National Park Service
U.S. Department of the Interior

El Camino Real de los Tejas National Historic Trail
Draft Comprehensive Management Plan / Environmental Assessment
Louisiana • Texas

Public Draft

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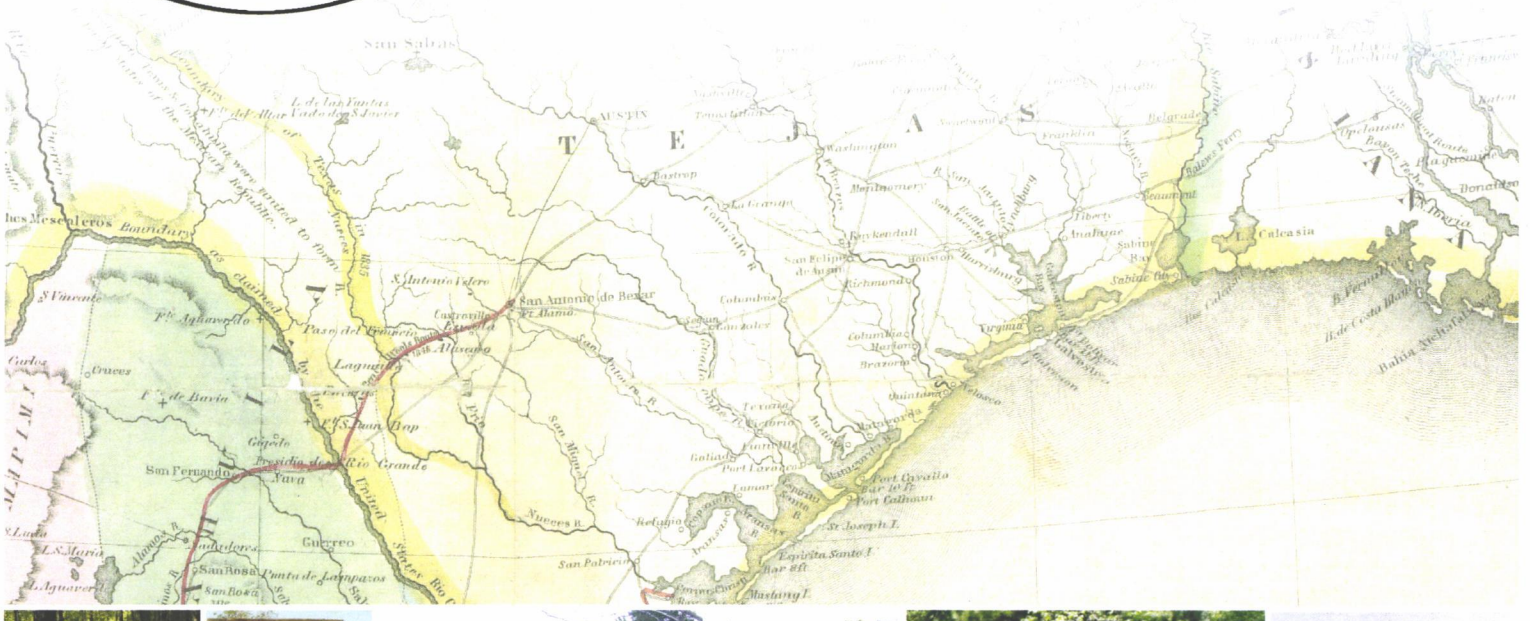
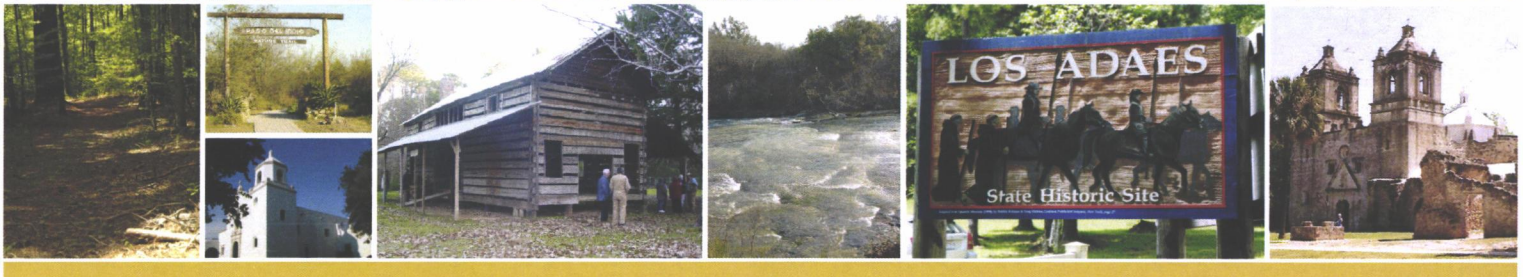
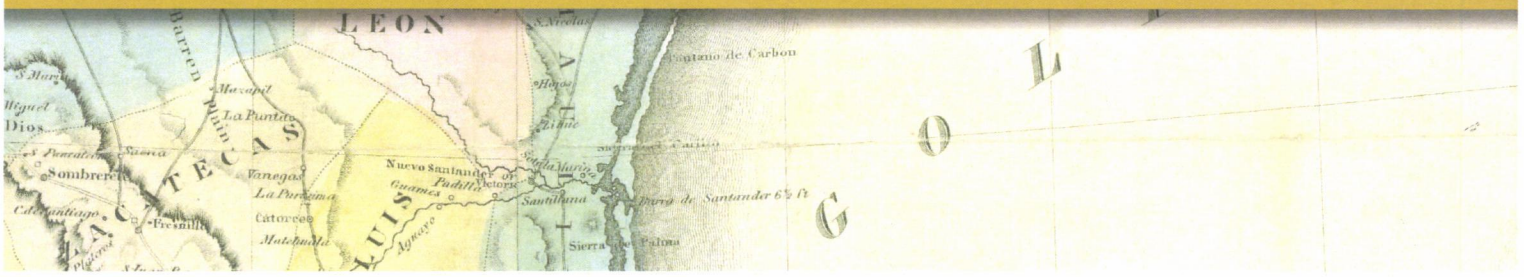
El Camino Real de los Tejas National Historic Trail





Draft Comprehensive Management Plan / Environmental Assessment
July 2010



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United States Department of the Interior

NATIONAL PARK SERVICE
National Trails Intermountain Region
P.O. Box 728
Santa Fe, New Mexico 87504-0728

October 20, 2010

Dear Interested Party:

The Draft Comprehensive Management Plan / Environmental Assessment for El Camino Real de los Tejas National Historic Trail is available for public review.

The purpose of this plan is to establish the administrative objectives, policies, processes, and management guidelines necessary to fulfill preservation and public use goals for El Camino Real de los Tejas National Historic Trail, which the U.S. Congress added to the National Trails System on October 18, 2004. The plan was developed in consultation with state and local government agencies; interested parties, including landowners; federally recognized American Indian tribes; area residents; trail-user organizations; National Park Service program managers and resources staff; and the general public.

This plan presents two alternatives and their respective environmental consequences. Under alternative A, the no-action alternative, there would be no federal action except for what is required under the National Trails System Act. Under alternative B, the preferred alternative, the National Trails Intermountain Region would collaborate with partners to provide the public the opportunity to enjoy and appreciate significant trail resources through high quality visitor programs while at the same time supporting research efforts to ensure that significant trail resources are identified and protected.

Public participation is very important to the successful development of this Draft Comprehensive Management Plan / Environmental Assessment. Therefore, we ask for your thoughtful evaluation and comment. The deadline for public comments is December 31, 2010.

Please submit comments via the Internet at: http://parkplanning.nps.gov/elte0810. You may also submit comments via email to Susan Boyle at susan_boyle@nps.gov or via regular mail to Susan Boyle, National Trails Intermountain Region, P.O. Box 728, Santa Fe, NM 87504. For further information or questions concerning this document please contact Susan Boyle at the email above.

We thank you in advance for your attention and we appreciate your interest and support in El Camino Real de los Tejas National Historic Trail.

Sincerely,

Aaron Mahr
Superintendent
National Trails Intermountain Region

El Camino Real de los Tejas National Historic Trail

Draft Comprehensive Management Plan / Environmental Assessment

NATIONAL TRAILS INTERMOUNTAIN REGION

NATIONAL PARK SERVICE

UNITED STATES DEPARTMENT OF THE INTERIOR

July 2010

Draft Comprehensive Management Plan / Environmental Assessment
El Camino Real de los Tejas National Historic Trail
U.S. Department of the Interior – National Park Service
July 2010

The purpose of this plan is to establish the administrative objectives, policies, processes, and management guidelines necessary to fulfill preservation and public-use goals for El Camino Real de los Tejas National Historic Trail, which the U.S. Congress added to the National Trails System on October 18, 2004. The legislation authorizing El Camino Real de los Tejas National Historic Trail identified approximately 2,580 miles of trail, extending from the Río Grande near Eagle Pass and Laredo, Texas, to Natchitoches, Louisiana. The designation of El Camino Real de los Tejas National Historic Trail commemorates significant historic routes extending from the United States–Mexico international border at the Río Grande to the eastern boundary of the Spanish province of Texas in Natchitoches Parish, Louisiana.

This plan provides a framework for the administration of the trail and a vision to be fulfilled through future, more specific resource studies and site and segment management plans. The plan was developed in consultation with state and local government agencies; interested parties, including landowners; federally recognized American Indian tribes; area residents; trail-user organizations; National Park Service program managers and resources staff; and the general public.

This document also includes a programmatic environmental assessment, which considers, at a general qualitative level, the impacts that the two alternatives could have on trail development. The environmental assessment sets the framework for future compliance with the National Environmental Policy Act and the National Historic Preservation Act for the significant resources associated with the trail. The environmental assessment also assists decision makers and the public in assessing the relative merits and impacts of each alternative.

This plan presents two alternatives and their respective environmental consequences. Under **alternative A**, the no-action alternative, there would be no federal action except for what is required under the National Trails System Act. The adoption of alternative A would not mean that present management activities would stop, but that the National Trails Intermountain Region and on-the-ground site and segment managers and owners would respond to future needs and problems in a manner similar to the way in which they are currently operating.

Under **alternative B**, the preferred alternative, the National Trails Intermountain Region would collaborate with partners to provide the public the opportunity to enjoy and appreciate significant trail resources through high quality visitor programs while at the same time supporting research efforts to ensure that significant trail resources are identified and protected.

Partners would work cooperatively to achieve the purpose of the trail designation – to commemorate the historic development of a network of trails, based upon American Indian routes, which linked Spanish missions and trading posts in a travel corridor from the Río Grande to Louisiana. Much of the implementation of strategies would rest with those members of the trail community willing to take the lead in proposing projects and programs that identify and protect significant trail resources and their accurate

interpretation. The National Trails Intermountain Region would provide technical assistance and a certain level of funding, as it becomes available, to eligible applications to facilitate the initiatives suggested by the trail community. It would also work closely with volunteers to achieve the purpose of the trail. Projects most likely to receive support would focus on the identification and protection of authentic resources and their interpretation. There would also be ample recreational and educational programs to provide trail users the opportunity to enjoy and understand the authentic character of the nationally significant resources associated with El Camino Real de los Tejas National Historic Trail.

Submit comments by mail to Superintendent, National Trails Intermountain Region, PO Box 728, Santa Fe, NM 87504. Or submit comments via the Internet at: http://parkplanning.nps.gov/ntir

EXECUTIVE SUMMARY

The National Park Service administers El Camino Real de los Tejas National Historic Trail, which was added to the National Trails System by the U.S. Congress on October 18, 2004. The legislation authorizing El Camino Real de los Tejas National Historic Trail identified approximately 2,580 miles of trail extending from the Río Grande near Eagle Pass and Laredo, Texas, to Natchitoches, Louisiana. The designation of El Camino Real de los Tejas National Historic Trail commemorates significant historic routes extending from the United States–Mexico border at the Río Grande to the eastern boundary of the Spanish province of Texas in Natchitoches Parish, Louisiana. Although the period of historic significance for El Camino Real de los Tejas National Historic Trail dates from 1680 to 1845—spanning Spanish, Mexican, and early American use—this plan focuses primarily on the network of roads that had been developed by the end of the Spanish Colonial period in 1821. Trail routes, as well as sites along the trail, are associated with events that made significant contributions to broad patterns of our nation's history.

The purpose of this Draft Comprehensive Management Plan / Environmental Assessment is to establish the administrative objectives, policies, processes, and management guidelines necessary to fulfill preservation and public-use goals for El Camino Real de los Tejas National Historic Trail. Although the act designating El Camino Real de los Tejas National Historic Trail does not specifically ask for the development of a plan, Section 5(f) of the National Trails System Act requires that a Comprehensive Management Plan be developed for all designated national historic trails. The National Trails System Act also requires the Secretary of the Interior to consult with appropriate state and local agencies in the planning and development of the trail.

This Comprehensive Management Plan / Environmental Assessment provides a framework for the administration of the trail and a vision to be fulfilled through future, more specific resource studies and site and segment management plans. Administrative staff at the National Trails Intermountain Region developed the plan in consultation with state and local government agencies; interested parties, including landowners; federally recognized American Indian tribes; area residents; trail-user organizations; National Park Service program managers and resources staff; and the general public. A mutually agreed-on plan facilitates the work of partners in accomplishing specific goals.

This document also includes a programmatic environmental assessment, which considers, at a general level, the impacts that the two alternatives could have on trail development. The environmental assessment sets the framework for future compliance with the National Environmental Policy Act and the National Historic Preservation Act for the significant resources associated with the trail. The environmental assessment also assists decision makers and the public in assessing the relative merits and impacts of each alternative.

PLANNING ISSUES

The planning team made several trips to both Texas and Louisiana to become acquainted with issues central to the planning process. Eight scoping meetings were conducted, where input from the public, government agency representatives, federally recognized American Indian tribes, trail organizations, and individuals was systematically recorded. Other comments by letter and/or comment forms and emails were received by the planning team.

ADMINISTRATION AND MANAGEMENT

Although the trail itself is administered by the National Trails Intermountain Region, less than 1% of the trail corridor is owned by the federal government. Given that a substantial percentage of resources is in private hands and that only a very small percentage of resources is managed by state and local entities, an effective mechanism needs to be developed to stimulate cooperative partnerships among the many stakeholders through a range of incentives. A major challenge facing trail administrators is the need for consistent preservation strategies, development, and marking of the trail as it passes through a variety of jurisdictions; other challenges include the lack of awareness about the trail and poor coordination among groups interested in trail development.

RESOURCE PROTECTION

Among the most pressing concerns in protecting resources is the need for the accurate mapping of routes and a systematic ground-truthing of trail resources. There is also need for additional research on several topics. Diverse ownership of trail resources (federal, several state entities, and numerous private landowners) poses a challenge to efforts to develop trail-wide strategies to preserve trail resources.

INTERPRETATION, VISITOR EXPERIENCE, AND USE

There is a general lack of coordination in getting interpretive information to the public. Interpretive facilities along the designated routes need to explain more accurately the historic developments along the trail, place them into an appropriate context, and provide the public with interesting yet relevant and authentic materials. Periodic updates of interpretive information to reflect the latest scholarship are needed, along with ways of making academic research information accessible to the general public, to teachers, and students in grades K–12 and beyond. Finally, there is a need to foster heritage tourism programs that draw on and protect authentic, documented historic resources clearly linked to the trail.

ALTERNATIVES

As part of the planning process, two alternatives were developed. The preferred alternative will address the issues discussed above.

ALTERNATIVE A: CONTINUATION OF CURRENT CONDITIONS—NO ACTION

This alternative is a requirement of National Environmental Policy Act and serves as a basis for comparison. Federal action would be limited to what is required under the National Trails System Act. Its adoption would not mean that present management activities would stop, but that administrative staff at the National Trails Intermountain Region and on-the-ground site and segment managers and owners would respond to future needs and problems in a manner similar to the way in which they are currently operating. Increased federal funding for trail administration activities would not occur.

ALTERNATIVE B: TRAIL DEVELOPMENT THROUGH PARTNERSHIPS (PREFERRED ALTERNATIVE)

Under this alternative, administrative staff at the National Trails Intermountain Region would assist the trail community in achieving the purpose of the trail designation, which is to commemorate the historic development of a network of trails, based upon American Indian routes, that linked Spanish missions and trading posts in a travel corridor from the Río Grande to Louisiana.

Under this alternative, the trail community would include, among others, the Texas Historical Commission; the Louisiana Department of Culture, Recreation, and Tourism; the State of Texas Parks and Wildlife Department; El Camino Real de los Tejas National Historic Trail Association; other federal entities; federally recognized tribes whose homelands are crossed by the trail in East Texas; private organizations; institutions of higher learning; museums; visitor centers; private owners of trail resources; trail scholars; public and private schools; Mexican entities (such as the Instituto Nacional de Antropología e Historia; and all others interested in the trail.

The National Trails Intermountain Region would collaborate with partners to provide the public the opportunity to enjoy and appreciate significant trail resources through high quality visitor programs while at the same time supporting research efforts to ensure that significant trail resources are identified and protected.

The National Trails Intermountain Region would serve as an information clearinghouse for activities along the trail, coordinating efforts to ensure the most efficient use of available resources. Much of the implementation of strategies would rest with those members of the trail community willing to take the lead in proposing projects and programs that identify and protect significant trail resources and their accurate interpretation. Volunteers would work closely with the National Trails Intermountain Region to achieve the purpose of the trail.

The National Trails Intermountain Region would provide technical assistance and a certain level of funding, as it becomes available, to eligible applications, depending on allocations. Funds from the Challenge Cost Share Program that fluctuate from year to year, and possibly from other programs, would help support initiatives suggested by the trail community. Projects most likely to receive support from the National Park Service would focus on the identification and protection of authentic resources and their interpretation, and would offer trail users the opportunity to enjoy and understand the authentic character of the nationally significant resources associated with El Camino Real de los Tejas National Historic Trail.

Administrative staff at the National Trails Intermountain Region would also oversee the development of sign and interpretive standards that can be applied consistently along the trail corridor. Consistency is important because it would heighten awareness of the trail and assist trail users in finding and following the designated trail routes and significant historic sites. Consistency would also allow for a more effective development of recreational experiences around authentic resources and interpretive programs.

The National Trails Intermountain Region would place its main emphasis on working with the trail community to expand knowledge about trail resources, in particular significant sites and segments with a certain degree of historic integrity. Investigations leading to more accurate and extensive identification of high-potential sites and segments and their location, condition, and priority needs will be encouraged. Research projects that aim to elucidate important aspects of trail history or topics that have not yet received adequate attention will also receive special consideration.

Under this alternative, there will be an

effort to foster awareness among the trail community of the evolving nature of the trail and its associated resources. It has been argued that El Camino Real de los Tejas National Historic Trail responds to the changing conditions and the needs of the users. The trail is complex and continually evolving, and has the potential of becoming a very powerful educational tool to attract people of all ages to understand and protect it.

The National Trails Intermountain Region would encourage and assist private landowners in protecting significant trail resources and, if possible and appropriate, help such owners to make resources accessible to the public. This is an important component of this alternative because a high proportion of trail resources is privately owned. As landowners become aware of the significance of their resources, they may decide to become more interested in monitoring and protecting them.

Under this alternative, the trail community would have the opportunity to become active participants in the development of inclusive interpretive and educational programs that reflect current scholarship and offer a variety of perspectives. There would be special emphasis on compelling stories about people, places, and events, particularly those that represent the heritage of the various ethnic groups, who were central in the development of the trail.

Under this alternative, a concerted effort will be made, in cooperation with the trail community, to provide recreational experiences closely linked and compatible with the appreciation of authentic trail resources and their protection. These experiences would be strengthened by the development of a consistent accompanying interpretive program, which places the history of the trail into a broad context from which it can be better understood and appreciated, and by the use of consistent signage to facilitate public awareness of the trail and the location of its resources.

THE NEXT STEPS

After a 45-day public review/comment period for the Draft Comprehensive Management Plan/Environmental Assessment for El Camino Real de los Tejas National Historic Trail, the planning team will evaluate comments from federal and states agencies, tribes, organizations, businesses, and individuals regarding this document. After this evaluation, the team will incorporate substantive comments in the draft document. This Final Comprehensive Management Plan/ Environmental Assessment will then be sent to the Intermountain Region Director of the National Park Service for approval.

PUBLIC COMMENT

If you wish to comment on the environmental assessment, you may post comments online at http:// parkplanning.nps.gov/ntir or mail comments to: Superintendent, National Trails Intermountain Region, P. O. Box 728, Santa Fe, New Mexico, 87504.

This environmental assessment will be on public review for 45 days. Before including your address, phone number, e-mail address, or other personal identifying information in your comment, you should be aware that your entire comment – including your personal identifying information – may be made publicly available at any time. Although you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

GLOSSARY

Acequia: ditch

Adaeseño: settler from Los Adaes who requested the Spanish government to return to the area close to their homeland in Los Adaes.

Ayuntamiento: municipal government.

Bayou: fen, marshland, bog

Carretera: highway.

Corralitos: Collection of small corrals.

Cuesta: hill, knoll.

Ejido: common lands.

Empresario: a land agent or land contractor, a crucial element of the system used by the Mexican government after independence from Spain to encourage colonization.

Entrada: an exploring or reconnoitering military expedition.

Ethnography: the study and systematic recording of human cultures.

Fundos legales: mission lands.

Guerra de la pulga: war of the flea.

Hacienda: ranch estate.

Jacal: a pole and daub hut or an adobe hut with a thatch roof.

Labor: cultivated field.

LiDAR (Light detection and ranging): optical remote-sensing technology that measures properties of scattered light to find range and/or other information about a distant target.

Lobanillo: growth covered with bark formed either in a branch or trunk of a tree.

Ojuelo: natural spring.

Paraje: stopping place, camp site.

Presidio: garrison.

Ranchería: Spanish term for American Indian villages in this region.

Rejoneado: made out of the locally quarried sandstone.

Troneras: gun ports.

Visita: sub-mission; chapels without a resident priest.

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CHAPTER 1
INTRODUCTION AND BACKGROUND

EL CAMINO REAL DE LOS TEJAS
NATIONAL HISTORIC TRAIL

CHAPTER 1: INTRODUCTION

PURPOSE AND NEED FOR THE PLAN

El Camino Real de los Tejas National Historic Trail became part of the National Trails System on October 18, 2004. The authorizing legislation (Public Law 108-342) identifies "approximately 2,580 miles of trail extending from the Río Grande near Eagle Pass and Laredo, Texas, to Natchitoches, Louisiana, as depicted on the maps included in the *National Historic Trail Feasibility Study and Environmental Assessment: El Camino Real de los Tejas, Texas and Louisiana* prepared by the National Park Service and dated July 1998 (see Appendix A, pg page 145 and Map 1-1, pg page 4).

BACKGROUND

The National Trails System Act of 1968 established the National Trails System

> "to provide for the ever-increasing outdoor recreation needs of an expanding population and to promote the preservation of, public access to, travel within, and enjoyment and appreciation of the open air, outdoor areas and historic resources of the Nation."

The National Trails System is composed of statutorily created national scenic trails and national historic trails. In addition, national recreation trails and connecting-and-side trail are recognized through secretarial actions. The National Trails System Act provides for a lead federal agency to administer each national scenic and national historic trail in cooperation with a variety of partners, including other federal agencies, state and local agencies, American Indians, local communities, private landowners, and others.

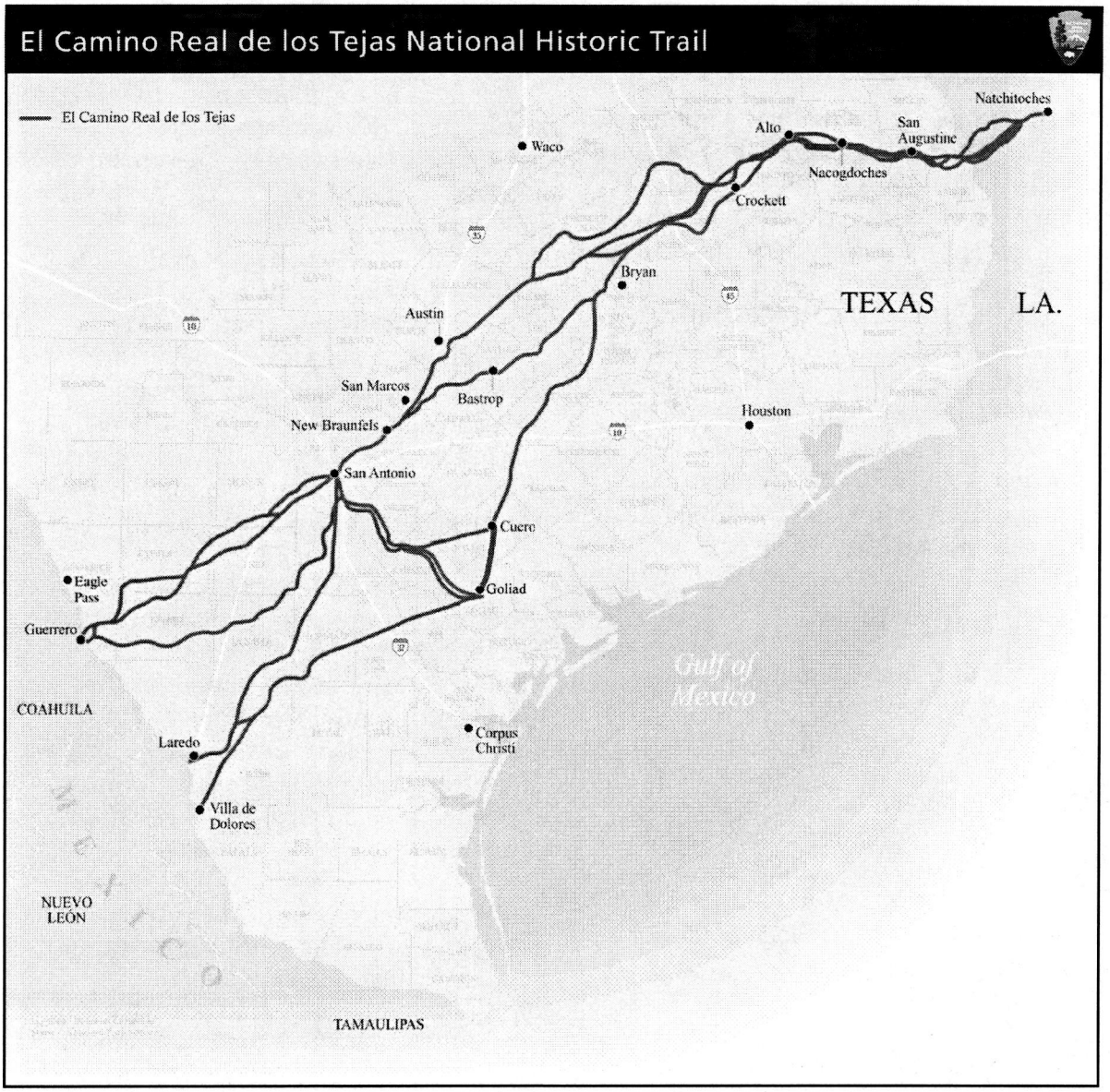
National historic trails identify and commemorate historic and prehistoric routes of travel that are of significance to the entire nation. They must meet all three criteria listed in Section 5(b) (11) of the National Trails System Act as follows:

1) It must be a trail or route established by historic use and must be historically significant as a result of that use; the route need not currently exist as a discernible trail to qualify, but its location must be sufficiently known to permit evaluation of public recreation and historical interest potential. A designated trail should generally accurately follow the historic route, but may deviate somewhat on occasion of necessity to avoid difficult routing through subsequent development, or to provide some route variations offering a more pleasurable recreational experience;

2) It must be of national significance with respect to any of several broad facets of American history, such as trade and commerce, exploration, migration and settlement, or military campaigns; to qualify as nationally significant, historic use of the trail must have had a far-reaching effect on broad patterns of American culture;

3) It must have significant potential for public recreational use or historic interest based in historic interpretation and appreciation; the potential for such use is generally greater along roadless segments developed as historic trails and at historic sites associated with the trail; the presence of recreation potential not related to historic appreciation is not sufficient justification for designation under this category. Such trails are established by an act of Congress. Examples include the Trail of Tears, Santa Fe, Oregon, California, Nez Perce (Nee-Me-Poo), and Lewis and Clark national historic trails.

Map 1-1. Congressionally Designated Routes for El Camino Real de los Tejas National Historic Trail



PURPOSE OF THE PLAN

Comprehensive management plans for national historic trails are long-term documents that provide a vision for the future of the trail, including a management philosophy and a framework to be used in making decisions and solving problems. This Comprehensive Management Plan will provide guidance for approximately the next 15–20 years.

The purpose of this Comprehensive Management Plan is to establish the administrative objectives, policies, processes, and management guidelines necessary to fulfill preservation and public-use goals for El Camino Real de los Tejas National Historic Trail, as established in the National Trails Systems Act (16 USC 1244 (a) and Public Law 108-342), titled "An Act to Amend the National Historic Trails System Act to Designate El Camino Real de los Tejas National Historic Trail."

Although the act designating El Camino Real de los Tejas National Historic Trail does not specifically ask for the development of a plan, Section 5(f) of the National Trails System Act requires that a Comprehensive Management Plan be developed for all designated national historic trails. The plan should include, but not be limited to the following items:

- specific objectives for the National Park Service, including the identification of significant ethnographic, archeological, historic, and natural resources to be protected; specific details of expected cooperative agreements with government agencies or private organizations or individuals;
- protection strategies for high potential sites and segments;
- user-capacity assessment; and
- implementation details

In addition, Public Law 108-342 includes the following requirements:

- The Secretary of the Interior shall administer those portions of the trail on nonfederal land only with the consent of the owner of such land and when such trail portion qualifies for certification as an officially established component of the trail;
- The designation of the trail does not authorize any person to enter private property without the consent of the owner;
- The Secretary shall consult with appropriate state and local agencies in the planning and development of the trail;
- The Secretary may coordinate with United States and Mexican public and nongovernmental organizations, academic institutions, and in consultation with the Secretary of State and the government of Mexico and its political subdivisions, for the purpose of exchanging trail information and research, fostering trail preservation and educational programs, providing technical assistance, and working to establish an international historic trail with complementary preservation and education programs in each nation; and
- The United States shall not acquire for the trail any land or interest in land outside the exterior boundary of any federally administered area without the consent of the owner of the land.

This Comprehensive Management Plan complies with the requirements of the National Environmental Policy Act of 1969. It includes a programmatic environmental assessment as a follow-up to the 1998 National Park Service *National Historic Trail Feasibility Study and Environmental Assessment: El Camino Real de los Tejas, Texas and Louisiana,* on which Congress based its decision to establish the trail. The feasibility study provided a historic overview, a statement of significance, and offered three alternatives for future protection, interpretation, and management of El Camino Real de los Tejas National Historic Trail. The examined alternatives included (a) the no-action alternative, (b) the designation of routes from Paso de Francia to Natchitoches, and (c) splitting the trail into two separately designated national historic trails: El Camino Real de los Tejas and the Old San Antonio Road. The Feasibility Study recommended the alternative designating the routes from Paso de Francia to Natchitoches, Louisiana, as El Camino Real de los Tejas. The *National Historic Trail Feasibility Study and Environmental Assessment: El Camino Real de los Tejas, Texas and Louisiana* constituted the first phase of a planning and environmental review process. This Comprehensive Management Plan, the second phase, is a general and programmatic document that includes the level of information necessary to make broad policy and planning decisions.

NEED FOR THE PLAN

This Comprehensive Management Plan is necessary to provide long-term guidance for natural and cultural resources preservation, education, and trail-use experience along El Camino Real de los Tejas National Historic Trail. It provides a framework for the administration of the trail and a vision to be fulfilled through future, more specific resource studies and site and segment management plans. It was developed in consultation with state and local government agencies; stakeholders, including landowners; federally recognized

American Indian tribes; area residents; trail-user organizations; National Park Service program managers and resources staff; and the general public. A mutually agreed-upon plan facilitates the work of partners in accomplishing specific goals.

The Comprehensive Management Plan describes how the national historic trail will be administered and managed and aims to accomplish the following:

- Confirms the purpose and significance of the trail;
- Describes resource conditions and visitor uses and experiences to be achieved;
- Identifies the need for partnerships to protect trail resources efficiently and to provide appropriate trail-user services; and
- Provides a frame of reference for National Park Service administrators and its partners when making decisions about central trail issues.

Federal ownership and management of El Camino Real de los Tejas National Historic Trail is limited to a portion of San Antonio Missions National Historical Park in Texas. Less than 1% of the national historic trail is within the boundary of this national park unit. With the designation of El Camino Real de los Tejas National Historic Trail, those trail segments within San Antonio Missions National Historical Park have become federal protection components in compliance with section 3(a) 3 of the National Trails System Act.

The Comprehensive Management Plan outlines a process through which non-federal trail sites and segments may become official components of El Camino Real de los Tejas National Historic Trail using specific development plans and implementation strategies (see section on Partnership Certification Program, page 39 and Appendix B: Partnership Certification Agreement, page 147). In compliance with the National Environmental Policy Act, Sections 106 and 110 of the National Historic Preservation Act, the impacts from each ensuing plan, construction project, trail program, and various other projects will be assessed, as required by the implementing regulations set forth in the Code of Federal Regulations and other applicable federal, state, and county regulations. In all cases, planning for the trail and for trail facilities will be carried out in close consultation with landowners, American Indian tribes, trail organizations, community groups, local residents, and state and local governments.

NEXT STEPS AND PLAN IMPLEMENTATION

A public review and comment period will follow the distribution of this Draft Comprehensive Management Plan/ Environmental Assessment. After the comment period, the National Park Service planning team will evaluate the comments and make appropriate changes to produce a final document. The plan will be signed by the Intermountain Region Director of the National Park Service and implemented.

The Comprehensive Management Plan is a long-term plan. Both National Park Service administrators and partners will take incremental steps toward reaching its goals. Once it is approved, additional research and resource studies and more detailed planning and environmental documentation could be completed as part of individual site and segment management plans.

The implementation of the Draft Comprehensive Management Plan could take many years and will depend upon additional funding and the National Trails Intermountain Region's and partners' time and effort. Upon approval, components of the plan will be prioritized and implemented as funding becomes available.

HISTORICAL BACKGROUND[1]

The designation of El Camino Real de los Tejas National Historic Trail in 2004 commemorates significant historic routes extending from the international border at the Río Grande to the easternmost extent of the Spanish province of Texas in Natchitoches Parish, Louisiana. The period of historic significance for El Camino Real de los Tejas National Historic Trail dates from 1680 to 1845; however, this plan focuses primarily on the network of roads that had been developed by the end of the Spanish Colonial period in 1821. Trail routes, as well as sites along the trail, are associated with events that contribute significantly to our understanding of broad patterns of United States history.

It is important to note that, after the initial period of exploration and colonization, the land along the different trail routes became home to various ethnic groups. These include Spanish (including Canary Islanders), French nationals, Mexicans, African-Americans, Anglos, and a variety of different European peoples. Most of them settled along the trail and managed, to a considerable extent, to retain their cultural traditions (see section on Ethnographic Resources, page 113).

When Spanish explorers began to travel consistently into Texas and western Louisiana, in the 1680s, they followed already existing networks of American Indian trails. Representatives of the Spanish Crown used these paths to reach areas where they subsequently established missions and presidios. Eventually, armies and immigrants followed these routes, which led to Euro-American settlements across the two states. Many of these roads continued to be used in later years, forming the boundaries of early Spanish and Mexican land grants. Some of these land grants became part of modern highway systems. In many places, Spanish names for roads and landscape features have been retained and often represent the only reminder of the Spanish presence. Physical remains of the trail, such as swales and ruts, are testimony to the Spanish Colonial heritage and to significant events that occurred along the trail.

Preferred travel routes evolved through time in response to social, cultural, and environmental changes. Topography was a key factor when deciding where to locate trails: the best routes went through areas of dry, solid ground, but with sufficient water resources to camp and replenish travelers and their horses and pack animals. In addition, certain routes were used seasonally to avoid natural obstacles, such as overflowing rivers and streams. As some groups moved, routes that were previously favored became less frequently used while others gained popularity. Settlements were often relocated in response to colonial policies, conflicts, and/or changing social conditions. Occasionally new routes were blazed to steer clear of dangerous obstacles.

The Spanish political agenda of the time, as well as the existing natural resources and cultural conditions among indigenous groups, directly influenced the selection of trail routes. Early missions and presidios (late 1600s– early 1700s) were established in areas near good water resources in places where Spain expected to Christianize potentially "friendly" American Indian groups and where they wished to establish strategic military defenses to counter French incursions. As a result, the earliest such settlements in Texas were established among agriculturist Caddo tribes whose sedentary ways of life appealed to the Spaniards more than the nomadic American Indian groups who also populated the area.

Prehistoric American Indian trails linked a complex network of villages and important natural resources. Many of these American Indian settlements were visited repeatedly by European explorers in the years preceding the first European settlements in Texas. The routes that made

1 - Information for this section comes principally from Deirdre Morgan Remley's Cultural Resource Inventory: El Camino Real de los Tejas National Historic Trail prepared between December 2007 and September 2008 for the National Trails Intermountain Region, Santa Fe, New Mexico.

possible regional settlement in Texas and western Louisiana largely followed American Indian trails.

The main contributing factor in establishing the network of trails that became El Camino Real de los Tejas, however, was Spain's attempt to create a buffer against the French from the late 1600s on. Spaniards showed little interest in settling the area until 1685, when they received news that French explorer René Robert Cavalier Sieur de La Salle had established a colony in Matagorda Bay.[2] Traveling both by overland routes and by sea, several Spanish parties searched for La Salle's outpost. Alonso de León made three failed attempts, but finally succeeded in finding La Salle's settlement in 1689. Accompanied by Franciscan friar Damián Massanet and guided primarily by a member of the Quems Nation, de León's party found La Salle's Fort St. Louis in ruins on the banks of Garcitas Creek (on the boundary of Victoria and Jackson counties)[3]. The search for La Salle's outpost was the beginning of an ongoing Spanish presence in East Texas, marked by regular expeditions and attempts at colonization.

Though the French colonization effort at Matagorda Bay was not successful, Spaniards responded by increasing their presence in East Texas to improve their ability to monitor and defend against future threats. In the year following the discovery of La Salle's settlement (1690), de León and Massanet set out for East Texas again. This time, they planned to contact the "governor" of the American Indians known as Los Tejas, to determine if his people would welcome a Spanish mission.

The people whom the Spanish called *Tejas* were the same as those the French referenced as *Les Cenis* (members and/or leaders of the Hasinai Confederation)[4]. These and other American Indian villages are depicted on several early maps, and it is likely that Luis de Moscoso's expedition party had visited them as early as 1542. A reference to "The Kingdom of the Tejas" by a Jumano Indian was recorded in Santa Fe in 1683. This may have stirred interest in the American Indian tribes of East Texas—an interest that would have been bolstered in 1689 when de León and Massanet were told that their journey had taken them near this kingdom. The following year (1690), their expedition to find the Tejas governor was a success, and marked the beginning of missionary efforts and Spanish Colonial settlement in East Texas.

Upon arriving at the village of the Tejas in 1690, Father Massanet reported that Spanish missionaries were well received and had constructed a temporary structure to hold mass. That same year, they built a more permanent log structure nearby: Mission San Francisco de los Tejas, probably in Houston County. (For a listing of Spanish missions and presidios associated with El Camino Real de los Tejas National Historic Trail, see Table 1-1, page 9) They also established Mission Santísimo Nombre de María in the same general area, but it was destroyed by flood in 1692. Even though an expedition brought supplies to Mission San Francisco de los Tejas in 1693,

2 - In fact, the Spanish routes and settlements might have been laid out on a very different landscape if not for the French encroaching on the boundaries of Spanish territory. For instance, in 1684, the Spanish attempted to establish a mission to the Jumano Indians east of the city of San Angelo, at a site that was not far from the first Spanish attempt to found a mission in Texas—a mission that lasted only six months in 1632. Although this second attempt at a mission to the Jumanos was even shorter-lived than the earlier one, Spaniards had hoped to make it a permanent mission; however, its distance from other major settlements would have made it difficult to sustain. When the Spanish received news of La Salle's settlement the following year, Spanish attention turned to the Texas coast and the general area of East Texas.

3 - The names of the counties used in this document reflect today's geographic and political boundaries. They are meant to serve as geographical references.

4 - The term *Tejas* (pronounced "TAY-has" and spelled "Texas" by de León) often used to describe the American Indian nation(s) for which the Spanish sought to establish a mission is a bit of misnomer. The term is based on the Caddo word Teija or Teysa (probably pronounced "TAY-shah") meaning friend or ally, rather than referring to an actual tribe or band. The Spanish spelling and pluralization (by adding an "s,") gives us the word Tejas or Texas. Throughout this document, the term *Tejas* is used to refer to the American Indian groups noted historically, whereas the spelling "Texas" refers to the state of Texas, unless otherwise noted.

the mission was soon abandoned due to growing hostility from local indigenous groups.[5] Although these first attempts to found missions in East Texas failed, they mark the beginning of increased travel along the Spanish Colonial road network that would eventually link major settlements in Texas and Louisiana.

Table 1-1. Presidios and Missions Associated with El Camino Real de los Tejas National Historic Trail (1690-1793)

1690	Mission San Francisco de los Tejas
1691	Mission Santísimo Nombre de María
1700	Mission San Juan Bautista
1700	Mission San Francisco Solano
1702	Mission San Bernardo
1703	Presidio San Juan Bautista del Río Grande
1716	Mission Nuestra Señora de la Purísima Concepción
1716	Mission Nuestra Señora de Guadalupe
1716	Mission San José de los Nazonis (de los Nacogdoches)
1716	Presidio Nuestra Señora de los Dolores
1717	Mission San Miguel de los Adaes
1717	Mission Nuestra Señora de los Dolores (de los Ais)
1718	Presidio San Antonio de Bexar
1718	Mission San Antonio de Valero
1721	Presidio Nuestra Señora del Pilar
1722	Mission San Francisco Xavier de Nájera
1722	Mission Espíritu Santo de Zúñiga
1722	Presidio Nuestra Señora de Loreto (La Bahía)
1731	Mission Nuestra Señora de la Purísima Concepción de Acuña
1731	Mission San Juan Capistrano
1731	Mission San Francisco de la Espada
1746	Mission San Francisco Xavier
1749	Mission San Ildefonso
1749	Mission Nuestra Señora de la Candelaria
1749	Mission Espíritu Santo de Zúñiga
1749	Presidio Nuestra Señora de Loreto
1751	Presidio San Francisco Xavier
1754	Mission Nuestra Señora del Rosario de los Cujanes
1756	Mission Nuestra Señora de la Luz
1756	Presidio San Agustín de Ahumada
1757	Presidio San Luis de las Amarillas
1757	Mission Santa Cruz de San Sabá
1762	Mission San Lorenzo de la Santa Cruz
1762	Mission Nuestra Señora de la Candelaria del Cañón
1793	Mission Nuestra Señora del Refugio

Between 1700 and 1703, Spanish travel into East Texas was made easier by the founding of three missions (San Juan Bautista, San Francisco Solano, and San Bernardo) and a presidio (San Juan Bautista del Río Grande), all of which were located on the south side of the Río Grande, near Guerrero, Mexico. This new settlement area created a convenient waypoint in addition to already known routes across the Río Grande. In 1707, Diego Ramón, stationed at the Río Grande settlement, crossed the river into Webb and Dimmit counties to punish raiding American Indians and to gather neophytes for the missions. In 1709, the Espinosa-Olivares-Aguirre Expedition traveled to the San Antonio River in Bexar County and recommended that missions be established there. In 1713, Louis Juchereau de St. Denis, a French explorer and colonist, contacted the Tejas, then traveled southwestward through the future Bexar County to the settlement area on the south side of the Río Grande.

The Spaniards made no attempts to settle East Texas again until 1716, more than two decades after Mission San Francisco de los Tejas was abandoned. In 1716, the Ramón-Espinosa Expedition reestablished Mission San Francisco de los Tejas at a new location in Cherokee County, and then founded three additional missions and one presidio in Nacogdoches County. In 1717, two more missions were established—one in San Augustine County and one in Natchitoches Parish, Louisiana (then part of the Spanish province of Texas).

In 1719, the East Texas missions were again temporarily abandoned. This time it was out of fear of a full-scale French invasion precipitated by the War of the Quadruple Alliance, which saw the French

5 - Some archeologists suggest that a handful of known archeological sites in Houston County may be associated with these missions (Krieger 1945, Tunnell 1965).

allied with Britain, Austria, and the Dutch Republic against Spain. This European conflict coincided with French exploration parties on the coast of Texas between 1719 and 1721, which underscored the need for a fortified frontier along the eastern boundary of the Spanish province of Texas.

In 1721, all of the East Texas settlements were reoccupied in or near their previous locations. That same year, the Spanish strengthened their defenses by adding a presidio and *villa* to Los Adaes. This site would serve as the capital of the Spanish province of Texas until it was abandoned in 1773, when the capital was moved to San Antonio de Bexar in Bexar County.

The East Texas settlements remained open until after the presidio in Nacogdoches County was closed in 1729. In 1730, three of the missions were temporarily moved to Austin in Travis County, and then permanently settled along the San Antonio River in Bexar County. Following the closing of the Nacogdoches County presidio and the removal of the three missions in East Texas, there remained five major sites in East Texas. These included the presidio, *villa*, and mission in Natchitoches Parish (Los Adaes); the mission in San Augustine County; and one mission in Nacogdoches County. These five sites remained occupied until 1773, when settlers were ordered to move to areas along the San Antonio River.

With the establishment of a mission at Los Adaes, Spanish roads and settlements were extended to the easternmost point of the province of Texas. Immediately following the establishment of the East Texas missions, the Spanish recognized the need for an intermediate station between the settlements on the Río Grande and those of East Texas. In 1718, Mission San Antonio de Valero (1718–1793) was established, along with Presidio San Antonio de Bexar and Villa de Bexar in San Antonio. During that time, one more mission, Mission San José y San Miguel de Aguayo (1720), was founded in Bexar County. In 1722, another mission, San Francisco Xavier de Nájera, was also established in Bexar County. Although it was intended to be an independent mission, it was in fact never more than a *visita*, or sub-mission, of Mission San Antonio de Valero. It later became part of Mission San Antonio de Valero.[6] Although they were moved to as many as three different locations, the other two missions remained permanent establishments in Bexar County until secularization in the late 18th and early 19th centuries. Presidio San Antonio de Bexar and Villa de Bexar survived well beyond the end of the Spanish Colonial period.

Another Spanish settlement founded at the end of the retreat from East Texas included a mission and a presidio established in Victoria County in 1721. The first location of Presidio Nuestra Señora de Loreto de la Bahía was on the site of La Salle's colony on the west bank of Garcitas Creek, and the first location of Mission Nuestra Señora del Espíritu Santo (1722–1830) was nearby, probably on the east bank of Garcitas Creek. In 1726, both the presidio and mission were moved to a location on the Guadalupe River in Victoria County. They were moved yet again 23 years later, in 1749, to their final location in Goliad County. Also that year, a *villa* (town) was established near the new site of the mission and presidio. All three locations would be known as the settlement area of "La Bahía" at the various times of their occupation in the Spanish Colonial period.

In summary, between 1721 and 1745, the three main settlement areas along the designated El Camino Real de los Tejas National Historic Trail included:

1) East Texas settlements from Houston County to Natchitoches Parish, Louisiana: six missions before 1730, reduced to three missions after 1730; two presidios before 1729, and one after 1729; and one *villa*;
2) Settlements in San Antonio, Bexar County: two missions prior to 1731,

6 -*Visitas* are sometimes called "sub-missions" because they are often outlying chapels of missions. They are chapels without a resident priest that are visited by a priest from a nearby parish once or more often each year.

increased to five after 1731; one presidio; and one *villa*; and

3) La Bahía settlements in Victoria, Goliad, and probably Jackson Counties: one mission and one presidio at three locations, with a *villa* after 1749, and an additional mission after 1754. In 1746, however, Father Mariano de los Dolores would begin a missionary effort in a new area on the San Xavier River (San Gabriel River).

Spanish colonization of the area presently known as Milam County began informally in 1746 as an attempt to develop a fourth major settlement area along the designated trail. Mission San Francisco Xavier de Horcasitas was founded in 1748, and by 1750 two additional missions and one presidio were established. This new settlement area was approximately midway between the San Antonio and East Texas settlements, offering a convenient waypoint. Although Spanish immigrants made no attempts at settlement in the area before 1746, they had familiarized themselves with this upper route as early as 1721, when Marqués de San Miguel de Aguayo traveled through the area and became acquainted with the local Ranchería Grande Indians. The San Xavier settlement was ultimately abandoned due to conflict with American Indians.

In 1746, after several proposals by Nuevo León governors, an order from the viceroy created the new colony or province of Nuevo Santander. This was followed by a period of exploration and establishment in 1748 of Nuevo Santander, south of the Río Grande. The new settlement area was formed along a corridor on both sides of the Río Grande, extending east to the Texas coast and north to above the Nueces River almost to the Frío River. In 1749, the governor of the new province, José de Escandón, brought 3,000 settlers and 146 soldiers to the area.

North of the Río Grande, Nuevo Santander was largely comprised of private ranches. Ranchers who lived along the Río Grande often owned large tracts of land on both sides of the river. Owners of large ranches north of the river could maintain their residence on the south side of today's international border. Many of the communities along the Río Grande evolved out of ranch headquarters. For instance, the town of Mier grew out of a ranch headquarters of 19 families that had previously been known as El Paso del Cántaro. A total of six *villas* would be settled on the Río Grande within the province of Nuevo Santander. Four of these *villas*—Reynosa, Camargo, Mier, and Revilla—were south of the Río Grande, although their ranchlands extended north of the present international border.

Only two *villas* would be located north of the river. The first was established when Escandón authorized Vásquez Borrego to expand his *hacienda* to create Villa Nuestra Señora de los Dolores in 1750, located in northwest Zapata County. Though it continued to be referred to as a *hacienda*, the officially decreed villa of Dolores would serve as an important waypoint between the Río Grande and the San Antonio and La Bahía settlements providing a ferry service as well as guards to protect both settlers and travelers across the Rio Grande. In addition to serving as a river crossing, guard post, town, and ranch, Villa Nuestra Señora de los Dolores was also considered to be a *visita*. Dolores was visited by the priest of Revilla for a month each year until it received a resident priest in 1760. Although Dolores had guard posts and other defensive structures, it suffered several attacks and resulting fluctuations in population. It was completely abandoned by 1828.

The second *villa* to be established north of the Río Grande in Nuevo Santander was San Agustín de Laredo, officially founded in 1755. Like Dolores, Laredo was located at a well-known crossing of the Río Grande. It eventually replaced Dolores as the main crossing in the area, including a ferry service at least as early as 1767. Also like Dolores, Laredo grew out of an existing ranching headquarters and served the functions of a town, a guard post, and a *visita*. Laredo received a resident priest in 1759, but it did not officially become a

mission.

The establishment of Nuevo Santander marks the beginning of a time when the lines between historic use types and functions for settlement sites became increasingly vague. As part of the Nuevo Santander land grants settlers provided guards, and ranch headquarters themselves often served as de facto guard posts, or at least, defensive structures constructed with fortified stone walls with gun ports and fireproof roofing materials. These defensive structures can still be seen in the Dolores ruins today. Additionally, ranch owners agreed to provide religious instruction for both the American Indians and the local Spanish population. In this way, ranching operations not only became civilian settlements but also evolved to serve functions previously performed by the military and missionaries. Such locations were usually centered on river crossings along the designated trail.

With the addition of the San Xavier settlement area and Nuevo Santander, there were now five main settlement areas along the designated trail: East Texas; San Antonio; La Bahía (in Victoria County until 1749, and Goliad County, thereafter); San Xavier in Milam County (with brief occupations in Hays and Comal counties); and Nuevo Santander. Another such settlement was located just south of present Eagle Pass in Maverick County.

All of the settlements were located along the main travel corridors used by the Spanish from at least as early as 1721, with many used even earlier, perhaps since 1691. As of 1755, these main travel routes included one corridor, which extended from the Río Grande crossings at Presidio San Juan Bautista del Río Grande northeast to San Antonio, then to the Nacogdoches area, and on to Los Adaes. A second main route crossed the Río Grande in the general area of Laredo in Webb County and extended north to San Antonio. A route that branched northeast passed through Goliad County and continued northeast, probably connecting with the upper travel corridor near the Neches or Trinity rivers in the area of Houston County, where the first mission to the Tejas was established in 1690.

In the 1750s, the Spanish attempted to branch out, but failed due to conflicts with American Indians.[7] The Spanish Crown recognized the failure of its colonial effort along the northern frontier, at least as early as 1766, when the Marqués de Rubí was sent to inspect presidios throughout the northern frontier, including Texas and Louisiana. As a result of Rubí's inspection, all recent settlements were ordered to be abandoned, and all of their inhabitants were relocated to San Antonio and La Bahía. However, with the move to the San Antonio River valley, the extent of Spanish Colonial presence—at least for a short period of time—was effectively reduced to two major settlement areas: Bexar and La Bahía. Soon after their removal from East Texas, a group from Los Adaes, historically known as "Adaeseños," requested that they be allowed to return to an area closer to their homelands. As a result, in 1774, the Villa of Nuestra Señora del Pilar de Bucareli was founded on the west bank of the Trinity River in Madison County near Paso Tomás. Bucareli was short-lived. It was abandoned five years later, in 1779, when its inhabitants reestablished their community at the site of the former Mission Nuestra Señora de Guadalupe in Nacogdoches, where the mission church was still standing. Much as in Nuevo Santander, the East Texas settlement sites—reestablished by civilians—would serve as de facto presidios and missions, as well as civilian settlements with ranches. The East Texas ranches along the trail later became trading posts, where

7 - Between 1756 and 1762, the Spanish created three new major settlement areas. They included missions and presidios in three areas far removed from the other settlements: 1) A settlement on the Gulf Coast, east of the present-day Houston metro area, that included Mission Nuestra Señora de la Luz de Orcoquisac (1756–1772) and Presidio San Agustín de Ahumada (1756–1770); 2) A settlement in Menard County, which included Mission Santa Cruz de San Sabá (1757–1758) and Presidio San Luis de las Amarillas (1757–1771; and 3) A settlement area known as the "El Cañon" missions, which included Mission San Lorenzo de la Santa Cruz (1762–1770) in Real County and Nuestra Señora de la Candelaria del Cañon (1762–1767) in Uvalde County. These new settlements represented Spanish attempts to expand the frontier, but they never succeeded and were abandoned by 1772.

Spanish, French, American, and American Indian traders legally and illegally bartered a wide variety of merchandise.

As a result of the recommendations of Marqués de Rubí, Spanish settlement policies in the New World changed. There was no longer an emphasis on establishing missions, presidios, and scattered towns; instead, there was a reduction in the number of settlement sites and no further expansion attempts. With the exception of a small outpost of the Presidio San Antonio de Bexar (a post known as Fuerte del Cíbolo), no new official Spanish presidios and only one mission (Mission Nuestra Señora del Refugio) would be founded during this period. Additionally, only four *villas* would be established—all an outgrowth of civilian ventures. The latter half of the 18th century saw a focus on civilian settlements and extended areas of mission ranches, where the lines between missionaries, military, ranchers, and general civilians became blurred. This pattern is similar to the one for Nuevo Santander, but it also seems prevalent in the settlement areas of San Antonio and La Bahía and also in East Texas after 1772. These sites played an important role in the continuation and success of the various routes of El Camino Real de los Tejas trail because most were located at important crossings.

The pattern of ranch headquarters being used as guard posts or stopping places along routes is illustrated in a late 18th-century map of the San Antonio River valley between the San Antonio and La Bahía settlement areas (Figure 1-1 on page page 13 is a section of this map). Although the cartographer and date of this map have not yet been confirmed, correspondence from Spanish Governor Domingo Cabello to Commandant General Teodoro de Croix in 1780 provides clues to the date and subject matter. Additionally, its reliability as documentation of the relationship between river crossings, roads, and ranch headquarters can be demonstrated by modern knowledge of the locations and dispositions of several of the trail-related resources depicted on this map. Researchers have added notes to the map to show sites that have been confirmed physically and archeologically, to demonstrate the credibility of its information and to facilitate its interpretation.[8]

Figure 1-1. Ranches and Roads in Wilson and Karnes Counties (Courtesy National Archives, Map no. NWCS-077-CWMF-Q47)

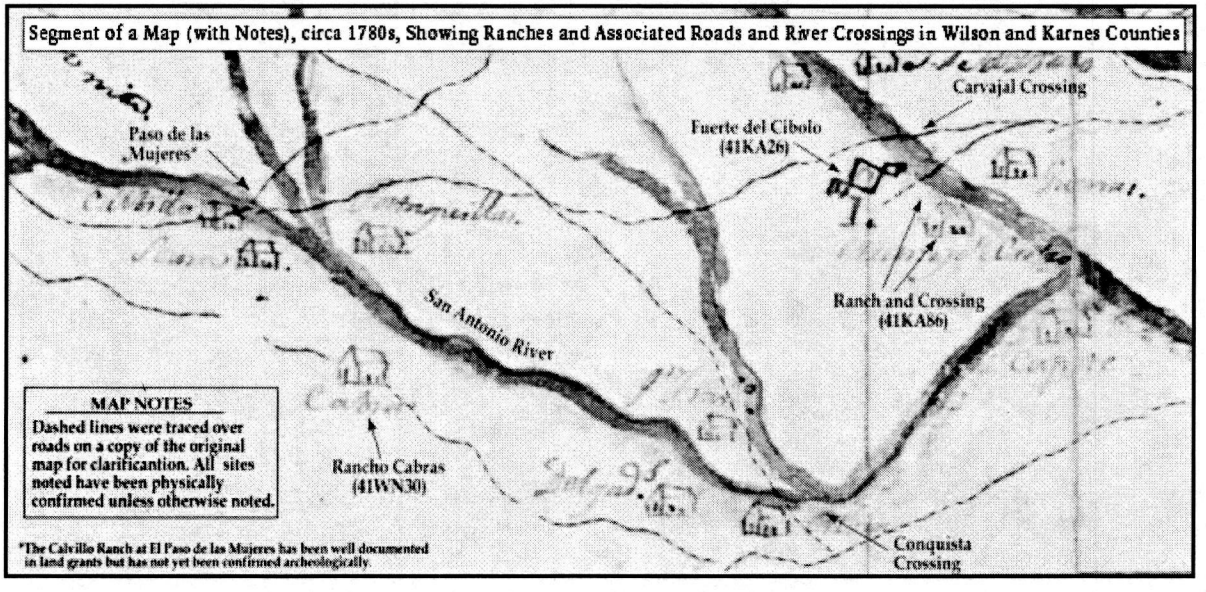


Figure 1-1 shows a settlement pattern of ranch headquarters clustered around one or more river crossings and houses on both sides of the river. The ranches depicted in this map are mission ranches and ranches

8 - Morgan-Remley conducted this investigation and added notes to the map.

leased from the missions, which were part of the mission lands (*fundos legales*) of the missions in San Antonio and La Bahía. These *fundos legales* included mission grounds, agricultural fields, and ranch lands. Legal documents refer to roads as ranch boundaries and several parcel corners and other boundaries being located at known river crossings. It is not clear if the pattern of ranch headquarters clustering around crossings was deliberately planned in laying out the boundaries of mission ranch lands. However, this pattern is consistent with travelers' written descriptions of *parajes* (stopping places or campsites), which noted that travel parties tried to make camp shortly after crossing a river because a heavy rain could come overnight and make it impassable. Therefore, it was important to have a *paraje* on either side of a river to facilitate whichever direction a given party would be traveling.[9] By the mid to late 18th century, many of the ranch headquarters and towns tended to be former campsites that evolved into stopovers with more amenities.

Ranch headquarters clustered near river crossings would not only have served travelers but also local settlers by providing a community structure that facilitated sharing resources and increased defense against enemies traveling along the road. A good example of this community structure is found in the number of people recorded at Antonio Gil Y'Barbo's Rancho Lobanillo, which, as early as 1773, boasted a population of at least 65 people (made up of 14 families). Y'Barbo's ranches are also noteworthy because he was known to be a prolific trader and smuggler, and it is likely that his ranch headquarters served as a trading post.

The community structure is also evident in the multiple functions served by ranch headquarters. For instance, Rancho de los Cabras had a church that was visited by a priest from Mission San Francisco de la Espada in Bexar County. This church may have also served three ranches located on the west side of the river near the crossing known as Paso de las Mujeres (at the Calvillo Ranch), all of which had been leased from Mission Espada ranch lands.

In addition to serving religious and economic functions, many ranch headquarters in the Nuevo Santander area were built to be defensive structures, as were those in the San Antonio River valley. Rancho de los Cabras, for instance, had defensive walls with probable bastions around the ranch compound. Additionally, two other sites that have been confirmed archeologically in the area covered by the map segment in Figure 1-1 include a presidio outpost and a ranch headquarters with masonry structures that would have provided greater defense than the *jacales* (primitive wattle-and-daub adobe structures) often recorded along the San Antonio River. According to historical reports, additional ranches in the area with masonry structures and chapels included Rancho Pastle in Wilson County and Rancho La Mora in Karnes County, though neither of these has been confirmed archeologically. Other ranch headquarters in the San Antonio River valley between Bexar and Goliad counties may have had similar defensive and religious structures.

In 1803, the United States acquired

9 - The term *paraje*, though often translated as campsite, is a word derived from the verb *parar*, which simply means to stop. It is from the same root word as *parador*, which is used in Spain today to refer to any place where a traveler stops overnight, such as a hostel or an inn. Therefore, although the term *paraje* has been interpreted by many researchers to mean campsite, a broader translation, such as stopover or waystation, may be more appropriate to discussing the stopping points along the trail routes as they evolved through time. That is, in the early period of the trail, the *paraje* was simply a place that travelers would record as they crossed the landscape, because it was important to note the places where one could find good water and favorable conditions to camp. However, in the later periods of the trail, especially after the expansion of private ranches near river crossings (beginning in the 1750s), *parajes* provided anything from a campsite to actual shelter and other amenities. In addition to the Pike diaries, another example that illustrates that ranch headquarters were likely also parajes is found in an 1827 land grant in Wilson County (GLO document #103440), which states that the Flores ranch was located on the San Antonio River (Río de Bexar) at *el paraje Nombrado Chayopines*. The reference to the well-known *paraje* in defining the ranch lands demonstrates the important relationship between the trail and ranch headquarters—a relationship that likely extended well into the Mexican period and beyond.

Louisiana from France, opening the door to an influx of Anglo-Americans into Louisiana and Texas. Other newcomers were American Indian groups from the east and southeast who were being pushed westward by Anglo expansion or saw better opportunities and more game available in the Southern Plains and in Texas. Among those tribes were the Creek Alabamas and the Coushattas. They settled among the Caddo for a while, and later were granted lands by Sam Houston, first governor of the Republic of Texas. The Choctaw also moved into the Red River area and, despite frictions, eventually settled among Caddo groups including the Adai, Chickasaw, Cherokee, Delaware, Kickapoo, Quapaw, Shawnee, and others who also made their move into Louisiana and Texas during the early and mid 1800s.

Following the Louisiana Purchase, Spain gained a new rival for supremacy of lands in Texas and Louisiana: the United States. Spanish officials soon realized that the cooperation of the local tribes was essential to maintaining New Spain's ill-defined territorial borders. Trade and gift-giving were once again central to Indian relations policies carried out by both Spanish and United States. Most of the traffic appears to have been between Nacogdoches and Natchitoches, but it is also clear that trade also involved other tribes and extended westward.

The boundary dispute between Spain and the United States was a complicated affair. It resulted in the establishment of a swath of territory between Nacogdoches and Natchitoches that was not under the control of either country. The boundaries of this territory, which came to be known as the Neutral Ground, were never officially described. Only the Sabine River and Arroyo Hondo were designated in the informal agreement between Lieutenant Colonel José María Herrera (the Spanish official who signed the agreement) and General James Wilkinson (the United States official who first took possession of Louisiana for the United States). The Spanish bolstered their claims by increasing troops at Bexar and Nacogdoches. More than 500 soldiers traveled from San Antonio to Nacogdoches, and in November 1806, 883 soldiers were assigned to patrol the area between Nacogdoches and Los Adaes.

This issue, which was debated from 1804 onward, was finally settled with the signing of the Adams-Onís Treaty on February 22, 1821. Although Spain asserted that the Caddo villages were located in Spanish territory, neither the groups along the Red River nor in the United States accepted that notion.

Travel through the area remained dangerous, though. Troops, settlers, traders, runaway slaves, filibusters, gangsters, and many newcomers from the East looking for easy profit and lands traveled the main road developed in the previous century. Caddo groups initially profited from the opportunity, but soon thereafter, started to suffer as the onslaught of new settlers overwhelmed them. In 1806, the warehouse at San Antonio distributed 589 three-pound tobacco twists, 1,829 knives, 938 scissors, and 3,024 small bells among 1,331 Indians of various tribes. These goods and others maintained trade relations and connections among native groups, but they did little to help these groups feel safer and offered no practical resources to help them defend their traditional lands.

The Spanish distribution of gifts was normally done through licensed traders like William Barr and Peter Samuel Davenport, while the United States used John Sibley's factory system located in Natchitoches. Unlike the Spanish traders, Sibley and others provided the native groups with weapons. Indeed, Sibley even arranged for a blacksmith to repair their weapons. Sibley was so successful that at one time as many as 700 Indians went to Natchitoches to receive gifts. This trade went a long way towards obtaining and maintaining native allegiance. It is unclear how much of this trade went through El Camino Real de los Tejas, but some certainly did.

In 1801, the Mexican government gave permission to the House of Barr and Davenport to export to Louisiana all of the

livestock they obtained from the Indians in exchange for muskets, blankets, pots and clothing. During the same year, Barr obtained permission to drive to Louisiana about 300 horses and mules so that he could purchase goods for the tribes. Notwithstanding the tensions in the Neutral Ground, Caddo groups fared rather well until the dismantling of the Spanish Colonial empire which began in 1810 with the rebellion led by Father Miguel Hidalgo y Costilla. The ensuing tumult of revolutionary movements culminated with the Texas Revolution of 1836. As Mexican General Antonio López de Santa Anna approached San Antonio to quell the Texas revolt, Caddo groups and others were again asked to take sides. This time, however, the sheer number of participants and their conflicting positions made the choices unclear for American Indians. In 1835, Caddo chiefs ceded those of their lands within United States territory and retreated westward to Texas.

As Mirabeau B. Lamar took office as president of the Republic of Texas the situation worsened for Caddo groups and American Indians in Texas. Pushed by Lamar, many retreated into Oklahoma for a while, but returned to Texas in 1839. In 1841, Sam Houston became president of the Republic of Texas and tried to find a solution. In March 1843, some Caddo groups and many other groups signed a peace treaty at the Tehuacana Creek near modern Waco, Texas. Following the treaty, the Kadohahacho, Hasinai, Nadaco, and other Caddo groups settled on the Clear Fork of the Brazos River. Sadly, the treaty did not bring about a lasting solution. In 1859, about 1,050 Caddo were removed to the Indian Territory and the Wichita agency in western Oklahoma. Today, the Caddo Tribe of Oklahoma has its tribal complex in Binger, Oklahoma.

Competition over the territory held by American Indian tribes had begun even before the end of the Spanish Colonial period. Spain recognized that immigration was the key to successful colonization, and began to consider requests from Anglos, including a petition for a land grant by Moses Austin in 1820. Following Moses Austin's death the following year, his son Stephen F. Austin carried out his father's plans, receiving a land grant in 1821. This was the beginning of what would become a large-scale European and American migration into Texas.

Austin's colony was located between the Lavaca and San Jacinto rivers, south of the San Antonio Road. The San Antonio Road, referenced in several land grants, remained a well-known route into modern times. During the Mexican period (1821–1836), Texas served as a buffer between the United States and Mexico. The Mexican government recognized that populating Texas with immigrants would strengthen the buffer area, so, in 1824, the Mexican state of Coahuila y Texas offered 4,428 acres of grazing land and 170 acres of farmland to new colonists. Within the next decade, more than 30,000 Anglos and 3,000 mainly African-American slaves moved into Texas, primarily to the eastern section of the state. With so many new arrivals, settlements grew up in areas far removed from the main routes of the designated trail, with the result that a network of roads began to crisscross the region, especially in East Texas. Complex road networks continued to develop throughout the Mexican period, as is well documented in the 1830 minutes of the *Ayuntamiento* (City Council) of San Felipe, in which Stephen F. Austin called for the construction of several new routes in the area, as well as assessments of some of the roads that predated the Mexican period.

During the Mexican and Texas Republic periods (1821–1845), existing roads in Texas were improved and additional ones developed. Even so, many of the settlements dating from this period were established along roads dating to the earlier Spanish period. But as immigration steadily increased—especially after Texas won its independence from Mexico in 1836—a complex settlement pattern and associated new roads transformed the landscape.

As the 19th century progressed, immigrants increasingly arrived by sea.

Port cities, such as Indianola and Galveston, became major entry points for newcomers from all over the world. With increased population and the complex network of roads that grew in its wake, designated trail routes still bore names that referenced their Spanish Colonial beginnings, but they no longer functioned as the major travel corridors they had been when Spain struggled to colonize Texas. With time radical changes to the use of the road occurred and the reasons that made El Camino Real de los Tejas nationally significant diminished.

PLANNING ISSUES AND CONCERNS

Members of the planning team made several trips to Texas and Louisiana in 2006 and 2007 to acquaint themselves with the main resources and issues central to the planning process. The team received ideas and comments from the public during these trips. The team conducted eight scoping meetings in 2007, where input from the public, government agency representatives, federally recognized American Indian tribes, trail organizations, and individuals was systematically recorded. The planning team also received and recorded comments by letter and/or comment forms. Every comment was considered. Members of the planning team have also helped identify issues that will likely directly impact the National Trails Intermountain Region's role as administrator of the trail.

Several concerns about trail administration can appropriately be addressed here while others are beyond the scope of the Draft Comprehensive Management Plan/Environmental Assessment, or would be better handled once detailed planning is underway.

The following is a list of the principal issues identified during the process of developing this document. The issues have been grouped into three categories, but in several cases they overlap. For example, ownership of resources is an issue that has been listed under administration, but it also has implications for resource protection, interpretation, and visitor use.

ADMINISTRATION AND MANAGEMENT

1. There is limited public awareness of the trail.
2. The role and responsibility of National Park Service in the administration of historic trails is not well understood by the partners.
3. There is no current overall administration of the trail: a series of sites and a few segments are managed locally, but no coordinated system of routes and trail resources exists.
4. The majority of resources is in private hands. A very small number is federally owned and a variety of state and local entities manage the rest. Many of the private landowners have been reluctant to participate in the development of this plan.
5. There is a lack of adequate coordination among groups interested in trail development. Protection and use strategies are inconsistent: different levels of protection, use, and interpretation are employed, depending on the location and owner.
6. No formal mechanism for providing technical assistance for preservation and interpretation exists.
7. Financial assistance to stimulate partnerships, protect trail-related resources, and educate the public is limited.

RESOURCE PROTECTION

1. Additional Routes might be identified
2. Trail routes need further study, particularly addressing the following areas:
   a. Accuracy
   b. Connecting routes
3. Ground truthing of trail resources has been completed only in certain areas; further research is necessary to add resources to the list of high potential sites and segments.
4. There is a need for additional research on the following topics and possibly

others:
a. Original Spanish government correspondence regarding the settlement of areas served by El Camino Real de los Tejas National Historic Trail;
b. Sites and segments related to the Caddo and other American Indian tribes with close ties to the trail;
c. The African-American experience along the trail;
d. Commercial activities/trade/contraband along the trail;
e. Evolution of civilian communities (Spanish, Mexican, Anglo) along the trail (from ranchos to towns);
f. The migration experience along the San Antonio Road.

5. Trail resources are under diverse ownership (federal, several state entities, and numerous private landowners).
6. Existing strategies to preserve trail resources, such as swales or ruts, are controversial.
7. No strategy has yet been identified to protect and preserve trail resources due to neglect, ignorance of their significance, development pressures, inappropriate uses, and natural processes.
8. No formal approach to provide technical assistance for preservation and interpretation has been established.

INTERPRETATION, VISITOR EXPERIENCE, AND USE

1. Few coordinated methods of getting interpretive information to the public exist.
2. Research information needs to be made accessible to the general public, as well as to teachers and students.
3. Periodic updates of interpretive information to reflect the latest scholarship are needed.
4. No formal approach to providing technical assistance for preservation and interpretation exists.
5. Strategies for promoting public support for the preservation of trail-related resources are lacking.
6. Methods used to mark the trails are different and often incompatible.
7. Interpretive facilities along the designated routes need to explain historic developments more accurately, place them into an appropriate context, and provide the public with interesting yet relevant and authentic materials.

BOUNDARY ADJUSTMENTS

The designation of El Camino Real de los Tejas National Historic Trail commemorates a significant route of travel. As in the case of all other national historic trails, the legislation does not include identification of specific legal boundaries and does not provide for federal land acquisition without the consent of the owner. The National Park Service does not identify land acquisition as a management priority for this plan.

Furthermore, most national historic trail routes are mapped at a very coarse scale and their specific historic location is often not known. The accurate identification of many of these routes will require exhaustive research and ground truthing, time-consuming tasks that will be ongoing throughout the life of this plan. It is possible that as new research reveals more accurate information, the location of the designated routes might be slightly modified. At the time this plan is being prepared no additional routes are contemplated for inclusion. However, because of the complexity of conquest and development patterns, potential routes of travel could be identified for further study. Inclusion of such additional routes would require action by Congress.

GUIDANCE FOR PLANNING AND ADMINISTRATION

General guidance for trail planning and administration derives from the purpose of the trail, as established by Congress; the national significance of the trail and its fundamental resources and values; the primary interpretive themes that convey the trail's significance; and federal, state, and

county legal and policy requirements—the more general body of laws and policies that apply to El Camino Real de los Tejas National Historic Trail. These parameters guide all programs and actions recommended in the Draft Comprehensive Management Plan/Environmental Assessment and contribute to achieving the trail's purpose and other mandates.

PURPOSE OF THE TRAIL

A statement of purpose defines why a particular trail or park has received official recognition. The purpose of El Camino Real de los Tejas National Historic Trail is derived from the legislative history, the *National Historic Trail Feasibility Study and Environmental Assessment: El Camino Real de los Tejas, Texas and Louisiana*, and the public comments received in 2007.

The purpose of El Camino Real de los Tejas National Historic Trail is to commemorate the development of a network of trails, based upon American Indian routes, which linked Spanish missions and posts in a travel corridor from the Río Grande to Louisiana. This network of trails was used throughout the Spanish Colonial period, the Mexican period, and up to Texas nation and statehood.

To achieve the trail's stated purpose, it is essential to identify, protect, and interpret the significant resources associated with El Camino Real de los Tejas National Historic Trail, and to provide trail users with educational and recreational opportunities, so that they will understand and enjoy authentic sites and segments associated with the history of the trail. The involvement of all of those interested in the trail and in particular volunteers will be essential to accomplish the purpose of the trail.

SIGNIFICANCE STATEMENTS

Significance statements reflect the trail's importance to the heritage of the United States. They serve as a tool in identifying interpretive themes and desirable visitor experiences. They help trail administrators focus on the preservation and enjoyment of those resources and values that directly contribute to the purpose of the trail, and that must be protected. Significance statements describe the unique qualities of the trail's resources, both separately and as a whole, and place them within a broader regional, national, and international context.

The significance statements for El Camino Real de Tejas National Historic Trail include:

- Spanish settlement of the northeast corner of the province of New Spain was triggered by the 17th-century struggle with France for territorial control in North America: The establishment of missions and presidios along El Camino Real de los Tejas demonstrated Spain's determination to discourage French intrusion.
- The network of routes that became El Camino Real de los Tejas followed established American Indian trails. It fostered the convergence of European and Indian cultures by linking cultural and linguistic groups, introducing a foreign religious system (Catholicism), and serving as an agent for cultural diffusion, biological exchange, and communication.
- For more than 160 years, El Camino Real de los Tejas facilitated the conquest, colonization, and development of the region and was a key feature of the Spanish Colonial empire in what later became the states of Texas and Louisiana.
- The location of El Camino Real de los Tejas shaped the physical and legal patterning of land grants, settlements, and subsequent transportation networks in Texas and Louisiana.
- El Camino Real de los Tejas served as a critical travel corridor for Mexican and Texan military forces during the first half of the 19th century.
- The Old San Antonio Road, from the Red River settlement of Natchitoches,

Louisiana, to San Antonio, Texas, was the primary overland route for early 19th-century Anglo and African-American migration into Texas, and supported the development of the cotton economy in eastern Texas and northwestern Louisiana.

PRIMARY INTERPRETIVE THEMES

Interpretive themes are the key statements defining the trail's significance and resource values. These themes identify the primary stories that best convey the trail's significance to the public. Interpretive themes connect trail resources to larger ideas, meanings, and values. They are the building blocks upon which interpretive programs are based. The theme headings below are for discussion purposes and not intended as titles.

• PROTECTION, CONTROL, AND DEVELOPMENT

El Camino Real de los Tejas was a line of defense for New Spain with long term consequences – modifying the landscape to meet the needs of armies and immigrants and leading to community and trade development.

• IRREVERSIBLE CHANGE

The cultural groups who traveled El Camino Real de los Tejas caused irreversible change to American Indian lifeways, affecting family and community life, religious practices, intertribal relations, and resource use.

• PATHS TRAVELED

The trail represents the lifeways of Indian groups, whose physical pathways were defined by the geographic landscape of the Tejas environment and were later adopted by Spanish, Mexican, American, and modern travelers.

• SHIFTING ROUTES

The trail was not static – varying routes were developed to meet the changing needs of travelers, who were affected by weather, Indian relations, terrain, settlement, and modes of transportation – and the multiple paths provide a visual understanding to modern travelers of the area's development through time.

• CHANGING STATES

The trail is representative of the dramatic socioeconomic change of the 1800s, including: political unrest, military action, Texas' independence from Mexico, nationhood, and entry into the United States.

HISTORIC RESOURCES ALONG THE TRAIL

DESCRIPTION OF TRAIL ROUTES

Current knowledge of El Camino Real de los Tejas is incomplete. This is evident in any attempt to clarify the complex system of routes associated with this trail (see Appendix C, page 149 for a discussion of mapping El Camino Real de los Tejas National Historic Trail). El Camino Real de los Tejas was not a single trail; instead, it was a network of regional routes that included El Camino Pita, the Upper Presidio Road, the Lower Presidio Road, El Camino de en Medio, El Camino Arriba, the San Antonio–Nacogdoches Road, La Bahía Road, El Camino Carretera, among other routes. Trail experts note, quite accurately, that throughout its long history, the trail's route alignments moved to allow travelers to avoid flooded rivers or hostile American Indians. Even though the routes shifted with the season of the year or with time, most destinations remained constant. However, often Spanish settlements proved ephemeral. Several missions, presidios, and villages were short-lived, a testimony to the obstacles that Spain faced in colonizing such a large and harsh territory.

The *National Historic Trail Feasibility Study and Environmental Assessment: El*

Camino Real de los Tejas, Texas and Louisiana identified El Camino Real de los Tejas National Historic Trail routes that were designated by Congress. The study classified the routes according to their starting and ending points into routes from the Río Grande to San Antonio, and routes from San Antonio to Los Adaes.

There were three basic routes from the Río Grande to San Antonio (see Map 1-2, page 23):

1) El Camino Pita, between Paso de Francia and San Antonio, was named for a paraje (campsite) used in 1716 by the Domingo Ramón-Fray Isidro Espinosa Expedition. It remained the route of most expeditions through the 1720s, when traffic moved farther south in response to American Indian attacks.

2) The Lower Presidio Road, used primarily from 1750 to 1800, went almost directly east from Paso de Francia, before turning north to San Antonio. This route was also known as El Camino de en Medio because it was between two other roads: El Camino Pita to the north and, on the south, another main road to San Antonio that ran east from the Laredo crossing of the Río Grande.

3) Routes from the Laredo area, also called the San Antonio–Laredo Road, came into use with the founding of Villa Dolores and Laredo in the 1750s. A spur from the San Antonio Road (1750–1830) went directly north-northeast from Laredo. A second route from Laredo to San Antonio (1750–1830) ran east-northeast to La Bahía near present-day Goliad. The route then turned back to the northwest, following the San Antonio River to San Antonio. An Upper Presidio Road was opened later (1795–1850) generally following the route of the earlier Camino Pita (it is generally north of it) to a point east of the Frío River.

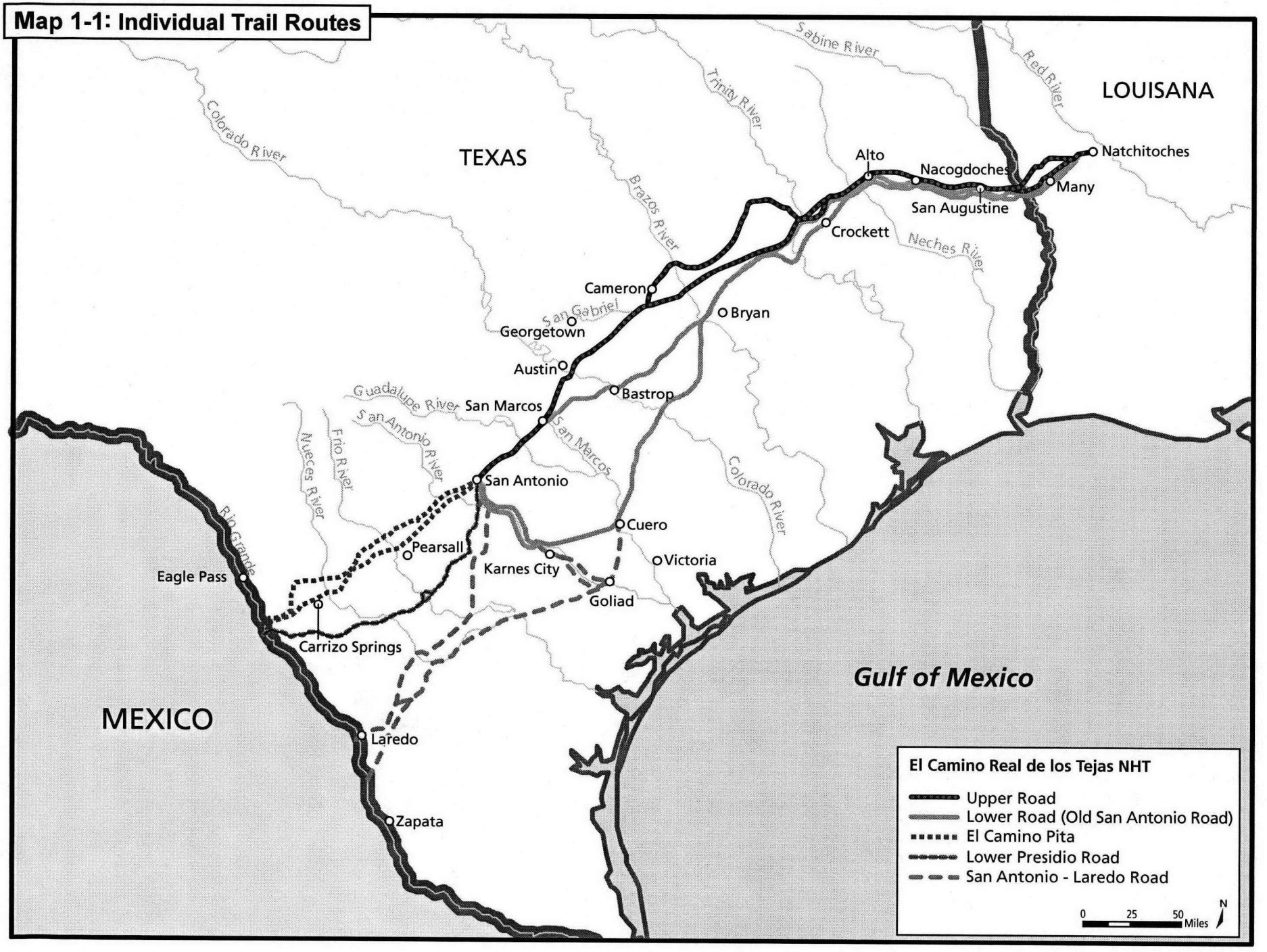
There were two main routes from San Antonio to Los Adaes (see Map 1-2, page 23):

1) The Upper Road or El Camino de los Tejas (1691–1800). This road went through modern New Braunfels and San Marcos, reached the Colorado River just east of Austin, and extended to the missions in eastern Texas in 1716. It was the predominant route for the explorers and early settlers of eastern Texas. Beyond a point 10 miles northeast of Austin to the San Gabriel River, this road is not well defined. From the San Gabriel River to the Trinity River, three variations are shown: one that can be partially identified from records and two other, more northerly, routes.

2) The Lower Road (ca. 1730–1790s). During the 1720s, the road east from San Antonio shifted south, followed the San Antonio River downstream, then turned east to cross the Guadalupe River near present-day Cuero, the Colorado River, just north of La Grange, and the Brazos near the mouth of the Little Brazos River, near Hearne. After the presidio and mission at La Bahía were moved to present Goliad in 1749, the road was extended to La Bahía, where it intersected with the Laredo Road after 1755. The Lower Road joined the northern route before their common crossing of the Trinity River. Most traffic, and especially official expeditions, followed the Lower Road between 1727 and the closing of Los Adaes in 1773. East of the Neches, all three routes—the Upper Road (also known as El Camino Real de los Tejas), the Lower Road, and the Old San Antonio Road (also called El Camino de Arriba)—are all on the same alignment.

After the closing of Los Adaes, both the Upper and Lower roads to the east continued to be used, with the Lower Road receiving more traffic. A new mail route was pioneered in 1795, with the aim of straightening the route to East Texas. Many

Map 1-1: Individual Trail Routes



segments of this road—later called the Old San Antonio Road—are the same as the Upper Road; other segments are the same as the Lower Road. In the area of New Braunfels, the San Antonio Road turned slightly south to avoid crossing the Comal and Blanco rivers. It then headed straight for the Brazos crossing of the Lower Road, passing the Colorado River at Bastrop. The Old San Antonio Road followed the Upper Road from San Antonio to the New Braunfels area, where it turned slightly south to cross the Guadalupe and San Marcos rivers. It then headed through Bastrop to the Brazos River, where it crossed the same area as the Lower Road.

The Old San Antonio Road between Natchitoches, Louisiana, and San Antonio, Texas, served as one colonial route used for emigration, trade and commerce in the early decades of the 19th century and beyond. The Old San Antonio Road also provided an important transportation corridor for military activities during the Texas Revolution and the War between Mexico and the United States.

In the state of Louisiana, State Highway 120 paralleled the original route of El Camino Real de los Tejas until the 1820s. At that time, the Americans established Fort Jesup and built what would become Louisiana State Highway 6 and the Pendleton Bridge across the Sabine River, making the ferry across the Sabine no longer necessary.

To avoid confusion, all of the congressionally designated routes are subsumed under the name El Camino Real de los Tejas.

HIGH POTENTIAL SITES AND SEGMENTS

According to Section 12 of the National Trails System Act:

a) high potential sites are those historic sites related to the route or sites in close proximity thereto, which provide opportunity to interpret the historic significance of the trail during the period of its major use; criteria for consideration as high potential sites include historic significance, presence of visible historic remnants, scenic quality, and relative freedom from intrusion;
b) high potential segments are those segments of a trail that afford high-quality recreation experiences along a portion of the route having greater-than-average scenic values or affording an opportunity to share vicariously the experience of the original users of a historic route.

The planning process determines if sites, trail segments, or associated resources are eligible to be included as official components of the national historic trail. "High potential" lists are compiled based on information available when the Draft Comprehensive Management Plan / Environmental Assessment is being prepared. They should not be regarded as complete, conclusive, or final. Lists may be amended to add or remove properties, as appropriate.

The process of selecting high potential sites and segments for El Camino Real de los Tejas National Historic Trail required the analysis of information from 40 Texas counties and two Louisiana parishes. The list of high potential sites and segments was developed after analyzing more than 500 sites and involved a number of steps (see Appendix D, page 155).

Crucial input in selecting high potential sites and segments came from a number of different representatives from the trail community, including the Texas Historical Commission; the Texas Parks and Wildlife Department; the Louisiana Department of Culture, Recreation, and Tourism; the Texas Department of Transportation; Stephen F. Austin State University; El Camino Real de los Tejas National Historic Trail Association; and others with knowledge of trail resources. Members of the National Trails Intermountain Region planning team, assisted by a core group of experts with extensive experience identifying high potential sites and segments, visited the majority of sites/

segments included in the list and made a determination as to which should be included. In a number of instances, a resource appeared significant but its relationship to the trail was not clear; in others, there was not enough historic evidence to link the site to the trail. In many cases, a site appears to merit inclusion, but its specific location has not been clearly identified. A decision was reached to develop two lists: 1) high potential sites and segments (see Appendix D, page 155, for greater detail); and 2) those sites that might merit inclusion later on but, at this time, fail to meet some of the criteria identified in the National Trails System Act; these sites (almost 100) are included in Appendix E, page 185.

As knowledge of trail resources increases, a larger number of authentic sites and segments will become eligible for inclusion as high potential sites. However, even though some of these sites and segments may merit inclusion due to their scientific importance in understanding the history and the development of the trail, they still may not be suitable for interpretation and public access. A combination of factors, such as limited size (very short swales), location (in an area not likely to permit safe public access or underwater), landowners' wishes, and other reasons, might lead trail administrators to conclude that some sites and segments, although authentic, do not have the potential to be developed and interpreted for the benefit of the public.

For the purpose of this plan, 74 high potential sites and segments have been selected for inclusion from the state of Texas; 19 from the state of Louisiana, a total of 93 for the entire trail. Their approximate location is depicted on the maps which are included at the end of Appendix D, page 171.

Table 1-2.
High Potential Sites and Segments

Parish/County	Site	Segment
LOUISIANA		
Natchitoches	15	1
Sabine	3	
TEXAS		
Bexar	22	1
Brazos	1	
Cherokee	3	
Dimmitt	1	
Frio	1	
Goliad	6	
Hays	6	
Houston		1
Jackson	1	
Karnes	2	
Maverick	1	
Milam	6	
Nacogdoches	5	
Nacogdoches/Rusk	1	
Sabine	1	1
San Augustine	2	
Travis	1	
Victoria	6	
Webb	6	
Wilson	1	
Zapata	1	
Total	**89**	**4**

GAPS IN INFORMATION AND RESEARCH NEEDS

Information for this Draft Comprehensive Management Plan/ Environmental Assessment has come from documents prepared specifically for this project. They include 1) a cultural resources inventory for the trail in Texas; 2) an ethnographic overview; 3) a cultural resources inventory for the trail in Louisiana; and 4) a natural resources overview. However, due to the considerable length of the designated route and the limited knowledge about major sections of the trail, much still remains to be learned

about El Camino Real de los Tejas National Historic Trail routes and associated resources. This Draft Comprehensive Management Plan/Environmental Assessment highlights the need for continued research and study of the people and the resources associated with the trail.

For this reason, the planning team recommends that the following studies be undertaken, as time and funding become available:

1) African-Americans' experience along the trail;
2) Immigration into Texas during the first half of the 19th century;
3) Development of Spanish/Mexican communities during the period of significance;
4) In-depth research of economic activities along the trail;
5) On-the-ground archeological investigations to verify routes and the specific location of missions and presidios;
6) Archeological and historical investigations to identify the location of missions and presidios, and other significant resources;
7) Studies of cultural landscapes along the trail;
8) Examination of additional historic routes for future Congressional designation; and
9) Development of site/segment protection strategies that take into account special environmental conditions along the trail.
10) Analysis of the relationship between route selection made by travelers and natural resources/environmental issues; and
11) Impact of the trail on indigenous communities (and vice-versa).

LEGAL AND POLICY REQUIREMENTS

In addition to the legislation designating the trail and the National Trails System Act, other federal laws apply to trail management. All trail resources and opportunities for visitor enjoyment must be managed in compliance with a large body of legal and policy requirements intended to adequately protect the nation's natural and cultural heritage and opportunities for the enjoyment of that heritage. Federal laws, regulations, and planning direction applicable to this Draft Comprehensive Management Plan/Environmental Assessment include, but are not limited to, the following:

- Antiquities Act of 1906 (16 USC 431-433)
- Archeological and Historic Preservation Act of 1974 (AHPA, 16 USC 469-469c)
- Archeological Resources Protection Act of 1979 (ARPA, 16 USC 470aa)
- Endangered Species Act of 1973 (16 USC 35)
- Federal Cave Protection Act of 1988 (16 USC 4301-4310)
- National Environmental Policy Act of 1969 (NEPA 42 USC 5)
- National Historic Preservation Act of 1966 (NHPA 16 USC 470)
- National Park Service Organic Act of 1916 (16 USC 1, 2, 3, and 4)
- Native American Graves and Repatriation Act of 1990 (25 NAGPRA, USC 3001 *ET. SEQ.*)
- Executive Order No. 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," 1994
- Executive Order No. 1300, "Indian Sacred Sites," 1996
- NPS *MANAGEMENT POLICIES* 2006
- and relevant NPS Director's Orders

RELATIONSHIP TO OTHER PLANS

COUNTY LAND USE PLANS

Existing land use plans in the trail's vicinity are numerous since the routes cross two Louisiana Parishes and 40 Texas Counties. Given the general nature of the alternatives proposed in this plan, it is not appropriate to list all such documents. However, as trail projects begin to be developed, the National Trails Intermountain Region will ensure that all pertinent local land use plans are examined to ensure that there are no unexpected impacts or inconsistencies.

STATE

Statewide Comprehensive Outdoor Recreation Plans exist for both Texas and Louisiana. In Texas, the Texas Parks and Wildlife Department has prepared the Land and Water Resources Conservation and Recreation Plan (2005). In Louisiana, the Division of Outdoor Recreation of the Office of State Parks prepared the state's plan that was approved early in 2009. These plans identify statewide recreation demands and issues and present a strategic approach to address them. These plans are required to qualify for federal grants for outdoor recreation projects and are to be updated every five years. The alternatives proposed in this plan are in accordance with the provisions identified in these documents.

At the request of the Texas State Legislature the Texas Department of Transportation prepared in 1991 and revised in 2001 a historic study and preservation plan for a large segment of the designated routes of El Camino Real de los Tejas. Included in *A Texas Legacy, The Old San Antonio Road and the Caminos Reales: A Tricentennial History, 1691-1991*, the preservation plan calls for the identification of historic resources, the completion and consolidation of all inventories and existing data, on-site investigation, evaluation and documentation, additional research, and the development of a management system. It identifies suitable places (the intersection of the various old routes with existing roads) for the installation of historic markers or information rest-stops for tourists. The plan also recommends the designation of the *caminos reales* as a national historic trail.

APPROPRIATE USE

Section 1.5 of *Management Policies* (2006), "Appropriate Use of the Parks," directs that the National Park Service must ensure that allowed park uses would not cause impairment of, or unacceptable impacts on, resources and values. In the case of El Camino Real de los Tejas National Historic Trail, the National Trails Intermountain Region does not own any of the resources and does not have the authority to regulate use. However, the office will make an effort to work with partners and the trail community to foster appropriate trail uses that will not result in unacceptable impacts to resources.

IMPACT TOPICS

Impact topics address those resources that could be affected by the alternatives presented in this plan. They offer a means of comparing the environmental consequences of implementing each alternative. The planning team chose topics on which to focus the environmental discussion, based on the following factors: resources and values that may be affected, federal laws and other legal requirements, the Council of Environmental Quality's guidelines for implementing the National Environmental Policy Act, the National Park Service management policies, and issues and concerns expressed during public scoping and meetings with interested parties along the trail.

Each impact topic is identified below. The list is followed by a brief justification for dismissing certain impact topics from further consideration.

IMPACT TOPICS ANALYZED

- Cultural Resources
  - *Ethnographic*
  - *Archeologic*
  - *Historic*
- Natural Resources
  - *Vegetation*
  - *Wildlife*
- Land Ownership and Use
- Socioeconomic Conditions
- Visitor Use and Experience

IMPACT TOPICS DISMISSED

The decision to dismiss certain impact topics from analysis is partially based on extensive experience administering national historic trails, and knowledge of trail resources. After a systematic analysis of the alternatives, the planning team concluded that certain impact topics were not relevant to the development of this Draft Comprehensive Management Plan/ Environmental Assessment. This decision was reached for two reasons: either because implementing either alternative would have no effect or a negligible effect on the topic or resource or because the resource does not occur along the trail. The topics dismissed from further evaluation include the following:

AIR QUALITY

Trail use would have negligible short- and long-term effects on air quality. Potential sources of air-quality effects may arise from development of trailheads and vehicle emissions associated with constructing small parking areas. Each of these sources would be short-term and negligible. The proposed alternative would result in negligible adverse, short-term effects on air quality: therefore, this impact topic was dismissed.

CAVES AND KARSTS

Although there are important caves and karsts in one of the counties and one of the parishes crossed by the trail, there are no known significant caves and karsts in the proximity of the trail corridor. If any future site-specific development were to take place, a more detailed environmental study would be undertaken to identify any possible such resource that might be affected; therefore, this topic was dismissed.

CLIMATE CHANGE AND SUSTAINABILITY

Although climatologists are unsure about the long-term results of global climate change, it is clear that the planet is experiencing a warming trend that affects ocean currents, sea levels, polar sea ice, and global weather patterns. Although these changes will likely affect winter precipitation patterns and amounts in the parks, it would be speculative to predict localized changes in temperature, precipitation, or other weather changes, in part because there are many variables that are not fully understood and there may be variables not currently defined. The analysis in this document is based on past and current weather patterns and the effects of future climate changes; therefore, this topic was dismissed.

CULTURAL LANDSCAPES

Those who traveled the trail focused neither on a set of swales or ruts nor on isolated places along the way, but instead on the physical nature of the regions they traversed. We identify such areas as cultural landscapes. The Secretary of the Interior's *Guidelines for the Treatment of Cultural Landscapes* define a cultural landscape as "a geographic area (including both natural and cultural resources and the wildlife or domestic animals therein) associated with an historic event, activity, or person or exhibiting other cultural or aesthetic values."

Cultural landscapes are particularly important in understanding Louisiana and Texas trails because they played a fundamental role in the selection of travel routes. Seasonal variations and weather patterns combined to dictate routes. Understanding the choices trail users made

requires us to examine the landscapes with care. The cultural aspects of a landscape are as important as the natural features in defining management strategies.

The term "landscape" differs in meaning, usage, and importance, depending on who is using it. Ecologists often use the term "ecoregion" or "ecosystem" when they refer to landscapes. Among cultural geographers, definitions of the term "landscape" have changed dramatically during the last six decades and continue to evolve.

Although cultural landscapes have not been considered essential trail resources, they should be a high priority for present-day trail managers because they define the nature of the trail, both at the time of original use and at present. Cultural landscapes are very important trail resources and need as much attention and protection as swales and other types of specific traditional historic resources. More importantly: legally, cultural landscapes merit the same protection as other cultural resources and should receive the same treatment and protection.

The major character-defining features of cultural landscapes along historic trails depend on the local vegetation, hydrology, topography, and soil, and sometimes the human modifications of these elements. Variations in vegetation, landforms, water sources, and soils also help to identify boundaries among the various component landscapes of a linear resource.

The National Park Service has developed a sophisticated methodology for the study of cultural landscapes. As in the case of User Capacity, identifying cultural landscapes along the trail and developing strategies for their protection would require periodic, long-term access to privately owned trail resources. It is likely that cultural landscapes occur along this trail. However, the majority of them are privately owned and many land owners are not willing to grant access to their land. Furthermore, any future trail development project associated with the proposed alternative would require compliance with federal laws regarding the protection of cultural landscapes. Therefore, it is the conclusion of the planning team that the National Park Service would not be able to do the work required to conduct cultural landscapes studies during the life of this plan. Therefore, this topic was dismissed.

GEOLOGY AND SOILS

Neither alternative proposes or implies activities that would remove, erode, or contaminate soils. In more than 20 years of national historic trails administration, the National Trails Intermountain Region has undertaken no projects that would adversely impact soils and has reasonable expectation that none would occur in the future. Any individual undertaking that might be proposed in the future would be carefully analyzed with respect to soil-related impacts. Impacts to soils and geology would be negligible, if any; therefore, this topic was dismissed.

MUSEUM COLLECTIONS

The National Park Service is one of the primary federal entities that preserves cultural and natural resources. National Park Service museum collections include diverse disciplines and represent a significant portion of the resources that the National Park Service is charged to preserve and protect. The collections are characterized as cultural, natural, and archival.

According to Director's Order-24 *Museum Collections*, the National Park Service requires the consideration of impacts on museum collections, and provides further policy guidance, standards, and requirements for preserving, protecting, documenting, and providing access to, and use of, National Park Service museum collections.

At the moment there are no museum collections associated with El Camino Real de los Tejas National Historic Trail. In the future the National Trails Intermountain Region will work with existing museum facilities (for a complete listing of museums

along the trail, see Appendix H) that have the capability of storing, curating, and displaying objects, specimens, and archives associated with the trail. A funding program, such as Challenge Cost Share, could help support museum collections in both Louisiana and Texas. Neither alternative would result in any unacceptable impacts; therefore this topic was dismissed.

PALEONTOLOGICAL RESOURCES

No known significant paleontological resources are located in the proximity of the trail corridor. If any future site-specific development were to take place, a more detailed environmental study would be undertaken to identify any such resource that might be affected; therefore, this topic was dismissed.

PRIME AND/OR UNIQUE FARMLANDS

Prime farmland is defined as soil that particularly produces general crops such as common foods, forage, fiber, and oil seed; unique farmland soils produce specialty crops, such as specific fruits, vegetables, and nuts. There are no lands classified as prime and/or unique farmlands within the El Camino Real de los Tejas National Historic Trail corridor. Neither of the alternatives propose land-use changes. In both cases, there will be a concerted effort to work with local landowners in implementing the provisions of this plan. Impacts to prime farmlands are expected to be negligible; therefore, this topic was dismissed.

PUBLIC HEALTH AND SAFETY

Neither alternative would result in any identifiable adverse impacts to human health or safety. Neither alternative would change sanitation levels of treated water or exposure to environmental or chemical hazards. The numbers or levels of mobility that would result from either alternative would not be detectable compared to accidents that occur every day in Texas and Louisiana; therefore, this topic was dismissed.

SOUNDSCAPES

National Park Service Management Policies 2001 and Director's Order 47, *Soundscape Preservation and Noise Management*, recognize that natural soundscapes are important park resources and call for the National Park Service to preserve, to the greatest extent possible, the natural soundscapes of parks. The policies and director's order further state that the National Park Service is to restore degraded soundscapes to their natural condition whenever possible and to protect natural soundscapes from degradation due to noise (undesirable human-caused sound).

Noise can adversely affect, directly and indirectly, the natural soundscape and other trail resources. It can also adversely impact the visitor experience. Currently, visitors to some of the sites along El Camino Real de los Tejas National Historic Trail have opportunities to experience solitude and tranquility in an environment of natural sounds. However, since the preponderance of trail resources along this trail is privately owned, the National Trails Intermountain Region can only work with partners to foster appropriate uses that do not impact the natural soundscapes of the trail. Neither alternative proposes any action that could affect the trail's soundscapes. Therefore, this topic was dismissed.

SPECIAL STATUS SPECIES -

The Endangered Species Act of 1973 requires examination of impacts on all federally -listed threatened, endangered, and candidate species. Section 7 of the Endangered Species Act requires all federal agencies to consult with the U.S. Fish and Wildlife Service to ensure that any action authorized, funded, or carried out by the agency does not jeopardize the continued existence of listed species or critical habitats. In addition, the 2006 *Management Policies* and Director's Order-77 *Natural Resources Management Guidelines* require the National Park Service to examine the impacts of federal candidate species, as well as state-listed threatened, endangered,

candidate rare, declining, and sensitive species. For the purpose of this analysis, the U.S. Fish and Wildlife Service and the Texas and Louisiana departments of natural resources were contacted with regards to federally- and state-listed species to determine those species that could potentially occur near the project area (see Appendix J, page 223, for a listing of Special Status Species).

Preliminary consultation with the U.S. Fish and Wildlife Service Southeastern and Southwestern regions indicates that neither alternative is likely to adversely affect any special status species in Texas or Louisiana. Both offices caution, however, that any subsequent development proposals would require further study and consultation with regard to potential impacts on such species. As stated previously, all federally funded proposals that involve development or outdoor recreation and that, therefore, could potentially impact special status species would be individually reviewed under the provisions of the National Environmental Policy Act. At this time, there are no specific projects that would cause any negative impact of any species of concern. For that reason, this topic was dismissed.

URBAN QUALITY AND DESIGN OF THE BUILT ENVIRONMENT

Consideration of this topic is required by 40 *Code of Federal Regulations* (CFR) 1502.16. The quality of urban areas is not a concern in this plan. Under either alternative, if new structures are proposed, vernacular architecture and compatible design would be taken into consideration. Structures, such as interpretive kiosks and restrooms, would be small and visually unobtrusive. Emphasis would be placed on designs, materials, and colors that blend in and do not detract from the natural and built environment. Appropriate actions under the National Environmental Policy Act and Section 106 of the National Historic Preservation Act would be taken on a case by case basis as site-specific projects are undertaken. Adverse impacts are anticipated to be negligible; therefore, this topic was dismissed.

VISUAL RESOURCES

Trail use would have negligible short- and long-term effects on visual resources. Visual effects may arise from development of trailheads and vehicle emissions associated with constructing small parking areas. Each of these sources would be short-term and negligible. Appropriate actions under the National Environmental Policy Act and Section 106 of the National Historic Preservation Act would be taken on a case by case basis as site-specific projects are undertaken. The proposed alternative would result in negligible, adverse, short-term effects on visual resources; therefore, the topic was dismissed.

WATER RESOURCES

Neither alternative would encourage actions that could result in an increased or decreased use of water or cause changes in the chemical, physical, or biological integrity of the water resources along the El Camino Real de los Tejas National Historic Trail corridor. In more than 20 years of administering national historic trails, the National Park Service has never undertaken projects that would impact water resources. It is not likely that any such project would be undertaken in the future; therefore this topic was dismissed.

WETLANDS AND FLOODPLAINS

Portions of the designated routes are located on or near floodplains and wetlands. Any federal agency involved in trail development in these areas would be mandated to follow Executive Order No. 11988, "Floodplain Management," which requires federal agencies, to the extent possible, to take into account the long- and short-term adverse impacts associated with the occupancy and modification of floodplains wherever there is a practical alternative. Furthermore, federal policy prohibits federal agencies from taking

certain actions in a 500-year floodplain. The alternatives considered in this environmental assessment do not call for any trail-related development proposals for these sensitive areas. Any future undertaking in relation to this trail would be carefully analyzed to ensure full compliance with this executive order mentioned above and any other pertinent federal policy; therefore, this topic was dismissed.

WILD AND SCENIC RIVERS

No wild and scenic rivers are located within the designated routes of El Camino Real de los Tejas National Historic Trail; therefore, this topic was dismissed.

WILDERNESS

No designated wilderness areas are located in the proximity of the trail corridor; therefore, this topic was dismissed.

ENVIRONMENTAL JUSTICE

Executive Order No. 12898 requires all federal agencies to incorporate environmental justice into their missions by identifying and addressing disproportionately high and adverse effects of their actions on minorities and low-income populations and communities. The communities along the trail corridor are characterized by a mixture of incomes and ethnic backgrounds (See tables in Appendix K; page 235-page 240). The proposal in this Draft Comprehensive Management Plan/Environmental Assessment would not have adverse impacts on minorities and low-income populations and communities; therefore, this topic was dismissed.

ENERGY REQUIREMENTS AND CONSERVATION POTENTIAL

No facilities with inherent energy needs are proposed in the alternatives. Existing building facilities would be used for visitor orientation and interpretation. Should any of these facilities require remodeling to accommodate trail projects, sustainable design concepts would be employed. The objectives of sustainability are to minimize adverse effects on natural and cultural resources, to reflect the environmental setting, and to require the least amount of nonrenewable fuels or energy possible; therefore, this topic was dismissed.

INDIAN TRUST LANDS AND RESOURCES

There are no Indian trust lands or resources in the area crossed by the designated routes; therefore, this topic was dismissed.

ECOLOGICALLY CRITICAL AREAS AND NATIONAL NATURAL LANDMARKS

There are no ecologically critical areas and national natural landmarks in the area crossed by the designated routes; therefore, this topic was dismissed.

NATURAL OR DEPLETABLE RESOURCE REQUIREMENTS AND CONSERVATION POTENTIAL

Neither alternative would substantially affect energy requirements, either within national park boundaries or nonfederal lands along the trail route, because any rehabilitated buildings or new facilities would take advantage of energy-conservation methods and materials; therefore this topic was dismissed.

POSSIBLE CONFLICTS BETWEEN THE PROPOSED ACTION AND THE OBJECTIVES OF FEDERAL, REGIONAL, STATE, AND LOCAL LAND-USE PLANS, POLICIES, AND CONTROLS.

Most trail-related projects along the designated routes would be proposed and carried out by individual landowners and managers, often without notification to, consultation with, or assistance from the National Park Service, the designated federal lead agency. The National Park

Service has no direct management authority over project type, size, and design, which would be the principal determining factor in any impacts from given projects. In addition, location-specific factors would vary considerably from site to site along the length of the national historic trail. These include habitat, vegetation, viewshed, existing uses, public sentiment, the presence of threatened and endangered species, and the presence of historic resources eligible for inclusion in the national historic register. The combined effects of all of these location- and project-specific factors cannot be fully anticipated or addressed at this time, but must be evaluated at the project level in accordance with the National Environmental Policy Act and Section 106 of the National Historic Preservation Act. Consultation with federal, regional, state, and local governing entities identified no conflicts with existing land-use plans that might arise from either of the alternatives at this time; therefore, this topic was dismissed.

CHAPTER 2
ALTERNATIVES

EL CAMINO REAL DE LOS TEJAS
NATIONAL HISTORIC TRAIL

CHAPTER 2: ALTERNATIVES

INTRODUCTION

The preferred alternative proposed in this plan (alternative B) aims to achieve a vision for the trail that emerged during the process of preparing this document. This vision entails collaborating with partners to provide the public the opportunity to enjoy and appreciate significant trail resources through high quality visitor programs while at the same time supporting research efforts to ensure that significant trail resources are identified and protected.

The actions proposed follow a progression based on the assessment of current conditions along the trail. For example, one central concern is the need to identify and document authentic trail resources. Once this task is completed, it would then be possible to develop protection strategies appropriate to the resources identified. Before some future actions can take place, it might be crucial to complete other tasks. For example, quality interpretation is based upon knowledge of authentic trail resources and their significance. Development of projects to enhance visitor experience depends to a large extent on a quality interpretive program. Interested partners would then be able to develop appropriate recreational and heritage tourism activities.

Not all of the actions identified under the action alternative can take place simultaneously, particularly since sites and segments along the trail are at different stages of development. Some have been well-researched and are open to the public. Others need research to clearly link them to the period of significance of the trail. Many are privately-owned and of difficult access. Some important sites are important for scientific purposes, but might not be of interest to the general public. Furthermore, the length of the trail would require crafting realistic implementation strategies, which in turn would entail collaboration with all those interested in the trail, so as to make the most effective use of available human and financial resources. As knowledge of the resources and awareness of the trail expand, the potential for development programs would also increase.

Under both alternatives the National Trails Intermountain Region would be implementing the authorities of the National Trails System Act that pertain to national historic trails. Both alternatives address the required and the discretionary authorities identified in the Act.

While the provisions of the National Trail System Act and the specific trail legislation allow for the acquisition of properties from willing sellers, the National Trails Intermountain Region does not intend to acquire any trail-related sites. However, it would be willing to provide technical assistance to partners interested in acquiring properties that are threatened and/or essential to offer visitors the opportunity to enjoy and appreciate significant trail resources.

ACTIONS COMMON TO ALL ALTERNATIVES

ADMINISTRATION AND MANAGEMENT

Within the National Trails System, the terms "administration" and "management" have specific and separate meanings to distinguish between trail-wide coordination (administration) and local ownership, protection, and interpretation (management).

ADMINISTRATION

Administration encompasses the tasks performed by the agency assigned by the Secretary of the Interior to administer the trail. For El Camino Real de los Tejas National Historic Trail, that agency is the National Park Service. Subject to available funding, the administering agency exercises trail-wide responsibilities under the National Trails System Act for that specific trail. Typically, such responsibilities include the following: providing technical assistance, oversight, and coordination among agencies and partnership organizations in planning, resource protection, trail marking, and interpretation; identifying high potential sites and segments, initiating and maintaining agreements (partnership, cooperative, and interagency); setting and maintaining signage and interpretive standards; helping to ensure consistent preservation, education, and public-use programs; managing the use of the official trail logo; encouraging and supporting the work of volunteers, and providing limited financial assistance to other cooperating government agencies, landowners, interest groups, and individuals.

Responsibility for the overall administration of El Camino Real de los Tejas National Historic Trail rests with the superintendent of the National Trails Intermountain Region with staff in Santa Fe, New Mexico, and Salt Lake City, Utah. Current cooperative agreements with the Texas Historical Commission and El Camino Real de los Tejas National Historic Trail Association would continue pending available funding.

MANAGEMENT

Management refers to those site-specific tasks carried out by various governmental, community, and private entities that own, direct, or care for lands along each national trail. Management responsibilities often include the following: inventorying resources; mapping, planning, and developing trail segments and sites; ensuring compliance with federal and state laws; providing appropriate public access; developing site interpretation; overseeing trail maintenance; carrying out trail marking; protecting resources and viewsheds; and managing visitor use.

As required by the enabling legislation, the National Trails Intermountain Region would make an effort to foster relations with individual and entities currently studying or developing compatible programs along the Mexican section of the trail, in particular members of the Instituto Nacional de Arqueología e Historia and other pertinent Mexican entities. Preliminary reconnaissance of significant sites located in Mexican territory suggests a rich potential for collaboration with Mexican authorities on both resource protection and interpretation.

RESOURCE IDENTIFICATION, PROTECTION, AND MONITORING

Both alternatives acknowledge the key role of environmental factors in the selection and use of trail routes and the identification and preservation of resources along the trail. This is significant for trail protection since, historically, routes were often selected because they offered the easiest way to reach a certain destination. The environmental factors that led travelers to favor certain routes still play a role in land use in modern times: historic routes were selected to facilitate travel and now their corridors have become the choice for the construction of pipelines, new highways, or road improvements. For this

reason, both alternatives consider the natural environment an integral component of high potential sites and segments.

Although a survey of historic sites (extant above grade and archeological) was carried out during the development of this plan, many sites and segments along El Camino Real de los Tejas National Historic Trail are not adequately known. This Draft Comprehensive Management Plan/ Environmental Assessment details high potential sites and segments for Louisiana and Texas derived from information on more than 500 sites (see Appendix D, page 155, for a detailed description of these sites). High potential sites and segments would receive priority both in terms of protection and interpretation.

On lands for which the National Park Service has the responsibility for the management and condition of cultural resources, such as San Antonio Missions National Historical Park, all pertinent federal laws would apply (see Chapter 1, page 25 for a list of applicable federal laws). Approaches to cultural resource research, on-the-ground route verification, planning, and stewardship would follow the National Park Service's *Director's Order 28, Cultural Resource Management Guidelines*. The National Trails Intermountain Region would also work with San Antonio Missions National Historical Park staff to carry out research to better understand the character and significance of cultural resources along the trail and the needs for protection and monitoring.

HEALTH AND SAFETY

Under both alternatives, health and safety issues would be addressed as appropriate. Trail users would be warned about potential risks, such as rough terrain and low-lying vegetation that could become entangled in footwear and cause a fall. Necessary precautions would be included in brochures and other written information, such as postings on the trail's Web site, signs at trail sites, and other forms of interpretive media.

USER CAPACITY

The National Trail System Act requires that carrying capacity be addressed in a Draft Comprehensive Management Plan/ Environmental Assessment. National Park Service planning guidelines have replaced the term "carrying capacity" with the term "user capacity." User capacity is defined as the type and level of visitor use that can be accommodated while sustaining the desired resource and social conditions and visitor experience that complement the purpose of El Camino Real de los Tejas National Historic Trail and its desired conditions.

The ever-changing character of the 2,580 mile-long El Camino Real de los Tejas National Historic Trail presents a unique challenge to planners attempting to quantify acceptable user capacity. The trail crosses numerous old and modern landscapes and rural and urban settings. Trail boundaries are difficult to determine. While some high potential sites and segments are managed by public agencies, a substantial number are in private hands, have uncontrolled access, and serve multiple uses. The capacity of each site or segment to withstand various types of use depends on complex combinations of environmental, cultural, and social factors; these range from extremely susceptible to remarkably resistant to impacts. Land uses and visitor experiences cannot easily be monitored or controlled by any one entity. Nevertheless, a meaningful strategy is necessary to determine and evaluate sustainable uses and levels for individual sites and segments over time, thereby ensuring that the full range of the trail's most significant resources are preserved to maintain the values and characteristics for which the trail was established as part of the National Trail System.

The premise behind user capacity is that some level of impact invariably accompanies public use; therefore, public agencies must decide which level of impact is acceptable and which actions are needed to keep impacts within acceptable limits. Two important components of user capacity for any national historic trail are 1) the

condition of trail-related resources and 2) the condition of social capacity. The condition of trail-related resources includes, among other things, the visual integrity of cultural sites, the ecological integrity of the area crossed by the trail, climatic conditions, the condition of the trail surface, pedestrian traffic, and erosional patterns. Conditions of social capacity include those levels of congestion and crowding that affect solitude and the opportunity to vicariously experience the nature of the trail.

Currently most land-management agencies employ user-capacity methodologies that follow the "limits of acceptable change" process developed by the United States Department of Agriculture Forest Service in the mid-1980s. The process involves the following steps:

- Develop prescriptions for resource and visitor-experience conditions in various land units or zones;
- Identify indicators (measurable variables) of conditions that can be measured over time;
- Set quantifiable standards that represent minimum acceptable conditions;
- Monitor conditions in relation to indicators and standards; and
- Adopt management actions to ensure that conditions remain at or above standard.

Using this approach it is clear that user capacity is not a set of numbers or limits, but a process that involves establishing desired conditions, monitoring, and evaluation, followed by actions to manage visitor use to ensure that trail values are protected.

This methodology would require periodic access to trail resources over the life of this plan. Given that the resources along El Camino Real de los Tejas are predominantly privately owned and that many land owners are not willing to grant access to their lands, the planning team has concluded that the National Park Service would not be able to conduct user capacity studies during the life of this plan. However, efforts would be made to collaborate with partners to periodically monitor the condition of significant trail resources and to encourage partners to pursue studies that would provide a greater understanding of user capacity issues along the trail.

TRAIL LOGO AND MARKER

The logo developed for El Camino Real de los Tejas National Historic Trail would be incorporated into the standard triangular shape of the National Trails System marker (see Figure 2-1). The marker is a unifying emblem representing the trail and all of its partners. Marker use would be restricted to the National Park Service and its partners for applications that help further the purposes of the trail. This marker is protected against unauthorized uses as a federal insignia. The Superintendent retains approval authority for all logo use along the trail.

Figure 2-1. Logo for El Camino Real de los Tejas National Historic Trail

INTRODUCTION TO ALTERNATIVES

The planning team gathered ideas and concerns expressed during the public scoping process, formal and informal community discussions, conversations with private landowners, and meetings with government agency representatives to develop two draft alternatives.

ALTERNATIVE A: CONTINUATION OF CURRENT CONDITIONS - NO ACTION

Concept

This alternative is a requirement of National Environmental Policy Act and serves as a basis for comparison. Federal actions would be limited to those required under the National Trails System Act. Its adoption would not mean that present management activities would stop, but that the National Trails Intermountain Region and on-the-ground site and segment managers and owners would respond to future needs and problems in a manner similar to the way in which they are currently operating. Federal administration would continue as it is, with levels consistent with 2010 funding.

Administration

Under this alternative the National Trails Intermountain Region would work closely with state, local agencies, and volunteers to implement the purpose of the trail and other activities as described by the National Trail System Act. It would oversee the development of sign and interpretive standards. It would also consult with state and federal agencies as well as the owners of resources to avoid incompatible uses. Efforts to cooperate with Mexican entities would be limited to responding to requests for information and providing technical assistance, as feasible based on available budgetary and staff resources.

Resource Identification, Protection, and Monitoring

The National Trails Intermountain Region would support projects that prioritize the protection of high potential sites and segments identified during the development of this plan.

A database compiled to keep track of available information on trail resources would be available for use in trail development projects although it might not be possible for the National Park Service to provide for periodic updates.

An additional database containing more than 500 bibliographical references to maps and written materials (historic, archaeological, et cetera) relevant to the trail during its period of significance and relating to both Louisiana and Texas would also be available although it might not be possible to provide for periodic updates.

Partnership Certification Program

Partnership certification is a tool used by federal trail administrators, with the consent of the landowner, to officially recognize, preserve and interpret trail resources on nonfederal lands. The product of the partnership certification program is not simply a paper certificate acknowledging a property's link to trail history, but an enduring partnership between the property owner/manager and the National Park Service to work together to benefit the trail resource and the visiting public.

Partnership certification begins with a conversation between the property owner/manager and the National Park Service about the historical significance and management needs of a particular trail-related property. As shared public recognition, preservation and public use interests emerge, the land owner/manager and the National Trails Intermountain Region may wish to enter into a voluntary partnership to manage, protect, and interpret the site for visitors. Commitment to that partnership is formalized with a simple, legally nonbinding agreement that

says that the parties would work together toward those general mutual goals (see Appendix B, page 147, for sample partnership certification agreement). The National Trails Intermountain Region can provide many forms of technical assistance, including signing and interpretation on a case by case basis.

In authorizing some national historic trails, Congress prohibited or severely restricted federal agencies from purchasing lands or interests in lands outside the boundaries of federal areas. However, through partnership certification, nonfederal parties may choose to work with the appropriate federal trail administrator to manage their trail properties as part of a national historic trail.

Purposes of Partnership Certification

Congress has established each national historic trail for the purpose of identifying and protecting an "historic route and its historic remnants and artifacts for public use and enjoyment." At the same time Congress has recognized that when deemed to be in the public interest, "such Secretary [charged with the administration of a national historic trail] may enter written cooperative agreements with the States or their political subdivisions, landowners, private organizations, or individuals to operate, develop, and maintain any portion of such a trail either within or outside a federally administered area. Such agreements may include provisions for limited financial assistance to encourage participation in the acquisition, protection, operation, development, or maintenance of such trails..." [16USC1242 Section 7 (h) 1].

Partnership certification extends national trail status and protection to nonfederal trail resources. Therefore, the purpose of partnership certification is to afford protection to nonfederal trail remnants, artifacts, and interpretive sites to allow for public use and appreciation. Partnership certification is not exclusively for the benefit of the property owner/ manager or even for the sole benefit of the resource, but for the public as well.

Conditions of certification should include some allowance for "public use and enjoyment"—a way for people to experience parts of the trail that otherwise would be unavailable for visitation.

Under this alternative the National Trails Intermountain Region would assist owners of high potential sites and segments, who express an interest to participate in this program, by providing technical assistance.

TRAIL USE EXPERIENCE

Interpretation/Education

The National Trails Intermountain Region would encourage local entities to develop interpretive media and education programs focusing on the interpretive themes and high potential sites and segments identified in this document. The media and programs currently offered to the general public by various public agencies or private organizations would continue. Efforts to provide opportunities for trail audiences to forge emotional and intellectual connections with the meanings of these resources would be limited, because the additional research required to enhance the current interpretive program would be left to independent researchers who might not have the necessary support to carry out long-term projects.

Recreational Activities

Existing recreational opportunities would continue to be provided at federal and state parks and other facilities along the route. At present few, if any of these facilities, offer programs that are trail related. Efforts to provide a consistent trail experience would be limited.

Trail retracement along major state highways would be possible, but would be dependent on local efforts. Trail routes following existing public roadways and providing access to high potential sites and segments would be marked to raise awareness of the trail and encourage visitation. It would also be possible that the trail community in consultation with

National Trails Intermountain Region would develop other appropriate recreational activities consistent with the provisions of the National Trail System Act.

ORIENTATION

Trail Identification: Marker and Signs

The official marker incorporating the logo, designed during the Comprehensive Management Plan development process, could be used to mark the designated trail route along major state highways (State Highway 21 in Texas and State Highway 6 in Louisiana) and at high potential sites and segments open to the public. Signs installed at these sites and segments would identify permitted trail uses, information on safety and protection of trail users, and adjacent private property. Signing would only be done as resources permit. The National Trails Intermountain Region would pursue no federal funding for signing.

Costs

The Fiscal Year 2010 budget of $201,000 for El Camino Real de los Tejas National Historic Trail is assumed to be constant for Alternative A. Small increases over the life of this plan (ca. 15 years) would not be expected to keep up with inflation.

Operations

Current levels of staffing would continue. Staff that give a portion of the time to the administration of the trail would include the superintendent, chief of trail operations, cultural resources specialist, tribal liaison, interpretive specialist, and a geographic information systems specialist. This staff would collaborate with partners on a limited basis to carry out the provisions of the National Trails System Act. Base funding of $201,000 would pay for annual operations, including the salary and benefits for staff, travel for routine technical assistance to partners, office equipment, supplies, phone, signs, brochures, and publications. However, the total staff time would amount to less than one full-time position. Under this alternative support for partner activities would diminish. A stagnant budget would mean long-term declines in all aspects of trail administration.

Funding

Funding for the annual operating costs would be provided by the base operating budget of the National Park Service. No increases in its base funding to meet the needs outlined in this alternative would be anticipated. Funding for brochures, other interpretive media, signs, and other needs may be available for mutually beneficial partnership projects through the competitive Challenge Cost Share Program, an appropriation from Congress that fluctuates in size from year to year and may not be available on a permanent basis. The current Challenge Cost Share Program requires partners to provide a minimum of 50 % matching contribution in the form of funds, equipment, in-kind labor, or supplies from non-federal sources.

Table 2-1. Alternative A: Annual Operations Costs (cumulative for a 10-year period)

Item	Estimated Range of Costs	FTEs	Construction/ Facility Development
Salaries and benefits	$ 90,000.00	>1	$ 0
Office equipment and supplies	$ 5,000.00		$ 0
Travel	$ 20,000.00		$ 0
Brochures, interpretive materials, signs	$ 10,000.00		$ 0
Support to partners	$ 76,000.00		$ 0
Total Annual Operations Costs	**$201,000.00**		**$ 0**

The information in this table corresponds with current Fiscal Year 2010 target staffing levels for the National Trails Intermountain Region.

ALTERNATIVE B: TRAIL DEVELOPMENT THROUGH PARTNERSHIPS (PREFERRED ALTERNATIVE)

Concept

This alternative builds on a central purpose of the National Trail System Act, which is to encourage and assist volunteer citizen involvement in the administration, planning, development, maintenance, and management of trails. The trail community encompasses individuals, entities, institutions, and partners who share an interest not only in trail history, authentic trail resources and their protection, but also in interpretive and educational programs that highlight the significance of the trail. Under this alternative, the trail community would include, among others, the Texas Historical Commission; the Louisiana Department of Culture, Recreation, and Tourism; the State of Texas Parks and Wildlife Department; El Camino Real de los Tejas National Historic Trail Association; the Louisiana and Texas departments of transportation; Mexico's Instituto Nacional de Antroplogía e Historia; federally recognized tribes whose homelands are crossed by the trail; private organizations; institutions of higher learning; museums; visitor centers; private owners of trail resources; trail scholars; public and private educational institutions; and others interested in the trail.

To achieve the purpose of the trail it would be essential to collaborate with partners to identify, protect, and interpret the significant resources associated with these routes, and to provide trail users with educational and recreational opportunities, so that they would understand and enjoy the authentic sites and segments associated with these routes and the history of the trail.

Under this alternative the National Trails Intermountain Region would take a more proactive approach; it would not just address the required authorities identified in the National Trails System Act, but it would also be implementing the discretionary authorities addressed in the Act, such as the development of cooperative agreements, support of volunteers, partnership certification of significant trail resources, and allowance for compatible use as necessary or required by trail partnerships.

Administration

During the scoping process the lack of coordination among the trail stakeholders and limited awareness of the trail and of the role of the National Park Service in its administration became recurrent themes. Lack of a formal mechanism for providing technical assistance and limited financial resources to support trail projects were also mentioned as serious issues that would hinder trail development.

Under alternative B, the preferred alternative, the National Trails Intermountain Region would assist in coordinating programs and activities along the trail in part through the continuation and establishment of cooperative agreements with state and local institutions interested in the trail.

As funding allows, the current cooperative agreement with the Texas Historical Commission for the purpose of working jointly to protect and interpret significant trail resources would continue (see Appendix F, page 201, for a sample Cooperative Agreement). Collaboration also would be essential at public sites managed by the Texas Historical Commission, such as Caddo Mound State Park, which includes high potential sites and segments related both to the history of the trail and to the Caddo culture. A similar cooperation based on available funding would be envisioned for Los Adaes State Historic Park, a public site operated by Louisiana's Department of Culture, Recreation and Tourism, Office of State Parks, which also includes trail significant resources.

Cooperative agreements with other state agencies that manage high potential sites and segments would also be initiated and/or

continued also pending on available funding. Such is the case of the Texas Parks and Wildlife Department that manages several significant trail resources identified as high potential sites and segments in this plan. Other important partners are the Louisiana and the Texas departments of transportation, agencies that provide signage and trail guidance materials.

Under this alternative the National Trails Intermountain Region would encourage owners of significant resources to participate in the Partnership Certification Program as already described in this document.

Adoption of this alternative implies that its implementation would rest mainly with volunteer members of the trail community willing to take the lead in proposing projects and programs that identify and protect significant trail resources and interpret them appropriately. For that reason, this alternative proposes the development of a comprehensive volunteer training program and strongly supports the coordination of volunteer efforts. Such an approach would address issues raised in the areas of resource identification and protection as well as interpretation and raising awareness about the trail.

To facilitate the initiatives suggested by the trail community and to provide for a more formal mechanism to deliver technical assistance, the National Trails Intermountain Region would offer eligible applicants a certain level of funding through the Challenge Cost Share Program and/or similar funding sources, as they become available. The limited size of resources in these programs would not eliminate the need for the trail to community to search for additional sources of funding for specific projects.

The proposals most likely to receive support from the National Trails Intermountain Region would focus on the identification and protection of authentic resources and their interpretation. Such projects would provide a solid foundation to offer trail users the opportunity to enjoy and understand the authentic character of the nationally significant resources associated with El Camino Real de los Tejas National Historic Trail. A high priority would be given to developing a strategic plan to prioritize technical and funding assistance. This is a crucial element in the effective use of financial resources, given the length of the trail and the number of resources involved.

Under this alternative, the National Trails Intermountain Region would act as an information clearinghouse for activities along the trail, coordinating efforts to ensure the most efficient use of available technical and funding resources, an issue that was repeatedly raised during the scoping process. It would also oversee the development of sign and interpretive standards that can be consistently applied along the trail corridor in conjunction with the Louisiana and Texas departments of transportation and other local highway authorities. Consistency would be important in order to heighten awareness of the trail and assist trail users in finding and following the designated trail routes and significant historic sites. Consistency would also allow for the development of a variety of satisfying recreational experiences using as inspiration authentic resources and interpretive programs.

Under the preferred alternative, the National Trails Intermountain Region would work with the Mexican entities to fulfill the purpose of the legislation, "... exchanging trail information and research, fostering trail preservation and educational programs, providing technical assistance, and working to establish an international historic trail with complementary preservation and education programs in each nation."

Resource Identification, Protection, and Monitoring

The National Trails Intermountain Region would emphasize working with the trail community to expand knowledge about trail resources, in particular significant sites and segments with a certain degree of historic integrity. Investigations

that lead to more accurate and complete identification of high potential sites and segments and their location, condition, and prioritized needs would be encouraged. Research projects that aim to elucidate important aspects of trail history or topics that have not yet received adequate attention, such as the development of Hispanic communities along the trail, the relationships between various ethnic groups, the Caddo legacy, and the experience of African-Americans in East Texas and western Louisiana, would also receive special consideration. Future investigations would eventually include the study of cultural landscapes and other topics of relevance (see Section on recommendations for further study, page 25).

Under this alternative, there would be an effort to foster awareness among the trail community of the evolving nature of the trail and its associated resources. It has been argued that El Camino Real de los Tejas National Historic Trail could be considered a living organism that responds to the changing conditions and the needs of the users—an organism that is complex and continually evolving. As such, the designated trail has the potential to become a powerful educational tool, with people of all ages and cultures interested in learning about it and working to protect it.

The study and preservation of historic trails is multidisciplinary by nature. A high priority would be placed on community-initiated and supported projects that emphasize the role of environmental factors in a) the selection and use of trail routes and b) issues associated with the identification and preservation of resources along the trail. This is significant for trail protection since, historically, routes were often selected because they offered the easiest way to reach a certain destination. The environmental factors that led travelers to favor certain routes still play a role in land use in modern times: historic travel routes are often selected for the construction of pipelines, new highways, or road improvements.

To support resource identification, monitoring, and protection, the National Trails Intermountain Region and the trail community would:

- Continue to maintain and upgrade a database prepared as part of the development of this plan to compile and keep track of available information on trail resources. This alternative envisions that this easily updated database would be used to collect additional historical trail resource information as it becomes available in the future. Because of the ease with which the database can be modified, current knowledge about trail resources would be easily available. The National Trails Intermountain Region would act as the clearinghouse for this publically accessible database, which would be geo-referenced and would include a series of variables or attributes that describe each resource (site or segment) and its current condition in detail (see Appendix G, page 211, for the attribute table that has been developed as part of this planning project). This database would also include visual documentation: a series of electronic images that reflect the condition of a site or segment at a certain point in time. These two features of the database—the written description and the images—would permit a more effective monitoring program since it would facilitate the comparison of current conditions with the information stored in the database. The current methods used to determine user capacity are difficult to implement, but the flexible database developed as part of this alternative, coupled with volunteers' efforts, would greatly assist the National Trails Intermountain Region in monitoring and preserving resources more effectively.
- Continue the route-verification process that has begun in association with the development of this plan. Combining fieldwork (archeological inventories and on-the ground-

verification) with archival research, this process would enhance the probability of accurately identifying authentic trail segments and clearly establishing their relationship to the trail. The process would require the integration of historic data derived from expedition diaries, maps, drawings, correspondence, reports, Government Land Office plats, and other documentary sources with archeological evidence and current physical landscape conditions data. The historic and archeological evidence would be spatially linked to satellite images, aerial photography, LiDAR, or other spatial tools, such as ground-penetrating radar, so that there is a higher probability of correctly identifying the location of trail routes. The results of this multidisplinary investigation would be eventually captured and stored in a geographic information system. This would facilitate the management of the trail-resource data because it could be easily updated as more accurate information becomes available.

- Maintain a bibliographical references database compiled in association with this project. At the time this plan is prepared it contains more than 500 entries including maps and written materials (historic, archaeological, et cetera) pertaining to Louisiana and Texas and relevant to the trail during its period of significance. This database would be periodically updated to include the latest publications, thereby supporting an interpretive program that reflects current trail scholarship.
- Strive to identify subject-matter experts currently studying or developing compatible programs along the Mexican section of the trail, in particular members of the Instituto Nacional de Arqueología e Historia and other pertinent Mexican entities. A preliminary reconnaissance of significant sites located in Mexican territory, conducted early in 2009, suggests rich potential for collaboration with Mexican authorities on resource identification, protection, and interpretation.
- Provide assistance with the development of the National Historic Preservation Act Section 106 consultation process with the State Historic Preservation Officers in Louisiana and Texas before starting any trail development project.
- Analyze resources along the trail to determine appropriate protection strategies. This alternative would support a trail-wide effort to complete periodic revisions to the trail database previously identified and to collaborate with partners in updating said database.
- Support the identification of properties potentially eligible for the National Register of Historic Places and collaborate in preparing forms for their nomination in collaboration with the Texas Historical Commission and the Louisiana Department of Culture, Recreation and Tourism.
- Integrate resource protection information into interpretive messages to provide an incentive for trail users to protect resources.
- Create a communication network to disseminate information about resources threats. Although the National Trails Intermountain Region has already been participating in the process to assess the potential impacts of proposed pipelines and other serious threats to trail resources, under this alternative there would be a clearly defined-process to alert all the owners of potentially-threatened properties about the need to participate in the compliance process. When resource threats become known, trail resource information would be shared with all federal, state, county and local entities and individual stakeholders.

- Encourage the participation of interested private citizens. With this alternative would establish a comprehensive training program for volunteers to learn about issues related to the identification, protection, and interpretation of trail resources. Volunteer efforts in the identification and inventory of resources are crucial to the success of national historic trails. Special training would be offered to volunteers living all along the trail, under the auspices of the Texas Historical Commission, the Louisiana Department of Culture, Recreation, and Tourism, as well as the National Trails Intermountain Region. This alternative envisions collaboration among institutions of higher learning and other interested groups to implement the volunteer training program.
- Create the position of volunteer "trail steward" for each county or parish crossed by the trail. These stewards (similar to the volunteer Archeological Stewards Program that currently exists for the state of Texas) would be responsible for periodic monitoring of the resources under their jurisdiction. Trail stewards would also be in charge of establishing and maintaining a semi-formal communication network that, among other things, would serve to identify potential threats to significant trail resources, such as upcoming construction projects. The National Trails Intermountain Region, the Texas Historical Commission and Louisiana Department of Culture, Recreation, and Tourism would provide technical assistance, support, and guidance to trail stewards.
- Collaborate with federally recognized tribes to identify additional sites and stories relevant to the history of the tribe that are associated with the trail.

Resource owners would be able to request technical assistance to address the following issues: accurate documentation of historic/archeological sites, physical deterioration of swales/segments, site restoration, building/ruin stabilization, among other things. The Texas Historical Commission, the Louisiana Department of Culture, Recreation, and Tourism, and the National Trails Intermountain Region would assist private landowners interested in developing their trail resources to ensure that future proposed projects do not impact the visual integrity of significant sites or segments.

Collaboration among the members of the trail community would be of outmost importance given the sheer length of the 2,580-mile-long designated trail. The National Trails Intermountain Region would encourage and support a yearly conference to discuss issues related to the purpose of the trail, such as current trail scholarship, resource protection issues, new interpretive and/or educational programs, and possibly others.

Partnership Certification Program

Partnership certification is a tool used by federal trail administrators, with the consent of the landowner, to officially recognize, preserve and interpret trail resources on nonfederal land. The product of the partnership certification program is not simply a paper certificate acknowledging a property's link to trail history, but an enduring partnership between the property owner/manager and the National Park Service to work together to benefit the trail resource and the visiting public.

Partnership certification begins with a conversation between the property owner/manager and the National Park Service about the historical significance and management needs of a particular trail-related property. As shared public recognition, preservation and public use interests emerge, the land owner/manager and the National Trails Intermountain Region may wish to enter into a voluntary partnership to manage, protect, and interpret the site for visitors. Commitment

to that partnership is formalized with a simple, legally nonbinding agreement that says that the parties would work together toward those general mutual goals (see Appendix B, pg page 147, for sample partnership certification agreement). The National Trails Intermountain Region, as funding permits, provides a certificate and a national historic trail site identification sign with the official logo designating the property a national historic trail certified site.

Through partnership certification, nonfederal parties may choose to work with the appropriate federal trail administrator to manage their trail properties as part of a national historic trail.

Purposes of Partnership Certification

Congress has established each national historic trail for the purpose of identifying and protecting an "historic route and its historic remnants and artifacts for public use and enjoyment."At the same time Congress has established that when deemed to be in the public interest, "such Secretary [charged with the administration of a national historic trail] may enter written cooperative agreements with the States or their political subdivisions, landowners, private organizations, or individuals to operate, develop, and maintain any portion of such a trail either within or outside a federally administered area. Such agreements may include provisions for limited financial assistance to encourage participation in the acquisition, protection, operation, development, or maintenance of such trails..."

Partnership certification extends national trail status to nonfederal trail resources. Therefore, the purpose of partnership certification is to allow for public use and appreciation of nonfederal trail remnants, artifacts, and interpretive sites. Partnership certification is not exclusively for the benefit of the property owner/manager or even for the sole benefit of the resource, but for the public as well. Conditions of certification should include some allowance for "public use and enjoyment"—a way for people to experience parts of the trail that otherwise would be unavailable for visitation.

Under this alternative the National Trails Intermountain Region would make a special effort to educate private landowners about the benefits of entering into partnership certification agreements. It would encourage owners of high potential sites and segments, who express an interest, to participate in this program by providing management, planning, coordination, technical assistance, and capacity building.

User Capacity

Several proposed actions under alternative B, the preferred alternative, would help to address user capacity. The development of a flexible database that would include assessments of resource conditions as well as images and that would be updated periodically would greatly assist the trail community in monitoring resources. In addition under this alternative volunteer trail stewards for each county and parish would be identified. Regularly scheduled monitoring of trail resources would be one of their main responsibilities.

Trail Use Experience

Interpretation/Education

Interpretation and education play a crucial role in the conservation of resources central to the trail experience: they offer visitors the opportunity to forge emotional and intellectual connections with the meanings of these resources. Only after trail users understand the significance of sites or segments can they truly enjoy and value them and advocate for their protection. For that reason, this alternative places strong emphasis on education and interpretation programs that aim to raise awareness about the trail, its history, and its resources.

This alternative envisions the development of a high-quality interpretive program, one that continually explores the relationship between the resource's tangible and intangible meanings and searches for

new ways of providing opportunities for audiences to make their own intellectual and emotional connections with these resources. Interpretation programs offer trail users ways of making connections between the physical resources and their essential meanings—in effect, to comprehend the relationship between the tangible and the intangible. For example, a Spanish mission is clearly a tangible resource; however, the reasons for its construction, its relationship to those who built it and the circumstances surrounding the building are intangibles. Interpretation itself may be viewed as a dynamic, flexible, and goal-driven process, whereby interpreters use a variety of tools to educate the public about the resource, engage them, and help them understand and appreciate it, and eventually, and most importantly, commit to its long-term stewardship. By providing opportunities to connect to the meanings of resources, interpretation programs awaken visitors to the importance of what they see and encourage them to explore associations with other resources that they have experienced. Interpretation helps audiences understand their relationships to, and their impacts upon, these resources.

The alternative would offer the trail community the opportunity to become active participants in the development of inclusive interpretive and educational programs that reflect current scholarship and offer a variety of perspectives. There would be special emphasis on compelling stories about people, places, and events, particularly those that represent the heritage of the various ethnic groups, who were central in the development of the trail. It is only after understanding the complex and evolving relationships among the various ethnic groups who lived along the trail and used the trail that proper interpretive and educational programs about the trail can be developed.

This document recommends the development of a comprehensive interpretive plan to improve the coordination of interpretive and educational programs.[1] This is a long trail, and its interpretive themes and potential audiences are complex; therefore, the development of an interpretive plan should be a priority. A comprehensive interpretive plan would help guide the development and implementation of trail-wide education programs, encourage collaboration, and avoid costly duplication of efforts. Under this alternative there would be an effort to incorporate all of the interpretive themes in trail interpretation programs and try to identify the most appropriate locations for the interpretation of each theme.

Wayside exhibits and signs would be installed along the trail only at those sites that require interpretation for user understanding, enjoyment, and safety. The National Trails Intermountain Region would work to ensure that design guidelines are adopted along the trail to protect the visual integrity of resources. Some of the interpretive materials would be bilingual: in English and Spanish.

This alternative suggests the development of a focused marketing program to alert visitors to trail interpretive programs. Interpretive partnerships among the trail community would be critical to the support and/or delivery of interpretive services. Identification of current and potential partners for interpretation, and the ways they can support the attainment of interpretive goals, would support efforts by staff at the National Trails Intermountain Region to employ strategic resources to serve the public and achieve desired interpretive goals.

The development and implementation of a wide range of media would be encouraged in order to engage trail users and to stimulate interest in El Camino Real de los Tejas National Historic Trail and its history.

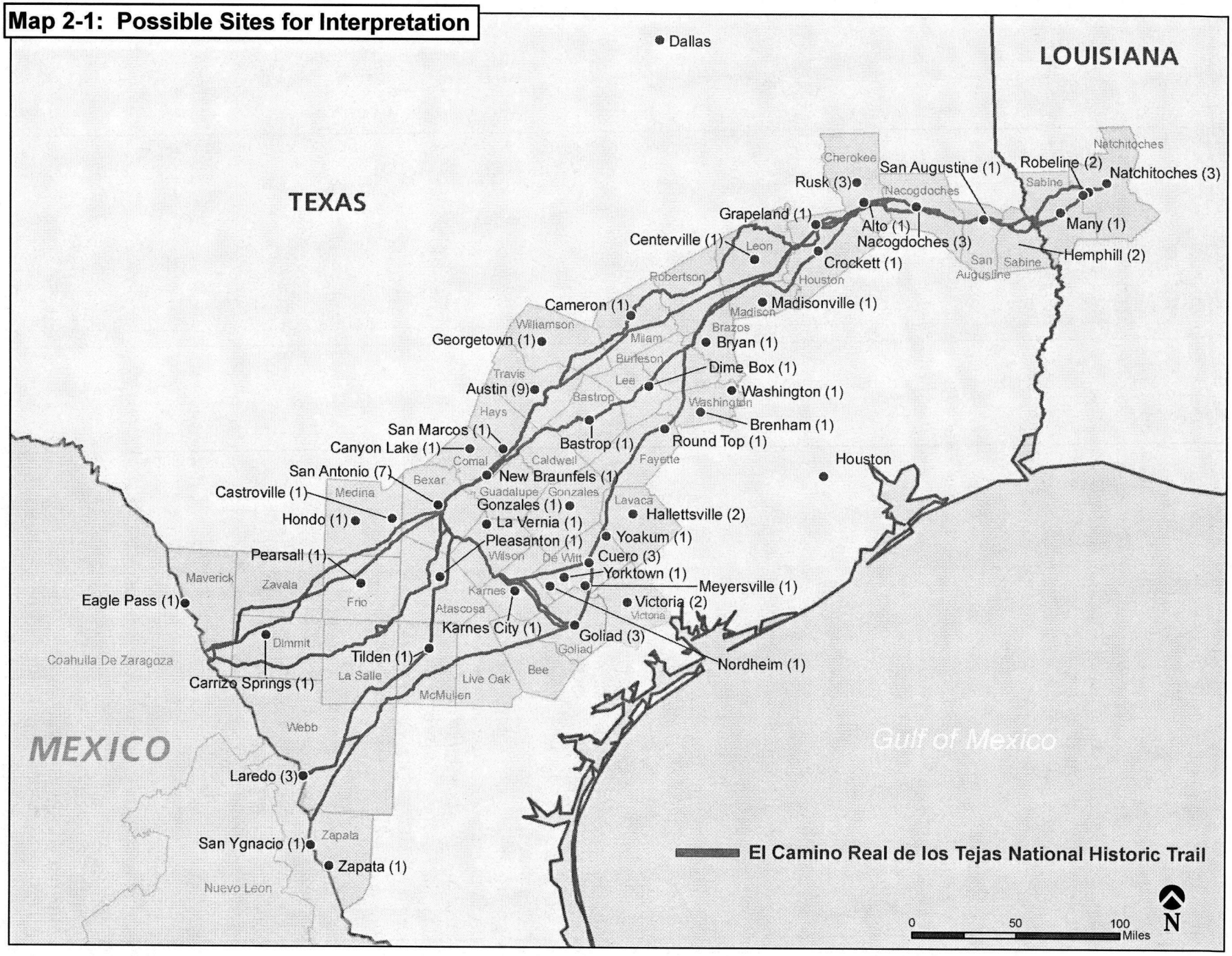
1 - The Comprehensive Interpretive Plan process is established in the National Park Service Director's Order #6. The basic planning component for interpretation, the Comprehensive Interpretive Plan is a tool for making choices. It helps parks and trails decide what their objectives are, who their audiences are, and what mix of media and personal services to use. The product is not the plan, but an effective and efficient interpretive program that achieves management goals, provides appropriate services for visitors, and promotes visitor experiences.

Interpretive media would be distributed at appropriate locations, with the purpose of promoting resource stewardship and to support trail-user safety, as well as their understanding and awareness of the need to preserve cultural and natural resources. Example of media that could be used are publications (brochures, reports, and newsletters), electronic media (Web sites, radio broadcasts, cell phone downloads, CD rentals, and MP3/iPod downloads), wayside exhibits, audiovisual media, and traveling exhibits and indoor exhibits associated with existing museums and visitor centers. Written media should be presented bilingually, in English and Spanish. The National Trails Intermountain Region would review media and interpretative tools developed by others.

An effort would be made to cooperate with institutions of higher learning to develop training workshops for educators interested in teaching trail history. Residents in communities along the trail would also be given the opportunity to learn about and managing natural and cultural resources, by participating in programs aimed at residents of all ages, from early education to higher education and community and adult education programs. The team that developed this Draft Comprehensive Management Plan/ Environmental Assessment envisions the trail as an "outdoor classroom," providing a land-based setting in which to learn the school curriculum. These educational experiences would serve as the basis for the creation of new career and employment opportunities in the fields of arts and culture, the environment, and sustainable economic development, where cultural conservation, building healthy communities and environmental restoration are the goals.

This alternative would support oral presentations, such as talks, lectures, group discussions, and living-history demonstrations at local school and civic organizations by qualified historians, and by others with profound knowledge of the history of the trail and of the various cultural groups that participated in its development. Museums and visitor centers interested in interpreting the history of the trail and in providing a high-quality interpretive experience to trail users would be given technical assistance in developing or improving existing programs. (Appendix H, page 213 and Map 2-1, page 50 identify already existing facilities in Louisiana parishes and Texas counties most likely to participate in this program. The map shows the names of the communities where the facilities are currently operating. The number of such facilities in each community is indicated in parenthesis.)

Map 2-1: Possible Sites for Interpretation



Map 2-1. Possible Venues for Trail Interpretation

Recreational Activities

> Section 2 (a) of the National Trails System Act states that trails should be established,
> "to promote the preservation of, public access to, travel within, and enjoyment and appreciation of the open-air, outdoor areas and historic resources of the Nation."

Providing memorable recreational opportunities for visitors while minimizing visual and physical encroachment is a high priority of the National Park Service. This alternative envisions offering a more meaningful trail user experience through integrated development and programming based on authentic resources and trail themes. Appropriate and consistent trail signage would facilitate visitor use and enjoyment of trail resources. A more profound understanding of significant trail-related sites and segments and enhanced cooperative efforts would result in a more meaningful experience of an entire array of trail resources. Increased cooperation among the members of the trail community would provide a more consistent and accurate message about the history of the trail and would make it easier for visitors to obtain information and to access numerous sites and segments.

One example of a recreational activity this alternative would strongly favor is "trail retracement," using existing roads that closely parallel the designated trail routes and, in some cases, roads built over the original trail alignment, such as Louisiana State Road 120 and Texas State Highway 21. Not only would such an activity not harm resources it would offer visitors the opportunity to engage intimately with trail resources and experience vicariously what travel along the trail might have been like during the period of significance. It is essential to provide opportunities for trail audiences to forge emotional and intellectual connections with the meanings of these resources. One of the best ways to achieve this is by actually traveling along these routes.

Additional sites that may offer some level of outdoor recreational opportunity include but are not limited to the San Antonio Missions National Historical Park Hike and Bike Trail in San Antonio, Texas, Los Adaes State Historic Park, in Robeline, Louisiana and Mission Tejas State Park in Grapeland, Texas. Walking, hiking, bicycling, horseback riding, camping, sightseeing, or travel by motor vehicle are all potential ways in which visitors can experience the trail corridor and its resources.

Retracement routes using existing public roadways and providing access to high potential sites and segments would be marked to raise awareness of the trail and encourage visitation. Agreements would be signed with local communities to identify such local routes. It is also possible that the trail community, in consultation with National Trails Intermountain Region, could develop other appropriate recreational activities that are consistent with the objectives of the National Trail System Act.

State and local governments, trail partners and landowners would be encouraged to help establish, maintain, and manage trail remnants, rights-of-ways and trail resources for the benefit of the public. Recreational opportunities and visitor enjoyment would be enhanced through increased cooperation among private landowners, the National Park Service, and other land managing agencies along the trail. Recognition through the National Park Service partnership certification program would also be another way for private landowners to share their resources with the public.

The National Trails Intermountain Region would support special cultural events sponsored by the trail community on authentic trail-related themes, as well as resource-protection issues, trail awareness, and public involvement.

All trail users would be informed through written and interpretive materials, signs, and exhibits about appropriate behavior practices and protocols to

minimize negative impacts to cultural and natural resources within the trail corridor and to maximize safety for trail users.

Partners might want to undertake the development of additional materials to enhance the visitor experience of specific user groups. They could prepare a series of visitor guides for hikers, equestrians, cyclists, etc.

Communities along the trail are enthusiastic about the potential of the trail to attract visitors and have expressed strong interest in the development of a heritage tourism program. Under this alternative El Camino Real de los Tejas National Historic Trail could become important in regional or local tourism plans. The National Trails Intermountain Region would be able to offer leadership and guidance to those groups interested in the development of heritage tourism programs, provided such programs place major emphasis on resource authenticity and the dissemination of information that is historically accurate.

Orientation

TRAIL IDENTIFICATION: MARKER AND SIGNS

The official marker incorporating the logo, developed during the Draft Comprehensive Management Plan/ Environmental Assessment process, would be used on signs marking the designated trail route and guiding visitor use of the trail (see Appendix I for sample of trail signs). Care would be taken to adapt logo use to the sites' signing needs. Special care should be taken to avoid visual clutter, which could impact the viewshed of the landscape along the trail. Signs installed at these sites and segments would identify permitted trail uses, information on safety and protection of trail users, and adjacent private property. Trail signs would be presented bilingually, in English and Spanish, whenever possible. Information signs, such as safety messages and property boundary markers, would also be presented bilingually, in English and Spanish, whenever possible and appropriate.

Sign specifications for marking the trail and use of the logo would be provided by the National Trails Intermountain Region, using a conceptual sign plan. This conceptual sign plan would address the design, placement, and use of the logo on a variety of signs, such as highway information and directional signs, entrance signs at parking areas, trailhead information signs, regulatory signs, directional indicators, interpretive signs and wayside exhibits, private-property signs, destination signs, and trail-partner signs. The sign plan would consider using both the National Trails Intermountain Region standards on federal lands and typical approaches on national historic trails that cross many nonfederal jurisdictions. Specific signage activities would be based on sign plans developed at the local level. All signage and marking would be dependent on available funding.

To help commemorate the trail's national significance, the official marker would be placed along federal and other managed trail segments and sites, in compliance with the sign plan. The National Trails Intermountain Region would provide the markers, but local managers on nonfederal lands would install them. Markers would be placed on private property only with the consent of the landowner. Markers would identify the actual trail for individuals who want to follow the route. Furthermore, by indicating the presence of the trail, markers may help protect the trail landscape from inadvertent destruction from development.

With the cooperation and assistance of road-managing agencies, and in compliance with the sign plan, retracement route signs would be placed along state and county roads at appropriate road junctions (consistent with the sign regulations of the managing highway department). Information signs to direct auto users to local sites or segments may also be used.

Costs

The implementation of alternative B, the preferred alternative, would depend not only on future NPS funding and service-wide priorities, but also on partnership

funds, time, and effort. The approval of alternative B would not guarantee the funding and staffing needed to implement the plan would be forthcoming and full implementation could take many years.

Although El Camino Real de los Tejas National Historic Trail is authorized to acquire land from willing sellers, no land acquisition through purchase is anticipated, and no land acquisition costs are included. All costs are in 2010 dollars.

Operations

Several members of the staff at the National Trails Intermountain Region would have responsibility for carrying out the provisions of the action alternative. They include a landscape architect, a cultural resources specialist, a planner, an interpretive specialist, a geographic information system specialist, a tribal liaison and an outreach coordinator. The Superintendent and staff involvement in the trail would be equivalent to three full-time positions.

In addition to staff salaries and benefits operational costs include direct partner support, travel, office equipment, supplies, phone, signs, brochures, and publications.

Funding

Funding for the annual operating costs would be provided by the base operating budget of the National Park Service. To achieve a minimum base level to implement this plan the National Trails Intermountain Region would seek increases in base funding to meet some of the needs outlined in this alternative.

Funding for some technical assistance projects, brochures, other interpretive media, signs, and additional needs may be available through such funding as the competitive Challenge Cost Share Program, a yearly appropriation from Congress that requires partners to provide a minimum of 50 % matching contribution in the form of funds, equipment, in-kind labor, or supplies from non-federal sources. However, these funds may not be available every year and their amount is likely to fluctuate from year to year.

However, since alternative B places major emphasis on partnerships and effective collaboration, it might be possible to explore in conjunction with the trail community additional avenues for funding that would make possible the full implementation of this plan.

Funding for technical assistance projects beyond administrative staff capabilities would be requested from other appropriate National Park Service sources.

Funds to develop projects on non-federal lands would be sought from state or local governments or private groups or individuals, sponsorships, or federal or state highway enhancement programs, either directly or in partnerships.

To fund cooperative preservation efforts for high potential sites and segments aid from state and county preservation fund sources and programs as well as funds from donations, grants and other sources would be sought. Funds would be used to supplement existing data about high potential sites and segments and to stabilize or conduct physical activities to conserve resources.

Table 2-2.
Alternative B: Annual Estimated Costs

Item	Estimated Range of Costs	FTEs	Construction/ Facility Development
Salaries and benefits	$280,000–300,000	<3	$ 0
Office equipment and supplies	$5,000–10,000		$ 0
Travel	$30,000–40,000		$ 0
Brochures, interpretive materials, signs	$20,000–30,000		$ 0
Support to Partners	$156,000		$ 0
Total Annual Operations Costs	**$491,000–$536,000**		**$ 0**

Alternatives Considered but Eliminated from Further Study

No additional alternatives were identified or considered by the public or the planning team.

SUMMARY: ENVIRONMENTALLY PREFERRED ALTERNATIVE

HOW THE ACTION ALTERNATIVE MEETS THE PURPOSE OF THE PLAN

The purpose of this Draft Comprehensive Management Plan/ Environmental Assessment is twofold: to establish administrative objectives, policies, processes, and management guidelines necessary to fulfill preservation and public-use goals for El Camino Real de los Tejas National Historic Trail, as established in the National Trails Systems Act, and to provide a framework to be used in making decisions and solving problems. The action alternative presented in this document strongly involves state and local agencies, as well as the entire trail community, in planning and developing the trail. It encourages the involvement of private landowners and fosters trail protection and interpretation and education programs, both in the states crossed by the trail and in developing future activities in collaboration with Mexican public, nongovernmental organizations, and academic institutions.

ENVIRONMENTALLY PREFERRED ALTERNATIVE

The National Park Service Director's Order No. 12 (Section 2.7) requires that an environmental assessment identify an environmentally preferred alternative. The Council on Environmental Quality defines the environmentally preferred as "the alternative that will promoted the national environmental policy as expressed in the National Environmental Policy Act's Section 101." Section 101 of the National Environmental Policy Act states that it is the continuing responsibility of the federal government to:

- Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
- Ensure safe, healthy, productive, and aesthetically and culturally pleasing surroundings;
- Attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or undesirable and unintended consequences;
- Preserve important historic, cultural, and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choice;
- Achieve a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities; and
- Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

Alternative A, continuation of current conditions, would minimally meet the criteria listed above. Alternative B, the preferred alternative, is the environmentally preferred alternative because it goes beyond the no-action alternative in attaining the full range of national environmental policy goals. It provides a higher level of protection of cultural and natural resources, while also proposing a wider range of neutral and beneficial uses of the environment. This alternative supports programs that enhance cultural diversity. It integrates resource protection with an appropriate and more diverse range of uses than the no-action alternative.

Table 2-3: Comparison of Alternatives

Table 2-3	Alternative A: Continuation of Current Conditions (No Action)	Alternative B, Preferred Alternative: Trail Development Through Partnerships
CONCEPT	This alternative, a requirement of National Environmental Policy Act, serves as a basis for comparison. Federal actions would be limited to those required under the National Trails System Act. Its adoption would not mean that present management activities would stop, but that the National Trails Intermountain Region and on-the-ground site and segment managers and owners would respond to future needs and problems in a manner similar to the way in which they are currently operating. Federal administration would continue as it is, with levels consistent with 2010 funding.	This alternative encourages and assists volunteer citizen involvement in the planning, development, maintenance and management of trails. The trail community encompasses individuals, entities, institutions or partners who share an interest in trail history, authentic trail resources and their protection as well as in interpretive and educational programs which highlight the significance of the trail. Under this alternative the National Trails Intermountain Region; it would not take a more proactive approach; just address the required authorities identified in the National Trails System Act, but it would also be implementing the discretionary authorities addressed in the Act, such as the development of cooperative agreements, support of volunteers, partnership certification of significant trail resources, and allowance for compatible use as necessary or required by trail partnerships.

Table 2-3	Alternative A: Continuation of Current Conditions (No Action)	Alternative B, Preferred Alternative: Trail Development Through Partnerships
ADMINISTRATION	The National Trails Intermountain Region would work closely with state, local agencies and volunteers to implement the purpose of the trail and other activities as described by the National Trail System Act. It would oversee the development of sign and interpretive standards and would consult with state and federal agencies as well as the owners of resources to avoid incompatible uses. Efforts to cooperate with Mexican entities would be limited to responding to requests for information and providing technical assistance, as feasible based on available budgetary and staff resources.	The National Trails Intermountain Region would assist the trail community in achieving the purpose of the trail designation, which is to commemorate the development of a network of trails, based upon American Indian routes, which linked Spanish missions and posts in a travel corridor from the Río Grande to Louisiana. Much of the implementation of strategies would rest with those members of the trail community, including volunteers, willing to take the lead in proposing projects and programs that identify and protect significant trail resources and their accurate interpretation. The National Trails Intermountain Region would continue current cooperative agreements and the signing of other cooperative agreements with state agencies that manage high potential sites and segments looking for more effective project coordination and use of financial resources. Cooperative agreements with federally recognized tribes would also be developed as appropriate. The National Trails Intermountain Region would work with Mexican entities to fulfill the purpose of the legislation "... exchanging trail information and research, fostering trail preservation and educational programs, providing technical assistance, and working to establish an international historic trail with complementary preservation and education programs in each nation."
RESOURCE IDENTIFICATION, PROTECTION AND MONITORING	The National Trails Intermountain Region administration would support projects that aim to protect the high potential sites and segments identified in conjunction with the development of this plan. There would be limited opportunity for research projects that explore topics that have not yet received adequate attention through the development of this plan.	Paramount emphasis will be placed on working with the trail community to expand knowledge about trail resources, in particular significant sites and segments with a degree of historic integrity. Investigations leading to more accurate and extensive identification of high potential sites and segments and their location, condition and priority needs will be encouraged. Research projects that aim to elucidate important aspects of trail history or topics that have not yet received adequate attention will also receive special consideration.

Table 2-3	Alternative A: Continuation of Current Conditions (No Action)	Alternative B, Preferred Alternative: Trail Development Through Partnerships
PARTNERSHIP CERTIFICATION PROGRAM	Under this alternative the National Trails Intermountain Region would provide technical assistance to owners of high potential sites and segments, who express an interest to participate in this program.	Under this alternative the National Trails Intermountain Region would make a special effort to educate private landowners about the benefits of entering into partnership certification agreements. It would encourage owners of high potential sites and segments, who express an interest, to participate in this program by providing management, planning, coordination, technical assistance, and capacity building.
USER CAPACITY	Efforts would be made to collaborate with partners to periodically monitor the condition of significant trail resources and to encourage partners to pursue studies that would provide a greater understanding of user capacity issues along the trail.	In addition, for this alternative the development of a flexible database that would include assessments of resource conditions as well as images that would be updated periodically would greatly assist the trail community in resource monitoring. In addition under this alternative the volunteer trail stewards for each county and parish would be responsible for regularly scheduled monitoring of trail resources.

Table 2-3

	Alternative A: Continuation of Current Conditions (No Action)	Alternative B, Preferred Alternative: Trail Development Through Partnerships
INTERPRETATION/EDUCATION	The National Trails Intermountain Region would encourage local entities to develop interpretive media and education programs focusing on the interpretive themes and high potential sites and segments identified in this document. The media and programs currently offered to the general public by various public agencies or private organizations would continue. Efforts to provide opportunities for trail audiences to forge emotional and intellectual connections with the meanings of these resources would be limited, because the additional research required to enhance the current interpretive program would be left to independent researchers who might not have the necessary support to carry out such projects.	This alternative would offer the trail community the opportunity to become active participants in the development of inclusive interpretive and educational programs that reflect current scholarship and offer a variety of perspectives. There would be special emphasis on worthy stories, particularly those that represent the heritage of the various ethnic groups, who were central in the development of the trail. It is only after understanding the complex and evolving relationship among the various ethnic groups who lived and used the trail that proper interpretive and educational programs about the trail can be developed. This alternative suggests the development of an aggressive marketing strategy for interpretive programs. Partnerships among the trail community would be critical to the support and/or delivery of interpretive services. Identification of current and potential partners for interpretation, and the ways they can support the attainment of interpretive goals, would enhance the National Trails Intermountain Region's ability to strategically use resources to serve the public and achieve desired interpretive goals.
RECREATIONAL ACTIVITIES	Existing recreational opportunities would continue to be provided at federal and state parks and facilities along the route. At present few, if any of them, provide activities that are trail related. Trail retracement along major state highways would be possible, but would be dependent on local efforts. Trail routes following existing public roadways and providing access to high potential sites and segments would be marked to raise awareness of the trail and encourage visitation.	This alternative envisions providing a more meaningful trail user experience through integrated development and programming. Appropriate and consistent trail signage would facilitate visitor use and enjoyment of trail resources. A more profound understanding of significant trail related sites and segments would result in an added appreciation of the heritage of the trail. Enhanced cooperative efforts would result in a more meaningful opportunity to experience an entire array of trail resources. Increased cooperation among the members of the trail community would provide a more consistent and accurate message about the history of the trail and would make it easier for visitors to obtain information and to access numerous sites and segments.

Table 2-3	Alternative A: Continuation of Current Conditions (No Action)	Alternative B, Preferred Alternative: Trail Development Through Partnerships
TRAIL IDENTIFICATION: MARKER AND SIGNS	The official marker incorporating the logo, designed during the preparation of the Comprehensive Management Plan, would be used to mark the designated trail route along major State Highways, such as State Highway 21 in Texas and State Highway 6 in Louisiana, and at high potential sites and segments open to the public. Signs installed at these sites and segments would identify permitted trail uses, information on safety and protection of trail users and adjacent private property. Signing would only be done as resources permit. The National Trails Intermountain Region would pursue no federal funding for signing.	Sign specifications for marking the trail and use of the logo will be provided by the National Trails Intermountain Region through a sign plan. This sign plan would address the design, placement and use of the logo on a variety of signs, such as highway information and directional signs, entrance signs at parking areas, trailhead information signs, regulatory signs, directional indicators, interpretive signs and wayside exhibits, private property signs, destination signs and trail partner signs. The sign plan would consider using both the National Trails Intermountain Region standards on federal lands and typical approaches on national historic trails that cross many nonfederal jurisdictions.
OPERATIONS	Current levels of staffing would continue. Staff that give a portion of the time to the administration of the trail would include the superintendent, the chief of trail operations, a cultural resources specialist, a tribal liaison, an interpretive specialist, and a geographic information systems specialist, would collaborate with partners on a limited basis to carry out the provisions of the National Trails System Act.	Members of the staff at the National Trails Intermountain Region that would have responsibility for carrying out the provisions of the action alternative include a landscape architect, a cultural resources specialist, a planner, an interpretive specialist, a geographic information system specialist, a tribal liaison and an outreach coordinator. To achieve minimum level of operations in implementing this plan, the Superintendent and staff involvement in the trail would be equivalent to three full-time positions.
ANNUAL ESTIMATED COST	$201,000 (1 FTE)	$ 491,000 – 536,000 (3 FTEs)

Table 2-4. Comparison of Impacts of Alternatives

Table 2-4, summarizes the anticipated environmental impacts for alternatives A and B. Only those impact topics that have been carried forward for further analysis are included in this table. Chapter 4, Environmental Consequences, provides a detailed explanation of these impacts.

Table 2-4	Alternative A: Continuation of Current Conditions (No Action)	Alternative B, Preferred Alternative: Trail Development Through Partnerships
ETHNOGRAPHIC RESOURCES	Trail-related ethnographic resources on private lands could be impacted by urban development and could also continue to be affected by private projects, such as the construction of oil and gas pipelines. American Indian trail routes and associated resources closely parallel major state and federal highways, so they might also be impacted by road enhancement projects as well as by increases in agricultural activities and livestock grazing. This alternative would add a minor degree to the overall cumulative impacts on ethnographic resources. Alternative A would have a minor, long-term, and indirect adverse impact because of the limited awareness of the resources that could be impacted. It would have negligible effects on American Indian concerns about the interpretation of the stories associated with El Camino Real de los Tejas National Historic Trail. Cumulatively, this action would only add a minor degree of impact to the overall effect on ethnographic resources. Resource impacts would be local, on or near the trail.	Trail-related ethnographic resources on private lands would continue to be impacted by urban development, such as housing, commercial businesses, and highways. However, at a minimum greater awareness of ethnographic resources would lessen the likelihood of impacts from non-federal projects. American Indian trail routes and associated resources closely parallel major state and federal highways, so they would be likely impacted by road enhancement projects as well as by increases in agriculture and livestock grazing. However, this alternative would result in minor cumulative impacts on ethnographic resources because greater awareness of resources would be more likely to prevent projects that might cause negative impacts. Alternative B would have minor, long-term, and indirect beneficial impacts because there would be greater awareness of the resources likely to be impacted. This alternative might have negligible effects on American Indian concerns about the interpretation of the stories associated with El Camino Real de los Tejas National Historic Trail; however, the efforts to highlight the contribution of American Indians to the development of this trail would bring about more awareness of the significance of resources and would be more likely to lead to their protection. Cumulatively, the minor beneficial effect of this action on ethnographic resources would not add impacts to the overall effect on ethnographic resources. trail would bring about more awareness of the significance of resources and would be more likely to lead to their protection. Cumulatively, the minor beneficial effect of this action on ethnographic resources would not add impacts to the overall effect on ethnographic resources.

Table 2-4	Alternative A: Continuation of Current Conditions (No Action)	Alternative B, Preferred Alternative: Trail Development Through Partnerships
ARCHEOLOGICAL RESOURCES	Trail-related archeological resources on private lands could be impacted by urban development. They would also continue to be affected by private projects, such as the construction of oil and gas pipelines. Historic trail routes and associated resources closely parallel major state and federal highways, so they might also be impacted by road enhancement projects as well as by increases in agricultural activities and livestock grazing. This alternative would incrementally add a minor degree to the overall cumulative impacts on archeological resources. It would have minor, long-term, and indirect adverse impacts on archeological resources because there would be little awareness of the existence and location of the resources. For that reason they would be more likely to be impacted. Cumulatively, this action would only add a minor degree of impact to the overall cumulative effect on archeological resources.	A few trail-related archeological resources on private lands could be gradually lost to development; but under this alternative the losses would be considerably smaller. Increased knowledge about trail resources, heightened awareness of their nature, and the substantial involvement of volunteers along the trail—both in the identification and protection of resources—would significantly improve the ability to protect significant trail resources and prevent their disappearance due to the trends identified under the cumulative impacts scenario. This alternative would result in long-term beneficial minor impacts on archeological resources because there would be greater awareness of the resources likely to be impacted. Increased knowledge about trail resources and compliance with Section 106 would result in beneficial impacts to archeological resources. Cumulatively, the minor beneficial effect of this action would only add a minor degree of impact to the overall cumulative effect on ethnographic resources.

Table 2-4	Alternative A: Continuation of Current Conditions (No Action)	Alternative B, Preferred Alternative: Trail Development Through Partnerships
HISTORIC RESOURCES	Historic trail resources on nonfederal lands would continue to be impacted by increased urban development, such as housing, commercial businesses, and highways. They would also continue to be affected by private development, such as the construction of oil and gas pipelines. Trail routes and associated historic resources closely parallel major state and federal highways, so they would be likely impacted by economic development activities, such as urban development as well as increases in agriculture and livestock grazing. This alternative would result in minor, long-term, and indirect cumulative impacts on historic resources. Alternative A may have a moderate, long-term, and indirect adverse cumulative impact on historic resources since there would be little awareness of the resources likely to be impacted. Cumulatively, the minor adverse effect of this action would only add a minor degree of impact to the overall cumulative effect on historic resources.	Trail-related historic resources on private lands could continue to be impacted by development, such as housing, commercial businesses, and highways; however, under this alternative, the losses would be considerably smaller. Increased knowledge about trail resources, heightened awareness of their nature, and the substantial involvement of volunteers along the trail, both in the identification and protection of resources and in preventing projects that might cause adverse impacts, would significantly improve the ability to prevent their disappearance. This alternative would result in long-term beneficial minor cumulative impacts on historic resources. Alternative B would have minor, long-term, and indirect beneficial impacts on historic resources because there would be greater awareness of the resources likely to be impacted. Cumulatively, the minor beneficial effect of this action on historic resources would add a minor degree of impact to the overall effect on historic resources. Cumulative impacts would have minor, long-term, and indirect widespread beneficial impacts on historic resources.

Table 2-4	Alternative A: Continuation of Current Conditions (No Action)	Alternative B, Preferred Alternative: Trail Development Through Partnerships
NATURAL RESOURCES: VEGETATION	Natural resources on private lands could continue to be impacted by increased urban development and the construction of oil and gas pipelines. Trail routes closely parallel major state and federal highways, so they would be likely impacted by a variety of economic development activities. This alternative would result in minor, long-term and adverse cumulative impacts on native vegetation. Alternative A would have a minor, long-term, and indirect adverse impact on native vegetation since there would be little awareness of the resources likely to be impacted. Cumulatively, the minor adverse effect of this action on native vegetation would only incrementally add a minor degree of impact to the overall impact on natural resources.	Heightened awareness of development opportunities from increased visitation might result in an expansion of retail trade and visitor services. However, under this alternative there would be a greater understanding of the need to protect the historic setting of trail resources and this would minimize the negative impacts of development associated with expanding services. The preferred alternative would cause minor, long-term beneficial and indirect effects because the majority of developers would be more cognizant of the impacts of their actions on trail resources. Furthermore, any federal project resulting directly from the implementation of Alternative B would undergo site-specific environmental analysis, and care would be taken to avoid and minimize impacts to these resources. Cumulatively, the minor beneficial effect of this action would only add a minor degree of impact to the overall impact on natural vegetation.

Table 2-4	Alternative A: Continuation of Current Conditions (No Action)	Alternative B, Preferred Alternative: Trail Development Through Partnerships
NATURAL RESOURCES: WILDLIFE	During the last two centuries, major changes in wildlife habitat have occurred throughout the counties and parishes crossed by the trail. Agriculture has led to large areas being converted from wildlife habitat to croplands and/or pastures of nonnative grasses. Timber harvesting for fuel or lumber has removed the extensive woodlands that covered the eastern sections of the trail, and livestock grazing has reduced animal densities in some areas and changed the composition of animal communities. Extensive residential, commercial, energy, and road-associated development have removed wildlife habitat. Natural resources on private lands could continue to be impacted by increased urban development and the construction of oil and gas pipelines. Trail routes closely parallel major state and federal highways, so they would be likely impacted by a variety of economic development activities. This alternative would result in minor, long-term and adverse cumulative impacts on native fauna. Alternative A would have a minor, long-term, and indirect adverse impact on wildlife since there would be little awareness of the resources likely to be impacted. Cumulatively, the minor adverse effect of this action on native fauna would only incrementally add a minor degree of impact to the overall impact on natural resources.	Because of raised awareness about trail resources, it is possible that some property owners might choose not to initiate activities, such as development or land clearing, which might impact native wildlife. In such cases, the impact of this alternative would be local and beneficial to natural fauna. Heightened awareness of development opportunities from increased visitation might result in an expansion of retail trade and visitor services. However, under this alternative there would be a greater understanding of the need to protect the historic setting of trail resources and this would minimize the negative impacts of development associated with expanding services. The preferred alternative would cause minor, long-term beneficial and indirect effects because the majority of developers would be more cognizant of the impacts of their actions on trail resources, such as wildlife habitat. Furthermore, any federal project resulting directly from the implementation of Alternative B would undergo site-specific environmental analysis, and care would be taken to avoid and minimize impacts to these resources. Cumulatively, the minor beneficial effect of this action would only add a minor degree of impact to the overall impact on natural wildlife.

Table 2-4	Alternative A: Continuation of Current Conditions (No Action)	Alternative B, Preferred Alternative: Trail Development Through Partnerships
VISITOR USE AND EXPERIENCE	Development projects that aim to attract large number of visitors, but that do not consider the need to retain the historic fabric of trail-related resources would detract from a high-quality experience. Increased urban growth, including housing, commercial business, and highway projects would limit geographical opportunities of providing a rewarding trail experience. All these factors would add a minor cumulative impact on the visitor experience. Under Alternative A developing an interpretive program and appropriate visitor access, and installing trail signs would result in minor beneficial effects. Cumulatively, the minor beneficial effect of this alternative on the visitor experience would only add a minor degree of impact to the overall cumulative effect on the current visitor use and experience.	The high quality visitor experience that would result from the implementation of Alternative B is likely to foster widespread interest in the trail and its resources among a broader spectrum of society than exists at the time this document is being prepared. Such interest would heighten awareness of the potential damage that unrestricted development and changes in land use could cause to trail resources. Other projects identified in the cumulative impact scenario, such as increase in heritage tourism and increase in Web sites, exhibits, and facilities that offer the opportunity to learn about and appreciate trail resources, would have minor beneficial impacts. The preferred alternative would cause moderate beneficial effects because a larger and more diverse audience would be able to learn about and appreciate trail resources. Cumulatively, the minor adverse effect of this action would only add a minor degree of impact to the overall cumulative effect on the visitor experience and would result in moderate, long-term beneficial and indirect impacts.

Table 2-4	Alternative A: Continuation of Current Conditions (No Action)	Alternative B, Preferred Alternative: Trail Development Through Partnerships
LAND OWNERSHIP AND USE	Several trends identified in the cumulative impact scenario are closely associated with landownership and use. However, at the time this document is being prepared the planning team is not aware of any specific project that would have an overall negative effect on landownership and use along the trail. Alternative A would have negligible cumulative impacts on landownership and use. Although the participation of landowners would be voluntary, it is likely that the trail designation would raise awareness of issues associated with the impact of incompatible land uses on the trail. No additional impacts on landownership and use would result from the implementation of this alternative. Alternative A would have minor, beneficial, and indirect effects on ownership and use along the trail corridor.	Although increased urban development would not necessarily decline due to the trail designation, greater awareness of trail resources might result in less detectable changes in land use. The same would be true for other forms of development described in the cumulative impact scenario. Alternative B would encourage more interest in the protection of resources along the trail, which could entail changes in land use and development trends. These cumulative impacts would be moderate and beneficial. The trends identified under the cumulative impacts scenario have the potential to impact land use along the trail. However, at the time this plan is being prepared there are no specific development projects being considered that would have major impacts on landownership and use. Alternative B would result in moderate, beneficial, and indirect cumulative impacts on land ownership and use along the trail.

Table 2-4	Alternative A: Continuation of Current Conditions (No Action)	Alternative B, Preferred Alternative: Trail Development Through Partnerships
SOCIOECONOMIC CONDITIONS	Several projects identified in the cumulative impact scenario have the potential to impact socioeconomic conditions along the trail. However, at the time this document is being prepared there is no information on specific projects that would have any type of impact on socioeconomic conditions along the trail. At this time it is not possible to speculate on the overall cumulative effect that these projects would have on such conditions. Some minor socioeconomic benefits are likely to result from trail development activities, increased visitation, and government expenditures associated with the development of this alternative. Alternative A would result in minor, long-term, and indirect beneficial impacts on socioeconomic conditions along the trail.	Several projects identified in the cumulative impact scenario have the potential to impact socioeconomic conditions along the trail. However, at the time this document is being prepared there is no information on specific projects that would have any type of impact on socioeconomic conditions along the trail. Implementing this alternative is likely to strengthen the regional and state economies through increased tourism revenues. Increased visitation to trail-related sites, segments, and establishments would result in minor growth in economic activity not only in those communities along the trail corridor, but possibly in Texas and Louisiana as a whole, because visitors might extend their stay in the trail area if there are additional opportunities to learn about natural and cultural history and to search for the trail. Federal expenditures would be slightly larger and possibly less circumscribed geographically. While there would be a beneficial impact from such expenditures, it would be minor. Alternative B would result in minor, beneficial, long-term, and indirect cumulative impacts on socioeconomic conditions along the trail

CHAPTER 3
AFFECTED ENVIRONMENT

EL CAMINO REAL DE LOS TEJAS
NATIONAL HISTORIC TRAIL

CHAPTER 3: AFFECTED ENVIRONMENT

INTRODUCTION

The purpose of this chapter is to describe the physical, biological, cultural, and social environments of El Camino Real de los Tejas National Historic Trail, including topics that could be affected from implementing the alternatives described in the previous chapter. However, this section of the plan also includes materials that were identified as important by the public and the planning team during the scoping process as well as environmental background data relevant to readers, site managers, and trail administrators.

To assist in the preparation of this section of the Draft Comprehensive Management Plan/Environmental Assessment, four studies were completed: 1) an ethnohistory of the general area encompassed in the designated routes; 2) an inventory of the cultural resources in Texas along the congressionally designated routes; 3) an inventory of cultural resources in Louisiana along the congressionally designated routes; and 4) a data acquisition study for the major natural resources topics.

CULTURAL RESOURCES

ETHNOGRAPHIC OVERVIEW

American Indian groups were central to the development of El Camino Real de los Tejas National Historic Trail and greatly influenced Spanish efforts to discourage French intrusion and create viable communities. They continued to play a major role in historical developments along the trail through the first half of the 19th century.

The Caddo

The ethnographic landscape the Spanish encountered, beginning in the 1680s, was highly complex: records of the early expeditions reveal close to 60 different groups of American Indians. Chief among them were the Caddo-speaking groups in the Neches-Angelina areas and along the Red River. All Caddo groups were intimately connected with El Camino Real de los Tejas: indeed, El Camino Real de los Tejas was named after the Tejas (Hasinai). Moreover, the seat of the Spanish Colonial capital of Texas occupied the lands of the Adaes (Adais) and was named after the tribe.

The Caddo lived in farmsteads dispersed across the landscape but located close to their agricultural fields. They were unified by a common language and by a structured cosmology, which was reflected in the arrangement of their settlements with specific locations for places of worship, burials, and the dwellings of spiritual and civil leaders. In the 17th and 18th centuries, Caddo speakers in Texas and Louisiana were organized in three major groupings, sometimes called confederacies: the Hasinai, Kadohadacho, and Natchitoches.

In their reports and correspondence, Spanish missionaries described the Hasinai Supreme Being, the Ayo-Caddi-Aymay, and the hierarchical system of religious and political leadership in a village, represented by a high priest (*xinesí*), a number of village leaders (*caddices*), and a council of elders (*canahas*). Caddices and cahanas were associated with specific Hasinai communities, but the xinesi exercised overall spiritual authority over most of the Hasinai. The xinesi superseded others whose functions included medicine men or shamans (*conna*), town criers (*tanmas*), and warriors (*amayxovas*), whose practices were important to the daily activities of the Hasinai. The xinesi established, maintained, and monitored communications between human beings and the spiritual realm and was responsible for ceremonies and objects designed to guarantee the well-being of the Hasinai in all its aspects; the xinesi was the unifying element in Hasinai communities.

This religious/political hierarchy was supported by the commoners through a well-organized system of reciprocal exchange between members of the human community and spiritual beings. This

interweaving of daily activities with spiritual ones, as well as a traditional settlement pattern that included productive farms, ceremonial centers, and burial grounds, made it difficult for Hasinai communities to accept the conditions the friars wanted to impose on them. Not only were the Hasinai expected to accept a different religion but they were also required to congregate in *pueblos*, or villages, and change the physical arrangement of their settlements. At the end of the 17th century, the Hasinai had not accepted these Spanish-imposed changes.

Caddo groups maintained social, political, and trade relationships with other native groups and with the French and the Spanish government forces throughout the colonial period: trade connections extended well beyond the modern boundaries of Texas and Louisiana. Inquiries made by Spanish authorities after the attack on San Sabá mission uncovered the widespread smuggling of weapons and ammunition along El Camino Real de los Tejas, an illegal trade of which military officials were fully aware, and indeed, from which they profited. These official Spanish inquiries, as well as the earlier arrest of French traders at the mouth of the Trinity River in 1754, made clear to government officials that, in order to have and keep the friendship of native groups, they either had to close their eyes to the contraband or compete against it.

From the late 1760s onward, by order of the Spanish Crown, Spain changed its colonizing tactics and implemented a policy of gift giving to the native tribes, which simultaneously provided goods for trade while binding the recipient to reciprocity obligations. The presence of Anglo-American traders in Louisiana and in Texas complicated Spanish relations with native people, though. This was particularly true after France ceded Louisiana to Spain in 1762.

In 1778, Frenchman Athanase de Mézières, lieutenant-governor of Louisiana, was appointed by Spanish authorities to manage gift giving and trade and to control contraband. The Caddo, Bidai, Comanche, Taovaya, Tawakoni, Wichita, and other Indian tribes participated in this trade, which was centered in Natchitoches and involved both French and Spanish traders as well as Anglo-Americans. The following year, de Mézières traveled along El Camino Real to visit most of the Indian tribes involved. His goal was to ascertain the condition of the tribes following a devastating epidemic in 1777, elicit their goodwill, and evaluate the extent of the trade. During this journey, de Mézières noted the remarkable Indian mounds east of the Neches River. He crossed the river and visited the village of San Pedro de los Nabedachos, already important historically, as it was the site of the first mission in Texas.

The large number of gifts given to the Caddo and other tribes only added to the vibrant underground economy, which developed first with the acquisition of contraband and swelled with the introduction of gift giving. By the end of the 1700s, there was little distinction between either practice. Spanish settlers and soldiers continued to visit the Caddo villages between San Antonio and Nacogdoches, and the movement of goods and people probably intensified considerably from the 1760s to the 1780s.

In 1773, in an effort to limit the underground economy, Spain closed the mission and presidio of Los Adaes and moved the seat of government to San Antonio. Despite this action, the following year Spanish authorities noted that French traders continued to trade in guns, powder and balls, and owed their suppliers more than 600 horses. The increased Caddo dependence upon the Spanish could not have come at a worse time. Weakened by epidemics and the continued wars with the Osage, their ancestral enemies, Caddo groups were forced to regroup and seek alliances, but they were still unable to mount an effective attack against the Osage.

Throughout the late 1770s, some Caddo groups sought an alliance with the Apache. In spite of old and ingrained

enmities, their mutual interest in trade items, particularly guns and ammunition, which the Apache needed and the Caddos could supply, made an alliance increasingly likely. New Spain was vehemently opposed. In 1780, Domingo Cabello, governor of Texas, held a meeting with the Hasinai at Presidio La Bahía. When the Lipan Apache arrived, aiming to hold peace talks with the Hasinai, Cabello refused to allow the Apache inside the fort. Barred from entry, the Lipans shouted over the walls that they would give the Hasinai horses, guns, even women in exchange for an alliance. Notwithstanding Spanish efforts, in 1782, the Apache and Hasinai made a peace agreement, and soon after, a huge trade fair was held on the Guadalupe River, at which the Apaches traded 1,000 Spanish horses to a group of Tonkawas, Hasinais, Bidais, and others in return for 270 guns.

Trade with the Apache continued for the next four years, but the Spanish authorities were determined to stop it. Spain tried several different approaches, even halting the gift giving until the Caddo groups gave in. Harassed by the Osage and diminished in numbers by epidemics and conflict, the Kadohadacho moved south to Caddo Lake in 1800; however, most of the other Caddo-speaking groups remained in their homelands until their final removal in 1859.

Nomadic American Indian Tribes

The story of nomadic Indian groups along El Camino Real de los Tejas National Historic Trail is equally complex. The information obtained from archival sources and supported by archaeological studies indicates that most indigenous groups subsisted by hunting and gathering, traveling through vast expanses of land, and using widely dispersed native plants and animals. The historical evidence indicates that geographic and resource areas were recognized by individual tribal groups and that sanctions were applied to trespassers, not so much due to the violation of geographical borders but because land resources were used without permission. Some areas can be assumed to be part of a native group's territory due to historical reports of repeated encounters with that group in the same general area and, sometimes, because of specific statements made by travelers. Two obvious cases are the Paquache, who were consistently encountered between the Nueces and Frío rivers, and the Payaya, who were repeatedly found in the greater San Antonio area. It is hard to match up native groups and territories along El Camino Real de los Tejas National Historical Trail with complete certainty: tribal members may have just been visiting certain regions and their land-use territories may have been located far from trail routes, despite encounters with Europeans.

The historical and archaeological data suggest that these groups were organized into small to medium-sized bands of 25 to 50 people, although some appear to have included 300 to 500 people. These groups, comprised of extended families related by blood or marriage, scheduled their gatherings to trade, to prepare for war and make war alliances, to perform ceremonies, to find mates, and to socialize in general, at times and places where food resources were known or expected to be abundant during different seasons of the year. Obviously, these were times when there were many mouths to feed, but it is also clear that some of the resources were to be used by those going to war and to guarantee the welfare of those staying behind.

Although little is known about the social organization of these hunting and gathering groups in Texas, the evidence indicates that spokespersons, generally male, represented and acted in the name of the group and, in some cases, also were prominent warriors. Male, and possibly female, shamans were engaged in healing and mediation rituals. Shamans were the mediators between human beings and the spiritual world. As part of curing ceremonies they used natural objects, such as plants for infusions and stones to which special powers were attributed. Curing and removal of malefic objects located in the body was facilitated by blowing over the affected area, laying on hands and sucking out objects such

as stones, arrows, and hair that had penetrated the body and were supposed to have caused the disease. Shamans were reimbursed for their services. They could be killed if the patient did not recover or if it was thought that the shaman was at fault.

Women raised children; gathered food, water, and wood; and often engaged in trading. There is evidence that, in some cases, women acted as peace negotiators. The roles of warrior and hunter were very important to the stability and defense of the group, as well as to the balance of relations with other groups. But the role of women as procreators and nurturers was essential. Information on child rearing and the roles children played in society is scant.

Nomadic hunter-gatherer groups set up temporary camps known as *rancherías*, where dwellings were generally made of bent poles or tree limbs, covered with brush and bison or deer pelts. Most of the evidence related to these *rancherías* is associated with the harvest and seasonal native use of specific resources, such as the fruit of the prickly pear, mesquite beans, mescal, wild berries, and nuts, such as pecans and acorns. Faunal resources, such as bison and deer, were procured at specific times of the year. They were important not just as sources of meat, marrow, and fat and pelts for clothing, shoes, and dwelling covers but also for glue to haft projectile points, and for other uses. Floral and faunal resources that were available only at specific times of the year and in specific locations required the timely arrival of native groups to harvest them, and native groups scheduled their movements and programmed their subsistence rounds to profit from those resources. The nomadic groups in Texas and Louisiana complemented their diets with small mammals, rodents, birds, snakes, snails, turtles, freshwater fish and shellfish, insects, birds' eggs, and other animal protein sources, which were generally available throughout the year and not concentrated in geographical patches.

Like inland bands, hunter-gatherer groups living along the coast of the Gulf of Mexico also procured deer and bison and native plants seasonally, but they also benefited from being able to rely on an abundant marine and estuary resource base that provided water roots, fish, shellfish, and sea mammals. Temporary camps used by coastal groups have been uncovered that reflect seasonal travel between the coast and the mainland to obtain resources. Native groups living along the Gulf Coast often built atop large shell mounds, which had accumulated over years of shellfish and shell consumption. The archeological evidence indicates that significant changes took place in the centuries prior to European arrival (the Proto-historic or Late Prehistoric period), although the overall patterns of resource selection and resource utilization did not vary much between the Proto-historic period and the arrival of Europeans.

Other American Indian Tribes

At other times, several other American Indian groups occupied the territory traversed by the trail. Among them are the Alabama-Coushatta, Apache, Bidai, Cherokee, Choctaw, Comanche, Delaware, Karankawa, Kickapoo, Kiowa, Seminole, Shawnee, and Tonkawa tribes.

The Alabama-Coushatta

The Alabama-Coushatta were part of the mound-building cultures of the Southeast, which included the Creeks, Cherokees, Caddo, Natchez, Choctaw, Muscogee, and others. All of these tribes shared a common religion, with the same basic beliefs, ceremonies, and traditions, but each tribe interpreted it slightly differently.

The record of the first contact with the Alabama people comes from the Hernando de Soto Expedition in 1641. Hernando de Soto came upon the "Alibamo" tribe in central Mississippi and attacked and killed many of them in a fierce battle. Later the Alabama people moved east, to present-day Alabama, where they lived at the junction of the Coosa and Tallapoosa rivers. De Soto also found the Coushata living along

the Tennessee River. By the 1780s, pressure on their lands from westward-migrating Americans forced the Alabama to move back west across the Mississippi River, into the Opelousa area of Louisiana. Around 1803, they moved west again, across the Sabine River into north East Texas.

In 1805, approximately 1,000 Alabamas came to Tyler County's Peach Tree Village. The Coushattas were already in East Texas, having arrived into the Big Thicket area sometime after 1795. Their intertribal friendship became even stronger as they roamed and hunted this new land together.

Although the Republic of Texas Congress had granted each tribe two leagues of land along the Trinity River in 1840, their land was soon taken over by white settlers, leaving them homeless. In 1853 the Texas legislature purchased 1,110 acres for the Alabamas. Two years later (1855) it set aside 640 acres for the Coushattas. However, the land allocated for the Coushattas was never plotted or surveyed, but either through marriage or special permission, Coushattas ended up moving onto Alabama territory, and eventually the tribe became known as the Alabama-Coushatta.

The Apache

Apaches had been present in the modern territory of Texas since the 1680s, but had remained mostly in or above the Hill Country until the Europeans settled San Antonio. That settlement, and the enhanced Spanish presence, affirmed Spanish intentions of colonization, particularly after the Aguayo Expedition in 1721, and frequently engendered violent Apache reactions. The Apache put Spanish settlers on notice when they left arrow shafts with red flags attached to them in the ground near San Antonio Presidio. Beginning in the 1720s, Apache groups, particularly the Lipan Apache, began attacking mule-train convoys along El Camino Real de los Tejas, successfully raiding the livestock herds of the missions and threatening San Antonio. As a result, travel along the trail became increasingly dangerous, particularly between the Río Grande and San Antonio.

Apache groups were displeased with the increased Spanish presence but took full advantage of raids on European supply convoys along El Camino Real de los Tejas to seize coveted horses and items to trade. European goods and local products sustained a native exchange and trade economy, which maintained a network of connections and alliances among groups and enhanced the prestige of individuals involved in it.

Conversely, attacks on convoys along El Camino Real de los Tejas killed or angered the Spanish settlers as well as taking a toll on native groups. The Apache were always viewed as the principal foe of the missions and settlers who were engaged in what has been called *la guerra de la pulga* (the war of the flea). The Apache utilized guerrilla-war strategies that used the main arteries of communication and travel corridors, such as El Camino Real de los Tejas, to counterbalance the superior military power of the colonizers. Local Apache successes enhanced their prestige among other Apache groups and made them doubly feared by the local native groups, whose small numbers and lack of skill in warfare made them vulnerable to both the Apache and the Spanish.

In the 1720s and 1730s, Apache attacks in San Antonio and along El Camino Real de los Tejas led the military and the citizenry to conduct punitive counter-attacks on Apache raiders. These punitive expeditions resulted in considerable booty in pelts, saddles, iron implements, and horses. In this way, horses presumably stolen in Apache raids along El Camino Real de los Tejas were returned to San Antonio. These raids also brought Apache slaves to San Antonio, mostly women and children who either served the Spanish as domestic and field help or were taken along El Camino Real de los Tejas to be traded south of the Río Grande to Mexico. The pattern of Apache raids and Spanish punitive counter-attacks was interspersed with peace negotiations, often initiated

and mediated by Apache women. The Spanish used Apache hostages to press the Apache into peace treaties; however, the policy was ill advised and not successful until the 1740s, when the Apache felt squeezed between the Comanche from the north and the Spanish in the south. The pattern of use, enslavement, or "adoption" of Apache women and children by Spaniards continued into the late 1700s.

Even as the San Antonio missions suffered Apache hit-and-run attacks and the loss of cattle, goats, sheep, and horses, they gained new converts from local native groups, who joined forces with Spanish settlers against their mutual enemy. Between 1746 and 1752, the three San Xavier missions on the San Gabriel River, near present-day Rockdale, Texas, were founded in this way. The location of these missions on good buffalo hunting grounds further angered the Apache, who began harassing the native populations even before the missions were built. It is ironic, then, that property from the San Xavier missions, which were abandoned in 1752, was used to help establish the Nueces River missions for the Apache at El Cañón in Real County in 1762, following a peace treaty. Earlier attempts were made to establish missions for the Apache on the south side of the Río Grande (1754) and at San Sabá (1757–1758), but only the later Upper Nueces missions were marginally successful.

The Bidai

The Bidai people lived along the lower Trinity River, south of El Camino Real de los Tejas, and were a friendly group. They traded with the Hasinai over the Bidai Trail, which led from the lower Trinity River to the vicinity of Nacogdoches. The Bidai had sporadic relations with the Karankawa groups, especially the Coco, as well as with the Tonkawa, the Wichita groups, the Comanche, and with the Lipan Apache, with whom they traded. Later on, the Bidai apparently intermarried with Coushatta people living along the Trinity River.

When Stephen F. Austin, established his colony on the lower Brazos River in the early 1820s, the Bidai often mingled with the American settlers asking for food. Subsequently, the Bidai experienced great difficulties and suffered at least one major typhoid fever epidemic. In 1836, they were once again receiving gifts from Anglo-Americans.

The Cherokee

The Cherokee moved into Texas during the early 19th century. In 1822, they traveled to San Antonio to sign an agreement with the Mexican governor of Texas, José Felix Trespalacios, and obtained permission to settle in Texas. In 1836, they met with Sam Houston to sign a treaty requesting formal title to the lands they occupied. At that time, they resided along the Angelina, Neches, and Sabine rivers, near Nacogdoches, and appeared interested in taking the lead in forming a union of different tribes in Texas. Unfortunately, frictions with European settlers and concern about the Cherokee's influence on other smaller tribes led the senate of the Republic of Texas to nullify the treaty. Three years later, the Texan government had still not ratified Cherokee claims, and it became clear that the tribe would be removed from Texas territory. In July 1839, President Mirabeau Lamar dispatched 900 soldiers to the Cherokee village. After a battle that left 100 Cherokee and two Texas soldiers dead, the Cherokee fled to Indian Territory.

The Choctaw

The first few Choctaw people in Texas settled among the Caddo-speaking group in 1807, when John Sibley brokered a peace agreement between representatives of the two tribes. Permission was given, despite deep-seated resentments and unresolved conflicts between the two tribes.

After 1819, the United States pressured the rest of the Choctaw to move westward from their original homelands in Mississippi, Alabama, and Georgia to Indian Territory in Arkansas and Oklahoma. The Choctaw were the first of

the Southeast's Five Civilized Tribes (the Choctaw, Cherokee, Chickasaw, Creek, and Seminole) to be removed to Indian Territory along what came to be known as the Trail of Tears. By 1836, the year the Choctaw signed a treaty with the Republic of Texas, around 40 Choctaw and some Chickasaw had been living in Nacogdoches and Shelby counties for about two years. The majority of the Choctaw, however, never moved to Texas and remained on Choctaw Nation lands in Indian Territory. Any problems between settlers and the Choctaw usually involved depredations by Texas troops or citizens crossing north of the Red River onto Choctaw Nation lands.

The Comanche

The Comanche began their forays into north and central Texas in late 1729 in an effort to displace the Apache from the Southern Plains and north-central Texas. Comanche economic life was centered on the buffalo, which they hunted, processed in great quantities, and bartered for any other products they required. The acquisition of horses and guns from Europeans enhanced Comanche prowess on the battlefield, enabling them to obtain war booty and more guns and horses and become a formidable force.

During the early period, Spanish Colonial settlers felt the impact of the Comanche presence indirectly, mostly through increased Apache activity, but the 1758 attack on Mission San Sabá changed the situation. The dominance of the Comanche, multiplied by alliances with the Tejas, Taovaya and Wichita tribes, changed the power dynamics in the territory surrounding El Camino Real de los Tejas. In the 1760s and 1770s, a succession of attacks by the Comanche and allied tribes on the Apache during buffalo hunts, as well as on the Nueces River missions, effectively positioned the Comanche to play a central role in political affairs. As a rule, the Comanche preferred to remain above the Red River. There is little evidence of their presence along El Camino Real de Tejas, except when they came to San Antonio to trade or meet with the Spanish officials, when they would frequently raid horse herds at the Bexar settlement and the missions.

Comanche raids often resulted in the kidnapping of Spanish women and children. In the fall of 1773, the Comanche mounted one of the largest and fiercest raids ever experienced by the settlement of Bexar. Raids on Laredo during the same year added 350 horses to the Comanche spoils. The hit-and-run attacks continued, often targeting ranches along the Río Grande and the presidio of San Juan Bautista. In 1778–1779, the Comanche set their sights on the Bucareli settlement on the Trinity River. Successive Comanche attacks, along with the devastation caused by a 1777 epidemic and a flood, led to Bucareli's abandonment.

In the 1780s, the Comanche established *rancherías* on the Medina River, north of Bexar, and at Arroyo Blanco on the Guadalupe River. These *rancherías* were part of a new strategy that connected the Comanche with the Texas road network and commerce along those roads. Even so, most Comanche remained in North Texas.

Multiple attempts to establish an enduring peace with the Comanche were only partially successful. The Comanche promised they would refrain from attacking settlements and taking horses only to repeat the depredations. For instance, during peace treaty negotiations in 1785, Comanche chiefs promised to stop raiding, but only after two raiding parties stole horses from San Antonio and La Bahía. After the treaty was signed, the Spanish supplied gifts to the Comanche. This established a regular routine, whereby Comanche groups often came to Bexar to collect their gifts, traveling across portions of El Camino Real de los Tejas, and often raiding the outlying settlements. Kavanagh (1999) has pointed out that warfare was embedded in the Comanche social structure and way of living.

While the 1785 peace treaty reduced the Comanche threat for Texas settlements it did not eliminate it, and confrontations

between Spanish settlers and the Comanche continued into the 1790s. During the revolutionary events of the early 19th century, including the Hidalgo revolt in 1810 and the Gutiérrez-Magee revolt in 1812–1813, the Comanche played all sides off one another and benefited from trade with the Anglo-Americans who were moving in from the east. Kavanagh (1999) points out that, between 1786 and 1820, the Comanche prospered as never before, expanding their range from Santa Fe to San Antonio and from Natchitoches to Chihuahua; however, the chaos of the collapse of the Spanish empire and the advance of the Anglo-Americans, altered their way of life considerably.

During the Mexican period, Comanche attacks throughout Texas and Mexico led to the 1822 treaty between the Comanche and the Mexican government. During the negotiations, one of the Mexican officials stated that the Comanche's wealth was in "good horses and arms" and that in their trade they had made "a well worn road through the unsettled regions towards Natchitoches." By 1825, the conditions of the treaty had already been violated, and fear and unrest reigned among settlers.

During the following decades, the Comanche were either friends or foes, depending on the time and place. For instance, the Comanche were considered important allies in the struggle between Mexico and the Anglo-Americans who revolted against Mexican President Antonio López de Santa Anna in 1835, but they were feared foes when, in 1836, they attacked the caravan of settlers from Villa Dolores Colony on the Río Grande. These settlers had abandoned their colony precisely because of rumors of an impending Comanche attack.

The political changes in Texas and the establishment of the *empresario* colonies led to increased friction between Anglo and European colonists and American Indian tribes. In 1838, another peace treaty was signed with the Comanche aimed at protecting the new colonists. Central to the peace treaty was a Comanche request that a demarcating line be established, dividing American Indian territory from the region southward occupied by the colonists. According to the wishes of the Comanche, this line was to run between the Hill Country and San Antonio, to allow the tribe to hunt buffalo. However, the creation of such a demarcating line was not in the interest or the plans of the citizenry, particularly the new colonists, and the issue was postponed indefinitely. The treaty languished until, finally, at the 1844 Council at the Falls-of-the-Brazos, the Comanche and other groups informed Sam Houston, president of the Republic of Texas, that they would not accept the conditions of the treaty without the promised demarcation line. The treaty was signed on October 9, 1844, but no line was established. In 1847, the Society of German Noblemen purchased the Fisher-Miller *empresario* land grant, and surveyors entered Comanche hunting grounds. Despite agreements and promises of gifts, the Comanche held their ground and continued to oppose the extension of the settlement.

As settlers encroached further on native lands, they competed for resources and conflicts multiplied. In January 1840, a group of Comanche traveled to San Antonio, presumably to trade, and became embroiled in what became known as the Council House Fight—a violent conflict that became deeply etched in the memories of the Comanche and the citizens of Bexar. The preponderance of conflicts signaled the reluctance of Comanche and citizens alike to abide by agreements. In August, the Comanche attacked Victoria and Linneville; in turn, the Comanche were attacked near Lockhart and lost many warriors.

The Delaware

Some members of the Delaware tribe moved into Texas in the early 19th century and lived near the Shawnee; however, by the 1820s, most of them had moved onto the Brazos Reserve among the Caddo. In 1836, the Delaware signed a treaty with Texas that placed them on Cherokee land.

When combined with the Shawnee, they were said to number 500 people. In general, the Delaware and the Shawnee managed to avoid conflicts with the white settlers.

In 1842, fears of alliances between the Mexican government and several native tribes, including the Delaware and the Shawnee, increased. The following year, representatives of both tribes met at the Tehuacana Indian Council. Roasting Ear, the Delaware chief, delivered the opening statement, followed by Linney, the Shawnee chief. In September of the same year, these tribes signed a peace treaty with the Republic of Texas. As interpreters, guides, trackers, pack-drivers, warriors, and hunters, the Delaware traversed a broad territorial expanse. Their presence is mentioned from the Río Grande to the Canadian River, as they were heavy users of the network of roads that became El Camino Real de los Tejas. In the 1850s, the few Delaware who remained in Texas were on the Brazos Reserve, among the Caddo and the Wichita, and in 1859 they moved to Indian Territory with those groups.

The Karankawa

The name Karankawa (Carancagua) identifies a specific Texas coastal group, but it is often used to include five different groups: the Karankawa proper, the Coco, the Cujane, the Guapite, and the Copane. These groups likely spoke dialects of the same language, and the Karankawa proper and the Coco apparently spoke the same language. The Karankawa language has not been linked to any other language family. Some of these coastal groups also had friendly relations with the Akokisa (Orcoquisa) and the Atakapa who also lived farther to the east, on the coastal area. None of these groups were in the vicinity of El Camino Real de los Tejas, but they had had close interactions with the Spanish since the expedition of 1689 that searched for La Salle's settlement. During that expedition Alonso de León traveled to Garcitas Creek, explored Matagorda Bay, and reported seeing native *rancherías*, likely belonging to any of the groups subsumed under the designation of Karankawa.

In 1722, the Franciscans founded Mission Nuestra Señora del Espíritu Santo de Zúñiga, hoping to attract coastal groups. Next to the mission, the Spanish founded the Presidio of Nuestra Señora de Loreto. In 1726, the mission was moved inland to the Guadalupe River, then moved again, in 1749, to the San Antonio River at modern Goliad. In 1745, when the Franciscans founded the missions on the San Gabriel River (San Xavier Missions), the Coco were one of the groups at the missions.

In 1754, the Franciscans established Mission Nuestra Señora del Rosario for the Cujane. Four years later, 21 natives had been baptized but all in *artículo mortis* (on their deathbed). The coastal missions owned large livestock herds and were raided by native groups, including the Karankawa, who took horses and cattle. During the 1770s and 1780s, the Karankawa were particularly active in raiding and were said to be well armed. They were involved in trade with other coastal groups, such as the Orcoquisa, as well as with inland groups. In 1774, the Coco and the Karankawa were living near the mouth of the Trinity River, where French and English settlers came to trade for horses and mules stolen from Presidio La Bahía. In 1780, General Teodoro de Croix commented that the Karankawa where living on the mainland and on the nearby islands and that they deserved to be exterminated because of their cruelty.

By the 1780s Mission Rosario was abandoned, partly because of attacks and raids on the livestock and partly because of native revolts. In 1791, the Franciscans established Mission Nuestra Señora del Refugio as a last effort to convert the Karankawa. Circumstances had changed. This time the Karankawa accepted the coastal mission, viewing it as a refuge, a useful location for fishing in time of need, and because it was far from their enemies, the Comanche. During the 1790s, the Karankawa appeared consistently in Mission Refugio censuses. In the early 1800s, the Karankawa, Coco, and Cujane were still mentioned

in the records, but many perished in conflicts with the white settlers.

The Keechi

The Keechi lived in the Red River area in the first decades of the 18th century and were mentioned as early as 1687 as Caddo allies. In 1745, Fr. Xavier Ortiz placed the Keechi in the area of the upper Trinity, Brazos, and Red River areas. In 1770, Athanase de Mézières visited the Kadohadacho on the Natchitoches River and met the chiefs of several Nations of the North (Norteños), including the Keechi. The following year they signed a treaty with the Spanish.

In 1772, de Mézières visited the Keechi village on the Upper Brazos and Trinity rivers. De Mézières reported that the Keechi traded buffalo and deer skins for guns and ammunition with the inhabitants of Natchitoches. He also noted that the Keechi had only played a small role in the hostilities waged against the *presidios* although they had taken part in the Mission San Sabá attack. In 1775, de Mézières following El Camino Real de los Tejas from Nacogdoches, left the highway at Bucareli, and reached the Keechi village on the Trinity River, near modern Palestine, Texas. During the first decades of the 19th century, the Keechi maintained their association with the Cadohadacho, traded at Nacogdoches, and remained east of the Trinity River.

In 1843, the Keechi were present at the Tehuacana Creek Council. They signed a peace agreement with the Republic of Texas, as part of the Wichita confederation under the leadership of A-cah-quash, the Waco chief. In 1846, the Keechi signed the Treaty of Council Springs, which placed them under the protection of the United States. Frictions with settlers and Keechi horse stealing led to several confrontations. In 1850, 200 Keechi moved to Indian Territory, where they settled near the confluence of the Canadian River and Choteau Creek. Finally, in 1859, the remaining Keechi were removed to Indian Territory as part of the Wichita and Affiliated Tribes.

The Kickapoo

After ceding their native lands in Illinois in 1819, a large number of Kickapoo moved to Texas, where they lived among the Cherokee until 1839, when the Cherokee were forced to leave. Stephen F. Austin's 1829 map shows the Kickapoo on the Upper Trinity River. In February 1836, the Kickapoo signed a peace treaty with Texas, but after it became known that the Kickapoo sided with Mexico, relations with the fledgling republic broke down. Late that year, after the Kadohadacho and Kickapoo had attacked settlements on the Brazos River, Texas Rangers mounted a successful attack against them on Elm Creek, east of Austin. In 1839, when Mirabeau Lamar ordered that the Kickapoo be removed from Texas, many of the Kickapoo fled to Matamoros, Mexico, and later to Morelos in Coahuila province. Some Kickapoo joined the Seminole leader Wild Cat's Mexican settlement. They were granted lands on condition that they join the Mexican Army, whenever required to fight the Apache, the Comanche, and others. Unhappy with the conditions of the agreement, these Kickapoo crossed the border at Eagle Pass and returned to Kansas, with only a few remaining in Morelos. Today, the Kickapoo Traditional Tribe of Texas lives on a small reservation immediately south of Eagle Pass on the Río Grande. These Kickapoo are the descendants of tribal members who returned to Texas from Kansas in 1864.

Like the Delaware and Shawnee, the Kickapoo were employed as interpreters, guides, scouts, and hunters. In the 1840s, Kickapoo parties were sometimes reported hunting in Texas, and in 1848, Commissioner George W. Bonnell's survey of American Indians listed 1,200 Kickapoo.

The Kiowa

Spanish sources place the Kiowa in the Central Plains in the first decades of the 18th century and in the Southern

Plains at the beginning of the 19th century. According to J. H. Gunnerson and D. A. Gunnerson, the Plains Apache joined the Kiowa sometime around 1700. As a band of the Kiowa, the Kiowa-Apache (still often called the Plains Apache) moved onto the Southern Plains in the late 18th century. In 1806, perhaps earlier, the Kiowa allied with the Comanche; the Kiowa-Comanche alliance persisted into the reservation period of the late 19th century.

Throughout the late 18th and beginning of the 19th centuries, the Kiowa remained mostly north of the Red and Arkansas rivers, but in association with the Comanche and other groups, they raided into Texas in the early 1800s, trading weapons and ammunition with people from Natchitoches and Nacogdoches, and trading and receiving gifts from Anglo-Americans. In 1836, representatives of the Republic of Texas visited the Kiowa and the Comanche to negotiate and trade. Even so, in 1843 and 1844, the list of goods specifically indicated for the Kiowa was insignificant.

In June 1844, Kinney Ranch near Corpus Christi was attacked. The attackers were presumably Kiowa, but it was attributed to several other groups. In October 1844, at the Council at the Falls-on-the-Brazos, Sam Houston asked the Comanche to keep the Kiowa away from Texas because the Kiowa were at war. Comanche Chief Pochanaquarhip replied that the Kiowa were stronger and the Comanche (or his band) feared them. Sam Houston asked Pochanaquarhip to send a runner with a white flag to warn the people in San Antonio anytime the Kiowa were approaching. Houston added, "If the Kiowa come in, the people not knowing, will say they are Comanche. We thought you all one people." As clarification, Pochanaquarhip explained that nine tribes had not made peace with the Texans; these included the Kiowa, Lipan Apache, and Cheyenne.

In 1849, Robert Neighbors, the Indian agent for the U.S. Bureau of Indian Affairs, listed 1,500 Kiowa warriors, the third largest native group in Texas in terms of population. Regarding several groups, including the Kiowa, Neighbors also stated that "our intercourse has been extremely limited, for the want of proper means." Kiowa relationship connections with El Camino Real de los Tejas appear to be slight, although their relationships with the Comanche and the Wichita groups complicate the issue. Today, the Kiowa live near Carnegie in Caddo County, Oklahoma.

The Seminole and Seminole Maroon

The Seminole came to Texas after their removal to Indian Territory from Florida in the 1830s and 1840s. Like the Cherokee, the Creek, and the Choctaw the Seminole were slave owners, a fact that had important repercussions on their move to Texas and Mexico. Seminole slavery followed social patterns and relationships that are quite unlike those practiced by other slave-owning American Indian tribes and by Western societies. Although culturally and linguistically different, the Black Seminole, often called the Seminole Maroons were, and are, descendants of African populations enslaved by the Seminole.

The key figure in the Seminole move to Texas and to northern Mexico was the Seminole Chief Cooacoochee, known as Wild Cat. Cooacoochee was a member of the 1846 Butler and Lewis Expedition to the Comanche and used this opportunity and others to explore the Southwest. He also explored the Brazos River area and made contacts with the Kickapoo, Caddo, and other groups. The events and legal issues connected with the Seminole recovery of their slaves after their removal from the Southeast are beyond the scope of this plan but, in 1849, the Seminole received 260 former black slaves. While the Seminole Maroon were hoping for freedom from their Seminole masters, they also had to contend with other native groups and with the white settlers who were ready to acquire them as slaves.

The solution for the Seminole and the Seminole Maroon was to emigrate to Mexico, which they eventually did in 1850. That year, the Seminole and the Seminole

Maroon stopped on Cow Bayou near Waco and at the Llano River to rest and raise crops before continuing the journey south. At these stops Wild Cat promoted his Mexican colony, but he only managed to entice some Kickapoo to move southward. As representative of the Seminole, Seminole Maroon, and Kickapoo, Wild Cat signed an agreement with the Mexican government that provided them with about 7,000 acres of land: half of the land was at the headwaters of the Río San Antonio and the other half at the headwaters of the Río San Rodrigo. In return, all three groups were to patrol the border and provide warriors to fight off other tribes such as the Apache and the Comanche who continuously harassed the citizens of northern Mexico. The Seminole settled at San Fernando de Rosas (modern Zaragoza), the Seminole Maroon at El Moral, and the Kickapoo at Tuillo (modern Guerrero).

Wild Cat and his fellow Seminole and Seminole Maroon were a serious problem for the United States, particularly regarding runaway slaves. Wild Cat was described as "an arch intriguer" and Texas officials often participated in or ordered the pursuit and apprehension of those thought to be runaway slaves. Many slaves used Eagle Pass to escape into Mexico, and so did the parties of slave hunters who pursued them. In the late 1860s, several requests were made to the Mexican authorities regarding border attacks and depredations committed by Seminole, Kickapoo, Delaware, Lipan Apache, and other groups who had sought refuge south of the border. In 1851, as mentioned above, the majority of the Kickapoo left Mexico; those few who remained settled in Morelos. That same year the Seminole and the Seminole Maroon moved to lands granted at the hacienda El Nacimiento although they settled apart. In 1859, most Seminole left Mexico for the Indian Territory, but some of the Seminole Maroon stayed.

The Shawnee

The Shawnee settled in Texas south of the Red River in 1822. In 1824, they obtained a temporary Mexican land grant and, by 1826, 5,000 Shawnee and Delaware families had settled the land. The southwestern bands became known as the Absentee Shawnee, but they chose different settlement areas. One band settled on the Canadian River; another joined the Cherokee on the Sabine River in 1839; and yet another joined the Caddo groups on the Brazos Reserve. Like the Delaware, with whom they were often associated, the Shawnee were hired as interpreters, guides, scouts, traders, and hunters. In the 1830s, the Villa de Dolores settlers on the Río Grande hired Shawnee hunters because the colonists feared attacks by the Comanche. In fact, there were reports of the Shawnee hunting beaver for pelts at Las Moras Creek, and on the Río Escondido, south of the border. In 1836, and under the leadership of the Cherokee, the Shawnee signed a peace treaty with the Republic of Texas. In 1837, the Shawnee were living in the area of Nacogdoches, although their status as residents was not clear. Two years later, some Shawnee decided to disassociate from the Cherokee, citing the latter's agreements with Mexico and the political situation in Texas under Mirabeau Lamar; others departed with the Cherokee and received compensation for lost property.

In 1843, the Shawnee were present at the Tehuacana Creek Council, near modern Waco. The gift list included 13 Shawnee, with nine warriors under the leadership of Black Cat. The following year, the Shawnee were also present at Tehuacana Creek. In 1849, Indian Agent Robert Neighbors listed the Shawnee with the Delaware: together, they numbered 650 people and 130 warriors. From the 1840s through the 1860s, the Shawnee (and the Delaware) settled along the Brazos and Bosque rivers. In 1861, the Absentee Shawnee who had been removed to the Wichita-Caddo reservation made a treaty with the Confederacy, and some Shawnee served in the Confederate Army.

The Tonkawa

Earlier interpretations and analyses described the Tonkawa as native to Texas;

however, the work of William Newcomb and Thomas Campbell conclusively demonstrated that the Tonkawa were first recorded in 1601, when they were living in Oklahoma. During a battle with the Aquacade, the Spaniards captured an Indian called Miguel. Miguel was taken to Mexico City, where he related that, while still a boy, he had been captured by Aquacade and that his own people lived at a place called Tanoak. A map drawn following Miguel's instructions placed Tanoak west of the Aquacade territory, somewhere between the Salt Fork and Medicine Lodge rivers in north-central Oklahoma. During the middle to late 17th century, some of these groups moved south and probably remained around the Red River region for several decades. In 1691, the Tonkawa (Tamaqua) and the Youjuane (Diujuan) lived along the Neches-Angelina rivers. A couple of decades later—in 1719, and again in 1723—French explorers mentioned the Tonkawa in the Red River area. In the middle of the 18th century, the Tonkawa appear to have ranged between the Colorado and the Trinity rivers, above El Camino Real de los Tejas leading from San Antonio to Los Adaes.

In the 1740s, the Franciscans founded the San Xavier missions near present-day Rockdale, in Milam County. The registers of Mission San Francisco Xavier de Horcasitas indicate that there were 11 Yojuane at the mission but only one Tonkawa. Indeed, the Tonkawa seem to have studiously avoided mission life. The Tonkawa were part of the native attacking force that destroyed Mission San Sabá in 1758. The Spanish punitive expedition meant to avenge the San Sabá outrage was a failure, but during the trip they encountered a large camp of Yojuane, and few natives survived the attack. Weakened, the Yojuane joined the Tonkawa.

In 1770, when Athanase de Mézières visited the Cadohadacho village on the Natchitoches River, the Tonkawa were expected to join the meeting but did not. Two years later, de Mézières traveled from Natchitoches to visit the native nations on the Upper Trinity and Brazos rivers. His report on the Tonkawa refers to a war alliance between the Yojuane and the Mayeye, which was mostly in place to fend off the Apache and the Osage. De Mézières mentioned that the Tonkawa had joined the Mission San Xavier briefly but had soon abandoned it. He stressed that they lived between the Trinity and the Brazos rivers, were prolific hunters, and traded their pelts at the Tawakoni village. In fact, the Tonkawa, Mayeye, and Yujuane generally set up camp four leagues (ca. 12 miles) beyond the beginning of the Monte Grande, near a spring called Las Puentecitas.

Despite Mézières's efforts, the Tonkawa never formally agreed to peace: in 1777, they campaigned against the Osage and were said to have 300 warriors. The Spanish continuously entreated and threatened the Tonkawa to change their nomadic way of life, settle in a village, and deliver the apostates who left the missions. In 1779, Mézières remarked that the Tonkawa had maintained 150 warriors on their rolls since the last epidemic. That same year, de Mézières met with the Tonkawa and Tawakoni chiefs and distributed gifts. The Tonkawa chief was El Mocho, alias Tosche [or Tosque], a Lipan Apache adoptee who became leader of the Tonkawa. By the 1790s, however, the Tonkawa were stealing horses from the Lipan Apache.

Pressure from the Spanish authorities and evolving political conditions must have convinced the Tonkawa to settle down because, in 1828, Jean Louis Berlandier recorded visiting a Tonkawa village located midway between the Guadalupe and Colorado rivers. At this time, the Tonkawa were allied with the Lipan Apache, who were suffering from the dearth of buffalo and the presence of the Comanche. Anglo settlers decided to remove the Tonkawa from the area; however, Stephen F. Austin informed the settlers that the Lipan Apache had agreed to take charge of the Tonkawa instead, and took them to an area between the upper Nueces River and the Río Grande, where they remained for a couple of years.

The Tonkawa and the Lipan Apache

fought as allies alongside the Texans against Mexico. In 1843, the Tonkawa endured a serious epidemic and continued to suffer a declining population due to intertribal conflict. The following year, the Tonkawa and the Lipan Apache camped near Cedar Creek to hunt, and both tribes were reported to make sporadic raids on cattle belonging to Texans. In May 1846, the Tonkawa signed a peace treaty with the United States at Council Springs. The terms of the treaty provided trade goods and protection to the tribes; in return, the signatory tribes were to return prisoners and captives and cease attacking and horse stealing. But impoverished by loss of lands and declining resources, and used to providing for themselves, proud tribal members frequently had no other choice but to continue to raid livestock from settlers to keep from starving. Many Tonkawa sought the promised help from the United States in the 1850s, often gravitating toward Fort Inge and Fort Clark. In the mid-1850s, the Tonkawa were sent to the Brazos Reserve, and in 1859 they were removed from Texas and settled on the Wichita Reserve in Indian Territory. Today, the Tonkawa live near Tonkawa, Oklahoma.

The Tawakoni (Wichita)

From the 16th through the 18th centuries, the Tawakoni moved gradually away from the Arkansas River into the Wichita Mountains and the area north of the Red River. Before 1835, the Iscani, Keechi, (Kitsai) Taovaya, Tawakoni, Waco, and the Wichita proper were politically autonomous groups that shared linguistic and cultural characteristics. After signing The Treaty of Camp Holmes with the United States, in 1835, these groups became collectively known as the Wichita. Still, unlike the Caddo in Texas and Louisiana, the Wichita groups generally remained peripheral to Texas until the late Spanish Colonial period.

In the 1740s, Wichita-speaking groups located in northern Oklahoma were engaged in profitable and intense trade with French settlers and other American Indian tribes, including the Comanche, with whom they had established peace. In the 1750s, these groups had moved to the Red River and, by 1758, some were involved in the attack and destruction of Mission San Sabá. That attack was perpetrated with the Comanche and the Texas Caddo and was meant to dissuade the Spanish from protecting the Lipan Apache. The following year, the Spanish mounted a punitive counter-attack against a fortified Taovaya village on the Red River. Colonel Diego Ortiz Parrilla led 600 men who were soundly defeated and had to flee for their lives.

In 1770, Athanase de Mézières visited the Cadohadacho, the Taovaya, the Tawakoni, the Iscani, and the Keechi on the Red River, although these groups also maintained a village along the Sabine River. The chiefs of these groups made clear that, prior to that date, the Tawakoni and the Iscani had settled between Bexar and San Sabá but had now moved to the Sabine River, where they intended to remain. Mézières confirmed that the Taovaya had abandoned their fortified village and had moved south. They also stated they were at war with the Lipan Apache, and that the Comanche were at war with them.

In 1771, the Taovaya agreed to a peace treaty with Spain. According to the terms of this treaty, the Taovaya would not travel farther south than the Bexar Presidio, would return captives, and would persuade the Comanche to refrain from committing hostile acts. At that time, the Taovaya were said to have between 2,000 and 3,000 warriors. A year later, Mézières again visited the Wichita groups. The Tawakoni village was located west of the Trinity River, but the Iscani lived in dispersed, smaller settlements about 20 miles from the Keechi. Mézières also learned that the Tawakoni had established another village on the Brazos. In 1777, the Wichita tribes suffered an epidemic that affected many other tribes in East Texas, particularly the Tawakoni. The following year, the Taovaya had returned to the fortified village on the Red River. During Mézières' 1779 visit to the Taovaya fortified villages, he estimated that there were 800 men and

many children at the Taovaya villages.

In 1801, the Taovaya again suffered a smallpox epidemic that reduced their adult male population to 400. At this time, the Iscani, Taovaya, and Tawakoni were living in villages located on both sides of the Red River. Their principal chief was Awakahea (or Awahakei) of the Tawakoni village, who died in 1811. When the tribes could not agree on a successor, the groups dispersed. The Tawakoni, or part of the tribe, moved south.

The Keechi, Tawakoni, Waco, and Wichita proper were present at the Tehuacana Creek Council of 1843, where it was agreed that all hostilities were to cease, trade would take place at the Brazos trading post, and if a treaty was to be concluded there would be mutual exchange of prisoners or captives. Chief Acaquash signed for all the tribes. The Republic of Texas, the Keechi, the Tawakoni, and the Waco signed a peace treaty at Bird's Fort on the Trinity River in September 1843.

But horse stealing continued, despite the treaties and the goodwill, angering settlers and leading to the killing of Wichita people. At the next Tehuacana Council, the chiefs of other groups repeatedly admonished the Tawakoni to listen to and uphold the recommendations of the council in order that they could be happy and freely travel without fear of reprisals. In 1846, the Keechi, Tawakoni, Taovaya, and Waco signed an agreement with the United States to cease mutual hostilities. As pressures mounted, white settlement expanded, and resources decreased, American Indian tribes, such as the Wichita, resorted once more to raiding. Ultimately, in 1859, the last of the Wichita groups were removed to Indian Territory.

African Americans

Africans could be found living all along the El Camino Real de los Tejas corridor, particularly after the late 1680s. Some came with the Spanish expeditions; many more trickled in via the Texas-Louisiana border.

In 1783, 19% of the Texas population was classified as "colored," terms that also included mestizo and mulatto, or mixed race, and anyone who did not fit well in other race categories. The figures in Texas slowly rose each subsequent year: 20% in 1784 and 21%; by 1790, though, it had dropped to 12%. Within Texas, 29% of the population of San Antonio was classified as African-American in 1780; by 1790, that percentage had risen to 37%. At La Bahía, 36% of the population was classified as colored in 1780; by 1790 that percentage had decreased to 19%. Skewing the numbers, however, is the fact that many light-skinned people with African ancestry were quite often classified as Spaniards, not mestizo or mulatto.

Africans occupied all sorts of trades and, while some were sold into slavery, others were free. Records show that Pedro Ramírez was a ranch hand in San Antonio, but Felipe Ulúa, who had bought his own freedom, owned property and raised crops. Still, their historical traces are difficult to find because they did not advertise their presence for fear of enslavement and persecution, particularly after the 1800s, when British and Anglo-American pro-slavery policies affected the South.

Some surviving records document the presence of African Americans during the early 1800s. For example, Kiamata Long was a slave girl who traveled to Texas with James Long from Louisiana and nursed his children. After his death in Mexico, Kiamata and Long's wife and children became part of Stephen F. Austin's colony. Kiamata and her children served the Long family throughout their lives. Moses Austin, Stephen's father, had an African slave, and so did many other Anglos in the Texas colonies. Although Mexico abolished slavery after it gained its independence from Spain in 1821, Texas colonists obtained an exemption from the abolition law and continued to own slaves during the Mexican period. James Fannin, for instance, smuggled in 153 African slaves from Cuba in 1833. In 1825, the Austin colony had 443 slaves owned by 69 slaveholders. By 1836, this figure had swelled to 5,000 slaves; just four years later, the figure was 11,323. Most of the

slaves worked as field hands in the cotton fields of East Texas or on the coast.

During the Texas Revolution, or War for Texas Independence (1835–1836), several Africans fought alongside the Texans to gain independence from Mexico. Unfortunately, although they were successful, the change in regime did not favor Africans; under the Republic of Texas, the lot of Africans, freed or enslaved, did not improve.

William Goyens, a light-skinned African, was an exception. Goyens lived in Nacogdoches in 1820 and became wealthy as a blacksmith, wagon manufacturer, and freight hauler between Nacogdoches and Natchitoches. He also owned his land, a mill, and traded in real estate. In 1832, Goyens bought a track of land on El Camino Real de los Tejas, four miles west of Nacogdoches. During the Texas Revolution, Sam Houston used Goyens as an emissary, requesting that the Cherokee not side with Mexican forces.

Samuel McCullough, another free African-American, was wounded trying to repel Mexican troops during the Battle of Goliad in October 1835. When the Texas Revolution was over, McCullough feared being deported. He successfully requested special permission to remain in Texas on the basis of his service to the republic. Hendrick Arnold was in a similar situation. Arnold fought with Colonel Ben Milam in San Antonio in 1835, and although, as a freedman he was supposed to leave the country, he and his family remained in San Antonio, where he was given land and operated a gristmill near Mission San Juan Capistrano. It is perhaps significant that both McCullough and Goyens were married to white women.

During the mid-1800s, many freed and fugitive slaves crossed Texas along El Camino Real de los Tejas, en route to Mexico, where they joined communities of Seminole Maroons, or Black Seminole. Others remained in Texas and made their name working on ranches as cowhands.

Other Ethnic Groups

Beginning in the 18th century with Canary Islanders, El Camino Real de los Tejas served as a migratory route for many European ethnic groups. After the 1840s, Belgians, Czechs, Frenchmen, Germans, Greeks, Hungarians, Italians, Irishmen, Norwegians, Poles, and Swedes settled along the trail corridor although most arrived by sea. Many of these communities still retain major elements of their ancestors' culture.

HISTORIC/ARCHEOLOGICAL RESOURCES

Information in this section is drawn from inventories of cultural resources along El Camino Real de los Tejas National Historic Trail carried out during the planning effort for this Draft Comprehensive Management Plan/ Environmental Assessment. The report and database of cultural resources along the Texas portion of the trail includes close to 300 sites. A similar report and database for the Louisiana portion of El Camino Real de los Tejas includes 208 potential sites and segments. Because many of the resources are privately owned, specific geographical details are not available to the public. No systematic field investigations were conducted in obtaining trail-related data: the data for these inventories were gathered from existing secondary sources, in addition to some primary sources. A database of more than 500 references used to document trail-related resources was also compiled in the course of preparing this plan. Both of these databases will be updated and expanded as new information is uncovered about trail-related resources.

PREVIOUS RESEARCH

For decades, researchers have documented cultural resources associated with El Camino Real de los Tejas National Historic Trail. Records used to study Spanish Colonial history and resources include travelers' diaries, historic maps, General Land Office maps

and land-grant documents, military records, legal documents, memoirs, and archeological and historical resource site forms prepared by historic preservation professionals. Many reports and books summarize these primary sources.

At the local level, knowledge about the trail has been transmitted through oral tradition; however, corroborating historical and archeological evidence is often limited. Avocational and professional historians and archeologists have examined primary sources and conducted field research to document the history of the trail, often finding physical evidence of swales, ruts, and related river crossings, camps, missions, *presidios*, battlefields, civilian settlements, ranches, and other artifacts.

On a broader scale, state agencies have documented the history of the trail throughout Texas. For example, the Texas Department of Transportation has collected and documented trail-related historical information throughout the state, including several counties through which the Texas Department of Transportation right-of-way encompasses much of the original alignment of the trail's main routes. Several books have been published, interpreting many of the historic documents and diaries. They provide clues to the locations of the routes as they may be found on modern landscapes. Such research and publications can help clarify the locations of various segments, and improve our general understanding of El Camino Real de los Tejas National Historic Trail and its varying routes through time and across the landscape.

Several reports and publications summarizing various aspects of trail history exist, but there has been no comprehensive effort to collect all of the data in one place. Often, data are found in unpublished sources, such as the notes of researchers, for which the original source data is not known. The planning team recognizes that a handful of researchers have spent decades investigating trail-related cultural resources, and that this research will probably be ongoing for decades. As mentioned above, during the course of preparing this plan, the planning team made a strong effort to summarize and organize all data into a comprehensive database that can be easily accessed for research purposes and expanded and updated.

An analysis of the geographic distribution of historic resources along El Camino Real de los Tejas National Historic Trail suggests some interesting patterns. While some counties had no trail-related sites previously recorded, other counties had dozens of potential trail-related sites for which studies were readily available. For example, more than 70 Spanish Colonial and historic American Indian sites were recorded for Bexar County. This is the result of three main factors:

1) Extensive urban development in Bexar County has resulted in required archeological studies to comply with federal and state regulations;

2) Several groups in Bexar County, including the NPS and other government entities and academic institutions, have devoted resources to the professional study and preservation of a number of Spanish Colonial period sites; and

3) The area was geographically located at the intersection of several Spanish Colonial roads.

The inventory of trail-related resources focused primarily on previously recorded sites. It was not an exhaustive search for all possible resources; therefore, it represents only a sampling of the total number of potential resources. This sample is neither systematic nor random, and it is heavily skewed by the fact that some areas have been studied intensively by historians and archeologists, while others have not. As a general rule, more professional studies have been conducted in counties where major settlements, such as missions and *presidios*, are known to exist and more is known about resources in these counties.

Trail Segments Retaining Physical Integrity

In some places, physical evidence of the trail has been obliterated or obscured by development and other man-made changes in the landscape, such as agricultural activities or tree harvesting; however, numerous original segments still survive and anyone with a small amount of training in landscape surveying should be able to follow them. Slight to extreme linear depressions, approximately 1 to 2 meters (3.3 to 6.6 feet) wide, may appear in undisturbed locations. In those cases where the depressions cannot be explained by natural processes such as erosion or by modern farming, hunting, logging, or forest management activities, and if the depressions remain consistent in width, the depressions could be the result of the natural wearing of carts or wagons, oxen, or foot traffic—in other words, they could be remaining traces of the trail. Archeological research would then be necessary to associate the trace/rut swales with a period of time when the trail was in use.

Researchers have identified intact trail segments in Bexar, Houston and Sabine counties and in Natchitoches Parish. Segments in Brazos, Karnes, Nacogdoches, Robert, San Augustine counties have been physically identified, but their relationship to the period of significance for the trail has not yet been confirmed.

Some segments of the original trail have been upgraded into modern dirt roads; in some cases, they have been paved. Such is the case with Louisiana State Highway 120. It roughly follows the original route used by the traffic crossing the Sabine River before 1822, when Fort Jesup was established and El Camino Real de los Tejas alignment was no longer the only route from Texas to Natchitoches. Others, like Ormigas Road, the Texas Star Road, and the Camino Carretera have been upgraded to allow for modern travel, but they still retain a considerable integrity of setting.

River Crossings and Parajes

River and creek crossings, as well as *parajes* (traveler's campsites, or more broadly, stopping places), would have existed in all of the counties crossed by the trail, including the counties where travelers would have passed through on their way to major destinations; yet, relatively few of these fords (and the likely *parajes* associated with them) have been documented. In some of these "pass-through" counties, documentation of resources was often accidental.

During the Spanish Colonial period, travelers mostly crossed the river at fords that were, by definition, shallow and did not require a ferry or bridge structure; however, some places where travelers crossed the river were deep enough to require simple bridge structures, such as fallen trees that were laid across the river, and there are occasional references to the use of rafts along the trail, indicating deep-water crossings. It has been documented that people made river crossings at each of the dams serving the five missions in Bexar County. It is clear that, although favored places to cross the river were typically undeveloped fords, deeper waters in other areas may have necessitated man-made structures to accomplish the river crossing.

While most maps show trails intersecting at roughly perpendicular angles to rivers, crossing the river using a ford often required following a river for some distance **away** from the main trail, locating the ford and using it to cross the river, then traveling back to the main trail, a fact corroborated by travel narratives. The location of fords along the trail is important in trail documentation because such locations help in mapping trail routes. Furthermore, *parajes* were located next to many places where river crossings were made and can provide clues to life on the trail. In a previous study of trail routes (McGraw et al 1991), dozens of fords and river crossing places were recorded. Many of these were confirmed by the use of a combination of aerial photography and field investigations.

Most *parajes* along the trail were

simple campsites, usually located near river and creek crossing places, where travelers could find good water near the trail. Some, however, included American Indian villages, where travelers would receive hospitality and may have traded goods. Additionally, missions, *presidios*, *villas*, and ranch headquarters often served the functions of *parajes* along the trail. For the following discussion, however, *parajes* refer to relatively isolated campsites, and those stopping places along the trail that were settlements are noted under other historic-use categories.

Information regarding several known river crossing places and their associated *parajes* was entered into the trail database. Many of these *parajes* were noted in several different diaries and itineraries throughout the period of significance of the trail, but not all of these campsites have been confirmed archeologically.

American Indian Villages

In the 17th century, Spanish explorers making the earliest *entradas* (entries) into the future states of Texas and Louisiana, along routes that would become El Camino Real de los Tejas National Historic Trail, noted in their journals that they accepted hospitality from several American Indian villages, or *rancherías*. Some of these *rancherías* were referenced repeatedly as stopping places, or *parajes*, along the various routes. For instance, the paraje known as Indian Mounds is well documented as being at or near present-day Caddo Mounds State Park, and a Kickapoo village was located at a well-known crossing on the Trinity River.

Spanish Missions

Spanish missions were established for the religious and social conversion of American Indians. Because many missions were short lived, some of them were never comprised of more than a few *jacales*, primitive wattle-and-daub structures made of poles and mud with a thatch roof. Some of these unsuccessful missions were abandoned, never having accomplished their goal of converting American Indians to Christianity, while others were reestablished at new locations, in the hopes that Christianizing American Indians would be more successful in different environs. Despite moving to new locations, often changing names as they did so, the majority of Spanish missions in Texas were unsuccessful in their efforts to convert American Indians to Christianity.

Some missions grew large enough to warrant the construction of elaborate stonemasonry buildings and structures and finely engineered *acequia* systems, becoming a major part of the landscape with dense archeological deposits. Often when missions were deemed a success, they were secularized, or transferred from ecclesiastical to civil or lay use, and the mission lands turned over to the neophytes, or new converts, at the missions. Secularization occurred only in the settlements in Bexar and Goliad counties, beginning with the secularization of Mission San Antonio de Valero in 1793.

Some of the buildings and structures of the more elaborate missions still retain much of their physical integrity, and they serve as representations of the esthetics that have become inextricably linked with the Spanish mission period over time. Other Spanish mission sites are now represented only by archeological remains and would require intensive study to properly understand their historic significance. Mission locations along El Camino Real de los Tejas National Historic Trail include a combination of cultural-resource types that have been recorded as archeological sites, historic buildings, historic structures, historic districts, and cultural landscapes.

When reestablishing a mission in a new location, missionaries brought with them everything that defined the mission as a religious entity. This included supplies, furnishings, and religious vestments that had originally been brought along the main branch of El Camino Real de los Tejas, as well as, often, converts from the previous mission. The multiple locations of certain

missions are closely related to the changing routes of the Spanish trails, and they serve as reminders of the state of social flux in which the trails developed. One mission may have been located in several different places over time, and the physical evidence of a particular mission may be found at each of these locations along the designated trail. Many mission locations, however, have not yet been confirmed archeologically.

Presidios, Military Outposts, and Forts

Beginning with the first mission to the Tejas, in 1690, fortified settlements manned by soldiers were an inseparable part of the Spanish colonial missionary effort along El Camino Real de los Tejas National Historic Trail. With the founding of the first *presidios*, or garrisons along the trail—Bexar County in 1718; Victoria County in 1721; and Los Adaes in 1721—the Spanish government increased its military defenses to protect missions and *villas*. In the late 1700s and early 1800s, the military presence along the trail increased to include outposts of the *presidios* and other military posts, such as informal guard stations staffed by civilian soldiers from nearby settlements. Like the missions, *presidios* sometimes moved locations, so multiple sites along the trail may be associated with a single presidio.

After Louisiana became part of the United States, following the Louisiana Purchase in 1803, several military installations were built along the trail to deter Spanish intrusions into American territory. For example, the U.S. Army at Fort Jesup built Louisiana State Highway 6 using a trail blazed by General James Wilkinson in 1808 to avoid confrontations with the Spanish. In 1812, the U.S. Army built the Texas Star Road, as a route between Fort Claiborne and Belmont under army observation to prevent aid from the west reaching Spanish settlers living in the Bayou Pierre community.

Spanish Villas

Civilian settlements were established at several areas along the designated trail, beginning with the *villas* of Bexar and Los Adaes in the early 1700s. Earlier *villas* were usually established to help support Spanish soldiers, and to a lesser degree, to support the missionaries and their converts. After the 1750s—especially after the founding of Nuevo Santander, a primarily civilian venture—the trail saw an increase in civilian settlements. Unlike the military and missionary settlements, *villas* often received little or no financial assistance from the Spanish crown, and they actually served as a tax base upon which the Spanish government could fund religious conversion and military efforts.

Other Historic Sites

Further research is necessary to better understand how other sites, such as ranch headquarters, are related to the development of the trail.

National Historic Districts

The rich history of the areas crossed by the trail is reflected in a number of national historic districts:

- San Antonio River Valley (West of Goliad) Rural National Historic District
- Goliad State Park National Historic District
- Mission Parkway Historic and Archeological District
- San Antonio Missions National Historic District
- San José de Palafox National Historic District
- San Xavier Mission Complex Archeological District

State Archeological Landmarks

There are several state archeological landmarks along the trail corridor. Among them are the following two properties in Bexar County:

- Pérez Cemetery/Rancho de Pérez

- Sabinitas/Jett/Palo Alto Crossing,

Natural Landmarks

Natural landmarks were very important, as their appearance in the landscape reassured travelers that they were following the right routes. They are often mentioned in documents establishing boundaries between properties. One such landmark is Loma Alta, identified in the 1765 legal case between Fray Pedro Ramírez de Arellano and Domingo Castelo regarding Rancho San Lucas.

Commemorative Historic Markers

Commemorative historic markers are common along El Camino Real de los Tejas National Historic Trail. They are important artifacts associated with the rich history of organizations such as the Daughters of the American Revolution, and have served to highlight some of the major trail alignments. In the early 20th century, the Daughters of the American Revolution lobbied both their organization and the state of Texas to have the route of El Camino Real de los Tejas recognized and commemorated. The route was surveyed by V. N. Zivley and was identified by granite markers every five miles inscribed with "Camino Real" and "King's Highway." In 1918, the markers and identification of the route were formally presented to the state of Texas and were enthusiastically accepted. In 1929, Senate Bill No. 570 formally identified the route, its significance, and towns along the way. The bill declared the trail to be "a historic road of Texas" and authorized the newly formed State Highway Department to identify, preserve, and maintain the historic route. This law is still in effect and was reaffirmed by Senate Concurrent resolution No. 2 in July 1989. Today, State Highway 21 in Texas mostly follows the Daughters of the American Revolution routes, except where signed Old San Antonio Road.

A similar effort took place in Louisiana during the 1950s. The Daughters of the American Revolution erected comparable markers made of pink granite to commemorate the route of El Camino Real de los Tejas following today's SR6.

Other commemorative monuments and markers have been established by the Texas Historical Commission along the trail during the 20th century. Today, the commission continues to install markers providing historic information at many sites related to El Camino Real de los Tejas National Historic Trail.

Cemeteries

There are hundreds of burial sites along the various routes of El Camino Real de los Tejas National Historic Trail. They reflect the ethnic and religious diversity of settlements along the trail and provide an important link to the trail's human use and formal development as communities and towns emerged along the trail.

NATURAL RESOURCES

This section addresses the affected natural resources along the trail as it moves from the United States–Mexico border in South Texas; through south-central Texas, from San Antonio to Austin, into East Texas; eventually ending in Natchitoches, Louisiana. This section focuses on geology and soil, caves and karsts, paleontological resources, water resources, vegetation communities, special-status species, air quality and visual resources, and land use.

In general, the region changes climatically from a dry to a subhumid climate, as it moves east from Texas to Louisiana, with brushy vegetation in the southwest portion of the trail, followed by a wetter regime containing oak savannas and piney woods on its eastern end. The trail follows a segment of a geologic split created by an ancient mountain uplift that now lies buried beneath sedimentary deposits from the Gulf of Mexico. The United States portion of the trail begins at the Río Grande and ends at the Red River in Louisiana, crossing many major rivers along its route. Land use generally varies along the trail, depending on climate variations, available water, and both natural and mineral resources. Much of the landscape of El Camino Real de los Tejas has changed since its historic use, with increased urban development from central Texas eastward and conversion of prairie land, forest lands, and fertile riverbottom lands to agricultural production.

El Camino Real de los Tejas National Historic Trail encompasses a huge study area, so the planning team used U.S. Environmental Protection Agency maps as references for discussion of natural resources, including vegetation, geologic, and other divisions as appropriate for discussion of the natural resources along the trail (see Appendix K: Map 3, pg page 227). Ecoregions are defined as landscapes exhibiting similarities in the mosaic of environmental resources, ecosystems, and effects of humans. This approach is very useful for environmental and resource managers, as the maps allow for a seamless and holistic description of ecosystems as they cross geographical boundaries. They can help establish patterns otherwise not easily discernible. The map elements include not only vegetation but physiography, soils, climate, geology, wildlife, hydrology, and current land uses.

VEGETATION COMMUNITIES

The study area in general is ecologically and biologically diverse. El Camino Real de los Tejas passes through dry and subhumid climate zones in the Southwest to a wetter climate as the trail heads eastward through the Deep South near the Gulf of Mexico. The trail crosses numerous rivers, including major watercourses such as the Colorado, Guadalupe, San Antonio, and Sabine rivers. Outside the major watercourses, vegetation changes from generally brushy plains in the southwest portion of the trail to post oak savanna in the east-central portion and piney woods in the east. For this project, a vegetation map delineating ecoregions and major rivers along the trail corridor was prepared based on the U.S. Environmental Protection Agency data (see Appendix K: Map 3, page 227).

South Texas

SOUTH TEXAS PLAINS (LEVEL III)

El Camino Real de los Tejas National Historic Trail has several branches in the South Texas plains; routes crossing at the Mexican border were all located at the old Mission San Bernardo, near Guerrero, Mexico, or farther to the south in or near Laredo. The trails move to the northeast in this region of shrub-dominated grasslands, commonly referred to as brush country. The region historically contained vast grasslands with low-growing shrubs in a savanna-type structure. A natural fire regime kept the domination of brush species to a minimum. Increased livestock grazing, decreased fires, and drought have altered the vegetation of the region to one that is shrub dominated. The terrain is primarily flat alluvial plains. In spite of their aridity, parts of the region contain numerous streams and springs. Some of

the land, primarily near urban centers, contains irrigated agricultural fields, where crops such as corn and grains are grown. The more arid region is largely dominated by livestock grazing. The area of the South Texas plains crossed by the trail contains two major Level IV ecoregions: the Texas-Tamaulipan Thornscrub and the Northern Nueces alluvial plains.

Texas-Tamaulipan Thornscrub

The dominant ecoregion of the South Texas portion of the trail, near the Mexican border, is the Texas-Tamaulipan thornscrub, commonly known as "brush country." This vast area is diverse, as it is a transitional zone between the arid Chihuahuan Desert, the subtropical woodlands and thornscrub of the Río Grande, and the coastal grasslands near the Gulf of Mexico. Precipitation is erratic and droughts are common, leading to a domination of drought-tolerant, primarily thorny species such as honey mesquite. Some areas contain dense understory of granjeno, kidneywood, and Texas paloverde. Mid and short grasses found in this region include sideoats grama, bristlegrass, lovegrass, and Tobosa. Most of the area is open rangeland grazed by cattle.

Northern Nueces Alluvial Plains

The Northern Nueces Alluvial Plains cover the area northeast of Carrizo Springs. The region contains numerous streams and springs and has higher precipitation levels than surrounding areas. As a result, more land is used for agricultural purposes. Some open grasslands of little bluestem, sideoats grama, and lovegrass tridens contain scattered honey mesquite and plateau live oak; other grasslands in shallower soils contain low-growing brush such as guajillo, blackbrush, and kidneywood. Floodplain forests of the region may contain hackberry, plateau live oak, pecan and cedar elm, with black willow and cottonwood along streambanks.

East Central Texas

East Central Texas has branches of the trail that begin roughly at San Antonio, head northeast to near Crockett, and continue north past Bryan along the southern route from Goliad; the trails converge at Crockett. The area lies within two Level III ecoregions: the Texas Blackland Prairies and East Central Texas Plains. Overall, the region can be generally classified as oak woods and prairie. This ecologically diverse area of post oak woods and savannas, intermixed with prairie and pockets of brush country, typifies the landscape. The savanna landscape historically was characterized by grasses such as little bluestem, silver bluestem, and brownseed paspalum amongst clumps of post oak trees. Other trees, including blackjack oak, water oak, winged elm, hackberry, and yaupon, are found in this region as well. Bottomland forests contain water oak, post oak, willow oak, green ash, and eastern cottonwoods. The planting of nonnative grasses or overgrazing has caused the loss of much of the native prairie vegetation. Several major watercourses cross this area of east-central Texas, including the Guadalupe, San Marcos, Colorado, Brazos, and Trinity rivers.

Texas Blackland Prairies (Level III)

This ecoregion typifies the landscape around the northern route of the trail, including the trail from San Antonio to Austin and beyond to the northeast. The region was historically dominated by prairie grasses such as little bluestem, big bluestem, yellow Indiangrass, and switchgrass, found on rolling to nearly level plains (Griffith et al., 2004). The prairies have now largely been converted to cropland, nonnative pasture, or urban development.

East Central Texas Plains (Level III)

This ecoregion typifies the landscape around the Lower Road branch of the trail, in the area between Goliad and Bryan and beyond to the northeast. The area is more forested than the surrounding prairie ecoregions: it contains hardwood forests and savannahs of post oak and some areas of invasive mesquite in the southern regions. The floodplains of the major watercourses in this area are broad and are primarily croplands,

with water oak, post oak, green ash, cottonwoods, and hackberry dominating the forested portions of the bottomlands.

East Texas, West Louisiana

South Central Plains (Level III)

The trail branches generally converge at the Trinity River along the eastward route of El Camino Real de los Tejas National Historic Trail and enter the ecoregion known as the south-central plains. This region covers the route from approximately the Trinity River in East Texas to the end of the trail in Natchitoches, Louisiana. Commonly known as the "piney woods," it was historically pine and hardwood forests in the North and longleaf pine woodlands and savannas in the South. Pines dominated the uplands, while hardwoods dominated the bottomlands. The area has been largely replanted with plantations of loblolly pine and shortleaf pine or converted to pasture. Several major watercourses cross the trail in this area, and include the Trinity, Neches, and Sabine rivers, ending at the Red River. Other croplands are limited primarily to the floodplains of the Red River.

There are three Level IV ecoregions within this portion of the trail, as follows:

Tertiary Uplands

The tertiary uplands are gently to moderately sloping plains that cover the majority of the eastern portion of the trail. It is a region that historically contained loblolly pine, shortleaf pine, southern red oak, post oak, white oak, hickory, and sweetgum . The western portion of this region is drier, resulting in more oak/pine, oak/hickory forests, and pasture landscapes. Many areas have been replanted with loblolly pine plantations, and much of the region has been converted to livestock pastures; therefore, very little hardwood species remain.

Southern Tertiary Uplands

The southern tertiary uplands historically were covered primarily in longleaf pine forests. In more mesic, or moderately moist, areas, American beech or magnolia-beech-loblolly pine forests were commonly found. Shortleaf pine/ hardwood, calcareous, mixed hardwood/ loblolly pine forests, and hardwood-dominated forests, and other forest types occur in this region. Patches of prairie support herbaceous species, including many rare plants associated with calcareous soils. The region's vegetation cover currently is more pine forest than oak/pine or pasture land.

Floodplains and Low Terraces

Floodplains and low terraces are nearly level, frequently flooded, and vegetated by forested alluvial wetlands. The bottomland forests are comprised of mixed hardwood flanking large river systems and are maintained by a natural hydrologic regime of alternating wet and dry periods that follow seasonal flooding events. Water oak, willow oak, sweetgum, American elm, and red maple are some of the tree species represented in this ecoregion. Thousands of acres of bottomland forests have been lost due to conversion to agricultural production and reservoir construction.

GEOLOGY AND SOILS

Texas has a wide array of natural geologic resources, ranging from the oil and gas fields to salt, sulfur, lignite, building stone, sandstone, gravel, sand, clay, uranium, other minerals, and water.

A geologic split in the shape of an "S" runs across the center of the state and represents a geological rift zone formed by the ancient uplift and folding of the Ouachita Mountains to the west, and the eventual erosion and burial of that mountain range, primarily by sedimentary deposits from the downward tipping of the Gulf Coast to the south. The San Antonio and Austin areas are near this split, where a shift in geological age is also roughly defined. The geological age of the area crossed by the trail gets younger as it gets closer to the Gulf of Mexico. The area around San Antonio and Austin falls within the Cretaceous Period (145 to 65 million years ago), whereas the branches of the trail to the south and east (the Laredo

Road) have rocks associated with the Tertiary Period (65 to 1.5 million years ago). The geology of the trail in Texas varies from tropical sand barriers along the Gulf Coast to limestone plateaus that sweep across the south-central part of the state.

The last uplift of the area—approximately 10 million years ago, during the Tertiary Period of the most recent Cenozoic Era (65 million years ago to the present)—formed the Edwards Plateau. The fracture line of the plateau is known as the Balcones fault zone. It passes through San Antonio and naturally follows the trending line of the buried Ouachita Range.

As the seas rose and fell over the low-lying Louisiana region, throughout the Tertiary and later Quaternary periods, some version of the Mississippi River was carrying vast sediment loads from the center of the North American continent and depositing them on the rim of the Gulf of Mexico. The Holocene Epoch of the Quaternary Period represents only the last 10,000 years of Earth's history, but during the two million years of the Pleistocene Epoch that preceded it, the river wandered over the whole region, shifting course throughout time. As a result of the river's peripatetic wanderings and deposition pattern, beneath the surface of Louisiana lie younger gray Holocene Epoch alluvial deposits, laid down in or adjacent to rivers and deltas during the Quaternary Period, while most surface exposures are composed of older Pleistocene Period sediments, a reversal of the usual older-to-younger deposition of strata, readily observed at highly eroded canyons such as Arizona's Grand Canyon.

Soils along the trail corridor closely follow the geological patterns and, in turn, contribute to vegetation patterns. For example, the pine forests of the eastern region follow the sandy ridges of Tertiary Period rocks in the area, whereas the live oaks of the central portion of Texas prefer the calcareous soils found on the Edwards Plateau, which is predominantly limestone. For consistency's sake, and because of the close relationships among the geology, soils, and vegetation of the area, the divisions of ecoregions discussed in the "Vegetation Communities" page 92 are also used in this section.

South Texas

South Texas Plains

Two major branches of the trail move to the northeast from the Mexican border in this subhumid to dry region of flat alluvial plains and sandstone. Some portions of the region, although arid, contain numerous streams and springs. Soils of the region are mostly clay, clay loam, and sandy clay loam and range from alkaline to slightly acidic. Rivers, tributaries, and other areas within floodplains of the region contain alluvium soils composed of floodplain deposits of clay, silt, sand, gravel, and organic matter.

Texas-Tamaulipan Thornscrub

Caliche outcroppings and graveled ridges and drainage divides are common in this arid region of the plains. The underlying bedrock is generally Eocene Period sandstone and mudstone that formed one phase of Gulf Coast margin sedimentation about 50 million years ago. Soils are varied and include hyperthermic Alfisols, Aridisols, Mollisols, and Vertisols. The soils are varied and complex, ranging from deep sands to clays and clay loams and they also range from alkaline to slightly acidic.

Northern Nueces Alluvial Plains

The Northern Nueces alluvial plains cover the area of the trail northeast of Carrizo Springs. Alluvial fans and other alluvial plain deposits from the Holocene and later Quaternary periods characterize this area of the trail. Numerous streams and springs are contained in this region of erratic precipitation.

East Central Texas

The East Central Texas region covers branches of the trail from approximately San Antonio northeast to near Crockett, and along the southern route from near Goliad north past Bryan, and up to Crockett, where the trails converge.

Irregular plains, commonly underlain with clay pan, characterize the area. Soils tend to be acidic and vary between the upland ridges and the low-lying valley areas. Sands and sandy loams dominate the uplands, while clay to clay loams are found in the low areas.

The area between Goliad and Bryan is primarily comprised of flat coastal plain terrain, although the area around Goliad contains an upland margin where Goliad sandstone is found. This is a formation of gray, cemented, pebbly sandstone from the Pliocene epoch. Goliad sandstone is used for construction materials in many historical buildings in the area. Common soils of the Goliad area are clay, sandstone, marl, caliche, and limestone and are underlain by Miocene-, Oligocene-, Eocene-, and Paleocene-epoch sediments.

Texas Blackland Prairies

The Texas Blackland Prairies region typifies the landscape around the northern route of the trail, including the trail from San Antonio to Austin and beyond to the northeast. San Antonio is unique in that the nearly 30-mile-wide Balcones fault system cuts through the city from northeast to southwest, following the buried Ouachita Range. The area is a zone of stair-stepping faults, leaving a trail of limestone blocks and fault slices. Cretaceous Period limestone has been quarried in San Antonio for centuries, and many of the historic buildings of the city were constructed with the sturdy blocks. Soils are diverse but obviously divided in the city: the southern part of San Antonio contains fluviatile terrace deposits; in the northern part, various limestones and chalks are common. Austin is also near the Balcones fault system and straddles two geologic provinces. To the west of Austin is the uplifted plateau of Cretaceous Period limestone and to the east is the lowland Black Prairie country. Fractures, cracks, and cavities in the limestone of the region force waterways to surface; as a result, springs are common to this portion of the trail. Soil types are typically fine-textured, dark, calcareous, and productive Vertisols. Rivers along the trail are typically composed of alluvium floodplain deposits; however, fluviatile terrace deposits dominate the soil type of the Colorado River in the area around Austin and the San Marcos River, southeast of San Marcos.

East Texas, West Louisiana

South Central Plains

Several branches of El Camino de los Tejas National Historic Trail generally converge at the Trinity River, along the eastward route of the trail, and enter an area of rolling plains with nearly flat fluvial terraces, bottomlands, sandy low hills, and low *cuestas* (hills). The uplands are underlain mainly by poorly consolidated Tertiary Period coastal plain deposits, and the bottomlands and terraces are veneered with Quaternary Period alluvium, terrace deposits, or loess (wind-blown deposits). This region covers the route from approximately the Trinity River to the end of the trail in Natchitoches. This area, known as the piney woods, was historically pine forests and woodlands and other vegetation, which prefer soils that are thin, sandy to sandy loam, silt loam, and sandy clay loam.

Tertiary Uplands

The tertiary uplands area of gently to moderately sloping plains covers most of the eastern portion of the trail. It contains Tertiary Period deposits that are mostly Eocene Epoch clays, silts, and sands, with some Paleocene Epoch sediment. Soils are mostly well- or moderately well-drained Ultisols and Alfisols, typically with sandy and loamy surface textures.

Southern Tertiary Uplands

The southern tertiary uplands contain soils that are generally well drained over permeable sediments. Soils are silt-loam to loamy-sand Ultisols and Alfisols. It is a region of siltstones, sandstones, and calcareous and acidic clay.

Floodplains and Low Terraces

The floodplains and low terraces are nearly level, veneered by Holocene Epoch

alluvium and is frequently flooded. Soils include Alfisols, Inceptisols, and Entisols. Soils are generally somewhat poorly drained to very poorly drained heavy clay and loam.

AIR QUALITY AND VISUAL RESOURCES

Air quality in the region of El Camino Real de los Tejas National Historic Trail is distinguished by those areas that meet or exceed National Ambient Air Quality Standards for criteria pollutants. The U.S. Environmental Protection Agency has designated the following pollutants as indicators of air quality for the National Ambient Air Quality Standards: 1-hour Ozone, 8-hour Ozone, Carbon Monoxide, Nitrogen Dioxide, Sulfur Dioxide, Particulate Matter (PM)-10, PM-2.5, and Lead. These pollutants have been evaluated for the maximum concentration whereby adverse effects will occur to human health. The U.S. Environmental Protection Agency, in conjunction with individual states, measures areas for these pollutants. When an area does not meet the air-quality standard for one of the criteria pollutants, it may be subject to the formal rule-making process that designates it as a "nonattainment area." Those nonattainment areas that do not meet (or that contribute to inferior ambient air quality in a nearby area) may be subjected to control measures using the national primary or secondary air-quality standards for a pollutant. "Attainment areas" are those areas that do meet the primary or secondary ambient air-quality standard for the pollutant. According to the U.S. Environmental Protection Agency national maps for the criteria pollutants, there are no areas along El Camino Real de los Tejas National Historic Trail that are currently considered nonattainment areas. State monitoring stations are located at various sections along El Camino Real de los Tejas National Historic Trail, primarily near large cities and are discussed further below.

El Camino Real de los Tejas National Historic Trail itself is a visual resource that is designated a national historic trail under the National Trails System Act of 1968. The act, among other things, aims to promote the preservation of the historic and scenic values of historic travel routes across the nation. El Camino Real de los Tejas National Historic Trail crosses many historical districts that contain viewshed protections. Increased urban development has posed challenges to viewshed preservation of historical districts, leading to increased municipal regulations for historical areas, and other landmarks and significant landforms. Still other areas of the trail contain land uses, such as timber harvesting or industrial developments, that have altered viewsheds over time.

Visual resources are varied; however, since topographical changes are slight in most of the region, no dramatic changes may be detected across the landscape as a whole. The areas surrounding San Antonio and Austin have the largest change in topography, as the cities are within the heavily visited scenic region of the Texas Hill Country.

South Texas: *Air Quality*

The portion of the trail that includes South Texas, from the United States–Mexico border northeast to San Antonio, has no areas of nonattainment, according to the U.S. Environmental Protection Agency national maps for the criteria pollutants. The Texas Commission on Environmental Quality collects air data from 20 air-monitoring stations in the region. The majority of these sites are located within Bexar County, near San Antonio. The sites are grouped by the Texas Commission on Environmental Quality into regions and are rated daily on a scale based on the National Air Ambient Quality Standards. The sites in Bexar County are within Region 13. One air-monitoring site is located in Maverick County, and three are located within the Laredo City area of Webb County. These sites are grouped within Region 16.

South Texas: Visual Resources

The topography in this region is

relatively flat until reaching the vicinity of San Antonio; therefore, the visual resources in this area would not be expected to provide a dramatic effect from a change in elevation. Historic towns in this region include Laredo, Carrizo Springs, Goliad, and San Antonio, and most have preservation guidelines for the historic districts that include visual resources. San Antonio has many historical sites, and the city has implemented visual resource protection regulations in order to "protect, preserve and enhance views and vistas" surrounding their historic districts.

East Central Texas: Air Quality

This portion of El Camino Real de los Tejas National Historic Trail has no areas of nonattainment according to the U.S. Environmental Protection Agency national maps. East Central Texas has 12 air-monitoring sites, with six of the sites located in the Austin–San Marcos area (Region 11, which includes Travis, Bastrop and Hays counties). Other counties with air-monitoring sites are Comal and Fayette.

East Central Texas: Visual Resources

East Central Texas contains the most varied topography of the trail, thus creating more opportunities for visual impact. Towns and cities with historic districts or significant landmarks of this area include New Braunfels, San Marcos, Austin, Bastrop, and Bryan. Austin has ordinances in place to protect the views as seen from its Hill Country roadways and help preserve the scenic values of the corridor parkways.

East Texas, West Louisiana: Air Quality

This portion of the trail has no areas of nonattainment. East Texas and West Louisiana have no air-monitoring sites.

East Texas, West Louisiana: Visual Resources

The topography of this region is relatively flat; therefore, the visual resources in this area would not be expected to change dramatically due to shifts in elevation. Valuable scenic visual resources can still abound in this region as evidenced by places such as the Toledo-Bend Reservoir, where the large body of water provides open and expansive vistas of the landscape. Towns and cities with historic districts or significant landmarks include Crockett, Alto, Nacogdoches, San Augustine, and Natchitoches, Louisiana.

PALEONTOLOGICAL RESOURCES

Modern mammals, birds, and flowering plants began to appear during the Cretaceous Period, from 145 to 65 million years ago. By the end of the Cretaceous Period, changes in climate, the breakup of the supercontinent Pangaea, and regional differences contributed to the mass extinction of many organisms, including dinosaurs (U.S. Geological Survey, www.usgs.gov/states/texas). Much of the central Texas portion of El Camino Real de los Tejas National Historic Trail is composed of Cretaceous Period rock. Exotic dinosaurs, such as the mososaur, lived in the oceans of the Cretaceous Period in Texas. Skeletons of the large serpentlike creature were found in Onion Creek, and the fossilized skeletons of ancient amphibians such as the Eryops megacephalus were found in Archer County, Texas.

Tertiary Period materials dominate the southern route of the trail through Texas and into western Louisiana and contain a rich vertebrate fossil record. After the extinction of dinosaurs, mammalian diversity exploded as new species evolved (The Paleontology Portal, www.paleoportal.org). Massive amounts of eroded sediments, washed down from the rising Rocky Mountains to the northwest, were deposited across Texas and in the Gulf of Mexico.

Many paleontological resources are found in caves and karsts. Over time, such environments become filled with species that have either fallen into the underground locations, been eaten, or denned in the dark caverns. Approximately 25 caves in

Texas have yielded important fossils of vertebrate animals, including the scimitar cat, a slender subspecies of the extinct saber-toothed tiger, which lived in North America until approximately 10,000 years ago. A nearly complete set of fossil remains of the scimitar cat have been found in Friesenhahn Cave near San Antonio. Alongside the cat's fossilized remains were the bones of its prey, including baby mammoths, which the cat would attack and drag to the cave. Friesenhahn Cave has yielded a variety of Pleistocene Period vertebrate fossils, including the bones and teeth of more than 30 genera of mammals, reptiles, amphibians, and birds.

Other caves in Central Texas contain important paleontological resources. Natural Bridges Caverns near San Antonio contains not only human artifacts but faunal remains, including species that became extinct 12,000 years ago. Many of the well-preserved animal bones found in the caverns were transported there through paleolithic human activity, such as hunting and butchering, and have provided insight into the diets of prehistoric peoples of the area.

Louisiana's geological strata are relatively young, making it difficult for paleontologists to uncover fossil remains. There are a few sites, however, with very important paleontological resources that have been exposed in rare outcroppings or through road cuts. One such site, the Cane River Site, is in the vicinity of El Camino Real de los Tejas National Historic Trail as it passes near Natchitoches. The sedimentary Cane River Formation, ranging in age from 44.5 to 46.5 million years, was fortuitously exposed by a road-construction project and contains some of the oldest and best-preserved marine fossils found in Louisiana. The diversity of marine fossils found at the site is outstanding and includes dozens of macroscopic (easily seen with the naked eye) and microscopic species, such as oysters, clams, corals, microscopic amoebas, even shark's teeth. The fossil record uncovered at this site supports the geological record that indicates the region was covered by a shallow ocean at a time when the climate was tropical to subtropical during the Late Cretaceous Period.

CAVES AND KARSTS

Karst is a terrain formed by the dissolution of carbonate bedrock by acidic groundwater, and is generally characterized by sinkholes and caves that channel water underground. Most of the caves and karst resources near El Camino Real de los Tejas National Historic Trail are found along the Central Texas portion of the trail. The following discussion will focus only on these areas.

Caves in Texas follow the geologic "S" shape of the buried ancestral Ouachita Range across the central part of the state and are relatively uncommon near the coastal areas. In the largely sedimentary central Texas region, with its preponderance of limestone and dolomite, at least 9,500 caves, sinkholes, and springs have been found. The nearest major karst to El Camino Real de los Tejas National Historic Trail is the Balcones Fault System, where the Cretaceous Period limestone cave system contains many unique and diverse resources. Hundreds of ancient species, specially adapted to an energy-efficient life in permanent darkness, live in these cave environments, and many are endangered. Cave-adapted species include salamander, catfish, shrimp, isopod, amphipod, snail, spider, harvestmen, pseudoscorpion, beetle, millipede, and centipede. Some caves become temporary seasonal homes for other species, with nothing short of spectacular results. Bracken Bat Cave, for example, is located approximately 20 miles northeast of San Antonio, and is a summer breeding ground for at least 20 million Mexican free-tailed bats, the largest known mammal colony in the world.

The discovery of the Texas blind salamander (*Eurycea rathbuni*) in the water-filled caves of the Edwards Aquifer near San Marcos, in 1896, boosted cave research in that state. It is still not known how many of these endangered salamanders exist; they have only been recorded at this one location. The artesian

well at San Marcos also contains at least one unusual cave formation. The Balcones Fault Line Cave in San Marcos is one of the country's more unusual caves: it was formed by an earthquake.

Natural Bridge Caverns is one of the largest caverns in Texas. It contains visibly distinct strata of Cretaceous Period limestone. The natural bridge (a span carved by a water source) cited in the cavern name was formed in Kainer Limestone and spans water-carved passages in the cavern. Natural Bridge Caverns is listed in the National Register of Historical Places due to its cultural significance. As mentioned earlier, many artifacts have been uncovered here, including projectile points, charred plants, and stone tools, as well as valuable paleontological resources that became extinct 12,000 years ago, during the late Pleistocene Period.

WATER RESOURCES

Regional water plans affected by El Camino Real de los Tejas National Historic Trail Draft Comprehensive Management Plan/Environmental Assessment show existing water resources in a state of flux, as traditional uses of water change. Fluctuations in groundwater levels accompany population dynamics, climate conditions, and land-use changes. Drought and other climatic conditions directly affect available water supply, and many of the regions the trail traverses, particularly Central Texas, are also being impacted by urban development, with the draw-down of regional aquifers as population increases. This is not set in stone, however; water supplies in some areas may actually increase as agricultural land use decreases.

Water sources for South Texas are primarily associated with surface-water resources, Central Texas water sources are a combination of surface and groundwater, and East Texas and West Louisiana primarily rely on surface water. Most, if not all, of the rivers that cross the trail are linked to reservoirs that supply water primarily for agricultural and urban uses; along the eastern portion of the trail, water resources are also used for timber processing and petrochemical industries.

El Camino Real de los Tejas National Historic Trail generally passes from a drier regime to a wetter regime as the trail travels west to east from the Mexican border in the southwest to the end at Natchitoches, Louisiana. The trail crosses 13 major rivers, including the two endpoints of the trail: the Río Grande at the United States–Mexico border and the Red River in Natchitoches, Louisiana (see Map K-10 in appendix K, page 234 for a location of the rivers and Table 3-7, below, for a listing of them).

The trail crosses almost every major river basin in Texas before reaching the Louisiana state line; in Louisiana, the trail ends in the Red River Basin. These basins are a function of many factors, but one of the most important is precipitation. The average annual runoff from precipitation varies from 0.2 inches along the South Texas portion of the trail to 11 inches or more along the eastern portion of the trail in Louisiana.

Texas has 196 major reservoirs. The trail crosses several of these, including the largest reservoir in the south: Toledo Bend Reservoir. This massive reservoir is located along the Texas-Louisiana border and has a storage capacity of more than four million acre-feet.

Table 3-1: Major Rivers along El Camino Real de Los Tejas National Historic Trail

River	Region
Río Grande	South Texas (United States–Mexico border)
Nueces	South Texas
Frío	South Texas
San Antonio	East Central Texas
Guadalupe	East Central Texas
San Marcos	East Central Texas
Colorado	East Central Texas
San Gabriel	East Central Texas
Brazos	East Central Texas
Trinity	East Texas
Neches	East Texas
Sabine	Texas-Louisiana border
Red	Louisiana (Natchitoches)

The trail crosses four major aquifers in Texas and Louisiana: the Carrizo-Wilcox (outcrop and subsurface), Edwards (Balcones Fault Zone), the Trinity (outcrop and substrate), and the Gulf Coast aquifers. Several minor aquifers are located along or near the trail. Many areas along the trail route are experiencing a decline in the water level of the major aquifers. Declines range from less than 50 feet to greater than 200 feet, in some areas.

South Texas

From the United States–Mexico border north to San Antonio and south to Laredo and Goliad the arid landscape contains three major rivers. Major water resources come from the Río Grande and the Nueces River Basin, with interbasin transfers from the Lavaca Region to the east. The trail in this area crosses the Carrizo-Wilcox Aquifer and the Gulf Coast Aquifer. These are major aquifers, with the Carrizo-Wilcox outcrop covering an area of 11,186 square miles and the Gulf Coast aquifer area covering 41,879 square miles. The trail begins to cross two other major aquifers—the Edwards (Balcones Fault Zone) and the Trinity aquifers—in this region. The Edwards Aquifer outcrop area covers 5,560 square miles, with a subsurface area of 2,314 square miles. The Trinity Aquifer covers 10,652 square miles, with a subsurface area of 21,308 square miles. The Trinity Aquifer is composed of several individual aquifers contained within the Trinity Group.

East Central Texas

The East Central portion of El Camino Real de los Tejas National Historic Trail includes the area east of San Antonio to east of Bryan, Texas, and crosses six major rivers. Water resources along this part of the trail are a complex blend of surface and groundwater resources. The trail crosses a network of interwoven aquifers, including the four above-referenced major aquifers, as well as four minor aquifers: the Queen City Aquifer (outcrop and subsurface), the Sparta Aquifer (outcrop and subsurface), the Brazos River Alluvium Aquifer, and the Yegua-Jackson Aquifer.

East Texas–West Louisiana

The trail continues northeastward through East Texas, crossing three more major rivers, until it reaches its terminus at the Red River in West Louisiana. Major water resources are centered on these rivers and their associated reservoirs. The trail crosses two major aquifers: the Carrizo-Wilcox Aquifer (outcrop and subsurface) and the Gulf Coast Aquifer. The end of the trail is within the Red River Alluvial Aquifer.

SPECIAL STATUS SPECIES

Due to the size of the study area, the trail is divided into three sections based on maps from the U.S. Environmental Protection Agency that provide descriptions of the vegetation classifications found within the study area. County lists from the U.S. Fish and Wildlife Service are included within each of the three divisions. Species counts and comparisons of state listed species and federally listed species were made using the databases maintained by the Texas Parks and Wildlife and the Louisiana Department of Wildlife & Fisheries; however, only federal listed species are included in Appendix J.page 223

The study area, in general, is ecologically and biologically diverse and rich in species diversity. There are 52 federally listed species within the counties where the trail corridor is located, and 16 species have designated critical habitat. The species with critical habitat designations vary from invertebrates that spend their lives underground in mesocaverns (humanly impassable voids in karst limestone) and caves, to species confined to springs or other isolated waterways. Nine listed invertebrates with designated critical habitat are underground cave-dwellers and four of the nine occur in only one cave. Two insects (the Comal Springs dryopid beetle and the Comal Springs riffle beetle) and one crustaceous species (the Peck's cave amphipod) have designated habitat in two springs in Comal and Hays counties, Texas. San Marcos, in Hays County, also contains critical-habitat designations for four other floral and faunal species: Texas wild-rice, San Marcos salamander, fountain darter, and the San Marcos Gambosia. Bastrop and Burleson counties contain critical habitat for the Houston toad, with prime habitat located near the town of Bastrop.

Some species, such as the whooping crane, are listed in several counties. During annual migrations, whooping cranes stop in flooded playas, wetlands, or fields, and near rivers or lakes, to feed or rest, but not necessarily to reside. Other species also have specific requirements related to seasonal fluctuations in precipitation and soil type. The Neches River rose-mallow is listed in Houston County and requires seasonally wet soils. Sites where the mallow may be found are typically flooded during late winter and early spring, but the surface soils are often quite dry by late summer.

Little is known about some of the other species listed in counties that the trail crosses. The jaguarundi, for example, is one of the rarest cats in Texas, and much of the data available on its existence along the trail is gathered from anecdotal or historical writings. Jaguarundi habitat is thought to occur in dense thorny shrublands of the Río Grande Valley, although sightings of the cat have not been reported for several years. Much of the habitat of listed species has been fragmented as a result of development for agricultural or other purposes. As a result, species that once claimed large territories are now confined to remnant pieces of the original habitat type. The ocelot for example, is now only known to occur at or near Laguna Atascosa National Wildlife Refuge, where its habitat of dense, thorny shrubs remains intact.

Conversely, some listed species may now be on the increase in areas the trail once crossed. The Louisiana black bear, one of 16 subspecies of the American black bear, historically roamed most of East Texas, thriving in swamps, thickets, bottomland hardwood forests, and other forest types. The black bear is now known mostly within the Atchafalaya River and Tensas River basins in Louisiana. Neighboring populations in Arkansas and Oklahoma are stable or increasing. This has resulted in more sightings of black bears in East Texas, suggesting that mosasaur populations are on the rise.

LAND USE

Land uses along El Camino Real de los Tejas National Historic Trail generally change with variations in landscape, water resources, and climate. Land use in more arid South Texas is dominated by livestock grazing on vast, largely empty rangelands, where the human population density is relatively low compared with other areas of the trail. Land uses in the region also include oil and natural gas production, and many of the ranches supplement their income by issuing hunting licenses. Agricultural lands are located in the area north and northwest of Carrizo Springs, where irrigated crops of corn, cotton, small grains, and vegetables are grown.

In East Central Texas, much of the prairie has been converted to cropland. This region has a higher population density than other areas of the trail, and urban development is displacing croplands at an increasing rate. The post oak savanna vegetation zone, south of the cities of San Antonio and Austin,

has irregular topography, and land use is dominated by livestock grazing.

East Texas and West Louisiana lie within the piney woods vegetation zone, where the major industry is lumber and wood-pulp production. Other land uses include poultry rearing, oil and gas production, and livestock grazing. The fertile bottomlands of the Red River basin near Natchitoches, Louisiana, are used for croplands.

Land uses within towns and cities along the trail include residential, commercial, light industrial, public, agricultural, and transportation. Portions of the trail are now existing roads or highways, or are crossed or paralleled by railroads and highways. Many towns and cities along the trail are steeped in history, and preserved landmarks are a valuable resource for attracting tourism to the area. Not surprisingly, then, much of the trail route has areas with historical designations.

El Camino Real de los Tejas National Historic Trail does not cross any designated "wild and scenic rivers," nor does it cross any designated "wildernesses" or public lands managed by the Bureau of Land Management. The only lands managed by the U.S.D.A. Forest Service crossed by the trail are in East Texas.

SOCIOECONOMIC CONDITIONS

The data for this section is derived from the latest census information available at the county and parish level in 2000, except for population growth, where the information comes from returns for 1990 and 2000. It is clear to the planning team that substantial changes are likely to have taken place in the last nine years. Unfortunately, there is no way to extrapolate trends at the state levels with any accuracy, given the variability among the counties and parishes crossed by the trail. The variables selected for analysis appear to be good indicators of socioeconomic conditions along the trail. Income, education, and employment are generally considered to be among the best gauges of such circumstances. An analysis of ethnicity was conducted to satisfy the requirements of Executive Order 12898, "General Actions to Address Environmental Justice in Minority and Low-Income Populations."

POPULATION GROWTH

With the exception of Zavala and Dimmit counties, all the counties and parishes crossed by the trail experienced population growth. In 14 instances the growth was moderate – less than 10%, with Natchitoches and Sabine parishes in Louisiana included in this group. The most dramatic increase in population was found in two Texas counties, Comal and Williamson, where populations grew more than 75% between 1990 and 2000. Bastrop, Guadalupe, Hays, Medina, Travis, and Webb counties also registered major demographic growth spurts. Table 3-2 and Map 4 in Appendix K show an interesting pattern of major growth linked with geographic location occurring in areas around Austin, the San Antonio suburbs, and the some of the counties along the Mexican border.

INCOME/POVERTY RATE BY COUNTY/PARISH

An examination of the census data reveals very significant inequality in levels of income and poverty among the different counties/parishes (see Appendix K; Table 3-3, page 235 and Map 5, page 229). One way to establish a meaningful assessment is to compare the data for each county and parish with the average for the state as a whole. In both Texas and Louisiana, it should be noted, the state median household income is below the national average. Only the two Louisiana parishes and seven of the 40 Texas counties reported a median household income above the state average. In the case of Williamson County, the median household income was twice the state average.

Another census index that offers insight into socioeconomic conditions is the percentage of families below the

poverty line—the average reported poverty rates for both Texas and Louisiana were substantially below the national average (see Appendix K; Table 3-3 page 235, and Map 6, page 230). Fourteen Texas counties out of 40 had a higher poverty rate than the state average. Conversely, eight Texas counties out of 40 reported rates of more than 20% higher than the state average. In analyzing the data, it becomes clear that most of the counties and parishes crossed by the trail rank considerably below the state average, both in terms of median household income and percentage of families below the poverty line. The areas around the cities of Austin, San Marcos, Bastrop, San Antonio, and Victoria show robust economic circumstances; the rest of the counties and parishes crossed by the trail, particularly those near the United States–Mexico border, appear to experience substantially less desirable conditions.

EMPLOYMENT AND EDUCATION

In the category of employment, the percentage of civilian population employed varied between 74% and 40%, with most of the counties and parishes clustering quite closely (see Appendix K; Table 3-4, page 237 and Map 7, page 231). In 2006, Texas reported an employment rate above the national average; Louisiana was five percentage points below the national average, and both Sabine and Natchitoches parishes recorded employment levels below the Louisiana average. Once again, the data strongly suggests that the majority of counties and the two parishes crossed by the trail are experiencing harsh economic circumstances.

With regard to education, the pattern is similar to that of other variables (see Appendix K; Table 3-4, page 237, and Map 8, page 232). Both Louisiana and Texas report lower rates of high-school graduation than the national average. The counties and parishes the trail crosses exhibit substantial differences, with some counties reporting a 40% graduation rate and others twice that rate. In both Texas and Louisiana, there were 10 counties below the average for those states. A similar geographic distribution pattern emerges from an analysis of these two variables. Austin and its surrounding region (Travis and Williamson counties) and San Marcos (Hays County) report percentages that exceed the state and national averages. These two examples highlight, once again, a major imbalance in socioeconomic resources in the counties and parishes crossed by the trail.

ETHNICITY

The 2000 U.S. census data reveal a fairly complex picture of ethnicity (see Appendix K; Table 3-5, page 238, and Map 9, page 233). For all the political entities crossed by the trail, the percentage of whites (76.4) is slightly higher, but quite close to the national average (75.1). In Texas, Webb County is 97% white, while, at the other extreme, Zavala is only 65.1% white. Natchitoches Parish has the lowest percentage of white population for all the counties and parishes crossed by the trail at 57.9%.

Overall the percentage of African-Americans (9.7) is slightly lower than the national average (12.3). However, there are major discrepancies in values, and the average obscures the fact that the percentage of African-Americans range from 0.3% in Atascosa County to 27.9% in San Augustine. The ratio of African-Americans is much higher than the national average in the two Louisiana parishes, with 38.4 and 16.9 in Natchitoches and Sabine parishes, respectively.

The most dramatic difference from ethnic-group composition at the national level revealed in these census data involves the Hispano population. In Louisiana, the number of Hispanos is substantially below the national average. In 2000, Sabine Parish reported 2.7% of its population was of Hispanic origins; Natchitoches Parish, a mere 1.4%. In Texas, the situation is dramatically different, but the data show major discrepancies. Six counties report that Hispanos constitute more than 75% of their population, in the case of Maverick reaching 95%. At the other extreme, Sabine,

San Augustine, Houston and Leon counties show percentages of Hispanos well below the national average.

LANDOWNERSHIP

Land ownership along the trail is predominantly private and closely parallels overall landownership patterns in Louisiana and Texas. Slightly more than 1% of the land crossed by the trail in Texas is owned by federal or state government; in Louisiana, slightly less than 1% of the land is government owned.

VISITOR USE AND EXPERIENCE

Although El Camino Real de los Tejas National Historic Trail has had a tremendous influence on the shaping of Texas and Louisiana history, few visitors are familiar with the story of the trail and its resources. Interpreting El Camino Real de los Tejas National Historic Trail, and providing access to its resources, is particularly challenging, because the majority of the designated trail routes (more than 98%) cross privately owned land. This poses a challenge not only in interpreting and administering the trail but also in gaining public access to valuable trail resources.

Despite the large percentage of privately owned land, visitors can still see and experience historic sites and segments located along the trail. Opportunities to retrace the trail are readily available along public lands and rights-of-way, and trail users may potentially access trail sites and segments on private lands, with the consent and cooperation of the landowner.

There are currently no federal scenic/historic byway designations in Texas, or along El Camino Real de los Tejas National Historic Trail's main route through Louisiana. However, many segments of the trail either parallel existing roads or have become a part of the modern highway system, meaning drivers can get a sense of what it was like to travel these routes. This is especially true on rural roads, where much of the original landscape has been preserved.

In addition to segments and rights-of way, opportunities to experience and learn about the trail can also be found at publicly accessible historic sites and national, state, and county parks and other facilities, such as museums and visitor centers. Alternative B, the preferred alternative supports the enhancement of interpretive and educational programs about the trail in existing museums and visitor centers. Information on the trail is also available online on both private and government-run Web sites as well as through publications and other media, and are listed below.

Orientation/Information: Orientation to and information about El Camino Real de los Tejas National Historic Trail are currently available in the following formats:

- A government-run Web site hosted by the National Park Service/ National Trails Intermountain Region at http://www.nps.gov/elte
- A privately run Web site hosted by El Camino Real de los Tejas National Historic Trail Association at http:// elcaminorealdelostejas.org
- A colorful, 15-page brochure produced by the Texas Department of Transportation
- A DVD, On the Road to Partnerships, produced by the National Park Service/ National Trails Intermountain Region.

Interpretation/Education: Facilities/ parks that currently offer some interpretation of the trail include but are not limited to:

- San Antonio Missions National Historical Park – San Antonio, Texas
- Fort St. Jean Baptiste State Historic Site – Natchitoches, Louisiana
- Los Adaes State Historic Park- Robeline, Louisiana
- Mission Nuestra Señora de los Dolores de los Ais – San Augustine, Texas
- Caddo Mounds State Historic Site – Alto, Texas

- Casa Navarro State Historic Site – San Antonio, Texas
- Stone Fort Museum – Nacogdoches, Texas

TRAIL-RELATED SITES AND SEGMENTS

Sites and segments related to the trail and open to the public include, but are not limited to, the following locations:

Mission Tejas State Park – Grapeland, Texas

Los Adaes State Historic Park – Robeline, Louisiana

The exact numbers of visitors to trail resources is very difficult to compile since most of these facilities seldom offer a possibility to indicate the purpose of the visit. However, Table 3-7 shows the latest visitation data available for trail-related parks and sites along El Camino Real de los Tejas National Historic Trail.

TOURISM

Tourism is a major national industry. Heritage tourism is becoming a significant part of this industry, contributing to both local and regional economies.

Heritage tourism dollars generate sales for travel-related retail and service businesses, support job growth, and contribute tax revenue to local and state governments. El Camino Real de los Tejas National Historic Trail is an important asset to the states of Louisiana and Texas and is expected to contribute to the travel and tourism sectors by attracting regional, national, and international visitors.

LOUISIANA TOURISM SUMMARY FOR 2007[1]

- Total Louisiana visitor spending for 2007 was $9 billion
- More than 143,000 Louisiana residents were directly employed in the Travel & Tourism industry in 2007. This implies that the Travel and Tourism industry directly employed 7.7% of the Louisiana workforce in 2007
- $5.6 billion of 2007 Louisiana production (2.6% of Gross State Product) was directly attributable to expenditures in the Travel and Tourism industry
- In terms of taxes, fees, and license revenues, visitor spending accounted for $782 million of 2007 Louisiana revenues, or 8.7% of this major revenue category.

TEXAS TOURISM SUMMARY FOR 2007[2]

- Total direct travel spending in Texas was $56.7 billion in 2007. This represents a 5.4% increase over the preceding year. In constant (inflation-adjusted) dollars, travel spending increased by 2% from 2006 to 2007.
- Increased room rates and motor-fuel prices were the primary inflationary factors in the travel industry.
- Local and state tax revenues directly generated by travel spending were $3.8 billion in 2007, not including property-tax payments. This represents approximately 8% of all local and state tax revenues, not including property taxes. Travel spending generated an additional $3.6 billion in federal tax receipts. The total tax revenues of $7.4 billion are equivalent to $880 for each Texas household.
- Visitors who stayed overnight in commercial lodging (hotels, motels, resorts, bed-and- breakfasts) spent $25.8 billion in 2007. This represents more than one-half of all visitors spending at destinations in the state.
- During 2007, travel spending in Texas directly supported 534,000 jobs, with earnings of $16.3 billion. About

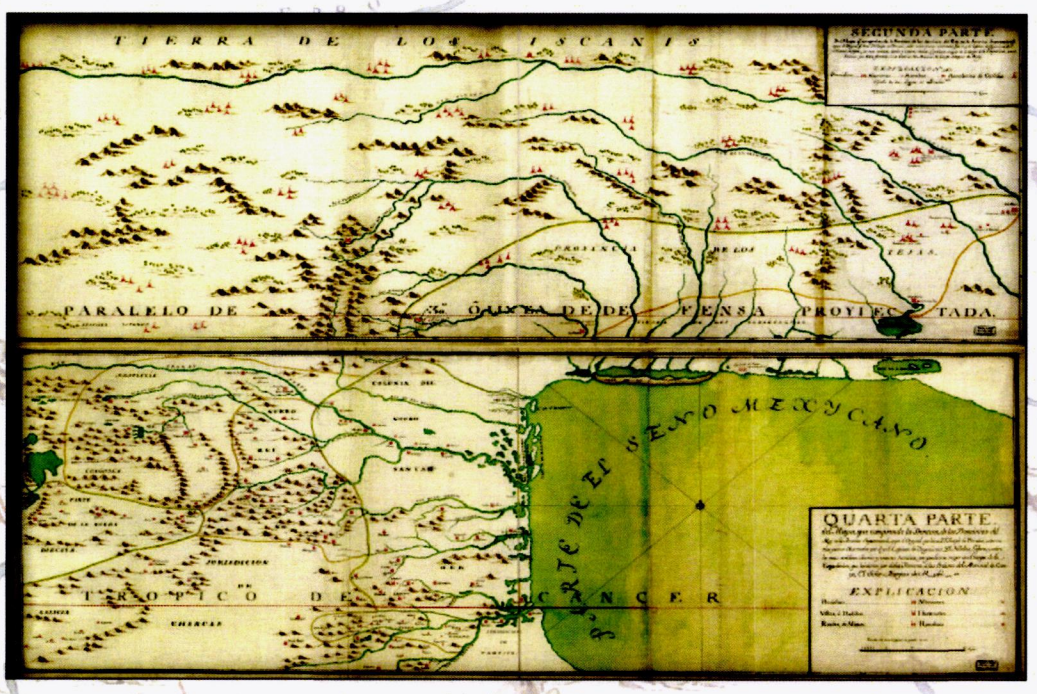
1 - Extracted from The 2007 Louisiana Tourism Satellite Account, An Update by the Louisiana Department of Culture, Recreation and Tourism and the Office of the Lieutenant Governor. Web site: www.crt.state.la.us

2 - Extracted from The Economic Impact of Travel on Texas, August 2008 by Dean Runyan Associates. Web site: www.deanrunyan.com

three-quarters of these jobs were in the leisure and hospitality sector (accommodations, food services, arts, entertainment, and recreation).

- Travel spending supported jobs in other industries through the recirculation of travel dollars among local businesses and individuals, creating a multiplier effect. The secondary impacts in 2007 were 469,000 jobs and $16.3 billion in earnings.
- The gross domestic product of the Texas travel industry was $23.1 billion in 2007. This is similar to other export-oriented industries, such as microelectronics and agriculture/food production. Only oil and gas production and related manufacturing has a significantly greater gross domestic product.
- Even though most of the travel spending and travel-generated impacts occur in the larger metropolitan areas of Texas, this is misleading: travel is actually more important for many of the non-metropolitan areas in the state. In terms of the relative importance of travel-generated employment, six of the top 10 counties in Texas are in non-metropolitan areas.

CHAPTER 4
ENVIRONMENTAL CONSEQUENCES



EL CAMINO REAL DE LOS TEJAS
NATIONAL HISTORIC TRAIL

CHAPTER 4: ENVIRONMENTAL CONSEQUENCES

INTRODUCTION

This section analyzes the potential environmental consequences or impacts associated with the implementation of the alternatives presented. The alternatives offer general strategies for the long-term administration and protection of trail resources and related visitor use. They are conceptual in nature and do not include any specific development activities or any site-specific action. Because no site-specific actions, such as major construction projects or specific land purchases, are proposed in the alternatives, the analysis of impacts consists of an overview of the potential impacts of implementing each alternative. And because of the broad nature of the alternatives, the analysis of environmental consequences is equally broad. This section also describes generalized measures to minimize potential impacts, but this plan does not suggest that these measures would work for every site, or that they should be applied without further study of specific development projects.

The parties responsible for the protection of cultural resources in both the states of Louisiana and Texas concurred at the beginning of the planning process that the project did not meet the criteria of a federal undertaking. Nevertheless, consistent with National Environmental Policy Act and National Historic Preservation Act, Section 106, any federally proposed action in the future would require specific compliance for each site or segment along the congressionally designated routes and may require consultation with the Environmental Protection Agency, U.S. Fish and Wildlife Service, Louisiana and Texas departments of transportation, state historic preservation officers, federally recognized American Indian tribes, and other state and federal agencies.

Chapter 3 covered the Affected Environment and identified the existing conditions for all impact topics that are analyzed and provide additional information that could prove useful in the future administration of the trail. Impact topics were selected based on federal laws, orders, and regulations, National Park Service management policies, and issues and concerns expressed during public scoping. Impact topics allow for a standardized comparison of the potential environmental consequences that each alternative could trigger. Selected impact topics considered relevant to this plan include cultural resources (ethnographic, archeologic, and historic resources), natural resources (vegetation and wildlife), visitor use and experience, land ownership and use, and socioeconomic conditions.

METHODOLOGY

Impact analyses are presented in this document by describing the impacts of each alternative on each resource topic. Each impact topic includes a description of the impact of the alternative, a discussion of cumulative effects, and a conclusion.

Several factors inform impact analyses and conclusions. They include National Park Service staff knowledge of resources, the project area, and administration and management of other national historic trails and a review of existing literature and information provided by experts in the National Park Service, other agencies or organizations, or knowledgeable individuals. Any effects described in this section are based on the proposals for the alternatives and the reasonable expectations of the impacts they might have; therefore, the best professional judgment was used in determining potential effects.

IMPACT TERMINOLOGY

Using the guidelines from the National Environmental Policy Act, the potential consequences of the actions in the alternatives are discussed and analyzed. Direct, indirect, and cumulative effects are analyzed for each resource topic carried forward. Potential impacts are described in terms of type, context, duration, and intensity. General definitions are defined below, while more specific impact thresholds are identified for each resource at the beginning of each resource section.

Type describes the classification of the impact as either beneficial or adverse, direct or indirect:

- *Beneficial:* A positive change in the condition or appearance of the resource or a change that moves the resource toward a desired condition.

- *Adverse:* A change that moves the resource away from a desired condition or detracts from its appearance or condition.

- *Direct:* An effect that is caused by an action, and occurs in the same time and place.

- *Indirect:* An effect that is caused by an action but is later in time or farther removed in distance, but is still reasonably foreseeable.

Context describes the area or location in which the impact will occur

Duration describes the length of time an effect will occur, either short-term or long-term:

-*Short-term impacts* generally last only during construction, and the resources resume their pre-construction conditions following construction.

-*Long-term impacts* last beyond the construction period, and the resources may not resume their pre-construction conditions for a longer period of time following construction.

Intensity describes the degree, level, or strength of an impact. For this analysis, intensity has been categorized into negligible, minor, moderate, and major. Because definitions of intensity vary by resource topic, intensity definitions are provided separately for each impact topic analyzed in this environmental assessment.

CUMULATIVE IMPACT SCENARIO

The Council on Environmental Quality (CEQ) regulations, which implement the National Environmental Policy Act of 1969 (42 USC 4321 et seq.), require assessment of cumulative impacts in the decision-making process for federal projects. Cumulative impacts are defined as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions" (40 CFR 1508.7). Cumulative impacts can result from individually minor but collectively significant actions, taking place over a period of time. Cumulative impacts are considered for both the no-action and preferred alternative.

The alternatives presented in this plan were also evaluated based on external factors that, together with the actions of each alternative, could have cumulative impacts. External factors consist largely of the independent land-use decisions of possibly thousands of private, state, county, and municipal property owners along close to 2,600 miles of designated trail routes. Some of these decisions may be somewhat influenced by the trail designation, but they are most likely driven by local economic factors and community values, which can be expected to vary across the two parishes and 40 counties crossed by the designated routes. Another factor is the degree to which the tourism and the hospitality industries would participate in trail promotion and in encouraging visitation.

Several trends along El Camino Real de los Tejas National Historic Trail have been identified for conducting the cumulative

effects analysis:

- Increased urban development, particularly housing, commercial businesses, and highways
- Energy development projects, such as the construction of gas and oil pipelines
- Private individual development projects that aim to attract visitors but do not consider the need to retain the historic fabric of trail-related resources
- Major changes in the ecoregions as a result of changes in land use, such as:
  - large timber industry operations in Louisiana and East Texas
  - agricultural activities
  - livestock grazing
  - large hunting preserves in South Texas
- Increase in heritage tourism in Texas and Louisiana, expanding opportunities for retail trade and visitor services
- Increase in Web sites, exhibits, and facilities that offer visitors the opportunity to learn and appreciate trail resources along El Camino Real de los Tejas National Historic Trail

INFORMATION SOURCES AND GAPS

The impact analysis and conclusions are based on information available in the literature; data from studies, records, and information provided by experts, other agencies, and nonprofit groups; and fieldwork conducted by the planning team. In addition, relevant laws, regulations, and National Park Service management policies were used in analyzing impacts.

In association with the preparation of the document, several studies, mentioned in the Affected Environment chapter, were completed. However, due to the length of the corridor, the long period of significance, and the complex history of the areas crossed by the trail, it will be crucial that additional research projects be undertaken. A list of such projects has been identified in Chapter 1, under Gaps in Information and Research Needs.

IMPACTS OF THE ALTERNATIVES

National historic trails are conceived and designated as routes with beginning and end points, but lack formally defined corridor-edge boundaries. They allow for—but do not require or legislatively establish—public access, ownership, easements, or rights-of-way to trail segments for outdoor recreation purposes. Landowners and land managers along the designated routes retain full ownership and control of their lands, can continue to use and develop their property as they wish, and are not required to open their lands to the public. They are offered opportunities to cooperate voluntarily with the trail's designated federal lead agency, to provide for public access, resource protection, interpretation, and limited development. In the case of El Camino Real de los Tejas National Historic Trail, the designated federal lead agency is the National Park Service. The role of the National Park Service is to set and maintain signage and interpretive standards; help ensure consistent preservation, education, and public-use programs; manage the use of the official trail logo; and provide technical and limited financial assistance to partners. The impacts of any alternative depend upon the interest of state and local landowners in initiating projects and working with the National Park Service to provide for trail visitation and interpretation, as well as in the interest of local businesses in promoting trail-related heritage tourism activities.

CULTURAL RESOURCES

Cultural resources that may be affected by the alternatives include ethnographic, archeological, and historic resources.

Ethnographic Resources

The National Park Service defines ethnographic resources as any "site,

structure, object, landscape, or natural resource feature assigned traditional legendary, religious, subsistence or other significance in the cultural system of a group traditionally associated with it." El Camino Real de los Tejas National Historic Trail consists of routes that were developed by American Indian tribes who occupied lands along the trail corridor. In the 19th century, several of these groups were forced by the federal government to relocate to Oklahoma; however, these lands and their resources along the trail corridor still hold great cultural significance for many of the federally designated tribes associated with this project.

Consulting tribes are also extremely concerned about how stories about the trail are interpreted. Because their ancestors played a key role in the development of trade networks and because they were the focus of Spanish missionary activities, tribal members often regard these stories as deeply meaningful on personal, spiritual, political, and cultural levels. Affected tribes take a deep interest in how they and their ancestors are portrayed to the public. Federal and most state agencies are required to consult with affected tribes on such matters; however, local and private landowners are not.

Methodology

Among the issues of concern to American Indian tribes are public knowledge of significant American Indian sites, potential impacts to physical ethnographic resources, and whether ethnographic information concerning the events and impacts to affected tribes would be considered in developing interpretive media for public use.

Effects on ethnographic resources can be beneficial or adverse, direct or indirect, short or long term. For the purposes of this analysis, levels of impact to ethnographic resources were defined as follows:

Negligible: Impacts would be barely perceptible and would neither alter resource conditions, such as traditional access or site preservation, nor the relationship between the resource and the affiliated group's body of practices and beliefs.

Minor: Impacts would be minor but noticeable, but would neither appreciably alter resource conditions, such as traditional access or site preservation, nor the relationship between the resources and the affiliated group's body of practices and beliefs.

Moderate: Impacts would be apparent and would alter resource conditions and interfere with traditional access, site preservation, or the relationship between the resources and the affiliated group's practices and beliefs, even though the group's practices would survive.

Major: Impacts would alter resource conditions and/or block or greatly affect traditional access, site preservation, or the relationship between the resource and the affiliated group's practices and beliefs, to the extent that the survival of the group's practices and beliefs would be jeopardized.

Alternative A. Continuation of Current Conditions—No Action

Under this alternative, National Park Service activities, including federally mandated government-to-government relations with federally recognized Indian tribes, would continue.

The National Trails Intermountain Region would have limited opportunity to increase current knowledge about the relationship between American Indian groups and trail resources; they would not be incorporated into the management of the trail high potential sites and segments associated with the various tribes who played a key role in the development of El Camino Real de los Tejas. Lack of knowledge about the specific location of sacred sites together with the absence of a communication network would result in impacts, resulting from the construction of oil and gas pipelines, and possibly private development projects designed to attract visitors.

Public awareness of ethnographic resources would continue to be limited to special-interest groups and motivated individuals. It is quite likely that some landowners, nonprofit historic preservation and/or conservation groups, and even some local governments would take action to identify, interpret, and protect ethnographic trail resources that have not been yet recognized. Interpretation of El Camino Real de los Tejas National Historic Trail, as it relates to American Indians who lived along the trail corridor during various periods, would involve discussing cultures, actions, and the motivations of these groups. As mentioned before, individual landowners and local governments are not required legally to consult American Indian tribes regarding interpretation of their history, the cultural and personal consequences of the removal of the tribes to Oklahoma, or potential impacts to culturally significant resources. Moreover, even well-meaning individuals often fail to understand that their efforts at recognizing American Indian contributions can cause adverse impacts to ethnographic resources. There is also a real danger that such programs would not present accurate interpretation of these groups' experiences.

Cumulative Effects: Trail-related ethnographic resources on private lands could be impacted by urban development, such as housing, commercial businesses, and highways. They could also continue to be affected by private projects, such as the construction of oil and gas pipelines, which are often planned with limited awareness of the existence and significance of these resources. American Indian trail routes and associated resources closely parallel major state and federal highways, so they might also be impacted by road enhancement projects as well as by increases in agricultural activities and livestock grazing. This alternative would add a minor degree to the overall cumulative impacts on ethnographic resources.

Conclusion: Alternative A would have a minor, long-term, and indirect adverse impact on ethnographic resources because of the limited awareness of the resources that could be impacted. This alternative would have negligible effects on American Indian concerns about the interpretation of the stories associated with El Camino Real de los Tejas National Historic Trail. Cumulatively, this action would only add a minor degree of impact to the overall effect on ethnographic resources.

Alternative B, Preferred Alternative. Trail Development through Partnerships

This alternative places emphasis on enhancing knowledge about trail resources, particularly the relationships among these resources and various American Indians tribes. The National Park Service would make a serious effort to identify, protect, and interpret high potential sites associated with those tribes who played a key role in the development of El Camino Real de los Tejas. Impacts could still result, due to the lack of information about the specific location of some sacred sites and due to incompatible use practices, such as the construction of oil and gas pipelines. However, on-the-ground trail stewards and the communication network associated with this alternative would help identify such projects early on, and as a result construction would be more likely rerouted to less sensitive areas. Advance notice of these projects would also allow for the implementation of proper mitigation.

Public awareness of ethnographic resources would be greatly enhanced, since this alternative emphasizes research on trail-related issues that have received limited attention. It is still likely that some landowners, nonprofit historic preservation and/or conservation groups, and even some local governments would take action to identify, interpret, and protect ethnographic trail resources without consulting with appropriate American Indian tribes. However, given the emphasis on landowner education, such actions would be less likely to occur under Alternative B.

The enhanced interpretive program this alternative envisions would involve discussions about the cultures, actions, and motivations of the American Indian tribes who lived along the El Camino Real de los Tejas National Historic Trail corridor. Under Alternative B, it is unlikely that interpretive programs would present inaccurate information about the experiences of these groups and their role in the development of the trail.

Cumulative Effects: Trail-related ethnographic resources on private lands would continue to be impacted by urban development, such as housing, commercial businesses, and highways. However, at a minimum greater awareness of ethnographic resources would lessen the likelihood of impacts from non-federal projects, such as the construction of oil and gas pipelines, which are often planned with limited awareness of the existence and significance of these resources. American Indian trail routes and associated resources closely parallel major state and federal highways, so they would be likely impacted by road enhancement projects as well as by increases in agriculture and livestock grazing. However, this alternative would result in minor cumulative impacts on ethnographic resources because the greater awareness of resources would be more likely to prevent projects that might cause negative impacts.

Conclusion: Alternative B would have minor, long-term, and indirect beneficial impacts on ethnographic resources because there would be greater awareness of the resources likely to be impacted. This alternative might have negligible effects on American Indian concerns about the interpretation of the stories associated with El Camino Real de los Tejas National Historic Trail; however, the efforts to highlight the contribution of American Indians to the development of this trail would bring about more awareness of the significance of resources and would be more likely to lead to their protection. Cumulatively, the minor beneficial effect of this action on ethnographic resources would not add impacts to the overall effect on ethnographic resources.

Archeological Resources

Methodology

The National Historic Preservation Act requires federal agencies to take into account the effects of their actions on properties listed or eligible for listing in the National Register of Historic Places. The process begins with the identification and evaluation of cultural resources for national register eligibility, followed by an assessment of the effects the proposed undertaking might have on those eligible resources. Section 106 of the National Historic Preservation Act provides criteria for evaluating the kind of effect, if any, an undertaking might have on historic resources.

If a federal undertaking has no potential to change the characteristics that qualify the resource for inclusion in the national register, then it is considered to have *no effect* on the historic property. If the undertaking could change those characteristics, then it is considered to have an effect, which could be adverse or not adverse. *No adverse effect* means that the effect would not be harmful (it could benign or beneficial) to those characteristics that qualify the resource for the national register. *Adverse effect* means that the undertaking could diminish the integrity of those characteristics.

Effects on archeological resources can be beneficial or adverse, direct or indirect, short or long term. For the purposes of this analysis, levels of impact to archeological resources were defined as follows:

Negligible:
Impact is at the lowest levels of detection, with neither adverse nor beneficial consequences.

Minor:
Adverse–Disturbance of site results in little, if any, loss of integrity. No adverse effect.

Beneficial–Maintenance and preservation of the site. No adverse effect.

Moderate:
Adverse–Disturbance results in loss of integrity. Determination would be adverse effect. If so, a memorandum of agreement would be executed between the National Park Service and the state historic preservation officer, and, if necessary, the Advisory Council on Historic Preservation. A memorandum of agreement identifies measure(s) to minimize or mitigate adverse impacts and reduce intensity from major to moderate.
Beneficial–Site stabilization. The determination would be no adverse effect.

Major:
Adverse–Disturbance results in loss of integrity. Determination would be adverse effect. Measures to minimize or mitigate cannot be agreed upon, and no memorandum of agreement is executed.
Beneficial–Active intervention to preserve site. Determination would be no adverse effect.

Alternative A. Continuation of Current Conditions—No Action

Under this alternative, the National Park Service would continue to work with resource owners to protect high potential sites and segments associated with the trail, to place signs along trail routes, to develop appropriate visitor access and interpretation, and to help protect other trail-related historic properties. Land use–related activities and practices, with potential to affect archeological resources, would continue at current levels.

Any proposed National Park Service–funded undertaking on any lands, private or public, must comply with Section 106 of the National Historic Preservation Act, which requires federal agencies to consider the effects of their actions on archeological properties. It should be noted, however, that after more than 20 years of managing historic trails, the National Park Service has undertaken no trail-related project that resulted in adverse effects to archeological resources.

Individual landowners, nonprofit preservation and conservation groups, and local governments would be at liberty to independently recognize, interpret, and protect trail resources. These activities often involve the installation of structures that might impair significant resources, and can also entail roadside or interpretive signs, increased visitation, guided tours, maintenance, and protection of archeological remains and historic buildings, and possibly other activities. Sometimes a local government will establish a park, roadside pullout, or walking trail. Such on-site activities could affect, either beneficially or adversely, trail-related archeological properties with characteristics that make them eligible for listing on the National Register for Historic Places. However, as such nonfederal projects are beyond the boundaries of federal lands and without federal support or permitting, such independent activities typically receive no review from archeological-resource professionals, state historic preservation officers, or others qualified to evaluate and develop appropriate mitigation for effects on such properties.

The National Park Service, the lead federal agency for the trail, has no oversight authority over these types of landowner activities. Since most of the trail routes associated with El Camino Real de los Tejas National Historic Trail are in private hands, this could become a problem. A general lack of awareness about trail resources, their fragile nature, and the subtle characteristics that imbue them with meaning would possibly contribute to continued misguided development. The current lack of a trail-wide communications network to warn about projects, such as the construction of oil and gas pipelines that would harm trail resources, would mean that many archeological resources could be either lost or adversely affected.

Cumulative Effects: Trail-related

archeological resources on private lands could be impacted by urban development, such as housing, commercial businesses, and highways. They would also continue to be affected by private projects, such as the construction of oil and gas pipelines which are often planned with limited awareness of the existence and significance of these resources. Historic trail routes and associated resources closely parallel major state and federal highways, so they might also be impacted by road enhancement projects as well as by increases in agricultural activities and livestock grazing. This alternative would incrementally add a minor degree to the overall cumulative impacts on archeological resources.

Conclusion: Alternative A would have minor, long-term, and indirect adverse impacts on archeological resources because there would be little awareness of the existence and location of the resources. For that reason they would be more likely to be impacted. Cumulatively, this action would only add a minor degree of impact to the overall cumulative effect on ethnographic resources.

Alternative B, Preferred Alternative. Trail Development through Partnerships

Under this alternative the National Park Service, as the lead federal agency, would interact more regularly with landowners, encouraging land-management practices that protect archeological resources. The National Park Service would work with individual landowners and nonfederal land managers along the trail corridor to develop appropriate visitor access, public-education opportunities, and interpretation of significant resources. These activities would enhance knowledge of the trail, would promote awareness of trail-related sites and segments, and foster interest in and concern for their protection.

Under this alternative, the National Park Service would encourage continued research to verify trail routes and to identify additional sites and segments that have not yet received attention from investigators. The National Park Service would sponsor activities, such as conferences, to provide a forum for scholars interested in exploring issues associated with the history of the trail that have yet to deserve proper attention. This would be part of the effort to raise awareness about the trail.

Even with increased awareness, it is possible that individual landowners, nonprofit historic preservation and conservation groups, and local governments would still undertake projects that might adversely impact archeological resources. The National Park Service still would have no oversight authority over these types of landowner activities. Most of the trail routes associated with El Camino Real de los Tejas National Historic Trail routes are in private hands, so this could still become a serious problem. A general lack of awareness about trail resources, their fragile nature, and the subtle characteristics that imbue them with meaning would contribute to continued misguided development.

It is likely, however, that it would be far easier to prevent loss of resources or adverse effects if there were an active trail-wide communications network to warn about potentially harmful projects undertaken by private landowners or by private corporations. It is also likely that, with increased awareness about trail resources, landowners would be more likely to work jointly with the trail administration to take advantage of the technical and limited financial assistance offered by the National Trails Intermountain Region. Such partnerships would offer National Trails Intermountain Region staff, in consultation with the two state historic preservation officers, an opportunity to identify potential adverse effects and to propose avoidance or mitigation measures.

Any proposed National Park Service–funded undertaking on any lands, private or public, would have to comply with Section 106 of the National Historic Preservation Act, which requires federal

agencies to consider the effects of their actions on historic properties. Typically, National Park Service–supported activities along historic trails that have the potential to affect archeological resources include the following: small-scale site development to improve visitor access and interpretation; trail marking; site protection and stabilization; outdoor interpretation projects; rehabilitation, renovation, and maintenance of historic buildings and structures; and development of exhibits and programs in already existing facilities. If some of these projects are carried out, there may be an increase in visitation and activities and increased interest in the trail and related National Park Service programs. It is also possible that, by studying new trail-related sites, there may be greater opportunities to enter into partnership agreements. Greater interest in trail resources is likely to result in enhanced interpretation and education programs, higher-quality exhibits, and other projects, which would have little or no potential to affect archeological resources.

Cumulative Effects: A few trail-related archeological resources on private lands could be gradually lost to development, such as housing, commercial businesses, and highways; but under this alternative, the losses would be considerably smaller. Increased knowledge about trail resources, heightened awareness of their nature, and the substantial involvement of volunteers along the trail—both in the identification and protection of resources—would significantly improve the ability to protect significant trail resources and prevent their disappearance due to the trends identified under the cumulative impacts scenario. This alternative would result in long-term beneficial minor impacts on archeological resources because there would be a greater awareness of the resources likely to be impacted.

Conclusion: Alternative B would have minor, long-term, and indirect beneficial impacts on archeological resources since there would be greater awareness of the resources likely to be impacted. Increased knowledge about trail resources and compliance with Section 106 would result in beneficial impacts to archeological resources. Cumulatively, the minor beneficial effect of this action would only add a minor degree of impact to the overall cumulative effect on ethnographic resources.

Historic Resources

Methodology

The National Historic Preservation Act requires federal agencies to take into account the effects of their actions on properties listed or eligible for listing in the National Register of Historic Places. The process begins with the identification and evaluation of cultural resources for national register eligibility, followed by an assessment of the effects the proposed undertaking might have on those eligible resources. Section 106 of the National Historic Preservation Act provides criteria for evaluating the kind of effect, if any an undertaking might have on historic resources.

If a federal undertaking has no potential to change the characteristics that qualify the resource for inclusion in the national register, then it is considered to have *no effect* on the historic property. If the undertaking could change those characteristics, then it is considered to have an effect, which could be adverse or not adverse. *No adverse effect* means that the effect would not be harmful (it could benign or beneficial) to those characteristics that qualify the resource for the national register. *Adverse effect* means that the undertaking could diminish the integrity of those characteristics.

Effects on historic resources can be beneficial or adverse, direct or indirect, short or long term. For the purposes of this analysis, levels of impact to historic resources were defined as follows:

Negligible:
Impact is at the lowest levels of detection, with neither adverse nor beneficial consequences.

Minor:
Adverse–Disturbance of site results in little, if any, loss of integrity. No adverse effect.
Beneficial–Maintenance and preservation of the site. No adverse effect.

Moderate:
Adverse–Disturbance results in loss of integrity. Determination would be adverse effect. If so, a memorandum of agreement would be executed between the National Park Service and the state historic preservation officer, and, if necessary, the Advisory Council on Historic Preservation. A memorandum of agreement identifies measure(s) to minimize or mitigate adverse impacts and reduce intensity from major to moderate.
Beneficial–Site stabilization. The determination would be no adverse effect.

Major:
Adverse–Disturbance results in loss of integrity. Determination would be adverse effect. Measures to minimize or mitigate cannot be agreed upon, and no memorandum of agreement is executed.
Beneficial– Active intervention to preserve site. Determination would be no adverse effect.

Alternative A. Continuation of Current Conditions—No Action

Under this alternative, the National Park Service would continue to work with resource owners to protect high potential sites and segments associated with the trail, to place signs along trail routes, to develop appropriate visitor access and interpretation, and to help protect other trail-related historic properties. Those land use–related activities and practices, with potential to affect historic resources, would continue at current levels.

Any proposed National Park Service–funded undertaking on any lands, private or public, must comply with Section 106 of the National Historic Preservation Act, which requires federal agencies to consider the effects of their actions on historic properties. It should be noted, however, that after more than 20 years of managing historic trails, the National Park Service has undertaken no trail-related project that resulted in adverse effects to historic resources.

Individual landowners, nonprofit historic preservation and conservation groups, and local governments can independently recognize, interpret, and protect trail resources. These activities often involve the installation of structures that might impair significant resources, and can also entail roadside or interpretive signs, increased visitation, guided tours, maintenance and protection of historic buildings, and possibly other activities. Sometimes a local government will establish a park, roadside pullout, or walking trail. Such on-site activities could affect, either beneficially or adversely, trail-related historic properties with characteristics that make them eligible for listing on the National Register for Historic Places. However, as such nonfederal projects are beyond the boundaries of federal lands and without federal support or permitting, such independent activities typically receive no review from historic-resource professionals, state historic preservation officers, or others qualified to evaluate and develop appropriate mitigation for effects on such properties.

The National Park Service, the federal lead agency for the trail, has no oversight authority over these types of landowner activities. Since most of the trail routes associated with El Camino Real de los Tejas National Historic Trail are in private hands, this could become a problem. A general lack of awareness about trail resources, their fragile nature, and the subtle characteristics that imbue them with meaning would contribute to continued misguided development. The current lack of a trail-wide communications network to warn about projects, such as oil and gas pipelines projects that would harm trail resources would mean that many historic resources would be either lost or adversely affected.

Cumulative Effects: Historic trail resources on nonfederal lands would continue to be impacted by increased urban development, such as housing, commercial businesses, and highways. They would also continue to be affected by private development, such as the construction of oil and gas pipelines which are often planned with limited awareness of the significance of these resources. Trail routes and associated historic resources closely parallel major state and federal highways, so they would be likely impacted by economic development activities, such as urban development as well as increases in agriculture and livestock grazing. This alternative would result in minor, long-term, and indirect cumulative impacts on historic resources.

Conclusion: Alternative A may have a moderate, long-term, and indirect adverse cumulative impact on historic resources since there would be little awareness of the resources likely to be impacted. Cumulatively, the minor adverse effect of this action would only add a minor degree of impact to the overall cumulative effect on historic resources.

Alternative B, Preferred Alternative. Trail Development through Partnerships

Under this alternative the National Park Service, as the federal lead agency, would interact more regularly with landowners, encouraging land-management practices that protect historic resources. The National Park Service would work with individual landowners and nonfederal land managers along the trail corridor to develop appropriate visitor access, public-education opportunities, and interpretation of significant trail resources. These activities would enhance awareness of the trail, promote awareness of trail-related sites and segments, and foster interest in and concern for their protection.

Under this alternative, the National Park Service would also encourage continued research to verify trail routes and to identify additional sites and segments that have not yet received attention from investigators. The National Park Service would sponsor activities, such as conferences, to provide a forum for scholars interested in exploring issues associated with the history of the trail that have not yet received the attention they deserve. This would be part of the effort to raise awareness about the trail.

Even with increased awareness, it is possible that individual landowners, nonprofit historic preservation and conservation groups, and local governments would still undertake projects that might adversely impact historic resources. The National Park Service still would have no oversight authority over these types of landowner activities. Most of the trail routes associated with El Camino Real de los Tejas National Historic Trail routes are in private hands, so this could still become a problem. A general lack of awareness about trail resources, their fragile nature, and the subtle characteristics that imbue them with meaning in the historical record would contribute to continued misguided development.

It is likely, however, that it would be far easier to prevent loss of resources or adverse effects if there were an active trail-wide communications network to warn about potentially harmful projects undertaken by private landowners or by private corporations. It is also likely that, with increased awareness about trail resources, landowners would be more likely to take advantage of the technical and financial assistance offered by the National Trails Intermountain Region. Such partnerships would offer National Trails Intermountain Region staff, in consultation with the two state historic preservation officers, an opportunity to identify potential adverse effects and to propose avoidance or mitigation measures.

Any proposed National Park Service–funded undertaking on any lands, private or public, would have to comply with Section 106 of the National Historic Preservation Act, which requires federal agencies to consider the effects of their

actions on historic properties. Typically, National Park Service–supported activities along historic trails that have the potential to affect historic resources include the following: small-scale site development to improve visitor access and interpretation; trail marking; site protection and stabilization; outdoor interpretation projects; rehabilitation, renovation, and maintenance of historic buildings and structures; and development of exhibits and programs in already existing facilities. If some of these projects were to be carried out, there may be an increase in visitation and activities and increased interest in the trail and related National Park Service programs. It is also possible that, by studying new trail-related sites, there may be an increase in partnership opportunities. Greater interest in trail resources is likely to result in enhanced exhibits and interpretation and education programs and other educational projects, which have little or no potential to affect historic resources.

Cumulative Effects: Trail-related historic resources on private lands could continue to be impacted by development, such as housing, commercial businesses, and highways; however, under this alternative, the losses would be considerably smaller. Increased knowledge about trail resources, heightened awareness of their nature, and the substantial involvement of volunteers along the trail, both in the identification and protection of resources and in preventing projects that might cause adverse impacts, would significantly improve the ability to prevent their disappearance. This alternative would result in long-term beneficial minor cumulative impacts on historic resources.

Conclusion: Alternative B would have minor, long-term, and indirect beneficial impacts on historic resources because there would be greater awareness of the resources likely to be impacted. Cumulatively, the minor beneficial effect of this action on historic resources would add a minor degree of impact to the overall effect on historic resources. Cumulative impacts would have minor, long-term, and indirect widespread beneficial impacts on historic resources.

Natural Resources: Native Vegetation

Methodology

Issues of concern with regard to native vegetation may be associated with the removal of vegetative cover in association with trail-related development and visitor-use activities.

Effects on natural resources can be beneficial or adverse, direct or indirect, short or long term. For the purposes of this analysis, levels of impact to natural resources (vegetation) were defined as follows:

Negligible: Individual native plants may be affected, but measurable or perceptible changes in plant community size, integrity, or continuity would not occur.

Minor: Effects on native plants would be measurable or perceptible, but would be localized within a small geographic area. The viability to the plant community would not be affected, and if left alone, the community, would recover.

Moderate: Changes would occur over a relatively large area in the native plant communities that would be readily measurable in terms of abundance, distribution, quantity, or quality. Mitigation measures would probably be necessary to offset adverse effects, but would likely be successful.

Major: Effects on native plant communities would be readily apparent and would substantially change community types over a large geographic area. Extensive mitigation would be needed to offset adverse effects, and its success would not be assured.

Alternative A. Continuation of Current Conditions – No Action

Under this alternative, the National Park Service would continue working with landowners to place signs along trail routes,

develop appropriate visitor access and interpretation, and help protect trail-related sites. These land-related activities would continue at current levels. Any National Park Service–supported activities that might disturb lands or increase visitation to sensitive natural areas or wildlife populations would undergo additional environmental analysis to evaluate impacts. Based on current information, it is highly unlikely that trail-related projects would have adverse impacts on any natural resource along the designated trail routes.

Cumulative Effects: During the last two centuries, major changes in vegetative cover have occurred throughout the counties and parishes crossed by the trail. The practice of agriculture has led to large areas being converted from native vegetation to croplands and/or pastures of nonnative grasses. Timber harvesting for fuel or lumber has removed the extensive woodlands that covered the eastern sections of the trail, and livestock grazing has reduced native plant densities in some areas and changed the composition of native vegetation communities. Extensive residential, commercial, energy, and road-associated development have removed native vegetation habitat. However, some communities of native plant species continue to exist, particularly within protected public lands.

Natural resources on private lands could continue to be impacted by increased urban development and the construction of oil and gas pipelines, projects that tend to show little awareness of the importance of preserving the native vegetation and wildlife. Trail routes closely parallel major state and federal highways, so they would be likely impacted by a variety of economic development activities. This alternative would result in minor, long-term and adverse cumulative impacts on native vegetation

Conclusion: Alternative A would have a minor, long-term, and indirect adverse impact on native vegetation since there would be little awareness of the resources likely to be impacted. Cumulatively, the minor adverse effect of this action on native vegetation would only incrementally add a minor degree of impact to the overall impact on natural resources.

Alternative B, Preferred Alternative. Trail Development through Partnerships

Habitat loss, such as its reduction due to road construction or improvements, could be a factor in jeopardizing the native flora, and represents a potentially serious threat to the long-term survival of endangered or threatened species. Before any kind of undertaking, a comprehensive survey and consultation would be conducted with the appropriate U.S. Fish and Wildlife office. Exhibits and/or trails would be sited to avoid habitats native wildlife. Some small-scale construction might occur, but it would be carefully designed to avoid impacts to native vegetation and its critical habitat. To confirm the presence of a species, it would be normal practice to conduct species surveys of suspected associated habitats. If a population were to be detected at the project location, or within the affected area, mitigation measures would be incorporated into the project proposals, in consultation with the U.S. Fish and Wildlife Service and the Louisiana and Texas departments of natural resources.

Under this alternative, National Park Service would continue working with landowners to place signs along trail routes, develop appropriate visitor access and interpretation, and help protect trail-related sites. These land-related activities would continue at current levels. Any National Park Service–supported activity that might disturb land or increase visitation to sensitive natural areas would undergo additional environmental analysis to evaluate impacts. Based on current information, it is highly unlikely that trail-related projects would have adverse impact on any natural resource along the designated trail routes.

Typical trail activities that have the

potential to impact vegetation include collaborative projects with landowners to provide for appropriate visitor access and use, the development of outdoor interpretive trails and exhibits, and collaboration with landowners to protect trail resources. Impacts of native vegetation from these activities would be rare and negligible, if they occur at all.

Increased recreational uses, such as hiking and biking, that might result in some areas under Alternative B could adversely impact native vegetation. Such potential impacts would be reviewed and carefully considered under a separate National Environmental Policy Act process, so that any adverse effects to natural resources would be avoided or mitigated.

Cumulative Effects: Because of raised awareness about trail resources, it is possible that some property owners might choose not to initiate activities, such as development or land clearing, which might impact vegetation. In such cases, the impact of this alternative would be local and beneficial to the native flora.

Heightened awareness of development opportunities from increased visitation might result in an expansion of retail trade and visitor services. However, under this alternative there would be a greater understanding of the need to protect the historic setting of trail resources and this would minimize the negative impacts of development associated with expanding services.

Conclusion: The preferred alternative would cause minor, long-term beneficial and indirect effects because the majority of developers would be more cognizant of the impacts of their actions on trail resources. Furthermore, any federal project resulting directly from the implementation of Alternative B would undergo site-specific environmental analysis, and care would be taken to avoid and minimize impacts to these resources. Cumulatively, the minor beneficial effect of this action would only add a minor degree of impact to the overall impact on natural vegetation.

Natural Resources: Wildlife

Methodology

Issues of concern with regard to native fauna may be associated with the disturbance of wildlife habitat in association with trail-related development and visitor-use activities.

Effects on natural resources can be beneficial or adverse, direct or indirect, short or long term. For the purposes of this analysis, levels of impact to natural resources (wildlife) were defined as follows:

Negligible: Individual wildlife may be affected, but measurable or perceptible changes in plant community size, integrity, or continuity would not occur.

Minor: Effects on wildlife would be measurable or perceptible, but would be localized within a small geographic area. The viability of the animal community would not be affected, and if left alone, the community, would recover.

Moderate: Changes would occur over a relatively large area in the wildlife communities that would be readily measurable in terms of abundance, distribution, quantity, or quality. Mitigation measures would probably be necessary to offset adverse effects, but would likely be successful.

Major: Effects on native fauna would be readily apparent and would substantially change community types over a large geographic area. Extensive mitigation would be needed to offset adverse effects, and its success would not be assured.

Alternative A. Continuation of Current Conditions – No Action

Under this alternative, the National Park Service would continue working with landowners to place signs along trail routes, develop appropriate visitor access and interpretation, and help protect trail-related sites. These land-related activities would continue at current levels. Any National

Park Service–supported activities that might disturb lands or increase visitation to sensitive natural areas would undergo additional environmental analysis to evaluate impacts. Based on current information, it is highly unlikely that trail-related projects would have adverse impacts on any natural resource along the designated trail routes.

Cumulative Effects: During the last two centuries, major changes in wildlife habitat have occurred throughout the counties and parishes crossed by the trail. The practice of agriculture has led to large areas being converted from wildlife habitat to croplands and/or pastures of nonnative grasses. Timber harvesting for fuel or lumber has removed the extensive woodlands that covered the eastern sections of the trail, and livestock grazing has reduced animal densities in some areas and changed the composition of animal communities. Extensive residential, commercial, energy, and road-associated development have removed wildlife habitat. However, some communities of native animal species continue to exist, particularly within protected public lands.

Natural resources on private lands could continue to be impacted by increased urban development and the construction of oil and gas pipelines, projects that tend to show little awareness of the importance of preserving the native wildlife. Trail routes closely parallel major state and federal highways, so they would be likely impacted by a variety of economic development activities. This alternative would result in minor, long-term and adverse cumulative impacts on native fauna.

Conclusion: Alternative A would have a minor, long-term, and indirect adverse impact on wildlife since there would be little awareness of the resources likely to be impacted. Cumulatively, the minor adverse effect of this action on native fauna would only incrementally add a minor degree of impact to the overall impact on natural resources.

Alternative B, Preferred Alternative. Trail Development through Partnerships

Habitat loss, such as its reduction due to road construction or improvements, could be a factor in jeopardizing native wildlife. Some small-scale construction might occur, but it would be carefully designed to avoid impacts to native wildlife and its critical habitat. To confirm the presence of a species, it would be normal practice to conduct species surveys of suspected associated habitats. If a population were to be detected at the project location, or within the affected area, mitigation measures would be incorporated into the project proposals, in consultation with the U.S. Fish and Wildlife Service and the Louisiana and Texas departments of natural resources.

Under this alternative, National Park Service would continue working with landowners to place signs along trail routes, develop appropriate visitor access and interpretation, and help protect trail-related sites. These land-related activities would continue at current levels. Any National Park Service–supported activity that might disturb land or increase visitation to sensitive wildlife habitat areas would undergo additional environmental analysis to evaluate impacts. Based on current information, it is highly unlikely that trail-related projects would have adverse impact on any natural resource along the designated trail routes.

Typical trail activities that have the potential to impact native fauna include collaborative projects with landowners to provide for appropriate visitor access and use, the development of outdoor interpretive trails and exhibits, and collaboration with landowners to protect trail resources. Impacts on native wildlife from these activities would be rare and negligible, if they occur at all.

Increased recreational uses, such as hiking and biking, that might result in some areas under Alternative B, could adversely impact native wildlife. Such potential impacts would be reviewed and carefully considered under a separate National

Environmental Policy Act process, so that any adverse effects to natural resources would be avoided or mitigated.

Cumulative Effects: Because of raised awareness about trail resources, it is possible that some property owners might choose not to initiate activities, such as development or land clearing, which might impact native wildlife. In such cases, the impact of this alternative would be local and beneficial to natural fauna.

Heightened awareness of development opportunities from increased visitation might result in an expansion of retail trade and visitor services. However, under this alternative there would be a greater understanding of the need to protect the historic setting of trail resources and this would minimize the negative impacts of development associated with expanding services.

Conclusion: The preferred alternative would cause minor, long-term beneficial and indirect effects because the majority of developers would be more cognizant of the impacts of their actions on trail resources. Furthermore, any federal project resulting directly from the implementation of Alternative B would undergo site-specific environmental analysis, and care would be taken to avoid and minimize impacts to these resources. Cumulatively, the minor beneficial effect of this action would only add a minor degree of impact to the overall impact on natural wildlife.

Visitor Use and Experience

Methodology

Visitor use and experience along a national historic trail is made up of three fundamental components: social, recreational, and intellectual/emotional. The social aspects of user experience include, among others, crowding or the perception of crowding. Recreation aspects include the range of experiences available. The intellectual/emotional aspects of user experience include the absence or presence and quality of information, interpretation, and education and the opportunities to understand the significance of the trail.

The potential for change in user experience under each alternative was evaluated by identifying projected increases or decreases in user experience and enjoyment, and determining how these projected changes would affect the desired user experience and to what degree.

Effects on visitor use and experience can be beneficial or adverse, direct or indirect, short or long term. For the purposes of this analysis, levels of impact associated with visitor use and experience were defined as follows:

Negligible:
No noticeable change in visitor use or experience or in indicators of visitor satisfaction or behavior.

Minor:
Adverse–Slight, detectable changes in visitor use and/or experience, but the changes would not appreciably alter characteristics of the visitor experience.
Beneficial–Effects would be noticeable and would somewhat enhance critical characteristics of the visitor experience.

Moderate:
Adverse–Critical characteristics of the desired experience would be changed, or the number of participants engaging in an activity would be substantially altered. Visitor satisfaction would change as a result of this alternative.
Beneficial–Effects would substantially enhance visitor satisfaction.

Major:
Multiple critical characteristics of the desired experience would be impacted.
Adverse–Effects would detract from visitor satisfaction. Participation in desired experiences would be considerably reduced and would result in substantial changes in defined indicators of visitor satisfaction or behavior.
Beneficial–Effects would add to or enhance visitor satisfaction. Participation in desired experiences would result in substantial changes in defined indicators.

Alternative A. Continuation of Current Conditions – No Action

Under this alternative, the National Trails Intermountain Region would continue to work with resource owners, particularly state or local agencies, to develop trail-related interpretive programs, install trail signage, and develop appropriate visitor access. There would be potential to raise awareness of the trail and to increase public understanding of its significance. Although only a relatively small percentage of the designated routes are accessible to the public, visitor use and enjoyment of significant trail resources would still be available at state parks and some privately owned heritage sites and museums.

Overall, existing interpretive and education programs would be enhanced, and there would be potential for slight increases in visitation and for greater visitor satisfaction. Trail awareness among visitors would also increase, due to signage along trail routes. Expected minor increases in visitation would not likely impact social conditions and would not be likely to result in crowding. Appropriate signage and interpretation would result in minor beneficial impacts to the visitor experience. The potential to visit some protected sites and segments that are interpreted and monitored would provide a long-term minor beneficial effect to the visitor experience.

Cumulative Impacts: Development projects that aim to attract large number of visitors, but that do not consider the need to retain the historic fabric of trail-related resources would detract from a high-quality experience. Increased urban growth, including housing, commercial business, and highway projects would limit geographical opportunities of providing a rewarding trail experience. All these factors would add a minor cumulative impact on the visitor experience.

Conclusion: Under Alternative A developing an interpretive program and appropriate visitor access, and installing trail signs would result in minor beneficial effects. Cumulatively, the minor beneficial effect of this alternative on the visitor experience would only add a minor degree of impact to the overall cumulative effect on the current visitor use and experience.

Alternative B, Preferred Alternative. Trail Development through Partnerships

Under this alternative the National Park Service, as the federal lead agency, would facilitate a coordinated effort by the trail community to provide a high-quality experience that would promote public understanding and appreciation of cultural and natural resources along the designated route. The quality of the interpretation and educational programs that are currently being offered would be greatly enhanced by working cooperatively with entities that own high-potential sites and segments along the designated trail, such as San Antonio Mission National Historical Park, and state agencies, such as the Texas Parks and Wildlife Department and the Texas Historical Commission.

There are large numbers of Hispanic residents along certain sections of the trail and the trail has the potential to attract visitors from Mexico. The emphasis on bilingual interpretation and education programs would serve the needs of this audience, which has not been effectively targeted in the past. Bilingual brochures and other interpretive media could be made available and shared with public and private schools.

The experiences of African-Americans and American Indian tribes would also be emphasized in the enhanced interpretation program developed under this alternative. This would help spotlight the contribution of these groups to the history of the trail and likely result in increased visitation and awareness both on the part of visitors and African-Americans and American Indian tribes.

All of the public sites along the trail currently experience low levels of visitation (see Appendix K; Table 3-7, page 240);

therefore, it is highly unlikely that the implementation of this alternative would result in overcrowding. Moreover, some of the provisions—for example, the development of a flexible and easily updatable database in conjunction with the work of local trail stewards—would make it easier and more effective to monitor the condition of resources. In some ways, this approach would replace the current process used to assess user capacity, which was designed to be applied to public lands of limited size, with well-defined public access and clearly established boundaries, where closures or other management actions are possible.

A meaningful and up-to-date interpretation of historic developments along the trail, as provided under this alternative, would allow visitors to forge emotional and intellectual connections with trail resources. Such engagement can only have a positive effect on the long-term protection of the resources, as visitors become personally committed to the future of trail resources. A variety of media, from print materials to computer programs, would be used to reach different age-groups. It is also to be expected that, by providing technical assistance to visitor centers and museums to expand and improve their current interpretive program, more visitors would be attracted to visiting trail sites. The development of a sign and interpretive plan would enhance the visitor experience since it would improve the ability to retrace a substantial portion of the original routes. The preferred alternative's emphasis on recreational activities, such as trail retracement, would offer visitors the opportunity to engage intimately with trail resources and experience vicariously what travel along the trail might have been like during the period of significance. It would help to provide opportunities for trail audiences to forge emotional and intellectual connections with the meanings of those resources by actually travelling along these routes. This level of engagement would result in long-term minor beneficial effect to the visitor experience.

Cumulative Impacts: The high quality visitor experience that would result from the implementation of Alternative B is likely to foster widespread interest in the trail and its resources among a broader spectrum of society than at the time this document is being prepared. Such interest would heighten awareness of the potential damage that unrestricted development and changes in land use could cause to trail resources. Other projects identified in the cumulative impact scenario, such as increase in heritage tourism and increase in Web sites, exhibits, and facilities that offer the opportunity to learn and appreciate about trail resources, would have minor beneficial impacts.

Conclusion: The preferred alternative would cause moderate beneficial effects because a larger and more diverse audience would be able to learn and appreciate trail resources. Recreational activities would provide opportunities for trail audiences to establish meaningful connections with the resources and will result in long-term beneficial effects to the visitor experience. Cumulatively, the minor adverse effect of this action would only add a minor degree of impact to the overall cumulative effect on the visitor experience and would result in moderate, long-term beneficial, and indirect impacts.

LAND OWNERSHIP AND USE

Impacts on land ownership and use are addressed in this section of the document because of the initial concern among owners of property along the trail that designation might in some way affect property rights. The enabling legislation, however, makes it clear that this is not the case. It includes, among other requirements, the following guidelines regarding land acquisition:

- The Secretary of the Interior shall administer those portions of the trail on nonfederal land only with the consent of the owner of such land and when such trail portion qualifies for certification as an officially established

component of the trail;

- The designation of the trail does not authorize any person to enter private property without the consent of the owner;
- The United States shall not acquire for the trail any land or interest in land outside the exterior boundary of any federally administered area without the consent of the owner of the land.

Issues of concern on this topic expressed by private landowners include the possibility of changes in land ownership and use practices; however, the National Park Service would not be acquiring any properties, even on a willing-seller basis.

Methodology

More than 2,500 miles of the designated routes of El Camino Real de los Tejas National Historic Trail are privately owned. Because of the sheer scale of the trail and the diversity of ownership, it has not been possible as part of the analysis for this Draft Comprehensive Management Plan/ Environmental Assessment to acquire data on the ownership and use of specific properties and address issues individually. Several general issues of concern have been expressed by landowners, however, including how trail designation would affect their ability to use their lands and the effect of trail designation on real estate values and potential future sale of land or easements along the trail.

Effects on visitor use and experience can be beneficial or adverse, direct or indirect, short or long term. For the purposes of this analysis, levels of impact associated with visitor use and experience were defined as follows:

Negligible: Changes in land ownership and use patterns are not detectable or cannot be attributed to the trail designation.

Minor: Changes in land ownership and use patterns may be detectable and appear likely to have resulted from the trail designation. They occur locally along trail routes and impact a few properties.

Moderate: Changes in land ownership and use patterns are apparent and are clearly attributable to the trail designation. They occur locally along trail routes and impact a number of properties along the designated routes.

Major: Changes in land ownership and use patterns are apparent and are clearly attributable to trail designation. They occur locally along trail routes and impact a substantial number of properties along designated routes.

Alternative A. Continuation of Current Conditions—No Action

Participation of landowners in activities associated with El Camino Real de los Tejas National Historic Trail is voluntary. The National Park Service would continue to work with local governments and local landowners to place signs along trail routes, develop appropriate visitor access and interpretation of trail sites, and help protect trail-related resources.

The presence of trail-related site or segments on privately owned land along other National Park Service–administered historic trails has rarely influenced property sales or proposed private developments. Real estate values have seldom been significantly influenced by the presence of trail sites or segments; instead, they have been based on the intended use of the property and the value and use of neighboring real estate.

The National Park Service would not be acquiring any land even on a willing-seller basis, so there is no anticipated impact to landownership and use resulting from alternative A.

Cumulative Impacts: Several trends identified in the cumulative impact scenario are closely associated with landownership and use. However, at the time this document is being prepared the planning team is not aware of any specific project that would have an overall negative effect on landownership and use

along the trail. Alternative A would have negligible cumulative impacts on landownership and use.

Conclusion: Although the participation of landowners would be voluntary, it is likely that the trail designation would raise awareness of issues associated with the impact of incompatible land uses on the trail. No additional impacts on landownership and use would result from the implementation of this alternative. Alternative A would have minor, beneficial, and indirect effects on ownership and use along the trail corridor.

Alternative B, Preferred Alternative. Trail Development through Partnerships

Along all of the historic trails it manages, the National Park Service actively works with private landowners to install trail-site signs, mark trail routes, establish opportunities for trail retracement and install signs to facilitate this activity, develop appropriate visitor access and interpretation, and help protect trail-related resources. These projects are supported through the Challenge Cost Share Program, an appropriation from Congress that may not be available every year and which requires partners to provide a minimum of 50% matching contribution in the form of funds, equipment, in-kind labor, or supplies from non-federal sources.. Interest in this program is likely to increase—at least temporarily—as publicity associated with the authorization of the trail creates interest in trail-related National Park Service programs and as new partnership opportunities arise. However, changes in land use as a result of these activities are likely to be rare and minor. Furthermore, since these projects are initiated by landowners, they tend to be compatible with existing land-use practices and are viewed both by landowners and the National Park Service as beneficial.

The partnership certification program is another tool that can be used to encourage landowners to protect the integrity of their properties. It is likely that because of the heightened public awareness along the trail associated with Alternative B, there would be a surge in partnership certifications. Still, because this is a program that is initiated by the landowners and tends to be used in conjunction with existing land-use practices, it would be viewed both by the landowner and the National Park Service as beneficial.

After a national historic trail has been authorized by Congress, local governments along the trail corridor will often establish parks, roadside pullouts, or trails for educational and recreational purposes. Such activities coincide with the designation of the trail and are compatible with continuing agricultural, residential, recreational, commercial, and other ongoing land uses. They are viewed as beneficial by landowners, governments, the general public, and the National Park Service. Some landowners may benefit from the sale of land or easements used for resource protection or for trail-related cultural, recreational, or educational facilities. Under this alternative, these activities are expected to increase slightly because of heightened awareness of the trail and greater public interest in the trail and its resources.

Under Section 106 of the National Historic Preservation Act, the National Park Service is required to consider the effects of undertakings on public properties. The development of a trail generally increases public awareness of the routes and associated resources, and with that awareness comes an increased sensitivity to activities that might affect trail resources, encouraging managers to review more carefully any potential impacts.

Programs that increase awareness about the existence of El Camino Real de los Tejas National Historic Trail may lead to the development of guidelines designed to reduce visual and physical impacts from development along the trail, helping managers accommodate recreational motorized use, hiking, bicycling, equestrian, and other activities along the route. Under this alternative, there would

be additional funding available for trail-related protection and recreation projects. The National Park Service views practices that enhance protection of trail resources as beneficial.

Cumulative Impacts: Although increased urban development would not necessarily decline due to the trail designation, greater awareness of trail resources might result in less detectable changes in land use. The same would be true for other forms of development described in the cumulative impact scenario. Alternative B would encourage more interest in the protection of resources along the trail, which could entail changes in land use and development trends. These cumulative impacts would be moderate and beneficial.

Conclusion: The trends identified under the cumulative impacts scenario have the potential to impact land use along the trail. However, at the time this plan is being prepared there are no specific development projects being considered that would have major impacts on landownership and use. Alternative B would result in moderate, beneficial, and indirect cumulative impacts on land ownership and use along the trail.

SOCIOECONOMIC CONDITIONS

Socioeconomic factors include the trail's effects on social and economic conditions in counties and parishes crossed by the trail and on land ownership.

Methodology

Socioeconomic data derived from the United States Census (see Appendix K; Tables K3–K7, page 236-page 240) and the latest available tourism information for the states of Louisiana and Texas (see Section on Tourism, page 106 , Chapter 3, Affected Environment) were used to identify and discuss potential impacts.

Clear and consistent hard data about the economic impact of historic trail designations are not available. The only existing study concerns the Overmountain Victory National Historic Trail, where the data suggest that the biggest beneficiaries of trail designation are establishments serving food and beverages and the retail and lodging industries along the trail route. Issues of concern include opportunities to create jobs related to tourism and hospitality and federal government expenditures associated with the administration of the funds, such as Challenge Cost Share, an appropriation from Congress that may not be available every year. This program requires partners to provide a minimum of 50 % matching contribution in the form of funds, equipment, in-kind labor, or supplies from non-federal sources.

Socioeconomic impacts were determined based on professional expertise and judgment. A qualitative analysis is sufficient to compare the alternatives for decision-making purposes.

The thresholds of change for the intensity of impacts on socioeconomic conditions are defined as follows:

Negligible:
Socioeconomic conditions would not be affected, or effects would not be measurable, or any changes would not be related to the trail.

Minor:
Changes in socioeconomic conditions would be noticeable and measurable. They would be linked to the designation of the trail and associated interpretation and development and would affect a small percentage of households in the counties and parishes crossed by the trail.
Adverse–Impacts would slightly diminish median household income and employment opportunities.
Beneficial–Impacts would result in enhanced median household income and employment opportunities and possibly a slight increase in high-school graduation levels.

Moderate:
Changes in economic conditions would be very apparent and widespread within

many of the counties and parishes and would be closely linked to trail development.
Adverse– Impacts would substantially reduce median household income and employment opportunities in various counties and parishes.
Beneficial– Impacts would substantially increase median household income and employment opportunities in various counties and parishes.

Major:
Changes would be readily apparent and clearly attributable to development associated with the trail. It would substantially change socioeconomic conditions, median household income, and employment opportunities in most of the area crossed by the trail.
Adverse–Impacts would greatly reduce median household income and employment opportunities in various counties and parishes.
Beneficial–Impacts would greatly increase median household income and employment opportunities in various counties and parishes.

Alternative A. Continuation of Current Conditions—No Action

With the exception of San Antonio Missions National Historical Park and The Alamo, most sites along El Camino Real de los Tejas National Historic Trail receive relatively few visitors. Total visitation figures for all 15 state sites and museums for which data are available (see Table 3-7, page page 239, Chapter 3, Affected Environment) indicate a total of slightly in excess of one-quarter million visitors a year, but many of those visits are not associated with the designated trail. Visitors are mostly attracted to the recreational opportunities offered by sites along the trail, and even though several of these facilities have trail resources, few have interpretation programs that are specifically trail related.

Trail-development activities, such as the installation of signage and expansion of interpretation programs, have the potential to attract additional visitors to the trail. Increased visitation is likely to result in small increases in revenues and employment associated with expanded opportunities to provide services and retail trade to visitors in the communities crossed by the trail. Work opportunities in the heritage tourism program and associated industries would increase slightly. The percentage of the population interested in furthering their education might increase slightly, since the heritage tourism industry would require a certain level of education and knowledge about the trail.

A very slight impact on economic conditions might result from direct government expenditures associated with the administration of the trail. Under this alternative, such expenditures would be relatively small and geographically circumscribed.

Cumulative Impacts: Several projects identified in the cumulative impact scenario have the potential to impact socioeconomic conditions along the trail. However, at the time this document is being prepared there is no information on specific projects that would have any type of impact on socioeconomic conditions along the trail. At this time it is not possible to speculate on the overall cumulative effect that these projects would have on such conditions.

Conclusion: Some minor socioeconomic benefits are likely to result from trail development activities, increased visitation, and government expenditures associated with the development of this alternative. Alternative A would result in minor, long-term, and indirect beneficial impacts on socioeconomic conditions along the trail.

Alternative B, Preferred Alternative. Trail Development through Partnerships

Efforts to protect, develop, maintain, and interpret the trail would create some new localized and relatively minor spending. Expenditures for labor and materials would be short term and would accrue to a few individuals or firms. Some

of the small communities along the trail would likely benefit from increased visitation and related expenditures. Local businesses, such as food service, lodging, camping stores, sporting goods, and bookstores would receive some benefits from sales to visitors. It would be possible that small bed-and-breakfast establishments operated by private landowners would open as a result.

With the exception of San Antonio Missions National Historical Park and The Alamo, most sites along El Camino Real de los Tejas National Historic Trail receive relatively few visitors. Total visitation figures for all 15 state sites and museums for which data are available (see Table 3-7, page 239) indicate a total of slightly in excess of one-quarter million visitors a year. It should be noted that many of those visits are not triggered by the presence of the designated trail. Visitors are mostly attracted to the recreational opportunities offered by sites along the trail, and even though many of these facilities have trail resources, few have any interpretation program that is specifically trail related.

Cumulative Impacts: Several projects identified in the cumulative impact scenario have the potential to impact socioeconomic conditions along the trail. However, at the time this document is being prepared there is no information on specific projects that would have any type of impact on socioeconomic conditions along the trail. At this time it is not possible to speculate on the overall cumulative effect that these projects would have on such conditions.

Conclusion: Implementing this alternative is likely to strengthen the regional and state economies through increased tourism revenues. Increased visitation to trail-related sites, segments, and establishments would result in minor growth in economic activity not only in those communities along the trail corridor but possibly in Texas and Louisiana as a whole, because visitors might extend their stay in the trail area if there are additional opportunities to learn about natural and cultural history and to search for the trail. Federal expenditures under this alternative would be greater and possibly less circumscribed geographically. While there would be a beneficial impact from such expenditures, it would be minor. Alternative B would result in minor, beneficial, long-term, and indirect cumulative impacts on socioeconomic conditions along the trail

UNACCEPTABLE IMPACTS

The National Park Service must prevent any activities that would impair park resources and values. The impact threshold at which impairment occurs is not always readily apparent. Therefore, the National Park Service applies standards that offer greater assurance that impairment will not occur. The National Park Service will do this by avoiding impacts that it determines to be unacceptable. These are impacts that fall short of impairment, but are still not acceptable within a particular park's environment. Park managers must not allow uses that would cause unacceptable impacts; they must evaluate existing or proposed uses and determine whether the associated impacts on resources and values are acceptable.

To determine if unacceptable impacts could occur to the resources and values of El Camino Real de los Tejas, the impacts of the proposed actions in this environmental assessment were evaluated based on monitoring information, published research, and professional expertise, and compared to the guidance on unacceptable impacts provided in *Management Policies* 1.4.7.1 that defines unacceptable impacts as impacts that, individually or cumulatively, would:

- Be inconsistent with a trail's purposes or values, or
- Impede the attainment of a trail's desired future conditions for natural and cultural resources as identified through the trail's planning process, or
- Create an unsafe or unhealthful

environment for visitors or employees, or

- Diminish opportunities for current or future generations to enjoy, learn about, or be inspired by trail resources or values, or
- Unreasonably interfere with:
  - trail programs or activities, or
  - an appropriate use, or
  - the atmosphere of peace and tranquility, or the natural soundscape maintained in wilderness and natural, historic, or commemorative locations along the trail.

By preventing unacceptable impacts, trail administrators work with partners to ensure that the proposed use of trail resources will not conflict with the conservation of those resources. In this manner, the trail administrators ensure compliance with the National Park Service Organic Act's separate mandate to conserve resources and values. Using the guidance above (see bullets), the following text analyzes the potential for unacceptable impacts for all alternatives carried forward in this Environmental Assessment.

- Both alternatives are consistent with the trail's purposes and values. The trail was established with the purpose of identifying and protecting an "historic route and its historic remnants and artifacts for public use and enjoyment." If Alternative A were selected this might result in the loss of resources, a loss that would increase with the passage of time. This loss would limit opportunities for the public to use the trail and enjoy its resources. If Alternative B, the preferred alternative, were selected, the trail administration would be better able to prevent the loss of resources and would be better equipped to provide for public use and enjoyment.
- Neither alternative would impede the attainment of desired future conditions for natural and cultural resources along the trail. Alternative A would be less likely to enhance research and foster the development of more adequate protection strategies.
- Neither alternative would create an unsafe or unhealthful environment for visitors or employees. Under Alternative B trail development projects would be more likely to enhance visitor safety by providing adequate parking and safe access to resources.
- Under either alternative, visitors would continue to have opportunities to enjoy, learn about, or be inspired by trail resources and values. Neither alternative would change the overall opportunities available to visitors. Alternative A would maintain visitor use and experience exactly as it is now. Alternative B would substantially enhance opportunities for visitors to understand and appreciate resources and would provide enhanced recreational opportunities.
- Neither alternative would interfere with programs or activities, appropriate uses, or an atmosphere of peace and tranquility along the trail. Alternative B, through its emphasis on partnerships, would enhance all trail programs. Through its emphasis on trail awareness it would rend to maintain an atmosphere of peace and tranquility along the designated routes and would be more likely to encourage appropriate uses.

Overall, the analysis of effects on trail resources, interpretation and visitor use indicates that there are no major adverse effects under either alternative; effects were analyzed as negligible to moderate. Based on this, and the above analysis, there would be no unacceptable impacts from Alternative A (No Action) or Alternative B (Preferred)

IMPAIRMENT

Impairment is an impact that in the

professional judgment of responsible National Park Service's managers would harm the integrity of resources and values. National Park Service's *Management Policies, 2006* require the analysis of potential effects to determine whether or not actions would impair resources. The fundamental purpose of the national park system, established by the Organic Act and reaffirmed by the General Authorities Act, as amended, begins with a mandate to conserve resources and values. National Park Service managers must always seek ways to avoid, or to minimize to the greatest degree practicable, adversely impacting resources and values.

However, the laws do give the National Park Service management discretion to allow impacts to resources and values when necessary and appropriate, as long as the impact does not constitute impairment of the affected resources and values. Although Congress has given the National Park Service the management discretion to allow certain impacts, that discretion is limited by the statutory requirement that the National Park Service must leave resources and values unimpaired, unless a particular law directly and specifically provides otherwise. An impact to any resource or value may, but does not necessarily, constitute an impairment, but an impact would be more likely to constitute an impairment when there is a major or severe adverse effect upon a resource or value whose conservation is:

- necessary to fulfill specific purposes identified in the establishing legislation;
- key to the natural or cultural integrity of the trail; or
- identified as a goal in the trail's general management plan or other relevant National Park Service planning documents.

The National Park Service's threshold for considering whether there could be an impairment is based on whether an action would have major or significant effects. This Environmental Assessment identifies less than major effects for all resource topics. Guided by this analysis and the Superintendent's professional judgment, there would be no impairment of trail resources and values from the implementation of either alternative.

CHAPTER 5
CONSULTATION AND COORDINATION

EL CAMINO REAL DE LOS TEJAS
NATIONAL HISTORIC TRAIL™

CHAPTER 5: CONSULTATION AND COORDINATION

INTRODUCTION

SCOPING MEETINGS

During the scoping process, the planning team informed local, state, and federal agencies and the public about the development of the Draft Comprehensive Management Plan/Environmental Assessment and solicited their comments in order to identify issues and questions to consider when developing the management plan. The 60-day scoping period took place between March 28 and May 31, 2007.

The scoping meetings were announced through media releases, in two different Web sites, and in a newsletter specifying local schedules and meeting venues. The Texas Historical Commission assisted by announcing the scoping meetings and the scoping process through their listserv at www.heritage-tourism-list-l@lists.thc.state.tx.us

Chambers of commerce in individual communities also released scoping meeting information. Eight public meetings took place in locations along the trail, from Laredo, Texas, to Natchitoches, Louisiana. The meetings were attended by nearly 200 people. Among the attendees were representatives from 60 private, state, and federal entities. Written and verbal comments are summarized and available at www.nps.gov/elte

A series of planning issues, posed as the questions listed below, were presented to the public for consideration, both in the newsletter and in the public meetings:

1) How will trail-related resources, including historic buildings and sites, archeological resources, and cultural landscapes be identified and protected?
2) How will visitors learn about and be directed to trail-related cultural and recreational activities?
3) How will coordinated trail-wide interpretation and education be provided to visitors and local residents?
4) How will the perspectives of all people associated with the trail's history be included in interpretive and educational materials?
5) How can American and Mexican perspectives on the trail be increased?
6) What is the most effective use of partnerships to achieve goals for the trail's future?

Verbal and written comments received during the scoping period and during these meetings were considered in the development of the alternatives presented in this draft.

FEDERAL AGENCIES

Less than 1% of land along El Camino Real de los Tejas National Historic Trail is publicly owned. Aside from San Antonio Missions National Historical Park and Cane River Creole National Historical Park, which are managed by the National Park Service, the only other public lands adjacent to the trail are portions of lands managed by the U.S.D.A. Forest Service. U.S.D.A. Forest Service personnel were contacted during the early stage of the planning process. U.S. Fish and Wildlife Service scientists from the Southwest and Southeast regional offices were consulted about federally listed threatened and endangered species found along the trail corridor.

STATE AND LOCAL AGENCIES

This document was developed in close consultation with the Texas Historical Commission, the agency designated a key partner in this project by the Texas State Legislature. Staff from the Texas Division of Archeology at the Texas Historical Commission offered valuable assistance in identifying high-potential sites and segments. The National Trails Intermountain Region has also taken the lead in highlighting possible construction projects that might adversely impact significant trail resources. The Louisiana

Department of Culture, Recreation and Tourism has been equally helpful.

The Texas Historical Commission also conducted a preliminary survey of information on resources associated with the trail. The information received was voluminous and demonstrated widespread enthusiasm for the trail. It included documentation on museums, visitor centers, community events, and festivals, as well as the description of numerous sites and segments. These materials were compiled and were of assistance to the contractor who developed the historic resource database for the state of Texas.

Both the Texas and the Louisiana departments of transportation have been important partners in developing this plan. They will continue to collaborate with the National Trails Intermountain Region to develop signage plans and other pertinent projects.

The planning team received great support during this process by staff from McKinney Falls, Fort Boggy, and Mission Tejas state parks, managed by the Texas Parks and Wildlife Department, and Caddo Mounds State Historic Park, managed by the Texas Historical Commission, which are all public parks with significant trail resources. Staff from the Texas Parks and Wildlife Department Division of Historic Sites also joined the planning team in assessing high-potential sites and segments. They have worked closely with the National Trails Intermountain Region and will become an important partner in the implementation phase of the plan.

Interested landowners, members of El Camino Real de los Tejas Trail Association, and other trail advocates also assisted the team in providing access to significant sites or important information.

PUBLIC OUTREACH

The planning team developed a list of contacts of nearly 1,000 individuals and entities who have received newsletters and other pertinent materials, such as a DVD, *On the Road to Partnerships*, prepared to support the planning effort.

The planning team traveled the entire length of the trail several times. Concerted efforts to assess resources and to gather input from interested trail advocates and landowners took place throughout the process. Starting in the fall of 2007, several trips were made to Louisiana and East and South Texas to meet with interested parties, discuss trail-related issues, and develop familiarity with the resources. Meetings took place in Yorktown (DeWitt County), Pearsall (Frio County), Victoria (Victoria County), and Goliad, Bryan/College Station (Brazos County), Rockdale (Milam County), and many other locations. Presentations at professional meetings and workshops also attempted to provide the public with updates about the planning document.

In Louisiana, members of the planning team also met with representatives of two state-recognized tribes: the Adai Indian Nation and the Choctaw-Apache Community of Ebarb.

ORGANIZATIONS

El Camino Real de los Tejas National Historic Trail Association played a key role in the development of this draft plan. Members contributed information and assisted the planning team in identifying resources of significance and arranging for landowners to become involved in this planning effort. County and parish historic commissions were also important in providing information and assisting in organizing meetings and visiting sites.

EDUCATIONAL INSTITUTIONS

There are several institutions of higher learning along the trail. An effort was made throughout this planning effort to contact those faculty members who are recognized trail experts or who could make a sizable contribution to this project.

CONSULTATION WITH AMERICAN INDIAN TRIBES

GOVERNMENT-TO-GOVERNMENT CONSULTATION

Government-to-government consultation is the basic means by which American Indian tribes and federal agencies approach and resolve differences in the application of policies and regulations. Government-to-government consultation recognizes that tribes are sovereign nations within the United States and that there is a unique legal and historic relationship between the United States Government and Indian tribes, shaped by treaties, congressional acts, court decisions, executive orders, and other actions of the Executive Branch.

Numerous laws require agencies to consult with American Indian tribes on federal actions. Federal actions are defined as projects, activities, or programs funded in whole or in part under the direct or indirect jurisdiction of a federal agency, including those carried out by or on behalf of a federal agency; those carried out with federal financial assistance; those requiring a federal permit, license, or approval; and those subject to state or local regulation, pursuant to a delegation or approval by a federal agency. The decision for an agency to enter into government-to-government consultation with American Indian tribes depends upon the agency's adherence to federal law, regulation, and agency policy, as well as on the nature and scale of the project. Tribal governments may also, at their discretion, request formal consultation on issues of interest.

The challenge for administrators of El Camino Real de los Tejas National Historic Trail is that, historically, Louisiana and Texas, the states through which the trail passes, had a very aggressive policy of removing American Indian tribes from their native lands. Federal removal programs in the 19th century required many American tribes to move to lands that were not their home. Such was the case for the Caddo, Wichita, Tonkawa, Comanche, and other tribes. Some tribes voluntarily removed to other states. Today, many of their descendants have still not been granted federal recognition as American Indian tribes, even though they are acknowledged as "State Recognized Tribes" in the state where they live.

It is the policy of the National Trails Intermountain Region to abide by the language contained in the National Historic Preservation Act (16 U.S.C. 470w):

> An Indian tribe means an Indian tribe, band, nation, or other organized group of community, including a Native Village, Regional Corporation or Village Corporation, as those terms are defined in Section 3 of the Alaska Native Claims Settlement Act (43 U.S.C. 1602), which is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians.

The key word in this law is "recognized," meaning federally recognized tribes. It is the policy of the National Trails Intermountain Region to abide by a government-to-government relationship with federally recognized tribes; however, this government-to-government relationship does not apply to groups who are not federally recognized.

Methodology

Recognizing the important role played by American Indian groups in establishing routes that later became El Camino Real de los Tejas National Historic Trail, the planning team made a special effort to engage all potentially affected American Indian groups in the planning process.

Formal consultation began in October 2007. All federally recognized tribes in Texas and Louisiana were contacted. Some of these tribes reside in Texas and Louisiana, while others are located in Oklahoma. The former include the Alabama–Coushatta Tribe of Texas, the Kickapoo Traditional Tribe of Texas, the Louisiana Coushatta Indian Tribe, the Louisiana Jena Band of Choctaw Indians, the Chitimacha Tribe of Louisiana, and the Louisiana Tunica–Biloxi Tribe. Federally recognized tribes residing in Oklahoma

include the Caddo, the Comanche, the Tonkawa, the Kiowa, and the Wichita & Affiliated tribes.

After initial phone contacts, members of the planning team made visits to a number of these groups: the Kickapoo in April 2008; the Caddo in October 2007, February and March 2008, and March 2009; and the Comanche, the Tonkawa, and the Wichita & Affiliated tribes in October 2007.

In an effort to solicit input from as many associated and interested parties as possible, the planning team also met with representatives from two non-federally recognized tribal entities in Louisiana in September 2007. These meetings did not represent government-to-government consultation. And, although the representatives expressed interest in participating in the project, the input they offered for incorporation in this plan was limited, due to changes in personnel or other issues. The planning team will continue to work with these groups, as their perspectives are key in the future interpretive program for the trail.

On March 2009, at a meeting with the Caddo Nation Tribal Council in Binger, Oklahoma, further government-to-government consultation took place, and focused on the development of this document. Several issues were discussed, among them the identification of sites, landmarks, and sacred places along the trail-designated routes that are important to the Caddo Nation.

The discussion also focused on the development of an oral-history program to record stories from tribal elders before they pass on. The Caddo Tribal Council expressed interest in working with the National Trails Intermountain Region to tell the "real" stories of the Caddo and El Camino Real. The tribal council viewed the opportunity to participate in the development of this document as a way to allow the Caddo Nation to partner in developing interpretive materials that reflect the Caddo's perspective.

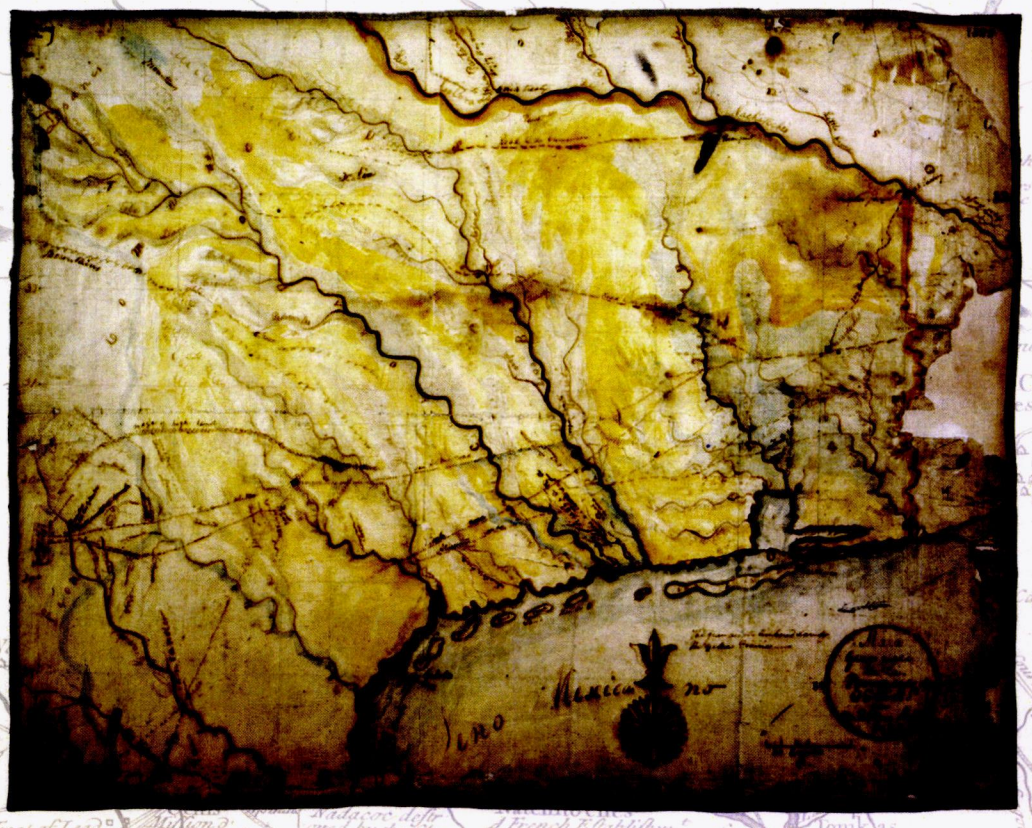
The Caddo Tribal Council also expressed support for signage and interpretation programs along the trail, particularly at Caddo sites. The tribal council reminded the National Trails Intermountain Region that all Caddo site are sacred and should be accorded that recognition in resource management and interpretation activities.

The executive director of the Comanche Nation of Oklahoma has also expressed interest in participating in the development of El Camino Real de los Tejas National Historic Trail.

A meeting of all federally recognized tribes is planned to discuss El Camino Real de los Tejas National Historic Trail and ways the tribes can be involved in its future. The main intention of this meeting will be to familiarize tribal leaders with issues related to trail administration and to create a positive dialogue with these tribes. The emphasis will be on the importance of incorporating American Indian perspectives into interpretive and education programs, as well as identification of those trail resources with special meaning to these tribes.

Another unique aspect of the history of the American Indians tribes associated with this trail is the movement of the eastern tribes from their homelands into Texas. These tribes are the Cherokee, Shawnee, Seminole, Choctaw, and Delaware. Pushed west by Anglo expansion, they hoped to call Texas home but were ultimately removed to Oklahoma. As mentioned above, it has been the policy of the National Trails Intermountain Region to engage in government-to-government consultation with the federally recognized tribes that resided traditionally along El Camino Real de los Tejas National Historic Trail.

APPENDICES



EL CAMINO REAL DE LOS TEJAS
NATIONAL HISTORIC TRAIL

APPENDIX A.
El Camino Real De Los Tejas National Historic Trail Legislation
Page 1 of 2

[A full copy of the National Trails System Act can be found at http://www.nps.gov/nts/legislation.html]

Public Law 108–342
108th Congress

An Act

Oct. 18, 2004
[S. 2052]

To amend the National Trails System Act to designate El Camino Real de los Tejas as a National Historic Trail.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

El Camino Real de los Tejas National Historic Trail Act.
Texas.
Louisiana.
Mexico.
16 USC 1241 note.

SECTION 1. SHORT TITLE.

This Act may be cited as the "El Camino Real de los Tejas National Historic Trail Act".

SEC. 2. DESIGNATION OF EL CAMINO REAL DE LOS TEJAS NATIONAL HISTORIC TRAIL.

Section 5(a) of the National Trails System Act (16 U.S.C. 1244(a)) is amended by adding at the end the following:

"(24) EL CAMINO REAL DE LOS TEJAS NATIONAL HISTORIC TRAIL.—

"(A) IN GENERAL.—El Camino Real de los Tejas (the Royal Road to the Tejas) National Historic Trail, a combination of historic routes (including the Old San Antonio Road) totaling approximately 2,580 miles, extending from the Rio Grande near Eagle Pass and Laredo, Texas, to Natchitoches, Louisiana, as generally depicted on the map entitled 'El Camino Real de los Tejas' contained in the report entitled 'National Historic Trail Feasibility Study and Environmental Assessment: El Camino Real de los Tejas, Texas-Louisiana', dated July 1998.

"(B) MAP.—A map generally depicting the trail shall be on file and available for public inspection in the appropriate offices of the National Park Service.

"(C) ADMINISTRATION.—(i) The Secretary of the Interior (referred to in this paragraph as 'the Secretary') shall administer the trail.

"(ii) The Secretary shall administer those portions of the trail on non-Federal land only with the consent of the owner of such land and when such trail portion qualifies for certification as an officially established component of the trail, consistent with section 3(a)(3). An owner's approval of a certification agreement shall satisfy the consent requirement. A certification agreement may be terminated at any time.

"(iii) The designation of the trail does not authorize any person to enter private property without the consent of the owner.

"(D) CONSULTATION.—The Secretary shall consult with appropriate State and local agencies in the planning and development of the trail.

Appendix A. El Camino Real de los Tejas National Historic Trail Legislation, Page 2 of 2

[A full copy of the National Trails System Act can be found at http://www.nps.gov/nts/legislation.html]

"(E) COORDINATION OF ACTIVITIES.—The Secretary may coordinate with United States and Mexican public and nongovernmental organizations, academic institutions, and, in consultation with the Secretary of State, the Government of Mexico and its political subdivisions, for the purpose of exchanging trail information and research, fostering trail preservation and educational programs, providing technical assistance, and working to establish an international historic trail with complementary preservation and education programs in each nation.

"(F) LAND ACQUISITION.—The United States shall not acquire for the trail any land or interest in land outside the exterior boundary of any federally-administered area without the consent of the owner of the land or interest in land.".

Approved October 18, 2004.

LEGISLATIVE HISTORY—S. 2052:

SENATE REPORTS: No. 108–321 (Comm. on Energy and Natural Resources).
CONGRESSIONAL RECORD, Vol. 150 (2004):
Sept. 15, considered and passed Senate.
Sept. 28, considered and passed House.

APPENDIX B: CERTIFICATION PROGRAM –
Partnership Certification Agreement

El Camino Real de Los Tejas
National Historic Trail

National Park Service
US Department of the Interior

Partnership Certification Agreement

[Name of the site]

[Location of the site]

Type of Property: [site or segment] **Owner: [Name]**

General

This agreement represents the Secretary of the Interior's certification, under section 7(h) of the National Trails System Act, that [name of the site], located in [location], meets the national historic trail criteria established by the National Trails System Act and any supplemental criteria prescribed by the Secretary of the Interior.

The National Park Service and [name of the owner] agree voluntarily to strive to achieve the highest level of resource protection and visitor appreciation of trail resources and history at the historic site and trail segment, as provided for in the Comprehensive Management Plan for El Camino Real de los Tejas National Historic Trail for "...the identification and protection of the historic route and its historic remnants and artifacts for public use and enjoyment." (National Trails System Act 16 U.S.C. - 1241 et seq. Section 3(a)(3)).

Through this agreement, the National Park Service and [name of owner] agree, if mutually deemed appropriate, to work jointly on planning, interpretation, resource management, and other matters that relate to El Camino Real de Los Tejas National Historic Trail at [name of site/segment], and to strive to meet the goals and objectives of the Comprehensive Management Plan for the Trail.

[Name of the owner] retains all legal rights to the property and nothing in this agreement is to be construed as granting any legal authority to the National Park Service over the property or any action by [name of the owner].

The agreement may be canceled by either party at any time by providing written notice to the other party. The National Park Service and [name of the owner] agree, whenever possible, to identify issues or concerns to allow for resolution.

This agreement will remain in effect unless cancelled by either party, or until the ownership of the property is transferred to another entity.

Signatures

I hereby agree to a partnership with the National Park Service for [name of the site/segment] on El Camino Real de Los Tejas National Historic Trail.

_____ _____

[Name of the owner] **Date**

On behalf of the Secretary of the Interior, I agree to a partnership with [name of the owner] for [name of the site/segment], on El Camino Real de los Tejas National Historic Trail.

_____ _____

[Name] Superintendent **Date**
National Trails Intermountain Region

APPENDIX C:
Mapping Historic Resources along El Camino Real De Los Tejas National Historic Trail

The accurate mapping of historic routes associated with El Camino Real de los Tejas National Historic Trail is a difficult task. This section of the plan addresses some of the major mapping issues. It provides background information and a brief, general description of a strategy for mapping trail resources, with the purpose of encouraging the trail community to use a consistent approach in the identification of trail routes.

Texas and Louisiana archeologists and historians have been working for several decades to document routes of exploration and settlement. However, the extent and complexity of the trail resources designated as part of El Camino Real de los Tejas National Historic Trail require the development of strategies that bring together trail advocates and scholars across a variety of disciplines to collaborate in a major integrated mapping effort. As with all other units of the National Historic Trail System, all decisions on routes (location, alignment) will be based on the preponderance of evidence. It is clear, however, that certain issues or segments will always be in contention.

In the last 20 years, new technologies such as Geographic Information Systems and Global Positioning Systems have revolutionized mapping, making it easier to develop a flexible and accurate geodatabase. The new technology mostly facilitates the storage, retrieval, and analysis of information: it still depends on the research of historians, archeologists, and trail experts to document the path of significant routes.

In the case of El Camino Real de los Tejas National Historic Trail, which has in excess of 2,500 miles of designated routes and more than 300 years of historical developments, the task is more complex. There are three important factors:

1. The existence of an extensive network of American Indian trails before the arrival of the Europeans.

While exploring Texas at the end of the 17th and beginning of the 18th centuries, the Spanish relied exclusively on trails blazed by American Indians, which, in turn, often followed wildlife migration routes. Both Texan and non-Texan Indian groups had used these routes for years for a variety of purposes, including travel, exchange of goods, participations in trade fairs, road networks for obtaining additional food, and routes used by those taking part in ceremonies. Accounts from the 17th and 18th centuries concur that Spanish exploration of Texas was only possible because of the knowledge and assistance of Indian guides; yet, no maps have been found identifying these pre-contact American Indian routes. In those cases, where Indian travel guidance was not available, Spanish explorers wandered and, inevitably, often lost their way. The ability to communicate with the American Indians was also crucial to the success of various expeditions: Spanish explorers often waited for translators before they would proceed on their journeys. Aside from El Camino Real de los Tejas National Historic Trail, many other national historic trails originated as American Indian routes and eventually became preferred travel routes for Europeans and Anglo-Americans.

2. A lengthy and complex period of historic development.

The Spanish explored and developed El Camino Real de los Tejas National Historic Trail routes for more than a century (1680s–1820). The routes continually evolved, as travelers made adjustments due to environmental conditions, such as flooding or drought. Indeed, routes varied from year to year, depending on the season, real or perceived threats from American Indian groups, and the purpose of the trip. These

Spanish Colonial routes eventually linked up with a number of secondary roads and covered a sizable territory. The constant shifting of these routes over a long period of time greatly complicates mapping. Even with the assistance of Geographic Information Systems, it is a challenge to create a single map that accurately reflects complex conditions on the ground.

Widespread contraband and other illegal commercial operations also complicate mapping, as many of the routes used by smugglers were chosen precisely to avoid being observed by Spanish Colonial authorities. Spain and France, the two European powers that vied for control of Texas and western Louisiana for most of the 18th century, tried to enforce mercantile policies that greatly limited opportunities for trade and commerce. Such policies made life hard in frontier communities, where survival depended upon the availability of supplies. Spanish authorities were particularly keen to discourage contraband and any other illegal activities that could strengthen French claims. In reality, though, the great distances involved and the difficulty of access, particularly along sections of El Camino Real de los Tejas National Historic Trail in eastern Texas and western Louisiana, meant that local settlers were dependent on merchandise and weapons illegally purchased from merchants in French-controlled Louisiana. Smugglers used less-traveled routes, away from official thoroughfares, to avoid being detected by Spanish troops garrisoned at presidios such as Los Adaes. There is no official record of smuggling routes but historic sources, directly and indirectly, document the existence of such activities. It is not clear if there are any surviving traces of such routes.

3. Special environmental conditions.

El Camino Real de los Tejas National Historic Trail covers more than 2,500 miles and crosses the entire state of Texas in a southwestern–northeastern direction, beginning at the Río Grande and ending at Natchitoches, in western Louisiana. The trail traverses a variety of ecoregions, from relatively arid and sparsely vegetated South Texas to the humid and heavily vegetated pine forests of East Texas and western Louisiana. Mapping such a lengthy route, which, in many locations, is more than 300 years old, requires consistency in approach and methodology.

Spanish expeditions into Texas faced a challenging environment. They had to cross a series of major rivers—the Río Grande, Nueces, Frío, San Antonio, Guadalupe, San Marcos, Colorado, Brazos, San Jacinto, Trinity, Angelina, Neches, and Sabine—which often required the use of ferries. Unexpected flash floods could strike at any time of the year, instantly turning most of these rivers into insurmountable obstacles. Quite often, expeditions had to change routes in order to find suitable places to make their river crossing. Shifts in river courses and changes in morphology since the time of the original expeditions challenge those trying to map and field-test these historic routes today. For example, at the Conquista Crossing of the San Antonio River, debris washed downriver during periods of high flow have created an island that did not exist during the Spanish Colonial period.

As in the case of other historic trails, rugged terrain often determined route selection. Early travelers almost exclusively followed already blazed Indian trails, particularly since the rugged topography in Central and East Texas greatly limited route options. When looking at the topographic information, it becomes clear why much longer routes were selected. For example, in the 1740s, the viceroy of New Spain ordered Captain Joaquín Orobio y Basterra of the Presidio at Bahía del Espíritu Santo to explore the coastal area, where French were supposedly getting established by way of Matagorda Bay. After two failed attempts to go directly east, Orobio finally traveled in a northerly direction, a considerable distance out of his way, to reach the crossing place for the Trinity River (probably near Robbin's Ferry), then traveled back down to his desired destination. The selected route

was much longer, but it was the only option to reach the coast.

Finally, it should be noted that the ephemeral nature of Spanish settlements (missions, presidios, villages) resulted in a multiplicity of short-lived roads that, like the settlements they linked, are difficult to document.

Documenting An Historic Route

Historic documentation. The first step in mapping is to gather appropriate historic information to document the location of historic routes. In the case of Texas and western Louisiana pertinent materials, including both primary and secondary sources, are voluminous, which adds to the challenge of mapping routes. It is essential to ensure that the historic evidence is solid and that **more than one** independent source confirms the location of the route. It is not enough to know the beginning and the end of a route; it is essential to have intermediate points that allow the identification of the specific route followed by the trail.

Expedition diaries. The traditional historic sources used to reconstruct the early Spanish routes into the Texas and Louisiana territories are expedition diaries. Unfortunately, surviving documentations for the period 1680–1780 include no more than 40 descriptions of routes of travel—many of them officials' reports on the condition of missions and presidios, which did not carefully detail the routes they followed. Even detailed descriptions of itineraries fail to provide conclusive information about the exact routes: distances were often misjudged, river names were confused, travel directions were not always correct, among other problems. Diaries may confirm that a certain river was crossed; however, the exact location of the crossing is much harder to identify. Underwater or low-water rock ledges, which created a shallow ford, were the most common natural features found at river crossings; but where there are several fords within a small geographic area, it is difficult to ascertain which crossing was the most commonly used.

The original expedition diaries were in Spanish or French; it is problematic to depend on translations that were not prepared with the idea of mapping routes in mind. Translating historic documents is a challenging task, and it is quite easy to make mistakes that could complicate the already-demanding task of historic mapping. Where there is conflicting evidence or field testing is not conclusive, it might be helpful to check the original documents for mistakes in translation.

Historic maps. A fairly high number of historic maps survive, but as in the case of the diaries, they do not provide conclusive evidence to clarify points of contention. Such maps are often of a scale that merely suggests the general direction of travel and does not permit field verification. In some cases, historic maps may distort the relative location of sites. As with all primary sources, it is important not to rely on any one mapping source as the sole determinant of a route.

General Land Office cadastral survey plats. These documents are of great assistance in mapping 19th- and 20th-century roads, and can be effective tools in identifying some Spanish Colonial roads. They are excellent documents, but they are most helpful at the individual-property level or in some cases at the county level. Because of their scale, it would be necessary to examine thousands of plats to reconstruct the congressionally designated El Camino Real de los Tejas National Historic Trail route. To use these General Land Office plats efficiently, it is important to have a fairly clear idea of the location of the trail in the area: not all plats include the names of historic roads.

Secondary sources. Secondary sources can be very helpful, but they should be used with care. Even historians like Herbert Bolton, who compiled the map information for his work, modified the data presented in the sources that he used (such as the names of the roads

in Stephen Austin's map). Of course, Bolton's main professional aim was the analysis of historic political development in early Texas history; the preparation of accurate route maps was secondary to his goals. Ethnographic studies may also include information that can be used to help clarify conflicting evidence.

Archeological Reports. Archeological resources play an essential role in helping historians verify the association of a site or segment with El Camino Real de los Tejas National Historic Trail. The State of Texas has one of the nation's best sources of information on archeological sites at the state level: the Texas Archeological Research Laboratory located in Austin[1]. Texas archeologists have produced a number of excellent reports confirming the alignment of road segments linked to El Camino Real de los Tejas National Historic Trail, which can be used as models to assist in the identification of trail routes.[2]

Aerial photography. Aerial photography became common in the 1930s, due to important technical advances between the two World Wars and its widespread adoption for land surveys by U.S. Government land-management agencies, such as the Soil Conservation Service, the U.S.D.A. Forest Service, and the U.S. Geological Survey. Aerial photography can be very helpful in areas that have not been impacted by major changes in land use, such as road construction or urban development. Where available, it can settle specific issues in relatively small geographic areas, especially in cases where there are visible traces of the trail. Remote sensing today often uses technology such as LiDAR3 and has become one of the most accurate, reliable, and cost-effective mapping systems currently available. It allows completing topographic surveys significantly faster and at a lower cost than using traditional survey methods. It is particularly helpful in detecting historic routes in heavily vegetated areas. Stephen F. Austin University in Nacogdoches, Texas, has pioneered the use of this technique to identify El Camino Real de los Tejas routes in East Texas.[4]

Putting the Lines on the Maps. Once systematic historical documentation has been collected, the route needs to be marked, using an adequate resolution. Because of the length of national historic trails, it is usually recommended that the route be plotted in maps of a scale of 1:100,000. For specific locations, it might be appropriate to have finer resolution, such as 1:24,000. At this stage, the information can also be captured and stored in a Geographic Information System.

B. Verification of routes on the ground. Ground truthing is an essential task if historic trails are to be mapped with precision. A substantial portion of original

1 - TARL is a nationally recognized archeological research facility and the largest archeological repository in the state. It is an organized research unit under the College of Liberal Arts at the University of Texas at Austin. Its mission is to collect, preserve, and curate archeological specimens and records, train students, conduct archeological research, and disseminate information about Texas' archeological legacy. For additional information, look at their Web site: http://www.utexas.edu/research/tarl/

2 - Jeff Williams, "GIS-Aided Archeological Research"; Joachim McGraw A., John W. Clark Jr., and Elizabeth A. Robbins (eds.), A Texas Legacy: The Old San Antonio Road and the Caminos; James E. Corbin, Jeffrey M. Williams, Victor J. Galan, and Rebecca St. John, "Cultural Resource Survey of Fort Boggy State Park"; Elizabeth Erickson and James Corbin, "Archeological Survey and Cultural Resource Assessment of Mission Tejas State Historical Park"; for a current inventory of trail resources based on all publicly available archeological reports, see Deirdre Morgan Remley's "Cultural Resources Inventory of Previously Documented Resources for El Camino Real de los Tejas National Historic Trail," in progress and available upon request at the NPS office of the National Trails Intermountain Region.

3 - LiDAR (Light Detection and Ranging) is an optical remote sensing technology that measures properties of scattered light to find the range and/or other information of a distant target. Like the similar radar technology, which uses radio waves instead of light, the range to an object is determined by measuring the time delay between transmission of a pulse and detection of the reflected signal. LiDAR technology has application in archeology, geography, geology, geomorphology, seismology, remote sensing, and atmospheric physics.

4 - Jeff Williams, "GIS Aided Archeological Research," MS Thesis, Stephen F. Austin State University, August 2007.

routes are still visible today, but, in many places, historic traces have been totally obliterated either by extensive highway construction or by changes in land use, such as commercial agriculture or silviculture (tree farming). Some of the obstacles facing those interested in tracing the path of the routes of El Camino Real de los Tejas National Historic Trail are dense vegetation, changing river morphology, urban growth, even the construction of reservoirs. Using the remote-sensing technologies described above, on-the-ground evidence can be gathered to validate or modify, if necessary, the information from the historical documents.

Swales, ruts, or remnants of old trails are often still visible in the trail corridor; however, not all visible road traces are associated with El Camino Real de los Tejas National Historic Trail. Trail advocates need to search the historical records for documents that provide information on the development and use of such sites/segments. In some cases, archeological investigations are necessary to establish clearly how certain sites/segments are linked to a particular historic period. The widespread road development that characterized Texas during the mid-1800s included many railroad branch lines and county roads, as well as an extensive network of cattle trails. These newer historic traces can be easily confused with the Spanish Colonial roads established in the previous century.

Conflicting evidence often challenges researchers. It is almost an unavoidable step in the early stages of route documentation. Only after systematically examining documents; checking archeological reports, secondary sources, aerial photography, and other remote sensing data; and field-checking the information obtained can we establish with certainty the existence of the historic roads linked to the development of El Camino Real de los Tejas National Historic Trail. It is a time-consuming task, requiring the collection and systematic analysis of pertinent data. The addition of new information, as it becomes available, makes this a constant work-in-progress. But it is a rewarding activity, which can greatly assist in the protection of the nation's significant resources.

APPENDIX D: HIGH POTENTIAL SITES AND SEGMENTS

BRIEF DESCRIPTIONS AND MAPS

The process of selecting high potential sites and segments for El Camino Real de los Tejas National Historic Trail required the analysis of information for 40 Texas counties and two Louisiana parishes. The list of high potential sites and segments was developed following an analysis of more than 500 sites. The task involved a number of steps, two of which were not discussed in the main text of the document, but that are presented here.

The first step took place early in the planning process. Volunteers in the trail community and individuals serving on county historical commissions in Texas and experts in Louisiana were asked to submit sites and segments for the consideration of the planning team. The information received was voluminous and demonstrated widespread enthusiasm for this project. It included documentation on museums, visitor centers, community events, and festivals, as well as the description of numerous sites and segments.

The second step involved the development of inventories of resources. Two professional archeologists worked in Texas and Louisiana to identify historically significant sites and segments that would meet the criteria specified in the National Trail System Act. This research yielded a database of more than 500 sites for the 40 Texas counties and the two Louisiana parishes. Of these 500 sites, 250 sites were then tentatively selected for further examination. The criteria for selection included the following:

- site or segment association with the trail;
- its historic significance;
- the existing level of information about it;
- its confirmed location;
- its accessibility;
- its scenic quality;
- whether it is relatively free from intrusion; and
- whether it has the potential to be developed for visitor use.

The planning team also made an effort to explore potentially significant sites for which there was no confirmed location, and consulted trail experts to ensure that all resources were properly evaluated.

Maps at the end of this appendix indicate the geographical location of these sites and segments.

LOUISIANA

HIGH POTENTIAL SEGMENTS

Natchitoches Parish

Name: Camino de la Laguna (part of a series of trails located at Los Adaes State Historic Site)
Historic use type: Trail segment
Description: This is a road that goes north from Los Adaes to La Laguna de Los Adaes. This road is clearly labeled on a map prepared by José de Urrutia in 1767. Its location has been confirmed on the ground.
Time period: 1700s
Ownership: Public (Louisiana Office of State Parks)

Name: Camino de los Ais (part of a series of trails located at Los Adaes State Historic Site)
Historic use type: Trail segment
Description: This is a road that travels west–southwest from Los Adaes toward Mission Dolores de los Ais. The road is clearly labeled on a map prepared by José de Urrutia in 1767. Its location has been confirmed on the ground.
Time period: 1700s
Ownership: Public (Louisiana Office of State Parks)

Name: Camino del Baño (part of a series of trails located at Los Adaes State Historic Site)
Historic use type: Trail segment
Description: This is a road that travels south from Los Adaes to Rancho del Baño. This road is clearly labeled on a map prepared by José de Urrutia in 1767. Its location has been confirmed on the ground.
Time period: 1700s
Ownership: Public (Louisiana Office of State Parks)

Name: Camino del Bayuco (part of a series of trails located at Los Adaes State Historic Site)
Historic use type: Trail segment
Description: This is a road that travels south from Los Adaes, then turns east to a destination named El Bayuco. The road is clearly labeled on a map prepared by José de Urrutia in 1767. Its location has been confirmed on the ground.
Time period: 1700s
Ownership: Public (Louisiana Office of State Parks)

Name: Camino de Natchitois
Historic use type: Trail segment
Description: This is a road that travels east–northeast from Los Adaes toward Natchitoches. This road is clearly labeled on a map prepared by José de Urrutia in 1767. Its location has been confirmed on the ground.
Time period: 1700s
Ownership: Public (Louisiana Office of State Parks)

HIGH POTENTIAL SITES

Natchitoches Parish

Name: American Cemetery
Historic use type: Cemetery/Second site of Fort St. Jean Baptiste
Description: This cemetery, established early in the 18th century, was the site of the relocated Fort St. Jean Baptiste. It is the oldest cemetery in Louisiana and includes graves from the middle of the 18th century. It was named the American Cemetery after the Louisiana Purchase in 1803.
Time period: 1700–1800s
Ownership: Public (City of Natchitoches)

Name: Los Adaes Village
Historic use type: Village
Description: This is the archeological site of a village established by some of the residents who left Los Adaes in the 1770s and returned to Louisiana after the unrest associated with the unsuccessful Gutiérrez-Magee Expedition of 1812–1813.
Time period: late 1700s–1800s
Ownership: Private

Name: Caddo Memorial Plaza

Historic use type: Sacred ground/Historic marker

Description: This is the site where more than 100 American Indian graves were unearthed in the 1930s, at the start of construction of the hatchery by the U.S. Fish and Wildlife Service. At that time, the Native American Graves Protection and Repatriation Act was not in effect, and many human remains, as well as funerary items, were crushed, stolen, looted, or destroyed. Some remains were transported to the Smithsonian Institution in Washington, DC, where they were kept in "The Nation's Attic" at the National Museum of Natural History until 2007. In 2000, authorized by the Museum of the American Indian Act, and supported by the Caddo Nation's Tribal Council and Repatriation Committee, the Caddo Nation Cultural Preservation Department began a long journey to return these remains to their ancestral home on Caddo Nation lands.

Time period: 1700–1800s

Ownership: Public (U.S. Fish and Wildlife Service)

Name: Fort Clairborne

Historic use type: Fort

Description: Fort Claiborne was established in 1804. It was named after William C. C. Claiborne, then-governor of territorial Louisiana. The fort protected United States interests on the southwestern frontier. Troops were garrisoned here almost continuously until the establishment of Fort Jesup in 1822.

Time period: 1804–1822

Ownership: Public (City of Natchitoches)

Name: Fort Seldon

Historic use type: Fort

Description: This was an American fort first occupied in 1816, and then again between November 1820 and May 1822. The site covers a square mile; a kitchen is the one structure still standing. One of the Officer's Quarters has been reconstructed and serves as a visitor center/museum.

Time period: 1816–1822

Ownership: Public (City of Natchitoches)

Name: Fort St. Jean Baptiste State Historic Site

Historic use type: Fort (reconstructed)

Description: French-Canadian trader Louis Juchereau de St. Denis was on a mission to establish trading ties with Mexico. After traveling nearly 140 leagues up the Red River, he encountered an impenetrable logjam, which prevented further navigation. He hastily built two crude huts, which grew to become Fort St. Jean Baptiste and the town of Natchitoches, the oldest permanent settlement in the entire Louisiana Purchase territory. St. Denis was named the commandant of the fort in 1722, and the colony thrived until his death in 1744. In 1731, an attack by the Natchez Indians exposed the vulnerabilities of the small French fort, prompting French officials to send engineer François Broutin to oversee the construction of a larger and stronger fortification. Although the construction of the larger fort on the west bank of the river caused Spanish officials to charge it was an invasion of Spanish territory, St. Denis politely ignored their protests. The fort continued to be garrisoned by French marines until 1762, when France's defeat in the French and Indian War forced it to cede Louisiana to Spain. Spanish authorities continued to operate the fort as a military outpost and trading center; however, the fort no longer protected a territorial boundary, so its strategic importance was diminished. Spain eventually abandoned the fort, and by the time the United States acquired the territory in 1803, it was in ruins and no longer usable. The U.S. Army built Fort Claiborne in Natchitoches to protect the western frontier.

Time period: 1700s

Ownership: Public (Louisiana Office of State Parks)

Name: Gorum Community

Historic use type: Community

Description: This area became the home of Adaeseños, the former settlers at Los Adaes, who moved here after El Presidio de Nuestra Señora del Pilar de Zaragoza de los Adaes was closed by Spanish authorities in 1773.

Time period: Post-1773

Ownership: Private

Name: Los Adaes State Historic Site
Historic use type: Mission and presidio site
Description: El Presidio de Nuestra Señora del Pilar de Zaragoza de los Adaes served as the capital of the province of Tejas from 1728 to 1773, when Spanish authorities decided to close it. Archeological excavations have found the remains of both the mission and presidio. The site is a National Historic Landmark.
Time period: 1717–1773
Ownership: Public (Louisiana Office of State Parks)

Name: Francois Roquier House
Historic use type: Trading post
Description: This was a trading post where members of the Appalachee, Coushatta, and Biloxi tribes came to purchase and exchange supplies.
Time period: 1700–1800s
Ownership: Public (State of Louisiana, Northwestern State University)

Name: Spanish Lake
Historic use type: Community
Description: This lakeside community was originally called Laguna de los Adaes, later Juan de Mora Lake, and finally Spanish Lake. Bison are reported to have watered at this site. In its report, the 1718 Alarcón Expedition provided a full description of the lake. The lake was about two leagues from El Presidio de Nuestra Señora del Pilar de Zaragoza de los Adaes, and the expedition camped about a league from the presidio. The report noted that the Cadodachos River flowed through the presidio and on to Natchitoches. The distance between presidios was 60 leagues. The nearest access point for the lake was four leagues from Natchitoches. Various kinds of fish are abundant year-round, along with many ducks of various sizes, which overwinter here.
Time period: 1718–1800s
Ownership: Private

TEXAS

HIGH POTENTIAL SEGMENTS

Bexar County

Name: Mission Road/Mission Trail and Villamain (Segment)
Historic use type: Trail segment
Description: This extensive national historic district includes 52 contributing buildings and 39 contributing sites. Mission Road follows part of the original route connecting the five main missions. The Mission Parkway study collected data on all of the local roads that connect to the main road system and documented the significance of these roads, which are mostly now city streets or National Park Service roads.
Time period: 1718
Ownership: Public (National Park Service/ City of San Antonio),

Houston County

Name: Mission Tejas State Park Trail Segment
Historic use type: Trail segment
Description: This 1.5-mile-long trail segment crosses an area that has remarkable visual integrity. The trail segment runs roughly parallel to State Road 21 and at times crosses the highway. One of the Caddo Indian sites within the state park is adjacent to the trail.
Time period: 1600s
Ownership: Public (Texas Parks and Wildlife Department)

Sabine County

Name: Lobanillo Swales
Historic use type: Trail segment
Description: Two sets of deep and parallel swales extend about one-quarter mile through the forest. One set of swales has seven parallel ruts reaching a depth of 18 feet and 12 feet wide. A state historic marker in nearby Geneva says that the historic Spanish rancho known as El Lobanillo, was located nearby. The rancho included the pueblo of

Gil Y'Barbo (1729–1809), a refuge used by his ailing mother and other refugees in 1773, when Spain evacuated colonists from western Louisiana and East Texas. It was given as a land grant to Juan Ignacio Pifermo in 1794, and inherited in the early 1800s by John Maximillian (ca. 1778–1866).
Time period: 1700–1800s
Ownership: Private

HIGH POTENTIAL SITES

Bexar County

Name: Acequia Madre de Mission de Valero
Historic use type: Irrigation Structure
Description: This site was described by Spanish expedition leader Ramón de Alarcón in 1691. It was a visita, or satellite mission, of Mission de Valero.
Time period: 1690s
Ownership: Public (City of San Antonio/San Antonio River Authority)

Name: Comanche Lookout
Historic use type: Natural landmark
Description: Comanche Lookout Park is a 96-acre public park owned by the City of San Antonio. It is the fourth highest point in Bexar County, with an elevation of 1,340 feet. The Cibolo floodplain lies at the base of this escarpment, between the Gulf Coastal Plain and the Edwards Plateau. American Indians used this hill as a vantage point for warfare and hunting. Apache, and later, Comanche Indians dominated the area as they hunted along waterways, including nearby Cibolo Creek. The hill was also a prominent landmark for travelers in the 18th and 19th centuries. One of several routes of El Camino Real de los Tejas extended past the base of the hill. The road followed earlier American Indian travel routes.
Time period: 1700–1800s
Ownership: Public (City of San Antonio)

Name: Iglesia de Nuestra Señora de la Candelaria y Guadalupe/San Fernando Cathedral
Historic use type: Church
Description: Listed in the National Register of Historic Places, this was the parish church of the villa of San Fernando de Bexar, which was built between 1737 and 1749 and restored in 1839. The gothic Cathedral of San Fernando, built between 1868 and 1873, incorporated portions of the existing Spanish church.
Time period: 1737–present
Ownership: Archdiocese of San Antonio

Name: Loma Alta
Historic use type: Natural landmark
Description: Legal documents indicate that, in 1765, Loma Alta was used as a landmark in determining the boundaries of Rancho San Lucas of Mission San José in a dispute involving Fray Pedro Ramírez de Arellano.
Time period: 1700–1800s
Ownership: Private

Name: Mission Espada Aqueduct
Historic use type: Irrigation feature
Description: Listed in the National Register of Historic Places, this aqueduct is an important structure associated with Mission Espada.
Time period: 1700s
Ownership: Public (National Park Service)

Name: Mission Espada Dam
Historic use type: San Antonio River crossing/Irrigation feature
Description: Listed in the National Register of Historic Places, this dam is a Spanish Colonial irrigation feature, which served as a river crossing, connecting the local network of roads between missions on both banks of the San Antonio River.
Time period: 1700s
Ownership: Public (National Park Service/ San Antonio River Authority)

Name: Mission Nuestra Señora de la Purísima Concepción de Acuña
Historic use type: Mission
Description: Listed in the National Register of Historic Places, this site includes a Spanish Colonial mission and associated grounds. The church has exceptional architectural preservation (including intact frescos) and is the oldest unrestored stone church in the

United States. The mission was originally founded in 1716 in East Texas as Concepción de los Ais. It was temporarily relocated to the area of present-day Austin in 1730 before being reestablished at its final location in Bexar County. The mission is still in use.
Time period: 1731–1824
Ownership: Public (National Park Service)

Name: Mission San Antonio de Valero, third site (the Alamo)
Historic use type: Mission
Description: Listed in the National Register of Historic Places, this mission is the final site of Mission San Antonio de Valero and the site of the Battle of the Alamo. It is now interpreted by the Daughters of the Republic of Texas.
Time period: 1724-1793
Ownership: Public (Daughters of the Republic of Texas)

Name: Mission San Francisco de la Espada
Historic use type: Mission
Description: Listed in the National Register of Historic Places, this mission was originally founded in 1690 as San Francisco de los Tejas near present-day Weches in Houston County. It was reestablished in San Antonio in 1731 and changed its name. The original buildings at Espada, the farthest south of the five missions near San Antonio, were undoubtedly of adobe. A wall surrounded the church (usually called a chapel), friary, granary, and workshops. Extensive farms and pastures lay nearby. By 1745, the Indians produced grain and beans, and the mission owned 1,150 head of cattle and 750 sheep. One of the few remaining early structures is the southeast bastion (fortified round tower), the only mission fort structure left intact in San Antonio. Its three-foot-thick rock walls, which contain holes for cannons and muskets, support a vaulted roof. Encompassing Espada's once-vital waterworks are a dam (one mile north), an irrigation ditch, and the only extant Spanish aqueduct in the United States.
Time period: 1731–1824
Ownership: Public (National Park Service)

Name: Mission San José Acequia
Historic use type: Irrigation feature
Description: Listed in the National Register of Historic Places, this is an acequia, or irrigation ditch, constructed to serve the original location of Mission San José. It may have been in use until early in the 20th century.
Time period: 1722–present
Ownership: Multiple (National Park Service, private and City of San Antonio)

Name: Mission San José y San Miguel de Aguayo, third site
Historic use type: Mission
Description: Listed in the National Register of Historic Places, this was the final site of Mission San José y San Miguel de Aguayo.
Time period: 1739–1824
Ownership: Public (National Park Service)

Name: Mission San Juan Acequia
Historic use type: Irrigation feature
Description: Listed in the National Register of Historic Places, this acequia is associated with Mission San Juan.
Time period: 1700s
Ownership: Public (National Park Service)

Name: Mission San Juan Capistrano
Historic use type: Mission
Description: Listed in the National Register of Historic Places, this Spanish Colonial mission was previously called San José de los Nazonis and was relocated from East Texas.
Time period: 1731–1824
Ownership: Public (National Park Service)

Name: Mission San Juan Dam
Historic use type: Irrigation feature/River crossing
Description: Listed in the National Register of Historic Places, this Spanish Colonial irrigation feature served as a river crossing, connecting the local network of roads between missions on both banks of the San Antonio River. The feature was excavated in 1970s by the National Park Service.
Time period: 1700s
Ownership: Public (National Park Service)

Name: Nogales Crossing
Historic use type: River Crossing
Description: This ford is listed in the National Register of Historic Places. Ivey notes that the boundaries of the mission lands of Nuestra Señora de la Purísima de la Concepción extended to a point called the Nogales Crossing, which he states is at the San Juan Dam on the San Antonio River, and that this spot marks one of the boundaries for Mission San Juan.
Time period: 1700s
Ownership: Public (Multiple management agencies)

Name: Padre Navarro House
Historic use type: Residence
Description: Listed in the National Register of Historic Places, this was a residence constructed by the Mission Concepción parish priest, Padre Navarro.
Time period: early 1800s
Ownership: Private

Name: Pérez Cemetery/Rancho de Pérez
Historic use type: Ranch/Cemetery
Description: This is a state archeological landmark that is likely part of the ranch headquarters of Rancho de Pérez, part of the Ignacio Pérez land grant. The site is located north of the Medina River and has been preserved and protected by the Pérez family for more than a century. There is a chapel at the cemetery, which was constructed on top of the foundation of the original Spanish Colonial period chapel. Some elements of the original chapel remain.
Time period: late 1700s/early 1800s
Ownership: Private

Name: Presidio San Antonio de Bexar, first site (San Pedro Springs)
Historic use type: Presidio/village/paraje
Description: Listed in the National Register of Historic Places, San Pedro Springs was an American Indian village named Yanaguana and probably began to be used as a paraje as early as 1692. It is also mentioned in the 1709 expedition. Clark and McGraw (1991) noted that the paraje known as "Ojo de Agua de San Pedro" was referenced in multiple historic documents. In 1718, the first presidio and villa of San Fernando de Bexar were founded here (both later moved). In 1729, a royal charter rededicated the area as an ejido, or public lands.
Time period: 1692
Ownership: Public (City of San Antonio)

Name: Presidio San Antonio de Bexar, second site/Governor's Palace/Casa del Capitán
Historic use type: Presidio
Description: This national historic landmark was the final site of the Presidio San Antonio de Bexar. The building is primarily a 19th-century reconstruction on the foundation of the original building. The site, known popularly as the Governor's Palace, was actually the residence of the captain of the presidio until 1773, followed by the senior officer. Marqués de Aguayo began construction in 1722, but there is a date of 1749 over the doorway. Construction may never have been completed during the Spanish period. The present building is a reconstruction completed in 1930.
Time period: 1722
Ownership: Public (City of San Antonio).

Name: Sabinitas/Jett/Palo Alto Crossing
Historic use type: Connecting side trail/ Medina River Crossing
Description: This ford is a state archeological landmark. It crossed the Medina for the Camino de los Palos Altos known to the Spanish as Paso Sabinitas.
Time period: 1700s
Ownership: Private

Name: La Villita Historic District/Villa de San Fernando/El Pueblo de San José y Santiago del Alamo /Las Islitas
Historic use type: Village/town
Description: Listed in the National Register of Historic Places, these four settlements are essentially contiguous and therefore are counted together as a complex. The historic district includes 27 contributing buildings, structures, and archeological remains dating to the Spanish period and later, with influ-

ences from later German settlements. La Villita was the civil settlement that grew up as a barrio around the Presidio San Antonio de Bexar.
Time period: 1700s
Ownership: Private

Name: Yturri-Edmunds Mill
Historic use type: Mill
Description: Part of the Mission Parkway Historic and Archeological District, this structure was originally a mill that was later converted to a residence. The mill was built in 1820 by Manuel Yturri Castillo. It is part of a site with several 19th-century buildings and is open to the public. The site is located on former lands of Mission Concepción.
Time period: 1820
Ownership: Public (City of San Antonio)

Brazos County

Name: Rye School Loop Swale
Historic use type: Trail segment
Description: American explorer Zebulon Pike made references to camping in the area in his diary.
Time period: 1800s
Ownership: Public (City of College Station)

Cherokee County

Name: Caddo Mounds Trace No. 1
Historic use type: Road segment
Description: Both the magnetometer data of existing subsurface swales and the 1806–1807 Juan Pedro Walker map clearly indicate the relationship of El Camino Real de los Tejas National Historic Trail to the three Caddo Mounds. A preliminary survey of the surrounding landscape during a National Park Service evaluation field trip confirmed that there is only one possible route for the trail to take north of the mounds. The mounds and the trail's relationship to them is also discussed in primary Spanish documents. For example, in 1767, La Fora records passing just north of the mounds, stating: "We forded this river [the Neches] in shallow water and one league beyond we climbed a hill. On the summit is a mound which appears to be hand-made."
Time period: pre-1700–1800s
Ownership: Public (Texas Historical Commission)

Name: Caddo Mounds Trace No. 2
Historic use type: Road segment
Description: Both the magnetometer data of existing subsurface swales and the 1806–1807 Juan Pedro Walker map clearly indicate the relationship of the trail to the three Caddo Mounds. A preliminary survey of the surrounding landscape during a National Park Service evaluation field trip confirmed that there is only one possible route for the trail to take north of the mounds. The mounds and the trail's relationship to them is also discussed in primary Spanish documents. For example, Nicolás La Fora writes in 1767 of passing just north of the mounds by stating "We forded this river [the Neches] in shallow water and one league beyond we climbed a hill. On the summit is a mound which appears to be hand-made."
Time period: pre-1700–1800s
Ownership: Public (Texas Historical Commission)

Name: George C. Davis Site/Indian Mounds
Historic use type: American Indian village/paraje
Description: This is a primarily Caddo Indian multicomponent site. Some portions of the village, or a related site, may extend beyond the state park boundaries. It is listed in the National Register of Historic Places.
Time period: Pre-1700s
Ownership: Public (Texas Historical Commission)

Dimmit County

Name: Crossing/Paraje at San Pedro Creek
Historic use type: American Indian village/Crossing/Paraje
Description: This is a site with petroglyphs. It is referenced as "Campo de Cuervo" in the Texas Historic Sites Atlas, but the location is more consistent with the San Pedro paraje

on the Lower Presidio Road. The site is a well-preserved late-period American Indian site. The owners appear to be very committed to preserving and researching the site.
Time period: 1600–1700s
Ownership: Private

Frio County

Name: Frio Town Crossing
Historic use type: River crossing
Description: This Frío River ford is north of Old Frio Town, which was built primarily to serve as a station along the Upper Presidio Road.
Time period: 1691–1827
Ownership: Private

Goliad County

Name: Cabeza Creek Crossing on La Bahía-Bexar Road and Trail Segment
Historic use type: Creek crossing and swales
Description: Part of a national register historic district, this is a gravel-bar ford on the Cabeza Creek associated with La Bahía-Bexar Road. Artifacts recorded for the site are American Indian; they are likely prehistoric, but could also be protohistoric or historic. Swales stretch on both sides of the crossing.
Time period: ca. 1700s
Ownership: Private

Name: Confluence of Cabeza Creek & San Antonio River
Historic use type: Natural landmark
Description: A component of a national register historic district, this confluence site was described by explorer Jean Louis Berlandier, who mentioned that Indians were camped on the banks of the river.
Time period: ca. 1700–early 1800s
Ownership: Private

Name: Mission Nuestra Señora del Espíritu Santo de Zuñiga (La Bahía), third site
Historic use type: Mission
Description: Listed in the National Register of Historic Places, this mission the final location of Mission Nuestra Señora del Espíritu Santo de Zuñiga.
Time period: 1749–1830
Ownership: Public (Goliad State Historic Park – Texas Historical Commission)

Name: Mission Nuestra Señora del Rosario de los Cujanes
Historic use type: Mission
Description: Listed in the National Register of Historic Places, this is an important Spanish Colonial mission.
Time period: 1764–1826
Ownership: Private (By appointment only)

Name: Presidio Nuestra Señora de Loreto de la Bahía, third site
Historic use type: Presidio
Description: This presidio is a national historic landmark. It was partially reconstructed in the 1960s.
Time period: 1749–1830
Ownership: Catholic Diocese

Name: Rancho Señor San José/Rancho de Capitán Piscina
Historic use type: Ranch headquarters
Description: Part of a national register historic district, sites at this ranch headquarters were recorded as archeological site numbers 41GD84, 41GD85, and 41GD86. Another site that may be associated with this ranch is No. 41GD49, which is a burial site containing both prehistoric and historic artifacts. The description of the historic artifacts suggests they may be from an early period.
Time period: 1700s
Ownership: Private

Hays County

Name: Comal Spring
Historic use type: Springs/paraje
Description: Spanish explorers discovered Comal Springs in 1691. The many American Indian tribes they found living there referred to it as Conaqueyadesta, translated as "where the river has its source." In an excerpt from his diary, Espinosa, who accompanied Domingo Ramon's expedi-

tion in 1716, described it this way: "Groves of inexpressible beauty are found in this vicinity. The waters of the Guadalupe are clear, crystal and so abundant that it seemed almost incredible to us that its source arose so near. It makes a delightful grove for recreation." Comal is the Spanish word for "basin," which somewhat describes the local geography. In 1764, the springs were visited by French explorer Louis Juchereau de St. Denis. They eventually became a paraje, or resting place, on the El Camino Real de los Tejas.
Time period: 1691–1800s
Ownership: Public (city of New Braunfels)

Name: McGehee Crossing
Historic use type: River Crossing
Description: This is a ford of the San Marcos River, located on the Old Bastrop Road. There is a state historic marker that indicates that Louis Juchereau de St. Denis traveled this route to establish trade between the French in Louisiana and the Spanish of Coahuila Province on the Rio Grande in 1714. The first settlement at the San Marcos River crossing along the trail route was Villa San Marcos de Neve, established by Spanish authorities in 1808. It was abandoned just four years later, as the Mexican Revolution began to brew. In 1820 and 1821, Texas colonists Moses Austin (1761–1821) and his son, Stephen F. Austin (1793–1836), very likely crossed the San Marcos River near this point. About 1846, Thomas Gilmer McGehee (1810–1890) settled on a Mexican land grant on the east side of the river. In 1859, Charles L. McGehee, Jr. (1837–1929), Thomas's nephew, acquired 1,200 acres of land bordered by El Camino Real de los Tejas and the river.
Time period: 1690s
Ownership: Private

Name: Old Bastrop Road/County Line Road Trail Segment
Historic use type: Trail swales
Description: A series of trail swales located on either side of the Old Bastrop Road/ County Line Road, this is the route followed by the Old San Antonio Road from the York Creek Cemetery in Comal County past the San Marcos River, where its name becomes County Line Road. Swales were recorded along this stretch of road at various points. McGraw et al cite numerous primary and secondary sources used to track the road. The road is also known as County Road 266 in Hays County.
Time period: 1600s
Ownership: Private

Name: San Marcos de Neve
Historic use type: Village/town
Description: A 1951 aerial photo shows intact road segments at this former townsite, which is located in an agricultural field atop a hill. A study conducted in the 1990s indicates that the site is eligible for the National Register of Historic Places under criteria A, C, and D.
Time period: 1808–1812
Ownership: Private

Name: San Marcos Spring
Historic use type: Paraje
Description: This paraje was repeatedly referenced in multiple historic documents. Immense springs rise at the Balcones Escarpment, a geologic fault that slices across the state, separating upland from lowland Texas. The abundance of freshwater attracted American Indians of the Central Texas region, and later European explorers and settlers. The name "San Marcos" first appears in the records of the Alonso de León Expedition of April 26, 1689 (Saint Mark's Day), marking another Texas river; it was first applied to this river in 1709. Following later explorations, several Spanish missions were temporarily located here in 1755.
Time period: 1700s
Ownership: Public (Texas State University)

Name: Willow Springs Creek Crossing
Historic use type: River Crossing
Description: This archeological site yielded lithic scatter near a ford of El Camino Real de los Tejas, and includes a well-preserved segment of the trail.
Time period: 1690s
Ownership: Public (Texas Department of Transportation)

Karnes County

Name: Carvajal Crossing

Historic use type: Creek Crossing
Description: This rock-bottomed ford across Cibolo Creek in north central Karnes County was the best-known ford along the old cart road that traveled from the Texas coast to San Antonio. Situated halfway between Goliad and San Antonio, the crossing was close to the old Fuerte del Santa Cruz and the ranch headquarters of Andrés Hernandez, who may have owned the first ranch in Texas. According to old maps and journals, at different times the crossing was called Tawakoni Crossing, the Crossing of the Tehuacanas, or Cibolo Crossing. About 1830, José Luis Carvajal, scion of a Canary Island family from San Antonio, acquired the ranch property adjoining the crossing; since that time the ford has been called Carvajal Crossing. The crossing is located south of the Farm to Market Road 887 bridge over Cibolo Creek.
Time period: 1700s
Ownership: Private

Name: Fuerte del Cíbolo

Historic use type: Fort
Description: This fort was not a formally designated presidio; however, it played an important role in protecting San Antonio and La Bahía at a time of increasing Spanish settlement in this area, following the decommission of missions and presidios in East Texas, including Orcoquisac/Anahuac, San Sabá, and Cañón. The original fort may have been established in 1735 and abandoned in 1737, but it is not clear if it was reestablished on the same site. Fuerte del Cíbolo was located at a natural ford of Cibolo Creek known as Carvajal Crossing (see above entry). This fort likely had more than one location and has been confirmed archeologically.
Time period: 1770s–1780s
Ownership: Private

Maverick County

Name: Paso de Francia/Paso de los Pacuaches

Historic use type: River crossing
Description: This ford of the Río Grande may have been used by de León in 1689 or 1690; it was well known throughout the Spanish period and later. Explorer Jean Louis Berlandier called the crossing "Paso de los Pacuaches." According to Pressler's 1867 map, the ford is just south of the confluence of Indio Creek and the Río Grande.
Time period: 1700s
Ownership: Private
Note: The team responsible for evaluating high potential sites and segments was not able to visit these sites during the evaluation period due to hunting activities on this privately owned property; however, other National Park Service staff from the National Trails Intermountain Region office in Santa Fe have previously visited the river crossing site and confirm its integrity.

Milam County

Name: Apache Pass

Historic use type: River crossing
Description: This ford is located between archeological site No. 41MM10 (a possible presidio) and No. 41MM18 (probably Mission Candelaria). There are no recorded sites in the immediate vicinity of the crossing. The visual integrity of this site has been compromised by the construction of a bridge across the creek. The ford is located within the San Xavier Mission Complex Archeological District, listed in the National Register of Historic Places, which protects three missions and a presidio.
Time period: Unclear
Ownership: Private

Name: Mission Nuestra Señora de la Candelaria

Historic use type: Mission
Description: This mission is listed in the National Register of Historic Places as part of the San Xavier Mission Complex Archeological District.
Time period: 1749–1755
Ownership: Private

Name: Mission San Francisco Xavier de Horcasitas

Historic use type: Mission
Description: This mission is listed in the National Register of Historic Places as part of the San Xavier Mission Complex Archeological District.
Time period: 1746–1756
Ownership: Private

Name: Mission San Ildefonso

Historic use type: Mission.
Description: This mission is listed in the National Register of Historic Places as part of the San Xavier Mission Complex Archeological District.
Time period: 1749–1755
Ownership: Private

Name: Presidio San Francisco Xavier de Gigedo

Historic use type: Presidio
Description: This presidio is listed in the National Register of Historic Places. Based on its location relative to the other sites, this presidio is thought to be part of the San Xavier Mission Complex Archeological District. Documents referencing this presidio were discovered in the archives in Seville, Spain, in 2007 and 2008, and a study of this and other presidios in Texas is ongoing. A professional archeologist is currently trying to verify the location of the presidio.
Time period: 1750–1757
Ownership: Private

Name: Sugarloaf Mountain

Historic use type: Natural landmark
Description: References to this landscape feature date from the 1750s.
Time period: 1700s
Ownership: Private

Nacogdoches County

Name: Acosta-Durst-Taylor House

Historic use type: House
Description: Archeological investigations have shown that the 1820s-era Durst-Taylor House was built upon the dirt floor belonging to the 1790s-era Acosta House that preceded it.
Time period: 1790s
Ownership: Public (City of Nacogdoches).

Name: Adolphus Stern House

Historic use type: House
Description: This state historic landmark is listed in the National Register Historic Properties. It consists of a 19th-century house that belonged to Adolphus Stern, a prolific writer who took part in the Fredonia Rebellion. Archeological investigations verify the authenticity of the structure. It is now a private museum, open to the public.
Time period: 1820s
Ownership: Private, but open to the public

Name: Old Stone Fort/La Casa de Piedra

Historic use type: Trading post
Description: Built by Antonio Gil Y'Barbo as a market or storage area for the town of Nacogdoches, the trading post is located on Old San Antonio Road and La Calle del Norte. This location may have also been associated with the Barr and Davenport Trading Post. The original post was torn down in 1902. The Stone Fort Museum is a replica constructed on the grounds of Stephen F. Austin State University.
Time period: 1779–1902
Ownership: Public (Stephen F. Austin State University)

Name: Pocket Park Site

Historic use type: possible house site
Description: This is a site with Spanish Colonial–period artifacts.
Time period: 1700–1800s
Ownership: Public (City of Nacogdoches)

Name: Washington Square Moundsite

Historic use type: Burial and temple site
Description: This Caddo Indian templesite and associated burial mounds is located near the center of Hasinai Culture in the area of Mission Concepción.
Time period: Pre-1700s
Ownership: Public (Nacogdoches Independent School District)

Nacogdoches/Rusk Counties

Name: Mission San José de los Nazonis.
Historic use type: Mission
Description: This mission was founded by the Domingo Ramón Expedition in 1716. It served the Nazoni Indians, on a branch of Shawnee Creek, in what became northwestern Nacogdoches County. The mission was abandoned in 1719, following French incursions from Louisiana, but was restored by the Marqués de Aguayo in 1721. In 1730, it was removed to the Colorado River in Texas, near the site of Austin's Zilker Park, where it stood alongside the San Francisco de los Neches and Nuestra Señora de la Purísima Concepción de los Hasinai missions. The following year, all three Austin missions were moved to the San Antonio River and reestablished as San Juan Capistrano Mission.
Time period: 18th century
Ownership: Private

Sabine County

Name: Gaines-Oliphant House
Historic use type: residence of ferry operator
Description: This 1818 log house was built by James Gaines, owner of the Gaines Ferry, for his in-laws. It is listed in the National Register of Historic Place and is being restored by the Daughters of the Republic of Texas.
Time period: 1800s
Ownership: Private (Daughters of the Republic of Texas)

San Augustine County

Name: Garrett Trace
Historic use type: Trail swale
Description: The trail swale is located in front of a two-story house belonging to William Garrett (1808–1884) that is now a state historic landmark. Garrett purchased this land soon after coming to Texas in 1830. In 1861, he erected the house using pine boards from his nearby sawmill. Built by slave labor, the structure had unusual free-standing columns in front and carved mantels over its six fireplaces. Garrett's home was often a stop for travelers on the Old San Antonio Road.
Time period: 1700–1800s
Ownership: Private

Name: Mission Nuestra Señora de los Dolores de los Ais, second site
Historic use type: Mission
Description: This mission is a state historic landmark and is listed in the National Register of Historic Places.
Time period: 1717–1773
Ownership: Public

Travis County

Name: McKinney Falls State Park/ Onion Creek Crossing
Historic use type: Road swale
Description: Although the ford for Onion Creek was probably located elsewhere, this site offers the opportunity to experience a setting similar to that of the actual creek crossing during the historic period.
Time period: 1700–1800s
Ownership: Public (Texas Parks and Wildlife Department)

Victoria County

Name: Guadalupe River Dam
Historic use type: Irrigation Feature
Description: This irrigation feature is associated with a significant mission site and is part of a property listed in the National Register of Historic Places.
Time period: ca. 1726–1749
Ownership: Private

Name: Mission Creek Dam and Acequia Site
Historic use type: Irrigation Feature
Description: This is a dam reportedly constructed by Araname Indian converts from the nearby mission. It is listed in National Register of Historic Places.
Time period: ca. 1726–1749
Ownership: Private

Name: Mission Espíritu Santo de Zúñiga Quarry
Historic use type: Quarry
Description: This Spanish quarry is associated with important local missions closely tied to the early history of the trail.
Time period: ca. 1722–1749.
Ownership: Private

Name: Mission Nuestra Señora del Espíritu Santo de Zúñiga (La Bahía), second site
Historic use type: Mission
Description: Unlike most Spanish missions excavated during the Work Progress Administration era, this mission's extensive ruins have not been reconstructed. It is an excellent example of unaltered early Spanish Colonial architecture.
Time period: ca. 1726–1749
Ownership: Private

Name: Presidio Nuestra Señora de Loreto de la Bahía, first site/Fort Saint Louis site
Historic use type: Presidio
Description: Originally this site listed in National Register of Historic Places was the location of French Fort St Louis established by La Salle in 1685. When the Spanish finally discovered the remains of the French settlement in 1689, they buried the cannons and burned the buildings. The Spanish established a presidio on the site in 1721. The original mission site of Nuestra Señora del Espiritu Santo de Zúñiga (La Bahía) is nearby.
Time period: 1685–1726
Ownership: Private

Name: Presidio Nuestra Señora de Loreto de la Bahía, second site
Historic use type: Presidio
Description: This is the second site of the Presidio Nuestra Señora de Loreto de la Bahía.
Time period: 1726–1749
Ownership: Private

Name: Tonkawa Bank Site – a submission of Mission Nuestra Señora del Espíritu Santo de Zúñiga (La Bahía), second site
Historic use type: Visita, or satellite mission/possibly second site of primary mission
Description: This mission site is listed in the National Register of Historic Places. Based on evidence from an archeological study, this mission is contemporaneous with the Mission Valley site of Mission Nuestra Señora del Espíritu Santo de Zúñiga, and may be the mission's second location or its visita (satellite parish). According to maps of the area, the mission was probably located near the ford for the Guadalupe River on the trail route that went west and northwest through Victoria County.
Time period: 1726–1749
Ownership: Private

Webb County

Name: Los Corralitos
Historic use type: Residence
Description: This windowless structure has two rows of troneras (gunports)—one at roof level to defend against Indian attacks. It is made out of rejoneado, the locally quarried sandstone. This site is a good example of the type of structure that was developed to fend off attacks from American Indian groups.
Time period: Post-1750
Ownership: Private

Name: El Paso de Jacinto/Paso de los Indios
Historic use: River crossing
Description: Around 1746, explorer Jacinto de León discovered a ford that allowed safe passage across the Río Grande in this vicinity; it had probably been used for centuries by American Indians. The ford came to be known as Paso de Jacinto; the Laredo community, which began as a ranch established by Tomás Tadeo Sánchez de la Barrera, grew up around it. In 1754, colonizer Jose de Escandón asked Sánchez to find a place for a settlement along the Nueces River. Sanchez failed to identify a suitable location on the

Nueces, and instead, in May 1755, settled along the Río Grande, downstream of Paso de Jacinto. Two years later, Agustín López de la Cámara Alta reported that the settlement at the crossing was important in sustaining what had become a major business and military route across the Río Grande. He also stated that the settlers' pursuits mainly involved breeding cattle and gathering salt from regional salt lakes. Most of the residents' more than 10,000 animals recorded in a census that year were smaller livestock, such as sheep and goats. By the turn of the 19th century, the crossing was marked on maps as Paso de los Indios; a century later, the Old Indian Crossing, as it was known in English, was a well-known landmark near the northern edge of Fort McIntosh. The significance of the ford to the history of Laredo is underscored by the presence of a nearby ranch known as Rancho Paso de los Indios. Historic features like these in Laredo offer a reminder of the impact of the trail and need for routes across the river. In 1757, this ford was recorded by Tienda de Cuervo [Bolton translation] as being the river crossing used by people with horses.
Time period: 1740s
Ownership: Private

Name: Jesús Treviño Fort and Ranch at San Ignacio
Historic use type: Fort and ranch
Description: This site is a national historic landmark.
Time period: 1830s
Ownership: Private
Note: River Pierce Foundation bought a one-half interest in the building.

Name: Rancho los Ojuelos National Historic District
Historic use type: Ranch
Description: This national historic district and state historic landmark was the ranch headquarters for the Ysidro Gutiérrez land grant established in 1830. The location of the ranch headquarters in this case was located near a large natural spring (ojuelos). This site is a good example of the type of multipurpose hacienda (socio-economic- agricultural-religious) that evolved close to Dolores in South Texas, adjacent to the Río Grande.
Time period: Post-1750s
Ownership: Private.

Name: Republic of the Río Grande Museum/Villa Antigua Border Heritage Museum
Historic use type: Residences
Description: Casa Ortiz, a component of this complex, is a state historic landmark
Time period: 1800s
Ownership: Webb County Heritage Foundation

Name: San José de Palafox Historic and Archeological District
Historic use type: Village/town/paraje
Description: This village/town/paraje is a national historic register district with one contributing sites and 12 contributing structures (No. 41WB87). San José de Palafox was a Spanish Colonial town located on a branch of the designated trail, approximately 30 miles from Laredo. Jean Louis Berlandier visited the ruins in 1828.
Time period: 1700s
Ownership: Private
Note: The evaluating team was not granted permission to access this site.

Wilson County

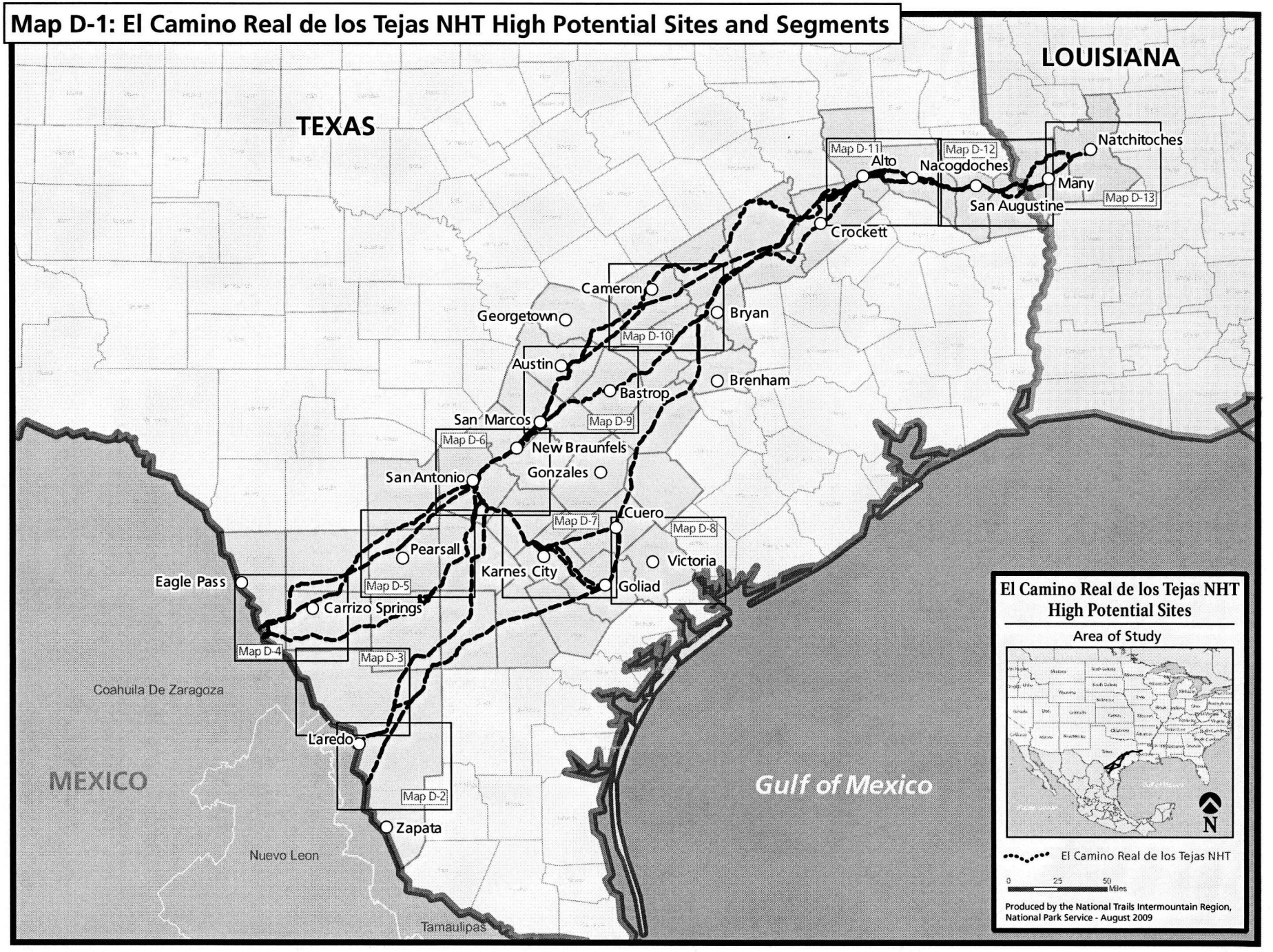
Name: Rancho de las Cabras
Historic use type: Ranch
Description: This ranch is listed in the National Register of Historic Places and is associated with Mission San Francisco de la Espada, whose ruins include standing walls. It was located on the west bank route of the Bexar–La Bahía Road.
Time period: 1700s
Ownership: Public (National Park Service)

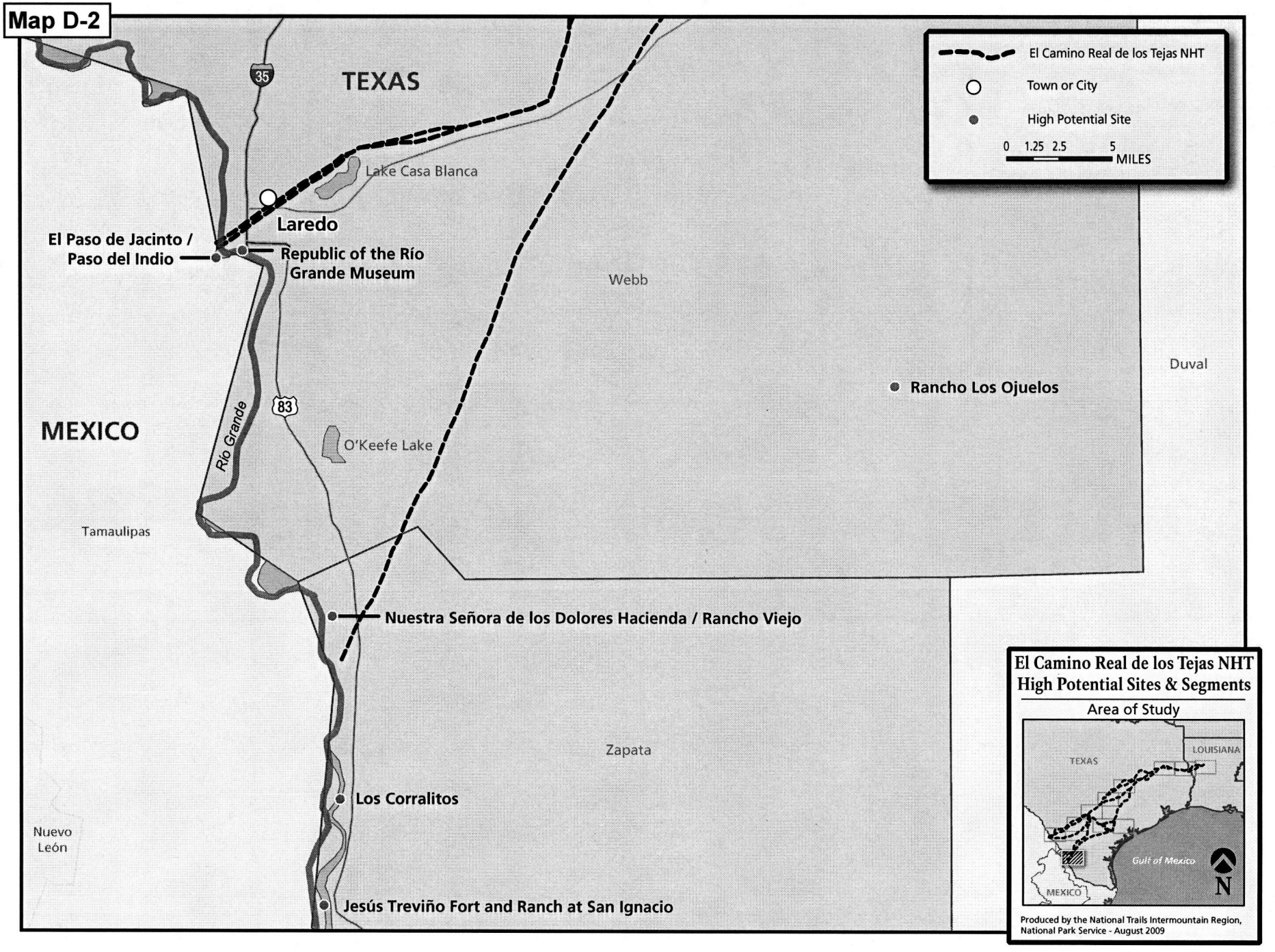
Zapata County

Name: [El Rancho] Nuestra Señora de los Dolores Hacienda/Rancho Viejo/ Dolores Viejo
Historic use type: Village/town
Description: This rancho is listed in the

National Register of Historic Places. It belonged to José Vasquez de Borrego and was the first of the Nuevo Santander ranches north of the Río Grande. It may have had the only ferry across the Río Grande in the early 1750s and was one of the destinations along the San Antonio–Laredo Road.
Time period: 1750–1851
Ownership: Private
Note: The evaluating team was not granted permission to access this site.

Map D-1: El Camino Real de los Tejas NHT High Potential Sites and Segments




Map D-2
TEXAS
35
Lake Casa Blanca
Laredo
El Paso de Jacinto /
Paso del Indio
Republic of the Río
Grande Museum
Webb
Duval
Rancho Los Ojuelos
MEXICO
Río Grande
83
O'Keefe Lake
Tamaulipas
Nuestra Señora de los Dolores Hacienda / Rancho Viejo
Zapata
Los Corralitos
Nuevo
León
Jesús Treviño Fort and Ranch at San Ignacio
El Camino Real de los Tejas NHT
Town or City
High Potential Site
0 1.25 2.5 5
MILES
El Camino Real de los Tejas NHT
High Potential Sites & Segments
Area of Study
TEXAS
LOUISIANA
Gulf of Mexico
MEXICO
N
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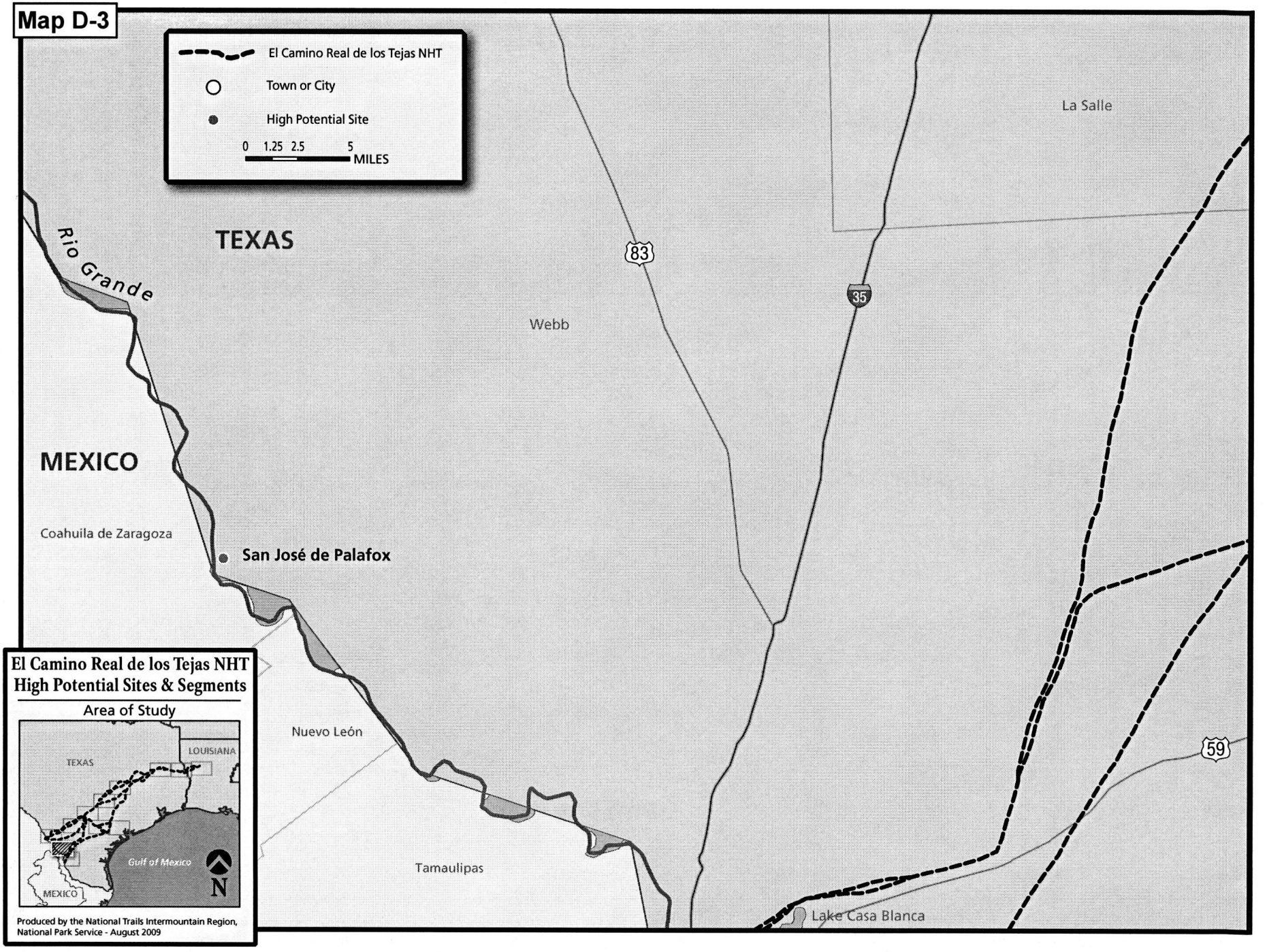
National Park Service - August 2009


Map D-3
El Camino Real de los Tejas NHT
Town or City
High Potential Site
0 1.25 2.5 5
MILES
TEXAS
Rio Grande
MEXICO
Coahuila de Zaragoza
San José de Palafox
Webb
La Salle
83
35
59
Nuevo León
Tamaulipas
Lake Casa Blanca
El Camino Real de los Tejas NHT
High Potential Sites & Segments
Area of Study
TEXAS
LOUISIANA
Gulf of Mexico
MEXICO
N
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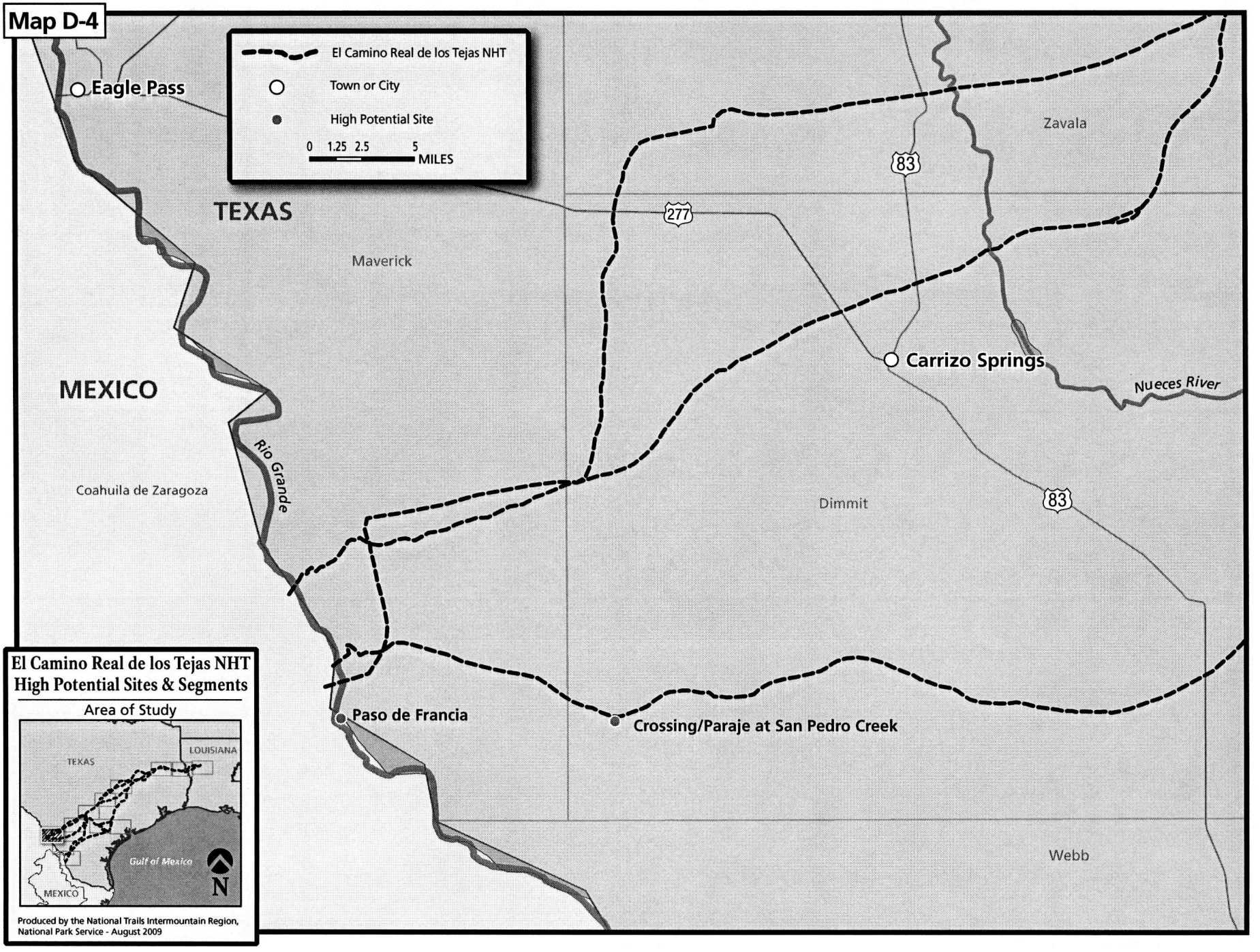
Map D-4
El Camino Real de los Tejas NHT
Town or City
High Potential Site
0 1.25 2.5 5
MILES
Eagle Pass
TEXAS
Maverick
Zavala
83
277
Carrizo Springs
Nueces River
MEXICO
Rio Grande
Coahuila de Zaragoza
Dimmit
83
Paso de Francia
Crossing/Paraje at San Pedro Creek
Webb
El Camino Real de los Tejas NHT
High Potential Sites & Segments
Area of Study
TEXAS
LOUISIANA
Gulf of Mexico
MEXICO
N
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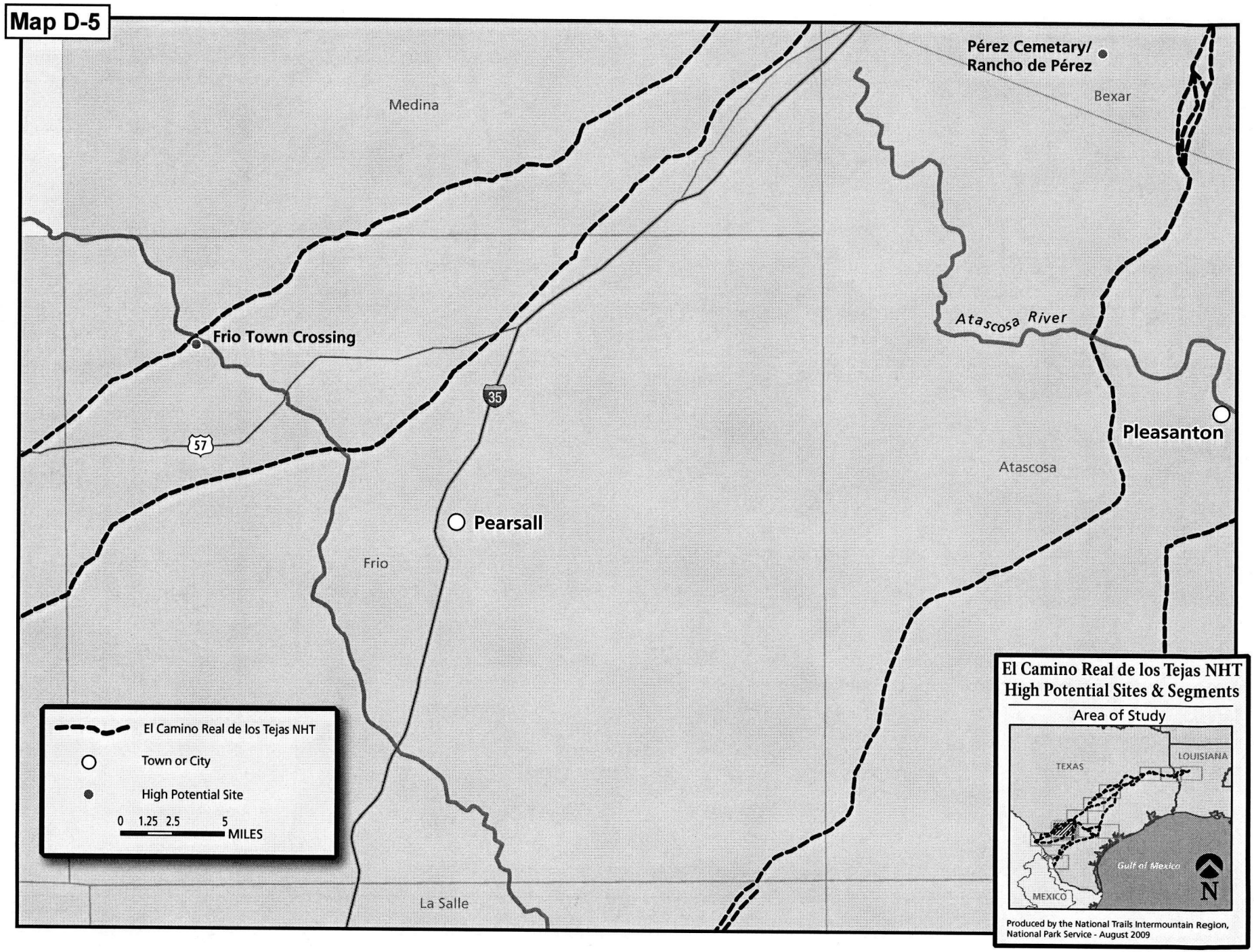
Map D-5
Pérez Cemetary/
Rancho de Pérez
Bexar
Medina
Atascosa River
Frio Town Crossing
35
57
Pleasanton
Atascosa
Pearsall
Frio
La Salle
El Camino Real de los Tejas NHT
Town or City
High Potential Site
0 1.25 2.5 5
MILES
El Camino Real de los Tejas NHT
High Potential Sites & Segments
Area of Study
TEXAS
LOUISIANA
Gulf of Mexico
MEXICO
N
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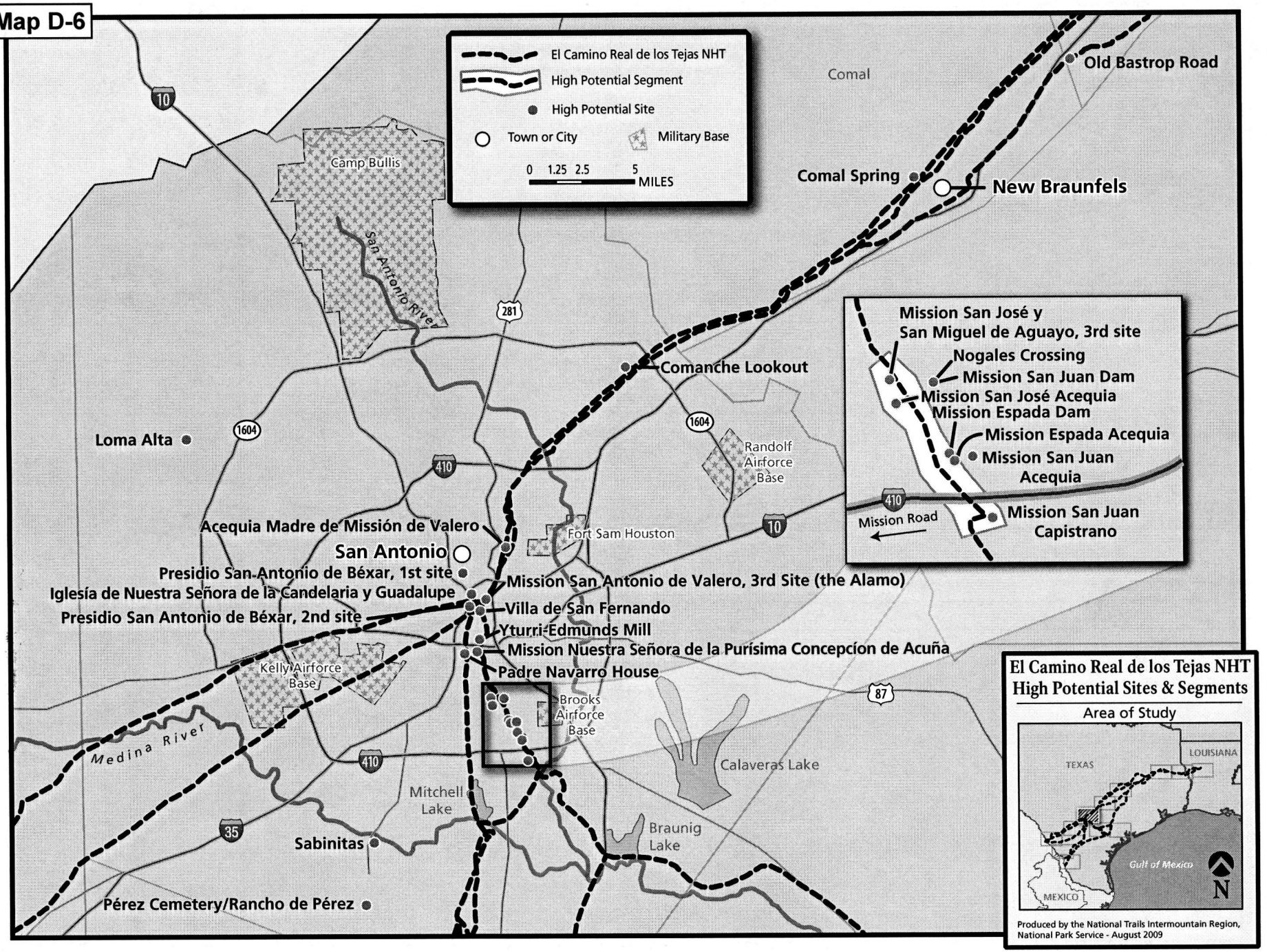
Map D-6
El Camino Real de los Tejas NHT
High Potential Segment
High Potential Site
Town or City
Military Base
0 1.25 2.5 5
MILES
Comal
Old Bastrop Road
Comal Spring
New Braunfels
Camp Bullis
San Antonio River
281
Comanche Lookout
Mission San José y
San Miguel de Aguayo, 3rd site
Nogales Crossing
Mission San Juan Dam
Mission San José Acequia
Mission Espada Dam
Mission Espada Acequia
Mission San Juan
Acequia
Mission Road
Mission San Juan
Capistrano
Loma Alta
1604
410
10
Randolf
Airforce
Base
Acequia Madre de Misión de Valero
San Antonio
Fort Sam Houston
Presidio San Antonio de Béxar, 1st site
Mission San Antonio de Valero, 3rd Site (the Alamo)
Iglesía de Nuestra Señora de la Candelaria y Guadalupe
Villa de San Fernando
Presidio San Antonio de Béxar, 2nd site
Yturri-Edmunds Mill
Mission Nuestra Señora de la Purísima Concepción de Acuña
Padre Navarro House
Kelly Airforce
Base
Brooks
Airforce
Base
87
Medina River
Calaveras Lake
Mitchell
Lake
Braunig
Lake
35
Sabinitas
Pérez Cemetery/Rancho de Pérez
El Camino Real de los Tejas NHT
High Potential Sites & Segments
Area of Study
TEXAS
LOUISIANA
Gulf of Mexico
MEXICO
N
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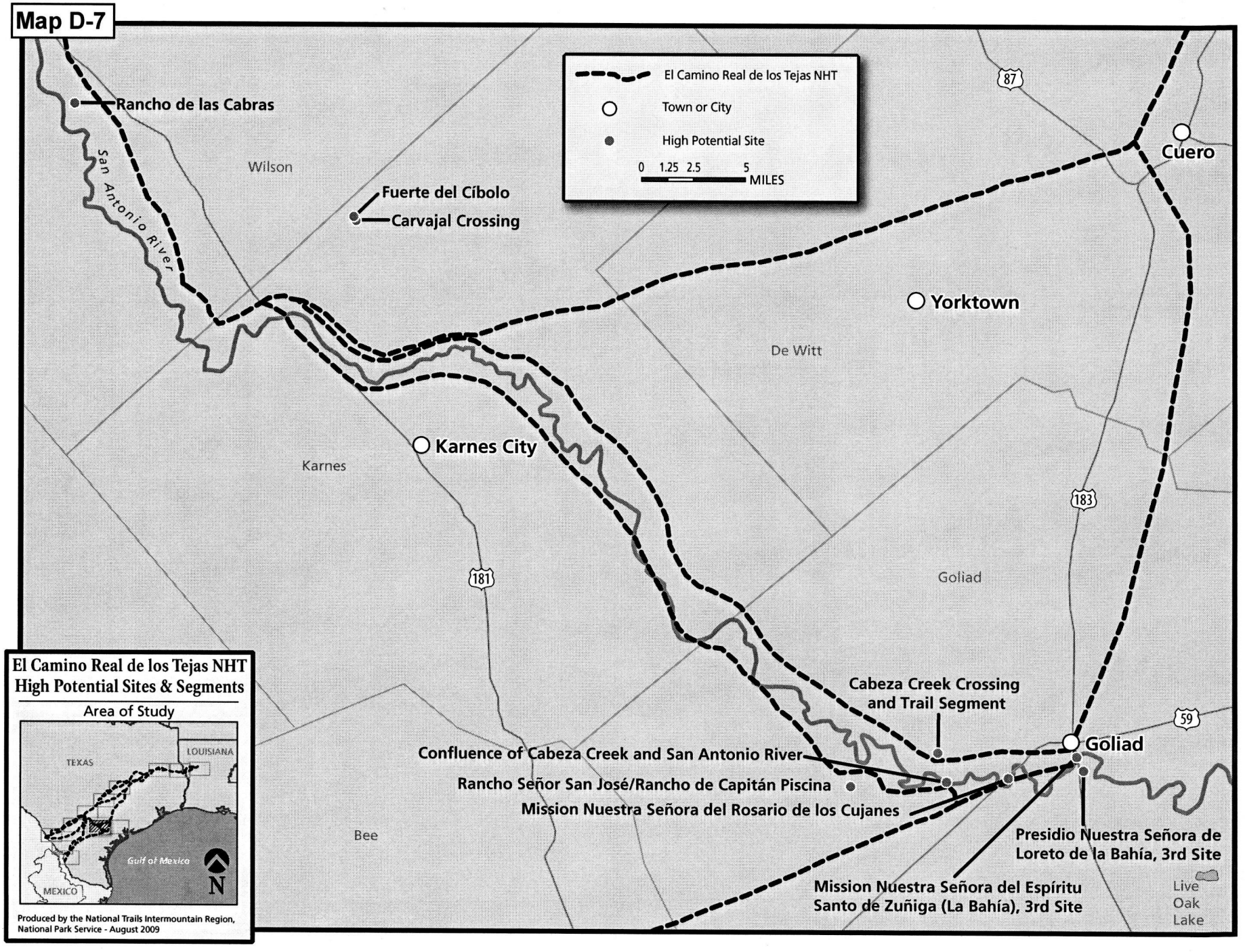
Map D-7
El Camino Real de los Tejas NHT
Town or City
High Potential Site
0 1.25 2.5 5
MILES
Rancho de las Cabras
San Antonio River
Wilson
Fuerte del Cíbolo
Carvajal Crossing
87
Cuero
Yorktown
De Witt
Karnes City
Karnes
183
181
Goliad
59
Cabeza Creek Crossing
and Trail Segment
Goliad
Confluence of Cabeza Creek and San Antonio River
Rancho Señor San José/Rancho de Capitán Piscina
Mission Nuestra Señora del Rosario de los Cujanes
Bee
Presidio Nuestra Señora de
Loreto de la Bahía, 3rd Site
Mission Nuestra Señora del Espíritu
Santo de Zuñiga (La Bahía), 3rd Site
Live
Oak
Lake
El Camino Real de los Tejas NHT
High Potential Sites & Segments
Area of Study
TEXAS
LOUISIANA
Gulf of Mexico
MEXICO
N
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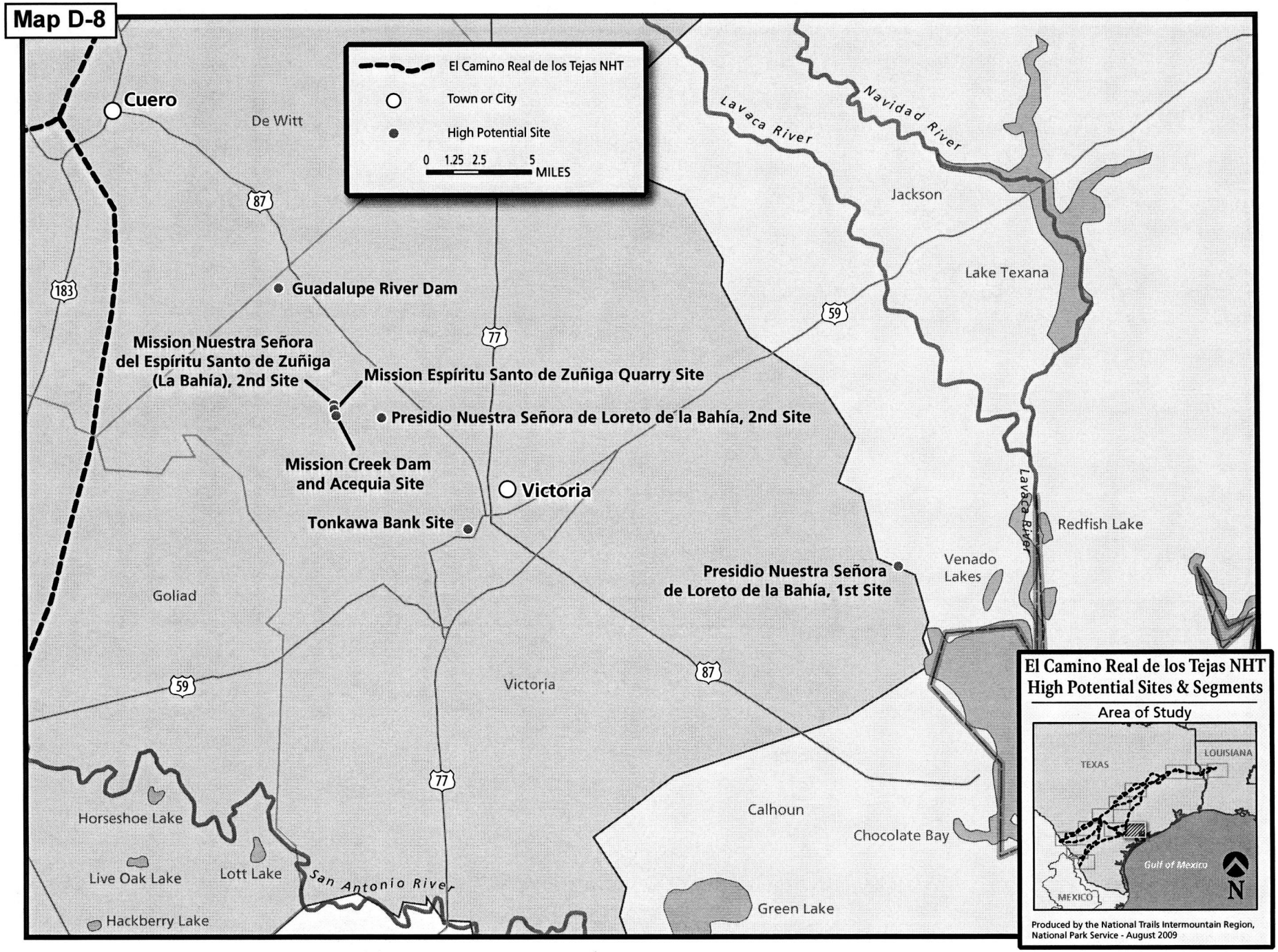
National Park Service - August 2009


Map D-8
El Camino Real de los Tejas NHT
Town or City
High Potential Site
0 1.25 2.5 5
MILES
Cuero
De Witt
Lavaca River
Navidad River
Jackson
Lake Texana
87
183
59
77
Guadalupe River Dam
Mission Nuestra Señora del Espíritu Santo de Zuñiga (La Bahía), 2nd Site
Mission Espíritu Santo de Zuñiga Quarry Site
Presidio Nuestra Señora de Loreto de la Bahía, 2nd Site
Mission Creek Dam and Acequia Site
Victoria
Tonkawa Bank Site
Redfish Lake
Venado Lakes
Presidio Nuestra Señora de Loreto de la Bahía, 1st Site
Goliad
Victoria
Calhoun
Chocolate Bay
Horseshoe Lake
Live Oak Lake
Lott Lake
San Antonio River
Hackberry Lake
Green Lake
El Camino Real de los Tejas NHT
High Potential Sites & Segments
Area of Study
TEXAS
LOUISIANA
Gulf of Mexico
MEXICO
N
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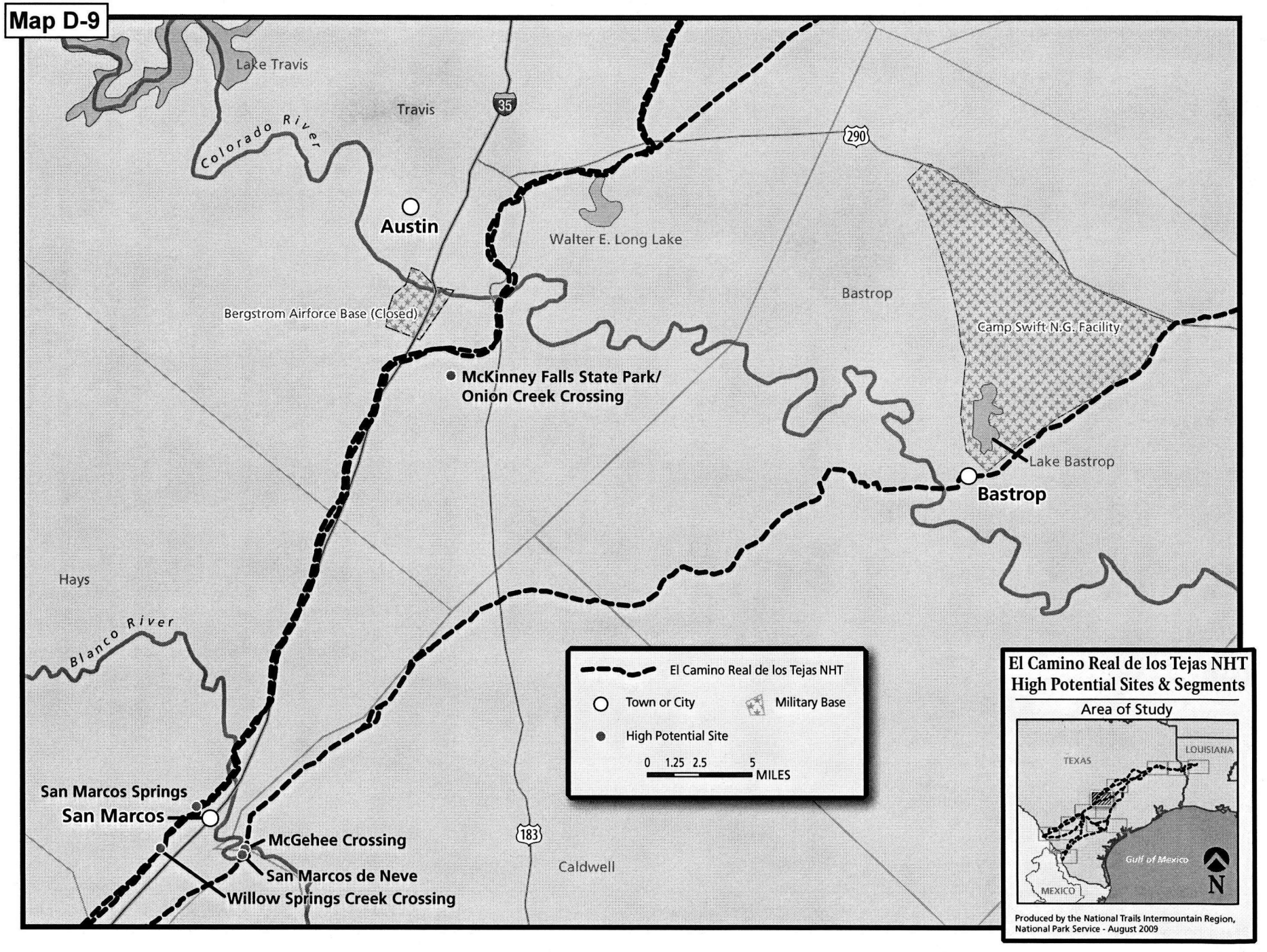
National Park Service - August 2009


Map D-9
Lake Travis
Travis
Colorado River
35
290
Austin
Walter E. Long Lake
Bergstrom Airforce Base (Closed)
Bastrop
Camp Swift N.G. Facility
McKinney Falls State Park/
Onion Creek Crossing
Lake Bastrop
Bastrop
Hays
Blanco River
El Camino Real de los Tejas NHT
Town or City
Military Base
High Potential Site
0 1.25 2.5 5
MILES
San Marcos Springs
San Marcos
McGehee Crossing
San Marcos de Neve
Willow Springs Creek Crossing
183
Caldwell
El Camino Real de los Tejas NHT
High Potential Sites & Segments
Area of Study
TEXAS
LOUISIANA
Gulf of Mexico
MEXICO
N
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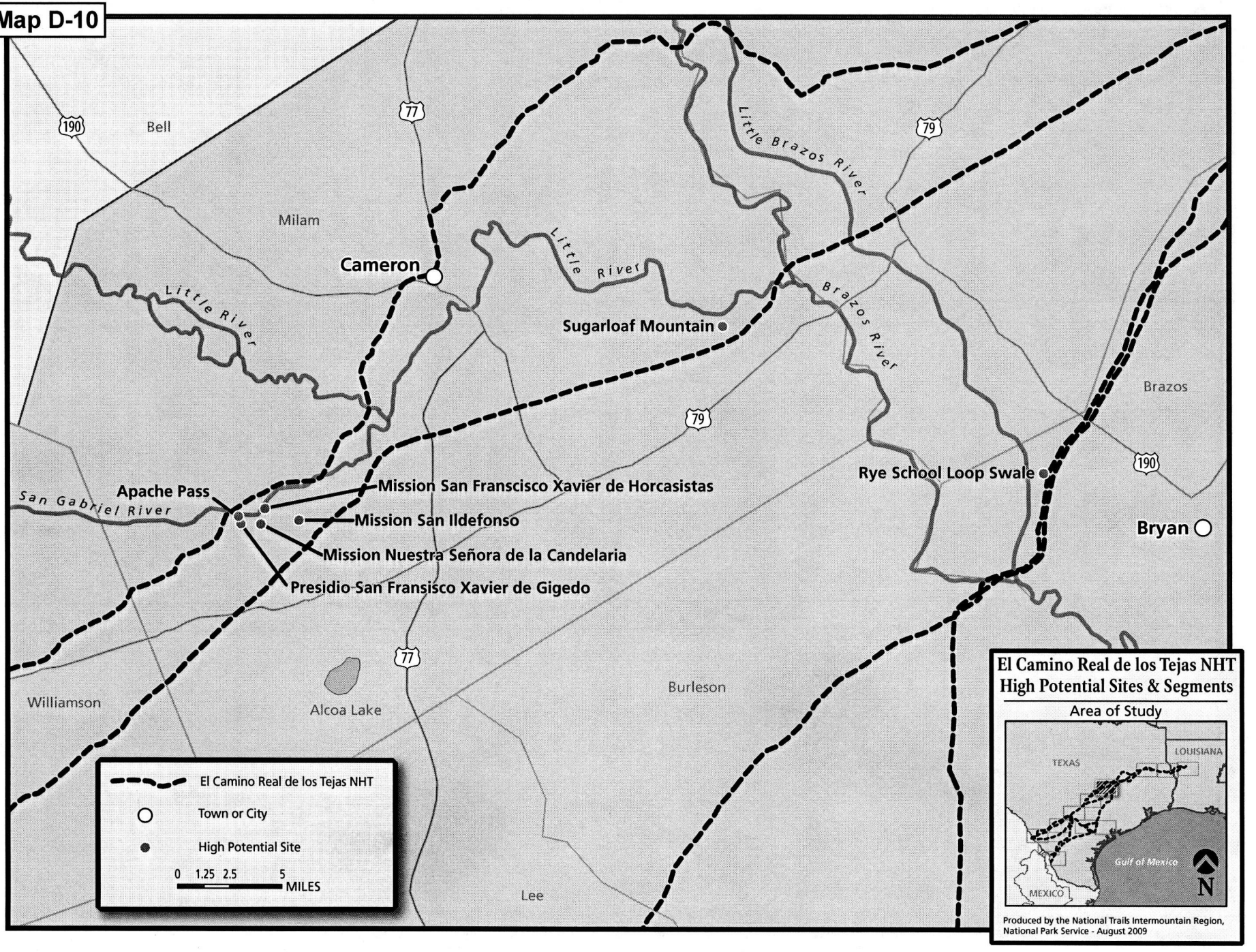
Map D-10
190
Bell
77
Little Brazos River
79
Milam
Cameron
Little River
Little River
Brazos River
Sugarloaf Mountain
Brazos
79
190
Rye School Loop Swale
Apache Pass
San Gabriel River
Mission San Franscisco Xavier de Horcasistas
Mission San Ildefonso
Mission Nuestra Señora de la Candelaria
Presidio San Fransisco Xavier de Gigedo
Bryan
77
Williamson
Alcoa Lake
Burleson
Lee
El Camino Real de los Tejas NHT
Town or City
High Potential Site
0 1.25 2.5 5
MILES
El Camino Real de los Tejas NHT
High Potential Sites & Segments
Area of Study
TEXAS
LOUISIANA
Gulf of Mexico
MEXICO
N
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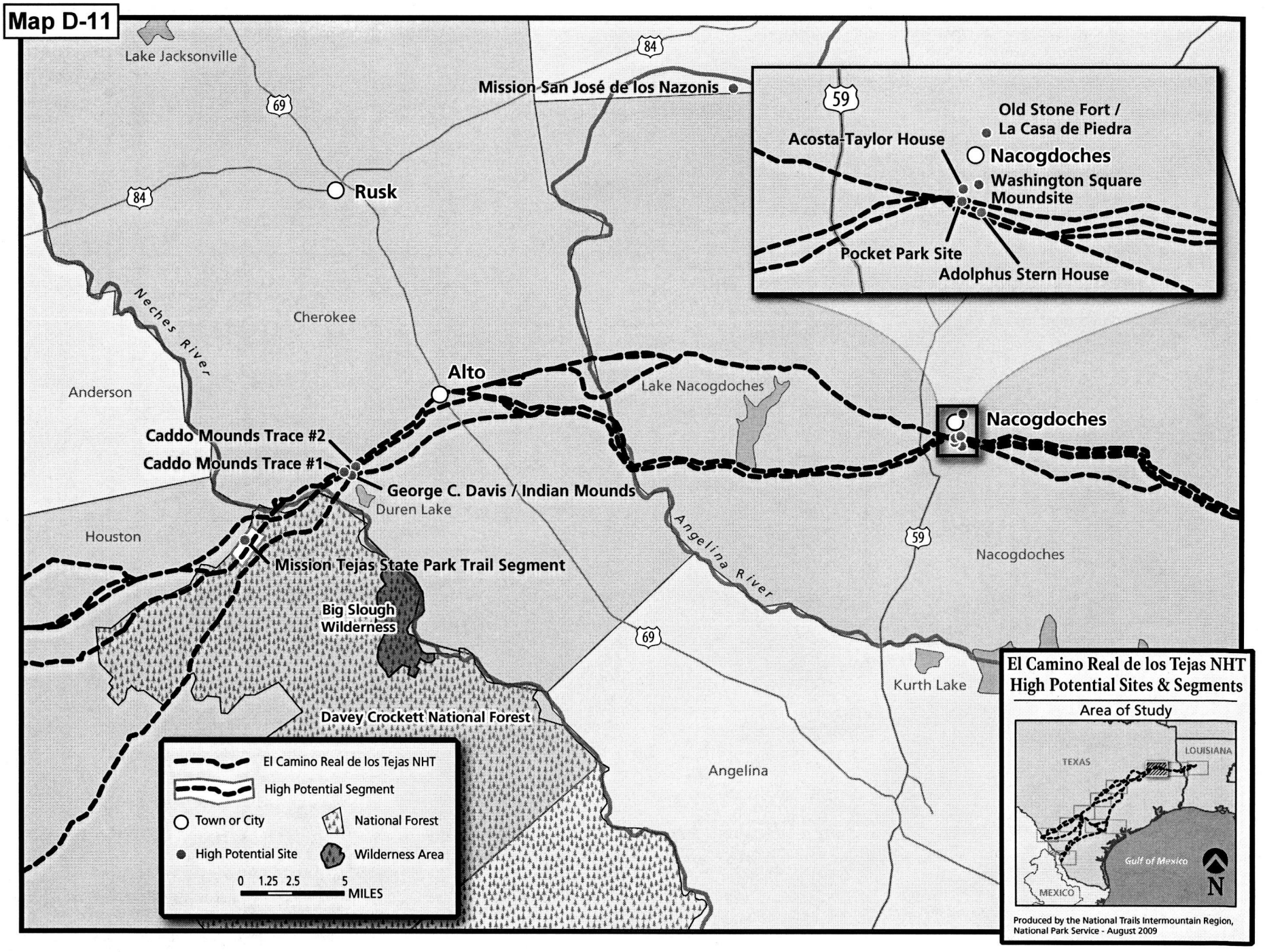
National Park Service - August 2009


Map D-11
Lake Jacksonville
84
69
Mission San José de los Nazonis
59
Old Stone Fort /
La Casa de Piedra
Acosta-Taylor House
Nacogdoches
Washington Square
Moundsite
Pocket Park Site
Adolphus Stern House
Rusk
84
Neches River
Cherokee
Anderson
Alto
Lake Nacogdoches
Nacogdoches
Caddo Mounds Trace #2
Caddo Mounds Trace #1
George C. Davis / Indian Mounds
Duren Lake
Houston
Mission Tejas State Park Trail Segment
Angelina River
59
Nacogdoches
Big Slough
Wilderness
69
Kurth Lake
Davey Crockett National Forest
Angelina
El Camino Real de los Tejas NHT
High Potential Segment
Town or City
National Forest
High Potential Site
Wilderness Area
0 1.25 2.5 5
MILES
El Camino Real de los Tejas NHT
High Potential Sites & Segments
Area of Study
TEXAS
LOUISIANA
Gulf of Mexico
MEXICO
N
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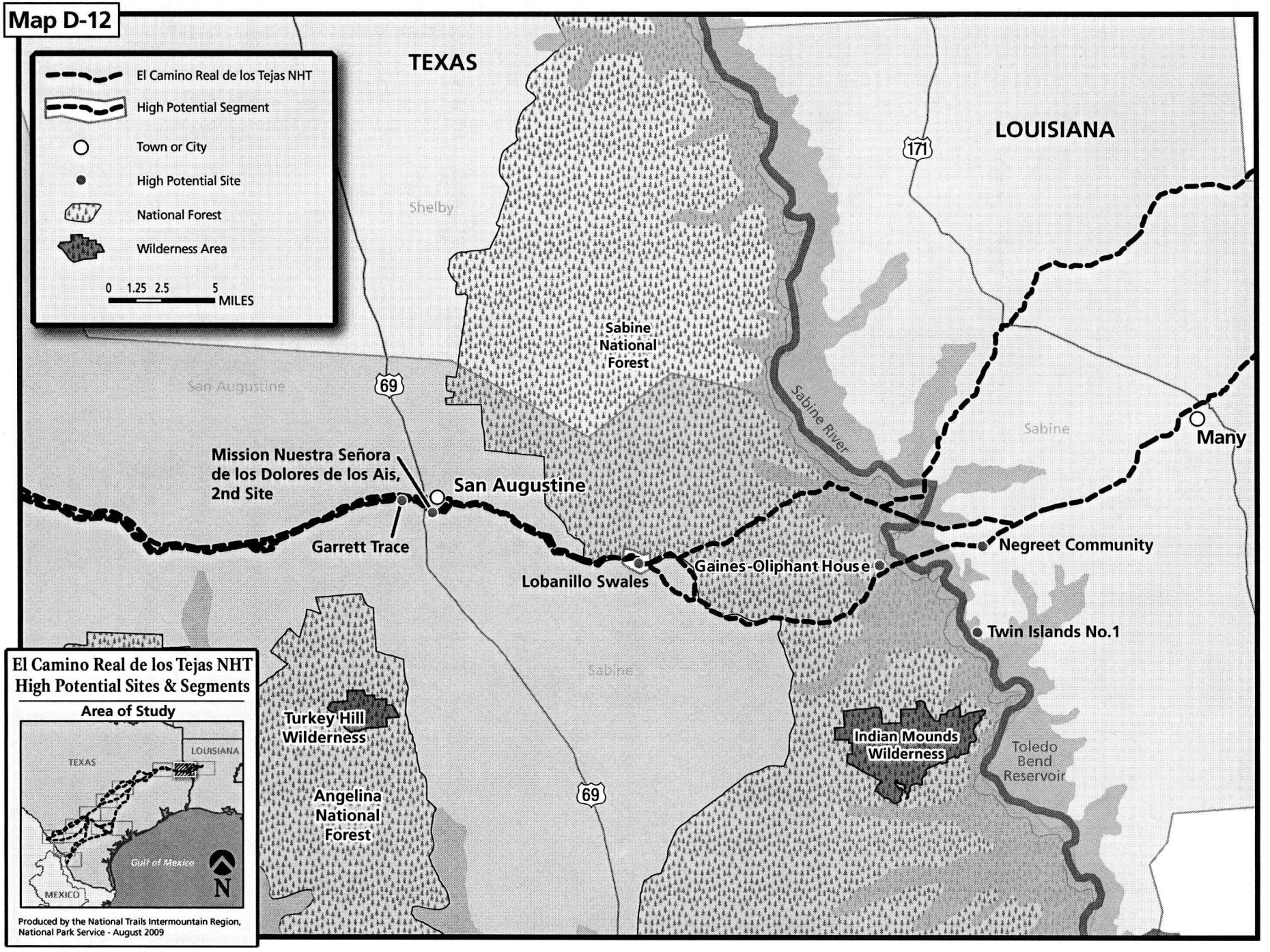
National Park Service - August 2009


Map D-12
El Camino Real de los Tejas NHT
High Potential Segment
Town or City
High Potential Site
National Forest
Wilderness Area
0 1.25 2.5 5
MILES
TEXAS
LOUISIANA
Shelby
San Augustine
Sabine
Sabine National Forest
Sabine River
171
69
Many
Mission Nuestra Señora de los Dolores de los Ais, 2nd Site
San Augustine
Garrett Trace
Lobanillo Swales
Gaines-Oliphant House
Negreet Community
Twin Islands No.1
Turkey Hill Wilderness
Angelina National Forest
Indian Mounds Wilderness
Toledo Bend Reservoir
El Camino Real de los Tejas NHT
High Potential Sites & Segments
Area of Study
TEXAS
LOUISIANA
Gulf of Mexico
MEXICO
N
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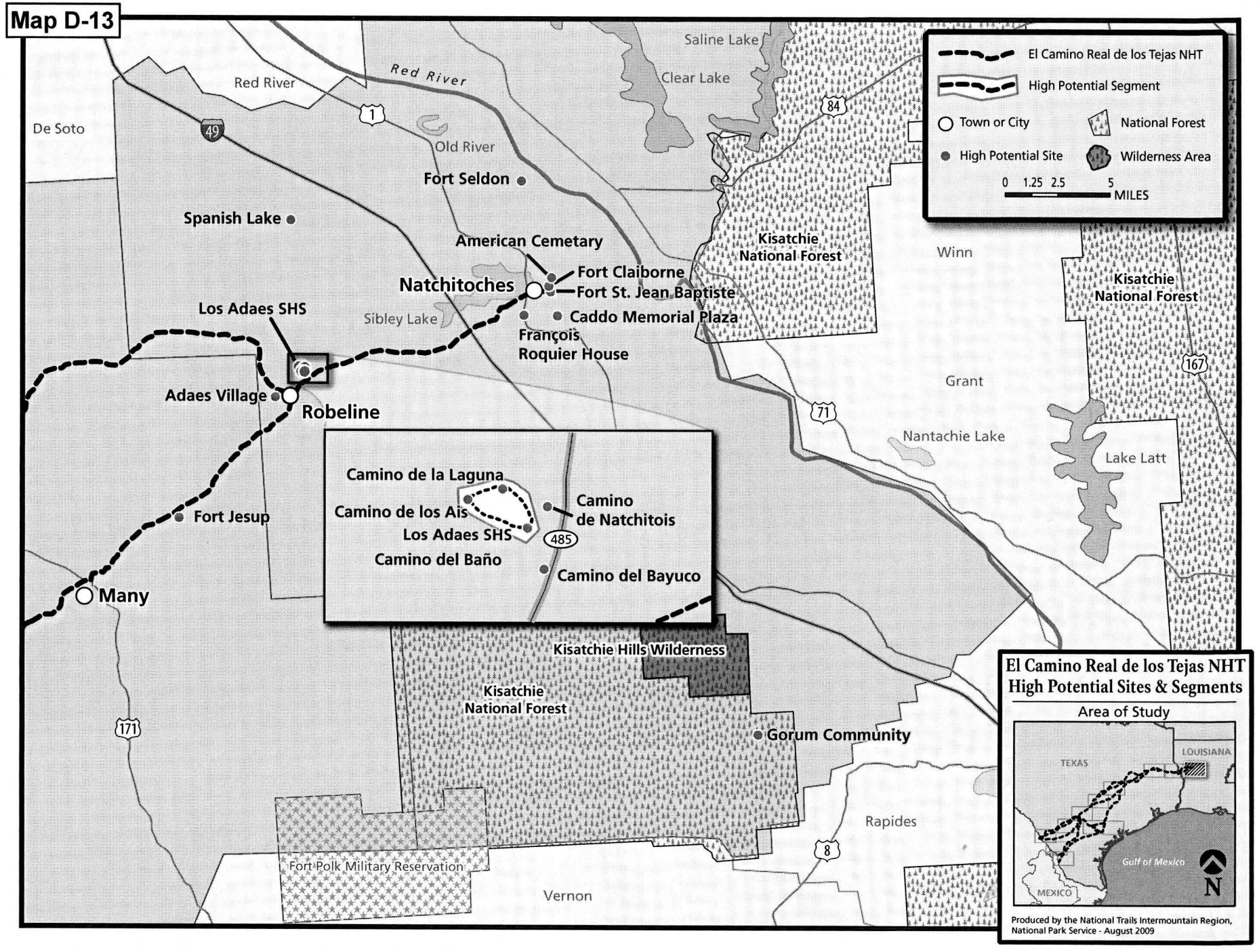
Map D-13
El Camino Real de los Tejas NHT
High Potential Segment
Town or City
National Forest
High Potential Site
Wilderness Area
0 1.25 2.5 5
MILES
Saline Lake
Clear Lake
Red River
Red River
De Soto
Old River
Fort Seldon
Spanish Lake
American Cemetary
Fort Claiborne
Natchitoches
Fort St. Jean Baptiste
Los Adaes SHS
Sibley Lake
Caddo Memorial Plaza
François
Roquier House
Kisatchie
National Forest
Winn
Kisatchie
National Forest
Adaes Village
Robeline
Grant
Nantachie Lake
Lake Latt
Camino de la Laguna
Camino de los Ais
Los Adaes SHS
Camino del Baño
Camino
de Natchitois
Camino del Bayuco
Fort Jesup
Many
Kisatchie Hills Wilderness
Kisatchie
National Forest
Gorum Community
Rapides
Fort Polk Military Reservation
Vernon
El Camino Real de los Tejas NHT
High Potential Sites & Segments
Area of Study
TEXAS
LOUISIANA
Gulf of Mexico
MEXICO
N
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National Park Service - August 2009

APPENDIX E: ADDITIONAL SITES AND SEGMENTS THAT COULD BE ELIGIBLE FOR INCLUSION

The section below includes sites that might merit inclusion later on but, at this time, fail to meet some of the criteria identified in the National Trails System Act.

LOUISIANA

Natchitoches Parish

Name: Arroyo Hondo
Historic use type: Boundary
Description: Between 1806 and 1820, Arroyo Hondo marked the border between Spain and France on the Neutral Strip. It is located east of the bridge crossing at Young's Bayou (Arroyo Hondo). A pink granite marker commemorates the site.
Time period: 1806–1820
Ownership: Private
Reason for questionable status: It is only one point along the boundary line. The marker is located next to a public road, but it may be difficult to create a safe public access.

Name: Bayou Amulet
Historic use type: Bayou/Creek
Description: Bayou Amulet was the main drainage canal into Red River from Lac Terre Noire, now Sibley Lake. During the French and Spanish Colonial periods, this bayou emptied into the Red River, now Cane River Lake. River trade from New Orleans and pack animal trains from Mexico used the location as a rendezvous; in fact, the stream was named "Bayou A Mule" on early maps, a reference to the many mules usually tied up along its banks. The name was later changed to "Bayou Amulet."
Time period: 1714–1803
Ownership: Private
Reason for questionable status: Additional historic information is necessary to link this area specifically to trail activities.

Name: Bayou Pierre Settlement
Historic use type: Community
Description: This settlement is thought to be one of the locations where the Adaeseños, the original residents of Los Adaes, went after the closing of Los Adaes. It is between Lake End and Frierson along Bayou Pierre, which drains into the Red River at Natchitoches.
Time period: 1770s
Ownership: Private
Reason for questionable status: Location has not been confirmed.

Name: Camp Sabine
Historic use type: Archeological site
Description: Zachary Taylor built Camp Sabine in 1822 at the place where General James Wilkinson had camped in 1808. Metal artifacts have been recorded.
Time period: 1808–1822
Ownership: Private
Reason for questionable status: Additional historic information is necessary to link this area specifically to the period of significance of the trail.

Name: Darby's Trace
Historic use type: Road
Description: William Darby traveled south from the settlement at Bayou Pierre to pick up El Camino Real de los Tejas near the old presidio and mission at Los Adaes. The road retains some integrity of setting.
Time period: 1812
Ownership: Public
Reason for questionable status: Additional historic information is necessary to link this area specifically to the period of significance of the trail.

Name: Goat Hill (New Spanish Town)
Historic use type: Landmark
Description: Goat Hill is the current designation for the high area where the New Spanish Town church was located. It is located on State Road 120 (the original alignment of El Camino Real de los Tejas in Louisiana), about three miles from Robeline. The landowners (the Jordans) suggest

that an area with elongated sunken areas is the old cemetery for the church, which was vandalized by treasure hunters.
Time period: 1800s
Ownership: Private
Reason for questionable status: Additional historic information is necessary to link this area specifically to the period of significance of the trail.

Name: La Gran Montaña
Historic use type: Natural landmark
Description: La Gran Montaña (Big Mountain) was described by José Antonio Pichardo as a landmark located at the boundary between France and Spain, halfway between the two forts at Natchitoches and Los Adaes. The specific location is uncertain: it is said to be near the Old Fire Tower, which can be accessed by driving south from State Road 6. Pichardo writes that French settlers had houses and other possessions built up to the foot of La Gran Montaña.
Time period: 1800s
Ownership: Unclear
Reason for questionable status: Specific location is not clear and more research is necessary to link this site to trail activities.

Name: Vincent Micheli Grants (Salinas Land Grant on both sides of the Sabine River)
Historic use type: Ranch
Description: The ranch on this land grant connected to El Camino Real de los Tejas and included fords of the Sabine River and Borregas Creek. The land grant included more than 27,000 acres of land on both sides of the Sabine River.
Time period: 1797–1802
Ownership: Private
Reason for questionable status: Specific location is not clear and more research is necessary to link this site to trail activities.

Name: Rancho del Baño
Historic use type: Ranch
Description: Governor Jacinto de Barrios Jaúregui was accused of charging for the issue of land titles in 1954. He named this ranch and four others (Rancho de Llano Ondo, Rancho de los Tres Llanos, Rancho de Pan y Agua, and Rancho de San José) as examples that he did not charge to issue land titles. These sites could be located in either Louisiana or Texas since the governor at Los Adaes had jurisdiction for the entire province.
Time period: 1700s
Ownership: Unclear
Reason for questionable status: Specific location is not clear and more research is necessary to link this site to trail activities.

Name: St. Denis' Vâcherie
Historic use type: Ranch
Description: This site is associated with Louis Juchereau de St. Denis.
Time period: first half of 18th century
Ownership: Public (Northwestern Louisiana State University)
Reason for questionable status: More historic information is needed to link this site to St. Denis.

Sabine Parish

Name: Juan Maximillian Bayou Cie
Historic use type: Bayou
Description: The John Maximillian land claim is bounded on the south by the claim belonging to David Waltman, brother-in-law of Guillaume Babe, and on the east by the claim belonging to Patterson and Baucus. Maximillian was born at Las Cabañas. It is said that, when he was eight years old, he helped his Uncle Cabin (Charbonneau) build the Cabin Road.
Time period: pre-1809
Ownership: Private
Reason for questionable status: Specific location is not clear. More research is necessary to link this site to trail activities.

Name: La Nana Ranch
Historic use type: Ranch
Description: The ranch was owned by William Barr and located south of El Camino Real de los Tejas. In 1803, an outpost was established by Spanish General Salved; by 1805, 10 Spanish troops were stationed here. In 1806, they were expelled by American General James Wilkinson.
Time period: 1800s

Ownership: Unclear
Reason for questionable status: Specific location is not clear. More research is necessary to link this site to trail activities.

Name: Ormigas Road
Historic use type: Road
Description: This road spanned the Ormigas land grant, from the Indian Crossing on the Sabine River (reference from 1795) to Bayou Tasman on the way to Los Adaes. It shows up on an 1842 plat map as a road from Hamilton to Natchitoches. State Road 174 roughly follows the Ormigas Road, within three miles east of the Sabine River.
Time period: 1700–1800s
Ownership: Private
Reason for questionable status: More research is needed to link this road to trail activities during the period of significance.

Natchitoches/Sabine Parishes

Name: Texas Star Road
Historic use type: Road
Description: This road runs between Fort Clairborne (marker in downtown Natchitoches) and Belmont, northwest of Los Adaes. It was built to intercept any movement coming from the west and to aid Spaniards living in the community of Bayou Pierre.
Time period: Post-1812
Ownership: Public
Reason for questionable status: More research is needed to link this road to trail activities during the period of significance.

TEXAS

Atascosa County

Name: Atascosa River Crossing
Historic use type: River crossing
Description/Background: Research has been done to try to identify the crossing place for the Atascosa River because it may be associated with the headquarters of the Atascosa Ranch. Physical evidence of the river crossing has not yet been found.
Time period: 1700s
Ownership: Unknown, but likely private
Reason for questionable status: Specific location of this site is not known.

Name: Lagunilla Creek Swales
Historic use type: Trail segment
Description/Background: Clark states that segments of undisturbed road were found on either side of Lagunilla Creek. According to Pressler's (1867) travel map, the only route that would have crossed Lagunilla Creek would have been the Lower Presidio Road, which should have passed the creek in the vicinity of present-day Charlotte. This route would have likely followed a general alignment similar to present day State Highway 97 and State Highway 85/Farm to Market Road 140 in this general area.
Time period: 1700s
Ownership: Unknown, but likely private
Reason for questionable status: Specific location of this site is not known.

Name: Poteet Swale
Historic use type: Trail segment
Description/Background: This trail segment is possibly associated with the headquarters of Atascosa Ranch.
Time period: 1600s
Ownership: Unknown, but likely private
Reason for questionable status: Specific location of this site is not known.

Bastrop County

Name: Bastrop State Park
Historic use type: Trail segment
Description: Unclear
Time period: Unclear
Ownership: Public (Texas Parks and Wildlife Department)
Reason for questionable status: Additional historic information is necessary to link this site to the period of significance of the trail.

Name: Colorado River Crossing/Trail segment, possibly near Puesto del Colorado
Historic use type: River crossing near fort

Description/Background: This river crossing may have been associated with a garrison at a ford on the Colorado River in present-day Bastrop. Archeological evidence of an undisturbed road segment has been recorded as No. 41BP85; however, the garrison has not been confirmed.
Time period: Unclear
Ownership: Unknown but likely private
Reason for questionable status: Specific location of this site is not known; further research is necessary to understand the site and its relationship to the trail.

Bexar County

Name: Cassín Crossing/Rancho de Costales west boundary

Historic use type: River crossing/*paraje*
Description: The names Cassin and Cassin Siding appear on maps on either side of the river, near the town of Earle, which corresponds with the two sites. Modern aerial photographs of Earle show a possible ford east of/parallel to Pleasanton Road. McGraw and Hindes note that Johnson and Ward's 1866 map shows the San Antonio–Laredo Road merging with the Presidio del Rio Grande Road in this vicinity; however, they note that the actual fork in the road was farther south, based on Roessler's map of 1865. This crossing is said to be on the "Atascosa" route to the Río Grande. The name itself describes the area as a boggy barrier to travel, and a wide right-of-way may have been necessary to ensure the two roads could be passable under extreme wet-weather conditions.
Time period: 1700s
Ownership: Unknown, likely private
Reason for questionable status: Further research is necessary to link this site with the designated trail.

Name: Concepción Creek Crossing

Historic use type: River crossing
Description: Ivey notes that mission records indicate that pasture lands granted to Mission Concepción extended to "the ford of the arroyo at the edge of the lands of Mission San José." Ivey interprets the arroyo to be Concepción Creek and mentions a river crossing at Concepción dam. He states that Presa Street is named for the Concepción dam. Presa Street follows the alignment of the road labeled Camino de la Bahía del Espíritu Santo on Menchaca's 1764 map.
Time period: 1700s
Ownership: San Antonio River Authority
Reason for questionable status: Further research is necessary to establish the specific geographic location of this site.

Name: Davenport Crossing (Nacogdoches Road Crossing at Cibolo Creek)

Historic use type: Cibolo Creek crossing
Description: There are swales and wheel marks on the stones across the creek bed.
Time period: Unclear
Ownership: Private
Reason for questionable status: Additional historic information is necessary to link this site with designated trail.

Name: El Monte/Monte Galván

Historic use type: Ranch
Description: This ranch is one of several belonging to Mission San Antonio de Valero, and is located northeast of the mission. A report in 1762 notes that a stone house and chapel were associated with the ranch; the description may have referred to the site as la Mora or el Monte. One of the boundaries of the ranch may have been an upper route to La Bahía. The ranch extended from Salado Creek, on the west, to Cibolo Creek, on the northeast, and possibly to Martínez Creek, in eastern Bexar County. McGraw believes the El Camino de los Tejas/Nacogdoches Road may have been one of the boundaries. Ivey states that the northern boundary of the ranch was probably Rosillo Creek, near the town of Kirby in northeast Bexar County. The mission lands of San Antonio de Valero were bordered on the south by the Compuerta de Concepción (sluice-gate of Mission Concepción), extending to a ford where an upper road to La Bahía crossed Salado Creek. The so-called Cabello 1780 map shows two crossings of Salado Creek. The map is extremely inaccurate in that area, but it shows a road extending from Cibolo Creek to Mission San Antonio Valero. DeLorme maps show a foot trail that was visible

at least once in recent history. The foot trail extends from the area depicted as a ranch on Cibolo Creek, near La Vernia or Sutherland Springs (probably Rancho Paistle). It follows the creek for approximately 30 miles and connects with Houston/Commerce streets in San Antonio. Extrapolating from this, it would likely run directly west toward Mission Valero, crossing the Salado Creek. The Delorme map shows a route named Camino de los Mochos following the alignment of Commerce Street on a modern map generated from 1837 maps of San Antonio.
Time period: 1700s
Ownership: Public
Reason for questionable status: The specific location of this ranch had not been verified by the time this document was prepared.

Name: Nogalitos Ford
Historic use type: River crossing
Description: Ivey notes that this is a ford on San Pedro Creek in Bexar County mentioned in mission records. Based on his description of the location, this appears to be a different crossing from the Nogales Crossing.
Time period: 1700s
Ownership: Private
Reason for questionable status: Further historic research is necessary to link this site with trail; the location has not been verified.

Name: Olmos Basin Road Segment
Historic use type: Trail segment
Description: A branch of the old Nacogdoches Road used to run from Olmos Dam to Hildebrand Avenue. The trail segment can be seen from the right-of-way.
Time period: 1700s
Ownership: Private
Reason for questionable status: Further historical research is necessary to link this site with trail.

Name: Paso de la Garza/Garza's Crossing
Historic use type: River crossing
Description: This is a ford of the Medina River along the Upper Laredo Road, located near present-day Somerset Road. Garza's Crossing was the name of the first post office (1872) in the modern community of Von Ormy.
Time period: 1700s
Ownership: Private
Reason for questionable status: The geographic location of this site could not be verified.

Name: Paso de los Tejas
Historic use type: Spring/*paraje*
Description: Materials for the construction of missions were acquired from a series of quarries in this location.
Time period: 1690s
Ownership: Public (City of San Antonio)
Reason for questionable status: Further research is needed to establish clearly the relationship of this site to the trail.

Name: Talon Crossing/Paso de Talon/ Pampopa
Historic use type: River crossing /*paraje*
Description: Records indicate that this ford and rest stop were part of the Ranchería of the Pampopa, which was well known historically. It is also a historic site with ruins.
Time period: pre-1700s
Ownership: Private
Reason for questionable status: Further research is necessary to link this site with trail; the location has not been verified.

Name: Upper Presidio Road Crossing of the Medina River
Historic use type: Medina River Crossing
Description: This ford is located at a giant bend in the Medina River and offered a more predictable crossing place of the river.
Time period: 1700s
Ownership: Private
Reason for questionable status: Specific historic information is necessary to link this site with the trail.

Brazos County

Name: Navasota River Swales
Historic use type: Trail segment
Description: This trail segment is located between the irrigation ditch and the Old San Antonio Road, leading west into Brazos

County. It runs through dense forest, between the barbed wire fence and the cleared Old San Antonio Road right-of-way. The swale is very shallow and rally faint: the trace varies in depth between 20 and 45 centimeters, sometimes only on one side for about 200 meters. It ascends a slight slope. Other small drainage features that also crosscut the shallow swale. This is a very good example of Major Ivey's 1916–1917 work in locating the old road because the Daughters of the American Revolution marker is right on the north side of the old road. Satellite imagery indicates this forested area between the fence line and the Old San Antonio Road may be Brazos County or Texas Department of Transportation property because the only fence line is south of the old road. There used to be a modern rest stop at this location, with several run-down stone picnic tables. The old road becomes a deep swale as it heads west. The deepest area reaches a depth in excess of 15 feet and is more than 20 feet wide. About one-quarter mile west from the Daughters of the American Revolution marker, the swale braids out into three parallel swales. They run almost one-half mile before topping the rise to the west and disappear into the present alignment of the Old San Antonio Road.
Time period: 1800s
Ownership: Private
Reason for questionable status: Further research is necessary to document the association of this site to the period of significance of the trail.

Burleson County

Name: Moseley's Ferry
Historic use type: River crossing/*paraje*
Description: This is a multicomponent site at a natural ford, which was later made into a ferry station (1846–1912). It is not known if this river crossing is on the main route or on a connecting route. More research is needed to determine if it was used during the Spanish Colonial period.
Time period: Unclear
Ownership: Public (Texas Department of Transportation)
Reason for questionable status: Further research is necessary to document the site.

Cherokee County

Name: Alto Swales
Historic use type: Road segment
Description: Unclear
Time period: Unclear
Ownership: Private?
Reason for questionable status: Further research is necessary to document this site and its relationship to the trail.

Name: Indian Mound Spring
Historic use type: Spring/*paraje*
Description: Unclear
Time period: pre-1700s
Ownership: Public (Texas Historical Commission)
Reason for questionable status: Further research is necessary to document this site and its relationship to the trail.

Cherokee/Houston Counties

Name: Weeping Mary Crossing
Historic use type: Neches River crossing
Description: This is a hard-rock crossing over the Neches River.
Time period: 1600–1800s
Ownership: Private
Reason for questionable status: Further research is necessary to document this site and its relationship to the trail.

DeWitt County

Name: Salt Creek Swales
Historic use type: Road segment
Description: Unclear
Time period: 1800s
Ownership: Private, but owner might be willing to cooperate.
Reason for questionable status: Further research is necessary to document this site and its relationship to the trail.

Dimmit County

Name: Laguna Espantosa/Espantosa
Historic use type: *Paraje*

Description: Clark and McGraw noted that this *paraje* was referenced in multiple historic documents, and that they were able to locate it. Espantosa appears on GLO County Sketch No. 11337. A 1973 report mentions the site as a famous camping ground on one of the earliest route between Texas and Coahuila.
Time period: 1700s
Ownership: Private
Reason for questionable status: Further investigation is needed to determine its association with the trail.

Frio County

Name: Frio County road with associated artifacts and features
Historic use type: Trail segment
Description: Located roughly where the Lower Presidio Road is expected to have crossed Frio County, this site is described as a hard-packed road surface with a hearth and lithic tools.
Time period: Not clear
Ownership: Private
Reason for questionable status: Site should be revisited to confirm its location and condition; evaluating team was not given permission to enter this site; further research is necessary to confirm its relationship to the trail.

Goliad County

Name: Villa La Bahía
Historic use type: Village
Description: This was the Spanish village associated with Presidio La Bahía and Mission Espíritu Santo and Mission Rosario in Goliad County.
Time period: 1749–1821
Ownership: Private
Reason for questionable status: Further research is necessary to document this site; the location has not been verified.

Hays County

Name: Manchaca Springs
Historic use type: Spring/*paraje*
Description: Unclear
Time period: Unclear
Ownership: Private
Reason for questionable status: Further research is necessary to document this site and its relationship to the trail.

Name: Redwood Road Ruts
Historic use type: Trail swales
Description: These trail swales are on both the east and west sides of the road.
Time period: 1600s
Ownership: Private
Reason for questionable status: Further research is necessary to document this site and its relationship to the trail.

Name: Stagecoach Park
Historic use type: Swales and river crossing (tributary of Onion Creek)
Description: This site has impressive swales that have left indentations on the stones by the creek.
Time period: 1690s
Ownership: Public (Hays County)
Reason for questionable status: Although this is an excellent site, at the time this document was being prepared there was not enough historic information linking it with the trail.

Name: Uhland Road Segment (near Kyle) – Plum Creek
Historic use type: Trail swales
Description: This swale is partially paved, but it has retained some integrity of setting.
Time period: 1690s
Ownership: Private
Reason for questionable status: There is not enough historic information at this time linking the segment with the trail.

Houston County

Name: Box Creek Crossing
Historic use type: River crossing
Description: According to Dr. James Corbin, there was a ford at the Box Creek confluence with the Neches.
Time period: 1600s
Ownership: Private

Reason for questionable status: Further research is needed to pinpoint the location of the creek crossing and establish a clear relationship to the trail.

Name: Rattlesnake Ranch Swale

Historic use type: Trail swale
Description: Archeological investigation has established a historic relationship to the trail.
Time period: 1700–1800s
Ownership: Private owner would consider allowing public visitation
Reason for questionable status: Visual integrity is compromised by oil-drilling equipment adjacent to the swales.

Houston/Leon Counties

Name: Hurricane Shoals/Kickapoo Rapids

Historic use type: River crossing
Description: Corbin and Williams believe this river crossing is located at Kickapoo Shoals (Kickapoo Rapids), and that the crossing was used by the 1716 Ramón Expedition. Montgomery (1995) notes that he found maps showing that one of the routes of the La Bahía Road passed through Walker County to join the Kickapoo Shoals Crossing.
Time period: 1600s
Ownership: Private
Reason for questionable status: Two distinct sites have been reported; however, at the time this document was being prepared, there is conflicting historic information, which makes it difficult to establish the river crossing's relationship to the trail. The references cited are not clearly identified. The sites are not easily accessible.

Karnes County

Name: Brockman Crossing

Historic use type: River crossing
Description: Not clear
Time period: Not clear
Ownership: Private
Reason for questionable status: Further research is needed to establish the time period for this river crossing and its relationship to the trail.

Name: Conquista Crossing and Swales

Historic use type: River crossing
Description: This ford of the San Antonio River is located at a distinct bend in the river. According to information on an 1867 travel map, the ford seems to have been located at the junction of the Laredo Road (just south of its junction with the Lower Presidio Road) and the road to Goliad County on the west bank. The route crossed the river to the east bank to join the road to Goliad. By 1867, therefore, the ford sat at the junction of at least three roads, and two of these roads are designated routes of the trail. The site has a remarkable degree of visual integrity, and several swales are evident on both sides of the river. This crossing may have been associated with Mission San Antonio de Valero's Rancho de la Mora.
Time period: Not clear
Ownership: Private, but owner would be willing to cooperate.
Reason for questionable status: This is a beautiful site, but it is not clear that it can be linked to the period of significance for the trail. More research is necessary to clarify this question.

Name: Rancho Cibolo [Rancho] del Castro (with river crossing)

Historic use type: Ranch headquarters
Description: The site is a possible *rancho* or may have been an extension of the military settlement of Santa Cruz de Cibolo. In historic studies, *fuertes* are described as "military towns" and may have had multiple sites. It is possible that this site predates the other, because it is not known if the 1735–1737 occupation was at the same site as the 1770s occupation.
Time period: 1735–1778
Ownership: Private
Reason for questionable status: Further research is needed to establish the time period when this site was used and its location.

Name: Site Associated with Fuerte del Cibolo

Historic use type: Fort
Description: This site contains a tomb asso-

ciated with the Fuerte del Cibolo. Both have been excavated, and their significance is well documented. This site is located more than one-half mile from the congressionally designated El Camino Real de los Tejas National Historic Trail; however, the Cabello and other maps, as well as historic documents, indicate that this was a site on the main historic trail from Bexar to La Bahía.
Time period: 1770 or 1780s
Ownership: Private
Reason for questionable status: Further research is needed to establish its relationship to the trail.

La Salle County

Name: Frio River Crossing
Historic use type: River crossing
Description: This location, if it is a Spanish Colonial–period crossing, would have been on the Laredo Road.
Time period: Not clear
Ownership: Private
Reason for questionable status: Further research is needed to establish the time period when this crossing was used and its location.

Name: La Salle County Trail Segment
Historic use type: Trail segment
Description: This location, if it is a Spanish Colonial–period trail segment, would have been on the Laredo Road.
Time period: Not clear
Ownership: Private
Reason for questionable status: Further research is needed to establish the time period when this segment was used and its specific location.

Lee County

Name: The Knobs
Historic use type: Natural landmark
Description: This is a natural landmark that is visible for a considerable distance.
Time period: 1600–1800s
Ownership: Private
Reason for questionable status: Historical information is necessary to associate site to the period of significance for the trail.

Name: West Yegua Swale
Historic use type: Road swale
Description: This road swale is a well-identified crossing of West Yegua Creek, east of current State Road 21 in the old community of Lincoln.
Time period: 1800s
Ownership: Private
Reason for questionable status: Historical information is necessary to link this site to the period of significance for the trail.

Leon County

Name: Dillard's Trace
Historic use type: Trail segment
Description: The trail segment is in a wooded location, with an old road running north of Black Lake.
Time period: 1800s
Ownership: Private
Reason for questionable status: Historical information is necessary to link this site to the period of significance for the trail.

Name: Fort Boggy State Park Swales
Historic use type: trail segment
Description: These trail segments were recorded in a report by Corbin. The road segment would have run perpendicular to the trail, and it is unclear if these swales predate the 1839 establishment of Fort Boggy. All archeological sites and historic structures recorded along these trail segments date to the mid- to late-1800s. A state historic marker indicates that pioneers settled in this area about 1840. Nearby, Kowhai and Kakapo Indian camps afforded these early settlers little sense of security. On February 5, 1840, Christopher C. Staley was ambushed and killed by a group of Indians while out hunting near his home. This incident led to the construction of Fort Boggy for the protection and safety of the settlers. Named for its proximity to Boggy Creek, the fort consisted of two blockhouses with 11 dwellings inside a footprint of about 5,000 square feet. A military company, authorized by Texas president Mirabeau B. Lamar, was formed to protect the fort under the leadership of Captain

Thomas Greer. According to one account, 77 people moved into the fort upon its completion, but many were struck by illness. The following year, Captain Greer was killed in an Indian attack while leading a scouting party beyond the fort. Soon after, the threat of raids lessened and Fort Boggy languished. For many years, a community church and school retained the name "Boggy." As an aid in the early settlement of this area, Fort Boggy remains significant to the history of Leon County.
Time period: 1800s
Ownership: Public (Texas Parks and Wildlife Department)
Reason for questionable status: This site is very important to the history of the area; however, at the time this document was prepared, the available information suggests that the site may not have had a direct relationship to the trail during its period of significance. The National Trails Intermountain Region is funding a research project to clarify the relationship of this site to the period of significance for the trail.

Madison County

Name: Madison Swale
Historic use type: trail segment
Description: This trail segment is a shallow swale leading out of Navasota River.
Time period: 1800s
Ownership: Private
Reason for questionable status: Historical information is necessary to link the site to the period of significance for the trail.

McMullen County

Name: Herrera's Road
Historic use type: Trail segment
Description: This is a variation of the Laredo Road referenced in early 19th-century maps. TSLAC map no. 1608 (ca. 1810–1820) dates the road at 1805. The source of the road name is slightly more confusing. In 1805, both the outgoing governor and incoming governor of Nuevo Leon had the name Herrera. The outgoing governor, Simon de Herrera, transferred to Texas in 1805, so it was likely a reference to him. This road seems to be generally in the same alignment as the designated Laredo Road, with the exception of a segment in McMullen County, where the road travels in a more northeasterly direction than the designated trail. The two roads meet at a point on the Frio River generally aligned with Farm to Market Road 99, within Choke Canyon Reservoir in the northeastern corner of that county. The meeting point would have likely been a ford associated with a rock formation known locally as Rock Falls (see entry below). From Rock Falls, the route would have turned northward to join the designated trail.
Time period: 1805
Ownership: Unclear
Reason for questionable status: The evaluating team was unable to visit area. It is not clear if the trail segment is visible above water or under Choke Canyon Reservoir.

Name: Rock Falls Crossing
Historic use type: River crossing
Description: A bedrock formation formed a pavement in the Frio River in McMullen County to create a natural ford. The crossing is likely submerged under Choke Canyon Reservoir.
Time period: 1805
Ownership: Choke Canyon Reservoir
Reason for questionable status: The evaluating team was unable to visit area. It is not clear if the segment is above water or under Choke Canyon Reservoir.

Medina County

Name: Chacon Creek Crossing, Upper Presidio Road
Historic use type: River crossing
Description: This resource was located in the field, using General Land Office maps (especially GLO no. 31454). The site is a sandstone or sandy limestone ford, which forms a natural impoundment of Goose Creek at its confluence with Chacon Creek. A few lithic artifacts were observed in the general area. The site was visited in June 2008, but overgrown vegetation prevented a thorough investigation. Another visit is recommended in winter, after vegetation has died back.

Time period: 1700s
Ownership: Private
Reason for questionable status: The evaluating team was unable to visit the crossing; the researcher who visited area in 2008 reported that overgrown vegetation prevented thorough investigations.

Name: Hondo Creek Crossing
Historic use type: River crossing
Description: This creek crossing has a nearby Indian petroglyph and historic carvings.
Time period: 1600s–1800s
Ownership: Private
Reason for questionable status: The evaluating team was unable to visit the crossing; its exact location needs to be confirmed.

Name: Landmark Inn Complex
Historic use type: River crossing
Description:
Time period: 1800s
Ownership: Public (Texas Historical Commission)
Reason for questionable status: More information is needed in order to link the site to the period of significance for the trail.

Name: Medina County Trail Segment
Historic use type: Trail Segment
Description: This is a trail segment that Al McGraw identified in the field in 1991, probably near the Hondo Crossing near Farm to Market Road 2200.
Time period: 1600s
Ownership: Private
Reason for questionable status: The evaluating team was unable to visit the trail segment; its exact location needs to be confirmed.

Milam County

Name: Ranchería Grande
Historic use type: American Indian Village/ *Paraje*
Description: Ranchería grande was a Spanish term used to describe the association of several large American Indian villages where multiple tribes settled together. There are two such sites in Milam County. At least one of them figures very prominently in the trail's history. It was visited at least as early as 1721 by the Aguayo Expedition, and a *paraje*, or rest stop, grew up here. The presence of these affiliated Indian villages is likely one of the reasons that Milam County was chosen as a mission site, beginning in 1746; however, no one has recorded this site.
Time period: pre-1700s
Ownership: Private
Reason for questionable status: The location of this rancheria grande has not been clearly established.

Nacogdoches County

Name: Barr and Davenport Rancho
Historic use type: Ranch
Description:
Time period: 1700–1800s
Ownership: Private
Reason for questionable status: Historical information is needed to link this site to the period of significance for the trail.

Name: Bernardo D'Ortolan Rancho
Historic use type: Ranch
Description: This site is associated with the Spanish Colonial–period ranch belonging to Bernardo D'Ortolan.
Time period: 1700–1800s
Ownership: Private
Reason for questionable status: Historical information is necessary to link this site to the period of significance for the trail.

Name: Bernardo D'Ortolan Swales
Historic use type: Trail swales
Description: These trail swales are associated with the Spanish Colonial–period ranch belonging to Bernardo D'Ortolan.
Time period: 1700–1800s
Ownership: Private
Reason for questionable status: Historical information is needed to link this site to the period of significance for the trail.

Name: Byrd's Trace
Historic use type: Trail segment
Description: A trail swale travels north of State Road 21 and makes a north-south road intersection leading to an upper and parallel

old road.
Time period: 1800s
Ownership: Private
Reason for questionable status: Historical information is needed to link this site to the period of significance for the trail.

Name: Eden Swales
Historic use type: Trail segment
Description: This trail segment exhibits old swales located using LIDAR remote-sensing technology.
Time period: 1800s
Ownership: Private
Reason for questionable status: Additional historical information is needed to link this site to the period of significance for the trail.

Name: Legg Plantation Swales
Historic use type: Trail swales
Description: These old swales were located using LIDAR remote-sensing technology
Time period: 1800s
Ownership: Private
Reason for questionable status: Additional historical information is needed to link this site to the period of significance for the trail.

Name: Melrose Swales
Historic use type: Trail swales
Description: Legal deed shows "OSR" information on plat map.
Time period: 1700–1800s
Ownership: Private
Comment—Owner would be interested in working with trail administration to interpret the site.
Reason for questionable status: Additional historical information is needed to link the site to the period of significance for the trail.

Nacogdoches/Cherokee Counties

Name: Concepción Crossing
Historic use type: Angelina River crossing
Description: This is a hard-rock crossing of the Angelina River near a very narrow portion of river.
Time period: 1600–1800s
Ownership: Private
Reason for questionable status: Additional historical information is needed to link this site to the period of significance for the trail.

Robertson County

Name: Burnett Shoals
Historic use type: Brazos River crossing
Description: Swales lead to and from this shallow natural ford of the Brazos River.
Time period: 1600–1800s
Ownership: Private
Reason for questionable status: Additional historical information is needed to link this site to the period of significance for the trail.

Name: Iron Mountain
Historic use type: Natural landmark
Description: Iron Mountain displays old swales located using LIDAR remote-sensing technology.
Time period: 1800s
Ownership: Private
Reason for questionable status: Additional historical information is needed to link this site to the period of significance for the trail.

Robertson/Leon Counties

Name: Grayson's Crossing
Historic use type: Navasota River crossing
Description: This ford of the Navasota River heads directly towards the Kickapoo Crossing of the Trinity River, farther to the east.
Time period: 1800s
Ownership: Private
Reason for questionable status: Additional historical information is needed to link this site to the period of significance for the trail.

Sabine County

Name: Camino Carretera
Historic use type: Trail segment
Description: This road segment dates back

to 1818.
Time period: 1800s
Ownership: Private
Reason for questionable status: Additional historical information is needed to link this site to the period of significance for the trail.

Name: County Line Swales
Historic use type: Trail swale
Description: This site has two parallel swales cross-cut by State Road 21 and is threatened by the expansion of State Road 21 right-of-way.
Time period: 1700–1800s
Ownership: Private
Reason for questionable status: Additional historical information is needed to link this site to the period of significance for the trail.

Name: Gazby/New Zion Swales
Historic use type: Trail swale
Description: This site displays deep parallel swales indicating single-file travel.
Time period: 1800s
Ownership: Private
Reason for questionable status: Additional historical information is needed to link this site to the period of significance for the trail.

Name: Geneva Swales
Historic use type: Trail swale
Description: The site contains a trail swale next to State Road 21 that leads to Carter's Ferry Road.
Time period: 1800s
Ownership: Private
Reason for questionable status: Additional historical information is needed to link this site to the period of significance for the trail.

Name: La Cuesta Alta
Historic use type: Natural landmark
Description: This *cuesta*, or knoll, is a high point over the Sabine River bottom that contains swales running between two hills.
Time period: 1700–1800s
Ownership: Private
Reason for questionable status: Additional historical information is needed to link this site to the period of significance for the trail.

Name: Lucky Loop Swales
Historic use type: Trail swales
Description: These parallel trail swales are found in the front yard of an occupied house.
Time period: 1800s
Ownership: Private
Reason for questionable status: Additional historical information is needed to link this site to the period of significance for the trail.

Name: Milam Swales
Historic use type: Trail swales
Description: Segments of this route have been mapped and recorded as dating to 1818.
Time period: 1800s
Ownership: Multiple
Reason for questionable status: Additional historical information is needed to link this site to the period of significance for the trail.

Name: Pendleton Swales
Historic use type: Trail swales
Description: These parallel swales lead from the shoreline of Toledo Bend Reservoir towards the 1800s Gaines-Oliphant House.
Time period: 1800s
Ownership: Private
Reason for questionable status: Additional historical information is needed to link this site to the period of significance for the trail.

Sabine County, Texas
Sabine Parish, Louisiana

Name: Crow's Ferry
Historic use type: Sabine River crossing
Description: This ford of the Sabine River is visible on 1936 aerial photographs. It was in use until the river valley was flooded by Toledo Bend Reservoir in the late 1960s.
Time period: 1700–1800s
Ownership: Public (Sabine River Authority)
Reason for questionable status: The

resource is beneath the Toledo Bend Reservoir.

Name: Gaines' Ferry
Historic use type: Sabine River crossing
Description: This ford of the Sabine River is visible on 1936 aerial photographs. It was in use until the river valley was flooded by Toledo Bend Reservoir in the late 1960s.
Time period: 1800s
Ownership: Public (Sabine River Authority)
Reason for questionable status: The resource is beneath the Toledo Bend Reservoir.

Name: Paso de las Sabinas
Historic use type: Sabine River crossing
Description: This ford of the Sabine River is visible on 1936 aerial photographs. It was in use until the river valley was flooded by Toledo Bend Reservoir in the late 1960s.
Time period: 1700–1800s
Ownership: Public (Sabine River Authority)
Reason for questionable status: The resource is beneath the Toledo Bend Reservoir.

Name: Patterson's Ferry
Historic use type: Sabine River crossing
Description: This ford of the Sabine River is visible on 1936 aerial photographs. It was in use until the river valley was flooded by Toledo Bend Reservoir in the late 1960s.
Time period: 1800s
Ownership: Public (Sabine River Authority)
Reason for questionable status: The resource is beneath the Toledo Bend Reservoir.

Sabine/San Augustine Counties

Name: Attoyac crossing
Historic use type: Attoyac Bayou crossing
Description: This hard-rock ford was identified by an elderly informant interviewed and videotaped by the Stone Fort Museum.
Time period: 1800s
Ownership: Private
Reason for questionable status: There is no historical information to link this specific crossing to the period of significance for the trail.

San Augustine County

Name: Niciper Swales
Historic use type: Road swale
Description: The old road swung south away from the present State Road 21 road alignment. It parallels CR256, curving back and forth. There road swales on both sides of CR 256.
Time period: 1700–1800s
Ownership: Private
Reason for questionable status: Additional historical information is needed to link this site to the period of significance for the trail.

Name: San Augustine Swales
Historic use type: Road swale
Description: This road swale is south of East Planters Road and runs behind individual properties.
Time period: 1800
Ownership: Private
Reason for questionable status: Additional historical information is needed to link this site to the period of significance for the trail.

Name: Skillern's Trace
Historic use type: Road swale
Description: Kenneth Skillern mapped an old road across his property and an adjoining property.
Time period: 1800
Ownership: Private
Reason for questionable status: Additional historical information is needed to link this site to the period of significance for the trail.

Travis County

Name: Arroyo de las Garrapatas
Historic use type: *Paraje*
Description: The Arroyo de las Garrapatas *paraje* was first described in 1709 by Father Espinosa with the Olivares-Aguirre Expedition, and it is mentioned in several other Spanish texts. A creek named Garrapatas,

off Texas' Colorado River, can be seen on Stephen F. Austin's 1829 map of the area, but it is shown to be north of his "Camino de Arriba." Arroyo/Río de Garrapatas has been identified as present-day Onion Creek in Austin, Travis County. Clark and McGraw (1991) noted that it was referenced in multiple historic documents. More research is needed to confirm the exact location of this *paraje*. It is located along Onion Creek and I-35. Two crossings are found in the area. They are recorded as site no. 41TV411 (which includes historic graffiti) and no. 41TV431. Site no. TV431 is located on Burleson Road.
Time period: 1700s
Ownership: Not clear
Reason for questionable status: The location of this *paraje* needs to be verified.

Name: Pilot Knob

Historic use type: Natural landmark
Description: This natural feature would have been visible to trail users from many miles ***away.***
Time period: 1600–1800s
Ownership: Private
Reason for questionable status: Additional historical information is needed to link this site to the period of significance for the trail.

Webb County

Name: El Paso de las Mujeres/Santa Cruz y Paso de las Mujeres/Calvillo Ranch

Historic use type: River crossing/*paraje*
Description: This was a ranch at a ford between the west bank and east bank routes of the Bexar–La Bahía Road. The secular ranch was leased to the Calvillo family at least as early as 1774 (see Rancho de Las Cabras landscape study in NPS San Antonio National Historical Park files). The name "El Paso de las Mujeres" is referenced repeatedly in land grants, and a house just north of the crossing is shown on a General Land Office sketch (GLO no. 1034436) at least as early as 1838. This appears to be the same location as a ranch headquarters depicted on a map that has been attributed to Domingo Cabello, ca. 1780 (see Jackson 2003).
Time period: 1700s
Ownership: Private
Reason for questionable status: The location of the ford needs to be confirmed.

Wilson County

Name: LODI
Historic use type: Village/town
Description: The historic marker text for Lodi has "41WN64" handwritten on it. The marker is more than a mile from this site, according the *Texas Historical Commission Atlas*. The site is located on the San Antonio River. It is at the end of a road with a marker describing a ferry supposedly used in the 1870s. The site is adjacent to a historic cemetery (mid-1800s) that also has had a new marker erected this year. The site was recorded as an Anglo site with stone ruins. It is possible that the site was inhabited earlier than the ferry markers indicate. The Lodi marker refers to the townsite being inhabited in the 1700s, which would likely have been the Mission San Juan ranch of Pataguilla. Colonel Jesse Pérez says the ferry location was the same as the river crossing that is known locally as "Paso de los Mujeres," which is located on private land.
Time period: 1700s
Ownership: Private
Reason for questionable status: The location of this site needs to be confirmed.

Name: Rancho de San Rafael de Pataguilla/ Patoquilla/Palahuilla (see also Lodi)
Historic use type: Ranch
Description: This ranch belonged to Mission San Juan Capistrano. In 1768, Solis visited the ranch headquarters, which was located on the east bank of the San Antonio River (Habig 1990:204). The site has not been confirmed archeologically, but historical maps place it near the historic town site of Lodi, possibly near either the crossing known as Paso de las Mujeres" or "Caballo Crossing." The ranch was deeded to Simón de Arocha in 1791.
Time period: 1758
Ownership: Private
Reason for questionable status: The location of the ranch site needs to be confirmed.

Name: Sequin Trace
Historic use type: Trail segment
Description: The so-called Cabello Map (ca. 1780?) depicts a road going to an area that appears to be Gray Crossing. People from Wilson County believe that Seguín Trace crossed at Gray Crossing. They noted that Gray Crossing is just below Rocky Ford, which is also known a Peacock Crossing. Wilson County provided a map of Seguín Trace, noting that the original source/documentation was not known. The map depicts the same route as the so-called Cabello Map. This would have been a connecting route, likely used to access one of the sites at Fuerte del Cibolo. The fort location would probably have been between Gray Crossing and a hot springs known locally as Ojo de Santa Cruz—the original name of the town of Sutherland Springs. Note that one of the names for Fuerte del Cibolo is Fuerte de Santa Cruz.
Time period: 1774
Ownership: Private
Reason for questionable status: The location of this trail segment needs to be confirmed.

APPENDIX F. SAMPLE COOPERATIVE AGREEMENT

Cooperative Agreement

Between the

National Park Service

National Trails Intermountain Region
And the
Texas Historical Commission

ARTICLE I. BACKGROUND AND OBJECTIVES

A. This Agreement is entered into by and between the UNITED STATES DEPARTMENT OF THE INTERIOR, NATIONAL PARK SERVICE, hereinafter referred to as "the Service," and the TEXAS HISTORICAL COMMISSION, hereinafter referred to as "the Commission."

B. Through this Agreement, the parties wish to:

1. Exchange their knowledge, skills, and resources to promote, recognize, and preserve the significant historical and recreational resources related to El Camino Real de los Tejas National Historic Trail, hereinafter referred to as "the Trail."

ARTICLE II. AUTHORITY

WHEREAS, the Service is the Federal agency assigned the principal responsibility of administering the Trail which provides for the identification, documentation, preservation, and interpretation of the Trail's historic buildings, sites, objects, structures, and districts, in Texas and Louisiana; and

WHEREAS, the objectives of the Commission are to promote preservation and heritage tourism in the State of Texas, and to do all things necessary to accomplish this purpose; and

WHEREAS the Commission shall, as provided for by Section 442.021 of the Government Code of Texas establish by the Texas legislature through H.B. 3269 and signed by the governor on 6/18/2005, "administer and coordinate the efforts of state and local public and private entities in [Texas] regarding the preservation of" [the Trail], and shall develop educational and interpretive programs relating to" the Trail.

WHEREAS, the roles of the two organizations are complimentary in the area of historic preservation and in carrying out these roles the two entities have developed complimentary expertise and experience,

WHEREAS, the National Trails System Act of 1968, as amended, 16 U.S.C. § 1241 et seq, provides for the promotion of trail resource preservation, provisions for recreational access and travel opportunities on the trail, promotion of enjoyment and appreciation of the trails and their related resources, and empowerment of individuals and groups in trail development.

WHEREAS, the National Historic Preservation Act of 1966, as amended, 16 U.S.C. § 470 et seq., provides for the dissemination of information about historic preservation and encourages the long range preservation of nationally significant properties; and

WHEREAS, the Historic Sites Act of 1935, 16 U.S.C. § 461 et seq., directs the Service to make necessary investigations and researches in the United States relating to particular sites, buildings, or objects to obtain true historical and archeological facts and information concerning the same,

NOW THEREFORE, in consideration of the above premises and in the interest of mutual advantage in attainment of common objectives, the parties agree as follows:

ARTICLE III. STATEMENT OF WORK

A. The Commission agrees to:

1. Work cooperatively with the Service in the fields of Trail preservation, marketing, and education

2. Promote and publicize the Trail through its agency networks which include its newsletter, list-serves, website, and other public outreach programs.

3. Undertake and perform in a professional manner additional work or projects related to historic preservation in Texas in accordance with Task Agreements executed by the parties under article VI of this agreement.

4. Participate with the Service in joint strategic, interpretive, and other planning for the Trail and assist in setting of priorities for joint efforts and assuming responsibility to take the lead on implementation, as appropriate.

5. Assist with developing visitor use opportunities and support facilities, including educational and interpretive opportunities for the public on and helping to insure that educational and interpretive efforts are accurate and sensitively done and that the necessary consultation has occurred.

B. The Service agrees to:

1. Work cooperatively with the Commission to help it achieve its legislated mandates with respect to the Trail in the State of Texas.

2. Involve the Commission in a meaningful way in the development of the Comprehensive Management and Use Plan for the Trail to the extent permitted under Federal law

3. Assist the Commission by allowing use of the El Camino Real de los Tejas National Historic Trail marker for appropriate purposes, once it is developed, as requested in writing.

4. Provide financial support to the Commission for additional work or projects related to historic preservation in Texas in accordance with Task Agreements executed by the parties under article VI of this agreement.

5. Assist the Commission by facilitating joint planning in order to carry out joint trail programs and assist in setting of priorities for joint efforts,

C. The Service and the Commission agree to:

1. Promote the sharing of information, knowledge, and methodology among public officials, private organizations, educators, and individuals active in the fields of history, archeology, historic preservation, cultural resources management, and interpretation by means of seminars, conferences, workshops, site visits, lectures, and symposia related to the Trail.

2. Assist each other in efforts to obtain cooperation and assistance from other federal, state, and local, agencies; organizations; elected officials; or individuals to help advance trail purposes.

3. Evaluate, redesign, and develop educational and interpretive research, exhibits, films, publications, and other public media for the Trail.

4. Share resources, facilities, information and expertise to enhance the public's understanding of history and historic preservation of the Trail.

5. Design a research agenda and projects, undertake research and review its quality to enhance mutual awareness of the value of, and access to, the Service's historic preservation efforts for the Trail.

6. Share Trail technical information, educational materials, and research results with historic preservationists and the public.

ARTICLE IV. TERM OF AGREEMENT

1. This Agreement shall become effective on the date of the last signature on this document and shall continue in full force and effect for a period of five (5) years unless terminated earlier in accordance with Article X of this Agreement.

ARTICLE IV. KEY OFFICIALS

The key officials specified in this Agreement are considered to be important to ensure maximum coordination and communication between the parties and the work being performed hereunder. However, upon written notice, either party may designate an alternate to act in the place of the designated key official, in an emergency or otherwise.

A. For the Service:

Technical:
[Name]
National Trails Intermountain Region
National Park Service
P. O. Box 728
Santa Fe, New Mexico 87504
[phone number]

Management

[Name] Superintendent
National Trails Intermountain Region
National Park Service
P. O. Box 728
Santa Fe, New Mexico 87504
[phone number]

Signatory/Administrative:

[Name]
Contracting Officer (primary)
Intermountain Support Office
National Park Service
P. O. Box 728
Santa Fe, New Mexico 87504
[phone number]

[Name]
Contracting Officer (secondary)
Intermountain Support Office
2968 Rodeo Park Drive West
P. O. Box 728
Santa Fe, New Mexico 87504
[phone number]

B. For the Commission:

[Name]. Executive Director
State Historic Preservation Officer
Texas Historical Commission

P.O. Box 12276
Austin, Texas 78711-2276

In the absence of the primary contracting officer the secondary contracting officer has the same authority as the primary.

ARTICLE VI. AWARD AND PAYMENT

Upon signature of this agreement by both parties, the Service will obligate [...] through account number [...] for the activities described in this Agreement per the attached Challenge Cost-Share Program Proposal and budget.

The commitment of additional funds in furtherance of this Agreement will be authorized by individual Task Agreements issued against this Agreement identifying each project or group or projects, amount of financial assistance and any other special term or condition applicable to that project.

Payments will be made on a reimbursable basis and upon submission of a completed Standard Form 270, Request for Reimbursement and Advance of Funds, as well as an itemized invoice to the Contracting Officer's Technical Representative [name], P. O. Box 728, Santa Fe, New Mexico 87504-0728. Financial status reports and final documents will be provided by the Commission to the same address. The Cooperative Agreement number and/or applicable Task Agreement or modification number should be cited. Any future Task Agreements or modifications to this Agreement will be mutually agreed upon and executed in writing by both parties based on the allocation of funds by Congress. Changes resulting in time and funding must be approved by the Contracting Officer.

ARTICLE VII. PRIOR APPROVAL

Changes in budget (reallocation of a specific line item expenditure), scope (subject matter or product alteration), or schedule (change within the allotted time) of a Task Agreement or modification must be mutually agreed upon and approved by the Contracting Officer.

When developed during the trail planning process, use of the El Camino Real de los Tejas Historic Trail marker symbol by the Commission will require written permission of the NPS. The NPS will provide the Commission with appropriate digital files as needed.

ARTICLE VIII. REPORTS AND/OR DELIVERABLE

Reports and other deliverables will be identified in each Task Agreement and/or modification to this Agreement. They may include, but are not limited to, performance reports, technical reports, oral briefings, photographs, slides, charts, maps, and data.

The delivery schedule and receiving location of reports and other items will be set forth in each

Task Agreement or modification to this Agreement.

The recipient shall submit an original and two copies of a Financial Status Report (SF-269A) 15 days following the end of each fiscal quarter.

The recipient shall submit an original and two copies of the Minority Business Enterprise Report (DI-1925) 15 days following the end of each quarter.

ARTICLE IX. PROPERTY UTILIZATION AND DISPOSITION

Property management standards set forth in OMB Circular A-110 and 43 CFR 12 apply to this Agreement.

ARTICLE X. TERMINATION AND MODIFICATION

A. This agreement may be modified only by a written instrument executed by both parties.

B. Either party may terminate this Agreement by providing the other party with sixty (60) days advance written notice. In the event that one party provides the other party with notice of its intention to terminate, the parties will meet promptly to discuss the reasons for the notice and to try to resolve their differences.

ARTICLE XI. REQUIRED AND SPECIAL PROVISIONS

1. OMB CIRCULARS AND OTHER REGULATIONS

The following OMB Circulars and other regulations are incorporated by reference into this Agreement:

(a) **OMB Circular A-87**, "Cost Principles for State, Local and Indian Tribal Governments".

(b) **OMB Circular A-102,** "Grants and Cooperative Agreements With State and Local Governments".

(c) **OMB Circular A-133**, "Audits of States, Local Governments, and Non-Profit Organizations".

(d) **43 CFR Part 12, Subpart D,** "Government-wide Debarment and Suspension (Non-procurement) and Government-wide Requirements for Drug-Free Workplace (Grants).

(e) **43 CFR Part 12, Subpart E,** "Buy American Requirements for Assistance Programs".

(f) **FAR Clause 52.203-12, Paragraphs (a) and (b),** "Limitation and Payments to Influence Certain Federal Transactions".

2. NON-DISCRIMINATION:

All activities pursuant to this Agreement and the provisions of Executive Order No. 11246, 3 C.F.R. 339 (1964-65) shall be in compliance with the requirements of Title VI of the Civil Rights Act of 1964 (78 Stat. 252; 42 U.S.C. §§ 2000d et seq.); Title V, Section 504 of the Rehabilitation Act of 1973 (87 Stat. 394; 29 U.S.C. §§ 794); the Age Discrimination Act of 1975 (89 Stat. 728; 42 U.S.C. §§ 6101 et seq.); and with all other Federal laws and regulations prohibiting discrimination on grounds of race, color, national origin, disabling condition, religion, or sex in providing for facilities and service to the public.

3. CONSISTENCY WITH PUBLIC LAWS:

Nothing herein contained shall be deemed to be inconsistent with or contrary to the purpose of or intent of any Act of Congress or the laws of the District establishing, affecting, or relating to the Agreement.

4. APPROPRIATIONS (Anti-Deficiency Act, 31 U.S.C. §§ 1341):

Nothing contained in this Agreement shall be construed as binding the Service to expend in any one fiscal year any sum in excess of appropriations made by Congress, for the purposes of this Agreement for that fiscal year, or other obligation for the further expenditure of money in excess of such appropriations.

5. OFFICIALS NOT TO BENEFIT (41 U.S.C. §§ 22):

No Member of, Delegate to, or Resident Commissioner in, Congress shall be admitted to any share or part of this Agreement or to any benefit to arise therefrom, unless the share or part or benefit is for the general benefit of a corporation or company.

6. LOBBYING PROHIBITION: The parties will abide by the provisions of 18 U.S.C. §§ 1913 (Lobbying with Appropriated Moneys) which states:

> No part of the money appropriated by any enactment of Congress shall, in the absence of express authorization by Congress, be used directly or indirectly to pay for any personal service, advertisement, telegram, telephone, letter, printed or written matter, or other device, intended or designed to influence in any manner a Member of Congress, to favor or oppose, by vote or otherwise, any legislation or appropriation by Congress, whether before or after the introduction of any bill or resolution proposing such legislation or appropriation; but this shall not prevent officers or employees of the United States or of its departments or agencies from communicating to Members of Congress on the request of any Member or to Congress, through the proper official channels, requests for legislation or appropriations which they deem necessary for the efficient conduct of the public business.

7. MINORITY BUSINESS ENTERPRISE DEVELOPMENT (Executive Order 12432)

It is the national policy to award a fair share of contracts to small and minority firms. The Service is strongly committed to the objectives of this policy and encourages all recipients of its Cooperative Agreements to take affirmative steps to ensure such fairness by ensuring procurement procedures are carried out in accordance with 43 CFR § 12.944 for Institutions of Higher Education, Hospitals and Other Non-Profit Organizations.

8. LIABILITY: The Parties accept responsibility for any property damage, injury or death, caused by the acts or omissions of their respective employees, acting within the scope of their employment, to the fullest extent permitted by law. To the extent work is to be provided by a non-governmental entity or person, the Department will require that entity or person to:

(1) Procure public and employee liability insurance from a responsible company or companies with a minimum limitation of One Million Dollars ($1,000,000) per person for any one claim, and an aggregate limitation of Three Million Dollars ($3,000,000) for any number of claims arising from any one incident. The policies shall name the United States as an additional insured, shall specify that the insured shall have no right of subrogation against the United States for payments of any premiums or deductibles due thereunder, and shall specify that the insurance shall be assumed by, be for the account of, and be at the insured's sole risk. Prior to beginning the work authorized herein, the contractor shall provide the Service with confirmation of such insurance coverage; and

(2) Pay the United States the full value for all damages to the lands or other property of the United States caused by such person or organization, its representatives, or employees; and

(3) Indemnify, save and hold harmless, and defend the United States against all fines, claims, damages, losses, judgments, and expenses arising out of, or from, any omission or activity of such person organization, its representatives, or employees.

9. ADVERTISING AND ENDORSEMENTS

a. The Commission shall not publicize, or otherwise circulate, promotional material (such as an advertisements, sales brochures, press releases, speeches, picture, movies, articles manuscripts or other publications) which states or implies Governmental, Departmental, bureau or Government employee endorsement of a product, service, or position which Commission represents. No release of information relating to this agreement may state or imply that the Government approves of the work product of Commission to be superior to other products or services.

b. The Commission will ensure that all information submitted for publication or other public releases of information regarding this project shall carry the following disclaimer:

The views and conclusions contained in this document are those of the authors and should not be interpreted as representing the opinions or policies of the U.S. Government. Mention of trade names or commercial products does not constitute their endorsement by the U.S. Government.

c. The Commission will obtain prior Service approval from the National Trails System – Santa Fe for any public information release which refers to the Department of the Interior, any bureau or employee (by name or title), or to this Agreement. The specific text, layout, photographs, etc. of the proposed release must be submitted to the Service along with the request for approval.

d. The Commission further agrees to include the above provisions in any sub-award to any sub-recipient, except for a sub-award to a state government, a local government or to a federally recognized Indian tribal government.

10. PUBLICATIONS OF RESULTS OF STUDIES: No party shall unilaterally publish a joint publication without consulting the other party. This restriction does not apply to popular publication of previously published technical matter. Publication pursuant to this Agreement may be produced independently or in collaboration with others, however, in all cases proper credit will be given to the efforts of those parties contribution to the publication. In the event no agreement is reached concerning the manner of publication or interpretation of results, either party may publish data after due notice and submission of the proposed manuscripts to the other. In such instances, the party publishing the data will give due credit to the cooperation but assume full responsibility for any statements on which there is a difference of opinion.

11. ACCESS TO RECORDS: The Secretary of the Interior and the Comptroller General of the United States, or their duly authorized representatives, shall have access for the purpose of financial or programmatic review and examination to any books, documents, papers, and records of QV that are pertinent to the Agreement at all reasonable times during the period of retention in accordance with OMB Circular A-110 and 43 CFR 12.

12. DI-2010 CERTIFICATION: The Department of the Interior's certification form, DI-2010, "Certifications Regarding Debarment, Suspension and Other Responsibility Matters, Drug-Free Workplace Requirements, and Lobbying" enclosed with this Agreement must be completed and signed by the Commission. The signed DI-2010 shall be part of this Agreement.

13. RIGHTS OF DATA: The Commission grants the United States of America a royalty-free, non-exclusive and irrevocable license to publish, reproduce and use, and dispose of in any manner and for any purpose without limitation, and to authorize or ratify publication, reproduction, or use by others, of all copyrightable material first produced or composed under this Agreement by the cooperator, its employees, or any individual or concern specifically employed or assigned to originate and prepare such material.

ARTICLE XII. ATTACHMENTS

In addition to the attachments previously specified in this Agreement, the following documents, provided by Commission are attached to or incorporated by reference and made a part of this Agreement:

a. Standard Form 424, Application for Federal Assistance - The form must completed and signed by the Commission. The signed SF-424 shall be part of this Agreement.

b. The Commission's Challenge Cost Share Program proposal and budget.

ARTICLE XIII. SIGNATURES

IN WITNESS HEREOF, the parties hereto execute this Agreement on the date(s) set forth below.

NATIONAL PARK SERVICE

Name: _____

Signature: _____

Title: Superintendent

Date: _____

Name: _____

Signature: _____

Title: _____

Date: _____

Name: _____

Signature: _____

Title: _____

Date: _____

TEXAS HISTORICAL COMMISSION

Name: _____

Signature: _____

Title: Executive Director

Date: _____

APPENDIX G:
POTENTIAL ATTRIBUTE LIST FOR SITE IDENTIFICATION AND MONITORING

Date

Site Name

Identification Number

GPS Latitude & Longitude

Survey Document Number

Survey Team Members

Legal or Physical Location Description

GPS Location

USGS 100K Quad

USGS 24K Quad

County

State

High-Potential Site/Segment

Congressional District

Access Code

Land Ownership

Current Stakeholders

Contact Information

Historical Significance

Existing Historical Assets

Natural Features
- TREES
- SOIL
- GRASS
- ROCK FEATURES
- ELEVATIONS
- POND
- SPRING
- STREAM
- RIVER

Built Environment
- BUILDINGS
- FENCING
- OVERHEAD LINES
- ROADS
- OTHERS

View North

View South

View East

View West

Detriments to Viewshed

Potential Long-Term Threats to Resource

Threats to Resource Requiring Immediate Attention

Subjective Physical Assessment of the Site

Directional Signage

Site Identification Signage

Local Signage/Marker

State Signage

Daughters of the American Revolution (DAR) Marker

Other Existing Markers or Signage

State Historic Site (yes or no)

Listed in National Register of Historic Places (yes or no)

Existing Interpretive Media and Condition

Further interpretation or replacement needed (yes or no)

Recommended Interpretation

Potential Themes and Topics

NHT Site Name

NHT Site Number

NRHP (National Register of Historic Places) Criteria

NRHP Property Category

NHT Public Use Site

Handicap Accessibility Status (ADA)

NHT Certification

APPENDIX H:
POSSIBLE VENUES FOR TRAIL INTERPRETATION

Table H-1, Louisiana

Venue	Address	City	Parish
Cane River Creole National Historical Park	400 Rapides Drive	Natchitoches	Natchitoches
Adai Indian Nation Cultural Center	4460 HWY 485	Robeline	Natchitoches
Los Adaes State Historic Site	6354 Hwy. 485	Robeline	Natchitoches
Old Courthouse Museum - Louisiana State Museum	600 Second Street	Natchitoches	Natchitoches
Fort Jesup State Historic Site	32 Geoghagan Road	Many	Sabine
Fort St. Jean Baptiste State Historic Park	155 Rue Jefferson	Natchitoches	Natchitoches

Table H-2, Texas

Venue	Address	City	County
Longhorn Museum	1959 Highway 97 E	Pleasanton	Atascosa
Bastrop County Museum	702 Main Street	Bastrop	Bastrop
Casa Navarro State Historic Site	228 S. Laredo Street	San Antonio	Bexar
San Antonio Academy Museum	117 East French Place	San Antonio	Bexar
San Antonio Missions National Historic Park	2202 Roosevelt Avenue	San Antonio	Bexar
Spanish Governor's Palace	105 Plaza de Armas	San Antonio	Bexar
Texas Transportation Museum	11731 Wetmore Road	San Antonio	Bexar
The Alamo	300 Alamo Plaza	San Antonio	Bexar
Witte Museum	3801 Broadway Street	San Antonio	Bexar
Brazos Valley Museum of Natural History	3232 Briarcrest Drive	Bryan	Brazos
Star of the Republic Museum	23200 Park Road 12	Washington	Brazos
Caddo Mounds State Historic Site	1649 State Hwy 21 W	Alto	Cherokee
Heritage Center of Cherokee County	208 S. Henderson Street	Rusk	Cherokee
Jim Hogg Historic Site	RR 5, Box 80	Rusk	Cherokee
Rusk & Palestine State Park	RR 4, Box 431	Rusk	Cherokee
Heritage Museum of the Texas Hill Country	4831 FM 2673	Canyon Lake	Comal
Sophienburg Museum and Archives	401 W. Coll Street	New Braunfels	Comal
The DeWitt County Historical Museum	312 E. Broadway	Cuero	DeWitt
Cuero Heritage Museum	124 E. Church Street	Cuero	DeWitt

Venue	Address	City	County
Chisholm Trail Museum	302 N. Esplanade	Cuero	DeWitt
Nordheim History Museum	Highway 72	Nordheim	DeWitt
Yoakum History Museum	312 Simpson Street	Yoakum	DeWitt
Old Stone Church Museum	1764 Meyersville Road	Meyersville	DeWitt
Yorktown Historical Museum	143 Main Street	Yorktown	DeWitt
Wade House Memorial Museum	200 North 9th Street	Carrizo Springs	Dimmit
Museum of Nature and Science	PO Box 729	Round Top	Fayette
Old Frio County Jail Museum	503 E. Trinity	Pearsall	Frio
Goliad State Historical Park	108 Park Road 6	Goliad	Goliad
Markethouse Museum	205 S. Market Street	Goliad	Goliad
Presidio La Bahia	PO Box 57	Goliad	Goliad
Gonzales Memorial Museum	414 Smith Street	Gonzales	Gonzales
Lyndon Baines Johnson Museum of San Marcos	601 University Drive	San Marcos	Hays
Crockett Depot & Museum	303 S. First	Crockett	Houston
Mission Tejas State Park	120 State Park Rd. 44	Grapeland	Houston
Karnes County Museum	8167 N FM 81	Karnes City	Karnes
Harlingen Arts and Heritage Museum	2435 Boxwood	Hallettsville	Lavaca
Lavaca Historical Museum	413 N. Main Street	Hallettsville	Lavaca
Yoakum Heritage Museum	312 Simpson Street	Yoakum	Lavaca
Donna Hooks Fletcher Museum	PO Box 174	Dime Box	Lee
Fort Boggy State Park	4994 Highway 75 South	Centerville	Leon
Madison County Museum	201 N. Madison Street	Madisonville	Madison
Fort Duncun Museum	1095 Avenue B	Eagle Pass	Maverick
McMullen County Historical Museum	301 W. Missouri	Tilden	McMullen
Medina County Museum	2202 18th Street	Hondo	Medina
Landmark Inn State Historic Site	402 East Florence Street	Castroville	Medina
Milam County Museum	201 E. Main Street	Cameron	Milam
Sterne-Hoya Library & Museum	211 S. Lanana Street	Nacogdoches	Nacogdoches
Stone Fort Museum	Stephen F. Austin State University	Nacogdoches	Nacogdoches
The Carnegie Library of Robertson County	315 E. Dechard Street	Franklin	Robertson
Bremond Historical Society	217 S. Main Street	Bremond	Robertson
Sabine County Jail Museum and Vergie Speights Memorial Library	PO Drawer 580	Hemphill	Sabine

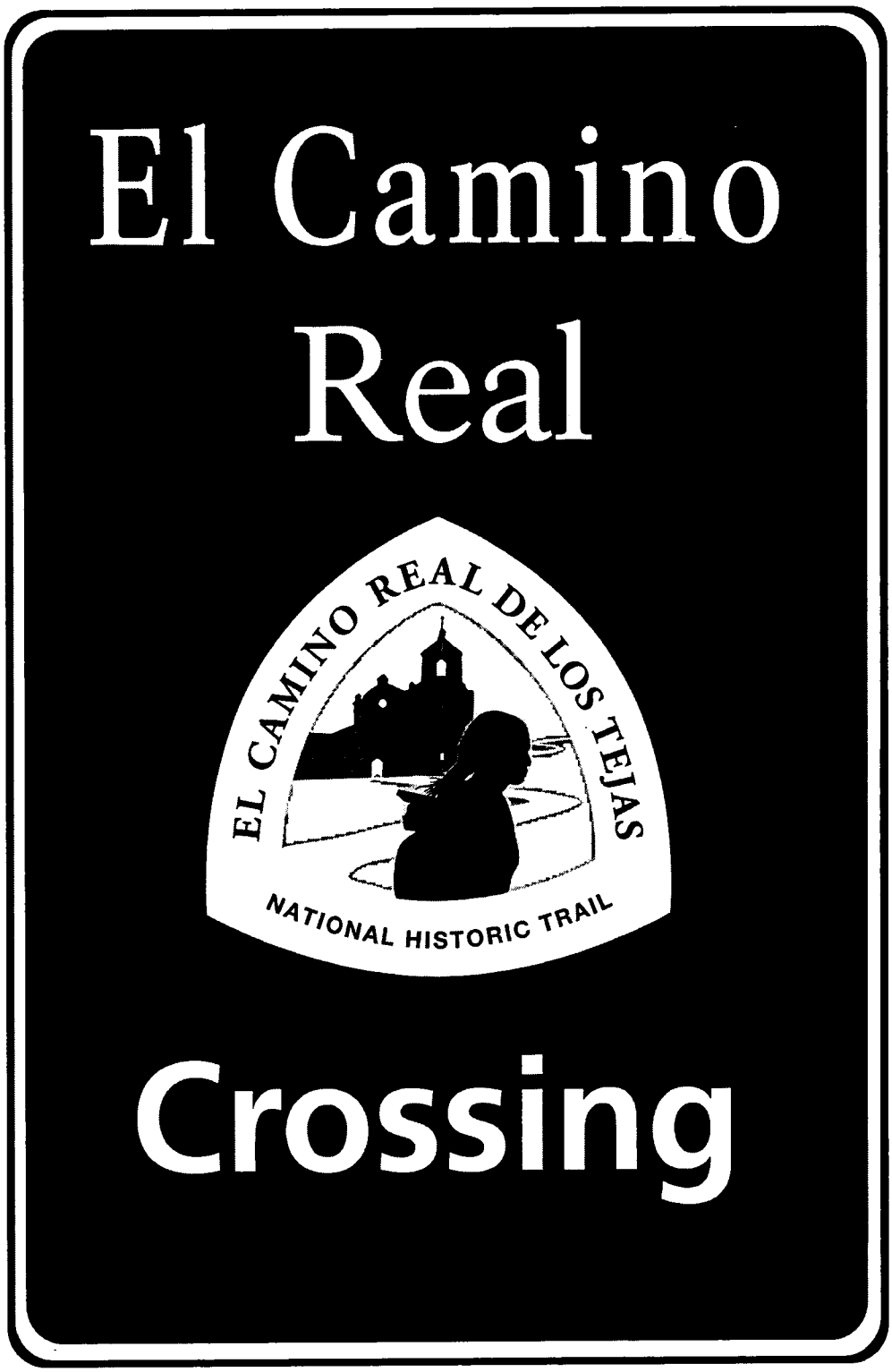
Venue	Address	City	County
Mission Dolores Visitor Center & Archives	701 S. Broadway	San Augustine	San Augustine
Bob Bullock Texas State History Museum	1800 N. Congress Avenue	Austin	Travis
Center for American History	University of Texas-Austin	Austin	Travis
LBJ Library and Museum	2313 Red River Street	Austin	Travis
McKinney Falls State Park	5808 McKinney Falls Parkway	Austin	Travis
Republic of Texas Museum	510 East Anderson	Austin	Travis
Texas Capitol Visitors Center	112 East 11th Street	Austin	Travis
Texas Military Forces Museum	2200 West 35th Street	Austin	Travis
Texas Natural Science Center	University of Texas-Austin	Austin	Travis
The French Legation Museum	802 San Marcos	Austin	Travis
Anderson Mill Museum	502 North Liberty Street		Victoria
Museum of the Coastal Bend	2200 East Red River	Victoria	Victoria
Brenham Heritage Museum	105 S. Market Street	Brenham	Washington
Laredo Children's Museum	5300 San Dario Avenue	Laredo	Webb
Republic of the Rio Grande Museum	1005 Zaragoza Street	Laredo	Webb
Villa Antigua Border Heritage Museum	810 Zaragoza Street	Laredo	Webb
Williamson County Historical Museum	716 S. Austin Avenue	Georgetown	Williamson
La Vernia Heritage Museum	PO Box 513	La Vernia	Wilson
Colonel Antonio Zapata Museum	PO Box 2325	Zapata	Zapata
La Paz County Historical Museum	305 Lincoln Street	San Ygnacio	Zapata

APPENDIX I. SAMPLE TRAIL SIGNS

Figure I-1. Original Route Sign

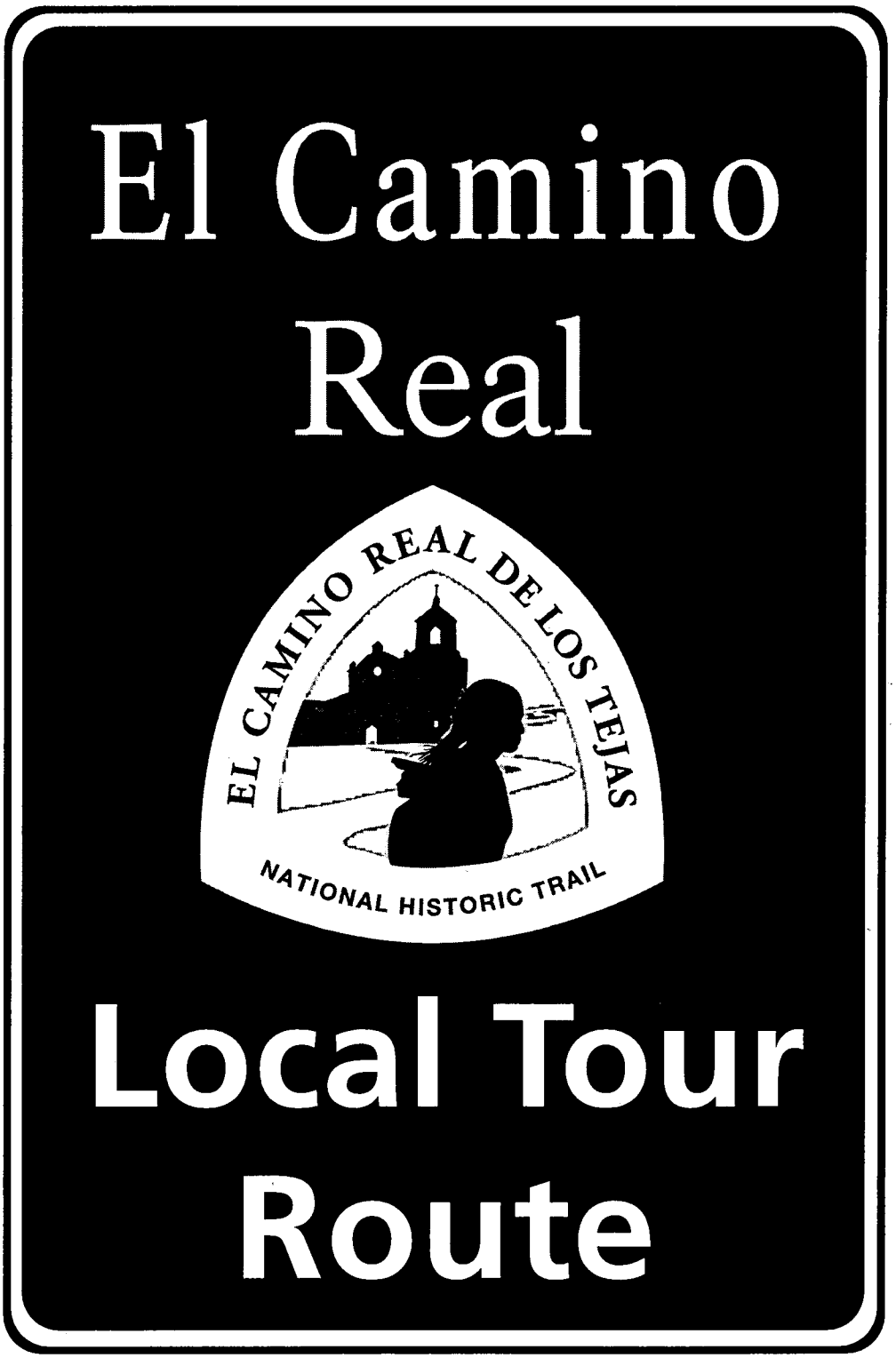
Recommended "Original Route' sign indicating the original route alignment of the trail

Figure I-2. Crossing Sign



Recommended 'Crossing' sign indicating that the trail once crossed at this location

Figure I-3. Local Tour Route Sign



Recommended 'Local Tour Route' sign

Figure I-4. State Historic Site Sign

Figure I-5. Site Directional Sign

Recommended site directional sign

APPENDIX J: THREATENED AND ENDANGERED SPECIES

El Camino Real de los Tejas National Historic Trail crosses 40 counties in Texas and two parishes in Louisiana. Texas has 105 species of flora and fauna listed as Threatened or Endangered species. There are 32 species of plants, of which seven are listed as Endangered. There are 73 species of fauna, of which two species are listed as Threatened and 35 listed as Endangered. There are eight candidate species: two are plants; the other six are animals.

Table J-1, Federally Listed Threatened and Endangered Plant Species

Common Name	Scientific Name	Federal Status	Location	Critical Habitat
Endangered Species				
Ashy dogweed	*Thymophylla tephroleuca*	Endangered	TX	No
Johnston's frankenia	*Frankenia johnstonii*	Endangered	TX	No
Large-fruited sand verbena	*Abronia macrocarpa*	Endangered	TX	No
Navasota ladies' tresses	*Spinranthes parksii*	Endangered	TX	No
Texas wild-rice	*Zizania texana*	Endangered	TX	Yes
White bladderpod	*Lesquerella pallida*	Endangered	TX	No
Zapata bladderpot	*Lesquerella thamnophilia*	Endangered	TX	No

Table J-2, Federally Listed Threatened and Endangered Animal Species

Common Name	Scientific Name	Federal Status	Location	Critical Habitat
Endangered Species				
[unnamed] ground beetle	*Rhadine exilis*	Endangered	TX	No
[unnamed] ground beetle	*Rhadine infernalis*	Endangered	TX	Yes
Attwater's greater prairie-chicken	*Tympanuchus cupido attwateri*	Endangered	TX	No
Barton Springs salamander	*Eurycea sosorum*	Endangered	TX	No
Bee Creek Cave harvestman	*Texella reddelli*	Endangered	TX	No
Black-capped vireo	*Vireo atricapilla*	Endangered	TX	No
Bone Cave harvestman	*Texella reyesi*	Endangered	TX	No
Bracken Bat Cave meshweaver	*Cicurina venii*	Endangered	TX	Yes
Coffin Cave mold beetle	*Batrisodes texanus*	Endangered	TX	No
Cokendolpher Cave harvestman	*Texella cokendolpheri*	Endangered	TX	Yes

Table J-2, Federally Listed Threatened and Endangered Animal Species

Common Name	Scientific Name	Federal Status	Location	Critical Habitat
Endangered Species				
Comal Spring dryopid beetle	*Stygoparnus comalensis*	Endangered	TX	No
Comal Spring riffle beetle	*Heterelmis comalensis*	Endangered	TX	No
Fountain darter	*Etheostoma fonticola*	Endangered	TX	Yes
Golden-cheeked warbler (wood)	*Dendroica chrysaparia*	Endangered	TX	No
Government Canyon bat cave meshweaver	*Cicurina vespera*	Endangered	TX	No
Government Canyon bat cave spider	*Neoleptoneta microps*	Endangered	TX	No
Gulf Coast jaguarundi	*Herpailurus (=Felis yagouaroundi cacomitli)*	Endangered	TX	No
Helotes mold beetle	*Batrisodes venyivi*	Endangered	TX	Yes
Houston toad	*Bufo houstonensis*	Endangered	TX	Yes
Interior least tern	*Sterna antillarum athalassos*	Endangered	LA	No
Jollyville Plateau salamander	*Eurycea tonkawae*	Endangered	TX	No
Kretschmarr Cave mold beetle	*Texamaurops reddelli*	Endangered	TX	No
Least tern	*Sterna antillarum*	Endangered	TX	No
Madla's Cave meshweaver	*Cicurina madla*	Endangered	TX	Yes
Ocelot	*Leopardus (=Felis pardalis)*	Endangered	TX	No
Peck's Cave amphipod	*Stygobromus (=Stygonectes) pecki*	Endangered	TX	No
Red-cockaded woodpecker	*Picoides borealis*	Endangered	LA-TX	No
Red wolf	*Canus rufus*	Endangered	LA	No
Robber Baron Cave meshweaver	*Cicurina baronia*	Endangered	TX	Yes
San Marcos gambusia	*Gambusia georgei*	Endangered	TX	Yes
Texas blind salamander	*Typhlomolge rathbuni*	Endangered	TX	No
Tooth Cave ground beetle	*Rhadine persephone*	Endangered	TX	No
Tooth Cave pseudoscorpion	*Tartarocreagris texana*	Endangered	TX	No
Tooth Cave spider	*Neoleptoneta myopica*	Endangered	TX	No
Warton's Cave meshweaver	*Cicurina wartoni*	Endangered	TX	No
Whooping crane	*Grus americana*	Endangered	TX	No

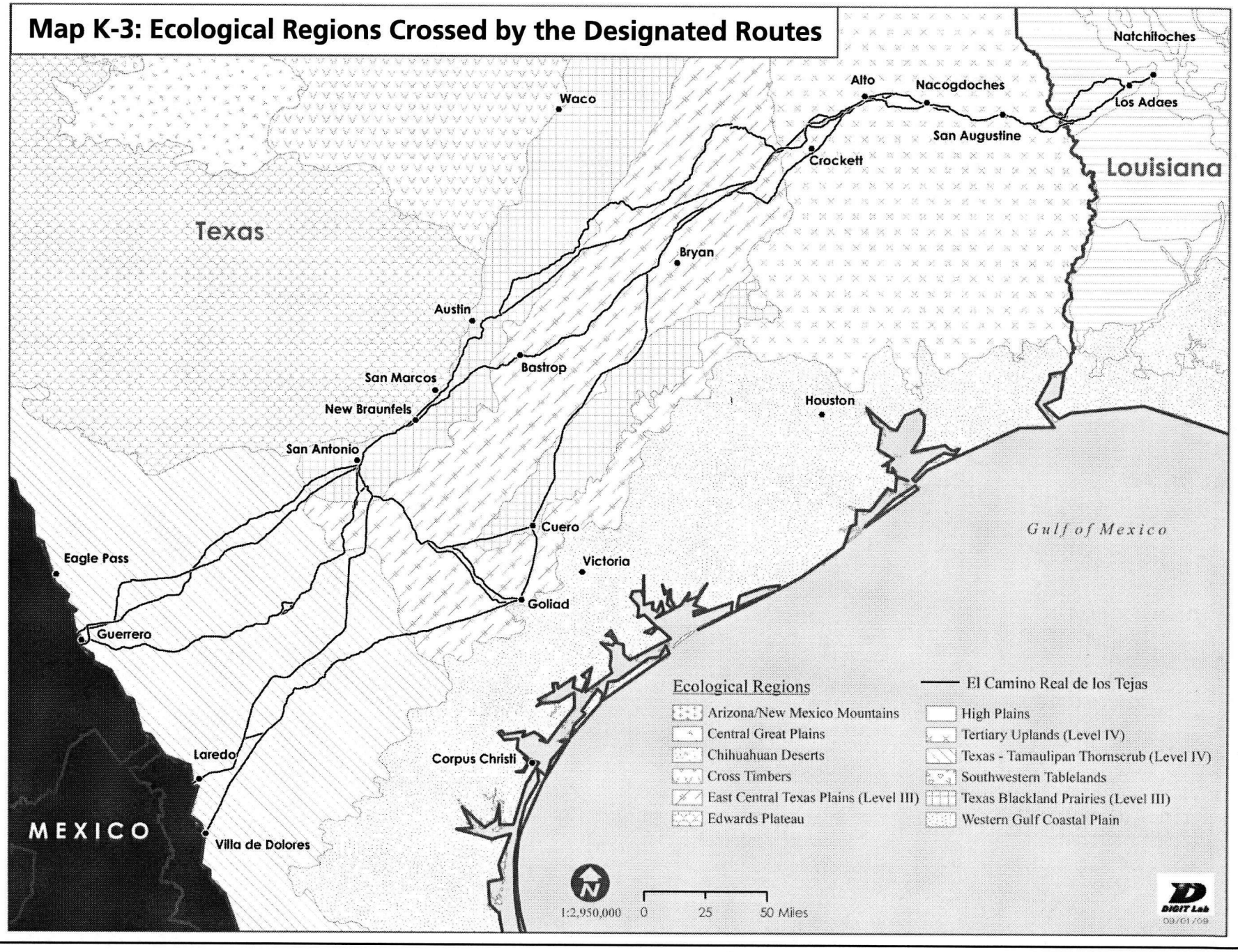
Table J-2, Federally Listed Threatened and Endangered Animal Species

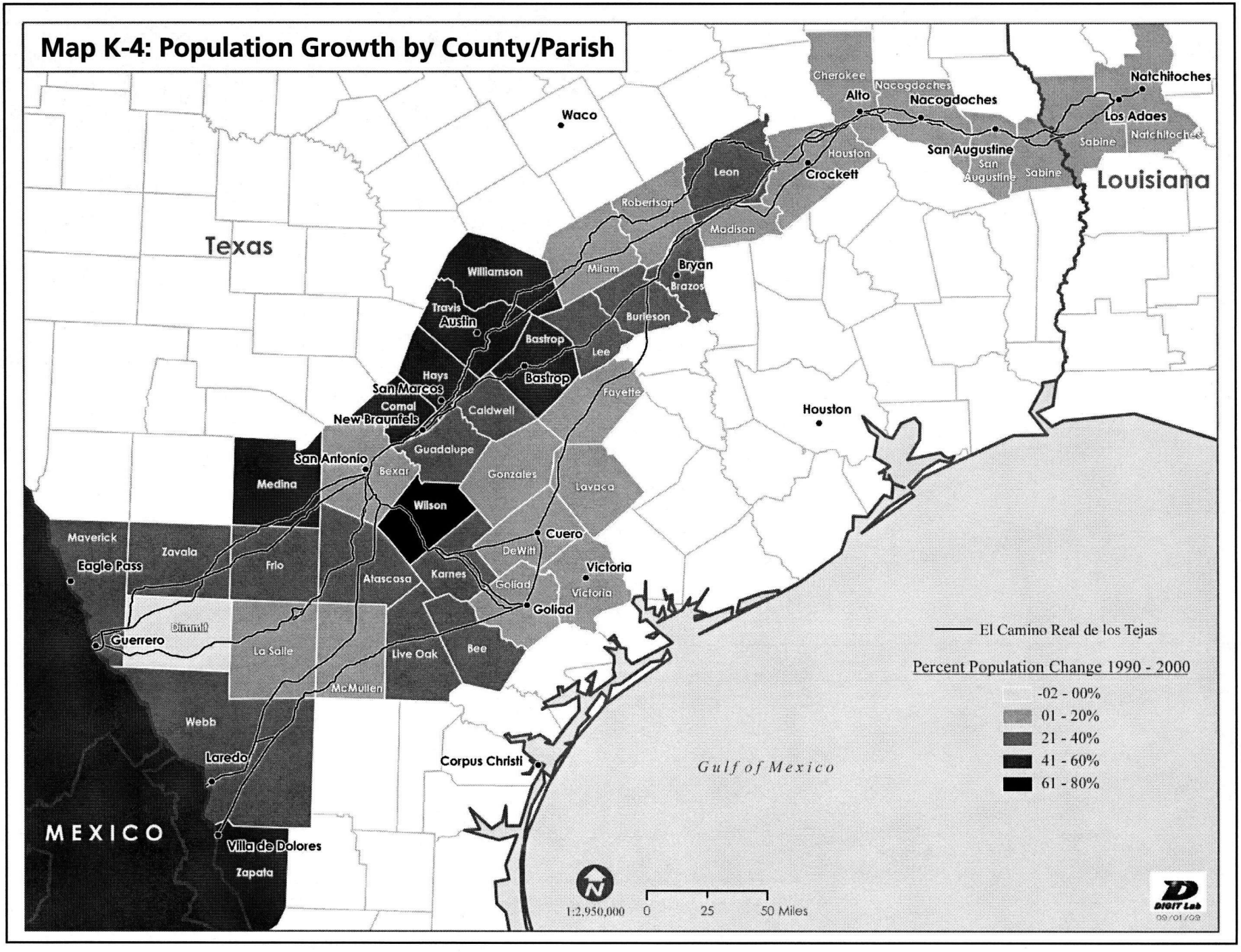
Common Name	Scientific Name	Federal Status	Location	Critical Habitat
Threatened Species				
Louisiana black bear	*Urus americanus huteolus*	Threatened	TX	No
San Marcos salamander	*Eurycea nana*	Threatened	TX	Yes

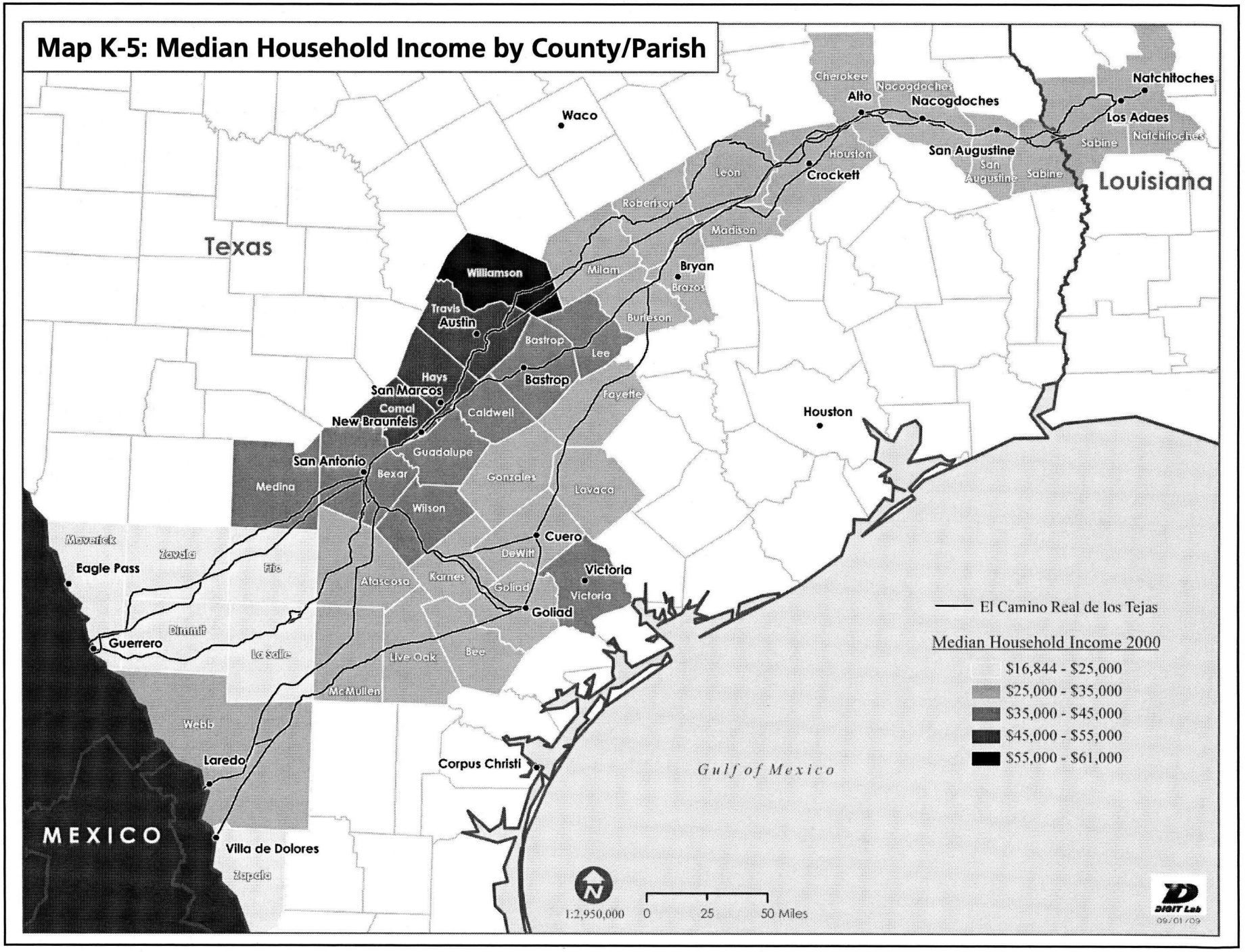
Table J-3, Proposed and Candidate Endangered Animal Species

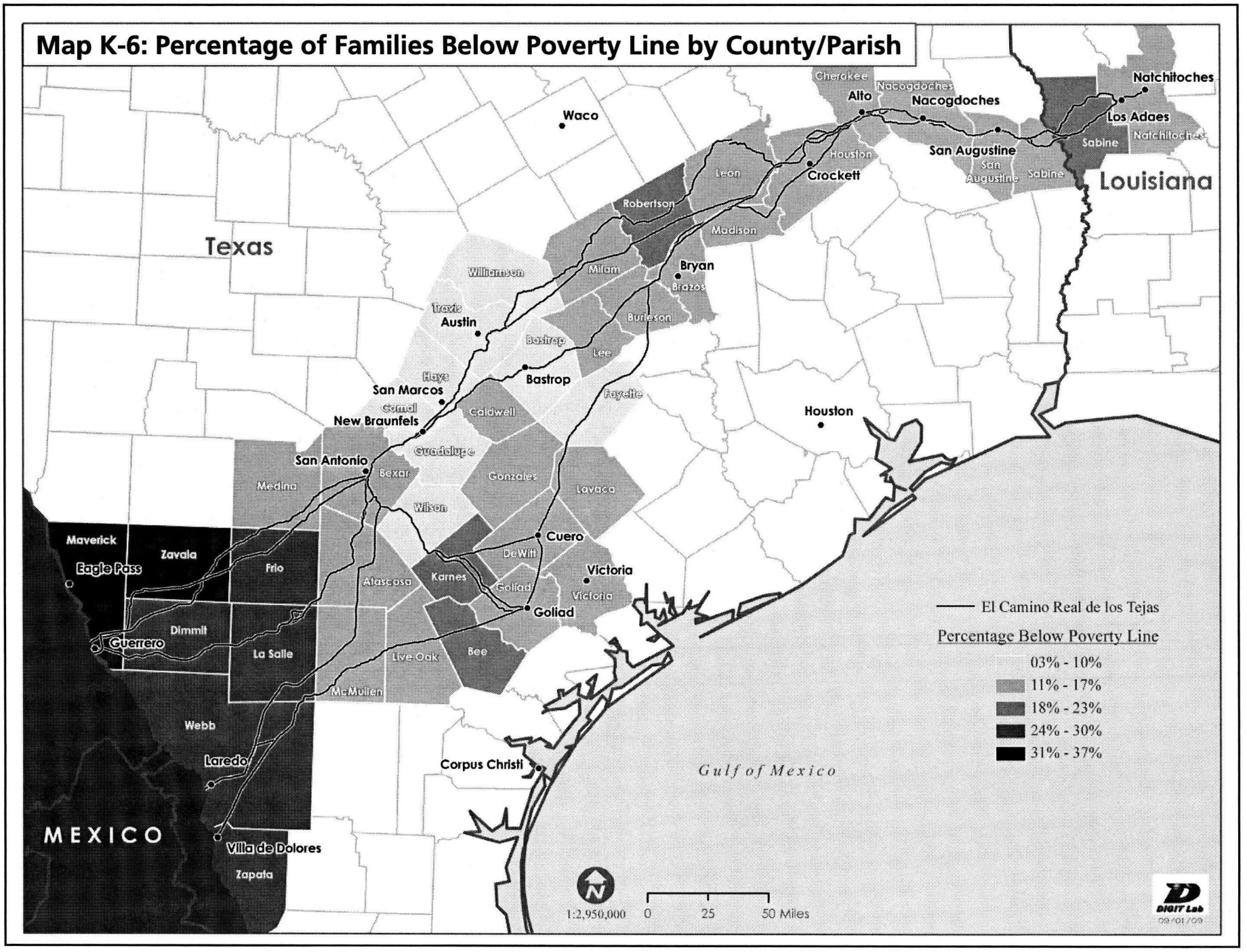
Common Name	Scientific Name	Federal Status	Location	Critical Habitat
Candidate Species				
Austin blind salamander	*Eurycea waterlooensis*	Candidate	TX	No
Georgetown salamander	*Eurycea naufragia*	Candidate	TX	No
Louisiana pine snake	*Pituophis ruthveni*	Candidate	LA-TX	No
Neches River rose-mallow	*Hisbiscus dasycalyx*	Candidate	TX	No
Sharpnose shiner	*Notropis oxyrhynchus*	Candidate	TX	No
Smalleye shiner	*Notropis buccula*	Candidate	TX	No
Texas golden gladecress	*Leavenworthia texana*	Candidate	TX	No
Texas hornshell (mussel)	*Popenaias popei*	Candidate	TX	No

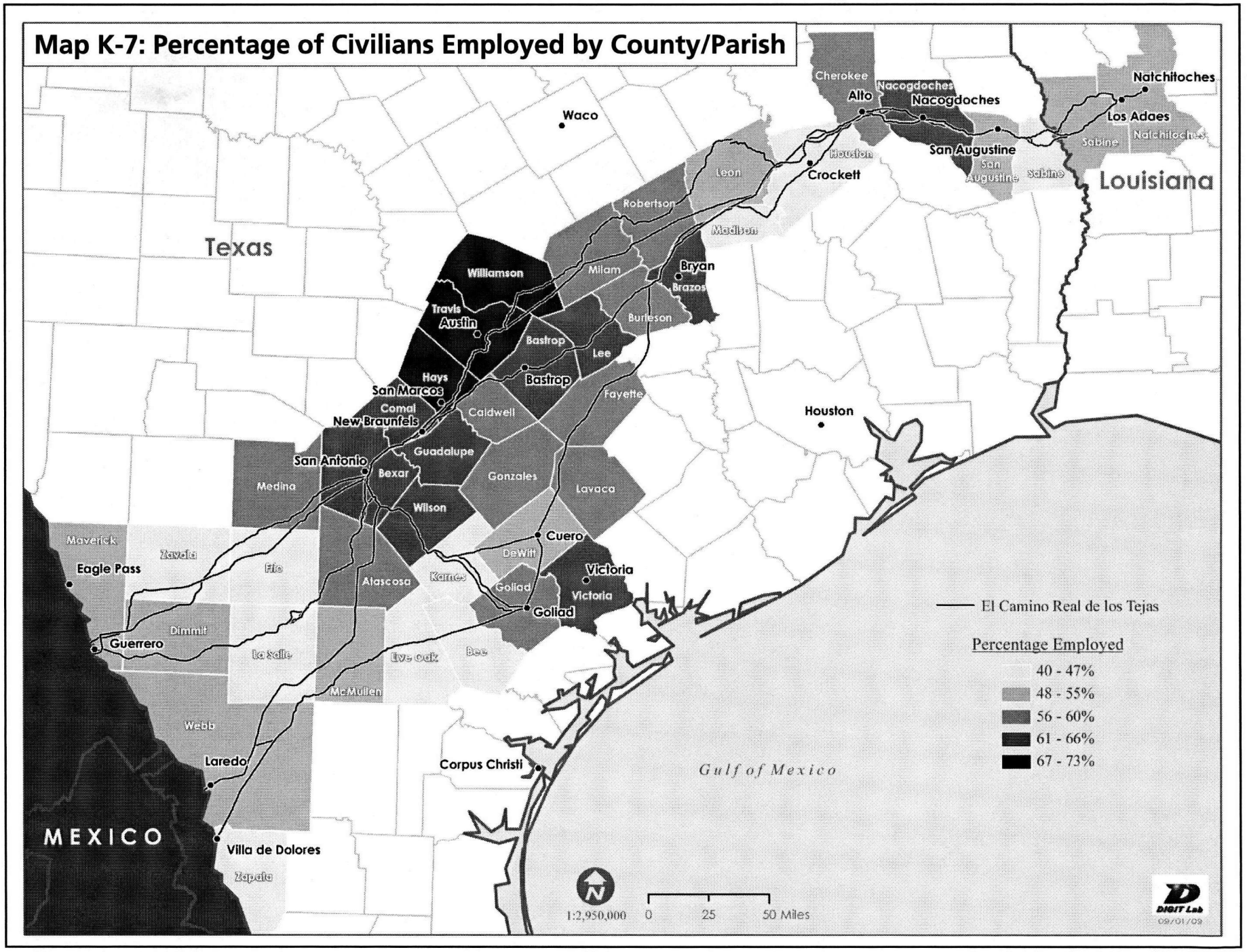
Map K-3: Ecological Regions Crossed by the Designated Routes

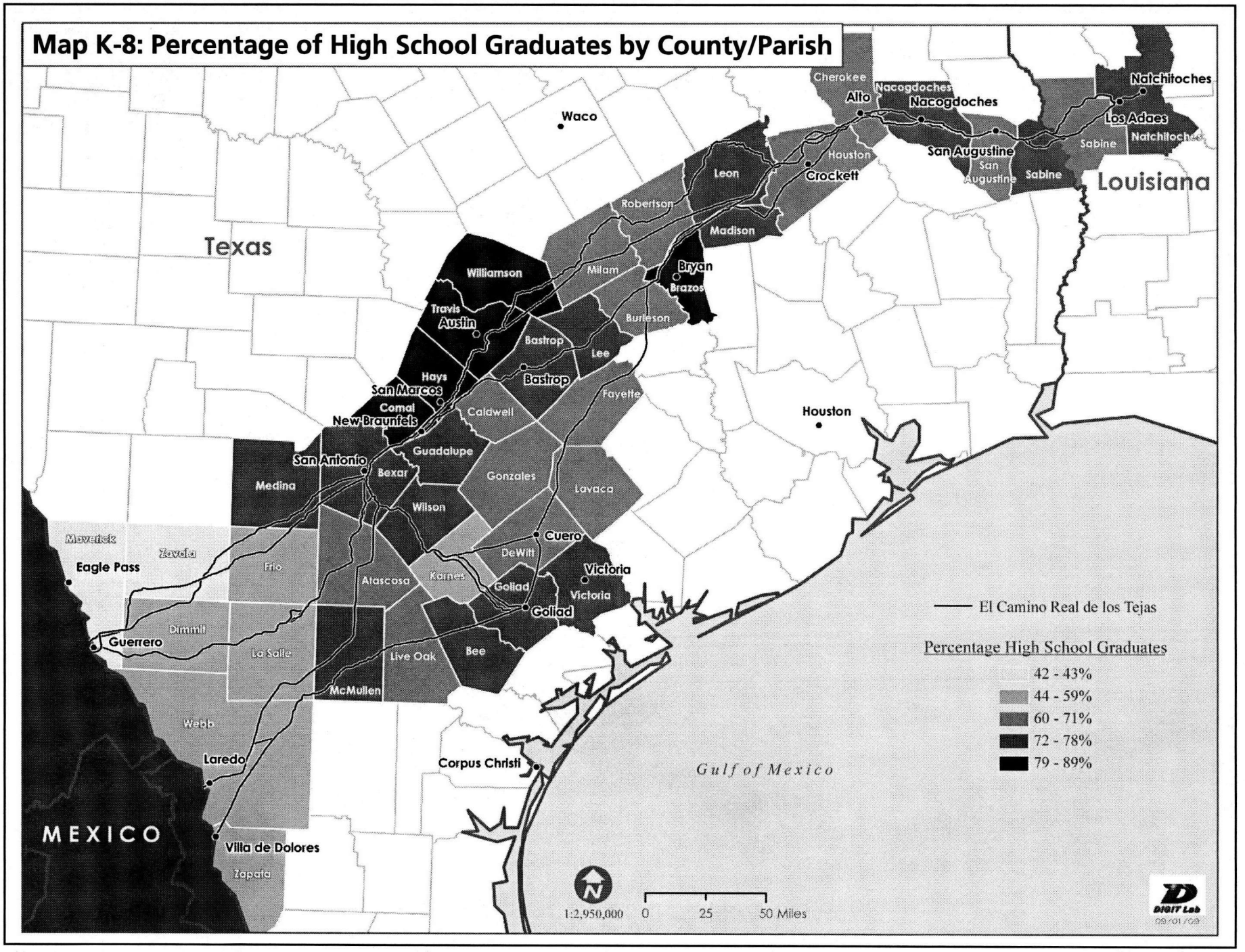


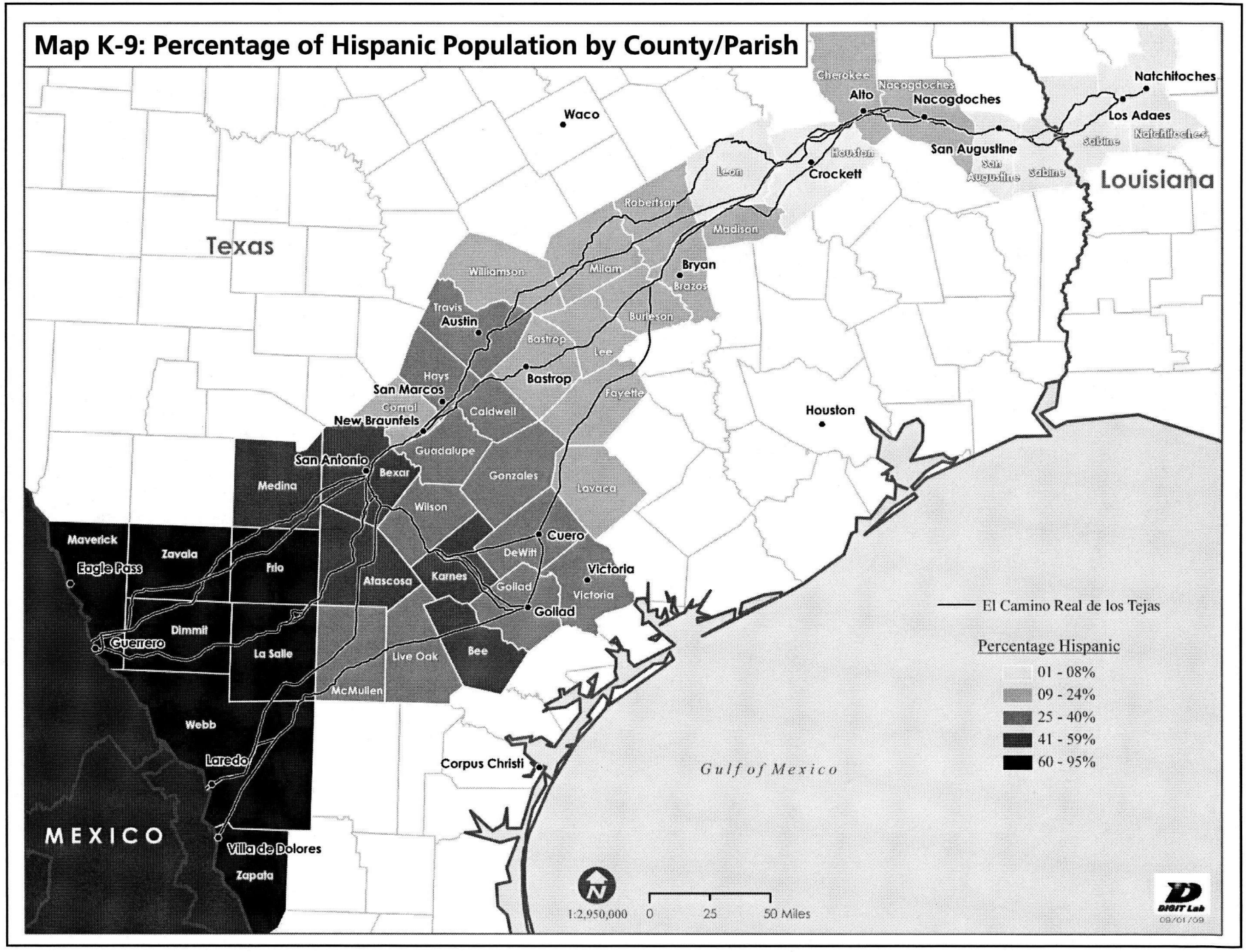

Map K-4: Population Growth by County/Parish
Texas
Louisiana
MEXICO
Gulf of Mexico
Waco
Houston
Corpus Christi
Laredo
Eagle Pass
Villa de Dolores
Austin
San Antonio
New Braunfels
San Marcos
Bastrop
Crockett
Alto
Nacogdoches
San Augustine
Natchitoches
Los Adaes
Bryan
Cuero
Victoria
Goliad
Williamson
Travis
Hays
Comal
Caldwell
Guadalupe
Bexar
Medina
Wilson
Gonzales
Lavaca
DeWitt
Karnes
Atascosa
Frio
Maverick
Zavala
Dimmit
Guerrero
La Salle
McMullen
Live Oak
Bee
Webb
Zapata
Robertson
Leon
Madison
Milam
Brazos
Burleson
Lee
Fayette
Houston
Sabine
Cherokee
El Camino Real de los Tejas
Percent Population Change 1990 - 2000
-02 - 00%
01 - 20%
21 - 40%
41 - 60%
61 - 80%
1:2,950,000
0
25
50 Miles
DIGIT Lab
09/01/02


Map K-5: Median Household Income by County/Parish
Texas
Louisiana
MEXICO
Gulf of Mexico
Waco
Natchitoches
Alto
Nacogdoches
Los Adaes
San Augustine
Crockett
Houston
Bryan
Austin
San Marcos
New Braunfels
San Antonio
Bastrop
Eagle Pass
Victoria
Goliad
Cuero
Laredo
Corpus Christi
Villa de Dolores
Cherokee
Sabine
Leon
Robertson
Madison
Milam
Brazos
Burleson
Williamson
Travis
Hays
Comal
Caldwell
Lee
Fayette
Guadalupe
Bexar
Gonzales
Lavaca
Wilson
Medina
Maverick
Zavala
Frio
Atascosa
Karnes
DeWitt
Goliad
Victoria
Dimmit
Guerrero
La Salle
Live Oak
Bee
McMullen
Webb
Zapata
El Camino Real de los Tejas
Median Household Income 2000
$16,844 - $25,000
$25,000 - $35,000
$35,000 - $45,000
$45,000 - $55,000
$55,000 - $61,000
1:2,950,000
0
25
50 Miles
DIGIT Lab
09/01/09


Map K-6: Percentage of Families Below Poverty Line by County/Parish
Texas
Louisiana
MEXICO
Gulf of Mexico
Waco
Austin
San Marcos
New Braunfels
San Antonio
Eagle Pass
Laredo
Villa de Dolores
Corpus Christi
Victoria
Goliad
Cuero
Bastrop
Crockett
Houston
Alto
Nacogdoches
San Augustine
Natchitoches
Los Adaes
Bryan
Maverick
Zavala
Frio
Dimmit
Guerrero
La Salle
Webb
Zapata
Medina
Bexar
Wilson
Atascosa
Karnes
DeWitt
Gonzales
Lavaca
Fayette
Caldwell
Guadalupe
Comal
Hays
Travis
Williamson
Milam
Brazos
Burleson
Lee
Bastrop
Robertson
Madison
Leon
Houston
Cherokee
Nacogdoches
Sabine
San Augustine
Natchitoches
Live Oak
Bee
McMullen
El Camino Real de los Tejas
Percentage Below Poverty Line
03% - 10%
11% - 17%
18% - 23%
24% - 30%
31% - 37%
1:2,950,000
0
25
50 Miles
DIGIT Lab
09/01/09


Map K-7: Percentage of Civilians Employed by County/Parish
Texas
Louisiana
MEXICO
Gulf of Mexico
Waco
Houston
Crockett
Cherokee
Nacogdoches
Alto
Nacogdoches
Natchitoches
Los Adaes
San Augustine
Sabine
Natchitoches
San Augustine
Sabine
Leon
Robertson
Madison
Milam
Bryan
Brazos
Williamson
Travis
Austin
Burleson
Bastrop
Lee
Bastrop
Hays
San Marcos
Comal
New Braunfels
Caldwell
Fayette
Houston
Guadalupe
San Antonio
Bexar
Gonzales
Lavaca
Medina
Wilson
Cuero
DeWitt
Victoria
Victoria
Maverick
Zavala
Eagle Pass
Frio
Atascosa
Karnes
Goliad
Goliad
Dimmit
Guerrero
La Salle
Live Oak
Bee
McMullen
Webb
Laredo
Corpus Christi
Villa de Dolores
Zapata
El Camino Real de los Tejas
Percentage Employed
40 - 47%
48 - 55%
56 - 60%
61 - 66%
67 - 73%
1:2,950,000
0
25
50 Miles
DIGIT Lab
09/01/09


Map K-8: Percentage of High School Graduates by County/Parish
Texas
Louisiana
MEXICO
Gulf of Mexico
Waco
Houston
Corpus Christi
Laredo
Eagle Pass
Villa de Dolores
Crockett
Alto
Nacogdoches
Natchitoches
Los Adaes
San Augustine
Sabine
Leon
Robertson
Madison
Milam
Bryan
Brazos
Burleson
Williamson
Travis
Austin
Bastrop
Lee
Fayette
Hays
San Marcos
Comal
New Braunfels
Caldwell
Guadalupe
San Antonio
Bexar
Medina
Gonzales
Lavaca
Wilson
Cuero
DeWitt
Victoria
Goliad
Karnes
Atascosa
Frio
Maverick
Zavala
Dimmit
La Salle
Live Oak
Bee
McMullen
Webb
Zapata
El Camino Real de los Tejas
Percentage High School Graduates
42 - 43%
44 - 59%
60 - 71%
72 - 78%
79 - 89%
1:2,950,000
0
25
50 Miles
DIGIT Lab
09/01/09


Map K-9: Percentage of Hispanic Population by County/Parish
Texas
Louisiana
MEXICO
Gulf of Mexico
Waco
Austin
Bryan
Bastrop
San Marcos
New Braunfels
San Antonio
Houston
Corpus Christi
Laredo
Eagle Pass
Victoria
Goliad
Crockett
San Augustine
Nacogdoches
Alto
Natchitoches
Los Adaes
Villa de Dolores
Zapata
Webb
Maverick
Zavala
Frio
Dimmit
Guerrero
La Salle
Medina
Bexar
Atascosa
McMullen
Live Oak
Bee
Wilson
Karnes
Gonzales
Guadalupe
Caldwell
Hays
Comal
Travis
Williamson
Milam
Brazos
Burleson
Lee
Fayette
Lavaca
DeWitt
Cuero
Victoria
Goliad
Robertson
Madison
Leon
Houston
Cherokee
Nacogdoches
Sabine
San Augustine
Sabine
Natchitoches
El Camino Real de los Tejas
Percentage Hispanic
01 - 08%
09 - 24%
25 - 40%
41 - 59%
60 - 95%
1:2,950,000
0
25
50 Miles
DIGIT Lab
09/01/09

Map K-10: Major Rivers along El Camino Real de los Tejas NHT

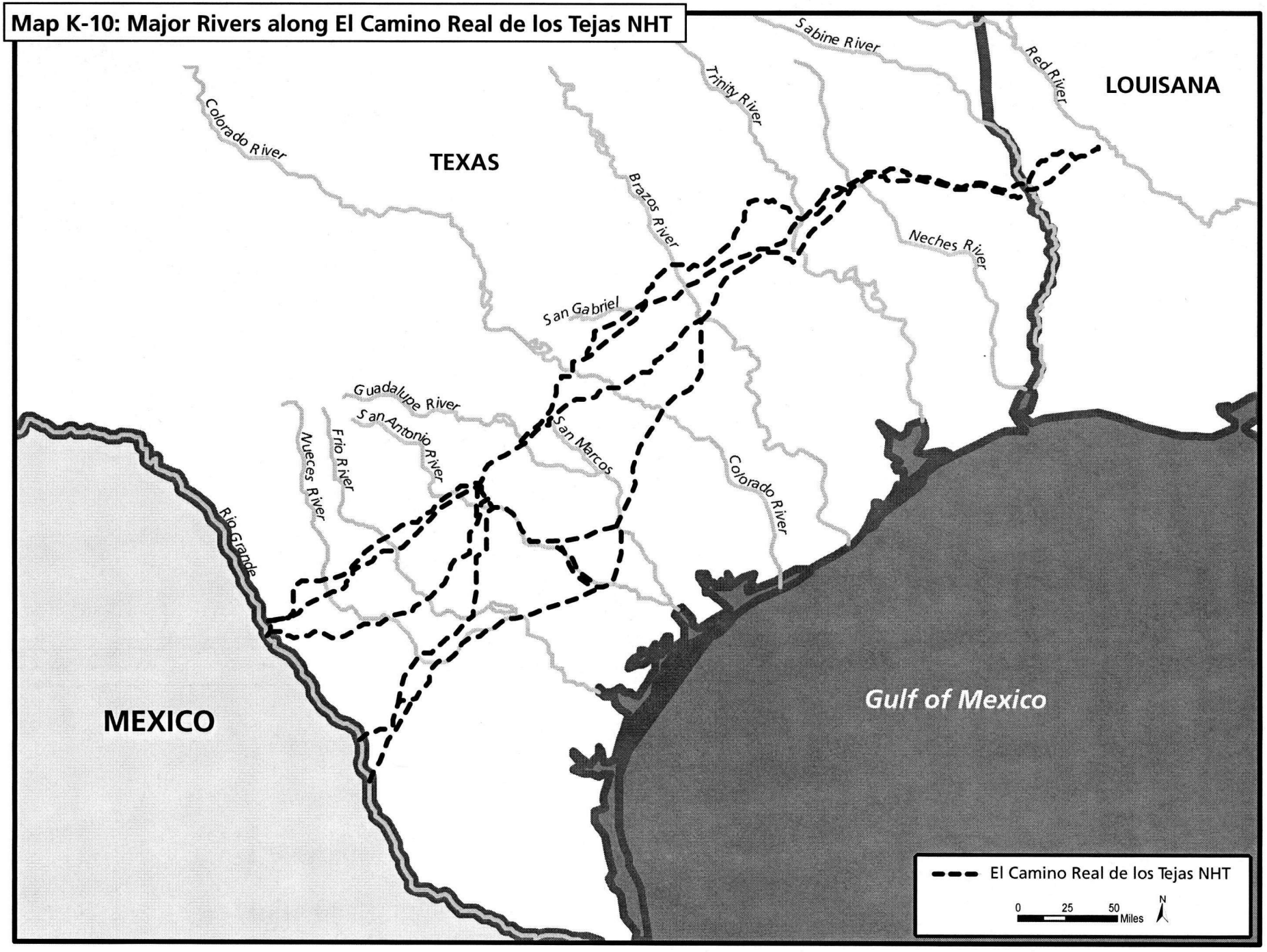


Table K-1. Median Household Income and Percentage of Families Below the Poverty Line by County/Parish, 2000

County/State	Median Household Income	% Difference from Statewide Median Income◆	% Families Below Poverty Rate★	Difference from Statewide Percentage
Atascosa	$33,081	-17.1	-16.1	+4.1
Bastrop	$43,578	+9.1	+8.4	-3.6
Bee	$28,392	-28.9	-19.7	+10.5
Bexar	$38,328	-4.0	-12.7	+.7
Brazos	$29,104	-27.0	-14.0	+2.0
Burleson	$33,026	-17.2	-13.2	+1.2
Caldwell	$36,573	-8.0	-10.4	-1.6
Cherokee	$29,313	-26.0	-13.7	+1.7
Comal	$46,147	+15.6	+6.4	-5.6
DeWitt	$28,714	-28.0	+15.3	+3.3
Dimmit	$21,917	-45.1	+29.7	+17.7
Fayette	$34,526	-13.5	-8.1	-3.9
Frio	$24,504	-38.6	+24.5	+12.5
Goliad	$34,201	-14.3	-11.9	-.1
Gonzales	$28,368	-28.9	+13.8	+1.8
Guadalupe	$43,949	+10.1	-7.3	-4.7
Hays	$45,006	+12.7	-6.4	-5.6
Houston	$28,119	-29.6	+15.6	+3.6
Karnes	$26,526	-33.6	+18.5	+6.5
La Salle	$21,857	-45.2	+28.2	+16.2
Lavaca	$29,132	-27.0	-10.2	-1.8
Lee	$36,280	-9.1	-9.7	-2.3
Leon	$30,981	-22.4	+12.6	+.6
Live Oak	$32,057	-19.7	+14.1	+2.1
Madison	$29,418	-26.3	+12.3	+.3
Maverick	$21,232	-48.8	+32.0	+20.0
McMullen	$32,500	-18.6	+15.9	+3.9
Medina	$36,063	-9.7	12.0	=
Milam	$33,186	-16.9	+12.2	+.2
Nacogdoches, TX	$28,301	-29.1	+15.5	+3.5
Natchitoches, LA	$25,722	-21.0	15.8	=
Robertson	$28,886	-27.6	+17.3	+5.3
Sabine, LA	$26,655	-14.8	+20.9	+5.1
Sabine, TX	$27,198	-31.9	-11.8	-.2
San Augustine, TX	$27,025	-32.3	+15.6	+3.6

◆ In 2000, the median household income for the United States was $41,994, for Texas was $39,927, and for Louisiana it was $32,566. Percentage values for this column were calculated as follows: (County Median Household Income – Texas Median Household Income) Texas Median Household Income.

★ In 2000, the percentage of families below poverty rate for the United States was 9.2%, for Texas it was 12%, and for Louisiana it was 15.8%.

County/State	Median Household Income	% Difference from Statewide Median Income◆	% Families Below Poverty Rate★	Difference from Statewide Percentage
Travis	$46,761	+17.1	-7.7	-4.3
Victoria	$38,732	-3.0	-10.5	-1.5
Webb	$28,100	-29.6	+26.7	+14.7
Williamson	$60,642	+51.9	-3.4	-8.6
Wilson	$40,006	+.02	-9.2	-2.8
Zapata	$24,635	-38.3	+29.3	+17.3
Zavala	$16,844	-57.8	+37.4	+27.4

◆ In 2000, the median household income for the United States was $41,994, for Texas was $39,927, and for Louisiana it was $32,566. Percentage values for this column were calculated as follows: (County Median Household Income – Texas Median Household Income) Texas Median Household Income.

★ In 2000, the percentage of families below poverty rate for the United States was 9.2%, for Texas it was 12%, and for Louisiana it was 15.8%.

Table K-2. Population Data for Counties and Parishes Crossed by the Trail, 1990–2000

County/State	1990 Population	2000 Population	Population Change 1990–2000	% Change in Population 1990–2000 †
Atascosa, TX	30,533	38,628	+8,095	+26.5
Bastrop, TX	38,263	57,733	+19,470	+50.9
Bee, TX	25,135	32,359	+7,224	+28.7
Bexar, TX	1,185,394	1,392,931	+207,537	+17.5
Brazos, TX	121,862	152,415	+30,553	+25.1
Burleson, TX	13,625	16,470	+2,845	+20.9
Caldwell, TX	26,392	32,194	+5,802	+22.0
Cherokee, TX	41,049	46,659	+5,610	+13.7
Comal, TX	51,832	78,021	+31,799	+75.0
DeWitt, TX	18,840	20,013	+1,173	+6.2
Dimmit, TX	10,433	10,248	-185	-1.8
Fayette, TX	20,095	21,804	+1,709	+8.5
Frio, TX	13,472	16,252	+2,780	+20.6
Goliad, TX	5,980	6,928	+948	+15.8
Gonzales, TX	17,205	18,628	+1,423	+8.2
Guadalupe, TX	64,873	89,023	+24,150	+37.2
Hays, TX	65,614	97,589	+31,975	+48.7
Houston, TX	21,375	23,185	+1,810	+8.5
Karnes, TX	12,455	15,446	+2,991	+24.0
La Salle, TX	5,254	5,866	+612	+11.6
Lavaca, TX	18,690	19,210	+520	+2.8
Lee, TX	12,854	15,657	+2,803	+21.8
Leon, TX	12,665	15,335	+2,670	+21.1
Live Oak, TX	9,556	12,309	+2,753	+28.8
Madison, TX	10,931	12,940	+2,009	+18.4

† Percentage population change has been computed in the following manner – (2000–1990)/1990.

County/State	1990 Population	2000 Population	Population Change 1990–2000	% Change in Population 1990–2000 †
Maverick, TX	36,378	47,297	+10,919	+30.0
McMullen, TX	817	851	+34	+4.2
Medina, TX	27,312	39,304	+11,992	+43.9
Milam, TX	22,946	24,238	+1,292	+5.6
Nacogdoches, TX	54,753	59,203	+4,450	+8.1
Natchitoches, LA	36,689	39,080	+2,391	+6.5
Robertson, TX	15,511	16,000	+489	+3.1
Sabine, LA	22,646	23,459	+813	+3.4
Sabine, TX	9,586	10,469	+883	+9.2
San Augustine, TX	7,999	8,946	+947	+11.9
Travis, TX	576,407	812,280	+235,873	+40.9
Victoria, TX	74,361	84,088	+9,727	+13.1
Webb, TX	133,239	193,117	+59,878	+44.9
Williamson, TX	139,551	249,967	+110,416	+79.1
Wilson, TX	22,650	32,408	+9,758	+43.1
Zapata, TX	9,279	12,182	+2,903	+23.9
Zavala, TX	12,162	11,600	-562	-4.6

† Percentage population change has been computed in the following manner – (2000–1990)/1990.

Table K-3. Percentage of Civilian Population Employed and Percentage of High School Graduates, 2000

County	Employed Civilian Pop (over 16)	% Employed◆	% High school grad. or higher★
Atascosa	15,430	59.3	65.2
Bastrop	26,529	63.6	76.9
Bee	9,944	42.0	73.7
Bexar	595,911	63.4	76.9
Brazos	72,096	64.1	81.3
Burleson	7,024	58.3	71.1
Caldwell	13,403	59.0	71.4
Cherokee	18,691	55.5	68.4
Comal	36,319	62.8	83.9
DeWitt	7,893	52.8	67.9
Dimmit	3,342	54.1	54.3
Fayette	10,039	59.5	71.3
Frio	5,257	47.1	57.7
Goliad	2,949	56.8	72.4
Gonzalez	8,315	59.1	62.0

◆ In 2000, the average percentage employed for the United States was 65%, the average for Texas was 65.6%, and the average for Louisiana was 61%.

★ In 2000, the average percentage of high-school graduates for the United States was 84.1%, the average for Texas was 78.6%, and the average for Louisiana was 79.4%.

County	Employed Civilian Pop (over 16)	% Employed◆	% High school grad. or higher★
Guadalupe	40,845	66.4	78.1
Hays	50,484	70.2	84.7
Houston	7,958	45.9	70.0
Karnes	4,705	40.2	59.1
La Salle	1,826	45.7	50.1
Lavaca	8,677	58.5	68.6
Lee	7,309	63.3	71.7
Leon	6,012	52.2	73.8
Live Oak	4,244	45.3	67.1
Madison	4,186	42.4	72.8
Maverick	13,161	50.7	42.1
McMullen	347	51.8	74.7
Medina	16,168	58.6	72.2
Milam	10,305	58.5	70.9
Nacogdoches	25,637	61.7	73.7
Natchitoches, LA	14,909	54.8	72.7
Robertson	6,318	56.4	68.1
Sabine, LA	8,466	51.2	70.8
Sabine, TX	3,258	41.9	72.5
San Augustine	3,210	48.8	69.9
Travis	441,161	72.0	84.7
Victoria	38,646	64.8	76.2
Webb	62,558	53.0	53.0
Williamson	129,192	72.8	88.8
Wilson	13,939	61.2	73.8
Zapata	3,384	43.9	53.1
Zavala	3,034	44.9	43.4

◆ In 2000, the average percentage employed for the United States was 65%, the average for Texas was 65.6%, and the average for Louisiana was 61%.

★ In 2000, the average percentage of high-school graduates for the United States was 84.1%, the average for Texas was 78.6%, and the average for Louisiana was 79.4%.

Table K-4.
Percentage of Ethnic Groups in Counties and Parishes Crossed by the Trail, 2000

County/State	Whites	% White	Black	% Black	Hispano	% Hispano	Other	% Other
Atascosa	28,286	73.3	230	0.6	22,620	58.6	9,001	22.7
Bastrop	46,327	80.2	5,072	8.8	13,845	24	5,090	8.9
Bee	21,957	67.9	3,203	9.9	17,450	53.9	6,510	20.1
Bexar	959,122	68.9	100,025	7.2	757,033	54.3	283,061	20.3
Brazos	113,479	74.5	16,333	10.7	27,253	17.9	19,597	12.9
Burleson	12,199	74.1	2,481	15.1	2,411	14.6	1,474	9.0
Caldwell	22,577	70.1	2,735	8.5	13,018	40.4	6,000	18.6

County/State	Whites	% White	Black	% Black	Hispano	% Hispano	Other	% Other
Cherokee	34,685	74.3	7,446	16	6,178	13.2	3,902	8.4
Comal	69,501	89.1	741	0.9	17,609	22.6	6,246	8.0
DeWitt	15,293	76.4	2,209	11	5,454	27.2	2,160	10.7
Dimmit	7,886	77	90	0.9	8,708	85	2,015	19.7
Fayette	18,442	84.6	1,528	7	2,786	12.8	1,592	7.4
Frio	11,679	71.9	792	4.9	11,987	73.8	3,375	20.8
Goliad	5,724	82.6	334	4.8	2,439	35.2	750	10.7
Gonzales	13,458	72.2	1,563	8.4	7,381	39.6	3,069	16.5
Guadalupe	69,122	77.6	4,460	5	29,561	33.2	12,705	14.3
Hays	77,014	78.9	3,588	3.7	28,859	29.6	14,557	15
Houston	15,899	68.6	6,476	27.9	1,739	7.5	633	2.8
Karnes	10,588	68.5	1,667	10.8	7,324	47.4	2,842	18.4
La Salle	4,779	81.5	208	3.5	4,524	77.1	754	12.8
Lavaca	16,686	86.9	1,305	6.8	2,183	11.4	1,000	5.2
Lee	11,992	76.6	1,892	12.1	2,848	18.2	1,503	9.6
Leon	12,809	83.5	1,593	10.4	1,213	7.9	770	5.0
Live Oak	10,743	87.3	301	2.4	4,683	38	1,026	8.3
Madison	8,642	66.8	2,959	22.9	2,042	15.8	1,339	10.3
Maverick	33,529	70.9	146	0.3	44,938	95	12,228	25.8
McMullen	752	88.4	10	1.2	282	33.1	78	9.1
Medina	31,200	79.4	866	2.2	17,873	45.5	6,108	15.5
Milam	19,121	78.9	2,678	11	4,516	18.6	2,044	8.4
Nacogdoches	44,405	75	9,908	16.7	6,660	11.2	4,056	6.9
Natchitoches, LA	22,608	57.9	15,017	38.4	566	1.4	957	2.4
Robertson	10,592	66.2	3,871	24.2	2,359	14.7	1,250	7.9
Sabine, LA	17,048	72.7	3,958	16.9	642	2.7	1,942	8.2
Sabine, TX	9,197	87.8	1,039	9.9	189	1.8	141	1.3
San Augustine	6,196	69.3	2,500	27.9	320	3.6	183	2.7
Travis	554,058	68.2	75,247	9.3	229,048	28.2	41,529	19.8
Victoria	62,406	74.2	5,297	6.3	32,959	39.2	14,519	17.2
Webb	158,670	97.5	713	0.4	182,070	94.3	28,823	15.3
Williamson	205,994	82.4	12,790	5.1	42,990	17.2	25,899	8.4
Wilson	26,311	81.2	392	1.2	11,834	36.5	4,917	17.5
Zapata	10,241	84.1	50	0.4	10,328	84.8	1,607	13.1
Zavala	7,547	65.1	57	0.5	10,582	91.2	3,688	31.8

Table K-5: Public Land Ownership in Texas and Louisiana

State	Federal	%	State	%	USFS	NPS	NWR	Army Corps
LA	1,387,100 acres	4.97	744,600	2.67	604,210	10,100	463,180	20,140
TX	2,391,400 acres	1.43	825,000	.49	755,100	1,172,600	463,700	945,870

Table K-6. Recreational Visits to Public Sites along El Camino Real de los Tejas National Historic Trail, 2007-2008

Feature Name	Feature Type	Management Entity	Location (or nearest)	Latest Visitation Figures (2007)
Bastrop State Park	Park	Texas Parks & Wildlife	Bastrop, Texas	158,036 (FY 2008)
Caddo Mounds State Historic Site	Archeological site	Texas Historical Commission	Alto, Texas	5,660 (FY 2008)
Fort Boggy State Park	Park	Texas Parks & Wildlife	Centerville, Texas	9,055 (FY 2008)
Goliad State Historical Park	Historic mission-presidio complex and park	Texas Parks & Wildlife	Goliad, Texas	50,999 (FY 2008)
McKinney Falls State Park	Park	Texas Parks & Wildlife	Austin, Texas	128,454 (FY 2008)
Mission Nuestra Señora de los Dolores de los Ais	Historic mission site and interpretive center	City of San Augustine	San Augustine, Texas	500 (FY 2008)
Mission Tejas State Park	Historic mission and park	Texas Parks & Wildlife	Alto, Texas	15,478 (FY 2008)
Old Stone Fort/ Stone Fort Museum	Reconstructed historical building	Stephen F. Austin State University	Nacogdoches, Texas	6,116 (Scholastic Year 2007–2008)
The Alamo	Historic mission-fortress compound	Daughters of the Republic of Texas	San Antonio, Texas	2.5 million visitors a year consistently over the last decade
San Antonio Missions National Historical Park	Federal historic park	National Park Service	San Antonio, Texas	1,303,212 (Year 2008)
Toledo Bend Reservoir	Reservoir	Sabine River Authority – State of Louisiana (Texas does not have a visitor center on their side of the river.	Texas-Louisiana border	16,488 (Year 2007) average for the last decade: 16,899
Fort Jesup State Historic Site	Historic site and park	Louisiana Department of Culture, Recreation & Tourism	Many, Louisiana	5,059 (FY 2007-2008)
Los Adaes State Historic Site	Historic site and park	Louisiana Department of Culture, Recreation & Tourism	Natchitoches, Louisiana	2,700 (FY 2007-2008)
Fort St. Jean Baptiste State Historic Site	Historic site and park	Louisiana Department of Culture, Recreation & Tourism	Natchitoches, Louisiana	12,344 (FY 2007-2008)
Cane River Creole National Historical Park	Federal historic park	National Park Service	Natchitoches, Louisiana	24,587 (Year 2008)

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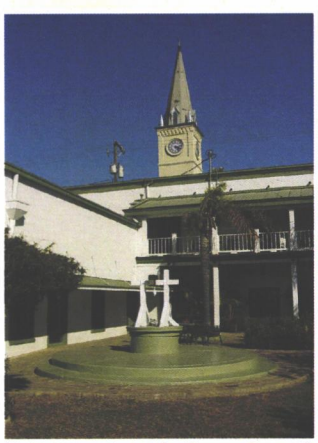

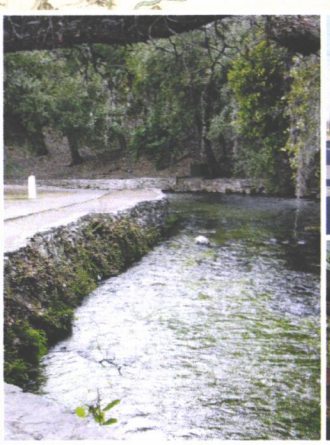

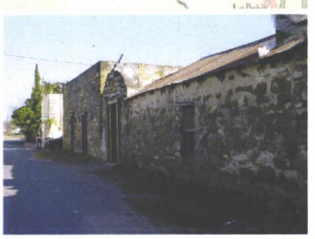

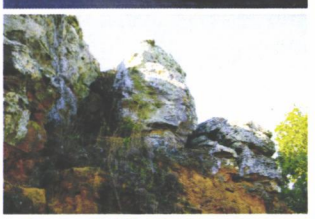

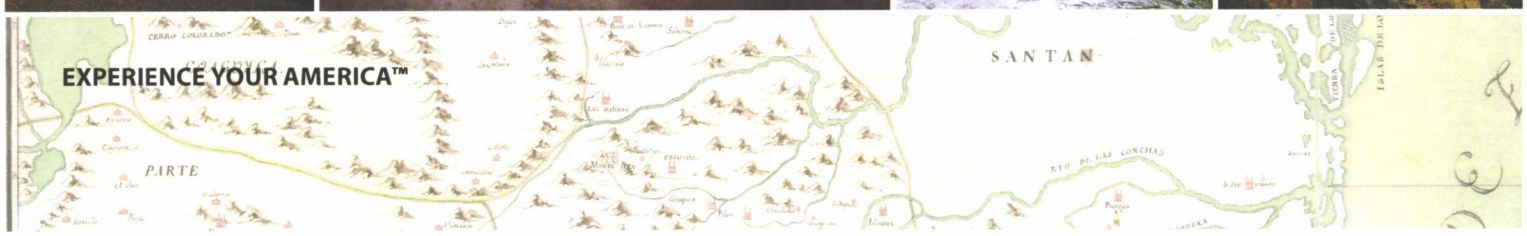

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