drainage is not a threat to the darter, and the National Park Service will continue to manage leases to prevent siltation and chemical pollution of the river.

Spotfin Chub

The Tennessee Ecological Services Division reports one locality near the parkway on Grinder's Creek in Lewis County, Tennessee, for spotfin chub. The creek will not be affected by NPS activities.

Mollusks

None of the listed mollusks have been collected within the parkway right-of-way or near the parkway. The TVA Division of Water Resources conducted site surveys of Cedar Creek in Alabama and Duck River in Tennessee before parkway construction but no listed species were found. It is unlikely that management of the parkway will affect mollusks or that completion of the parkway will impact mollusk habitat.

Status Review Species

Only one of the status review plants, *Xyris tennesseensis*, is known from the parkway. *Xyris* is found near the parkway crossing of Little Swan Creek in Lewis County, Tennessee. No management actions appear necessary to protect the species. The Park Service will cooperate with the Tennessee Division of Ecological Services to monitor the site.

Of the other plants, two (*Crataegus harbisonii* and *Helianthus eggertii*), have been collected on the Highland Rim, but the Tennessee Division of Ecological Services reports that it is unlikely either would be within the parkway right-of-way. The remaining eight plants are associated with the cedar glades and barrens of the Nashville Basin, and there is only a remote possibility that any of these plants would be found on parkway lands. Because of the relatively low possibility for finding these species in the right-of-way, a systematic survey will not be conducted, but the Park Service will cooperate with the Tennessee Division of Ecological Services in making further informal reconnaissances.

Hellbenders are widely distributed in the region, and it is unlikely construction or management of the parkway will significantly affect the species. Bachman's sparrow and the Appalachian Bewick's wren frequent forest openings and edges, and construction and management of the parkway would tend to benefit both species.

CONSIDERATIONS OF CUMULATIVE EFFECTS ON ENDANGERED OR THREATENED SPECIES

Proposed and alternative park developments will not affect any of the species listed by the U.S. Fish and Wildlife Service. Mowing road shoulders and grass bays along the parkway right-of-way within the Cypress Creek and Buffalo River drainages may be currently affecting slackwater darter breeding habitat, although mowing impacts are probably minimal because ephemeral seepage areas where breeding occurs are too wet to mow during the breeding season (that is, January - May). Instituting the management recommendations for the darter described above will better ensure protection for the species. There are no other apparent threats to listed species on the parkway.

DIFFICULTIES ENCOUNTERED IN OBTAINING DATA AND COMPLETING STUDIES

No difficulties were encountered during the survey process. The data obtained are considered adequate to assess impacts on endangered or threatened species with the exception of slackwater darter habitat information. The "Resources Management Plan" proposes to collect additional darter habitat information through annual monitoring programs.

CONCLUSIONS OF THE AGENCY

The National Park Service concludes that there will be no effect on endangered or threatened species or critical habitat from the proposed or alternative development actions in the new general management plan for the Natchez Trace Parkway. Proposed natural resource management actions will improve knowledge of the slackwater darter and may mitigate potential threats to darter breeding habitat within the parkway right-of-way.

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