

Comprehensive Management and Use Plan
Final Environmental Impact Statement
California National Historic Trail
Pony Express National Historic Trail

Management and Use Plan Update
Final Environmental Impact Statement
Oregon National Historic Trail
Mormon Pioneer National Historic Trail



OREGON • CALIFORNIA • MORMON PIONEER • PONY EXPRESS
NATIONAL HISTORIC TRAILS

United States Department of the Interior • National Park Service



Leave No Trace Ethic

Plan Ahead and Prepare
Camp and Travel on Durable Surfaces
Pack It In, Pack It Out
Properly Dispose of Human Waste
Leave What You Find
Minimize the Use and Impact of Fires

Comprehensive Management and Use Plan / Final Environmental Impact Statement
California National Historic Trail
Pony Express National Historic Trail

Management and Use Plan Update / Final Environmental Impact Statement
Oregon National Historic Trail
Mormon Pioneer National Historic Trail



This *Comprehensive Management and Use Plan / Final Environmental Impact Statement* for the Oregon, California, Mormon Pioneer, and Pony Express National Historic Trails is shaped, in part, by the planning requirements found in section 5(f) of the National Trails System Act. It focuses on the trails' purpose and significance, issues and concerns related to current conditions along the trails, resource protection, visitor experience and use, and long-term administrative and management objectives. Elements of the proposed plan have been developed in cooperation with federal, state, and local agencies, as well as nonprofit trails organizations — the entities that form the core of any partnership for national historic trails.

In 1978 Congress authorized the Oregon and Mormon Pioneer National Historic Trails to commemorate these significant routes of travel and to promote their preservation, interpretation, public use, and appreciation. In 1992 it authorized the California and Pony Express National Historic Trails. The National Trails System Act requires that comprehensive management and use plans be prepared for all national trails. Plans for the Oregon and Mormon Pioneer Trails were approved in 1981, but need to be updated to provide additional guidance on high-potential sites and segments, resource protection techniques, site certification, visitor use, interpretation, and cooperative management.

This comprehensive plan serves as a coordinating document that provides broad-based policies, guidelines, and standards for administering the four trails in such a manner as to ensure the protection of trail resources, their interpretation, and their continued use. Two alternatives for the administration of the trails are presented in this document. Both alternatives aim to balance resource preservation and visitor use, thus satisfying the purposes of the National Trails System Act “to provide for the 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.” Alternative 1 (continuation of current conditions) reflects the current wide variability in administration and management, resource protection strategies, interpretation, visitor experience, and use. The alternative notes how resource protection, trail marking, and interpretation are ongoing processes and how increasing levels of cooperation and coordination are becoming more common among the various partners. Alternative 2 (enhanced conditions and a historic trails partnership — the proposal) focuses on enhancing resource preservation and visitor use. To do so, it will be necessary to achieve the highest possible degree of cooperation among the partners, increase awareness of the need to work together, and communicate what is being planned and what is actually being done. This alternative calls for an improved visitor experience through integrated development and programming and a comprehensive strategy for resource protection, including an ambitious program to inventory and monitor resources that would bring together, in one location, information that is currently dispersed.

The *Draft Environmental Impact Statement* was on public review from August 21 to October 19, 1998. Close to 1,000 copies were distributed. Public meetings were held in late September and early October 1998 and were attended by approximately 180 people. Written comments were received from 32 federal, state, and local agencies, 1 Indian tribe, and about 105 organizations and individuals. This *Final Environmental Impact Statement* has been revised in response to substantive comments. There will be a 30-day no-action period after this document is released to the public, after which a record of decision for the selected alternative will be signed.

For further information about this document, contact Jere Krakow, Superintendent, NPS Long Distance Trails Office, 324 S. State St. #250, P.O. Box 45155, Salt Lake City, UT 84145; telephone 801-539-4095.

Summary

This document presents a proposed comprehensive management and use plan for the California and Pony Express National Historic Trails and updates the 1981 Oregon and Mormon Pioneer Comprehensive Management and Use Plans.

In 1978 Congress authorized the Oregon and Mormon Pioneer National Historic Trails to commemorate these significant routes of travel and to promote their preservation, interpretation, public use, and appreciation. In 1992 it authorized the California and Pony Express National Historic Trails. The National Trails System Act requires that comprehensive management and use plans be prepared. Plans for the Oregon and Mormon Pioneer were approved in 1981, but they need to be updated to provide additional guidance on high-potential sites and segments, resource protection techniques, site certification, visitor use, interpretation, and cooperative management.

The Oregon, California, Mormon Pioneer, and Pony Express National Historic Trails commemorate important aspects of American history in the 19th century.¹ They facilitated the settlement of a large portion of the western United States, fostered commerce, and encouraged the development of a transportation and communication network that brought the country closer together. While the trails opened the West to settlement, they also dramatically affected American Indian culture and resulted in the loss of much of their land and resources. The trails inspired a romantic movement in art, literature, and cinema that has had a tremendous impact on the American popular culture. The extensive resources associated with the trails offer the opportunity to understand the emigrant experience and its broad historic context.

The trails did not follow a single route, rather numerous branches and cutoffs were used by the emigrants heading west. These historic trail routes extend nearly 11,000 miles in portions of 12 states and include many significant cultural and natural resources, but at this time not all these historic routes are part of the authorized national historic trails.

No one entity can provide adequate protection for these extensive resources. The preservation of historic trails depends on information sharing and mutual assistance among trails partners in both the public and private sectors.

This Comprehensive Management and Use Plan / Final Environmental Impact Statement is shaped, in part, by the planning requirements found in section 5(f) of the National Trails System Act. It focuses on the trails' purpose and significance, issues and concerns related to current conditions along the trails, resource protection, visitor experience

and use, and long-term administrative and management objectives. Elements of the proposed plan have been developed in cooperation with federal, state, and local agencies, as well as nonprofit trail organizations — the entities that form the core of any partnership for national historic trails.

This comprehensive plan serves as a coordinating document that provides broad-based policies, guidelines, and standards for administering the four trails to ensure the protection of trail resources, their interpretation, and their continued use.

This document recognizes the various jurisdictions and plans of all the partner agencies. While its goals and objectives have been reviewed and given general approval by the cooperating agencies, it is recognized that full implementation would require a series of amendments to existing land use plans. Such amendments would have to be pursued on a case-by-case basis after consideration of resource values and land uses.

When existing plans affecting historic trails are amended, or when new plans are drafted, it is recommended that the provisions of this document be incorporated in developing protection strategies.

The Draft Environmental Impact Statement was available for a 60-day public review from August 21 to October 19, 1998. Close to 1,000 copies were sent out for review. Public meetings were held in late September and early October at nine locations throughout the West and were attended by approximately 180 people. Written comments were received from 32 federal, state, and local agencies, 1 Indian tribe, and about 105 organizations and individuals. This Final Comprehensive Management and Use Plan / Environmental Impact Statement has been revised in response to substantive comments on the draft document. In accordance with the National Environmental Policy Act, all written responses from public agencies are reprinted in this document. Substantive comments from individuals have been summarized and responded to in a tabular format.

This Final Environmental Impact Statement associated with the Comprehensive Management and Use Plan is programmatic because the proposal does not call for any undertaking or action that would result in ground disturbances. Any future development would require detailed environmental analyses to be carried out as required by state and local regulations and the provisions of the National Environmental Policy Act and section 106 of the National Historic Preservation Act.

1. Whenever the four trails are addressed in this plan, a chronological order has been adopted as follows: Oregon, California, Mormon Pioneer, and Pony Express.

Two alternatives for the administration of the trails are presented in this document. Both alternatives aim to balance resource preservation and visitor use, thus satisfying the purposes of the National Trails System Act “to provide for the 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.”

Alternative 1 (continuation of current conditions) reflects the current wide variability in administration and management, resource protection strategies, interpretation, visitor experience, and use. The alternative notes how resource protection, trail marking, and interpretation are ongoing processes and how increasing levels of cooperation and coordination are becoming more common among the various partners.

Alternative 2 (enhanced conditions and a historic trails partnership — the proposal) focuses on enhancing resource preservation and visitor use. To do so, it would be necessary to achieve the highest possible degree of cooperation among the partners, increase awareness of the need to work together, and communicate what is being planned and what is actually being done. This alternative calls for an improved visitor experience through integrated development and programming

and a comprehensive strategy for resource protection, including an ambitious program to inventory and monitor resources that would bring together, in one location, information that is currently dispersed.

The National Park Service, the agency designated by the secretary of the interior to administer these four trails, has created a Long Distance Trails Office based in Salt Lake City. This office would take a leading role in implementing the proposed plan. As legally mandated, the Long Distance Trails Office, with the assistance of trail resource managers and trail advocacy groups, would administer the four trails for their preservation and appropriate public use and benefits. This office would foster better communication among federal, state, and local resource managers and various nonprofit trail organizations. It would also serve as a clearinghouse for information about trail routes, significant resources, and technical assistance for management, resource protection, interpretation, and visitor use.

Some components of this plan signal new approaches to the management of historic trails. A geographic information system (GIS) has been used to map most of the routes and the locations of all the high-potential sites and segments associated with the four trails. These data, in conjunction with the computerized data set of the trail

resources generated during the planning process, would become the starting point for a systematic and coordinated effort to use the Salt Lake City office as the central repository for all trail-related resource information.

Some features of the proposal are similar to those presented in the Comprehensive Management and Use Plans for the Oregon and Mormon Pioneer Trails, such as the establishment of flexible management corridors and the identification of resource monitoring needs. This plan suggests a new approach for monitoring resources and assessing their vulnerability to excessive use. It also stresses the need to understand the relationship between the natural and cultural components of trail resources and the importance of landscapes in preserving the historic character of trails.

Cooperative partnerships among federal agencies, between federal and state agencies, and between public and private organizations — even including volunteers and landowners — are essential in bringing these trails to life. A 1995 servicewide memorandum of understanding signed by the Bureau of Land Management, the Forest Service, and the National Park Service pledges federal cooperation. The success of this plan depends on the trail partners and their cooperation.

Contents

Purpose of and Need for the Plan	1	State Level	50
Introduction	3	Local Level	50
Legislative Authority	4	Service-wide Memorandum of Understanding	50
Purpose and Significance of the Trails	25	Cooperative Management Agreements	50
Oregon National Historic Trail	25	Public Awareness	50
California National Historic Trail	25	Trail Marking	50
Mormon Pioneer National Historic Trail	25	Volunteers and Liability	51
Pony Express National Historic Trail	25	Resource Protection	51
Administrative Objectives	26	Protection Plan	51
Administration	26	Site Certification	52
Resource Protection	26	Challenge Cost-Share Programs	52
Interpretation, Visitor Experience, and Use	26	Resource Monitoring	53
Issues and Concerns	26	Interpretation, Visitor Experience, and Use	53
Administration and Management	26	Interpretation	53
Resource Protection	26	Visitor Experience and Use	54
Interpretation and Visitor Experience	26	Alternative 2: Enhanced Conditions and a Historic Trails Partnership	
Use of National Historic Trails	27	(The Proposal)	63
Site Development and Marking	27	Administration and Management	63
Historical Overview and Interpretive Themes	29	Federal Level	63
Historical Overview	29	State Level	64
Cultural Contact and Clashes on the Overland Trails	29	Local Level	64
Oregon and California Trails	29	Service-wide Memorandum of Understanding	64
Mormon Pioneer Trail	30	Cooperative Management Agreements	64
Pony Express Trail	30	Public Awareness	64
Interpretive Themes and Subthemes	31	Trail Marking	65
Trailwide Themes	31	Volunteers and Liability	65
Geographic Regions and Subthemes	32	Technical Task Forces / Review Teams	66
Trail-Specific Subthemes	33	National Historic Trails Forum	66
Historic Routes and Significant Resources	35	Resource Protection	66
Historic Routes	35	Protection Plan	66
Oregon National Historic Trail	35	Site Certification	68
California National Historic Trail	36	Challenge Cost-Share Programs	68
Mormon Pioneer National Historic Trail	40	Resource Monitoring	68
Pony Express National Historic Trail	41	Interpretation, Visitor Experience, and Use	68
Significant Resources	42	Interpretation	68
Oregon National Historic Trail: High-Potential Sites		Visitor Experience and Use	70
and Segments Update	42	Recommendations for Further Study	70
California and Pony Express National Historic Trails:		Historic Resource Study	70
High-Potential Sites and Segments	42	Archeological Resources	70
Mormon Pioneer National Historic Trail: High-Potential		Landownership and Use along the Four Trails	70
Sites and Segments Update	43	GIS Mapping	70
Alternatives, Including the Proposed Action	45	American Indians	70
Introduction	47	Verification of Trail Routes and Sites	70
Alternative 1 (Continuation of Current Conditions)	49	United States Army	70
Administration and Management	49	Additional Routes for the Oregon National Historic Trail	70
Federal Level	49	Additional Routes for the California National Historic Trail	71
Alternative 2: Enhanced Conditions and a Historic Trails Partnership		Alternatives Considered but Rejected	77
(The Proposal)	63	Trails West National Historic Park	77
Administration and Management	63	Protection and Management of the Premier Resources	
Federal Level	63	Associated with the Historic Trails	77
State Level	64		
Local Level	64		
Service-wide Memorandum of Understanding	64		
Cooperative Management Agreements	64		
Public Awareness	64		
Trail Marking	65		
Volunteers and Liability	65		
Technical Task Forces / Review Teams	66		
National Historic Trails Forum	66		
Resource Protection	66		
Protection Plan	66		
Site Certification	68		
Challenge Cost-Share Programs	68		
Resource Monitoring	68		
Interpretation, Visitor Experience, and Use	68		
Interpretation	68		
Visitor Experience and Use	70		
Recommendations for Further Study	70		
Historic Resource Study	70		
Archeological Resources	70		
Landownership and Use along the Four Trails	70		
GIS Mapping	70		
American Indians	70		
Verification of Trail Routes and Sites	70		
United States Army	70		
Additional Routes for the Oregon National Historic Trail	70		
Additional Routes for the California National Historic Trail	71		

CONTENTS

Affected Environment	89	
Introduction	91	
General Geographic Description of the Routes — California and Pony Express National Historic Trails	93	
Trail Resources	95	
Regional Landscapes	95	
Mississippi and Missouri Rivers Starting Points	95	
Platte River	96	
Rocky Mountains / Continental Divide	96	
Snake River–Columbia Plateau / Pacific Northwest	97	
Cascade Range	97	
Great Basin	98	
Sierra Nevada	98	
Cultural Landscapes	99	
Archeological Resources	99	
Historic Resources	99	
Ethnographic Resources	99	
Cultural Sketches and Culture Areas	100	
The Lakota Sioux	100	
The Paiute People	101	
Socioeconomic Conditions along the Trails	103	
Landownership and Use	103	
California National Historic Trail	104	
Pony Express National Historic Trail	104	
Population	104	
Income	105	
Socioeconomic Conditions Within Affected States	105	
Missouri	105	
Illinois	105	
Iowa	105	
Kansas	106	
Nebraska	106	
Colorado	106	
Wyoming	106	
Idaho	107	
Utah	107	
Nevada	107	
Oregon	110	
California	110	
Environmental Consequences	111	
Introduction	113	
Impacts on Trail Resources	115	
Air Quality	115	
Alternative 1	115	
Alternative 2	115	
Soils	115	
Alternative 1	115	
Alternative 2	115	
Water Quality	115	
Alternative 1	115	
Alternative 2	116	
Vegetation	116	
Alternative 1	116	
Alternative 2	116	
Wildlife	116	
Cultural Landscapes	116	
Alternative 1	116	
Alternative 2	116	
Archeological Resources	116	
Alternative 1	116	
Alternative 2	116	
Historic Resources	117	
Alternative 1	117	
Alternative 2	117	
Ethnographic Resources	117	
Impacts on Interpretation, Visitor Experience, and Use	119	
Alternative 1	119	
Alternative 2	119	
Impacts on Socioeconomic Conditions	121	
Economy	121	
Alternative 1	121	
Alternative 2	121	
Landownership and Use	121	
Access and Transportation	121	
Other Impact Considerations	123	
Cumulative Impacts	123	
Unavoidable Adverse Effects	123	
Irreversible and Irrecoverable Commitments of Resources	123	
Relationship between Short-Term Uses and the Maintenance and Enhancement of Long-Term Productivity	123	
Compliance / Consultation and Coordination	125	
Compliance	127	
Cultural Resources	127	
Natural Resources	127	
Consultation and Coordination	129	
Federal Agencies	129	
American Indian Tribes	130	
State Agencies	130	
Local Agencies	131	
Trail Associations	131	
Planning Process and Public Involvement	131	
Comments and Responses	135	
Appendixes / Bibliography / Preparers / Index	207	
Appendixes		
A: National Trails System Act	209	
B: Servicewide Memorandum of Understanding for Cooperative Management and Administration of National Historic Trails among the U.S. Department of the Interior, Bureau of Land Management and National Park Service, and the U.S. Department of Agriculture Forest Service	217	
C: Solicitor's Opinion on the Oregon National Historic Trail	221	
D: Solicitor's Opinion on the California National Historic Trail	223	
E: California and Pony Express National Historic Trails: High-Potential Segments	227	
F: California and Pony Express National Historic Trails: High-Potential Sites	241	
G: Oregon National Historic Trail: High-Potential Segments	283	
H: Oregon National Historic Trail: High-Potential Sites	289	
I: Mormon Pioneer National Historic Trail: High-Potential Segments	313	
J: Mormon Pioneer National Historic Trail: High-Potential Sites	317	
K: Protection Tools	335	
L: Federal Programs That Might Be of Assistance in Managing Trails	337	
M: Wayside Design Guidelines	341	
N: Recommended Signs	343	
O: Illustrations of Logos for the Oregon, California, Mormon Pioneer, and Pony Express National Historic Trails	347	
P: Visitor Experience Matrix	349	
Bibliography	361	
Preparers and Consultants	367	
Index	369	

Tables

1: Oregon National Historic Trail — Route Miles by State 35
 2: California National Historic Trail — Route Miles by State 36
 3: Mormon Pioneer National Historic Trail — Route Miles by State 40
 4: Pony Express National Historic Trail — Route Miles by State 41
 5: Oregon National Historic Trail: — High-Potential Sites and Segments by State 42
 6: Oregon Pioneer National Historic Trail — Mileage of High-Potential Segments 42
 7: California and Pony Express National Historic Trails — High-Potential Sites and Segments 43
 8: California and Pony Express National Historic Trails — Mileage of High-Potential Segments by State 43
 9: Mormon Pioneer National Historic Trail — High-Potential Sites and Segments by State 43
 10: Mormon Pioneer National Historic Trail — Mileage of High-Potential Segments 43
 11: Comparison of Alternatives 78
 12: Comparison of Impacts 82
 13: Landownership and Use along the California National Historic Trail (in miles) 103
 14: Land Uses along the California National Historic Trail (in miles) 104
 15: Landownership and Use along the Pony Express National Historic Trail (in miles) 105
 16: Land Uses along the Pony Express National Historic Trail (in miles) 106
 17: Counties Crossed by the Four National Historic Trails 108
 18: Average Population Growth Rates for Counties Crossed by National Historic Trails between 1980 and 1994 109
 19: Average Per Capita Income for Counties Crossed by the Trails 110
 20: Responses to Individual Public Comments 198

Maps

1: Location (All Trails) x
 2: Pony Express and California National Historic Trails (Missouri, Kansas, and Nebraska): High-Potential Sites and Segments 5
 3: California and Pony Express National Historic Trails (Wyoming and Utah): High-Potential Sites and Segments 7
 4: California National Historic Trail (Idaho and Oregon): High-Potential Sites and Segments 9
 5: California and Pony Express National Historic Trails (Nevada and California): High-Potential Sites 11
 6: California and Pony Express National Historic Trails (Nevada and California): High-Potential Segments 13
 7: Oregon National Historic Trail (Missouri, Kansas, and Nebraska): High-Potential Sites and Segments 15
 8: Oregon National Historic Trail (Wyoming and Utah): High-Potential Sites and Segments 17
 9: Oregon National Historic Trail (Idaho and Oregon): High-Potential Sites and Segments 19
 10: Mormon Pioneer National Historic Trail (Iowa and Nebraska): High-Potential Sites and Segments 21
 11: Mormon Pioneer National Historic Trail (Wyoming and Utah): High-Potential Sites and Segments 23
 12: Tribes Encountered along the Trails, 1840s, 1850s 28
 13: Auto-Tour Route for all the Trails (Iowa, Missouri, Nebraska, and Kansas) 55
 14: Auto-Tour Route for all the Trails (Wyoming and Utah) 57
 15: Auto-Tour Route for all the Trails (Idaho and Oregon) 59
 16: Auto-Tour Route for All the Trails (Nevada and California) 61
 17: Environmental Settings (All Trails) 90



----- OREGON NATIONAL HISTORIC TRAIL
 - . - . - . CALIFORNIA NATIONAL HISTORIC TRAIL

..... MORMON PIONEER NATIONAL HISTORIC TRAIL
 _____ PONY EXPRESS NATIONAL HISTORIC TRAIL



OREGON • CALIFORNIA • MORMON PIONEER • PONY EXPRESS
NATIONAL HISTORIC TRAILS

United States Department of the Interior • National Park Service
 485 • 481 • 657 • 658 • 20008A • DSC • 5/99

Purpose of and Need for the Plan



Introduction

The purpose of this document is to develop a comprehensive management and use plan for the California and the Pony Express National Historic Trails. This document also updates the 1981 Comprehensive Management and Use Plans for the Oregon and Mormon Pioneer National Historic Trails. Map 1 shows the congressionally authorized routes of the four trails.

The need for the plan is to comply with the requirements of the National Trails System Act, and to address management issues and concerns related to administration and management, resource protection, interpretation and visitor experience, uses of the national historic trails, and site development and marking. (The specific issues are further described beginning on page 26.)

This Comprehensive Management and Use Plan / Final Environmental Impact Statement is shaped, in part, by the planning requirements found in section 5(f) of the National Trails System Act (see appendix A). It focuses on the trails' purpose and significance, resource protection, visitor experience and use, and long-term administrative objectives. Elements of the proposed plan have been developed in cooperation with federal, state, and local agencies, as well as various nonprofit trail organizations — the entities that form the core of any partnership for national historic trails.

This plan serves as a coordinating document that provides broad-based policies, guidelines, and standards for administering the four trails in such a manner as to ensure the protection of trail resources, their interpretation, and their appropriate public use.

This document acknowledges the various management jurisdictions and plans of all the partner agencies. While this plan's goals and objectives have been reviewed and given general approval by the cooperating agencies, it is recognized that full implementation would require a series of amendments to existing land use plans. Such amendments would have to be pursued on a local basis after consideration of other, possibly conflicting, resource values and land uses.

However, when existing plans affecting historic trails are amended, or when new plans are drafted, it is recommended that the provisions of this document be incorporated in developing protection strategies.

The Final Environmental Impact Statement associated with this plan is programmatic because it does not propose any undertaking or action that would result in ground disturbances. Any future development would require detailed environmental analyses to be carried out as required by state and local regulations and the provisions of the National Environmental Policy Act and section 106 of the National Historic Preservation Act.

The National Park Service, as designated by the secretary of the interior, is responsible for the overall administration of these four trails and the management of lands and trail resources under NPS jurisdiction. Other federal, state, local, and private interests would continue to manage and/or develop trail resources on lands under their jurisdictions.

In 1995 a servicewide memorandum of understanding was signed by the National Park Service, the Bureau of Land Management, and the Forest Service — the agencies that manage most of the federal lands crossed by the four trails (see appendix B). The main purpose of the memorandum is to ensure and expand continued long-term inter-agency coordination and cooperation in planning, preserving, administering, and managing national historic trails. The servicewide memorandum of understanding emphasizes the need for quality public service and the efficient and effective expenditure of federal funds through cooperation among the federal agencies involved.

The memorandum clarifies the distinction between administrators and managers of trail resources. Administrative responsibilities include overall trailwide coordination, planning and marking, site and segment certification, resource preservation and protection, interpretation, cooperative/interagency agreements, and limited financial assistance to other government agencies, landowners, and interest groups. Management responsibilities rest with private landowners, government land managing agencies, and other organizations that have

TRAIL ADMINISTRATION AND MANAGEMENT

The Long Distance Trails Office in Salt Lake City, Utah, administers the Oregon, the California, the Mormon Pioneer, and the Pony Express National Historic Trails. It does not manage trail resources on a day-to-day basis. The responsibility for managing trail resources remains in the hands of the current trail managers at the federal, state, local, and private levels.

The Long Distance Trails Office serves as a clearinghouse for comprehensive trail resource data, provides information on different resource management strategies used at sites throughout the corridors, and guides the development of the interpretive program for the trails. In addition, it can assist partners in overall coordination efforts, as well as the preparation of memorandums of understanding, cooperative agreements, and site certifications.

The plan is designed to be flexible enough that any current or potential historic trails partners could use it to help design and implement protection, management, trail marking, and interpretive efforts. This plan provides the "common ground" on which all historic trails partners can meet, communicate, and assist one another in creating more efficient strategies for resource protection, management, visitor use, interpretation, and public awareness.

ownership jurisdiction. They include planning and developing trail segments or specific sites, site interpretation, site stabilization and protection, and managing visitor use.

In 1995 the National Park Service established the Long Distance Trails Office in Salt Lake City, Utah, to improve interstate and inter-regional coordination. This office is responsible for implementing this plan, but it does not manage trail resources. Specific responsibilities of the trails office include coordinating and supporting the protection of trail resources, marking and interpreting the trails, designating and marking an auto-tour route, and identifying and certifying high-potential sites.

The availability of the Draft Environmental Impact Statement for a 60-day public review was announced in the Federal Register on August 18, 1998. Close to 1,000 copies were sent out for review. Public meetings were held in late September and early October at nine locations throughout the West and were attended by approximately 180 people. Written comments were received from 32 federal, state, and local agencies, 1 Indian tribe, and about 105 organizations and individuals. This Comprehensive Management and Use Plan / Final Environmental Impact Statement has been revised in response to substantive comments on the draft document. Substantive comments, as defined by the Council on Environmental Quality, are those that (1) question the accuracy of information, (2) question the adequacy of the environmental analysis, (3) present reasonable alternatives to those presented in the plan, and (4) cause changes or revision in the proposal. In accordance with the National Environmental Policy Act, all written responses from public agencies are reprinted in this document. Substantive comments from individuals have been summarized and responded to in table 20.

This Comprehensive Management and Use Plan / Final Environmental Impact Statement

- describes the purpose and significance of each trail
- addresses the planning requirements outlined in section 5 of the National Trails System Act
- addresses issues and concerns related to resource protection
- addresses issues and concerns related to interpretation and visitor use
- establishes the long-term objectives for the administration of the four trails
- presents a proposed plan for the comprehensive administration of the trails, as well as a no-action alternative that would continue existing administrative programs
- assesses the impacts of implementing the proposed plan and the no-action alternative
- provides general maps of the national historic trails

The proposed plan provides a framework for federal, state, and local governments, as well as private organizations and individuals, to cooperatively maintain, protect, and manage the resources associated with the trails. In addition, this plan guides the development of an interpretive program and outlines a range of activities for visitor experience and use.

This document fulfills the legislative requirement for comprehensive management and use plans for the California and Pony Express National Historic Trails, and it updates earlier plans for the Oregon and the Mormon Pioneer National Historic Trails. These two plans were developed independently from each other and make no provision for the overlapping nature of these routes.

Only the 1,400-mile original wagon route that Brigham Young and the Pioneer Party followed in 1846–47, between Nauvoo, Illinois, and Salt Lake City, Utah, has been authorized by legislation as the Mormon Pioneer National Historic Trail. Only the primary route of the Oregon Trail has been authorized as a national historic trail. Only the routes and cutoffs identified in the National Park Service's 1987 Eligibility / Feasibility Study and Environmental Assessment for National Historic Trail Authorization have been authorized as the California and Pony Express National Historic Trails.

The Department of the Interior's Office of the Solicitor has established that additional routes and cutoffs determined to be directly associated with a national historic trail may be added through (1) a study to determine the feasibility and suitability of designating such routes as components of a national historic trail, and (2) subsequent congressional action amending the original act for a particular trail.

For the California and the Pony Express Trails, this plan identifies high-potential sites and segments as required by the National Trails System Act (see appendixes E and F and maps 2-6). According to the National Trails System Act, high-potential historic 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.

High-potential route segments are

those segments of a trail which would afford a high quality recreation experience in a portion of the route having greater than average scenic values or affording an opportunity to vicariously share the experience of the original users of a historic route.

Historic sites and segments associated with the trails, either listed on or determined eligible for listing on the National Register of Historic

Places, are included in the list of high-potential sites. Other historic resources that may be worthy of management consideration may in the future be considered for inclusion among the list of high-potential sites and segments if research confirms their significance and integrity.

Updates of the list of high-potential sites and segments for the Oregon and the Mormon Pioneer National Historic Trails are included (see appendixes G-H, I-J, and maps 7-11).

Federally owned sites and segments of these trails are considered federal protection components and should receive special attention by managing agencies to enhance their trail-related values.

Many high-potential resources are not under federal jurisdiction. In those cases the National Trails System Act (sec 3 (a) (3)) authorizes a procedure whereby landowners can have their historic sites certified as components of a national historic trail (see appendix K for a more detailed description of the certification procedure).

Legislative Authority

The Oregon and the Mormon Pioneer Trails were authorized as national historic trails by Congress in 1978 (see National Trails System Act, sections 5 (a) (3) and (4), respectively). In 1992 Congress established the California and Pony Express National Historic Trails (see National Trails System Act sec. 5 (a) (18) and (19), respectively). The 1992 legislation amending the National Trails System Act directs the secretary of the interior to

provide for the development and maintenance of [these] trails within federally administered areas.

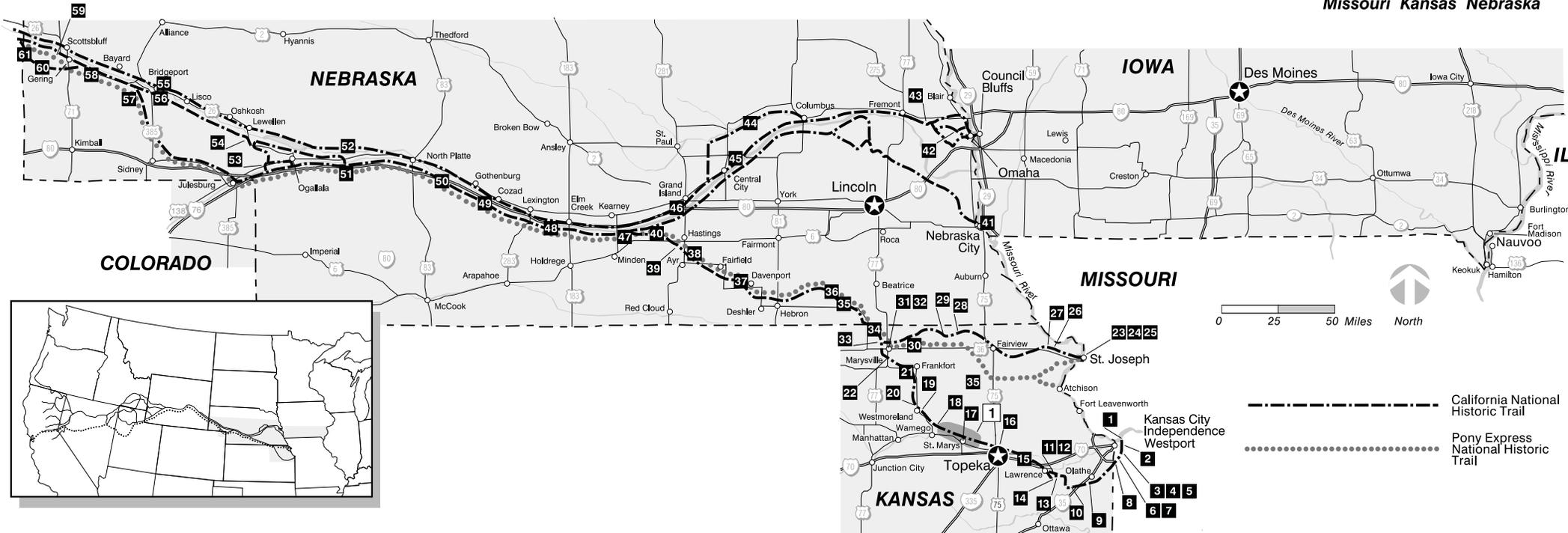
The legislation also directs the secretary to

cooperate with and encourage those states through which the trails pass to operate, develop, and maintain any portions of these trails which are located outside the boundaries of federally administered areas.

The National Trails System Act also authorizes the secretary of the interior to enter into cooperative agreements with states, local governments, landowners, and private organizations or individuals to help operate, develop, and maintain trail portions outside federal jurisdiction. These cooperative agreements can include provisions for limited financial or technical assistance to encourage participation in trail management activities. Cooperative agreements can also secure volunteer assistance for the protection and management of the trails and their related resources.

High-Potential Sites and Segments

California National Historic Trail
Pony Express National Historic Trail
Missouri Kansas Nebraska



--- California National Historic Trail
..... Pony Express National Historic Trail

HIGH-POTENTIAL SEGMENTS

- Kansas**
- 1 St. Marys-Red Vermillion Crossing

HIGH-POTENTIAL SITES

Missouri

- 1 Upper Independence Landing (Wayne City)
- 2 Independence Courthouse Square Complex
- 3 Santa Fe Trail Park Ruts
- 4 Rice-Tremonti Home
- 5 Eighty-fifth Street Ruts
- 6 Heart (Hart) Grove Campground
- 7 Minor Park/Red Bridge Crossing of the Big Blue River
- 8 New Santa Fe

Kansas

- 9 Lone Elm Campground
- 10 Parting of the Oregon-California and Santa Fe Trails
- 11 Lower Bluejacket Crossing of the Wakarusa River
- 12 Upper Bluejacket Crossing of the Wakarusa River
- 13 Blue Mound
- 14 Upper Wakarusa Crossing/Blanton's Bridge

- 15 Pellant Ruts
- 16 Kansas River Crossing/Papin's Ferry
- 17 St. Marys Mission
- 18 Vieux Cemetery/Red Vermillion Crossing
- 19 Scott Spring
- 20 Coon Creek/Marshall Grave
- 21 Black Vermillion Crossing
- 22 Alcove Spring

Missouri

- 23 St. Joseph Riverfront Ferry Landing
- 24 Pony Express Stable Pike's Peak Stable)
- 25 Patee House (Eastern Terminus)

Kansas

- 26 Swale Leading to Wolf River Crossing
- 27 Iowa, Sac, and Fox Presbyterian Mission

- 28 Nemaha River Crossing
- 29 Clear Creek Swale
- 30 Guittard's Station Swales
- 31 Marysville Pony Express Barn
- 32 Marshall Ferry on the Big Blue River
- 33 Junction of the St. Joe and Independence Roads
- 34 Hollenberg Station

Nebraska

- 35 Rock Creek Station
- 36 George Winslow Grave
- 37 The Narrows
- 38 Ayr Ruts
- 39 Thirty-Two Mile Station
- 40 Susan Hail Grave/Sand Hill Station
- 41 Nebraska City Complex
- 42 Military Road Ruts

- 43 Crossing of the Elkhorn River
- 44 Lower Loup River Ford
- 45 Lone Tree Site
- 46 Murdock Site
- 47 Fort Kearny
- 48 Plum Creek
- 49 Dan Smith's West Ranch
- 50 Fort McPherson
- 51 O'Fallon's Bluff
- 52 Sand Hill Ruts
- 53 California Hill/Upper Crossing of the South Platte River
- 54 Ash Hollow Complex/Windlass Hill
- 55 Ancient Bluff Ruins
- 56 Amanda Lamin Grave
- 57 Courthouse Rock/Jail Rock
- 58 Chimney Rock

- 59 Scotts Bluff National Monument/Mitchell Pass
- 60 Robidoux Pass
- 61 Horse Creek Treaty Grounds



OREGON • CALIFORNIA • MORMON PIONEER • PONY EXPRESS
NATIONAL HISTORIC TRAILS

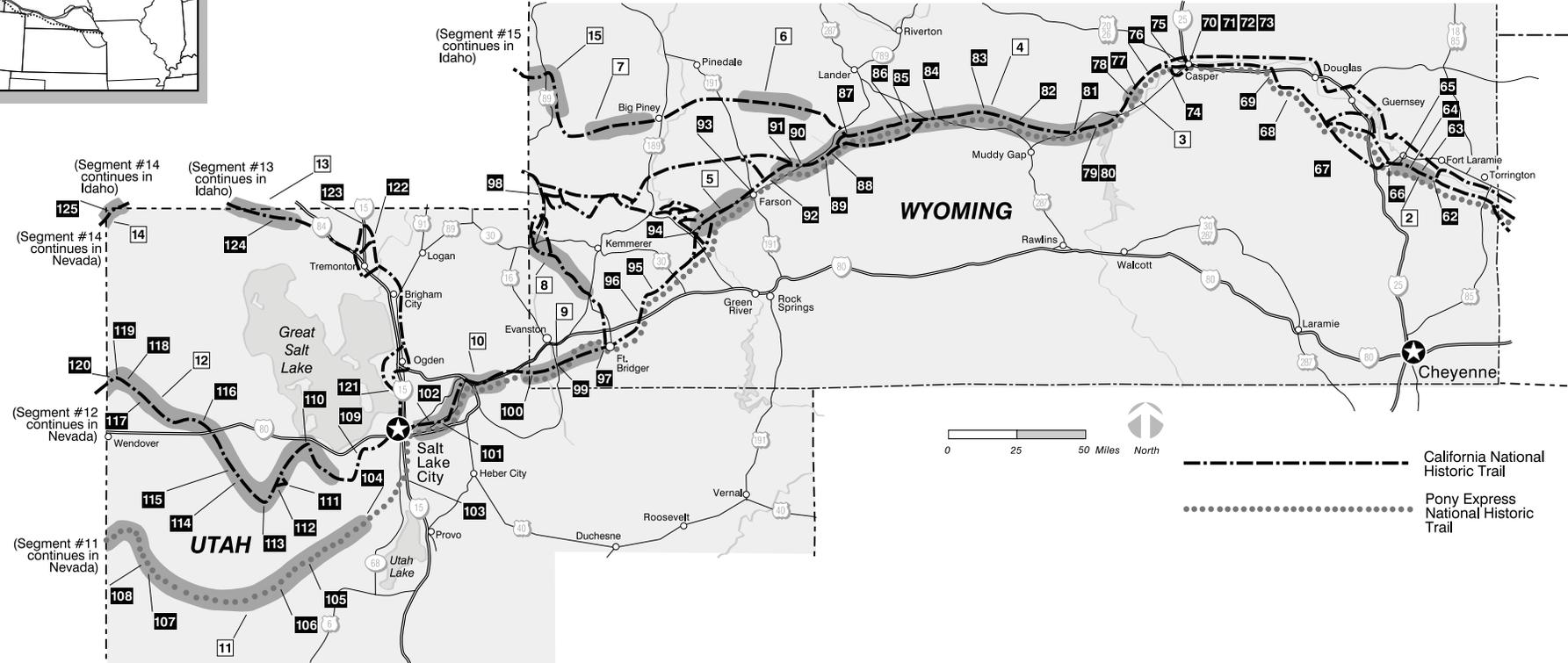
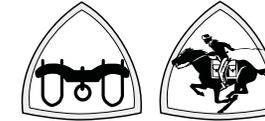
United States Department of the Interior • National Park Service

658 • 657 • 20009A • DSC • 4/99

High-Potential Sites and Segments

California National Historic Trail
Pony Express National Historic Trail

Wyoming Utah



----- California National Historic Trail
..... Pony Express National Historic Trail

HIGH-POTENTIAL SEGMENTS

- Wyoming**
- 2 Fort Laramie to Warm Springs (Simpson Segment)
 - 3 Prospect Hill
 - 4 South Pass (Horse Creek to Little Sandy Crossing)
 - 5 Big Sandy to Green River
 - 6 Anderson Ridge to Buckskin Crossing
 - 7 North Piney Creek to Smiths Fork
 - 8 Bear River Divide
- Wyoming & Utah**
- 9 Fort Bridger to Cache Cave
- Utah**
- 10 Castle Rock to This Is the Place Heritage Park
- Utah & Nevada**
- 11 Fairfield to Ruby Valley (Simpson Segment)
 - 12 Grantsville to Franklin River Crossing
- Utah & Idaho**
- 13 Curlew Valley to Salt Lake Cutoff Junction
- Idaho, Utah, & Nevada**
- 14 Granite Pass to Humboldt River
- Wyoming & Idaho**
- 15 Auburn to Wayan

HIGH-POTENTIAL SITES

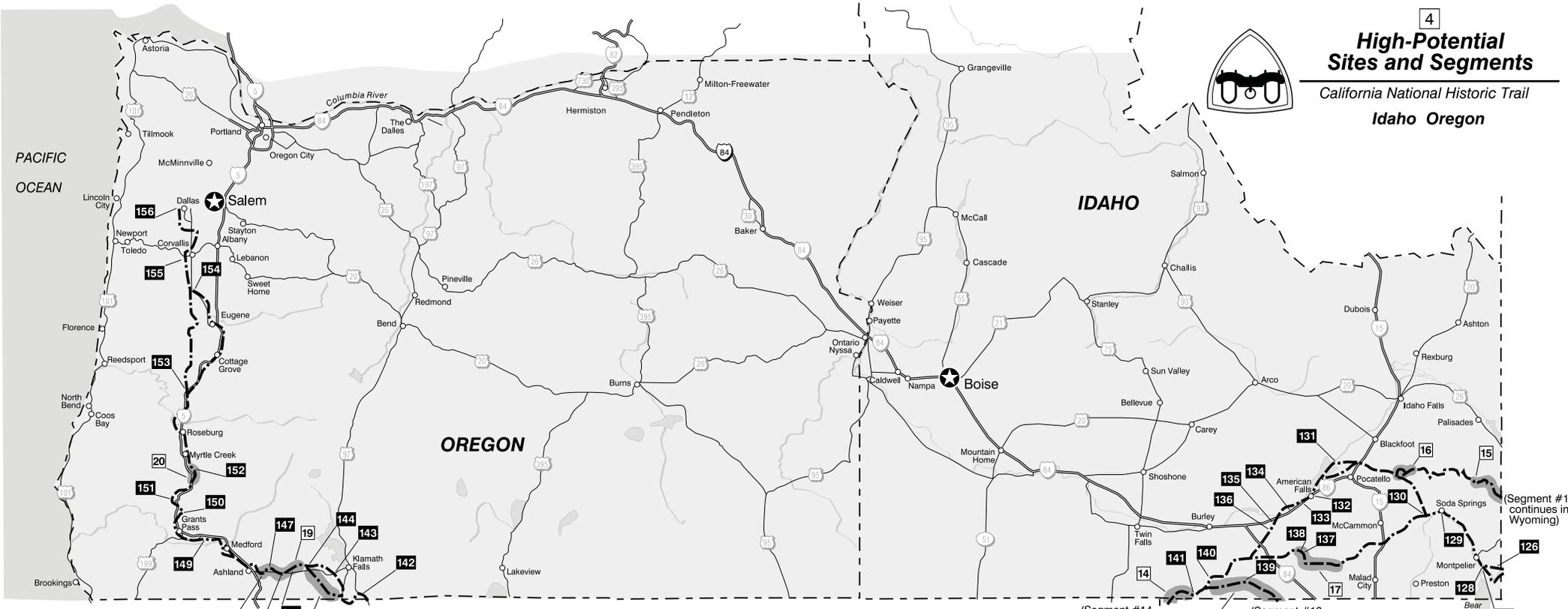
- Wyoming**
- 62 Fort Laramie
 - 63 Mexican Hill
 - 64 Register Cliff
 - 65 Guernsey Ruts (Deep Rut Hill)
 - 66 Warm Springs Canyon
 - 67 Laramie Peak
 - 68 Ayres Natural Bridge
 - 69 Unthank Grave
 - 70 Reshaw Bridge (Richard's Second Bridge)
 - 71 Mormon Ferry (1849)
 - 72 Fort Caspar
 - 73 Upper Platte Ferry and Ford (1847)
 - 74 Bessemer Bend/ Red Buttes Crossing
 - 75 Emigrant Gap
 - 76 Avenue of Rocks
 - 77 Willow Springs
 - 78 Prospect Hill
 - 79 Saleratus Lake
 - 80 Independence Rock
 - 81 Devil's Gate
 - 82 Split Rock
 - 83 Three Crossings/ Deep Sand Route
 - 84 Ice Slough
 - 85 Rocky Ridge Station
 - 86 Rocky Ridge
 - 87 Burnt Ranch (Ninth Crossing of the Sweetwater River)
 - 88 South Pass
 - 89 Pacific Springs
 - 90 Dry Sandy Crossing
 - 91 Parting of the Ways
 - 92 Little Sandy Crossing
 - 93 Big Sandy Crossing
 - 94 Lombard Ferry (Green River Mormon Crossing)
 - 95 Church Butte
 - 96 Name Rock
 - 97 Fort Bridger
 - 98 West End of the Sublette Cutoff
 - 99 Bear River Crossing
 - 100 The Needles
- Utah**
- 101 Big Mountain Pass
 - 102 Little Mountain Summit
 - 103 Indian Ford on the Jordan River
 - 104 Camp Floyd/ Stagecoach Inn
 - 105 Faust's Station
 - 106 Simpson Springs
 - 107 Boyd Station
 - 108 Willow Springs Station
 - 109 Benson's Mill
 - 110 Timpie Point
 - 111 Spring at Dell Ranch
 - 112 Rock Ledge Overlook
 - 113 Hope Wells
 - 114 Redlum Spring
 - 115 Big Hill at Hastings Pass
 - 116 Grayback Hills
 - 117 Floating Island
 - 118 Playa Wagon Tracks
 - 119 Donner Spring
 - 120 Halls Spring
 - 121 Haight Creek
 - 122 Hampton Ford on the Bear River
 - 123 Rocky Ford on the Malad River
 - 124 Pilot Springs
 - 125 Goose Creek



OREGON • CALIFORNIA • MORMON PIONEER • PONY EXPRESS
NATIONAL HISTORIC TRAILS

United States Department of the Interior • National Park Service
658 • 657 • 200010A • DSC • 5/99

4
High-Potential Sites and Segments
 California National Historic Trail
 Idaho Oregon

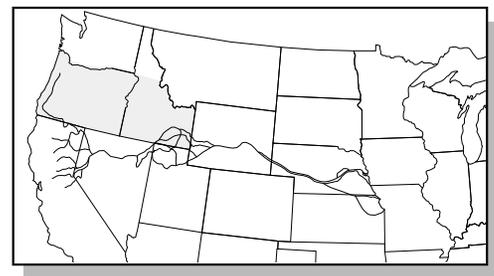


HIGH-POTENTIAL SEGMENTS

- Utah & Idaho**
 13 Curlew Valley to Salt Lake Cutoff Junction
- Idaho, Utah, & Nevada**
 14 Granite Pass to Humboldt River
- Wyoming & Idaho**
 15 Auburn to Wayan
- Idaho**
 16 Portneuf Crossing to the Narrows of Ross Fork
 17 Arbon Valley to Sublett Reservoir
- Oregon**
 18 Bear Valley
 19 Cascade Mountain Crossing
 20 Canyon Creek Pass

HIGH-POTENTIAL SITES

- Idaho**
 126 Thomas Fork Crossing
 127 Big Hill
 128 Smith's Trading Post
 129 Soda Springs Complex
 130 Sheep Rock (Soda Point)
 131 Fort Hall
 132 American Falls
 133 Massacre Rocks
 134 Register Rock
 135 Coldwater Hill
 136 California Trail Junction/ Raft River Crossing
 137 Summit Springs
 138 Sublett Creek Canyon
 139 Raft River Narrows
- Oregon**
 140 City of Rocks Complex
 141 Granite Pass
 142 Natural Bridge on Lost River
 143 Upper Klamath River Crossing
 144 Lower Klamath River Crossing
 145 Jenny Creek Wagon Slide
 146 Tub Springs State Wayside
 147 Cascade Mountain Summit
 148 Junction of the Trappers Trail to California and the Applegate Trail
- Utah**
 149 Valley of the Rogue State Park
 150 Grave Creek
 151 Wolf Creek Tavern State Heritage Site
 152 Canyonville Pioneer Park
 153 Pleasant Valley/ Yoncalla Complex
 154 Long Tom River Crossing
 155 Mary's River Crossing
 156 Dallas/La Creole Creek Complex



California National Historic Trail

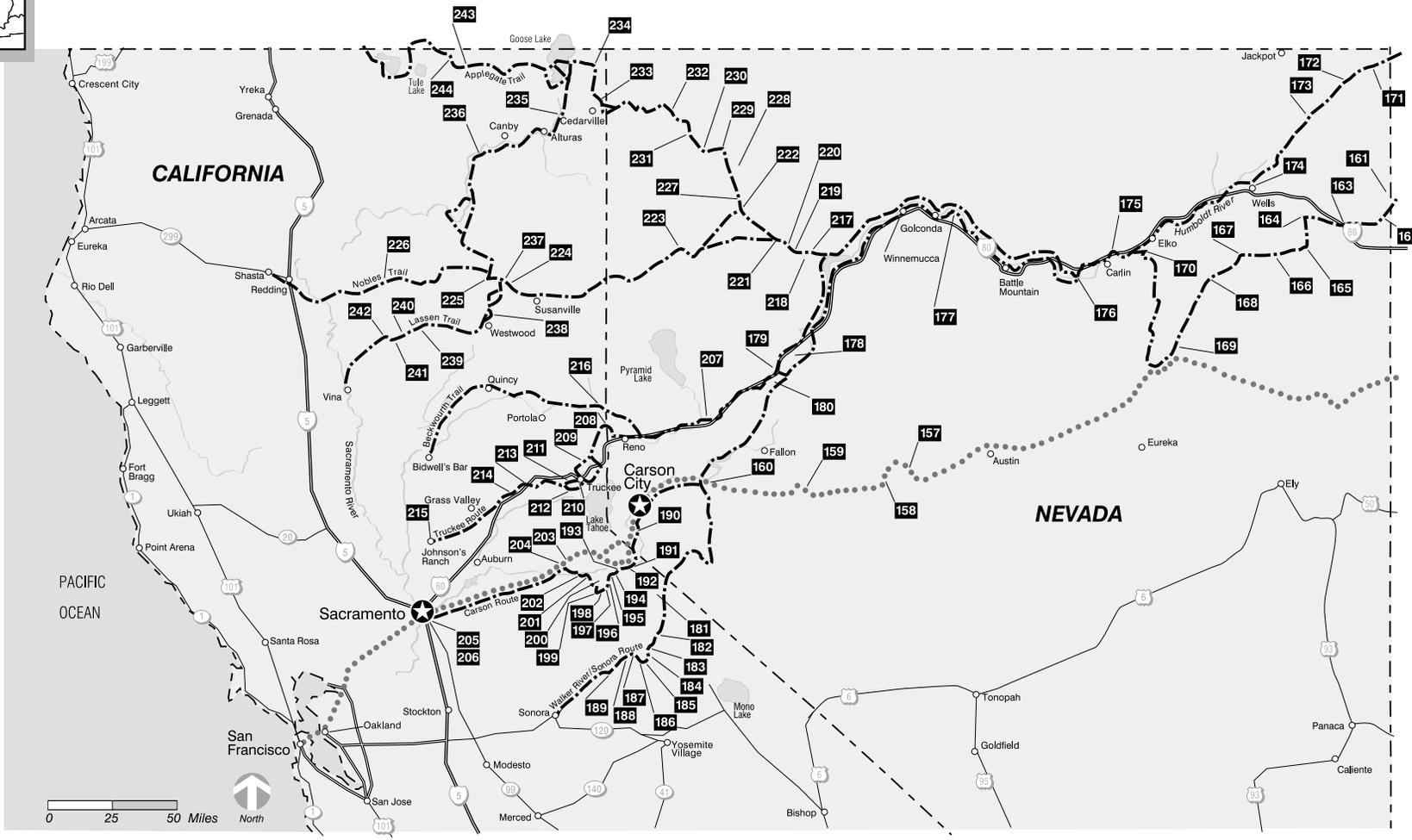
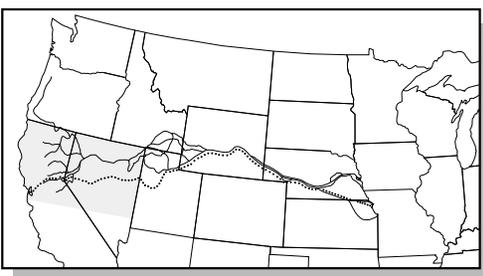


OREGON • CALIFORNIA • MORMON PIONEER • PONY EXPRESS
NATIONAL HISTORIC TRAILS

United States Department of the Interior • National Park Service
 657-20011A • DSC-5/99

High-Potential Sites

California National Historic Trail
Pony Express National Historic Trail
Nevada California



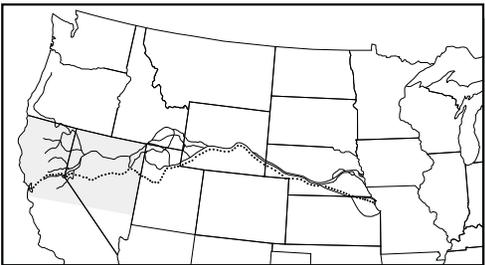
HIGH-POTENTIAL SITES

- Nevada**
- 157 Edwards Creek Station
- 158 Cold Springs Station
- 159 Sand Springs Station
- 160 Fort Churchill
- 161 Pilot Peak
- 162 Bidwell Pass
- 163 Silver Zone Pass
- 164 Big Springs
- 165 Flowery Lake Springs
- 166 Mound Springs
- 167 Warm Springs
- 168 Sulphur Hot Springs
- 169 Cave Creek
- 170 Overlook of the South Fork of the Humboldt River Gorge
- 171 Record Bluff
- 172 Rock Spring
- 173 Thousand Springs Valley
- 174 Humboldt Wells
- 175 Carlin Canyon
- 176 Gravelly Ford
- 177 Iron Point
- 178 Humboldt Sink
- 179 Parting of the Truckee and Carson Routes
- 180 Humboldt Bar
- California**
- 181 Little Lost Canyon
- 182 Upper Levitt Meadow
- 183 Browder Flat
- 184 Approach to Fremont Lake
- 185 Upper Little Emigrant Valley
- 186 Hubbs Grave Site
- 187 Relief Camp
- 188 Commemorative Iron Tire
- 189 Burst Rock (Birth Rock)
- Nevada**
- 190 Mormon Station
- California**
- 191 Woodfords Station
- 192 Snowshoe Thompson Cave and Ruts
- 193 Hope Valley
- 194 Devil's Ladder/Carson Pass
- 195 East Shore Caples Lake
- 196 West Shore Caples Lake
- 197 Emigrant Valley
- 198 Covered Wagon Summit/West Pass
- 199 Plasse Trading Post
- 200 Melissa Coray Peak
- 201 Tragedy Springs
- 202 Leek Spring Valley
- 203 Brockliss Bridge Crossing
- 204 Union House
- 205 Sutter's Fort
- 206 B. F. Hastings Building
- Nevada**
- 207 Fernley Ruts
- California**
- 208 Dog Valley Overlook and Slide
- 209 Donner Camp Site
- 210 Donner Memorial State Park
- 211 Donner Pass
- 212 Roller Pass
- 213 Bear Valley
- 214 Mule Spring
- 215 Johnson's Ranch
- 216 Beckwourth Pass
- Nevada**
- 217 Willow Springs
- 218 Antelope Springs
- 219 Antelope Pass
- 220 Kamma Pass
- 221 Rabbithole Springs
- 222 Black Rock/Black Rock Springs
- 223 Deep Hole Springs
- California**
- 224 Bridge Creek/Nancy Allen Grave
- 225 Pine Creek Valley
- 226 Manzanita Chute
- 227 Double Hot Springs
- 228 Lassen and Clapper Burial site
- Nevada**
- 229 Mud Meadows
- 230 Fly Canyon Wagon Slide
- 231 High Rock Canyon
- 232 Bruff's Singular Rock
- California**
- 233 Seyfeyth's Hot Springs/Surprise Valley
- 234 Fandango Pass (Lassen's Pass)
- 235 Conical Rocks
- 236 Hanging Rock
- 237 Feather Lake
- 238 Duck Lake
- Nevada**
- 239 Deer Creek Meadows
- 240 The Narrows
- 241 Bruff's Camp
- 242 Steep Hollow
- 243 Fiddlers Green
- 244 Bloody Point



OREGON • CALIFORNIA • MORMON PIONEER • PONY EXPRESS
NATIONAL HISTORIC TRAILS

United States Department of the Interior • National Park Service
658 • 657 • 20012A • DSC • 5/99



High-Potential Segments

California National Historic Trail
 Pony Express National Historic Trail
 Nevada California

HIGH-POTENTIAL SEGMENTS

Utah & Nevada

- 11 Fairfield to Ruby Valley (Simpson Segment)
- 12 Grantsville to Franklin River Crossing

Idaho, Utah, & Nevada

- 14 Granite Pass to Humboldt River

Nevada

- 21 Overland Canyon
- 22 Overland Canyon to Simpson Park Station
- 23 South Fork Humboldt River Gorge
- 24 Carlin to Gravelly Ford
- 25 North Battle Mountain to Ellison
- 26 Iron Point to Edna Mountain Pass
- 27 Golconda to Winnemucca
- 28 Humboldt River - North Side Trail
- 29 Humboldt River - South Side Trail
- 30 Rye Patch Reservoir to Woolsey
- 31 Humboldt Sink to Dayton
- 32 Mickey Canyon

California

- 33 Summit Creek Canyon

Nevada & California

- 34 Genoa to Union House

Nevada

- 35 Humboldt Sink to Fernley

California

- 36 Verdi to Steephollow Crossing
- 37 Grizzly Valley/Grizzly Ridge
- 38 Quincy to Spanish Ranch
- 39 Bucks Summit to Lake Oroville

Nevada & California

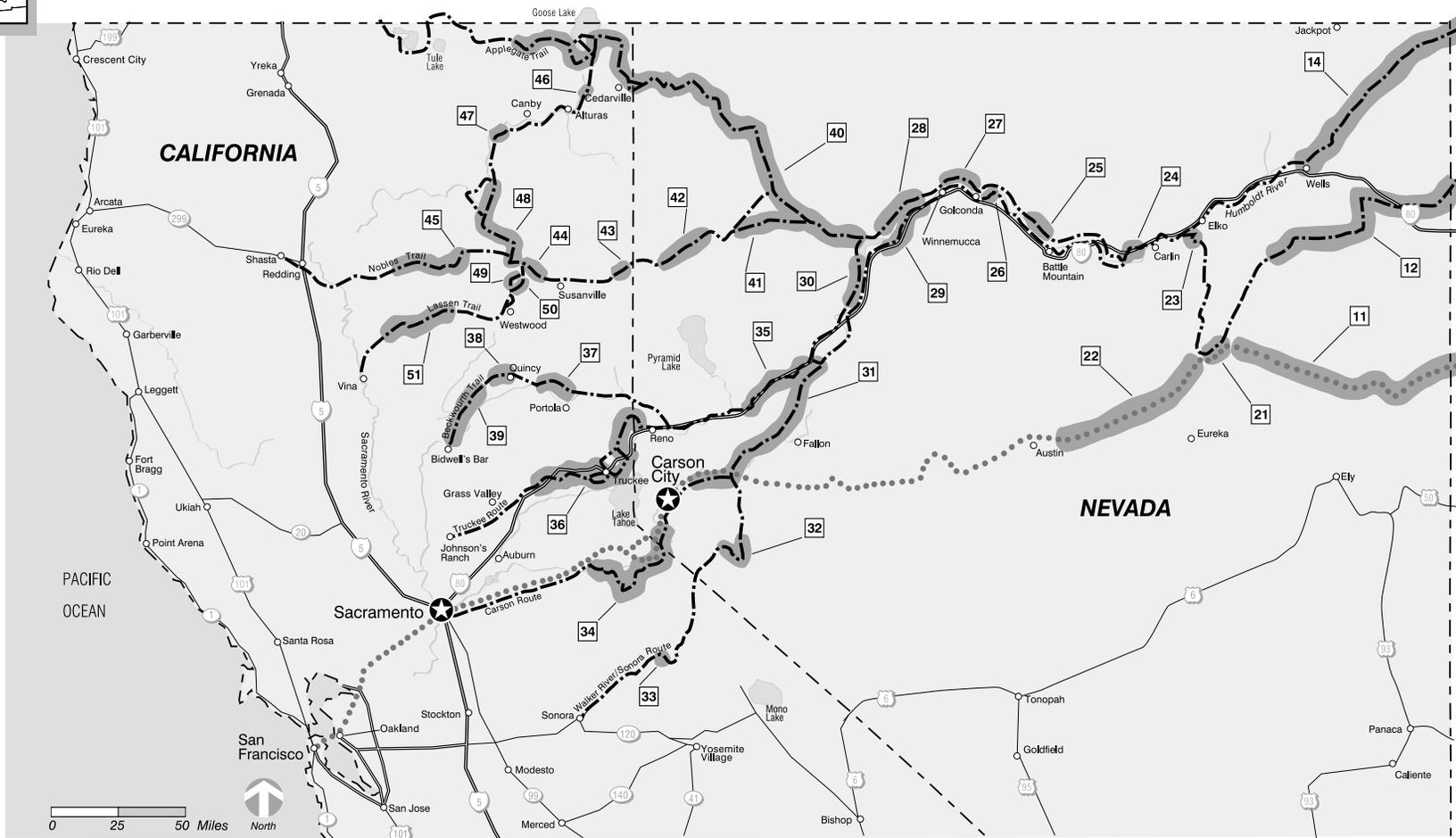
- 40 Lassen Meadows to Pothole Springs

Nevada

- 41 1856 Nobles Trail Junction to Granite Creek
- 42 Deep Hole Springs to Smoke Creek Canyon

California

- 43 Rush Creek Valley to Viewland
- 44 Bridge Creek to Feather Lake
- 45 Butte Creek to Manzanita Chute
- 46 Trail to North Fork of Pit River
- 47 Pit River Canyon
- 48 Pit River to Feather Lake
- 49 Clover Valley Branch to Robbers Creek
- 50 Norvell Flat Branch to Robbers Creek
- 51 Deer Creek Meadows to Acorn Hollow

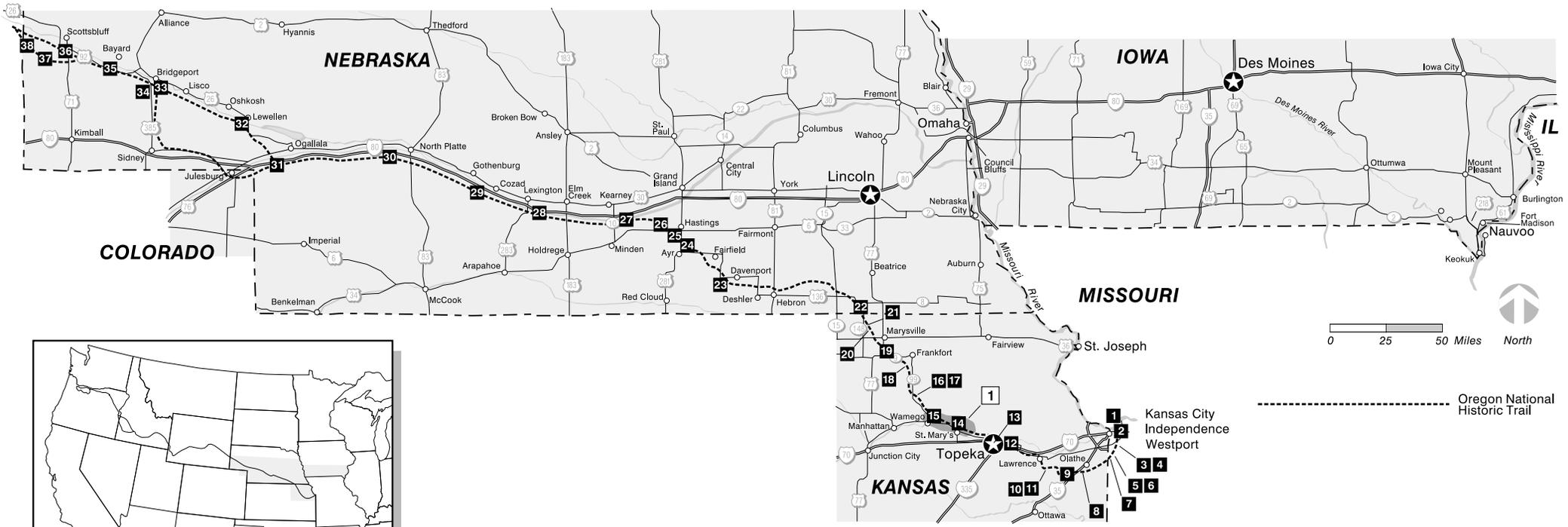


OREGON • CALIFORNIA • MORMON PIONEER • PONY EXPRESS
NATIONAL HISTORIC TRAILS

United States Department of the Interior • National Park Service
 658 • 657 • 20013A • DSC • 5/99

High-Potential Sites and Segments

Oregon National Historic Trail
Missouri Kansas Nebraska



HIGH-POTENTIAL SEGMENTS

Kansas

- 1 St. Marys-Red Vermillion Crossing

HIGH-POTENTIAL SITES

Missouri

- * 1 Upper Independence Landing (Wayne City)
- 2 Independence Courthouse Square Complex
- * 3 Santa Fe Trail Park Ruts
- * 4 Eighty-fifth Street Ruts
- * 5 Heart (Hart) Grove Campground
- ** 6 Minor Park/Red Bridge Crossing of the Big Blue River
- 7 New Santa Fe
- * 8 Lone Elm Campground
- ** 9 Parting of the Oregon-California and Santa Fe Trails
- 10 Blue Mound
- * 11 Upper Wakarusa Crossing/Blanton's Bridge
- * 12 Pellant Ruts
- ** 13 Kansas River Crossing/Papin's Ferry
- 14 Saint Marys Mission
- ** 15 Viewx Cemetery/Red Vermillion Crossing
- 16 Scott Spring
- * 17 Coon Creek/Marshall Grave
- * 18 Black Vermillion Crossing
- 19 Alcove Spring
- 20 Junction of St. Joe and Independence Roads
- 21 Hollenberg Station

Nebraska

- 22 Rock Creek Station
- 23 The Narrows
- 24 Ayr Ruts
- 25 Thirty-two Mile Station
- 26 Susan Hail Grave/Sand Hill Station
- 27 Fort Kearny
- 28 Plum Creek
- 29 Dan Smith's West Ranch
- 30 O'Fallon's Bluff
- 31 California Hill/Upper Crossing of the South Platte River
- 32 Ash Hollow Complex/Windlass Hill
- 33 Amanda Lamin Grave
- 34 Courthouse Rock/Jail Rock
- 35 Chimney Rock
- 36 Scotts Bluff National Monument/Mitchell Pass
- 37 Robidoux Pass
- 38 Horse Creek Treaty Grounds

* New Site
** New Name



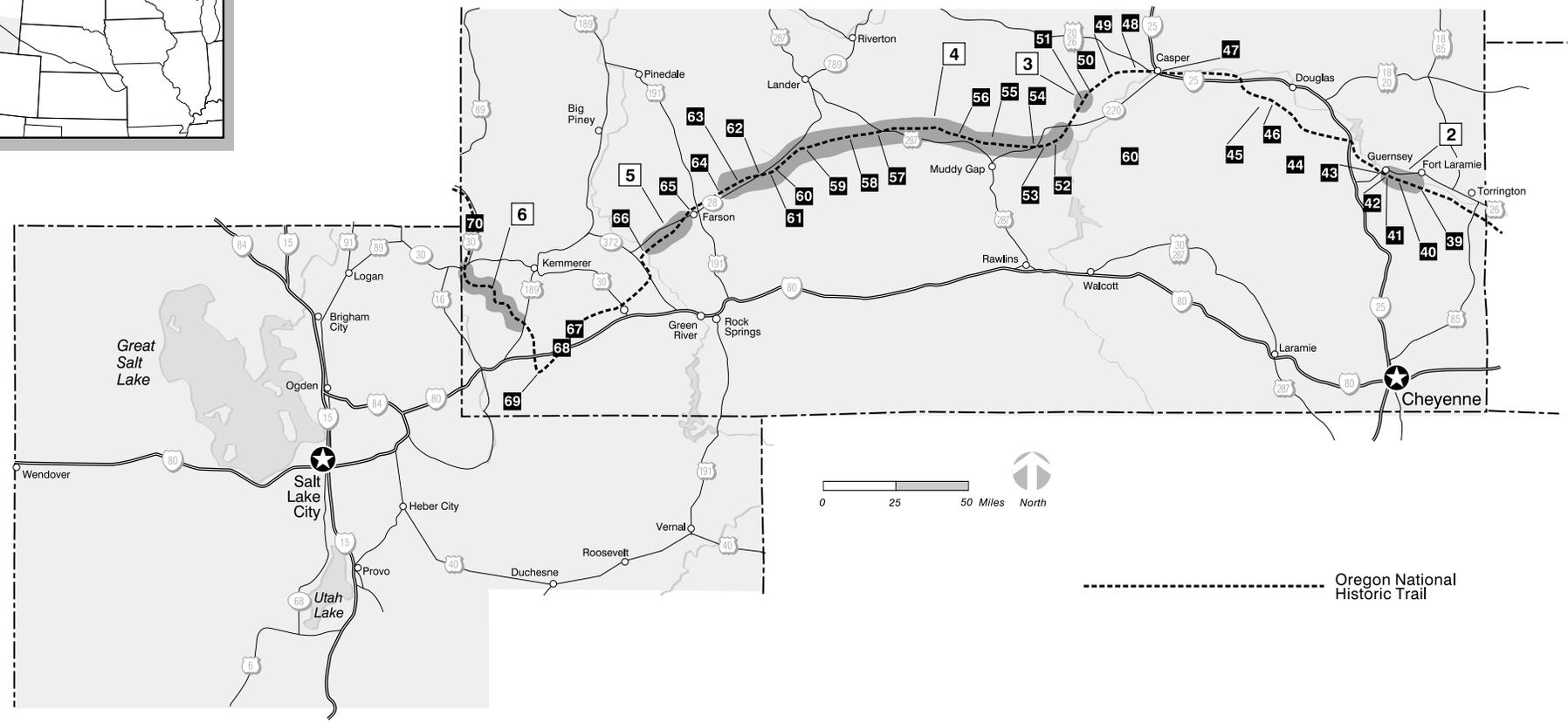
OREGON • CALIFORNIA • MORMON PIONEER • PONY EXPRESS
NATIONAL HISTORIC TRAILS

United States Department of the Interior • National Park Service
485 • 20014A • DSC • 5/99

High-Potential Sites and Segments

Oregon National Historic Trail

Wyoming Utah



HIGH-POTENTIAL SEGMENTS Wyoming

- 2** Fort Laramie to Warm Springs
- 3** Prospect Hill
- 4** South Pass (Horse Creek to Little Sandy Crossing)
- 5** Big Sandy to Green River
- 6** Bear River Divide

HIGH-POTENTIAL SITES Wyoming

- 39** Fort Laramie
- * **40** Mexican Hill
- * **41** Register Cliff
- ** **42** Guernsey Ruts (Deep Rut Hill)
- * **43** Warm Springs Canyon
- * **44** Laramie Peak
- * **45** Ayres Natural Bridge
- 46** Hembree Grave
- 47** Mormon Ferry (1849)
- * **48** Emigrant Gap
- ** **49** Avenue of Rocks
- 50** Willow Springs
- * **51** Prospect Hill
- * **52** Saleratus Lake
- 53** Independence Rock
- 54** Devil's Gate
- 55** Split Rock
- ** **56** Three Crossings/Deep Sand Route
- ** **57** Ice Slough
- 58** Rocky Ridge
- 59** Burnt Ranch (Ninth Crossing of the Sweetwater River)
- 60** South Pass
- 61** Pacific Springs

- ** **62** Dry Sandy Crossing
- 63** Parting of the Ways
- * **64** Little Sandy Crossing
- * **65** Big Sandy Crossing
- 66** Lombard Ferry (Green River Mormon Ferry)
- 67** Church Butte
- 68** Name Rock
- 69** Fort Bridger
- 70** West End of the Sublette Cutoff

* New Site
 ** New Name



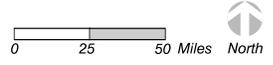
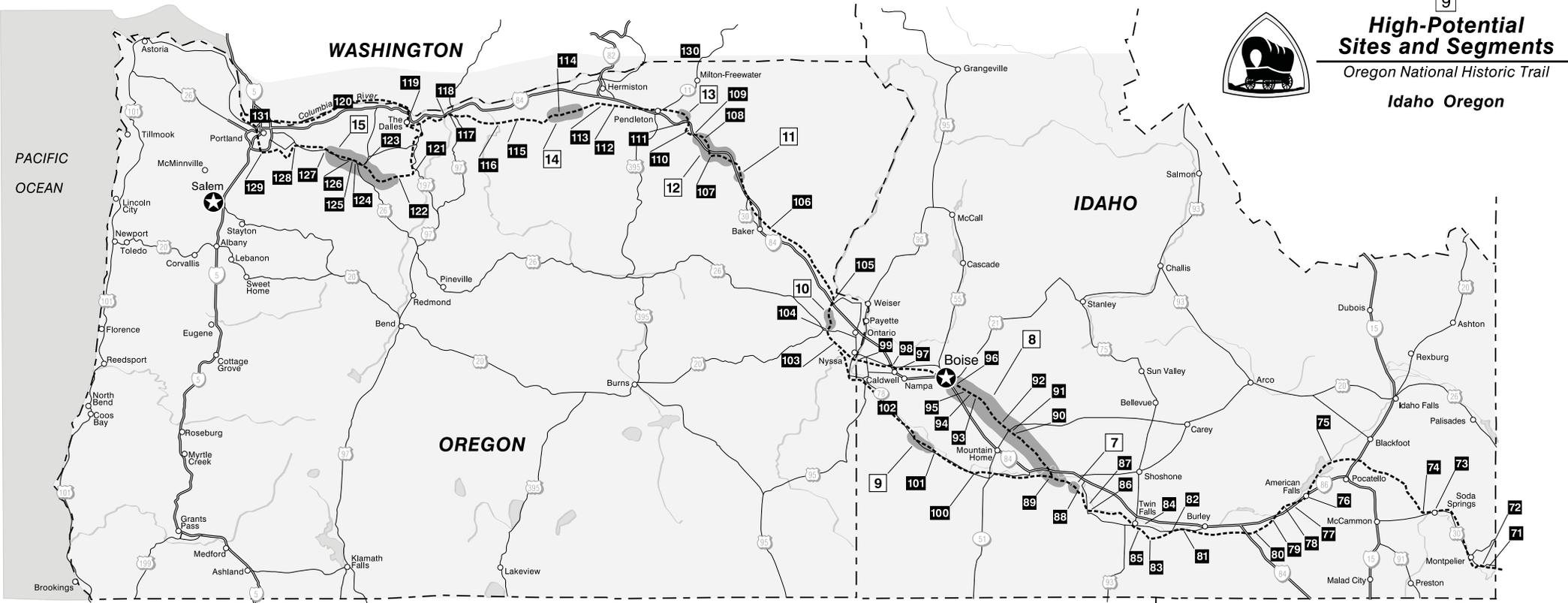
OREGON • CALIFORNIA • MORMON PIONEER • PONY EXPRESS
 NATIONAL HISTORIC TRAILS

United States Department of the Interior • National Park Service
 485 • 20015A • DSC • 5/99

High-Potential Sites and Segments

Oregon National Historic Trail

Idaho Oregon



HIGH-POTENTIAL SITES

- | | | | |
|---|---|---|-------------------------------------|
| Idaho | 89 Three Island Crossing | ** 106 Flagstaff Hill/National Historic Oregon Trail Interpretive Center | ** 124 Government Camp |
| * 71 Thomas Fork Crossing | ** 90 Teapot Dome Hot Springs | 107 Hilgard Junction | 125 Laurel Hill |
| * 72 Big Hill | 91 Rattlesnake Station | * 108 Blue Mountain Crossing Interpretive Park | 126 West Barlow Tollgate |
| 73 Soda Springs Complex | 92 Canyon Creek Station | 109 Meacham | 127 Wildwood Recreation Area |
| 74 Sheep Rock | ** 93 Inscription Rock | 110 Emigrant Springs | * 128 Philip Foster Farm |
| 75 Fort Hall | * 94 Ditto Station | 111 Deadman Pass | * 129 Oregon City Complex |
| 76 American Falls | * 95 Indian Creek Station | 112 Echo Complex | |
| 77 Massacre Rocks | 96 Bonneville Point | 113 Echo Meadows | |
| * 78 Register Rock | 97 Ward Massacre Site | 114 Well Spring | |
| * 79 Coldwater Hill | 98 Canyon Hill Ruts | 115 Fourmile Canyon | |
| 80 California Trail Junction/Raft River Crossing | 99 Fort Boise (Hudson's Bay Company) | ** 116 John Day River Crossing | |
| 81 Milner Ruts (Cedars Emigrant Campsite) | 100 C.J. Strike Ruts | 117 Biggs Junction | |
| * 82 Caldron Linn | 101 Utter Massacre Site | * 118 Deschutes River Crossing | |
| 83 Stricker Store/Rock Creek Station | 102 Givens Hot Springs | 119 The Dalles Complex | |
| 84 Shoshone Falls | | 120 Cascades of the Columbia | |
| 85 Rock Creek Crossing | | 121 Tygh Valley | |
| 86 Kanaka Rapids | | 122 Barlow Gate | |
| ** 87 Thousand Springs Complex | | 123 Barlow Pass Complex | |
| | Oregon | | |
| | 103 Keeney Pass | | |
| | 104 Vale Complex | | |
| | 105 Farewell Bend | | |
| | | Washington | |
| | | 130 Whitman Mission | |
| | | 131 Fort Vancouver | |

* New Site
** New Name

HIGH-POTENTIAL SEGMENTS

- | | |
|-------------------------------|-------------------------|
| Idaho | 12 Blue Mountain |
| 7 Hagerman Fossil Beds | 13 Emigrant Hill |
| 8 North Trail | 14 Boardman |
| 9 Sinker Creek | 15 Barlow Road |
| Oregon | |
| 10 Alkali Springs | |
| 11 Ladd Canyon | |



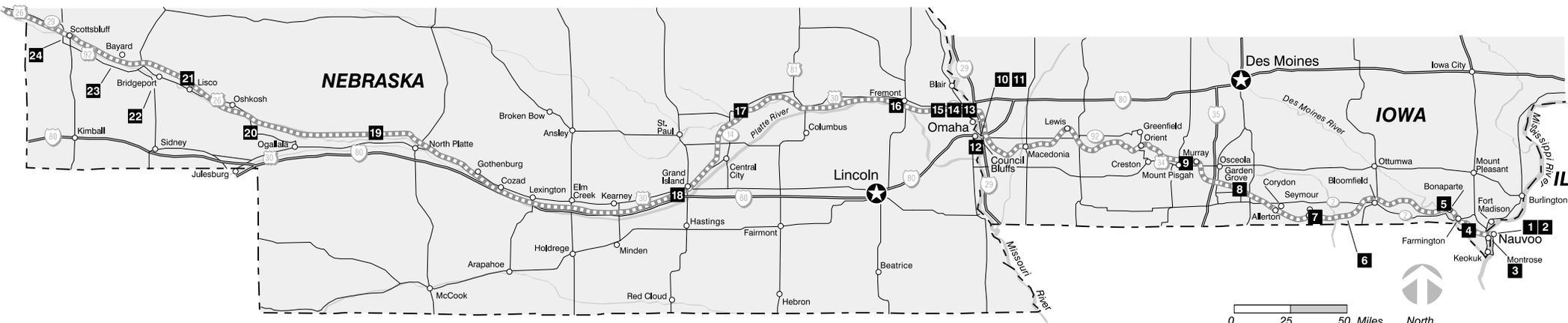
OREGON • CALIFORNIA • MORMON PIONEER • PONY EXPRESS
NATIONAL HISTORIC TRAILS

United States Department of the Interior • National Park Service
485 • 20016A • DSC • 5/99

High-Potential Sites and Segments

Mormon Pioneer National Historic Trail

Iowa Nebraska



----- Mormon Pioneer National Historic Trail



HIGH-POTENTIAL SITES

Illinois

- 1** Nauvoo National Historic District
- 2** Nauvoo Landing

Iowa

- 3** Montrose Landing
- 4** Sugar Creek Camp
- 5** Des Moines River Crossing
- 6** Chariton River Crossing
- * **7** Locust Creek Camp (Come, Come Ye Saints)
- 8** Garden Grove
- 9** Mount Pisgah
- * **10** Grand Encampment
- * **11** Kanesville Tabernacle
- * **12** Middle Mormon Ferry (Missouri River)

Nebraska

- * **13** Winter Quarters Complex
- * **14** Military Road Ruts
- 15** Crossing of the Elkhorn River
- 16** Liberty Pole Camp
- * **17** Lower Loup River Ford
- * **18** Murdock Site
- * **19** Sand Hill Ruts
- * **20** Ash Hollow Complex/Windlass Hill
- 21** Ancient Bluff Ruins
- * **22** Courthouse Rock/Jail Rock
- * **23** Chimney Rock
- * **24** Scotts Bluff National Monument/Mitchell Pass

* New Site
 * New Name



OREGON • CALIFORNIA • MORMON PIONEER • PONY EXPRESS
 NATIONAL HISTORIC TRAILS

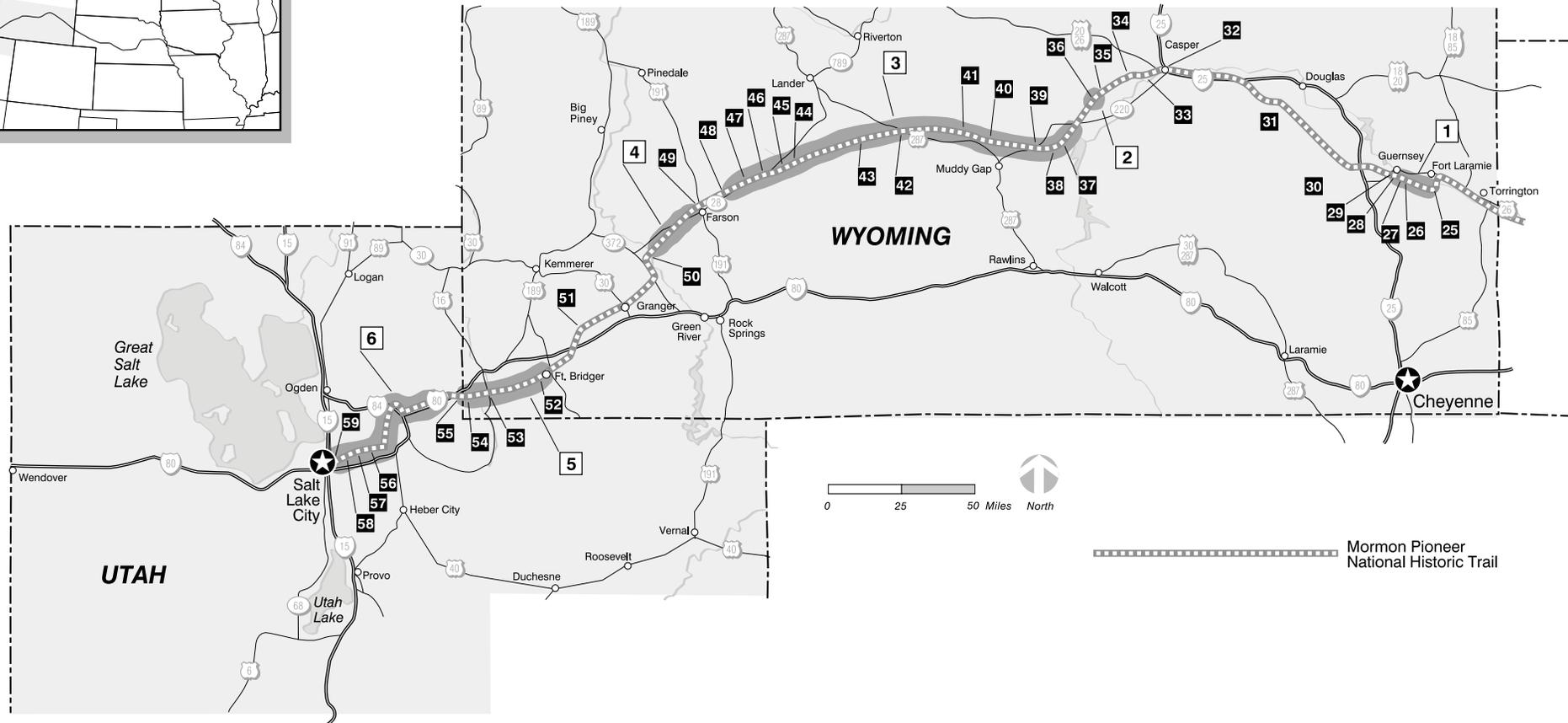
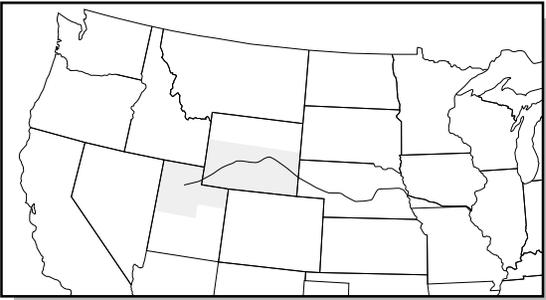
United States Department of the Interior • National Park Service

481 • 20017A • DSC • 5/99

High-Potential Sites and Segments

Mormon Pioneer National Historic Trail

Wyoming Utah



Mormon Pioneer National Historic Trail

HIGH-POTENTIAL SEGMENTS Wyoming

- 1** Fort Laramie to Warm Springs
- 2** Prospect Hill
- 3** South Pass (Horse Creek to Little Sandy Crossing)
- 4** Big Sandy to Green River
- 5** Fort Bridger to Cache Cave
- 6** Castle Rock to This Is the Place Heritage Park

HIGH-POTENTIAL SITES Wyoming

- 25** Fort Laramie
- * **26** Mexican Hill
- * * **27** Register Cliff
- * * **28** Guernsey Ruts (Deep Rut Hill)
- 29** Warm Springs Canyon
- * **30** Laramie Peak
- 31** Ayres Natural Bridge
- 32** Upper Platte Ferry and Ford (1847)
- 33** Bessemer Bend/Red Buttes Crossing
- 34** Avenue of Rocks
- 35** Willow Springs
- 36** Prospect Hill
- * **37** Saleratus Lake
- 38** Independence Rock
- * **39** Devil's Gate
- 40** Split Rock
- * **41** Three Crossings/Deep Sand Route
- 42** Ice Slough
- * **43** Rocky Ridge
- 44** South Pass
- 45** Pacific Springs
- * **46** Dry Sandy Crossing
- 47** Parting of the Ways
- * * **48** Little Sandy Crossing
- * **49** Big Sandy Crossing
- 50** Lombard Ferry (Green River Mormon Ferry)
- 51** Church Butte
- * * **52** Fort Bridger
- 53** Bear River Crossing
- 54** The Needles

Utah

- 55** Cache Cave
- 56** Big Mountain Pass
- 57** Little Mountain Summit
- 58** Last Camp
- * * **59** This Is the Place Heritage Park

* New Site
* * New Name



OREGON • CALIFORNIA • MORMON PIONEER • PONY EXPRESS
NATIONAL HISTORIC TRAILS

United States Department of the Interior • National Park Service
481 • 20018A • DSC • 5/99

Purpose and Significance of the Trails

The purpose of each trail was first identified by the National Trails System Act and later clarified by representatives of federal and state agencies, as well as trail associations, during four planning workshops held in the spring and summer of 1994 in Lakewood, Colorado.

Purpose statements developed by the workshop participants provide guidance for future management and use of these trails. The following statements reflect the consensus reached in these workshops and have not been modified.

The significance of each trail was also detailed during these workshops to highlight what is important about each of the trails.

Vision for the Trails

The Oregon, California, Mormon Pioneer, and Pony Express National Historic Trails represent in part the heritage of the westward expansion of the United States. To preserve this heritage, and to provide opportunities for people to understand and experience this part of American history, partners from public agencies, as well as representatives from nonprofit organizations and public landowners, work together to protect, maintain, and promote the trail corridors. This collaborative effort is necessary to ensure that future generations will be able to appreciate and enjoy trail resources.



OREGON NATIONAL HISTORIC TRAIL

The purposes of the trail are

- to identify, preserve, and interpret the sites, route, and history of the Oregon Trail for all people to experience and understand
- to commemorate the westward movement of emigrants to the Oregon country as an important chapter of our national heritage

The trail is significant because

- it was the first trail that demonstrated the feasibility of moving families, possessions, and cultures by wheeled vehicles across an area previously perceived as impassable
- it was the corridor for one of the largest and longest emigration of families in the history of the United States

- it is a symbol of American westward traditional migration embodied in traditional concepts of pioneer spirit, patriotism, and rugged individualism
- it strengthened the United States' claim to the Pacific Northwest



CALIFORNIA NATIONAL HISTORIC TRAIL

The purposes of the trail are to

- enable all people to envision and experience, in a coherent and convenient way, the heritage and impacts of the western overland migration
- encourage preservation of its history and physical remains

The trail is significant because

- it is one of the major highways of the 19th century, which provided a 2,400-mile path for emigrants to the West. Their resulting settlement significantly contributed to change in peoples, cultures, and landscapes
- one of the largest overland migrations in American westward expansion used the trail as a result of the California gold rush
- the route, followed earlier by American Indians and western explorers and travelers, provided a foundation for American transportation and communication systems west of the Mississippi River



MORMON PIONEER NATIONAL HISTORIC TRAIL

The purposes of the trail are

- to identify, preserve, and explain the sites, route, and history of the Mormon Pioneer Trail for all people to experience and understand
- to commemorate the 19th century migration of Mormon emigrants to the Valley of the Great Salt Lake as an important aspect of our national heritage

The trail is significant because

- the trail was used by cohesive Mormon companies seeking religious freedom, with the intent of locating their new Zion in the Far West
- the trail was traveled/developed by communities or companies of people with the intent of bringing church members to settle the Valley of the Great Salt Lake and surrounding regions
- the trail was part of the westward movement that provided an improved route into the Great Basin
- the Mormons, in using the trail in both directions, improved the route and provided assistance along the way



PONY EXPRESS NATIONAL HISTORIC TRAIL

The purposes of the trail are to

- identify, preserve, and explain the sites, route, and history of the Pony Express for all people to experience and understand
- commemorate the rapid mail delivery that linked eastern and western states

The trail is significant because

- the Pony Express proved the viability of a central United States overland communication system and was a forerunner of a transcontinental telegraph and railroad
- the Pony Express required organizational skills to join the populous East and the West
- the horse-and-rider relay system used by the Pony Express became the nation's most direct and fastest means of east-west communications before completion of the telegraph system
- the Pony Express played a vital role in aligning California with the Union by providing a link between the eastern states and California just before the Civil War; it allowed westerners to develop and maintain a sense of contact with the East at a critical time in United States history
- the Pony Express made important contributions to journalism, commerce, and personal domestic and international communication by providing news and original documents in a timely manner
- the lone riders and isolated stations became a lasting image of the West

Administrative Objectives

The administrative objectives for the national historic trails set the goals for addressing planning issues and maintaining the significant qualities of the trails. They guide plan implementation and measure progress.

ADMINISTRATION

- Implement the National Trails System Act in conjunction with other authorities through partnerships, whenever possible.
- Administer trails in a cooperative, cohesive, and consistent manner and as a total entity, while incorporating the expertise and input of interested organizations, agencies, and landowners.
- Facilitate communication among trail managers to maintain a comprehensive approach to trail planning, protection, management, and development.
- Centralize administration in a well-staffed office that functions as a clearinghouse for all federal, state, and local governmental agencies and private interest groups.
- Provide incentives and stimulate cooperative partnerships.
- Implement the comprehensive management plan.

RESOURCE PROTECTION

- Encourage the identification, evaluation, and preservation of trail resources.
- Identify research needs and coordinate research.
- Assist in the development of models for determining the impacts on historic resources from excessive visitor use (using concepts, such as carrying capacity), natural processes (such as erosion), incompatible uses (such as mineral development), and others.

INTERPRETATION, VISITOR EXPERIENCE, AND USE

- Allow visitors to retrace the trails and to experience the trails and their resources firsthand.
- Manage the uses of the trail corridors in ways that conserve the significant values and resources related to the trails.
- Provide accurate information and knowledge to enhance the appreciation of trail resources and to protect those resources.

- Provide adequate information and orientation to help visitors plan trips, including information on tour routes, facilities, and services.
- Encourage the development of visitor facilities that provide convenient and accessible opportunities to learn about and experience trail resources.
- Encourage the development of integrated and coordinated interpretation of the trails to ensure quality and consistency.
- Encourage the development of a flexible interpretive program that reflects fresh research findings.
- Make trail route maps available for planning, protection, research, and public use.
- Provide visitors with the widest range of opportunities to experience the trails.

Issues and Concerns

The following planning issues were identified in discussions with various trail organizations and federal and state land managers during meetings in 1994 and 1995. Planning issues are the questions or problems this plan will address.

ADMINISTRATION AND MANAGEMENT

The Bureau of Land Management, the Forest Service, and some of the states traversed by the trails already have plans to guide the management of many of these historic trail resources. However, management mandates and approaches under these plans differ, and coordination among the different trail-managing agencies, or even within the same agency, are inconsistent.

During this planning process the Bureau of Land Management made an effort to collect all the information regarding the management of historic trails in existing management plans. This proved a difficult task because few plans specifically address trail resources and measures for their protection and appropriate public use.

The four trails are currently managed as a series of pieces rather than as a whole system of routes and trail resources. Inconsistencies in protection and use strategies, even within the same agency, result in different levels of protection, appropriate use, and interpretation.

To effectively administer and manage the trails, the following issues need to be addressed:

- There is no formalized approach for providing technical assistance for preservation and interpretation.
- Strategies for protecting and preserving threatened trail resources, particularly national historic landmarks and those at risk due to neglect, development pressures, inappropriate uses, or natural processes, have not been developed.
- Strategies for promoting public support for the preservation of trail-related resources have not been identified.
- The role and responsibility of the National Park Service in the administration of historic trails is not understood by the partners.
- Limited financial assistance needs to be used to stimulate partnerships, protect resources, and educate the public.

RESOURCE PROTECTION

The following conditions present challenges to protecting the trails and their associated resources:

- Viewsheds contribute in significant ways to the experience of visitors; how viewsheds are protected is controversial.
- The protection of trail resources is challenging because of their number and complexity.
- Trail remnants, such as swales and ruts, exist in different environments and conditions, ranging from areas of bare rock, eroded soil, and drifting sand, to areas that are overgrown with vegetation.
- Consistency is needed on trail preservation and on cultural landscape and viewshed protection.
- Some economic activities along the trail corridors can intrude on scenic or historic vistas, or impact trail resources by the nature of their operational characteristics.

INTERPRETATION AND VISITOR EXPERIENCE

The historic trails offer numerous opportunities for interpretation. Although each trail is unique, many characteristics are shared. This poses the following problems for interpretation:

- The visitor experience may be redundant, particularly as a result of the need to place the trails within context at each interpretive stop.
- There are few coordinated methods of getting interpretive information to the public.

- Some routes or segments are more accessible and easier to interpret. Others, of equal significance, are more remote or are more difficult to interpret.
- Information about historic trails is available locally, but it is not broadly distributed.

USES OF NATIONAL HISTORIC TRAILS

Not all trails or segments are used in the same manner. The following conditions hamper the coordination of trail use and visitation:

- Opinions differ on how best to preserve trail resources such as ruts or swales.

- The historic trails pass through different environments with different landscape conditions and environmental sensitivities.
- Appropriate types and intensities of trail use have not been defined in most cases.

SITE DEVELOPMENT AND MARKING

Signs and site development vary widely along the trails. Barriers to consistent signing and site development include:

- Carsonite, concrete, railroad rail, and wooden posts are randomly used to mark the trails.
- There are various generations of historic signs and blazings.

- Some routes have numerous signs erected by various groups.
- In some areas of Nebraska and Wyoming the four trails follow the same route.
- The question of how to mark and interpret these trails without causing visual clutter is a concern of trail managers and state transportation departments.

Historical Overview and Interpretive Themes

Historical Overview

Between 1803 and 1848 the United States acquired more than two million square miles of new territory in the trans-Mississippi West. These lands tripled the size of the country and offered people the opportunity to expand and settle in areas west of the Mississippi River.

Most Americans had only vague impressions of conditions beyond the Mississippi River. Although the region included the homes of thousands of American Indians, some early explorers had dismissed much of this vast area as uninhabitable desert. Despite its forbidding character, fur trappers, traders, and missionaries established an American presence in the West soon after the turn of the 19th century. American trappers, following in the wake of the Lewis and Clark expedition, ranged from the Missouri River to beyond the Sierra Nevada. In the 1820s New England sea captains established contact with the peoples of California to trade American manufactured goods for cattle hides, beef tallow, and other items. Traders followed the overland trail to Santa Fe and Chihuahua, helping to establish a southwestern trade network with Hispanic merchants and American Indian groups. Christian missionaries also ventured west to create communities.

Beginning in the 1830s, both Americans and Europeans traveled westward by the thousands. These emigrants opened and used numerous trails and built ferries, bridges, forts, towns, and cities. Within a few decades areas that once had been either unknown or dismissed as barriers to civilization joined the rest of the nation as states or territories.

CULTURAL CONTACT AND CLASHES ON THE OVERLAND TRAILS

American Indians played a key role in the overland migration. Although some of the emigrant trails were new, many mirrored earlier Indian routes that resulted from following major river systems and crossing imposing mountain ranges (see map 12). Initially, American Indians assisted and guided explorers and emigrants.

The legends of the overland trek included spectacular tales of bloody battles between emigrant trains and the “savages” who inhabited the western plains and mountains. In fact, violence was almost nonexistent in the early 1840s. The occasional contacts between emigrants and Indians were usually a novelty for both sides. Members of several tribes proved invaluable to many overland travelers by providing supplies and fresh livestock, operating ferries at dangerous river crossings, or serving as guides. Emigrants entrusted their stock, wagons,

and even their families to Indian swimmers and boatmen at dangerous river crossings all along the trail.

Theft, not violence, was the Indian threat that early overlanders most often cited. The usually heavily armed emigrants were as likely to kill or maim themselves or other travelers in accidental shootings, quarrels in camp, or disputes at fords and ferries than die in battles with Indians.

However, as the decade progressed and the number of travelers increased, conflict and violent confrontations escalated. The thousands of emigrants strained the resources of the trail corridors. Many made a nuisance of themselves, wantonly destroying the game that represented the Indians’ livelihood. The racism that profoundly shaped antebellum society also framed emigrant/Indian relations. Numerous emigrants expressed little sympathy for the rights of an “inferior” race to land they perceived as virtually empty and underused. Americans who considered the western part of the United States resented Indian attempts to levy tribute for passage across tribal lands. Many emigrants paid, occasionally grudgingly; others ignored Indian demands for payment or reacted violently. Indian warriors occasionally retaliated by harassing wagon trains and robbing and terrorizing isolated emigrants. As relations deteriorated, Indians from many tribes killed hundreds of overlanders, either for offenses the emigrants had committed or in retribution for the crimes of others. Whites killed hundreds of Indians, often for no other reason than that they were Indian. The increasing spiral of violence between emigrants and Indians ultimately pitted the tribes against the government of the United States. The overland migrations helped initiate a series of wars that lasted for decades and robbed Indians of their political and economic independence for decades to come.



OREGON AND CALIFORNIA TRAILS

The Oregon country — including the present states of Oregon, Washington, and Idaho, a large portion of British Columbia, northwestern Montana, and a portion of Wyoming — provided great opportunities for emigrants and would-be settlers. Reports of the richness of the Oregon country, and particularly of the Willamette River valley, triggered a movement that by the late 1840s became one of the great mass migrations in history.

The United States economy provided additional motivation for a society already inclined toward mobility. In the aftermath of the Panic of 1837, disillusioned farmers throughout the Middle West and the

Mississippi Valley began to consider moving west to recoup their fortunes. The first emigrant wagon train bound for the Pacific Coast, the Bidwell-Bartleson party, left Independence, Missouri, in the spring of 1841. Soon, thousands of eager Americans followed.

Despite economic hardships back home, many emigrants would never have made the overland trek had they understood the dangers that awaited them. The trip to Oregon or California entailed a five- to six-month journey by wagon across almost 2,000 miles of open plains, forbidding deserts, and rugged mountains. With few supply stations of any kind, emigrants had to be nearly self-sufficient. Supplies for the entire trip often could not exceed the capacity of one wagon and a few yoke of oxen.

Timing was critical in preparing for the journey. Travelers could not start before the prairie grass was ready for grazing, but had to begin early enough to beat the first heavy snows in the Sierra Nevada. The first emigrants had to find and hire reliable guides. Traveling alone invited disaster, but finding compatible trail companions was often difficult.

Weather on the plains was unpredictable; emigrants encountered dust storms, thunderstorms, floods, snow, wind, and blistering heat. Emigrants forded numerous streams swollen by spring runoffs. Finding sufficient fuel and potable water was a taxing chore. Dried buffalo dung frequently offered the only alternative for fuel, and occasionally the paunch of a dead animal provided the only water supply. Some pioneers confronted brutal violence and even cannibalism. Cholera outbreaks in the late 1840s and early 1850s killed emigrants by the thousands.

With the discovery of gold in 1848, migration patterns changed. Emigrants bound for Oregon and those already settled in Oregon began to emigrate to California. Two years later California gained statehood and attracted an increasing number of emigrants who opened numerous routes across the Sierra Nevada in their efforts to reach the goldfields of California. By 1850 those moving to California greatly exceeded those headed for Oregon. They followed the Oregon Trail through Wyoming and then blazed new routes across Idaho, Utah, Nevada, and California.

While most travelers jumped off from points along the Missouri River, hundreds of Cherokee and other southerners followed trails across Arkansas and Kansas to the Santa Fe Trail. They traveled along the Arkansas River into what is now Colorado. Turning northward, the overlanders used trading trails along the front range of the Rocky Mountains to join finally with the main California Trail in Wyoming.

While the journey to Oregon was difficult, the trek to California was often even more demanding. California-bound emigrants encountered the worst of the Great Basin deserts, where they endured brutal hardships. Oxen died by the hundreds, and desperate travelers jettisoned prized possessions, hoping to reach California. Beyond the Rocky Mountains and the Great Basin, the emigrants confronted the rugged Sierra Nevada and explored various routes to cross this range. Many of the first attempts ended in near disaster. Some emigrants staggered over the last leg of their journey, with their few remaining belongings strapped to pack animals. Failure to follow the right route and reach the Sierra Nevada before the snow fell could prove catastrophic, as the ill-fated Donner party and others discovered.



MORMON PIONEER TRAIL

Other emigrants went west searching for a sanctuary from religious intolerance and violence. The strife that shaped much of antebellum religious life resulted in part from the 1820s revival movement known as the Second Great Awakening. The movement swept through the frontier regions along the Appalachians, creating new religious denominations and utopian societies. One of the most important groups that emerged was the Church of Jesus Christ of Latter-day Saints, founded by the charismatic Joseph Smith.

The Latter-day Saints, or Mormons, attracted converts by the thousands. The new church provoked in non-Mormon "gentiles" suspicion and hostility equal to the Saints' religious fervor. The Latter-day Saints moved from New York to Ohio to Missouri to Illinois in order to escape persecution. After Smith's murder in Carthage, Illinois, in 1844, the Mormons under Smith's protégé, Brigham Young, planned an exodus into the far West. But three years passed before they finally completed their trek and reached their destination in the Valley of the Great Salt Lake.

The Mormon trek to the Great Salt Lake comprised one of the most remarkable chapters of the overland migrations. Their escape from religious persecution set them apart from most American emigrants. However, they also displayed a strong spirit of enterprise. Unlike other Americans, who usually traveled overland in small groups, the Mormons maintained a communal structure both on the trip west and in their new colony at Salt Lake City.

The organization and discipline of the Mormons served them well in their migration and in their rapid development of an agrarian com-

munity. By late 1848 Salt Lake City had become a supply station for travelers on the California Trail. Other Mormons moved east along the trail as missionaries to build bridges, operate ferries, and sell supplies to emigrants. Still others turned a profit salvaging equipment that westbound travelers had cast aside. Economic necessity led many Mormons and non-Mormons to subordinate earlier antagonisms and cooperate.

The church enjoyed enormous success in attracting converts from Europe. These new church members immigrated to America to make the trek to Utah. In 1856 Brigham Young decided that these newcomers would join with new American converts and make the overland crossing using handcarts instead of wagons. Between 1856 and 1860, 10 companies of almost 3,000 people crossed the Great Plains, pushing or pulling handcarts loaded with as much as 500 pounds of supplies. For the most part, the handcart experiment was successful. Handcart emigrants traveled faster and easier than those using wagons. However, two handcart companies made a late start from the Missouri River, and the results were disastrous. Snowstorms trapped these companies in the open country between Bessemer Bend and South Pass, Wyoming. Here, over 220 emigrants died of exposure before relief columns arrived from Salt Lake City.

In little more than a decade, the Mormons built a thriving city and colony in the Valley of the Great Salt Lake. Utah, its population having grown to over 30,000, became a U.S. territory in 1856, with Brigham Young serving as territorial governor. When Young publicly sanctioned polygamy as church doctrine in 1852, the Latter-day Saints found themselves locked in an increasingly bitter conflict with the U.S. government. Polygamy helped trigger this conflict, as did Young's near-absolute rule of the territory. The dispute erupted in a short-lived conflict between the Mormon colony and the United States. Young, the Mormon church, and the colony all survived; and Utah continued to flourish as one of the country's most remarkable social and religious experiments.



PONY EXPRESS TRAIL

By 1860 the population in the West had grown dramatically. As gold and silver were discovered in Colorado, Nevada, and other places in the West, migration patterns changed. Better communication between the eastern states and the far West became a pressing issue. The federal government responded by issuing mail contracts to overland and seagoing carriers. The best stagecoach routes, however, required at least three weeks travel time; water routes required as much as six

months. Many western citizens found this level of service unacceptable. Some prominent Californians, including Senator William Gwin, contemplated the creation of a mounted courier service to carry mail between the Missouri River and the Pacific Coast. The idea presented some significant obstacles that required the federal government to give carriers substantial financial incentives.

In 1849 the U.S. government began the first regular overland mail service by private mail carrier to the western United States from Independence, Missouri. During the following decade the federal government provided freight or stagecoach lines with generous incentives to accept western mail contracts. The firm of Russell, Majors, and Waddell was a western Missouri freighting company that had been under contract with the federal government to transport supplies to army installations throughout the West.

By the late 1850s, the Russell, Majors, and Waddell firm was on the verge of bankruptcy due to heavy losses. The partners, particularly the recklessly enterprising William H. Russell, eagerly sought some way to recoup the company's fortunes. According to Russell, an opportunity presented itself in the winter of 1859 while in Washington, D.C., when he encountered Senator Gwin. Gwin tried to sell Russell on the idea of a pony express. The senator supposedly promised that if Russell and his partners created the courier service, he would work in Congress to secure for the firm the necessary subsidies. A speculator by nature, and desperate in the bargain, Russell pitched the idea to his partners, Alexander Majors and William Waddell. Russell overcame his partners' misgivings, and the firm announced the creation of the Central Overland California and Pike's Peak Express Company, more commonly known as the Pony Express, to provide mail service between the Missouri River and the Pacific Coast.

The courier service could never sustain itself solely on the revenues from carrying mail. Yet, if it succeeded in transporting mail throughout the year, it could lead to the award of a lucrative contract for conventional mail carriage between Missouri and California. The tens of thousands of dollars lost in the Pony Express would be more than made up by the hundreds of thousands of dollars made in the bigger deals to follow.

In many ways, the Pony Express embodied the essence of capitalism in a frontier setting. It also illustrated the essential role of the federal government in western development. The firm of Russell, Majors, and Waddell faced enormous startup costs to get the courier service underway. The Pony Express required hundreds of horses and hundreds of men to work as riders, station keepers, or stock handlers. In addition, most of the stations in the far West were not self-supporting. The company had to ship supplies over great distances, which

added enormously to the firm's overhead. In spite of all obstacles, the new firm managed to begin service within a few months of its formation. On April 3, 1860, the first riders departed St. Joseph, Missouri, and San Francisco, California. They and other riders transported the mail pouches, known as mochilas, to the eastern and western terminuses of the route within hours of the 10-day period that Russell and his partners had promised.

The new courier service functioned remarkably well, maintaining consistent service over an enormous distance in the face of difficult terrain and frequently harsh climatic conditions. The Pony Express's early achievements bolstered the company's claims that the central overland route was a practical route for year-round communication. Continued success would strengthen the firm's case for a conventional mail contract. In the meantime, however, it became readily apparent that without a substantial government subsidy, the Pony Express would quickly collapse. The Pony Express continued in operation until November 1861, when it discontinued service, partially as a result of the completion of the overland telegraph line, which eliminated the need for mounted couriers, but also because the anticipated mail contracts never materialized.

The Pony Express earned a significant place in American history. It created a new and faster communication link between the East and the Pacific Coast. It demonstrated the viability of the central overland route; much of the route that its riders followed became the right of way for the transcontinental railroad and later highways. The Pony Express played an important role in maintaining communication between the federal government and California in the months immediately before the start of the Civil War. Finally, it has come to symbolize America's rapid expansion to the Pacific in the antebellum era. Through this process, the United States secured its conquest of the American West.

This short-lived venture has captured the imagination of the American people. The persistence of its image in American history reveals a great deal about how we see ourselves as a nation.

Interpretive Themes and Subthemes

The following interpretive themes have been identified for the Oregon, California, Mormon Pioneer, and Pony Express National Historic Trails. These themes and subthemes provide the framework and guidance for interpreting the four trails in an integrated and systematic way. These themes will be modified, when necessary, to reflect current research.

TRAILWIDE THEMES

- The geographically central corridor of these four historic trails (up the Platte, the North Platte, and the Sweetwater Rivers to South Pass) has been called "the best natural road in the world." This corridor became the "superhighway" of westward expansion during the mid-19th century, a period of "manifest destiny" when the nation realized its dream of stretching from ocean to ocean.
- This corridor had been used for thousands of years by American Indians and in the mid-19th century became the transportation route for successive waves of European trappers, missionaries, soldiers, teamsters, stagecoach drivers, Pony Express riders, and overland emigrants bound for opportunity in the Oregon territory, the Great Basin, and the California goldfields.
- Though overland traffic declined dramatically after the completion of the transcontinental railroad in 1869, the trail corridors laid the basis for communication and transportation systems that are still in use today. Railroads, modern highways, pipelines, and powerlines still follow the general routes of the old emigrant trails.
- Landforms, landmarks, forage, wood, and water dictated the paths of migration. Numerous factors, such as weather, flooding rivers, adequate pasture for draft animals, and water for animals and humans affected the organization and outfitting of wagon trains and the Pony Express.
- The influx of close to 500,000 emigrants (from 1840 to 1860) across and into the traditional homelands of the American Indians undermined the latter groups' political and economic independence in the trans-Mississippi West.
- The emigrants' fear of American Indians was often unjustified. Many emigrants would have faced more difficulties and challenges had it not been for American Indian assistance along the trails.
- All 19th century overland travelers shared similar experiences while traveling west: the drudgery of walking hundreds of miles, suffocating dust, violent thunderstorms, mud, temperature extremes, bad weather, poor forage, fear of Indians, accidents, sickness, and death. These experiences — frequently recorded in journals, diaries, and letters — became a part of our national heritage and inspired a romantic movement in art, literature, and cinema that has had an enormous effect on American popular culture.

GEOGRAPHIC REGIONS AND SUBTHEMES

The Missouri and Mississippi Rivers (Starting Points)

The outfitting and organization of the overland emigrant trains occurred mainly in towns and communities along these rivers.

- Independence, Westport, St. Joseph, Nebraska City, and Council Bluffs/Omaha were the primary jumping-off points for emigrants headed west; the overland migrations had an enormous influence on the evolution of these towns.
- Often described as a rope with frayed ends, the various routes from the Mississippi and Missouri Rivers jumping-off places (i.e., strands of the rope) converged on the Platte River at Fort Kearny to create the “Platte River Road,” the main emigrant, military, and communication route west.

The Platte River

- Fort Kearny marked the end of the tallgrass prairies and the start of the Great Plains. The flat, treeless horizon stretching endlessly before them shocked many emigrants, perhaps causing them for the first time to realize the enormity of the journey ahead.
- The Platte and North Platte Rivers across Nebraska and Wyoming provided a broad natural avenue, made to order for ox- and mule-drawn covered wagons. This corridor headed west in exactly the right direction and provided all the necessities for overland travel — water, forage, and a level road to follow.
- In the western reaches of the Great Plains, west of Fort Laramie, the country begins to break up into deepening ravines and steeper ascents. Traveling continually in the shadow of Laramie Peak — the emigrants’ first view of the western mountains — and knowing the trail would soon become more difficult, the emigrants began to lighten the loads in their wagons as much as they dared.

The Rocky Mountains and the Continental Divide

- At Casper, Wyoming, the character of the trail changes dramatically and begins the gradual ascent over the high range country toward South Pass and the Continental Divide. Quitting the North Platte River, the emigrants became more aware that their trek was a race against the approach of winter and pushed on as rapidly as they could across this “hell’s reach” of bad campsites, poor water, scarce

grass, alkali flats, and rocky, steep terrain.

- South Pass was the key to the entire emigrant trail corridor, for only at South Pass could wagons be taken up its broad, gentle grade and over the 7,550-foot backbone of the Rocky Mountains. South Pass marked the emigrants’ arrival at the frontier of the Oregon Territory, the end of the long ascent over the Continental Divide, and the halfway point of the journey west.
- At the Parting of the Ways, emigrants had to make a series of hard decisions regarding the risks of taking shortcuts. The decision to risk a cutoff — based upon water sources; the condition of livestock, people, supplies, and equipment; the time of year; grass conditions; and their final destination — sometimes meant a life or death gamble.

Snake River-Columbia Plateau and the Pacific Northwest

- In southern Idaho emigrants encountered scorching deserts, treacherous rivers, exotic landforms, and mineral hot springs.
- In southern Idaho, at the Raft River crossing, the main branch of the California Trail split from the Oregon Trail. Emigrants were forced to make their final choice of destination, the left fork branching southwest toward California and the right fork continuing west to Oregon.
- At waystations across southern Idaho — such as the Smith Trading Post, Fort Hall, and Fort Boise — travelers were able to reprovision for the last leg of their journey.
- Before the Barlow Road around the south shoulder of Mt. Hood was opened in 1846, emigrants faced the daunting challenge of rafting the treacherous Columbia River.

The Great Basin

- This forbidding landscape became the graveyard of the California Trail — graves, dead stock, shattered wagons, and jettisoned freight bore mute testimony to the basin’s unforgiving character. The unrelenting desert sun of late summer beat down on roads enveloped in clouds of alkali dust so thick drivers could not see their lead cattle. With half-starved oxen and people reaching the point of exhaustion, the emigrants felt an increasing sense of urgency to reach their final destination before consuming their last reserves.

- The Humboldt is a small river — crooked, shallow, turbid, monotonous, and seemingly endless — but it offered sustenance to emigrants and their livestock. The emigrants followed it for 300 miles across the Nevada desert to the Humboldt Sink. Without the Humboldt, overland migration to California might have been impossible.

The Sierra Nevada

- These mountains form the Great Wall — the final barrier that stood between the pioneers and a new life in California. By sheer force of courage and determination, this once impenetrable wall of granite was crossed, and California was opened to overland emigration.
- American Indians did not perceive the Sierra Nevada as a “Great Wall.” They readily traded and traveled back and forth across the abrupt eastern escarpment, and often assisted explorers and others who made the crossing at inopportune times.
- The fate of the Donner-Reed party offers horrifying evidence of the price the journey could extract from those who miscalculated their arrival at the gates of the Sierra Nevada.
- The western ends of the “frayed rope” that began on the Missouri River fanned out from the Humboldt Sink along many routes to various destinations in the goldfields of the Sierra Nevada. In 1849 alone, 25,000 emigrants poured into California along the California Trail, illustrating the vast potential of the new El Dorado on the Pacific Coast.

The Cascades

- The Applegate Trail was developed by Oregon pioneers as a southern route, or “backdoor,” to Oregon and a way of avoiding the treacherous descent of the Columbia River.
- When news of the gold strikes in the Sierras reached Oregon, eager forty-niners poured south down the Applegate Trail into the goldfields of the Sierra Nevada.

TRAIL-SPECIFIC SUBTHEMES



Oregon National Historic Trail

- The Oregon Trail was the harbinger of America's westward expansion and the core of one of the largest and longest mass migrations in U.S. history.
- In 1836 when Presbyterian missionaries Marcus Whitman and Henry Spalding took their wives over the Oregon Trail to establish Indian missions in the Oregon country, they proved the feasibility of moving families and wheeled vehicles across an area previously perceived as impassable.
- The waves of migration to Oregon strengthened U.S. claims to the Pacific Northwest. By 1846, when the treaty with Great Britain established the northern boundary of the United States at the 49th parallel, more than 5,000 emigrants had settled in the fertile Willamette Valley.



California National Historic Trail

- Between 1841 and 1860, more than 200,000 Americans traversed the California Trail to escape economic adversity, obtain better farmlands, or get rich quick in the gold rush.
- Although most of the overland emigrants to Oregon and California through 1848 sought to establish farms and permanent

homes, a majority of the forty-niners were single young men, hoping to make their fortunes in the goldfields of the Sierra Nevada and return home to the East.

- The California Trail emigrants represented various cultures, ethnic groups, religious denominations, educational backgrounds, and economic interests.
- The rapid influx of Americans along the California Trail influenced national politics, international relations and boundaries, and U.S. policy toward American Indians. Settlement was so rapid that California became a state in 1850 without having been a territory.



Mormon Pioneer National Historic Trail

- The migrating Mormons were bound together by a common faith and a desire for religious freedom in the face of intolerance and persecution. This was a movement of an entire people, an entire religion, and an entire culture driven by religious fervor and determination.
- Unlike other elements of the westward expansion, the cohesive Mormon companies showed clear lines of authority and a sense of community.
- The Mormons did not hire professional guides. Instead, they followed existing trails, used maps and accounts of early explorers, and gathered information from travelers and frontiersmen they met along the way.

- Through the construction of bridges, ferries, and supply stations, the Mormons improved conditions and communications along the trail for travelers moving both east and west.
- The Mormon community funded continued migration of poor church members and converts from Europe. About half of all Mormon emigrants came directly from foreign countries.



Pony Express National Historic Trail

- The Pony Express offered the fastest transcontinental mail service of its day, providing a vital, all-season communication link between the east and west during a critical period in American history.
- The organization and implementation of this complex system required the contributions of hundreds of people — among them district superintendents, clerks, station keepers, stock tenders, and riders — a stark contrast to the popular image of the solitary express rider.
- The route of the Pony Express had to reconcile requirements for favorable topography and water sources with the need to minimize distance.
- With the completion of the transcontinental telegraph, the Pony Express discontinued operations after only 19 months in service. Yet the trail proved the feasibility of a central overland transportation route and played a vital role in aligning California with the Union just before the Civil War.

Historic Routes and Significant Resources

Historic Routes



OREGON NATIONAL HISTORIC TRAIL

The enabling legislation (Public Law 95-625 amendment to the National Trails System Act, PL 90-543) authorized a primary route between Independence, Missouri, and Oregon City, Oregon. Table 1 summarizes the approximate miles by state. The general route is shown on map 1. An official route map for the Oregon National Historic Trail, as required by the National Trails System Act, has been prepared, and the route has been digitized using ARC-INFO, a geographic information system (GIS). The description of the route will be published in the Federal Register. If new research identifies more accurate route locations, an official notice of correction will be published.

When the Oregon National Historic Trail legislation was passed, Congress decided to concentrate on the most important right-of-way for purposes of official designation and marking. Where an alternative right-of-way of equal importance existed, both were selected. The years 1841-48 were designated for determining the primary route to avoid confusion with the route of the forty-niners to California. This route also includes the Barlow Road between The Dalles and Oregon City, Oregon, which was developed in 1846. Congress authorized a single route, except for a 126-mile branch (South Alternate Route) between Three Island Crossing, Idaho, and eastern Oregon, and a 114-mile branch (Columbia River Route) used between 1841 and 1846 extending from The Dalles to Oregon City, Oregon (see maps 1 and 7-9).

The route of the Oregon National Historic Trail begins at Independence, Missouri. The emigrants followed the older Santa Fe Trail to the southwest for about 40 miles, then headed northwest for the Platte River. Emigrants crossed the rolling hills of the eastern Great Plains, bisected by numerous rivers and streams, such as the Wakarusa, Kansas, Red Vermillion, Black Vermillion, and Big Blue Rivers. They followed the Little Blue River valley (into Nebraska), and when the river turned south, they continued northwest to the broad Platte River valley.

The emigrants followed the Platte River to its confluence in western Nebraska, crossed the South Platte near California Hill, and descended in the North Platte valley through Ash Hollow. After Ft. Laramie, the first major stopping place on the trail, emigrants moved northwest over the dry ranges connecting the meanders of the North Platte River, crossed and left the North Platte at present-day Casper, and

Table 1: Oregon National Historic Trail — Route Miles by State

State	Miles
Missouri	16
Kansas	165
Nebraska	424
Wyoming	491
Idaho	510
Oregon	524
Total	2,130

headed southwest across the high range country of Wyoming toward Independence Rock.

After South Pass, which many emigrants considered to be the halfway point of their trip, they crossed the Dry Sandy and the Big Sandy and eventually reached the welcome water, grass, and shade of the Green River. They then proceeded to Fort Bridger, the second of the major resupply points along the trail, which was then a small and isolated fur trading post.

After Fort Bridger the emigrants went over the rugged Bear River Divide, followed the Bear River into Idaho, and then left it to head across the desert toward Fort Hall, on the banks of the Snake River. Fort Hall was a fur trading post operated by the Hudson's Bay Company. It was also a supply point and aid station for the weary emigrants.

After Fort Hall the emigrants followed the Snake River through southern Idaho. They forded the Snake River at Three Island Crossing whenever possible. Once across, they skirted the mountains north of the Snake toward Fort Boise, another Hudson's Bay Company trading post, and another spot where rest and resupply were possible before crossing the Snake. Approximately half of the emigrants were unable to cross the river at Three Island Crossing, and were forced to use the 126-mile South Alternate Route. Days of hot and dusty travel along the south bank of the Snake awaited emigrants before they could rejoin the main route just west of Fort Boise.

After Fort Boise the emigrants crossed the arid rangeland of eastern Oregon, broken by the Malheur River, and met the Snake for the last time at Farewell Bend. They then turned northwest toward the Columbia River at The Dalles and the Blue Mountains. After the taxing crossing of the Blue Mountains, emigrants turned west and crossed north-central Oregon. They forded the John Day and Deschutes Rivers, finally descending into the Columbia River valley just east of The Dalles.

The overland portion of the trail ended at The Dalles until 1846, when the Barlow Road was opened. Before that time, the emigrants built rafts to travel down the Columbia River to Fort Vancouver, and then up the Willamette River to Oregon City. After 1846 most emigrants preferred to head south from The Dalles to Tygh Valley and then west across the southern shoulder of Mount Hood on the Barlow Road. They then crossed the Cascade Range at Barlow Pass and descended into Oregon City.



CALIFORNIA NATIONAL HISTORIC TRAIL

According to an opinion of the U.S. Department of the Interior’s Office of the Solicitor (see appendix C), only those routes and cutoffs identified in the 1987 NPS Feasibility Study constitute the authorized route of the California National Historic Trail (see maps 1-6). Table 2 summarizes the approximate number of trail miles by state.

An official route map for the California National Historic Trail, as required by the National Trails System Act, has been prepared, and the routes have been digitized in a GIS format using ARC-INFO. The description of the routes will be published in the Federal Register. If new research identifies more accurate trail locations, an official notice of correction will be published.

The NPS 1987 Feasibility Study identified the following routes and cutoffs as constituting the congressionally authorized California National Historic Trail. (To help locate the trails, geographic references to present-day towns and highways are used, even though these designations may not have existed during the period being described.)

Main Trail from Independence (Missouri) to the Humboldt Sink(Nevada)

The primary route of the Oregon-California Trail left from Upper Independence Landing at Wayne City and ascended the steep river

Table 2: California National Historic Trail — Route Miles by State

State	Miles
Missouri	18
Kansas	290
Nebraska	1,067
Colorado	16
Wyoming.....	1,088
Idaho	457
Oregon	424
Utah	349
Nevada	1,136
California	994
Total	5,839

bluffs to Independence, Missouri, where emigrants outfitted for the journey. Referred to as the Independence Road, the route followed the older Santa Fe Trail southwest out of Independence, crossed the Big Blue River at Red Bridge crossing, and intersected the Westport Road west of present-day Gardner, Kansas. Turning northwest from the Santa Fe Trail, the trail intersected the Westport-Lawrence Road on the Wakarusa River, crossed the Wakarusa River near Lawrence and the Kansas River near Topeka, intersected the Fort Leavenworth-Kansas River Route, and paralleled the north side of the Kansas River. After crossing Red Vermillion Creek, the trail turned north to intersect the St. Joe Road west of present-day Marysville, Kansas.

In Nebraska the trail paralleled the north side of the Little Blue River, intersecting the Oxbow Trail on the south bank of the Platte River (15 miles west of Fort Kearny). Here the trail followed the south bank of the Platte River west to the fork of the Platte. Emigrants followed the south bank of the South Platte and crossed at one of three sites. The lower crossing was opposite O’Fallon’s Bluff (2 miles east of Sutherland, Nebraska), the middle crossing was at Ogallala, and

the upper crossing (the most popular) was 4 miles west of Brule. After crossing the Platte the routes came together at Ash Hollow on the south bank of the North Platte River.

The main trail headed northwest, following the south bank of the North Platte River, past the landmarks Courthouse, Jail, Chimney, and Castle Rocks to Fort Laramie. This was the most important military post and emigrant resupply point along the entire trail. From here the main trail stayed on the south side of the river but divided into numerous branches — some up on the plateau and others in the floodplain of the North Platte River. The route passed near Ayres Natural Bridge and rejoined the North Platte River 4 miles southeast of Glenrock. The main trail turned west and followed the south bank of the North Platte to the area of Fort Caspar.

West of Fort Caspar the trail route split on the way to Avenue of Rocks, with the main trail coming south through Emigrant Gap and continuing southwest to meet the Sweetwater River near Independence Rock. Here the trail turned west and followed the Sweetwater past Devil’s Gate and Split Rock to Three Crossings, where the primary route crossed the Sweetwater four times within 9 miles. Some emigrants avoided these crossings by swinging south on the aptly named Deep Sand route.

After passing Ice Slough the trail crossed the Sweetwater River for the last time at Burnt Ranch and continued southwest to South Pass and the Continental Divide. After crossing Dry Sandy Creek, emigrants arrived at the Parting of the Ways. The primary trail followed a well-watered route southwest, crossing Little Sandy Creek and Big Sandy River, and then heading for the Green River at Lombard Ferry. There were many braids of the main trail and alternate routes between Big Timber Station (6 miles northeast of Lombard Ferry) and Granger, but the primary route crossed the Green River at Lombard Ferry, headed south along the river to the site of the Bridger-Fraeb trading post at Palmer Crossing, and then turned southwest to Granger. From Granger, the trail continued southwest, passed Church Butte, and intersected Blacks Fork, which it followed to Fort Bridger. At Fort Bridger the trail headed north over the Bear River divide to Bear River. The main trail followed the east side of the Bear northward toward Idaho.

Two miles east of the Idaho border the trail route varied, with emigrants trying to find better routes along the Bear River and over the Sheep Creek Hills to Montpelier. The trail then headed north along the east bank of the Bear River and passed through Soda Springs. At Sheep Rock the main trail headed northwest up the Portneuf Valley, crossed the Portneuf River north of the present Chesterfield Reservoir and turned west along Jeff Cabin Creek to the Narrows of Ross Fork Creek. The trail followed Ross Fork to Fort Hall on the Snake River

(the Hudson's Bay Company post). At Fort Hall the primary route followed the east bank of the Snake River south to American Falls and past Massacre Rocks and Register Rock. Three miles east of Tule Island the route split, with the primary route heading southwest to the Raft River crossing.

After crossing the Raft River, the Oregon Trail headed west and the California Trail turned south through the Raft River valley to City of Rocks. The trail climbed through Pinnacle Pass (near Twin Sisters) and Granite Pass, and then dropped to Goose Creek. Emigrants followed Goose Creek south, through the northwest corner of Utah and into Nevada.

Through the Great Basin the trail proceeded southwest, followed Goose Creek, Little Goose Creek, and Rock Spring Creek, through Thousand Springs Valley, and then along West Brush Creek to Willow Creek. At Humboldt Wells (the source of the Humboldt River) the trail followed the north bank of the Humboldt River southwest through Elko, Nevada. The main route stayed near the Humboldt River and passed through narrow Carlin Canyon (during periods of high water, this route was almost impassable). West of Carlin the trail climbed Emigrant Pass and descended through Emigrant Canyon to rejoin the Humboldt at Gravelly Ford. Here the route divided to follow the north and south sides of the river and rejoined at Humboldt Bar, where a series of branches followed various routes across the Sierra Nevada.

Eastern Feeder Routes

Both prior to and during the gold rush years various river towns competed for the lucrative outfitting trade. The following are the routes that developed from east to west along the Missouri River.

St. Joe Road— 1844

Starting in 1844 many emigrants traveled up the Missouri River to St. Joseph to start their journey west, saving two weeks of travel time. Between 1849 and 1851 more emigrants departed from St. Joseph than any other jumping-off point along the Missouri. After leaving the Missouri River bottoms, the trail extended through rolling country to the west, crossing the Wolf and Nemaha Rivers. After intersecting the Fort Leavenworth–Big Blue River route at Marysville, Kansas, the trail crossed the Big Blue River and joined the Independence Road in open prairie 3 miles east of Hanover.

Old Fort Kearny Road (Oxbow Trail) 1850

The Old Fort Kearny Road started near the original site of Fort Kearny on Table Creek at Nebraska City. Opened by the U.S. Army in 1847 as a supply road to the new Fort Kearny, the trail was first used in 1850 by emigrants who were too impatient to wait for a ferry at Independence, St. Joseph, or Council Bluffs. After leaving the Missouri River about half way between St. Joseph and Council Bluffs, the road swung northwest toward the Platte. Near Skull Creek the route split. The primary route turned west and then northwest toward the Platte River. The Oxbow Trail alternate went north from Skull Creek to reach the Platte River west of Linwood, where it followed the south bank of the Platte to Deer Creek and met the main Oxbow Trail coming up from David City. The combined route continued along the south bank of the Platte and joined the primary Oregon-California Trail 15 miles west of Fort Kearny.

Council Bluffs Road— 1845

Another major starting point in the later 1840s and 1850s was at Council Bluffs (north of the mouth of the Platte River and across the Missouri River from Omaha). Emigrants could cross at the middle, upper, and lower Missouri River ferries, each following a slightly different route to the vicinity of Fremont, Nebraska, where they joined the main branch of the Council Bluffs Road.

From Fremont the Council Bluffs Road headed west along the north bank of the Platte River to Columbus, where the trail split briefly. The principal route stayed north of the Platte River to the fork. The trail then followed the north bank of the North Platte and entered Wyoming near the town of Henry. The Council Bluffs Road crossed the North Platte River and joined the primary Oregon-California Trail at Fort Laramie.

Central Cutoffs and Alternate Routes

The cutoffs and alternate routes along the central section of the Oregon-California Trail are described from east to west.

Julesburg Cutoff— 1859

After 1859 much of the emigrant and freight traffic on the California Trail continued southwest from the upper crossing of the South Platte River, along the south side of the river, to Julesburg, Colorado. The discovery of gold in 1858 made Julesburg a major stage station. This route added a few miles to the journey, but the stage station offered supplies, and travelers along Lodgepole Creek were able to avoid the difficult ascent of California Hill and the descent of Windlass Hill

into Ash Hollow. The Julesburg Cutoff crossed the South Platte River near the present-day town of Ovid, Colorado, and headed north and then west along Lodgepole Creek. The trail turned north just east of Sidney, Nebraska, passed Courthouse and Jail Rocks, and rejoined the primary Oregon-California Trail on the North Platte River 4 miles west of Bridgeport.

Childs Cutoff— 1850

At Fort Laramie, where the Council Bluffs Road crossed the North Platte River to join the main trail on the south bank, Andrew Childs pioneered a new route in 1850 by staying on the north bank of the North Platte between Fort Laramie and Casper. It was tougher going than the main route, but it attracted some use in later years. The Childs Cutoff allowed emigrants to avoid the crush of wagon trains on the south bank, two crossings of the North Platte River, and contamination from diseases being spread along the main trail during peak travel years.

Seminole Cutoff— 1853

The Seminole Cutoff bypassed Rocky Ridge and several crossings of the Sweetwater River in Wyoming. Pioneered by a fur trapper named Seminole, it extended between Warm Springs and Burnt Ranch. The route stayed south of the Sweetwater River. It was never very popular with emigrants, who liked to travel near water, but it was used by freighters and others wanting to pass the slower-moving emigrant wagons.

Lander Road— 1858

Frederick Lander laid out the Lander Road from Burnt Ranch, Wyoming, to Fort Hall, Idaho, and improved the trail from Fort Hall to City of Rocks. The Lander Road saved five days of travel. Emigrants used this route primarily during the 1860s, especially those heading to Oregon and to the Montana minefields.

The trail headed northwest out of Burnt Ranch, ascended Lander Creek, climbed over the Continental Divide at Jensen Meadows, and descended to the Big Sandy River. Continuing west, the trail crossed the New Fork and Green Rivers and passed north of Marbleton. After skirting the south flanks of Mount Thompson, the trail ascended La Barge Creek, climbed over Wagner Pass, and descended to Smiths Fork. It followed the Salt River north to Star Valley and the town of Auburn and then turned west to follow Stump Creek into Idaho.

The trail passed through Terrace Canyon, south of Grays Lake, and between the Limerock and Crater Mountains, crossing the Blackfoot

River, following the south bank of the river to the present Cutthroat Trout campground and heading west to the Portneuf River. After crossing the Portneuf, the trail headed west to meet the primary route of the Oregon-California Trail (coming up from the south) at the Narrows of Ross Fork Creek.

Sublette Cutoff— 1844

On the west side of South Pass numerous cutoffs and alternate routes were developed during the late 1840s. The Sublette Cutoff, first used in 1844 by the Elisha Stevens party, gradually gained favor over the older Fort Bridger Trail because emigrants avoided the long loop down to Fort Bridger and then back up toward Fort Hall, cutting 65 miles and three days off the trip. Its drawback was a lack of good water, including a 50-mile stretch of dry desert known as Sublette Flats. Emigrants continued to use both the Sublette and Fort Bridger routes, but the forty-niners showed a preference for the Sublette Cutoff.

The primary route of the Sublette Cutoff left the main Oregon-California Trail at Parting of the Ways and headed west across Sublette Flats. An alternate route traveled down the Oregon-California Trail to Little Sandy Crossing and swung northwest to intersect the principal cutoff route. After crossing the Little Colorado Desert, the trail crossed the Green River at one of three sites and headed south. At Willow Creek the cutoff split into numerous branches, with the main trail climbing west over Slate Creek Ridge, crossing Wheat Creek (where the Dempsey-Hockaday Cutoff went west), and turning south along the west foot of Commissary Ridge to cross Hams Fork south of Kemmerer Reservoir. The trail then turned northwest and ascended Quakenasp Canyon to Emigrant Springs at Pine Grove (with a connector trail going north to the Dempsey-Hockaday Cutoff). The main trail crossed Dempsey Ridge, descended the Rock Slide, and turned northwest to rejoin the primary Oregon-California Trail coming north from Fort Bridger.

Baker-Davis Road— 1852

In 1852 numerous alternate routes were pioneered from the Sublette Cutoff, as emigrants and gold-seekers sought to take advantage of this shortcut but wanted to avoid the 50-mile crossing of the waterless Sublette Flats. The Baker-Davis Road followed the Big Sandy River farther before turning northwest, thereby avoiding the long desert stretch that the principal cutoff crossed. The starting point for the Baker-Davis Road was 7 miles northeast of Lombard Ferry, just west of Big Timber station. The route crossed the Green River at Case Ferry and joined the Slate Creek Cutoff 2 miles west of Fontenelle, Wyoming.

Kinney Cutoff and Westside Kinney Cutoff 1852

The Kinney Cutoff had several routes and branches that crossed the Green River at four different ferry sites. The main cutoff left the primary Oregon-California Trail 3 miles northeast of Lombard Ferry and headed northwest along the west side of Green River. Four feeder routes came into the Kinney Cutoff from the more northerly Baker-Davis Road. The Westside Kinney Cutoff crossed the Green River at Lombard Ferry and traveled up the west side of the river to meet the other Kinney Cutoff routes at Fontenelle, Wyoming. Two miles west of Fontenelle, the Kinney Cutoff intersected the Baker-Davis Road at the start of the Slate Creek Cutoff.

Slate Creek Cutoff— 1852

The Slate Creek Cutoff was the western extension of the Kinney and Baker-Davis routes. The cutoff began near the Green River, 2 miles west of Fontenelle, Wyoming, and headed west to Emigrant Spring. The trail climbed over Slate Creek Ridge and met the main Sublette Cutoff near Rocky Gap.

Dempsey-Hockaday Cutoff— 1854

The Dempsey-Hockaday Cutoff was a more northerly variant of the Sublette Cutoff, leaving that cutoff at Wheat Creek and heading west. The cutoff crossed Hams Fork north of Lake Vina Naughton, climbed over Dempsey Ridge, and turned northwest to intersect the primary Oregon-California Trail at Big Hill, east of Cokeville, Wyoming.

Hastings Cutoff— 1846

Lansford Hastings believed the best route to California lay directly through the Great Salt Lake Desert. In 1846 Hastings convinced about 80 wagons of late-starting emigrants to try his new route; the last of them was the ill-fated Donner-Reed party. As news spread of the Donner-Reed disaster in the Sierra, the Hastings Cutoff was thoroughly discredited. A few foolhardy gold-rushers used the route in 1849 and 1850, but after 1850 the route was never used again. However, the section of trail from Fort Bridger to Salt Lake City was heavily used by Mormon emigrants and those using the Salt Lake Cutoff.

The Hastings Cutoff started from Fort Bridger and headed southwest, crossing Bear River, passing The Needles and Cache Cave, and traversing Echo Canyon to the Weber River, which it followed to Henefer. From Henefer the trail followed by the first wagon company (the Harlan-Young party) continued down the narrow, tortuous

Weber River canyon and emerged from the Wasatch Mountains south of present-day Ogden. The cutoff headed south from Ogden, along the western foot of the Wasatch Mountains, to Magna.

Because Hastings found the Weber River canyon descent to be extremely difficult for wagons, he advised the Donner-Reed party to go south through Main Canyon, over Hogsback Summit, and down East Canyon Creek. The route then turned up East Canyon Creek, through Little Emigration Canyon, over Big Mountain Pass to Mountain Dell, over Little Mountain Summit to Emigration Canyon and into the Great Salt Lake valley. When the Mormon Pioneer Company arrived in 1847, they improved the Main Canyon route, which became the preferred route for subsequent emigrants.

From Salt Lake City the Hastings Cutoff headed west across Tooele Valley, skirting the Oquirrh and the Stansbury Mountains. The trail then turned south to Hope Wells (the last good water) and crossed 83 grueling miles to Donner Spring, on the far side of the Great Salt Lake Desert. Turning northwest, the route climbed through Hastings Pass, crossed the Grayback Hills, and headed out onto the salt flats. The trail entered Nevada near Bidwell Pass.

On the other side of Bidwell Pass and Silver Zone Pass, the cutoff arrived at Big Springs in Goshute Valley, where it turned south and then west to the Sulphur Hot Springs in Ruby Valley. The trail crossed the Ruby Mountains by way of Overland Pass, emerging into Huntington Valley. The cutoff then followed Huntington Creek due north and through the South Fork Humboldt River Canyon, emerging on the Humboldt River to rejoin the primary route of the California Trail north of Moleen.

Salt Lake Cutoff— 1848

Having gotten mired down in mud trying to follow the Hastings Cutoff across the Great Salt Lake Desert in 1848, frontiersman Samuel Hensley led his pack train back to Salt Lake City. He decided to stay near the base of the Wasatch Mountains as he headed north, swinging through Ogden, crossing the Ogden River, and heading north to Utah Hot Springs and Brigham City. The Salt Lake Cutoff then turned northwest over Rattlesnake Pass and headed west across Curlew Valley. Passing Pilot Springs, Emigrant Spring, and Cedar Spring, the trail proceeded northwest into Idaho and the Raft River. Emigrants traveled west through the Raft River Narrows, crossed the Upper Raft River Valley, ascended Emigrant Canyon, and intersected the main California Trail coming from the south at the western end of City of Rocks.

When Hensley originally pioneered the route, he met members of the returning Mormon Battalion, who had just opened the Carson route

of the California Trail, and told them about his new cutoff. At City of Rocks the Mormon group found Hensley's pack route and took their wagons over it to Salt Lake City, thereby adapting the cutoff to wagon use. During the gold rush period, Hensley's Salt Lake Cutoff received heavy emigrant traffic.

Hudspeth Cutoff— 1849

Intending to shave days off their travel time by bypassing Fort Hall, a large wagon train that was captained by Benoni Hudspeth and guided by John J. Myers, split off the California Trail and headed west from Sheep Rock. After crossing Gem Valley the cutoff ascended the Fish Creek and the Portneuf Mountains and dropped into Henderson Canyon. Passing south of Lava Hot Springs, the trail crossed Marsh Valley, climbed over Cedar Mountain, and turned south along Dairy Creek and Little Malad River. The route turned west up Sublett Canyon and crossed the Sublett Range, passed through Sublett Creek Canyon, and emerged from the mountains near Sublett Reservoir. After crossing the Raft River valley, the cutoff rejoined the main California Trail on the west edge of the valley at Cassia Creek. The route took six days, rejoining the California Trail where it left the Raft River. While this route did not save a great deal of time, the remaining year's migration followed this new cutoff.

Western Routes

The western routes are described from east to west.

Carson Route— 1848

During the summer of 1848 members of the disbanded Mormon Battalion pioneered a new wagon trail east across the Sierra Nevada to the Humboldt River. Beginning in Pleasant Valley, east of what would become Placerville, they followed ridges to the crest of the Sierra at West Pass. They then made their way over Carson Pass and along the Carson River to a point near Fallon, Nevada. From there, they struck northerly to the bend in the Truckee River, where they joined the Truckee Route and followed it across the Forty-Mile Desert to the Humboldt Sink and the main California Trail.

As they headed east along the Humboldt River, the Mormons met Joseph Chiles, whom they told of their new wagon trail. Chiles decided to turn southwest at the Humboldt Sink and blaze a wagon trail to the Carson River. The main trail ran through what is now Lahontan Reservoir to Willow Station, across Churchill Valley to Fort Churchill, and up the Carson River to Dayton and then Carson City. The route turned southwest to Mormon Station in the town of Genoa, then south to Daggett Creek, down the western edge of the Carson Valley,

and into California to West Carson Canyon. The trail emerged from the canyon at Hope Valley, turned southwest to the top of Carson Pass, the first summit on the route. Continuing west, the trail climbed through Emigrant Valley to West Pass. At 9,600 feet, Covered Wagon Summit was the highest point on the Carson Route and the second highest Sierra Nevada crossing on any emigrant route into California.

The trail then skirted Squaw Ridge to the Plasse Trading Post, descended to Tragedy Springs, and headed west (the route is now followed by U.S. 50). At Leek Springs the Carson Route turned north-west and followed Iron Mountain Ridge to intersect the Johnson Cutoff and Georgetown trails (coming in from the east) at Union House. The trail then turned southwest and passed through Pleasant Valley. At Diamond Springs, a spur trail went north 2 miles to Placerville. Travelers bound for Sacramento continued west to Mormon Tavern and on to Ten Mile House. Sutter's Fort was about 8 miles farther west along the south bank of the American River.

Walker River–Sonora Trail— 1852

In July 1852 merchants and promoters of the community of Sonora subscribed funds for a relief expedition to benefit stranded and starving gold-rushers. Emigrants taking advantage of the relief were expected to head towards Sonora in gratitude. Unfortunately, the high, rough road of the Sonora Pass and the unbroken trail caused great hardships and suffering for those emigrants who tried it.

The Walker River–Sonora Road left the Carson Route at Fort Churchill, turned south through Adrian Valley, and met the Walker River near Yerington, Nevada. The trail followed the Walker River south to Mickey Canyon, then north to rejoin the Walker River only 4 miles southwest of where they left it.

The trail generally followed the West Walker River to its headwaters on a route that wound to the 9,780-foot summit at Sonora Pass, the highest emigrant wagon pass in the United States. Emigrants traveled northwest down Summit Creek and then turned southwest, following ridges to Pinecrest. The route followed the ridge between the South Fork Stanislaus River and the North Fork Tuolumne River before descending along Sullivan and Sonora Creeks to Sonora.

Truckee Route— 1844

After pioneering the Sublette Cutoff west of South Pass, the Elisha Stevens party, accompanied by mountain men Caleb Greenwood and Isaac Hitchcock, continued on the Oregon Trail to the Raft River. They then followed the route used the previous year by the Walker party. After reaching the Humboldt Sink, a Paiute Indian chief whom they named "Truckee" took them west across the Forty-Mile Desert

to the Truckee River south of Pyramid Lake. They followed the river through two difficult canyons to an opening over the Sierra Nevada, later known as Donner Pass. Facing snow in late November, they abandoned some of their wagons near Donner Lake and packed on to Sutter's Fort. They retrieved their wagons early the next year, becoming the first emigrant group to take wagons across the Sierra.

Emigrants taking the Truckee Route in later years crossed Humboldt Bar at the west edge of the Humboldt Sink and cut southwest across the Forty-Mile Desert to meet the Truckee River (this route is basically followed by I-80). Emigrants then followed the Truckee River west to Truckee Meadows (near Reno) then to Verdi. The trail climbed to the northwest along the south branch of Dog Creek to Dog Valley, turned southwest through Hoke Valley, crossed the Little Truckee River, and jogged south to Prosser Creek Reservoir, meeting the Truckee River east of Truckee, California, and following the river to Donner Lake.

At Donner Lake the trail split: the 1844 route went over Donner Pass, and an 1846 route (pioneered by Caleb Greenwood) went over Roller Pass; the routes rejoined at Summit Valley, and the trail descended to the South Yuba River, which it followed to Cisco Butte. From here the trail climbed to Crystal Lake, crossed Sixmile Valley and Carpenter Flat, and made the hazardous descent through Emigrant Gap into Bear Valley. The trail then followed the Bear River southwest, up Lowell Hill Ridge, across Deadmans Flat, over the top of Camel's Hump, and made a precipitous descent to Steephollow Crossing. This was the steepest descent encountered in the entire mountain crossing. Continuing southwest (on the north side of the Bear River), the route followed ridges above the river all the way to Johnson's Ranch.

Beckwourth Trail— 1851

Jim Beckwourth, a mulatto trapper, found an easier pass through the Sierra Nevada in the spring of 1851. With the backing of the mining operators at Bidwell Bar and the merchants of Marysville, he intercepted trains headed down the Truckee Route and guided them into Marysville. His route left the Truckee River at Truckee Meadows (near Reno) and headed northwest (a route later followed by U.S. 395). The route ascended Upper Long Valley, climbed over Beckwourth Pass, then headed west across Sierra Valley. It paralleled the Big Grizzly Creek up to Grizzly Valley, climbed over Grizzly Ridge, and descended along Greenhorn Creek to American Valley and the town of Quincy, California. Heading southwest, the trail crossed Meadow Valley, climbed over Bucks Summit, descended to Bucks Lake, crossed Grizzly Summit, and followed ridges south to Mountain House. Emigrants then followed Galen and Canyon Creeks to Bidwell Bar on the Feather River (now flooded by Lake Oroville).

From Bidwell Bar, travelers followed the freight and stage road to Marysville. The Beckwourth Trail was shorter for gold-rushers headed to Bidwell Bar but somewhat longer for those going to Marysville.

Applegate Traibr Southern Road to Oregon 1846

By 1846 a number of attempts had been made to find an alternative to the treacherous Columbia River Gorge route. Jesse Applegate, Levi Scott, and David Goff successfully led a group from Polk County, Oregon, down the Old Trappers Trail to California as far south as Ashland, Oregon. Turning east, they dipped into the northeastern corner of California, swung south around Goose Lake, and headed southeast through High Rock Canyon and over the Black Rock Desert. They finally reached the Humboldt River and the main California Trail at Lassen Meadows (the northern tip of today's Rye Patch Reservoir). Soon a number of Oregon-bound emigrants were persuaded to leave the established Oregon Trail and try this new route. It was an arduous trip that stretched much longer than planned.

From Lassen Meadows, westbound emigrants headed northwest to Rabbithole Springs, across the 50-mile Black Rock Desert to Black Rock Springs — the long-awaited "oasis in the desert" and the first adequate water since leaving the Humboldt River. The trail continued north and west, passing over Fortynine Pass and into California, skirting Upper Alkali Lake to the south, and climbing northwest through Fandango Pass to Goose Lake. From here the trail headed west, reaching Bloody Point, the site of several fatal conflicts between emigrants and the Modoc Indians.

The Applegate Trail swung around the southern edge of Lower Klamath Lake to Willow Creek, then headed northwest to Lake Miller in Oregon, and continued west across the Cascade Mountains, and descended to Tyler Creek. The route turned northwest to Ashland and Medford, followed the south bank of the Rogue River to Grants Pass, and then headed north (this route is now followed by I-5).

The trail passed Canyonville, crossing the South and North Umpqua Rivers, Calapooya Creek, and following Cabin Creek north to Pleasant Valley, where the trail split (with the western branch heading north and the eastern branch heading northeast and following the west bank of the Willamette River through Eugene), and rejoined 2 miles south of Monroe. The trail then paralleled the west side of Muddy Creek to Corvallis, and north along the route now followed by Oregon 99W. After crossing Calloway Creek, the trail turned northwest and arrived at Rickreall Creek, east of Dallas, Oregon.

Nobles Trail— 1852

The Nobles Trail was opened by William H. Nobles, with the financial backing of merchants in Shasta City (west of Redding, California). Emigrants using the Nobles Trail left the main California Trail at Lassen Meadows and followed the Applegate Trail west. At Black Rock Springs the Nobles Trail turned southwest to Granite Creek. By 1856, however, the discovery of Trego Hot Springs made it possible to leave the Applegate Trail at Rabbithole Springs and head due west to Granite Creek, shortening the journey by about 23 miles. From Granite Creek the Nobles Trail headed west from spring to spring (Gerlach Hot Spring, Deephole Spring, Buffalo Springs) to Smoke Creek Canyon and into California.

The trail then turned south, west, then south again to Honey Lake Valley, and followed the Susan River west to Susanville. On the west side of Honey Lake Valley the trail began to ascend the Sierra Nevada, passing Big Spring and turning northwest to the junction with the Lassen Trail near Feather Lake. The Nobles Trail followed the Lassen Trail north for 3 miles, then it headed north and west to Black Butte Creek. Here the trail turned south and entered the area of Lassen Volcanic National Park, then it climbed over Nobles Pass and descended to Manzanite Creek, which it followed to Shingletown. The route followed the Shingle Creek drainage for a few miles and then turned southwest to Fort Redding, then northwest, crossing the Sacramento River and reaching Shasta City .

Lassen Trail— 1848

In 1848 Peter Lassen and a small wagon train left the Humboldt River on the Applegate Trail to reach his ranch in the northern Sacramento Valley. Lassen turned off the Applegate Trail at the southern end of Goose Lake and led his party down the Pit River and beyond, until the group became demoralized and in need of provisions. Fortunately, two Oregon groups headed for the goldfields (one a wagon party led by Peter Burnett and the other a packing party) caught up with Lassen's group about 50 miles from his ranch. The Oregonians provided aid and helped the stragglers reach their destination.



MORMON PIONEER NATIONAL HISTORIC TRAIL

The enabling legislature authorized a route commemorating the 1846-47 journey of the Mormon Pioneer party (see maps 1 and 10-11). Table 3 summarizes the approximate number of trail miles by state.

The official route map for the Mormon Pioneer National Historic Trail has been prepared, as required by the National Trails System Act, and the route has been digitized in a GIS format using ARC/INFO. The description of the route will be published in the Federal Register. If new research identifies more accurate trail locations, an official notice of correction will be published.

The route begins at Nauvoo, Illinois, a former Sauk and Fox Indian village on the east bank of the Mississippi River. Under the leadership of Brigham Young, the original pioneer party started February 4, 1846, crossing by ferry to the Iowa shore. The route in Iowa commenced at Sugar Creek Camp, where the main camp began to roll on March 1, 1846, traveling up the east side of the Des Moines River, fording the river near Bonaparte, then paralleling the southern border of Iowa to the Corydon vicinity. There they turned northward across the prairie to near Osceola, then traveled westward to the Council Bluff area and the Missouri River, arriving there on June 13, 1846.

Table 3: Mormon National Historic Trail — Route Miles by State

<i>State</i>	<i>Miles</i>
Illinois	2
Iowa	317
Nebraska	511
Wyoming	511
Utah	74
Total	1,415

The Mormon pioneers crossed the Missouri River and entered present-day Nebraska on June 29, 1846. They established the Mormon settlement of Winter Quarters on the west bank, which was then frontier lands of the Omaha Indian Nation. That summer, advance parties traveled as far as the Elkhorn, Loup, and Niobrara Valleys in quest of desirable wintering sites.

The trek across Nebraska began from Winter Quarters in April 1847. The pioneers assembled first at the Crossing of the Elkhorn, then later at Liberty Pole Camp on the bank of the Platte, near Fremont. They followed the broad floodplain of the Platte River to Columbus, turned up the Loup Fork to pass Pawnee Mission, then crossed the Loup River near the 98th meridian and returned to the Platte River near Grand Island.

Brigham Young and his followers paralleled the north side of the Platte, measuring and recording their travel for future trail guidance. Upon reaching the junction of the North and South Forks of the Platte, they chose to move along the northern branch of the river where, on May 18, they found themselves opposite the camping grounds of Ash Hollow. Leaving the Sand Hills, they passed Chimney Rock, Courthouse Rock, and Scotts Bluff, and they left Nebraska on May 31 near Henry, where they could see the snow of Laramie Peak far to the west.

Brigham Young and his pioneers entered present-day Wyoming on June 1, 1847, and camped in the vicinity of Fort Laramie (Ft. William), where they were joined by the Mississippi Branch of Latter-day Saints. After conferring with the fort's inhabitants about trail conditions, they forded the North Platte River and continued west following the Oregon Trail to the Casper area, where they established the Mormon Ferry to recross the river.

They departed the North Platte to continue overland to the Sweetwater River and Independence Rock. The pioneers then proceeded up that drainage to cross the Continental Divide at South Pass. In the Pacific drainage, they followed the Big Sandy and its tributary to the Green River.

Leaving the Green River Valley, the Mormon pioneer party continued along the Oregon Trail to Fort Bridger, then followed the Donner-Reed route, crossing the Bear River and departing the state of Wyoming in the vicinity of the Needles.

Entering present-day Utah, Brigham Young and his followers passed Cache Cave, then proceeded down the precipitous Echo Canyon, followed the Weber River north to Henefer, then turned away from the river and up the main canyon to Hogsback Summit. There they had their first real view of the Wasatch country. They continued along the

Donner-Reed route descending to East Canyon, then south along the creek to Mormon Flats. Here they turned west following Little Emigration Canyon to the bald and rocky crest of Big Mountain Pass. They rough-locked their wagon wheels for a straight-down descent to Mountain Dell Canyon, where they took a southerly direction. The route then swung west over the dividing ridge of Little Mountain summit, the last summit on the long trail, and to a sharp descent to Emigration Canyon. The final lap was on the short but treacherous winding and narrow canyon floor of "This is the Place." The pioneer scouts first reached the Valley of the Great Salt Lake on July 21, 1847, and the main body on July 22; due to illness, Brigham Young followed the main body two days later.



PONY EXPRESS NATIONAL HISTORIC TRAIL

The enabling legislation authorized a route of approximately 2,000 miles, including the original route and subsequent route changes, extending from St. Joseph, Missouri to Sacramento, California, as described in the National Park Service's 1987 Feasibility Study. Separate legislation in 1992 and a subsequent Feasibility Study resulted in the secretary of the interior adding the route from Sacramento to San Francisco in 1997. Table 4 summarizes the approximate number of trail miles by state and includes the mileage from Sacramento to San Francisco.

The general route is shown on maps 1-6. It is difficult to identify a specific set of miles for the Pony Express route because it changed through time, particularly after its starting point moved to Atchison, Kansas.

An official route map for the trail, as required by the National Trails System Act, has been prepared, and the route has been digitized in a GIS format using ARC-INFO. The description of the route will be published in the Federal Register. If new research identifies more accurate trail locations, an official notice of correction will be published.

For the most part the eastern segment of the route follows the Oregon, California, and Mormon Pioneer trails through Missouri, Kansas, Nebraska, and Wyoming. In eastern Kansas the route initially avoided the St. Joe Road of the Oregon-California Trail, following a network of established roads and trails until meeting the St. Joe Road and the main Oregon-California Trail slightly farther west.

In Nebraska the Pony Express Trail followed the main trail to and along the south bank of the Platte to the junction of the South Platte, which the Pony Express followed into Colorado to Julesburg. Turning

Table 4: Pony Express National Historic Trail — Route Miles by State

State	Miles
Missouri	1
Kansas	139
Nebraska	441
Colorado	16
Wyoming	540
Utah.....	241
Nevada	404
California	223
Total	2,005

northwest, the trail reentered Nebraska and continued back to the North Platte River to rejoin the main Oregon-California Trail into Wyoming. In Wyoming the route followed the main trail route along the North Platte to present-day Casper, then followed the Sweetwater River until crossing the Continental Divide at South Pass. The Pony Express Trail left the Oregon-California Trail at Fort Bridger and followed the Mormon Pioneer Trail and the Hastings Cutoff of the California Trail southwest into Salt Lake City.

The Pony Express Trail left the Hastings Cutoff and headed south to avoid the Great Salt Lake. It then proceeded westerly through the barren, desolate land to Nevada. The next portion of the route covered high desert and crossed several mountain ranges to Carson City. Then the trail turned south to Genoa, where it reconnected with the Johnson Cutoff of the California Trail. It followed the Carson River and scaled the Sierra Nevada at Echo Summit, descended the South Fork of the American River to Placerville and then to Sacramento, following what is now old U.S. Highway 50. The later Kingsbury-McDonald route over Johnson Pass also descended along the South Fork to Placerville, cutting out about 12 miles.

Significant Resources

The National Trails System Act provides for the identification of high-potential sites and segments, based on criteria established in the act. These criteria include historic significance, the presence of visible historic remnants, scenic quality, and relative freedom from intrusion. High-potential segments are those segments of a trail that afford high quality recreational experiences along a portion of the route having greater than average scenic values or affording an opportunity to vicariously share the experience of the original users of a historic route. Each site or segment must have the potential to interpret the trails' historical significance and to provide opportunities for high-quality recreation.

This plan acknowledges that the lists of high-potential sites and segments for each trail must be flexible and will require periodic updates. Under both alternatives a mechanism is provided to modify and revise high-potential sites and segments as new information becomes available, or if the integrity of trail resources becomes compromised.

All of the information on sites and segments gathered during the planning process and submissions received from resource managers and trail organizations through September 18, 1997, has been entered into the database. This database is available at the Long Distance Trails Office. In the future it will be linked to the GIS mapping effort completed as part of this planning process.

Revisions have been made to the lists of high-potential sites and segments for each trail to reflect comments received during the various review processes and to reflect research conducted by the Long Distance Trails Office since the release of the Draft Comprehensive Management and Use Plan / Draft Environmental Impact Statement.



OREGON NATIONAL HISTORIC TRAIL: HIGH-POTENTIAL SITES AND SEGMENTS UPDATE

Modifications to the original listing of sites and segments identified in the Comprehensive Management and Use Plan for the Oregon National Historic Trail have resulted in the addition of 5 segments and 20 sites, the modification of 1 segment, and the deletion of 7 sites. Since the publication of the draft plan the Long Distance Trails Office has refined the list of high-potential resources associated with this trail. Four sites have been added, 10 have been deleted, and 15 names of sites or segments have been modified (see maps 7-9, and appendixes G and H).

Table 5 indicates the number of high-potential sites and segments by state. Table 6 displays the mileage of segments by state.

This list can be modified in the future to add sites and segments that additional research might indicate to be worthy of inclusion. Sites and segments can also be deleted from this list.

**Table 5: Oregon National Historic Trail —
High-Potential Sites and Segments by State**

State	Sites	Segments
Missouri	7	0
Kansas	14	1
Nebraska	17	0
Wyoming	32	5
Idaho	32	3
Oregon	27	6
Washington.....	2	0
Total	131	15

**Table 6: Oregon National Historic Trail —
Mileage of High-Potential Segments**

State	Number of Segments	Number of Miles
Kansas	1	6
Wyoming	5	243
Idaho	3	114
Oregon	6	82
Total	15	445



CALIFORNIA AND PONY EXPRESS NATIONAL HISTORIC TRAILS: HIGH-POTENTIAL SITES AND SEGMENTS

From the extensive list of submissions, 244 sites and 52 segments listed in tables 7 and 8 have been identified as high-potential (for a more comprehensive description of these resources, see appendixes E and F and maps 2-6). The segments total 2,077 miles. Some of these sites and segments have already been classified as high-potential in the plans for the Oregon and Mormon Pioneer Trails.

Since the publication of the draft plan, the Long Distance Trails Office has refined the list of high-potential resources associated with this trail. These changes are the result of the opinion by the U.S. Department of the Interior's Office of the Solicitor, public comments, and additional research conducted by the Long Distance Trails Office. Seven segments were deleted, seven were added, and the names of seven segments were modified. A total of 37 sites have been deleted, 14 have been added, and the names of 26 sites have been modified (see maps 2-6 and appendixes E and F).

This list of high-potential resources can be modified in the future to add sites and segments that additional research might indicate to be worthy of inclusion. Sites and segments can also be deleted from this list.

A list of sites and segments that may merit inclusion as high-potential sites and segments in the future was developed during the planning process and is part of the resource database maintained at the Long Distance Trails Office.

Table 7: California and Pony Express National Historic Trails — High-Potential Sites and Segments by State

State	Sites	Segments
Missouri	11	0
Kansas	23	1
Nebraska	27	0
Wyoming	39	8
Utah	25	5
Idaho	16	3
Nevada	39	15
Oregon	15	3
California	49	17
Total	244	52

Table 8: California and Pony Express National Historic Trail — Mileage of High-Potential Segments

State	Number of Segments	Number of Miles
Kansas	1	16
Wyoming	8	356
Utah	5	588
Idaho	3	62
Nevada	15	584
Oregon	3	49
California	17	422
Total	52	2,077



MORMON PIONEER NATIONAL HISTORIC TRAIL: HIGH-POTENTIAL SITES AND SEGMENTS UPDATE

The original listing of sites and segments identified in the 1981 Comprehensive Management and Use Plan for the Mormon Pioneer National Historic Trail has been updated, resulting in the addition of 3 segments, the modification and extension of 3 segments, the addition of 7 sites, and the deletion of 33 sites. The plan did not specify mileages for some of the initial protection segments, but an examination of the document maps reveals about 40 miles of trail were identified as high-potential. This plan extends that mileage to 307 miles.

Sites were deleted from the list of high-potential sites because they failed to meet the criteria described in the legislation or were not associated with the pioneer trip of 1846–47. The original plan rated most of these sites C-2, indicating that they were of low priority and related to the period after the pioneer migration. However, many of these sites were part of the expanded high-potential segments and would continue to receive the protection such designation entails. Other sites have been deleted because there is disagreement as to their location.

Since the publication of the draft plan the Long Distance Trails Office has refined the list of high-potential resources associated with this trail. A total of 5 sites have been added, 1 has been deleted, and the names of 10 sites or segments have been modified (see maps 10-11, and appendixes I and J).

Table 9 indicates the number of high-potential sites and segments by state. Table 10 displays the mileage of segments by state.

This list can be modified in the future to add sites and segments that additional research might indicate to be worthy of inclusion. Sites and segments can also be deleted from this list.

Table 9: Mormon Pioneer National Historic Trails — High-Potential Sites and Segments by State

State	Sites	Segments
Illinois	2	0
Iowa	10	0
Nebraska	12	0
Wyoming	30	4
Utah	5	2
Total	59	6

Table 10: Mormon Pioneer National Historic Trail — Mileage of High-Potential Segments

State	Number of Segments	Number of Miles
Wyoming	4	212
Utah	2	95
Total	6	307

Alternatives, Including the Proposed Action



Introduction

The plan that is approved will serve as the comprehensive management and use plan for the California and the Pony Express National Historic Trails. It will also update the existing Comprehensive Management and Use Plans for the Oregon and Mormon Pioneer National Historic Trails that were developed in 1981. The selected goals and actions proposed in this document will provide overall administrative and management direction for all four trails for at least the next 15 to 20 years.

The alternatives presented assume that for each specific provision, ALL four trails would be equally affected. However, in instances where the proposed actions would be pertinent only to a specific trail, they are clearly indicated.

Some elements of these alternatives were part of the original plans for the Oregon and Mormon Pioneer Trails. The Oregon plan established a 0.5-mile protection corridor for all the high-potential segments. The Mormon Pioneer plan identified short- and long-term resource inventory and monitoring strategies.

Two alternatives for the administration of all the trails are presented in this document. Both alternatives aim to balance resource preservation and visitor use, thus satisfying the purposes of the National Trails System Act “to provide for the 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.”

- Alternative 1 (continuation of current conditions) reflects the wide variability in administration and management, resource protection strategies, interpretation, visitor experience, and use that exists today. The alternative notes how resource protection, trail marking, and interpretation have been ongoing processes, and how increasing levels of cooperation and coordination are becoming more common among the various trail partners.

- Alternative 2 (the proposal—enhanced conditions and a historic trails partnership) focuses on attaining the highest possible degree of resource protection and an enhanced public experience through education and the direct retracing of trail segments. This would be accomplished through cooperation among all trail partners, increasing awareness of the need to work together and communicating what is being planned and what is actually being done. It calls for the development of a comprehensive strategy for resource protection, including an ambitious program to inventory and monitor resources. This program would bring together, in one location, information currently dispersed among the various partners.

The alternatives presented in this plan emphasize the evolving nature of trail resources in terms of their historic significance and their degree of integrity. The assessment of their significance may change as research reveals new information. Resource integrity may also be reassessed in light of additional data. An interpretive program that permits visitors to retrace routes and interact with resources and that is flexible enough to incorporate the latest research is an essential component of both alternatives.

For the management of the Oregon and Mormon Pioneer National Historic Trails, provisions regarding site certification, resource monitoring, the servicewide memorandum of understanding, and revisions to the lists of high-potential sites and segments, and other details would be as described in the proposal (alternative 2).

The descriptions of the alternatives are divided into three sections that correspond with the administrative objectives identified for this plan — administration and management; resource protection; and interpretation, visitor experience, and use. The proposal also includes a fourth section on recommended studies that would apply to both alternatives. Tables 11 and 12 at the end of this section summarize the alternatives and the projected impacts from implementing them.

Alternative 1 (Continuation of Current Conditions)

The NPS Long Distance Trails Office in Salt Lake City implements the authorities of the National Trails System Act. The adoption of this alternative does not mean that present planning and management activities would be stopped. It assumes that the National Park Service and on-the-ground site and segment managers would respond to future needs and problems in a manner similar to the way they are currently operating.

Administration and Management

FEDERAL LEVEL

Bureau of Land Management, Forest Service,
and Other Federal Agencies

The Bureau of Land Management and the Forest Service manage the largest segments of the four trails (over 36% of the trail lands are under their jurisdiction). Currently there are 34 BLM districts and 6 state offices involved in the management of trail lands. The trails cross 21 national forests and numerous ranger districts. In addition to serving as on-the-ground managers, the Bureau of Land Management and the Forest Service develop statewide plans and area-specific plans, maintain the trail, offer general and specific interpretive programs, provide interpretive waysides, map the trail, document and protect trail resources, review planning and policy documents, and protect adjacent lands from adverse uses. These agencies manage land use activities on or near these trails in conformance with existing land use plans and applicable laws. They are also in charge of law enforcement activities for lands under their jurisdiction.

The overall management of national historic trail resources at the federal agency level varies dramatically between units and lacks formal coordination. Trail management functions are shared among different offices throughout the country and among various disciplines (archeologists, historians, recreation planners, etc.) within these offices.

Some trail resources are managed by the Bureau of Reclamation, the Fish and Wildlife Service, and the Department of Defense. The Bureau of Indian Affairs has oversight responsibility for trail resources on American Indian lands.

National Park Service
(Long Distance Trails Office in Salt Lake City)

NPS administration of the four trails is centered at the Long Distance Trails Office in Salt Lake City, Utah. The superintendent of the Long Distance Trails Office is responsible for interstate and interregional coordination, strengthening incentives for nonfederal landownership and/or management, and reliance on nonprofit groups to carry out a substantial share of the intent of the National Trails System Act.

Specifically NPS administrative tasks include the following:

- managing and analyzing trail resource data
- overseeing research and documentation
- monitoring trail problems
- monitoring land protection through cooperating partners
- interpreting the trails
- advocating the protection of trail resources
- conducting sign and marking programs
- coordinating with federal, state, and local governments
- offering technical assistance in all aspects of trail planning
- certifying trail sites and segments
- reviewing and commenting on proposals affecting the trails
- promoting the trails
- managing the challenge cost-share program
- establishing partnerships with citizen-based trail groups, such as the Oregon-California Trails Association (OCTA)
- maintaining the official maps for the trails

This office is associated in particular with the Bureau of Land Management. Support services are negotiated and provided for communications (computer, electronic mail, telephone services), office supplies, mail, photocopying, and graphics.

Professional support for the GIS database for the trails would be provided by agency staffs or specialists under contract with the trails office. This would not only require GIS professionals but also computer work stations equipped with appropriate software.

At present the staff consists of the superintendent, an interpretive planner, and an administrative support assistant.

The annual budget for administering the four trails is \$311,000. In order to continue at about the same level, approximately \$60,000 per year would need to be added to protect resources, and to provide interpretive services and technical assistance.

STATE LEVEL

The states crossed by the trails have long been involved in protecting, interpreting, and managing trail resources. Many important sites and segments are currently protected as state parks or other state-held properties. Cooperation regarding trail resource protection may continue to be relatively limited within the agencies in each state, and especially among the states.

LOCAL LEVEL

Local agencies, land preservation groups, private landowners, and trail associations play important, yet different, roles in preserving trail resources. Agencies at the county and city level are involved in trail promotion and in many cases the management of important trail resources. Trail associations provide a powerful and effective constituency for the preservation and public enjoyment of trail resources. These associations have assisted with the identification of significant resources and routes and continue to work closely with trail managers and administrators to mark trails, establish interpretive waysides, and participate in other outreach activities.

Cooperation among all of the trail partners, for the most part, is informal and dependent on personal contacts.

SERVICEWIDE MEMORANDUM OF UNDERSTANDING

In 1995 the National Park Service, the Bureau of Land Management, and the Forest Service signed a servicewide memorandum of understanding intended "to assure and expand continued long-term interagency coordination and cooperation for the planning, preservation, administration, management, and operation of national historic trails as authorized in the National Trails System Act" (see appendix B). In the memorandum the three agencies agree to do the following:

- Develop appropriate organizational structures to facilitate this interagency cooperation.
- Develop staff assignments from trail managing agencies to the administrative office responsible for overall coordination of a specific national historic trail.
- Cooperatively coordinate contacts with external constituents.
- Promote efficient coordination of public and private funding to support national historic trail activities.
- Coordinate agency budget submissions for these historic trail activities.

- Facilitate federal coordination of national historic trails by agreeing to the transfer of funds, personnel, and services.
- Agree to establish interagency positions or an electronic communication network in their trails office(s) to coordinate planning, administration, and management.
- Identify agency personnel at all levels of the organization who work with national historic trails as part of their regular duties. Furthermore, each agency shall provide the services of these individuals, as appropriate and feasible, to cooperatively implement this servicewide memorandum of understanding.

Although increased communication among the three federal agencies is becoming more prevalent, the formal implementation of the provisions identified above has been quite limited and dependent on personal and professional contacts.

COOPERATIVE MANAGEMENT AGREEMENTS

The Long Distance Trails Office in Salt Lake City develops memorandums of understanding, cooperative agreements, or interagency agreements, as needed, with other public agencies and private entities. Similar networks of agreements support most of the other national scenic and historic trails in the national trails systems. These tools are governed by the provisions of the Federal Assistance and Interagency Agreements Guideline (NPS-20).

Generally the agreements can be established with agencies or entities that are responsible for major sites and segments or that help to achieve administrative and management objectives for the trail. Any appropriate and legal provision can be incorporated in such agreements. Possible provisions can include trail marking, development and management activities, support facilities, access and interpretation, right-of-way agreements with private landowners, technical assistance, and fund-raising activities. The agreements can last for a definite period of time (usually five years) and can be reviewed and renewed as appropriate.

Currently, a few cooperative management agreements for these four trails are in place. Once trailwide planning has been completed, additional agreements will be drawn.

PUBLIC AWARENESS

Raising public awareness of the trails and building public support for their continued protection are important goals of the federal, state, and local agencies, as well as the trail associations.

Federal, state, and local agencies involved in the administration or direct management of the four historic trails, as well as nonprofit organizations, continue to work independently to increase the awareness of national historic trails. However, there is no overall coordination for programs. Many projects are organized by a variety of groups and take place in a variety of settings. Trail talks, tours, gift catalogs, and adopt-a-site programs are ways to raise public awareness of the trails.

TRAIL MARKING

Trail marker logos for national trails are established under authority of sections 3(a)(4) and 7(c) of the National Trails System Act. As official insignia of the United States government, they are protected from unauthorized uses, manufacture, and sale in the United States (18 USC 701). Therefore, all uses of these trail marker logos must be approved and authorized in writing by the superintendent of the Long Distance Trails Office in Salt Lake City. "TM" in the lower right corner indicates a marker is in the process of service mark protection. "R" indicates full protection by the U.S. Patent Office.

The National Park Service provides trail marker logos for the national historic trails. Logos unique to the four trails have been incorporated into the official rounded triangular shape of the national trails system marker (see appendixes N and O). They are to be used only for specific applications that help to further the purposes of the trail, and they can only be used when authorized by the superintendent. Specifications for use of the logos are provided by the National Park Service.

Trail markers for the four national historic trails have been, and would continue to be, placed on posts at appropriate locations along the routes of the trails and along auto-tour routes. Where the trails cross federal protection components, markers could be erected and maintained by the managing agency, in accordance with standards established by the secretary of the interior. Where the trails cross nonfederal lands, markers could be provided to cooperating agencies or private interests, in accordance with cooperative agreements, and they could be erected and maintained by those entities. Trail crossing locations on two-lane roads and highways would be marked with 9-inch metal-backed signs displaying the appropriate logo. The trail logos (also on 9-inch metal-backed signs) would also be placed at sites certified under the National Trails System Act.

Various kinds of durable posts are used to mark trails on both federal and nonfederal lands. Where the trails extend across cultivated lands or other developed areas, Carsonite posts displaying the appropriate logo would be located at the edges of these areas or placed in a way

that did not interfere with the established land uses (see appendix N). On grazing lands Carsonite posts would be located in the ruts at appropriate intervals. No markers would be erected on privately owned land without the owner's consent. Additional temporary markers might be used to help establish a designated footpath along a preferred alignment.

Carsonite, concrete, railroad rails, and wooden posts have been randomly used to mark the trails. The various generations of historic signs and blazings that have been erected by various groups would remain in place.

VOLUNTEERS AND LIABILITY

The administration of historic trails is greatly dependent on the efforts of volunteers. These efforts would continue, without being centrally coordinated.

The Volunteers in the Parks and in the Forests Act of 1969 provides a means for the National Park Service to protect cooperating landowners and others who volunteer to help with trail management, use, and resource protection from liability claims. The states through which the trails pass all have legislation to protect landowners from liability due to the use of their holdings by the public for camping, hiking, sightseeing, or other approved recreational activities. This provision applies when the public uses private lands without charge or other consideration.

The Volunteer Protection Act of 1997 provides increased liability protection for volunteers. Its purpose is to promote the interests of social service program beneficiaries and taxpayers and to sustain the availability of programs, nonprofit organizations, and governmental entities that depend on volunteer contributions by reforming the laws to provide certain protections from liability abuses related to volunteers serving nonprofit organizations and governmental entities.

Resource Protection

PROTECTION PLAN

Section 5 of the National Trails System Act requires "a protection plan for any high-potential historic sites or high-potential route segments." Few, if any, of the protection actions identified for the Oregon and the Mormon Pioneer National Historic Trails in 1981 have been implemented.

The following are considered crucial in protecting trail resources and would continue to be addressed in a variety of ways.

High-Potential Sites and Segments

Protection would continue to be limited largely to the identification of sites and segments, with general recommendations for their administration. The following criteria would be used to identify these resources, based on the National Register of Historic Places and the National Trails System Act:

- significance to the trail (based on documentation and/or archeological research)
- integrity of the physical remains
- integrity and quality of the setting
- opportunity for high-quality recreation evoking the historic trail experience
- opportunity to interpret the primary period of trail use

The Long Distance Trails Office would continue to be the gathering point for new submissions to these lists and would cooperate with other federal managers, trail associations, trail scholars, and state historic preservation offices in updating the lists, including additions, deletions, and modifications. The criteria used to identify the initial list of high-potential sites would also be used to make these changes.

In addition, beginning in 2001 and every two years the OCTA chapters, under the auspices of the OCTA national organization, would convene representatives of the various historic trail communities, including other trail organizations, such as the National Pony Express Association, the Mormon Trail associations, and the Pony Express Trail Association, federal, state, and local managers, state historic preservation offices, and individual scholars to review and make recommendations regarding additions, deletions, and modifications to the lists of high-potential sites and segments. These recommendations would be forwarded to the Long Distance Trails Office in Salt Lake City, which would publish the modified updates.

Some trail resources might not meet the criteria for inclusion on the lists of high-potential sites and segments. Their visual integrity might be compromised or they might have incomplete historic documentation, or there might not be enough evidence to assess their significance. As the status of these resources is reassessed or clarified, they could be considered for additional protection measures.

Resource Inventory

Federal agencies are authorized to inventory resources for the lands under their jurisdiction. However, the shortage of funds has prevented the systematic inventory of trail resources. Currently, there is no central repository for data, inventory forms vary considerably from place to place, and the amount and detail of information is inconsistent. In addition, the sharing of inventory data is sporadic, and there is little inventory data for resources on private lands.

The Long Distance Trails Office in Salt Lake City would work with appropriate technical staff to incorporate the databases generated during the course of the planning process into the GIS system used to map the routes and trail resources.

Trail Mapping

Currently, paper maps exist at varying scales ranging from 1:24,000 to 1:1,000,000. There are electronic maps for some resource areas. Some states are in the process of developing sets of maps for these trails, but the level of detail is not consistent, and geographic projections vary from project to project. In addition, the software used is not always compatible.

As part of this alternative, GIS maps would continue to be generated at 1:100,000 scale, with high-potential sites and segments identified for each quadrangle. Even though the digitized routes and the locations of the sites have not been field-tested (except for the state of Oregon and a couple of routes in California), this effort constitutes the first attempt to bring together route information for these four trails. Maps at this scale are limited in their locational accuracy for trail resources and their applicability for on-the-ground management, yet the mapping project demonstrates the need to systematize current information and to make it available to all the partners and other interested parties.

Effectively integrating GIS into the management of historic trail resources requires long-term technical support, with additional funding and staffing. The database generated for this project can be effectively integrated with databases from other agencies and partners to provide easy access to one reliable source of information for all trail resources.

The Long Distance Trails Office in Salt Lake City would require long-term technical support to effectively use the existing database. Expanding GIS mapping to incorporate all trail routes not already in the database would continue to be a priority.

Carrying Capacity

The National Trails System Act requires that comprehensive management and use plans provide “an identified carrying capacity of the trail and a plan for its implementation.” This provision of the legislation has not been implemented in individual plans. To do so would require an agreement among the partners about what constitutes a trail resource (see the “Affected Environment” section), and about a methodology to assess carrying capacity, as well as a high level of coordination and cooperation among the managers of trail resources. At the moment there are no plans to carry out this type of analysis.

Research Needs

At present, no systematic way of coordinating and identifying research needs exists. Even though such a program was called for both in the Oregon and Mormon Pioneer plans, it has never been implemented. Under this alternative a historic resource study would be developed for the Oregon and California National Historic Trails. Historic resource studies were completed for the Mormon Pioneer and Pony Express National Historic Trails in 1991 and 1994, respectively.

Protection Tools

A variety of existing federal programs can be of assistance in the administration and management of trail resources (see appendix L for a description of these programs). Some of the land designations resulting from these programs, such as the Bureau of Land Management’s area of critical environmental concern (ACEC), would continue to be used to protect important trail resources, such as South Pass, Wyoming.

Other tools to protect trail-related resources include easements, donation / bargain sale, fee-simple ownership, agreements, and local land protection and regulatory processes (see appendix K for further description of the “tools” available for resource protection).

An important distinction needs to be made between the authorizing legislation for these trails. Unlike the Oregon and Mormon Pioneer Trails, the California and Pony Express legislation allows for the fee-simple purchase by the federal government of properties along these trails based on the willing consent of the landowner. Consideration of such purchases is limited to sites and segments that are not already protected, that are determined to be especially important for public interpretation or trail continuity, and that require careful management to preserve resource integrity. Fee-simple purchase might also be considered for historically significant sites or segments where the

landowner did not want to participate in a cooperative agreement and the resources were deteriorating. In such cases, state and local agencies and nonprofit groups would be encouraged to acquire an appropriate interest.

NPS acquisition does not necessarily mean that the National Park Service would directly manage a property. In the cooperative spirit of the National Trails System Act, as amended, the National Park Service would seek local sponsors, including government agencies or private groups, to manage the resources.

Management Corridors

The Comprehensive Management and Use Plan for the Oregon Trail recommended that “eventually a corridor averaging a half mile wide centered along the trail along the full length of each of the seven cross-country segments (318 miles) should be protected from the kinds of use and development which may adversely impact the Oregon Trail.” The similar plan for the Mormon Pioneer Trail did not make any specific recommendations in this regard.

Most federal agencies have not established management corridors within their jurisdictions. There are a few exceptions. In some BLM resource areas a management corridor extends 0.25 mile from the center of the trail. The BLM Green River resource area in southwestern Wyoming implemented a plan in 1998 that establishes a 6-mile-wide management corridor in the area around South Pass management unit and a 2-mile-wide management corridor along the Lander Road. The BLM Winnemucca resource area also has established a 2-mile-wide management corridor along certain portions of the Applegate Trail.

SITE CERTIFICATION

Trail segments and trail-related sites on nonfederal lands are officially included as part of a designated national historic trail if they are certified as protected segments by the secretary of the interior. Currently there is one certified site for the Oregon National Historic Trail (Fort Henrietta, Oregon), but none for the Mormon Pioneer National Historic Trail.

Certification could help ensure that sites or segments outside federal jurisdiction meet the basic preservation, interpretation, or recreation functions described in the National Trails System Act (sec. 3(a)(3)) and any other prescribed criteria. The certification program is one of the most important ways in which the federal administering agency can foster partnerships with nonfederal landowners throughout the trail corridors.

The proposed certification process for the Oregon, California, Mormon Pioneer, and Pony Express National Historic Trails is as follows:

- (1) The National Park Service would pursue early coordination with potential applicants to ensure that they fully understood the site/segment certification procedures and to aid in their application efforts.
- (2) Applicants would be required to document their resources and interpretive programs. Environmental or other compliance procedures would have to be completed.
- (3) The National Park Service would provide technical assistance on issues related to cultural or natural resource compliance.
- (4) The National Park Service and the applicants would determine management objectives for the site/segment, and management responsibilities would be outlined. For smaller sites and segments, the application could replace more detailed management planning and formal cooperative agreements.

On completion of official certification, the public would be informed through appropriate trail information programs that the site or segment was available for public use and enjoyment.

Certification is not permanent; it can be renewed subject to satisfactory performance of the terms of the agreement. Decertification would result in the removal of a site or segment from trail information programs and the removal of trail logo markers. Other actions might be taken as well, depending on the terms of certification.

CHALLENGE COST-SHARE PROGRAMS

Challenge cost-share programs were developed to increase and strengthen partnerships in the preservation and improvement of cultural, natural, and recreational resources for which federal land-managing agencies are responsible. Each agency’s program is slightly different. The NPS program provides a maximum of 50% federal cost-sharing funds to expedite and complete mutually beneficial projects. The program requires the partner to provide matching share contributions — funds, equipment, supplies, in-kind labor — from nonfederal sources. Partners include nonfederal entities such as individuals, educational institutions, private nonprofit organizations, philanthropic organizations, charitable groups, or nonfederal (i.e., state, local, or tribal) agencies or governments. The current maximum amount that can be awarded to a project in any given year is \$30,000.

If the project occurs on federal land, it has to relate to a need identified in an approved planning document. If a project is outside federal land, it should address a critical resource threat or unmet public need. Funds can be used for any project that protects, preserves, improves, or interprets sites and segments recognized as components of the national historic trails, whether on federal, state, or private lands. Ideally, all nonfederal sites should receive certification before challenge cost-share projects are authorized for those sites. Past projects conducted along national historic trail corridors have included archival research, trail mapping, trail marking, the development of interpretive waysides, archeological surveys, interpretive publications, the restoration of historic markers, and the development of museum exhibits.

Challenge cost-share is not a grant program in which the funds are given to the partner organization to carry out the project without agency collaboration. It is a reimbursable program in which the partner organizations do the work, and they are then reimbursed for their costs. Nearly all projects are structured as cooperative agreements between the federal agency and the partner organization. These agreements are required to meet the legal criteria for cooperative agreements under the Federal Grants and Cooperative Agreement Act. The National Park Service then becomes an active partner with the applicant in developing and carrying out the proposed project.

Advanced payments for goods or services cannot be authorized under cooperative agreements. The National Park Service reimburses the partner organization monthly upon presentation of a written invoice. Challenge cost-share funds are appropriated by Congress on an annual basis, and funding levels vary from year to year. Funding available for the four trails addressed by this document during recent years has been as high as \$110,000.

RESOURCE MONITORING

Trail visitation will probably continue to increase during years when commemorative events take place. Sesquicentennials and other celebrations attract large number of visitors. Some trail resources are able to withstand these increases without experiencing major negative impacts; however, they still require special monitoring. The Long Distance Trails Office in Salt Lake City would continue to assist in developing and reviewing plans to coordinate the events and monitor their impact on trail resources. The coordination of events and the monitoring of impacts is the responsibility of different agencies; the individual entities participating in the event would have to rely on informal communication networks to make sure that no violations occurred as a result.

Interpretation, Visitor Experience, and Use

INTERPRETATION

Interpretation for all four trails is cooperatively developed by federal, state, local, and private agencies and entities. The Long Distance Trails Office in Salt Lake City and other NPS support offices would continue to assist in developing cooperative agreements for interpretive facilities and programs and to provide limited funding and technical assistance to state, local, or private organizations interpreting the trails.

Interpretive Themes and Subthemes

Interpretive themes and subthemes have been identified for the Oregon, California, Mormon Pioneer, and Pony Express National Historic Trails (see the "Historical Overview and Interpretive Themes" section for a comprehensive list of interpretive themes and subthemes). These themes would be modified, when necessary, to reflect fresh research findings.

The same themes and subthemes would be used under both alternatives to provide the framework and guidance for interpreting the trails in an integrated and systematic way. The same framework would be applicable regardless of the organization, agency, group, or individual responsible for the management of a particular site or segment.

All four trails played an important role in the American westward expansion in the 19th century. Their stories guide the interpretation of the accounts unique to each trail and enhance distinct experiences in successive landscape settings.

Interpretive Media and Outreach Activities

Both the federally protected and the certified components of the trails would continue to provide opportunities for visitors to retrace historic routes, interact with trail resources, understand and appreciate the history and significance of the trails and related resources, and illustrate the larger story of America's westward expansion.

- **Wayside Exhibits** — The federal partners, in cooperation with state and local agencies and trail organizations, would continue to help develop an interpretive wayside exhibit system at points along the trails. In most cases these waysides are at or near high-potential sites and segments. In a few locations BLM backcountry byways have trail waysides along them.

- **Publications** — Various entities along the trail would continue to publish pamphlets and small publications interpreting local trail resources. These publications are important for interpreting the four national historic trails. Some brochures include a map of an entire trail and the associated high-potential sites and segments and provide a historical overview of the trail's stories and important visitor information. Some brochures focus on specific sites, segments, or events.
- **Outreach Activities** — The Long Distance Trails Office, in cooperation with the federal partners and trail associations, would continue to assist with outreach activities in local schools and in the creation of publications. As encouraged by the National Trails System Act, public education would comprise an important element of the ongoing efforts to promote these trails and to increase the public's awareness and appreciation of the trails. The Long Distance Trails Office in Salt Lake City and federal partners, through cooperative agreements, would continue to assist and encourage various groups to seek matching funds for such purposes.

Interpretive Programs and Facilities

Current interpretive facilities range from formal visitor centers to kiosks, wayside exhibits, individual interpretive signs, and trail markers. As the popularity of historic trails increases, new facilities would be built, and existing facilities would expand their programs to incorporate not only the emigrant experience, but also the relationship of the migration to American Indians (see appendix P for a listing of some of the major trail museums and small interpretive sites). Interpretive activities would include trail tours, public lectures, and interpretive dedications.

Almost all the states traversed by the trails have established interpretive facilities that focus on specific aspects of the emigrant experience. Wyoming, Idaho, and Nebraska are currently planning additional centers. Representative interpretive facilities, listed roughly from east to west, include the following:

- Historic Nauvoo, Nauvoo, Illinois
- Western Historic Trails Center, Council Bluffs, Iowa
- Winter Quarters, Omaha, Nebraska
- National Frontier Trails Center, Independence, Missouri
- Pony Express Museum, St. Joseph, Missouri
- Patee House, St. Joseph, Missouri
- Chimney Rock National Historic Site, Bridgeport, Nebraska
- Scotts Bluff National Monument, Gering, Nebraska

- Fort Laramie National Historic Site, Ft. Laramie, Wyoming
- National Oregon/California Trail Center, Montpelier, Idaho
- Flagstaff Hill/National Historic Oregon Trail Interpretive Center, Baker City, Oregon
- Tamastlikt Cultural Institute, Pendleton, Oregon
- End of the Oregon Trail Interpretive Center, Oregon City, Oregon

While interpretive facilities exist at various locations, significant portions of the trail have minimal visitor facilities and interpretation. Federal, state, local, and private organizations would continue to participate in various activities to promote and foster the interpretation of historic trails. While constructing visitor facilities along these trails is considered a nonfederal responsibility, the National Park Service could assist with exhibits in facilities built and operated by others.

VISITOR EXPERIENCE AND USE

Recreational Activities

The National Trails System Act seeks to ensure a meaningful recreational experience as well as the preservation of trail resources. Recreational trail use varies dramatically from area to area and in level of intensity. The trails would continue to offer a variety of recreational opportunities, from strenuous hikes to leisurely drives along designated auto tour routes. Appendix P identifies a sample of interpretive and recreational opportunities associated with the four national historic trails.

Visitor use along the trails is increasing because of factors such as heritage tourism (i.e., people rediscovering their past), commemorative activities, and media interest, which manifests itself in movies and documentaries. Visitor use would probably continue to increase under this alternative.

Visitors would continue to have opportunities to follow the trails by walking, biking, horseback riding, using a handcart, or using a cov-

ered wagon. Many of these activities would be related to historic reenactments of the trails experience (e.g., visiting trail sites and related features, driving along auto-tour routes, reading interpretive brochures and publications, and visiting associated museums and educational facilities along the route).

Trail segments currently opened for vehicle travel would remain open for such use unless conditions changed. Driving along BLM back-country byways would be another opportunity to experience the trails.

On private lands recreational use of the trails could be accomplished through (a) certification, (b) easements, (c) cooperative agreements, (d) exchanges, (e) obtaining permission, and (f) direct negotiation with a specific landowner.

Recreational use of the trails has led to impacts on trail resources. Monitoring the use of trails continues to be a difficult task for agencies that have multiple use mandates. Federal, state, and local agencies would continue to regulate the recreational use of the trails through a variety of mechanisms, including closures, seasonal restrictions, and defining appropriate types and levels of use. Certain forms of recreational uses such as wagon trains, anniversary events, public gatherings, attempts at world speed records, and others continue to be controlled through federal and state permit systems and through other legislation.

Any new programs, facilities, and recreational activities must provide opportunities for visitors with disabilities, including those with mobility, hearing, visual, or learning impairments.

Auto-Tour Routes

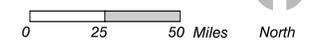
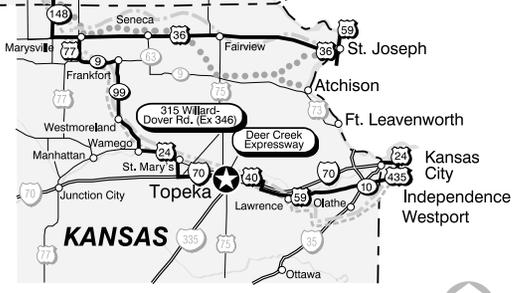
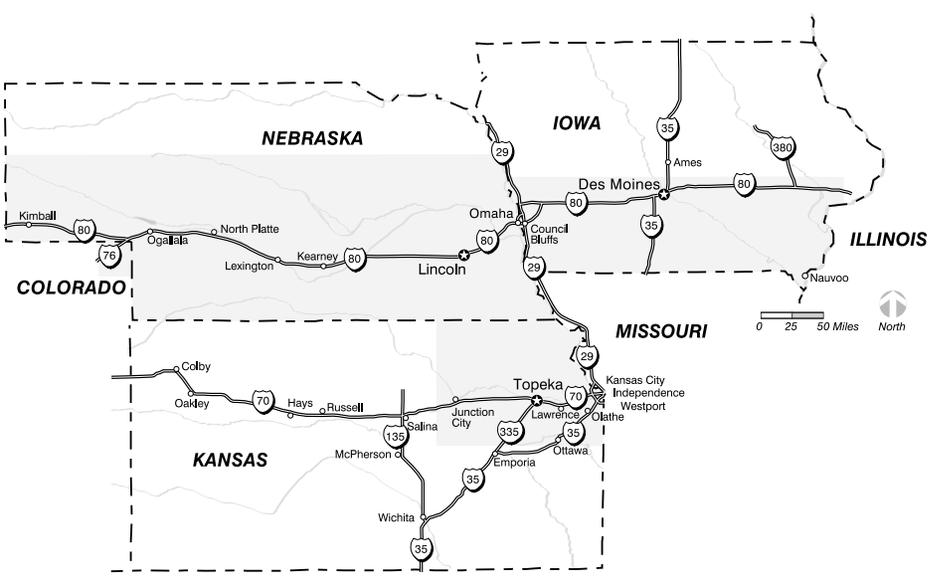
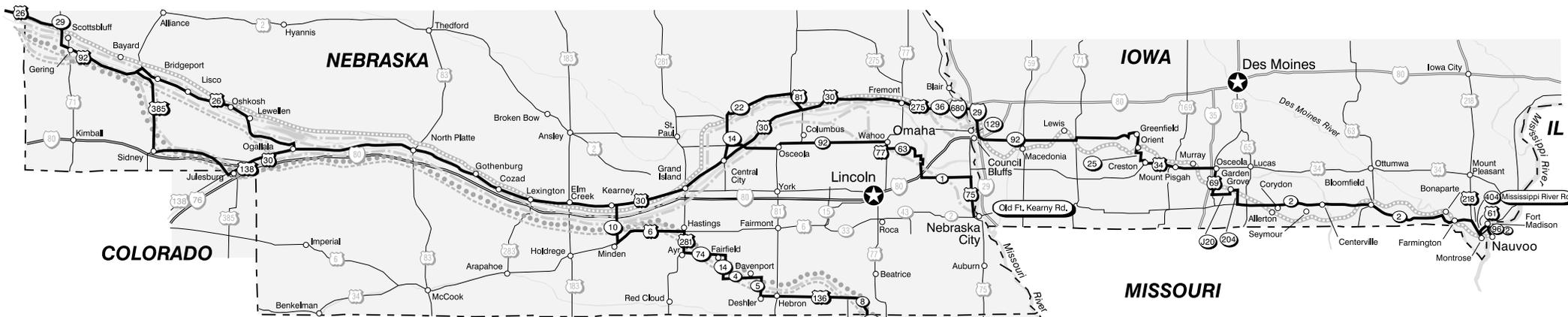
Auto-tour routes provide opportunities for visitors to enjoy the trails. The auto-tour routes for the four trails are on all-weather-roads that are able to accommodate two-wheel drive vehicles year-round.

In consultation with state departments of transportation, auto-tour routes have been established and would be marked along the existing county, state, and federal highway systems, consistent with the provisions of the National Trails System Act and existing state plans. The purpose of the routes is to heighten public awareness of the trails, to confirm the routes, and to stimulate interest in visiting actual trail sites, segments, and interpretive facilities.

Auto-tour routes would guide visitors on a relatively simple and direct line of travel that parallels, as much as possible, the approximate routes of the four national historic trails. In places where all four trails follow the same corridor, and where the Oregon and the Mormon Pioneer Trails are already established, additional marking would be placed to identify the routes as part of the California and the Pony Express National Historic Trails. Maps 13-16 illustrate the established routes for the Oregon and Mormon Pioneer National Historic Trails and the proposed routes for the California and Pony Express National Historic Trails.

In some cases the auto-tour routes closely approximate the route of the trails, making it convenient for auto tourists to locate certified trail sites and segments. In other cases, however, visitors would have to rely on interpretive brochures, or locally provided signs, to reach important sites that are not directly on the tour route. Where the historic route closely parallels a secondary road, 9-inch metal-backed signs would be made available to mark the route. In Nevada and portions of Utah the distance between trail resources and the designated route can extend up to 60 miles because there are no paved highways in the vicinity of the trail route.

The auto-tour routes would continue to be coordinated by the Long Distance Trails Office in Salt Lake City in partnership with state departments of transportation and tourism, federal agencies (such as the Bureau of Land Management and the Forest Service), offices of historic preservation agencies and groups, chambers of commerce, and other civic organizations. The routes for the California and the Pony Express National Historic Trails would be eventually identified on state and commercial highway maps.



-  Auto Tour Route
-  Oregon National Historic Trail
-  California National Historic Trail
-  Mormon Pioneer Historic Trail
-  Pony Express National Historic Trail

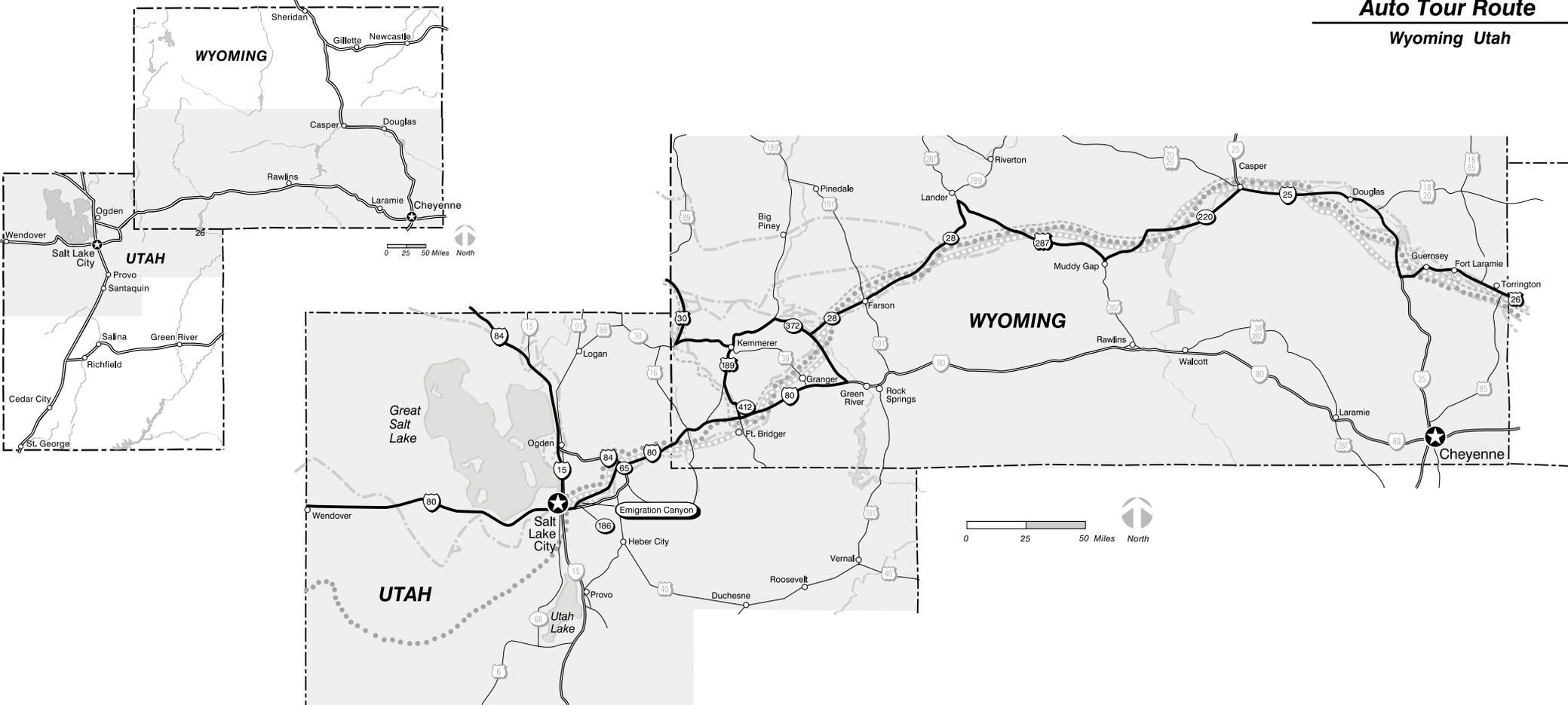


OREGON • CALIFORNIA • MORMON PIONEER • PONY EXPRESS
NATIONAL HISTORIC TRAILS

United States Department of the Interior • National Park Service
 485 • 481 • 657 • 658 • 20019A • DSC • 5/99

Auto Tour Route

Wyoming Utah



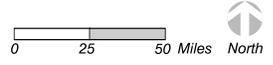
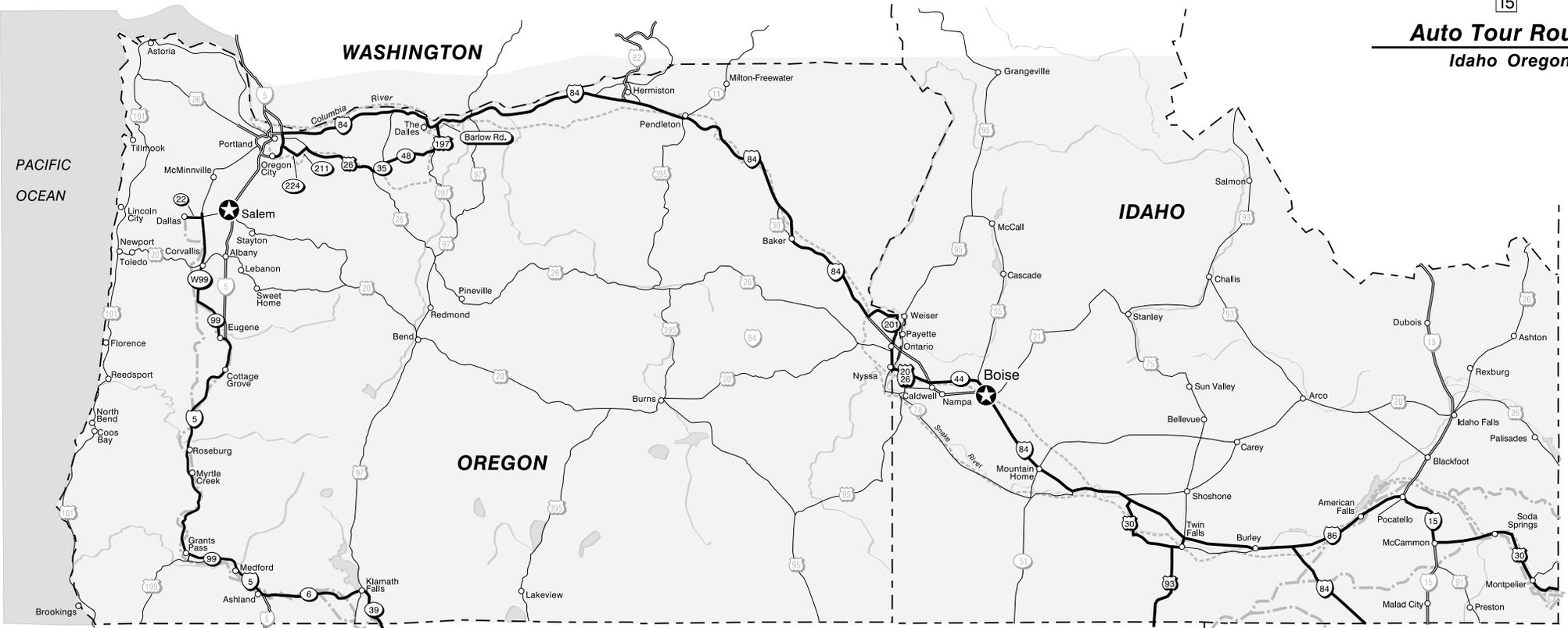
-  Auto Tour Route
-  Oregon National Historic Trail
-  California National Historic Trail
-  Mormon Pioneer National Historic Trail
-  Pony Express National Historic Trail



OREGON • CALIFORNIA • MORMON PIONEER • PONY EXPRESS
NATIONAL HISTORIC TRAILS

United States Department of the Interior • National Park Service
 485 • 481 • 657 • 658 • 20020A • DSC • 5/99

Auto Tour Route Idaho Oregon

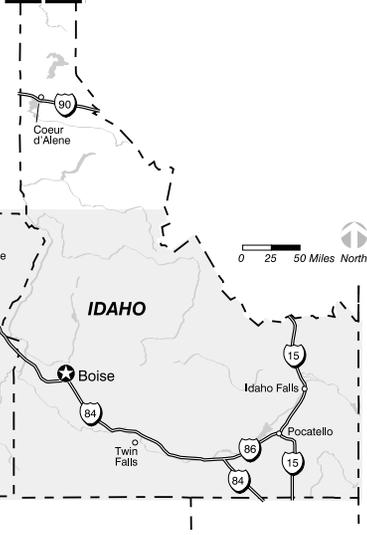


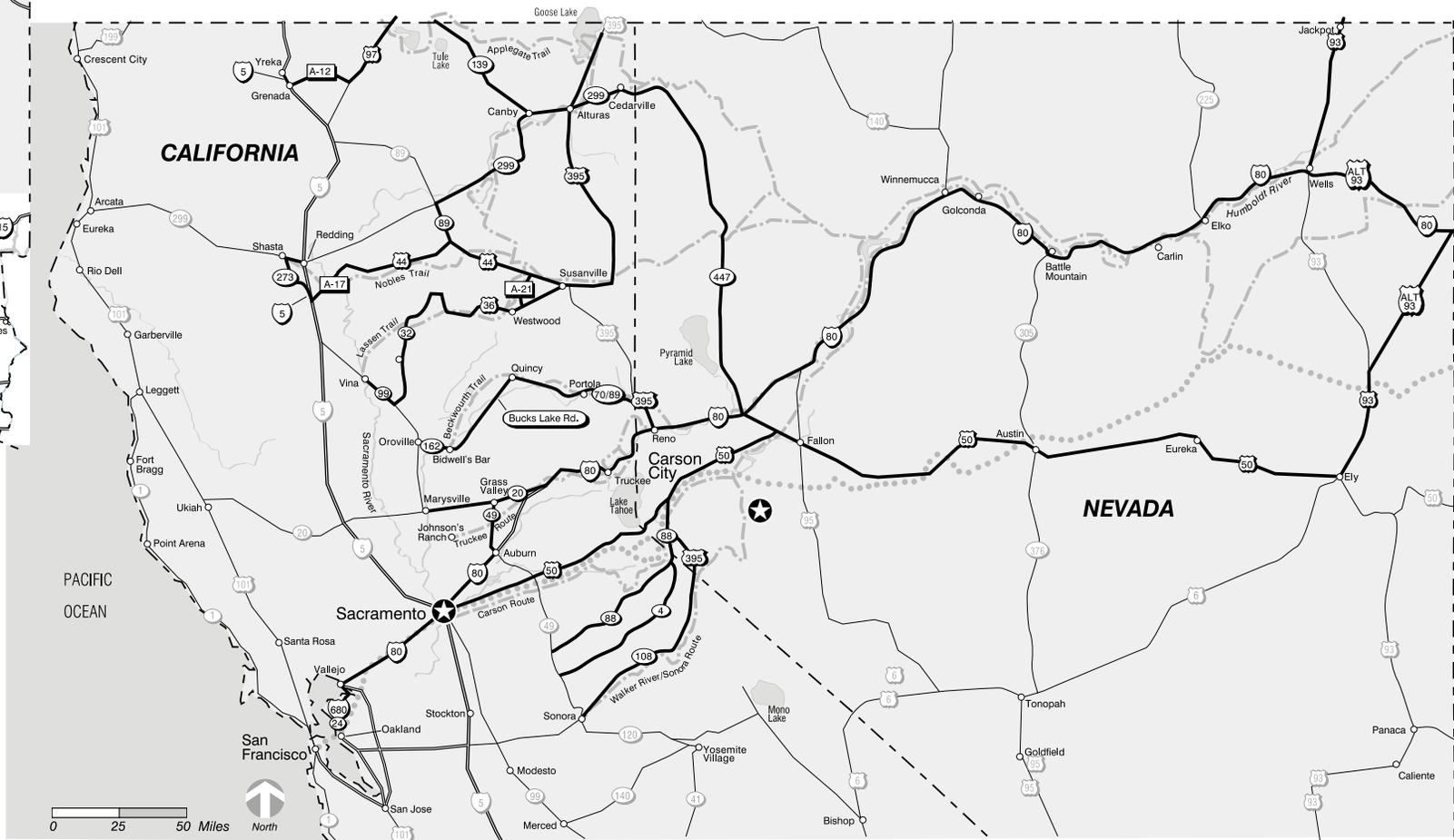
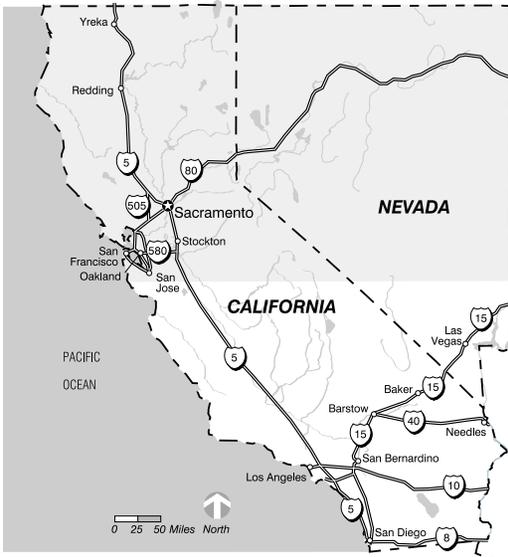
- Auto Tour Route
- Oregon National Historic Trail
- California National Historic Trail



OREGON • CALIFORNIA • MORMON PIONEER • PONY EXPRESS
NATIONAL HISTORIC TRAILS

United States Department of the Interior • National Park Service
485 • 481 • 657 • 658 • 20021A • DSC 5/99





Auto Tour Route

California National Historic Trail

Pony Express National Historic Trail



OREGON • CALIFORNIA • MORMON PIONEER • PONY EXPRESS
NATIONAL HISTORIC TRAILS

United States Department of the Interior • National Park Service
 485 • 481 • 657 • 658 • 20022A • DSC • 5/99

Alternative 2: Enhanced Conditions and a Historic Trails Partnership (the Proposal)

Under this alternative the National Park Service and its partners would undertake an ambitious program to enhance and balance resource preservation and visitor use, thus satisfying the dual purposes of the National Trails System Act “to provide for the 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.”

In order to accomplish the degree of resource protection and enhanced public experience through education and direct retracing of trail segments, it is imperative for all agencies and entities associated with these trails to coordinate their work. The National Park Service would strive to achieve as high a level of cooperation among federal, state, and local agencies, trail associations, and private landowners as possible. Together, the National Park Service and its partners would establish a **historic trails partnership** to assist in implementing a comprehensive strategy for trail administration.

To ensure increased efficiency, closer communications, and more strategic resource protection, current federal programs would continue to be used in the administration of trail resources, but in a more formally coordinated and effective manner.

The successful administration of the four trails would require enhancing and more effectively coordinating the activities of trail associations, private landowners, and federal, state, and local agencies. Efficient cooperation would result in a historic trails partnership that would assist in implementing the comprehensive strategy for resource protection and enhanced visitor experience outlined in this alternative.

Administration and Management

FEDERAL LEVEL

Bureau of Land Management, the Forest Service, and Other Federal Agencies

Under alternative 2 the Bureau of Land Management and the Forest Service would designate historic trail coordinators to assist the National Park Service in the administration of the trails. These coordinators, in cooperation with their agencies’ resource managers and administrators, would be authorized to coordinate overall policy for trail resources under their agencies’ jurisdictions and would facilitate information sharing on issues related to resource protection and man-

agement. Issues related to communication among the Long Distance Trails Office and personnel in the field from the Bureau of Land Management and the Forest Service would also be facilitated by these trails coordinators. They would also help to establish consistent policies and approaches for trail management, and they would help ensure that the interests of their agencies were reflected in the administrative direction set by the National Park Service.

The Bureau of Land Management and the Forest Service would exchange personnel with the National Park Service, as necessary, to promote interagency cooperation in historic trails administration and management. These individuals would be assigned to term or permanent positions.

The National Park Service, the Bureau of Land Management, and the Forest Service would each provide resources to carry out trail programs. This would be accomplished by pooling funds from the trail budgets of each agency. In addition, the National Park Service, the Bureau of Land Management, and the Forest Service could coordinate budget submittals for the administration, management, protection, and interpretation of the historic trails.

Other federal agencies, such as the Bureau of Reclamation, the Fish and Wildlife Service, and the Department of Defense, which also manage trail resources, would be involved when lands under their jurisdictions were affected by a proposed program.

National Park Service (Long Distance Trails Office)

Administration of the four trails would continue to be centered at the Long Distance Trails Office in Salt Lake City, Utah. This office would continue to be associated with federal entities, in particular the Bureau of Land Management. Support services would be negotiated to provide communications (computer, electronic mail, telephone services), office supplies, mail, photocopying, and graphics.

The Long Distance Trails Office would become the central depository for all information related to the administration of the four trails. All the partners would be encouraged to submit copies of all pertinent documentation to this office, which would make these materials available upon request. When resource threats became known, information would be shared by all federal, state, and local partners, as well as by the trail associations.

Professional support for the GIS database for the trails would be provided by Long Distance Trails Office staff, or by specialists under contract with the trails office. This would not only require GIS professionals, but computer work stations equipped with appropriate software.

Professional and support staff for the Long Distance Trails Office would encompass several disciplines, including resource management, interpretation, and design.

To facilitate the administrative functions of the Long Distance Trails Office, interagency staff would be deployed at four strategic points along the trails corridor. These individuals would assist in interagency cooperation and would provide more convenient, if not immediate, contact for trail partners and the general public.

The deployed Long Distance Trails Office staff would have responsibility for certifying sites, assisting in marking auto-tour routes, preparing interpretive materials, providing technical assistance as needed to trail groups and resource managers, assisting in marketing and promoting the trails and related special events, and coordinating a portion of the trails' challenge cost-share program.

The estimated annual operating costs would be \$1,200,000, based on 1998 dollars, for the Long Distance Trails Office to administer the four trails. This amount would provide for a superintendent, administrative support, and interdisciplinary staff, including interpretation and resource management. This amount would be used for site certification, cooperative agreements, technical assistance, partner support, travel, challenge cost-share projects and support, and special projects such as mapping and media production. Operational costs such as trail marking, brochure development and printing, newsletters, other publications and interpretive media would also be covered.

Funding for the trails office would principally come from the base operation budget of the National Park Service. Special funding sources would be sought for particular projects, such as technical assistance, resource preservation, and planning.

STATE LEVEL

The states crossed by the trails have long been involved in protecting and managing trail resources and would continue these efforts. However, under this alternative the National Park Service would encourage a higher level of cooperation and communication among the states and their respective agencies.

State resource management agencies, including state historic preservation offices, would support ongoing trail preservation efforts by assisting with the various elements of the protection plan, particularly the identification of high-potential sites and segments, the inventory of trail resources, the identification of research needs and the coordination of research projects, and the identification of management units. These management agencies would also help monitor com-

memorative events and develop action plans to address potential threats.

LOCAL LEVEL

Initiatives at the local level could greatly enhance trail resource protection. These initiatives might include commenting on utility licensing, surface and subsurface mineral extraction permits, cultural and natural resource preservation laws, ordinances, and related measures.

Counties and cities would be encouraged to support resource protection by integrating nearby national historic trail designations in local land management plans. For example, farmland at certain points along the routes of the trails might meet the requirements for agricultural preservation zones established under state or county regulations. These preservation zones have been set up to keep prime farmland assessed at a low valuation or in active agricultural production or to keep grazing land in continued use. Efforts by local governments and private parties to acquire land would be essential tools for preserving trail resources. These efforts would supplement land protection efforts by federal agencies (see appendix K for additional information on techniques to encourage buyers to protect resources and appendix L for federal programs that might be of assistance in managing the trails).

Land preservation groups would also be encouraged to work closely with state and federal agencies to preserve undeveloped areas while maintaining such areas under private ownership. Both owners and communities could benefit from potential tax advantages available through cooperative efforts to preserve open space. Lands would remain on the local tax rolls, but would be taxed at the lower, undeveloped parcel rate. Thus, landowners would not be forced by rising taxable property values to sell to developers or to subdivide and develop land that was suitable for farming or ranching.

Working with land preservation groups, such as the Nature Conservancy, could provide a great opportunity to preserve trail resources. The acquisition of properties, purchases of conservation easements, or other arrangements could produce important results.

Trail associations would continue to be essential for the successful administration of the trails. The various Mormon Trail associations, the Oregon-California Trail Association, the National Pony Express Association, and the Pony Express Trail Association would continue to provide powerful and effective constituencies for trail resource preservation. Their continued support and involvement would be an essential element of the historic trails partnership.

Trail associations would be encouraged to assist the Long Distance Trails Office by sharing their information on historic routes, significant historic archeological resources, emigrant diaries, and other pertinent data. Trail associations could further help land managers in the administration of the trails by creating cooperating associations, friends groups, or similar organizations to help protect and enhance lands under the jurisdiction of these federal agencies. These organizations could also encourage volunteer activity to assist with trail corridor monitoring, and protection and interpretation, and they could help build greater public support for historic trail preservation and use, as well as persuading local landowners who own significant trail resources to participate in the trails' certification program. The trail associations would also be encouraged to assist federal, state, and local parks and museums in acquiring important objects for their collections, such as journals, letters, and emigrants' personal effects.

Recognition programs would also be an important tool for rewarding special partners and would provide an incentive for others to join in the cooperative effort.

SERVICEWIDE MEMORANDUM OF UNDERSTANDING

Cooperative actions related to the servicewide memorandum of understanding (1995) among the National Park Service, the Bureau of Land Management, and the Forest Service would be the same as those described in alternative 1, but there would be a concerted effort on the part of trail managers to effectively implement as many provisions as possible.

COOPERATIVE MANAGEMENT AGREEMENTS

Memorandums of understanding, cooperative agreements, and interagency agreements would continue to be developed by the Long Distance Trails Office, as described under alternative 1. A cooperative agreement among the Bureau of Land Management, Forest Service, and National Park Service would be developed and implemented that specifically related to the four trails.

PUBLIC AWARENESS

As described in alternative 1, raising public awareness of trails and building support for their continued protection would continue to be important goals of the trail partners. The higher level of cooperation among the National Park Service and its partners under this alternative would allow for new and better opportunities to achieve these goals. Some of the following proposals and opportunities would go

beyond those that could be achieved under current management conditions.

National Historic Trails Web Site

In the servicewide memorandum of understanding, the National Park Service, the Bureau of Land Management, and the Forest Service “mutually agree to . . . establish an electronic communication network in their trail office(s) to coordinate planning, administration, and management.” This Internet Web site would provide news and information on all four trails, and it would be shared by the Bureau of Land Management, the Forest Service, the various trails organizations, and any affected state agencies that wished to participate. Specific items available to users of the Web site would include information on certified sites and segments, auto-tour routes, historic trail and auto-tour maps, interpretive materials and programs, resource threats, and trail-related special events.

Trail Promotion

Consistent with the intent of the National Trails System Act to “provide for the ever-increasing outdoor recreation needs of an expanding population” and “the enjoyment and appreciation of the open-air, outdoors areas and historic resources of the Nation,” the Long Distance Trails Office would encourage the development of a promotion plan to foster public awareness of the trails and their resources.

Recreational opportunities for visitors could be coordinated in a four-trail promotional strategy with local, regional, and state tourism bureaus. Local chambers of commerce, convention and visitor bureaus, and other interested parties would be encouraged to work together in the development of a tourism plan.

If interest was strong, the Long Distance Trails Office in Salt Lake City would encourage the establishment of an interstate trail promotion task force. Its role would be to promote appropriate activities and events along the four trails to local and state communities, as well as to out-of-state and foreign visitors. If established, the National Park Service would negotiate an agreement with the task force to address how the agency and the task force could assist one another. Actions that might be undertaken by the National Park Service include the following:

- Coordinate NPS interpretive efforts with the promotional activities of the task force.
- Provide NPS assistance so that the task force would have accurate information for promotional efforts.

- Provide the task force with NPS trail brochures or other materials.
- Inform task force members how to obtain NPS permission to use the official trail marker symbol for appropriate purposes.

Actions that might be undertaken by the task force to assist the National Park Service include the following:

- Assist the National Park Service and, through it, other land-managing entities to encourage visitor respect for the appropriate use of trail resources, especially those on private property.
- Help control trail and site promotion to protect less developed or fragile resources from overuse and adverse impacts.
- Help protect and enhance visual quality along the trail.

The task force would work to promote the trails as a single, integrated trail system. Within that overall system, the task force might also provide for a coordinated series of regionally oriented auto-tour route brochures that provide visitors with more detailed information about activities and support services. A videotape or slide show could be produced to interpret the trails and related sites for use at travel shows, group meetings, schools, and other occasions.

In cooperation with local managers, the National Park Service might authorize the limited use of trail markers for select special events, if the event would help advance the objectives of the trails in a substantial way and if there were no liability consequences.

The National Park Service would encourage all trail advocates to stress trail protection and conservation in their promotions. Local promotional efforts might involve state historic register plaques, plaques for local historic sites, walking or driving tours of state and local areas of interest, and special events fashioned around themes relating to the trail.

Corporations might be encouraged to “adopt-a-site,” contributing funding and volunteers to work on resource preservation, to develop sites, and to promote high-potential sites or segments. Such sponsors would be expected to adhere to all local management and NPS standards for development and interpretation, and they would have to comply with federal resource preservation statutes.

Heritage Tourism

Heritage tourism entails traveling to historic and cultural attractions to learn about the past in an enjoyable manner, but it does not result in the decline of the very heritage that attracts visitors in the first place. Heritage tourism would be strongly encouraged as a new type of visitor use opportunity, as well as an excellent tool to assist in the

promotion of historic trails. Heritage tourism is sensitive to environmental issues and is designed to allow people to experience resources with an ecologically and culturally sensitive frame-of-mind, with a leave-no-trace emphasis.

The Long Distance Trails Office, in cooperation with state departments of tourism, would encourage and assist trail communities in becoming gradually involved in the National Trust of Historic Preservation’s heritage tourism program. The Long Distance Trails Office would also be available to facilitate and guide the development of local or regional tourism programs that followed the general principles of heritage tourism.

The National Trust for Historic Preservation has identified the following five principles to create a sustainable heritage tourism program. These principles follow closely the criteria set in the National Trails System Act.

- Focus on the authenticity and quality of the experience.
- Preserve and protect resources.
- Make sites come alive.
- Find a fit between a community or region and tourism.
- Cooperate.

TRAIL MARKING

Trail marking procedures would be largely the same as those described under alternative 1. However, the National Park Service and its partners would cooperate to complete a sign plan. This plan would enable the historic trails partnership to reduce the amount of existing sign clutter and would ensure that new signs were placed in appropriate locations. The plan would also foster the use of consistent materials and designs (see appendixes M, N, and O).

VOLUNTEERS AND LIABILITY

Federal partners would develop a coordinated program to enhance the efficiency of volunteer activities. Volunteers could be of particular assistance in protecting trail resources by entering data and updating information related to the trails’ resource protection plans. They could also assist with trail marking and with others activities associated with the administration and protection of trail resources. Because of the geographical extent of trail resources, it might be beneficial to use existing networks of historic trail supporters, such as the Mormon Trail associations, the Oregon-California Trail Association, the Pony Express Trail Association, and the National Pony Express Association in the initial stages of the program.

As in alternative 1, the Volunteers in the Parks and in the Forests Act of 1969 and the Volunteer Protection Act of 1997 would continue to provide a means for the federal government to protect cooperating landowners and other partners from liability claims.

TECHNICAL TASK FORCES / REVIEW TEAMS

The Long Distance Trails Office would convene technical task forces to help address special issues. For example, it might become necessary to assemble an interpretive task force to assist in preparing the brochures for the California and the Pony Express National Historic Trails. Such task forces could also assist in addressing possible controversial interpretations, resource management issues, and establishing a database of landowners along the trails. Additional task forces could be convened to deal with strategies for trail promotion, trail marking, and other considerations.

NATIONAL HISTORIC TRAILS FORUM

The goal of this forum would be to share and exchange information and enhance the appreciation and protection of the national historic trails addressed in this plan.

The forum could begin as an annual gathering of private landowners, including federal, state, and local agencies, as well as other organizations and individuals interested in the trails. It would include presentations on current research, planning issues, protection or preservation needs, and other issues.

This forum would have the potential to develop into a nonprofit association formed to integrate interests in historic trails under the auspices of the National Trails System Act. Federal agencies, organizations, and individuals who own, who are involved with trail sites or segments, or who have an interest in the trails would participate. Limited financial assistance would be available to defray costs for attendees.

The forum would independently coordinate operating procedures and scheduling meetings. Eventually it could become a not-for-profit foundation and be the focal point for cooperation among the various partners. It could circulate resolutions concerning issues on which it had a consensus position, generate recommendations for projects, “influence” agency decisions by being involved in the NEPA process and other opportunities, and encourage trail-related events.

Resource Protection

PROTECTION PLAN

In order to carry out the intent of the National Trails System Act, the Long Distance Trails Office would assist in developing a protection plan that would initially focus on high-potential sites and segments, but eventually expand to include all trail resources. This plan would be closely coordinated with all the affected partners and should be incorporated when developing or amending plans that could affect trail resources.

This protection plan, jointly developed by representatives from the Bureau of Land Management, the Forest Service, and the National Park Service during August-September 1997, would provide for a systematic inventory and analysis of trail resources, their condition, and recommendations for their appropriate use and potential treatment.

The following components of the protection plan would correspond to the items currently considered crucial to protect trail resources, as described under alternative 1.

High-Potential Sites and Segments

The current list of high-potential sites and segments for the California and Pony Express National Historic Trails is presented in appendixes E and F. Additions to, modifications of, or deletions from the original list of high-potential sites and segments for the Oregon and the Mormon Pioneer Trails are listed in appendixes G, H, I, and J; the changes are summarized in the “Historic Routes and Significant Resources” section.

The Long Distance Trails Office would be the gathering point for new submissions to these lists and would cooperate with other federal managers, trail associations, trail scholars, and state historic preservation offices in updating the lists, including additions, deletions, and modifications. The criteria used to identify the initial list of high-potential sites would also be used to make these changes.

In addition, beginning in 2001, and every two years, the OCTA chapters, under the auspices of the OCTA national organization, would convene representatives of the various historic trail communities, including other trail organizations (such as the National Pony Express Association, the Mormon Trail associations, and the Pony Express Trail Association), state historic preservation offices, and individual scholars, as well as federal, state, and local managers, to review and

make recommendations regarding additions to, deletions from, and modifications of the lists of high-potential sites and segments. These recommendations would be forwarded to the Long Distance Trails Office in Salt Lake City, which would publish the modified updates.

There are some trail resources that might not meet the criteria for inclusion on the lists of high-potential sites and segments. Their visual integrity might be compromised, they might have incomplete historic documentation, or there might not be enough evidence to assess their significance. As the status of these resources was reassessed or clarified, they could be considered for the additional protection that high-potential status would grant them.

Resource Inventory

A resource inventory program has been developed in conjunction with all the major partners and with the highest level of coordination and cooperation necessary to reach consensus on the inventory formats and data standards. A preexisting inventory form developed for the Long Distance Trails Office was used as a starting point. The partners also assisted in completing the inventory.

The completed inventory would be integrated with map-based, photo-based, and data-based management software that allows data to be linked to specific sites and segments identified on the digitized maps. This inventory would focus on physical resources and historical documents pertaining to the trails, to individual sites, and to the surrounding landscapes. The inventory would also include a carrying capacity analysis (see below).

The inventory is focused on the high-potential sites and segments identified for this planning process that have already been entered into a database. As funds became available, the program would be extended to include additional trail resources.

Trail Mapping

The Long Distance Trails Office would require long-term technical support to more effectively use new technology, such as GIS mapping. As soon as feasible, GIS mapping would be expanded to include all California Trail routes for which sufficient high-quality documentation exists. The next phase, pending amendment of the Oregon and California National Historic Trail legislation, would be the inclusion of the additional routes identified in the recommendations section. This work would require the support and collaboration of the various state historic preservation offices.

Under this alternative the Long Distance Trails Office would have full GIS capabilities because it would become the central depository for all existing GIS mapping data that have been collected to date for the four historic trails by the federal partners and others.

Carrying Capacity

Historic trails and their related sites and segments are fragile resources. Once the integrity of their historic form and setting is destroyed, it cannot be restored. Many factors, such as erosion, wind scour, growth of vegetation, farming, mining, urban development, livestock and wild horse grazing, contribute to the degradation of historic trails, not just visitor use. For these reasons, it is necessary to have a management mechanism in place that could prevent or minimize excessive uses that have the potential to irreparably damage resources.

Carrying capacity methodologies currently employed by most land-managing agencies follow the “limits of acceptable change” process developed by the Forest Service in the mid 1980s. This process involves the following:

- Develop prescriptions for resource and visitor experience conditions in various land units or zones.
- Identify indicators of those conditions that can be monitored over time.
- Set standards that represent minimum acceptable conditions.
- Take management actions to ensure that conditions remain at or above standard.

The four historic trails extend hundreds of miles over diverse landscapes, both rural and urban. They are managed by numerous agencies, often have uncontrolled access, and serve multiple uses. Their capacity to withstand use depends on complex combinations of soils and vegetation that range from extremely fragile to remarkably resilient. Their use cannot be easily monitored or controlled. These and other factors make it necessary to develop a meaningful strategy to determine sustainable use levels for individual sites and segments.

This alternative recommends the development of an **index of vulnerability** to predict overuse. The index would take into account the following factors:

- frequency and extent of special commemorative activities
- fragility of the resources (nature of the soils, erodibility, vegetation, climate, slope, aspect, etc.)
- popularity of a specific site (this could vary depending on movies, TV programs, etc.)
- nature of the predominant use (hiking, horseback riding, using wagons or handcarts, four-wheel driving, etc.)
- ease of access (paved highway, hiking trail, route suitable for four-wheel-drive vehicle only, etc.)
- proximity of interstate freeways and highway access points
- proximity to densely populated urban areas, tourist attractions, or resorts
- land status (Is the area under mineral lease? Is it covered by an unpatented mining claim? Is it under a right-of-way application or within a right-of-way corridor?)

As part of the inventory of resources, each high-potential site or segment would be assigned a rating of 1, 2, or 3 (1 meaning little potential disturbance, 2 moderate potential, and 3 a high probability of disturbance) for each of the factors listed above. Depending on special circumstances, some of these factors could be weighted. For example, a high rating (denoting high vulnerability to overuse) would probably mean that the site or segment was close to a densely populated urban area, was very popular and likely to be the target of special commemorative activities, was easily accessible, was close to an interstate freeway, or was characterized by fragile environmental conditions (vegetation and/or soils).

Sites or segments receiving a high rating would be more likely to experience heavy visitation and would be least likely to tolerate intense use without suffering long-term damage. These sites and segments would be potentially threatened and require frequent and careful monitoring. If their condition showed deterioration in violating established standards, then they could be temporarily withdrawn from public use, at least until a more adequate strategy for their preservation was developed; they could be interpreted from a distance; or other measures could be adopted to prevent the further destruction of their historic fabric.

This index would be part of the forthcoming inventory of trail resources that would also include an evaluation of existing conditions for every high-potential site and segment. Resources would be rated on two characteristics: condition and the index rating of vulnerability to overuse. Conditions would range from poor to pristine; the index from low to high. Resources where both variables were high should be a top priority for protection; those where vulnerability was low would be the easiest to protect. Where both were low, priority would

also be low. The most difficult decisions would pertain to those sites that fell in the middle.

It would also be necessary to develop a monitoring system to identify where and when trail conditions began to show evidence of deterioration. General recreational trail standards and indicators could be used and/or modified to establish monitoring guidelines suitable for historic trails. It would also be possible on a regular basis (every five years) to document photographically the conditions of high-potential sites and segments. This would be a relatively inexpensive process that would involve establishing fixed points where digital photographs could be taken and linked to the other automated data.

Regular monitoring of extensive trail resources would be an ambitious undertaking and would require the cooperation and commitment of several federal, state, and local jurisdictions. It would be essential to identify resources that would be potentially threatened and those that were already showing a certain degree of deterioration to ensure that these resources were preserved for the enjoyment and appreciation of future generations.

The Long Distance Trails Office would work cooperatively with the partners to develop and refine the uses of the index of vulnerability and monitoring plans for a selected set of sites and segments. Once refined, attempts would be made to apply the methodology to other significant resources.

Research Needs

The Long Distance Trails Office would assist in identifying future research needs and acting as a clearinghouse for research projects undertaken by federal and state agencies, or by private individuals. The Long Distance Trails Office would also have the lead in coordinating research projects, such as historic resource studies of the Oregon and California National Historic Trails. In addition, the trails office would identify needs for special history studies and cultural landscape reports. It would also make recommendations for resource management and interpretation.

Protection Tools

Tools to manage the trails would continue to include easements, donation/bargain sale, fee-simple ownership, agreements, and local land protection and regulatory processes as described under alternative 1 (see appendix K for a further description of the “tools” available for resource protection).

Management Corridors

Adequate protection of national historic trails would require more than the protection of ruts and sites. Maintaining the physical integrity of the trail landscape would be essential to preserving the overall context of the trails' history and ensuring a rich and evocative visitor experience.

This alternative would employ a flexible accordion approach (varying widths) in establishing appropriate widths for management corridors along designated high-potential segments. The widths for individual trail sections would be determined by factors such as type of ownership, viewshed, level of integrity, documented kinds of historic use of the trail and surrounding landscape, compatibility with existing resource uses, social values, and other considerations. Although this could be accomplished in various ways, this plan strongly recommends that an attempt be made to include all affected partners in reaching decisions regarding the width of corridors and the manner in which the resources would be protected. This approach would consider existing land use plans and management objectives.

SITE CERTIFICATION

Certification could help ensure that sites or segments outside federal jurisdiction met the basic preservation, interpretation, or recreation functions prescribed in the National Trails System Act (sec. 3(a)(3)) and any other criteria. The certification program is one of the most important ways in which the federal administering agency can foster partnerships with nonfederal landowners throughout the trail corridors.

The proposed certification process for the Oregon, California, Mormon Pioneer, and Pony Express National Historic Trails is as follows:

- (1) The National Park Service would pursue early coordination with potential applicants to ensure that they fully understood the site / segment certification procedures and to aid in their application efforts.
- (2) Applicants would be required to document their resources and interpretive programs. Environmental or other compliance procedures would have to be completed.
- (3) The National Park Service would provide technical assistance on issues related to cultural or natural resource compliance.

- (4) The National Park Service and the applicants would determine management objectives for each site or segment, and management responsibilities would be outlined. For smaller sites and segments, the application could replace more detailed management planning and formal cooperative agreements.

On completion of official certification, the public would be informed through appropriate trail information programs that the site or segment was available for public use and enjoyment.

Certification is not permanent; it can be renewed subject to satisfactory performance of the terms of the agreement. Decertification would result in the removal of the site or segment from trail information programs and the removal of trail logo markers for the area. Other actions might be taken as well, depending on the terms of certification.

Under this alternative the Long Distance Trails Office would compile a complete list of all private owners of tracts containing trail-related resources. The Long Distance Trails Office would prepare a newsletter informing landowners of issues, developments, and events occurring in the trail corridors. Staff members would work with landowners to identify endangered resources and answer questions regarding participation in the certification process. A certification handbook similar to those developed for the Santa Fe and Trail of Tears National Historic Trails would be developed. Partners would have the opportunity to assist with the certification program.

CHALLENGE COST-SHARE PROGRAMS

The use of challenge cost-share programs would continue, as described under alternative 1.

RESOURCE MONITORING

Trail visitation would likely continue to increase during years when commemorative events took place. Sesquicentennials and other celebrations would continue to attract large numbers of visitors. Some trail resources might be able to withstand these increases without experiencing major negative impacts; however, they would still require special monitoring. As described in alternative 1, the Long Distance Trails Office would continue to assist in developing plans to coordinate commemorative events and to monitor their impacts.

When resource threats became known, information would be shared by all the federal, state, and local partners as well as by the trail associations.

Interpretation, Visitor Experience, and Use INTERPRETATION

Interpretive programs for all four trails would continue to be cooperatively developed by federal, state, local, and private agencies and entities, as described under alternative 1. The Long Distance Trails Office and other NPS support offices would continue to assist in developing cooperative agreements for interpretive facilities and programs and would continue to provide limited funding and technical assistance to state, local, or private organizations that were engaged in interpreting the trails.

Interpretive Themes and Subthemes

Interpretive themes and subthemes have been identified for the Oregon, California, Mormon Pioneer, and Pony Express National Historic Trails, and they would be the same under both alternatives (see the "Historic Overview and Interpretive Themes" section for a comprehensive listing of the themes and subthemes). These themes would be subject to modification to reflect new research findings.

These themes and subthemes would provide the framework and guidance for interpreting the four trails in an integrated and systematic way.

Interpretive Media and Outreach Activities

- *Wayside Exhibits* — As in alternative 1, the federal partners, in cooperation with state and local agencies and trail organizations, would continue to help in developing an interpretive wayside exhibit system, in accordance with local management guidelines as well as NPS wayside guidelines.

Under this alternative the Long Distance Trails Office would also be responsible for completing an inventory of existing wayside exhibits and interpretive markers. The inventory would include the text, the design, and the photographic documentation of existing conditions. This information would be made available to all partners. Those proposing new interpretive projects would be encouraged to follow NPS wayside guidelines (see appendix M).

In order to standardize the display of the presented information, all new proposed wayside exhibits and other permanent interpretive markers would be coordinated through the Long Distance Trails Office. Consistent and accurate information would be presented in an overview section to allow visitors to place the presented information within the context of the entire trail.

- **Traveling Exhibits** — Traveling exhibits would be used where and whenever possible to present various interpretive and educational materials. These exhibits would be an excellent way to reach many people throughout the trail corridors with a specific educational or interpretive theme.
- **Publications** — As described in alternative 1, brochures and other publications would continue to be used for each of the four national historic trails. Brochures for the California and Pony Express Trails would be produced and distributed.
- **Outreach Activities** — Current outreach activities, as described under alternative 1, would continue. However, under this alternative, the Long Distance Trails Office, with the assistance of its trail partners, would compile a biennial report describing all ongoing trail outreach activities. This report, which would be distributed among all trail partners, would facilitate information sharing by documenting what kinds of programs were being conducted in other parts of the trails. This information could be used by the various partners throughout the trail corridors to enhance the quality of their outreach activities.
- **Audiovisual Media** — Appropriate audiovisual productions would be used to orient visitors to the trails. The Long Distance Trails Office, in cooperation with federal, state, and local partners, would develop audiovisual programs to be presented at all designated interpretive facilities and museums, as well as at schools and meetings of civic organizations. Site-specific audiovisual programs could be subsequently produced for major trail sites. These productions would play an important role in the outreach activities described above and in alternative 1.
- **Interpretive Plan** — An interpretive plan would be prepared by the Long Distance Trails Office, in conjunction with its partners. The plan would prescribe the appropriate techniques needed to present specific interpretive themes and would ensure that programs at related sites complemented each other. The interpretive plan would also provide guidelines for producing coordinated museum exhibits, traveling exhibits, audiovisual programs, wayside exhibits, and publications, along with detailed cost estimates for planning and production. The plan would address both comprehensive and regional interpretive themes to broaden public understanding of this era of American history and to enhance the visitor experience along all four trails.

In the preparation of the interpretive plan, the interpretive planner from the Long Distance Trails Office, if requested, would work in

conjunction with other interpretive planners from the National Park Service, the Bureau of Land Management, and the Forest Service, representatives of state historic preservation offices, interpreters and planners at state sites that provide trails interpretation, and subject matter experts from private trails associations.

Interpretive Programs and Facilities

Current interpretive programs and facilities would continue throughout the trail corridors.

As new interpretive facilities were planned along the trails, the Long Distance Trails Office would work with the project's proponents on facility design and to ensure the accuracy and the consistency of the message that the new facility would present.

A certification process would be offered to any facility programs that interpreted any of the four trails addressed in this plan. Based on those criteria, the National Park Service would provide various levels of interpretive assistance, including technical support and interpretive media. Programs that met the criteria would be certified as official interpretive components of the trail, and the use of the trail logo would be permitted on their signs and approved materials. The National Park Service would work with potential applicants to ensure that they understood the interpretive certification criteria early in their program development. Applicants for NPS assistance and certification would need to show that they could provide the following:

- accurate interpretive information for visitors
- appropriate exhibits, brochures, and other interpretive materials
- appropriate curation of artifacts
- programs and facilities that would be fully accessible to and usable by individuals with disabilities and that would meet or exceed federal standards and NPS compliance requirements
- programs that would be open daily according to a regular schedule for at least a season
- clean, well-maintained, and orderly facilities
- facilities that would not impair the integrity of the resources
- new facilities (if proposed) with a harmonious design theme
- programs and facilities that would meet local, state, and federal regulations for health, safety, equal employment opportunities, and environmental compliance
- a professional, auditable system of financial accountability if special publications or other materials sponsored or provided by the National Park Service were to be sold

- operating staff that were familiar with trail history and, as appropriate, personal interpretive techniques

Once the certification criteria for complementary interpretive programs were met, the National Park Service could provide assistance according to the categories described below, but it would not construct or operate facilities.

- **Federal (non-NPS) and State Interpretive and Educational Facilities** — These would include those facilities constructed, operated, or substantially supported by state or federal agencies other than the National Park Service. The National Park Service could provide technical assistance for interpretive planning, design, or curation; allow its publications to be sold; or provide exhibits or other media appropriate for the site.
- **Local and Regional Nonprofit Interpretive and Educational Facilities** — These would include those nonprofit facilities run by cities, counties, or regional entities. The National Park Service could provide technical assistance or, on a cost-share basis, modular exhibits with an overview of the trails and local site information. If the facility qualified, NPS-sponsored publications or materials could be sold.

The extent to which media could be provided would depend on future NPS interpretive planning and consideration of the following site factors:

- historical significance to the trail
- outdoor interpretive / recreational values
- resource integrity
- location relative to facilities or programs
- ability to convey trail themes and to educate and reach the public
- proximity to actual trail resources
- ability to contribute to interpretive program balance between different sites.

The official certification of an interpretive facility program means that the program would be publicized. Certification would be subject to renewal on a five-year basis, dependent on the satisfactory performance of the terms of the agreement. A program that was not recertified would no longer be listed in trail information programs, and trail logos/markers for the area would be removed.

VISITOR EXPERIENCE AND USE

Recreational Activities

While recreational activities throughout the trail corridors would be largely the same as those described under alternative 1, providing a more meaningful visitor experience through integrated development and programming would be emphasized. Being better able to retrace routes, visitors would develop an understanding of historic resources and an added appreciation of the nation's heritage. Enhanced cooperative efforts would result in a more meaningful opportunity to experience an entire array of trail resources (see appendix P for a sample listing of recreational opportunities associated with the four national historic trails). Increased cooperative efforts would also provide a more consistent and accurate message about the history of the trails and would make it easier for visitors to obtain information.

Auto-Tour Routes

As described in alternative 1, auto-tour routes would continue to provide opportunities for visitors to enjoy the four trails (see maps 13-16 for the proposed and the established auto-tour routes for the four trails). These routes would continue to be coordinated through state departments of transportation and tourism, federal agencies, offices of historic preservation, chambers of commerce, and other civic organizations.

Visitor Use Monitoring Program

At the moment no effort has been made to monitor visitor use. Some of the interpretive facilities tally visitation; some sites have registers where visitors can sign, but there is no attempt to gather existing information on visitation throughout the trail corridors. A program to monitor visitor use should be developed systematically. The quality of the visitor experience, impacts on resources, and carrying capacity would help establish baseline data for managers of trail resources.

Recommendations for Further Study

The following recommendations apply to both alternatives presented in this plan. Their order reflects priorities established during planning.

HISTORIC RESOURCE STUDY

Because of the magnitude and complexity of the resources under consideration, historic resource studies should be undertaken for the California and Oregon National Historic Trails as soon as funds become available. The study would examine trail resources, including both natural and cultural resources, and would include a determination of eligibility. A separate study and volume would focus on landscapes. Research would be conducted under the supervision of the Long Distance Trails Office and could be phased to focus first on the shared corridor between the Oregon and California Trails. As more funds became available, research could expand to incorporate the California routes.

ARCHEOLOGICAL RESOURCES

An inventory of existing archeological studies by trail and by state should be conducted. This study would identify needs for further research. Once identified, specific projects would be initiated as funds became available.

LANDOWNERSHIP AND USE ALONG THE FOUR TRAILS

Landownership and use data are essential for administering the four trails. Available ownership and use information dates from the 1970s and is not complete (see tables 13-17). Efforts would be made to conduct a study to update and extend this information.

GIS MAPPING

All the documented routes for the Oregon, California, Mormon Pioneer, and Pony Express National Historic Trails would be digitized and become part of the GIS database at the 1:100,000 scale. A phased approach to develop a complete set of GIS maps at the 1:24,000 scale would be initiated for all four trails.

AMERICAN INDIANS

Systematic research would be required to describe the tribes affiliated with all four trails and to analyze the impacts that the overland migration had on them. Additional research would be required to firmly establish the degree of cultural interaction and trading between emigrants and the various American Indian groups, the impact of American emigration on the American Indians along the trails, and related topics.

VERIFICATION OF TRAIL ROUTES AND SITES

A study would be conducted to verify and ground-truth the main and alternate routes, as well as the associated trail resources for all the trails affected by this plan.

Some portions of the Pony Express route have not been precisely determined. Additional research, including historic archeological investigations, would be necessary to establish more accurate locations of the trail and trail resources. It is also recommended that a comprehensive list of all documented Pony Express stations and their exact locations be prepared.

UNITED STATES ARMY

The U. S. Army served an important role in the history of the trails, providing both protection and critical supply points for emigrants and the Pony Express. Additional research would provide a clearer understanding of the army's contribution to the trails' evolution, its connection with civil emigrants and settlers, and its complex relationship with American Indians.



ADDITIONAL ROUTES FOR THE OREGON NATIONAL HISTORIC TRAIL

Oregon

The time frame for the original *Oregon National Historic Trail Comprehensive Management and Use Plan* was 1841 to 1848, which fails to acknowledge that the Oregon Trail was used as a corridor for overland emigrant travel into the 1880s and that emigrants used other routes to reach their destination in addition to the route authorized by Congress as a national historic trail. To terminate the Oregon Trail's time frame in 1848 is to ignore the years during which the heaviest travel occurred. The majority of overland emigrants entering the Pacific Northwest arrived by the Oregon Trail and its branches in the 1850s. Emigrants traveled to the Pacific Northwest along the Oregon Trail well into the 1880s, when the first steam railroad connections linked the Pacific Northwest to the midwestern states. (The Oregon Short Line, connecting to the Union Pacific, opened in 1884, and the Southern Pacific links were established in 1887.)

In 1995 the Oregon legislature recognized five Oregon Trail branches as “alternate routes of the Oregon Trail.” House Bill 2966 recognized the significance of the Whitman Mission Route, the Upper Columbia River Route, the Meek Cutoff, the Free Emigrant Road, and the Cutoff to the Barlow Road as Oregon Trail branches critical to the settlement of Oregon. The 1995 Oregon legislature additionally passed House Joint Memorial 6, proclaiming 1995 as the year of the Meek Cutoff Trail.

The following seven Oregon Trail branches in the states of Oregon and Washington should be considered for further study and possible inclusion as part of the Oregon National Historic Trail.

Whitman Mission Route (1841–47)

The Whitman Mission route stretches from the Umatilla River near Cayuse, Oregon, to the Whitman Mission and then to Fort Walla Walla (Wallula).

Upper Columbia River Route (1841–48)

The Upper Columbia River route extends from Fort Walla Walla to The Dalles (Wascopam).

Cowlitz River Route (1845)

The Cowlitz River route runs from Fort Vancouver to Puget Sound.

Meek Cutoff (1845)

The Meek Cutoff travels from the Malheur River (Vale) to the Crooked River and north to The Dalles.

Cutoff to the Barlow Road (1847–84)

This cutoff travels from the John Day River crossing to Tygh Valley.

Free Emigrant Road (1853)

The Free Emigrant Road runs from the Crooked River to the Deschutes River near Bend and south to Emigrant Pass and the Middle Fork of the Willamette River to Eugene.

Naches Pass Trail (1853–54)

This trail travels from Fort Walla Walla to Puget Sound.

Idaho

The following have been identified as additional routes for possible inclusion to the Oregon National Historic Trail:

North Alternate Oregon Trail

The North Alternate Oregon Trail left the main route above Salmon Falls south of present-day Hagerman. Emigrants started using the route in 1852 after retired trappers installed a ferry across the Snake River. This route joined the main route of the Oregon Trail near Teapot Dome, east of present-day Mountain Home.

Goodale’s Cutoff

Goodale’s Cutoff left the Oregon Trail at Fort Hall, proceeded past the north end of Craters of the Moon and through Camas Prairie. It then joined an original route of the Oregon Trail near Ditto Creek, south of the Boise River. This route was preferred by fur trade expeditions after Donald MacKenzie discovered it in 1820. To the north of the Boise River a northern part of Goodale’s Cutoff followed the Payette River through the Weiser River country, crossed the Snake River on Brownlee Ferry, and joined the original route of the Oregon Trail near present-day Baker City, Oregon. Unfortunately, this route is not well documented, and little visible evidence has survived to indicate its location. Between 1852 and 1862 a few wagon trains used the trail following a route promoted by John J. Jeffrey.

During the rush to gold in Idaho in 1862, emigrant parties eager to find a shorter route to the Boise River encouraged Tim Goodale, a mountain man who knew most of the Indian and fur trade trails of the Snake River country, to lead them over the route. This combined company, consisting of 795 men and 300 women and children, was the largest ever recorded using an emigrant trail segment. After 1862 it became a major Oregon Trail route.

North Side Alternate Route

This alternative route follows the north side of the Snake River from the vicinity of Fort Hall to the Thousand Springs area, where it connects with the North Alternate Oregon Trail. Hudson’s Bay Company traders preferred this route when traveling between Fort Boise and

Fort Hall, but early emigrant wagons had to travel south of the Snake River until ferries and roads were developed. A shorter and faster trail, this route connected with Marcus Whitman’s Oregon Trail wagon road near Teapot Dome. A north alternate wagon road connector to this route followed from a ferry above Thousand Springs in 1852. Heavy wagon traffic eventually used this superior route, passing through the lava obstructions west of Milner, near Shoshone Falls. The lack of good diary descriptions makes it difficult to determine how heavily the trail was used, but excellent surface evidence and early township survey plats clearly document wagon use.



ADDITIONAL ROUTES FOR THE CALIFORNIA NATIONAL HISTORIC TRAIL

A substantial variety of emigrant trails crossed to California. These routes, although not officially authorized by Congress, have historical significant relationships to the California Trail. Some of them, however, have not been mapped and have not been studied to the extent necessary to determine their level of significance. Furthermore, extant resources associated with them have not been identified. The Long Distance Trails Office and trail advocacy groups should explore the need to further study the routes summarized below before initiating efforts leading to official recognition. (To help locate the trails, geographic references to present-day towns and highways are used, even though many of these designations did not exist during the period being described.)

Road from Lower Independence Landing (Blue Mills) to Independence

The road from Blue Mills to Independence Courthouse Square was used from about 1832 into the 1840s. Countless tons of trade goods bound for Santa Fe, and emigrants bound for California and Oregon, departed from this landing. The landing fell into disuse after the development of the Upper Independence Landing at Wayne City.

Blue Ridge Cutoff

Two routes headed south from Independence Courthouse Square. The Blue Ridge Cutoff was the western route. The Independence Road, which is the official route of both the Oregon and California National Historic Trails, was 2 miles east and ran parallel to the Blue Ridge Cutoff. The two routes rejoined in Raytown, just north of the Rice-Tremonti home.

Westport Landing Road

Francois Chouteau established trading houses at the site of Westport Landing as early as 1821. Originally, the route was used by trappers and traders to ascend the steep river bluffs. With the founding of Westport in 1834, the Westport Landing Road became the primary route for emigrants and merchants traveling from Westport Landing (also known by the late 1840s as Kansas Landing) to the outfitting town of Westport, 4 miles south of the Missouri River.

Westport Road

The Westport Road was first used by California bound emigrants in 1841, when much of the Bidwell-Bartleson party followed a branch of the Santa Fe Trail south from Westport to their rendezvous at Sapling Grove. The route then continued past the Flat Rock Creek / Indian Creek crossing and the Elm Grove campground, and joined the Independence Road 2 miles west of Gardner, Kansas.

Westport-Lawrence Road

The Westport-Lawrence Road followed the north branch of the Santa Fe Trail from Westport through the lands of the three Shawnee Indian Missions. The route then headed west, paralleling the south bank of the Kansas River through Johnson and Douglas Counties, to the western Shawnee settlements on the Wakarusa River. Here the route joined the Independence Road / Oregon Trail at the Lower Bluejacket Crossing.

Gum Springs-Fort Leavenworth Route

This was the primary land route for travelers between Westport and Fort Leavenworth. Many emigrants jumped off at Westport Landing, outfitted at Westport, and headed west on the north branch of the Santa Fe Trail. Leaving that route to cross Turkey Creek, they met the Fort Leavenworth military road at the site of Gum Springs. From Gum Springs, the route followed the Fort Leavenworth road northwest 4.5 miles to the Delaware (Grinter) crossing of the Kansas River. The route continued north on the military road, through the lands of the Delaware Indians, to Fort Leavenworth. From there, emigrants could take the Fort Leavenworth-Big Blue River route northwest to join the St. Joe Road or the Fort Leavenworth-Kansas River Route southwest to join the Independence Road.

Fort Leavenworth-Big Blue River Route

First conceived by Col. Stephen W. Kearny, this route ran west from Fort Leavenworth to Eightmile House, where the Fort Leavenworth-Kansas River Route branched southwest. The Fort Leavenworth-Big Blue River route then turned northwest, paralleling Stranger Creek and Camp Creek, to the town of Lancaster. The route crossed the Little Delaware and Delaware Rivers, turned northwest to follow the ridge between Muddy and Craig Creeks, and passed north of the towns of Seneca, Axtell, and Beattie. After crossing Robidoux and Spring Creeks, the route joined the St. Joe Road at Marysville, Kansas, 1 mile east of the Marshall Ferry crossing of the Big Blue River.

Routes from Atchison and Independence Creek

Feeder routes from jumping off points at Atchison and Independence Creek joined the Fort Leavenworth-Big Blue River Route near Shannon, Kansas.

Road to Amazonia

The route from the Missouri River jumping off point at Amazonia headed southwest up Smith Creek to join the St. Joe Road 4 miles northeast of present-day Troy, Kansas.

Fort Leavenworth — Kansas River Route

Established by the military in 1850, the Fort Leavenworth-Kansas River Route branched off the Fort Leavenworth-Big Blue River route 8 miles west of Fort Leavenworth. There the route turned southwest, crossed Stranger Creek, and passed through the towns of Easton and Winchester. After crossing the Delaware River, Rock Creek, Muddy Creek, and Soldier Creek, the route joined the Independence Road (which crossed the Kansas River at Papin's Ferry) north of Topeka.

Union Ferry Route

This 35-mile alternate route left the Independence Road at Big Springs and ran south of present-day Topeka and the Kansas River crossing at Papin's Ferry. After swinging south, the route approached the river again near Smith's Ferry and the Baptist Mission to the Potawatomi Indians. It then turned west, paralleling the south side of

the Kansas River, until it reached the Union Town ferry. After crossing the Kansas River, the Union Ferry Route rejoined the Independence Road at present-day Rossville, Kansas.

Nebraska City Cutoff Routes

Three branches of the Nebraska City Cutoff braided across east-central Nebraska from Nebraska City to the Platte River. The routes were developed in three consecutive years, from 1860 to 1862, as shortcuts between Nebraska City and Fort Kearny. The routes generally ascended the Little Nemaha River and passed south of Lincoln, Nebraska. The three routes came together near Beaver Crossing on the West Fork of the Big Blue River and continued west. Running south of York, Nebraska, and ascending the south bank of Beaver Creek, the Nebraska City Cutoff joined the Oxbow Trail on the Platte River near Mormon Island, 3 miles northeast of Doniphan, Nebraska.

Road from Old Wyoming to the Nebraska City Cutoff

This feeder route from the jumping off point of Old Wyoming on the Missouri River ran southwest to join the 1862 route of the Nebraska City Cutoff 7 miles west of Nebraska City.

Road from Minersville to Nebraska City

This feeder route from the Minersville Ferry on the Missouri River ran northwest for 7 miles to Nebraska City, where emigrants began their journey west on either the Oxbow Trail or one of the three routes of the Nebraska City Cutoff.

Lower Plattsouth Route

From the Plattsouth Ferry, a road ran southeast for about 2.5 miles and split into the Upper and Lower Plattsouth routes. The lower route ran southeast, crossed Fourmile Creek, turned west to the town of Manley, and joined the Oxbow Trail at Murdock, 3 miles north of Weeping Water Creek.

Upper Plattsouth Route

From its junction with the Lower Plattsouth Route, 1 mile west of the town of Plattsouth, the upper route headed west, crossed Fourmile Creek, and turned northwest to intersect the south bank of

the Platte River at Turkey Creek. Turning west, the route followed the Platte River, swung south to cross Decker Creek, and followed the Platte River as it turned north. The upper route joined the Oxbow Trail 2 miles southeast of Saline Ford and the town of Ashland, Nebraska.

Lower Bellevue Route

From the Lower Missouri River Ferry at Bellevue, Nebraska, the Lower Bellevue Route headed southwest, crossed Papillion Creek, and reached the north bank of the Platte River at Zwiebel Creek. The route followed the north bank of the river in a wide arc, west and then north, to intersect the Upper Bellevue Route 2 miles east of the Elkhorn River.

Upper Bellevue Route

From the Lower Missouri River Ferry at Bellevue, Nebraska, the Upper Bellevue Route headed west, crossed Papillion Creek, and turned northwest, running between the drainages of Hell Creek and Big Papillion Creek. The route then split. One branch continued northwest to join one of the branches of the Council Bluffs Road coming from the middle Missouri River ferry at Omaha. The other branch turned west, went through the town of Millard, passed the junction with the Lower Bellevue Trail, crossed the Elkhorn River, and ran north along the east bank of the Platte River to intersect the primary Council Bluffs Road 2 miles southwest of present-day Fremont.

Woodbury Cutoff

The Woodbury Cutoff was a shortcut of the Oxbow Trail. It left the Oxbow Trail south of Weeping Water Creek, 4 miles west of the present-day town of Elmwood, and headed west. The route crossed Stove, Camp, and Salt Creeks, passed north of Lincoln, Nebraska, crossed Little Salt Creek and Oak Creek, and rejoined the Oxbow Trail 2 miles north of the present-day town of Brainard.

Diamond Springs Cutoff

The Diamond Springs Cutoff (in Wyoming) was used to avoid the difficult climb over Rocky Ridge. This route left the primary Oregon-California Trail 2 miles northeast of Rocky Ridge and turned northwest to Silver Creek, which it ascended to Diamond Springs.

Continuing west, the route crossed Strawberry Creek, and rejoined the main trail 1 mile east of Rock Creek.

Cherokee Trail (1849-50) and the Overland Trail in Wyoming

The Cherokee Trail was primarily a route to the goldfields for members of the Cherokee Nation who had been forcibly resettled earlier in Indian Territory. Beginning in 1849, and again in 1850, several wagon companies of Cherokee Indians and some whites used various existing trails and trails they pioneered to reach the primary Oregon-California-Mormon Trail west of the Green River near Fort Bridger.

Leaving the Grand (Neosho) River at Grand Saline, Oklahoma, they headed northwest to the Santa Fe Trail and followed it west to Bent's Old Fort. They continued along the Arkansas River to Pueblo, Colorado, and then turned north along the front range of the Rocky Mountains to Denver. Here the 1849 and 1850 routes divided. The 1849 travelers turned northeast and passed through the present-day towns of Brighton, Fort Lupton, and Greeley. The 1850 route headed due north. The two routes rejoined northwest of Fort Collins, Colorado, and ran northwest to a point on Willow Creek, 3 miles northwest of present-day Tie Siding, Wyoming.

Here the routes split again. The 1849 emigrants passed northwesterly over the Laramie Plains to Wagon Hound Creek, where they turned west. After crossing Pass Creek and the North Platte River, the trail turned north and ran through present-day Rawlins, Wyoming. Again headed west, the 1849 route crossed the Great Divide Basin to Point of Rocks, passed through Rock Springs, Wyoming, crossed the Green River, and joined the main Oregon-California Trail at present-day Granger.

The 1850 emigrants turned southwest from Willow Creek and dipped back into Colorado. Their trail turned northwest along the east bank of the Laramie River and followed the river north (back into Wyoming) to a crossing south of Boswell Creek. The route swung south (into Colorado) to Pinkham Creek and again turned north. Crossing the North Platte River, they headed northwest (back into Wyoming), crossed Big Creek, passed through present-day Encampment, and continued west across Muddy Creek. The route continued west along the Powder Rim, ascended Vermillion Creek, crossed the Green River just north of present-day Buckboard Crossing, and joined the primary route of the Oregon-California Trail at Fort Bridger.

From Fort Bridger, the Cherokee companies continued on existing trails to California. Also in 1850, Captain Howard Stansbury of the Topographical Engineers surveyed this route in southern Wyoming,

which became known in the late 1850s as the Overland Trail. The route was used by emigrants and the Overland Stage.

Bidwell-Bartleson Route — 1841

The 1841 Bidwell-Bartleson party was the first group of overland emigrants to reach northern California by way of the Humboldt River. Leaving the Oregon Trail near Soda Springs, Idaho, they followed the Bear River south, then turned west around the north end of the Great Salt Lake, searching for a way to the Humboldt River. West of Donner Springs, they were the first emigrants over the route that would later become infamous as the Hastings Cutoff. At Big Springs, in eastern Nevada, they abandoned their wagons and continued west with pack animals. After crossing the Ruby Mountains at Harrison Pass, they finally reached the Humboldt River near present-day Elko, Nevada, and followed that river to its sink. The party then sought to cross the Sierra Nevada by turning southwest, where they struggled over the mountains somewhere near today's Sonora Pass. Although a better route to the Humboldt River through Granite Pass was used by most later emigrants, the Bidwell-Bartleson party had opened the trail along the Humboldt River, which would become the primary route to California in following years.

Weber Canyon Route of the Hastings Cutoff — 1846

When the first wagon company of 1846 Hastings followers (the Harlan-Young party) reached present-day Henefer, they chose to continue down the Weber River. Heinrich Lienhard's party followed their lead. The Bryant-Russell pack party had turned up the Main Canyon route as far as East Canyon Creek, where they veered northwest down that creek to rejoin the Weber Canyon route west of present-day Morgan, Utah.

Therefore, most of the emigrants following Hasting's new route proceeded down the narrow, tortuous Weber River Canyon, passed Devils' Slide, and emerged from the Wasatch Mountains south of Ogden. The canyon was so narrow that wagons often had to travel "directly down the foaming riverbed, full of great boulders." Hastings found the Weber River canyon descent to be extremely difficult for wagons and advised the Donner-Reed party to turn south up Main Canyon.

Once they emerged into the Valley of the Great Salt Lake, the Hastings companies turned south along the foothills of the Wasatch Mountains. Each of the three parties chose a slightly different crossing of the Jordan River, but all four routes (including the Donner-Reed

route) rejoined east of the Oquirrh Mountains near present-day Magna.

Variants taken by these different groups can be found all along the Hastings Cutoff from here to the Humboldt River.

Secret Pass—1846

When the Hastings Cutoff reached Warm Springs, east of Ruby Valley, the closest route to the Humboldt River was to turn northwest, climb over the Humboldt Range, cross the Franklin River, and cross the Ruby Mountains by following Secret Creek through Secret Pass. This route was passable for pack trains, but completely impassable for wagons. Wagon trains were forced to turn south, cross the Ruby Mountains through Overland Pass, and turn north again to join the Humboldt near Moleen.

Bishop Creek Cutoff — 1843

Joseph Chiles, a member of the Bidwell-Bartleson party, organized an emigrant wagon party in 1843. West of Fort Laramie, this party met Joseph Walker, who agreed to guide them. Due to a shortage of supplies at Fort Hall, the party divided into a pack train and a wagon train. Childs led the pack train through eastern Oregon, trying to reach California by outflanking the Sierra Nevada. Meanwhile, Walker led the wagon company to the Humboldt River by way of the Raft River, City of Rocks, Granite Pass, Goose Creek, and Thousand Springs Valley. This soon became the primary wagon route to the Humboldt River and was known as the Fort Hall Road.

Upon reaching Bishop Creek, Walker turned west, passed through the Snake Mountains on an extremely rough road through Bishop Creek Canyon, and intersected the Humboldt River at the eastern end of Star Valley. In 1845 Caleb Greenwood pioneered a route south from Bishop Creek that intersected the Humboldt River at Humboldt Wells. The Humboldt Wells route soon became the primary California Trail route, and the original route through Bishop Creek Canyon was known as the Bishop Creek Cutoff.

Greenhorn Cutoff

The main route of the California Trail west of Elko stayed near the Humboldt River and passed through narrow Carlin Canyon. During periods of high water, this route was almost impassable. The Greenhorn Cutoff was developed as an alternate loop to the north to avoid Carlin Canyon. The Greenhorn Cutoff started 2.5 miles south of the Hunter interchange on I-80 at Moleen. The trail looped north,

crossed Dry Susie Creek southeast of the Adobe Range, and headed south down Susie Creek to rejoin the main trail 1 mile east of Carlin.

McAuley Cutoff — 1852

In 1852 the McAuley party constructed a toll road that crossed Sheep Creek and turned southwest down the creek to reach Bear River. It followed the east side of the Bear River, approximately along the route of U.S. Highway 30, and rejoined the main Oregon-California Trail at the base of Big Hill. The cutoff was longer than the main trail, but it avoided the steep climb over the Sheep Creek Hills.

Johnson Cutoff — 1850–54

The Johnson Cutoff left the Carson Route at Carson City and skirted the south side of Lake Tahoe. It turned west down the South Fork of the American River, followed Peavine Ridge, and briefly intersected with the Carson Route at Union House. Heading due west from Union House (the Carson Route went southwest from that point) the Johnson Cutoff followed the current route of U.S. Highway 50 to Johnson Ranch, near present-day Blakeley Reservoir. Placerville was 5 miles farther west on Hangtown Creek.

Georgetown/Dagget Pass Trail

The Georgetown Trail turned west from the Carson Route south of Carson City, near present-day Walley's Hot Springs. The grade ascended Haines Canyon to Daggett Pass and descended to intersect the Johnson Cutoff on the shore of Lake Tahoe. The two routes ran together as far as Atherton Flat, on the eastern end of Peavine Ridge. Here the Georgetown Trail turned northwest and headed for Georgetown.

Luther Pass Trail — 1854

The Luther Pass Trail turned north from the Carson Route in Hope Valley, climbed through Luther Pass, descended Grass Creek, crossed the Upper Truckee River, and intersected the Johnson Cutoff / Georgetown Trail on the South Fork of the American River below Echo Summit.

Big Trees Road — 1849

The Big Trees Road was opened by westbound emigrant parties in 1849, surveyed and improved by the Murphy's exploring party in

1855, and carried significant numbers of later emigrants. The route was heavily used by freighters as an alternate to the Placerville Road throughout the rush for Washoe Silver, until the railroad was completed and the "Ebbetts Pass" road was opened to Silver Mountain and Markleeville.

The Big Trees Road turned off the Carson Route in Hope Valley and headed south through Faith and Charity Valleys. After crossing Border-Ruffian Pass near the Blue Lakes, the route descended to the Mokelumne River in Hermit Valley. The trail then climbed west up Pacific Grade, the only slope of even moderate difficulty for emigrant (and later freight) wagons on the Big Trees Road (the crest lies at 8,050 feet and was often referred to as an "easy grade"). The trail continued southwest through Bear Valley, Calaveras Big Trees Grove, Avery, Murphy's, and Angels Camp. Most emigrants stopped at the first good diggings, but the Big Trees Road could be followed to many camps in California's southern mines, such as Columbia and Sonora.

Volcano Road — 1852

The Volcano Road left the Carson Route 2 miles southeast of Leek Springs and headed southwest, along and across the ridges of the watershed of the Cosumnes River to Volcano.

Grizzly Flat Cutoff — 1852

The Grizzly Flat Cutoff turned off the Carson Route at Leak Springs, headed west to Old Capps Crossing of the North Fork of the Cosumnes River, and on to the mining camp at Grizzly Flat.

Sacramento-Coloma Emigrant/Wagon Road

This road was used by those traveling between the gold camps of Coloma and Sacramento. The road left Sacramento and traveled up the American River to Willow Springs, near Folsom. It continued northwest, past Green Springs, to Sutter's Mill at Coloma.

Nevada City Road — 1850

In August 1849 a gold strike on Deer Creek (present-day Nevada City) changed the course of the Truckee Route. The first gold seekers to reach the area arrived from Sacramento. Their route started at Sutter's Fort and went through Johnson's Ranch, Round Tent, Spenceville, Penn Valley, Rough and Ready, and then Nevada City. By 1850 news of the gold strike at the Deer Creek dry diggings had

reached the East, and this area became the destination point for many 1850 emigrants. The Nevada City Trail was developed by these emigrants as the shortest way possible to this newly discovered bonanza. The Nevada City Road left the original Truckee Route at Bear Valley, climbed Washington Ridge to the north, and generally followed that ridge westward to Nevada City. Another branch of the Nevada City Road branched south from Washington Ridge and followed Harmony Ridge into Nevada City.

Burnett Cutoff — 1848

This 1848 route to the California goldfields was opened by gold-rush Oregonians under the leadership of Peter Burnett. The Burnett Cutoff left the Applegate Trail about a mile southeast of Bloody Point and headed south to join the Lassen Trail on Pit River.

Yreka Trail — 1852

The Yreka Trail left the Applegate Trail (the South Emigrant Road to Oregon) 2 miles southwest of Klamath and turned south up the east side of Willow Creek. After the opening of this trail to Shasta Butte City (today's Yreka) in 1852, a sizable portion of the emigrant traffic over the Applegate Trail was destined, not for Oregon, but for the gold regions of California. This 73-mile trail still preserves a large number of swales and sites.

Cooke-Graham Wagon Road to Southern California — 1846–48

During the Mexican War of 1846, the Mormon Battalion, under the leadership of Bvt. Lt. Col. Phillip St. George Cooke, opened a wagon road from Santa Fe to southern California, by way of the Rio Grande, the San Pedro River, and the Gila River. With an important realignment by Maj. Graham in 1848 by way of the Santa Cruz River, this wagon road became the principal route to California from the southern states and Mexico during the gold rush years. The route is also known as the Southern Trail.

Mormon Trail to Southern California — 1848

In late 1847, as a means of establishing settlements in southern California, Mormon leaders arranged for the opening of a trail from Salt Lake City to Los Angeles, following a long segment of the Old Spanish Trail. By early 1848 Mormons had successfully established a pack trail, which they soon developed into a wagon trail. Mormon guides led forty-niners who arrived late in the summer at Salt Lake and feared to venture across the Sierra Nevada on this newly opened wagon trail to southern California.

Southern Routes to California — 1849

To accommodate gold rushers flooding to California through the southern states in 1849, several new wagon roads were opened that connected to the existing Southern Trail (Cooke-Graham Wagon Road of 1846–48). For gold rushers landing in the Gulf ports of Texas, two new roads crossed the unsettled western frontier of Texas to El Paso on the Rio Grande: the Upper Road from Austin and the Lower Road from San Antonio. From El Paso, emigrants could take several routes to link up with the Southern Trail. Two other wagon roads began at Fort Smith, on the Arkansas-Indian Territory border. Both were surveyed and opened by Capt. Randolph Marcy during 1849: one route went from Fort Smith to the Santa Fe Trail along the Canadian River in Oklahoma, and the other went from Fort Smith through northern Texas to El Paso.

Placer County Road to Auburn — 1852

This route turned north off the Carson Route and went to the town of Auburn on the North Fork of the American River, 35 miles north-east of Sacramento.

Hennes Pass Route — 1852

The Hennes Pass route to Marysville turned north off the Truckee Route at the Little Truckee River. The route saw considerable use in the late 1860s because of a local gold rush. The Hennes Pass route had an easy ascent of the Sierra Nevada from the east, but the descent of the western slopes was just as difficult as any other route. When the road and railroad were built through Donner Pass, just to the south, this route was virtually abandoned.

Central Overland Trail — 1859

James Simpson, of the U.S. Topographical Engineers, constructed an alternate road from Fort Bridger directly to Camp Floyd (later Fort Crittendon) in 1858. The following year, Simpson laid out the Central Overland Trail from Camp Floyd to the Carson River. Because of increasing Indian depredations along the Humboldt River route, emigrant wagon trains switched to Simpson's new wagon road, especially during the Civil War. In 1860–61 the Pony Express used this trail (deviating from it in some places.)

Beale Road — 1858; and Mojave Road — 1859

Edward Beale laid out a new wagon road along the 35th parallel from Albuquerque, New Mexico, to the Mojave Villages on the Colorado River in 1858. The following year, the military—supplying the new Fort Mojave (at the Mojave Villages) from Los Angeles—extended the Beale Road across the Mojave Desert. This desert extension west of the Colorado River to the Mormon Trail/Old Spanish Trail is known as the Mojave Road.

Alternatives Considered but Rejected

Trails West National Historic Park

In April 1978 a proposal was made in Congress for the creation of the "Trails West National Historic Park." Under this proposal the National Park Service would have acquired nationally significant resources related to the historic trails that were not currently under federal protection. These resources would have become components of a new unit of the national park system.

On the basis of national significance, as defined in Criteria for Parklands, the California, Mormon Pioneer, Oregon, and Pony Express National Historic Trails would all qualify as units of the national park system. However, in the face of current budget constraints, the acquisition of the many resources outside federal jurisdiction would make this an unfeasible alternative at this time. Moreover, the proposal did not address management issues for resources that are not nationally significant, or that are under the control of other federal agencies.

Protection and Management of the Premier Resources Associated with the Historic Trails

Under this alternative, originally coined as "the Best of the West," the Long Distance Trails Office would have focused its protection efforts on the premier historic resources in the trail corridors, including all national historic landmarks under federal, state, local, and private jurisdiction. Other resources determined to be the most exceptional by virtue of their physical integrity and historical significance also would have been included for protection and management. The remaining sites and segments would not have been addressed by the plan.

This alternative was rejected because it would not fulfill the requirements of the National Trails System Act, which requires the development of a comprehensive management plan, not a plan for selected sites only. Furthermore, the National Trails System Act suggests that the protection plan within the comprehensive management plan address all high-potential sites and segments.

Table 11: Comparison of Alternatives

ALTERNATIVE 1: CONTINUATION OF CURRENT CONDITIONS	ALTERNATIVE 2: ENHANCED CONDITIONS AND A HISTORIC TRAILS PARTNERSHIP (THE PROPOSAL)
<p>Administration and Management</p> <p>A. Federal Level — Federal agencies, such as the Bureau of Land Management and the Forest Service, would continue to manage the largest segments of the trails; however, management would vary dramatically between agencies and would lack formal coordination. The NPS Long Distance Trails Office would continue as the main office for the administration of the four trails. Operations, staffing, office space, and budget would continue as funding allows.</p> <p>B. State level — States and state agencies would continue to be involved in the protection and management of the trails and their resources; however, cooperation and communication within state agencies and among the different states involved would remain weak.</p> <p>C. Local level — City and county governments, local agencies, land preservation groups, private landowners, and trail associations would continue to play important roles in trail administration and resource protection; however, cooperation and coordination among these entities would remain informal and largely dependent on personal contacts.</p>	<p><i>Together, the National Park Service and its partners would work to establish a historic trails partnership to assist in implementing a comprehensive strategy to enhance resource protection and to provide opportunities for visitors to have direct interaction with trail resources.</i></p> <p>A. Federal Level — The Bureau of Land Management and the Forest Service would designate trail coordinators to assist the Long Distance Trails Office. Federal agencies would exchange personnel as necessary to promote cooperation and efficiency. Federal partners would jointly fund the operations of the NPS Long Distance Trails Office and its deployed staff. The Long Distance Trails Office would strive to achieve a higher level of cooperation among federal, state, and local agencies, trail associations, and private landowners. The trails office would also take on some new responsibilities such as acting as a library for all information related to the management of the trails and sharing information about resource threats with all partners. To improve its existing operations and to meet the trails office's new responsibilities, staffing, office space, and budget would be increased. In addition, the Long Distance Trails Office's deployed staff would be located at strategic points along the trail corridors to enhance operational effectiveness and to improve the administrative ability of the National Park Service.</p> <p>B. State level — The Park Service would encourage a higher level of cooperation and communication among the states and their respective agencies. State resource management agencies would support ongoing trail preservation efforts by assisting with elements of the protection plan. These agencies would also help monitor commemorative events and develop action plans that would address potential threats.</p> <p>C. Local level — Local agencies, trail associations and private landowners would be important elements of the historic trails partnership. Trail associations would be encouraged to help land managers and the trails' administration by creating cooperating associations, friends groups, or similar organizations to help protect and enhance lands under federal jurisdiction. These organizations could also encourage volunteer activity to assist with trail protection and interpretation, help build a larger constituency for historic trail preservation and use, and persuade local landowners who owned significant trail resources to participate in the trails' certification program. The trail associations would also be encouraged to assist federal, state, and local parks and museums in acquiring important pieces for their collections, such as journals, letters, and emigrants' personal effects.</p>

Table 11: Comparison of Alternatives (continued)

ALTERNATIVE 1: CONTINUATION OF CURRENT CONDITIONS	ALTERNATIVE 2: ENHANCED CONDITIONS AND A HISTORIC TRAILS PARTNERSHIP (THE PROPOSAL)
<p>D. Efforts would continue to be made to implement certain provisions of the servicewide memorandum of understanding among the National Park Service, the Bureau of Land Management, and the Forest Service. However overall implementation would be largely inconsistent and based on personal and professional contacts within the agencies.</p> <p>E. Cooperative management agreements, memorandums of understanding, and interagency agreements would be developed, as needed, by the Long Distance Trails Office.</p> <p>F. Current efforts to increase public awareness of historic trails would continue.</p> <p>G. Official trail marking would continue to be provided by the National Park Service; however, various generations of historic signs and blazings that have been erected by other groups would remain. The need to develop a sign plan to outline how trails are to be marked and which parties are responsible for sign installation and maintenance would not be addressed.</p> <p>H. The administration of the trails would rely on the efforts of volunteers. However, there would be no effort to coordinate individuals or parties volunteering. The Volunteers in the Parks and in the Forests Act of 1969 and the Volunteer Protection Act of 1997 would provide volunteers, including cooperating landowners, protection from liability claims.</p> <p>I. Not applicable.</p>	<p>D. A servicewide memorandum of understanding among the National Park Service, the Bureau of Land Management, and the Forest Service would be implemented to accomplish the following:</p> <ol style="list-style-type: none"> (1) Develop appropriate organizational structures to facilitate interagency cooperation. (2) Develop staff assignments to the administrative office responsible for overall coordination of a national historic trail. (3) Cooperatively coordinate contacts with external constituents. (4) Promote efficient coordination of public and private funding to support trail activities. (5) Coordinate agency budget submissions for trail activities. (6) Facilitate federal coordination of national historic trails by agreeing to the transfer of funds, personnel, and services. (7) Establish interagency positions or an electronic communication network in trails office(s) to coordinate planning, administration, and management. (8) Identify agency personnel who work with national historic trails as part of their regular duties <p>E. Same as alternative 1.</p> <p>F. Efforts to increase public awareness of the historic trails would include the development of a national historic trails Web site, increased trail promotion, and heritage tourism.</p> <p>G. Trail marking — The National Park Service and its trail partners would cooperate to complete a sign plan. This plan would enable the historic trails partnership to reduce the amount of existing sign clutter and would ensure that new signs were placed in appropriate locations. The plan would also guide the National Park Service and its partners to use consistent materials and designs.</p> <p>H. Federal partners would develop a coordinated program to increase the efficiency of volunteer activities. As in alternative 1, the Volunteers in the Parks and in the Forests Act of 1969 and the Volunteer Protection Act of 1997 would continue to provide volunteers protection from liability claims.</p> <p>I. Technical task forces or technical review teams would be convened to assist in the solution of special trail-related issues.</p>

Table 11: Comparison of Alternatives (continued)

ALTERNATIVE 1: CONTINUATION OF CURRENT CONDITIONS	ALTERNATIVE 2: ENHANCED CONDITIONS AND A HISTORIC TRAILS PARTNERSHIP (THE PROPOSAL)
<p>H. Not applicable.</p> <p>Resource Protection</p> <p>A. No formal protection plan would be completed under this alternative, but the following crucial functions would be carried out by the National Park Service and its existing partners as much as possible:</p> <ol style="list-style-type: none"> (1) High-potential sites and segments would be identified. (2) No formal resource inventory program would be developed. The information generated during planning would be incorporated into the GIS database. (3) Trail mapping, including sites and segments, would continue and would be expanded to incorporate trail routes not in the database. (4) No carrying capacity would be assessed. (5) Historic resource studies would be developed for the Oregon and California National Historic Trails. (6) The resource protection tool kit would be used. (7) Management corridors for high-potential segments of the Oregon Trail would remain as established. <p>B. Existing site certification procedures would continue to be used as a means to include nonfederal high-potential sites and segments as part of an authorized national historic trail.</p> <p>C. Challenge cost-share program would continue.</p> <p>D. Current resource monitoring techniques, including the Long Distance Trails Office's assistance in monitoring commemorative events, would continue.</p>	<p>H. A national historic trails owners forum would be established to enhance the appreciation and protection of all national historic trails.</p> <p>Resource Protection</p> <p>A. To comply with the National Trails System Act, the Long Distance Trails Office would coordinate with its partners to create an overarching protection plan. The following components of the protection plan would build on the crucial resource protection functions currently taking place:</p> <ol style="list-style-type: none"> (1) The Long Distance Trails Office would be a gathering point for new submissions to the list of high-potential sites and segments and would cooperate with others to update lists. (2) The resource inventory program would be automated, linking sites and segments to digitized maps. The inventory would include information on resource condition, landscapes, as well as references to historical documentation. (3) The Long Distance Trails Office would have full GIS capabilities and would become the central depository for all existing GIS trail mapping data. All additional routes identified in the "Recommendation" section would be mapped. (4) Carrying capacity — Indexes to establish potential vulnerability of resources and their present condition would be developed; the application of these indexes would allow for systematic monitoring of resource conditions. (5) The Long Distance Trails Office would have the lead in coordinating research projects, once research needs were established. Historic resource studies for the Oregon and California Trails would be undertaken. (6) The tool kit would not change under this alternative. (7) Management corridors of varying widths for high-potential segments would be established in conjunction with all affected entities. <p>B. A stronger effort would be made to encourage nonfederal landowners to submit sites and segments for site certification.</p> <p>C. Same as alternative 1</p> <p>D. In addition to current resource monitoring techniques, when potential threats were identified, the Long Distance Trails Office would be informed and would subsequently contact appropriate constituents and managers to prevent or mitigate negative activities or uses.</p>

Table 11: Comparison of Alternatives (continued)

ALTERNATIVE 1: CONTINUATION OF CURRENT CONDITIONS	ALTERNATIVE 2: ENHANCED CONDITIONS AND A HISTORIC TRAILS PARTNERSHIP (THE PROPOSAL)
<p>Interpretation / Visitor Experience and Use</p> <p>B. Interpretation would continue to be developed by federal, state, and local entities, including trail associations.</p> <ul style="list-style-type: none"> (1) Interpretive themes and subthemes have been developed to provide a framework and guidance for interpreting the trails in an integrated and systematic way. (2) Interpretive media and outreach activities would continue to include wayside exhibits, publications, and contact with schools. (3) Existing interpretive programs and facilities would continue to be relied on. <p>C. Visitor Experience and Use</p> <ul style="list-style-type: none"> (1) Recreational activities currently taking place throughout the trails corridor remain the same. (2) The development of an auto-tour route would continue. 	<p>B. As in alternative 1, interpretation would continue to be developed by federal, state, and local entities, including trail associations.</p> <ul style="list-style-type: none"> (1) Interpretive themes and subthemes — Same as alternative 1. (2) Interpretive media and outreach activities — The Long Distance Trails Office would complete an inventory of existing wayside exhibits and interpretive markers; new interpretive projects would be encouraged to follow the design guidelines identified in appendix M; gradual efforts would be made to standardize the content and the display of interpretive information. The Long Distance Trails Office, with the assistance of the partners, would compile an annual report of trail outreach activities. Appropriate audiovisual productions would be used to orient visitors; the Long Distance Trails Office, in cooperation with the partners, would develop trailwide audiovisual presentations; in the future site-specific audiovisual programs might be produced. An interpretive plan would be prepared by the Long Distance Trails Office, in conjunction with the partners, to prescribe appropriate techniques to communicate specific interpretive themes and to ensure that programs at related sites complemented each other. (3) The Long Distance Trails Office would work with new facility proponents to ensure the accuracy and consistency of the message to be presented to the public. Certification would be offered to facility programs that interpreted the four trails. Technical assistance for interpretive planning would be provided to non-NPS, state, and local interpretive and educational facilities. <p>C. Visitor Experience and Use</p> <ul style="list-style-type: none"> (1) Same as alternative 1, but emphasis would be placed on providing a more meaningful visitor experience through integrated development and programming. (2) Same as alternative 1.

Table 12: Comparison of Impacts

<p>ALTERNATIVE 1: CONTINUATION OF CURRENT CONDITIONS</p>	<p>ALTERNATIVE 2: ENHANCED CONDITIONS AND A HISTORIC TRAILS PARTNERSHIP (THE PROPOSAL)</p>
<p>Impacts on Trail Resources</p> <p>Air Quality — The potential development of interpretive waysides and signs would result in minor and short-term fugitive dust emissions.</p> <p>Commemorative activities would continue to cause a temporary, but localized, increase in pollutants from vehicle emissions, as well as an increase in dust along dirt roads. The extent of the negative impacts would depend on the soil type, soil moisture, and the number and type of vehicles.</p> <p>Soils — Current levels of visitor use would continue to result in erosion and soil compaction throughout the trail corridors, particularly at and along popular sites and segments. Adverse impacts on soils from the inappropriate use of all-terrain vehicles or the excessive use of support vehicles in commemorative activities could continue at current levels; however, the extent of the impacts would be determined by the soil types occurring at specific areas and therefore is not assessed for any particular trail.</p> <p>Potential adverse impacts on unstable soils from future construction activities would be minimized because these areas would continue to be avoided as much as possible.</p> <p>Water Quality — Current use levels would continue to result in minor sedimentation in watersheds along the trail corridors. This sedimentation would continue to result in minor adverse impacts on water quality. As in other natural resource areas, the variability in conditions along the trail would determine the extent of the impact.</p>	<p>Air Quality — Same as alternative 1 except more visitation would be expected under alternative 2 because of increased trail promotion. This might result in more commemorative activities along the trail corridors. These activities would continue to result in an increase in temporary and localized pollutants from vehicle emissions, as well as an increase in dust along dirt roads. However, a periodic resource monitoring program and improved coordination among the partners could limit adverse effects on air quality by carefully selecting sites and regulating the speed of heavy vehicles.</p> <p>Soils — Impacts would be the same as under alternative 1 except probable increased levels of visitor use, including foot traffic and the use of all-terrain vehicles, could increase erosion and soil compaction throughout the trails corridor, especially if this use was concentrated in areas that are already popular. Adverse impacts on soils from inappropriate use of all-terrain vehicles or the excessive use of support vehicles in commemorative activities could also increase.</p> <p>Mitigation such as increased visitor education and interpretation could deter some inappropriate trail uses and could disperse visitors so that impacts on soils were not as concentrated.</p> <p>The assessment of resource vulnerability and regular monitoring of especially fragile resources could limit adverse effects on soils. Managers would be able to identify those areas where soil damage was more likely to occur and could limit or mitigate negative impacts in these areas.</p> <p>Water Quality — While visitor use could potentially increase, adverse impacts on water quality from sedimentation would continue to be minor. The assessment of resource vulnerability and regular monitoring of especially fragile resources would limit adverse effects on watersheds and drainages. Managers would be able to identify any watersheds or drainages where damage was likely to occur and limit or mitigate negative impacts from visitor use in these areas. As in alternative 1, the variability in conditions of watersheds and drainages along the trails would determine the extent of any impacts.</p>

Table 12: Comparison of Impacts (continued)

ALTERNATIVE 1: CONTINUATION OF CURRENT CONDITIONS	ALTERNATIVE 2: ENHANCED CONDITIONS AND A HISTORIC TRAILS PARTNERSHIP (THE PROPOSAL)
<p>Vegetation — Current use levels would continue to result in vegetation trampling both off and on the trails. The presence of people along the trails would continue the potential for the introduction of exotic species along the trail corridors.</p> <p>The development of wayside exhibits and trail marking would have minor adverse impacts on vegetation, consisting of the removal or trampling of vegetation in the immediate area. However, the areas affected would be very limited because these activities would take place mostly on previously disturbed areas near roads.</p> <p>Wildlife — The potential construction of waysides and the placement of signs throughout the trail corridors would continue to take place near roads and in previously disturbed areas in most cases, limiting any adverse effects on animals and their habitat. There would be short-term disturbance to wildlife during construction, with most wildlife species expected to reoccupy nearby habitat when the construction activities were completed.</p> <p>The effects of visitation on wildlife would depend on the species and would have to be considered on a case-by-case basis. Potential impacts on wildlife would be minimized by avoiding important habitat altogether or employing various measures to limit or restrict human activity.</p> <p>Cultural Landscapes — Interpretive wayside exhibits and trail markings would continue to intrude on the trail landscapes, but sensitive siting and design would minimize any negative impacts.</p> <p>Current levels of visitation would continue to affect the visual character of resources through the trampling of vegetation, soil compaction, and the development of widespread human trails. These activities would continue to affect the visual and aesthetic value of these resources.</p> <p>The lack of a comprehensive approach for resource inventory and monitoring means that resources would continue to be at risk due to overuse, inappropriate activities, or inadvertent destruction.</p> <p>Site certification would continue to have beneficial impacts on resources because the program encourages landowners to meet preservation standards in order to maintain certified status.</p>	<p>Vegetation — Same as alternative 1 except that possibly higher levels of visitor use could increase the amount of vegetation trampling both off and on the trails. More people along the trails would also heighten the potential of introducing new nonnative species within the trail corridors.</p> <p>The assessment of resource vulnerability and regular monitoring of especially fragile resources would limit adverse effects on vegetation. Managers would be able to identify areas where damage to vegetation was likely to occur and limit or mitigate negative impacts from visitor use in these areas.</p> <p>Wildlife — Same as alternative 1.</p> <p>Cultural Landscapes — Same as alternative 1 except higher levels of visitation could increase adverse impacts on the visual character of trail resources. Visitor-related impacts such as the trampling of vegetation, soil compaction, and the development of widespread human trails would probably increase. However, the systematic inventory and monitoring of resources recommended in this alternative could prevent some of this resource deterioration.</p> <p>The identification of management corridors and the protection of resources within them would have beneficial impacts on the cultural landscapes associated with the trails because their historical character would be protected from inappropriate visual intrusions.</p> <p>Enhanced trail education programs and the resulting increase in public awareness would make visitors more sensitive to the significance and fragile nature of trail resources, in particular cultural landscapes. This in turn might have beneficial impacts on cultural landscapes as visitors would be more likely to appreciate and respect resources.</p>

Table 12: Comparison of Impacts (continued)

ALTERNATIVE 1: CONTINUATION OF CURRENT CONDITIONS	ALTERNATIVE 2: ENHANCED CONDITIONS AND A HISTORIC TRAILS PARTNERSHIP (THE PROPOSAL)
<p>Archeological Resources — Future compliance documents would continue to require special precautions to prevent or minimize impacts on unknown archeological resources during construction.</p> <p>Current levels of visitor use would continue to cause erosion, some diagnostic artifacts and features would not be preserved for future analysis. Vandalism, illegal collecting, and inadvertent damage would continue to reduce the number and quality of sites, which over time would have a negative impact on the archeological database.</p> <p>Site certification would continue to have beneficial impacts on archeological resources as the program encourages landowners to meet preservation standards in order to maintain certified status.</p> <p>Historic Resources — Federal recognition would probably continue to provide some protection for historic sites not on the National Register of Historic Places might take place. Eligible resources have not yet been documented or evaluated.</p> <p>The use of historic sites and route segments would continue to contribute to the deterioration of historic trail resources.</p> <p>Site certification would continue to benefit privately owned historic sites because it would afford these sites a degree of protection.</p> <p>Ethnographic Resources — No systematic inventory exists regarding ethnographic resources along the trail routes. Ethnographic surveys and studies would be initiated by the cooperators when appropriate. The cooperators would continue to maintain an open dialogue with all groups to ensure respect and protection of these resources.</p>	<p>Archeological Resources — Same as alternative 1 except increased visitation, expected under alternative 2, could increase erosion. As a result, there could be an increase in the amount of diagnostic artifacts and features unable to be preserved for future analysis. The amount of vandalism, illegal collecting, and inadvertent damage could increase and could further reduce the number and quality of archeological sites.</p> <p>The systematic inventory and monitoring of resources recommended in this alternative could prevent some impacts on archeological resources, as could increasing the level of interpretation and education about the trails. Both proposals could benefit archeological resources by either preventing resource impacts by restricting use, or by fostering a greater respect for trail resources.</p> <p>Historic Resources — Same as alternative 1 except increased use, which would be expected under this alternative, could further contribute to the deterioration of historic trail resources.</p> <p>Increasing public awareness of national historic trails could result in a greater appreciation of resources, which in turn could lead to more successful protection efforts and benefits for resources.</p> <p>The systematic inventory and monitoring of resources recommended in this alternative could prevent some impacts on historic resources, as could increasing the level of interpretation and education about the trails. Both proposals could benefit historic resources by either preventing resource impacts by restricting use, or by fostering a greater respect for trail resources.</p> <p>Ethnographic Resources — Same as alternative 1.</p>

Table 12: Comparison of Impacts (continued)

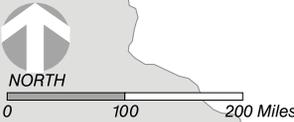
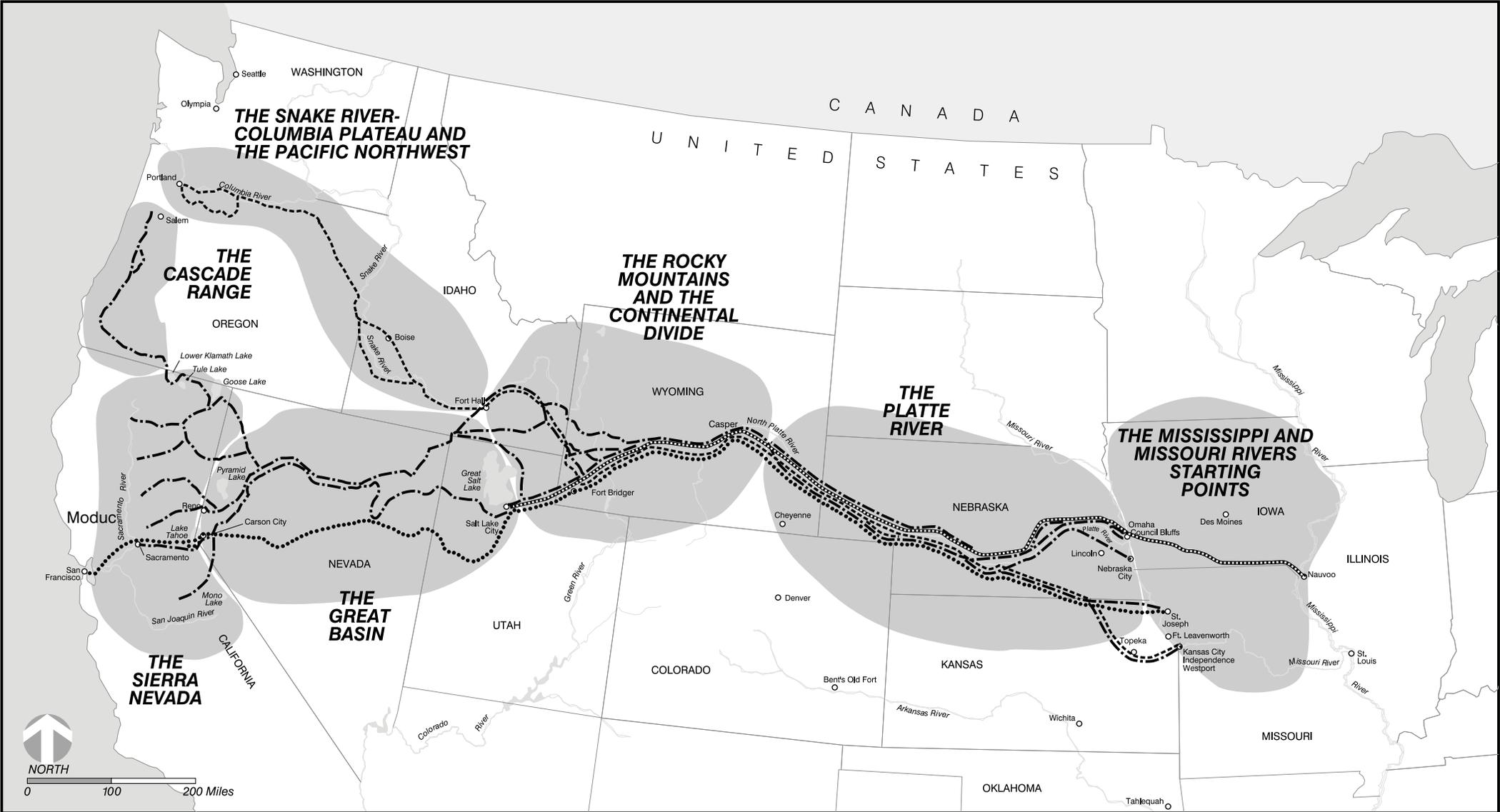
ALTERNATIVE 1: CONTINUATION OF CURRENT CONDITIONS	ALTERNATIVE 2: ENHANCED CONDITIONS AND A HISTORIC TRAILS PARTNERSHIP (THE PROPOSAL)
<p>Impacts on Interpretation, Visitor Experience, and Use</p> <p>There would continue to be few opportunities to incorporate new interpretations and to enhance the existing interpretive messages presented to the public. Consequently, if research needs were not identified and projects not implemented, there would continue to be an unfulfilled potential to greatly improve the known history of the trail corridors.</p> <p>The role that American Indians played in the history of the emigrant trails is currently only minimally interpreted, and themes related to Indians would not be expanded in most cases. The lack of Indian-related interpretation would not adversely affect the visitor experience; however, the potential for greatly expanding and improving on this important theme would be unfulfilled.</p> <p>Continuing efforts to provide consistent and accurate trail markings would benefit visitors seeking to follow trail routes. In some cases visitors would continue to be inconvenienced by a lack of both regulatory and educational / interpretive information. Also, visitors could become confused by conflicting, existing information.</p> <p>The potential for adverse impacts on the visitor experience would continue because the condition of trail resources would go largely unmonitored, and visitor use would continue to be unregulated in most cases. Unmonitored use, especially if it increased, could adversely affect the visitor experience because fragile and or character-defining trail resources could be damaged or destroyed. These affected resources often comprise the visual scene that visitors come to experience.</p> <p>Site certification would continue to benefit the visitor experience by opening access to privately owned sites that might not be currently open to the public. The certification of programs and facilities would continue to enhance the visitor experience by ensuring the accuracy, consistency, and quality of the interpretive message presented to the public.</p>	<p>The inventory and monitoring program would benefit visitors by increasing their awareness, sensitivity, and understanding of trail resources. This would also benefit the visitor experience because preserved resources would contribute to the improvement of interpretive programs.</p> <p>Identifying research needs and coordinating research projects would enhance the trails' interpretive programs and would lead to greater appreciation of the significance of the trails and a much improved visitor experience.</p> <p>The development of a coordinated interpretive wayside system would be of great benefit to visitors. It would provide for consistent interpretation that met high standards. Visitors would benefit because they would be able to place the information presented at each wayside within the context of the trail. There would also be visual benefits as the exhibits would eventually be standardized as described in this plan in appendix M.</p> <p>Improved consultation with culturally affiliated groups would ensure that interpretive media and programs presented a culturally sensitive and accurate picture of the role of American Indians in the establishment of the overland trails and the westward migrations of the mid-19th century.</p> <p>The use of traveling exhibits would benefit visitors because information would be presented without causing long-term negative visual impacts on trail resources. Traveling exhibits would also allow for the use of timely interpretive materials that could be tied to special commemorative events or seasonal events and that could benefit visitors attending the events.</p> <p>The annual report on outreach activities would result in beneficial effects because new ideas could be shared and incorporated into programs at a low cost. This is a good example of the benefits of cooperation among partners.</p> <p>The development of appropriate audiovisual presentations would greatly enhance the visitor experience. By updating the presentations to include up-to-date research and information, by making presentations relevant to various age groups, and by developing presentations of adequate length, the visitor experience would be greatly enhanced.</p> <p>An interpretive plan would have beneficial impacts on the visitor experience and would be of great assistance to trail managers and many of the partners.</p> <p>Site certification would continue to benefit the visitor experience by opening access to privately owned sites. The certification of programs and facilities would enhance the visitor experience by ensuring the accuracy, consistency, and quality of the interpretive message.</p>

Table 12: Comparison of Impacts (continued)

ALTERNATIVE 1: CONTINUATION OF CURRENT CONDITIONS	ALTERNATIVE 2: ENHANCED CONDITIONS AND A HISTORIC TRAILS PARTNERSHIP (THE PROPOSAL)
<p>Impacts on Socioeconomic Conditions</p> <p>Economy — The overall economic effect would be minimal and limited to the counties crossed by the trails. Visitation might increase, but the expenditures associated with heritage tourism and other activities compatible with the protection of resources would probably not have significant economic impacts on the affected counties because the increase in visitation is expected to be limited.</p> <p>Landownership and Use — Land use and development could threaten trail resources. Left unchecked, heritage tourism and economic development could have a substantial effect. Zoning and easement patterns could be used to protect resources; however, inappropriate application of these and similar concepts could serve to foster inappropriate development. All groups should be encouraged to share plans and goals on a regular basis through regular meetings to ensure communication that could lead to the protection of the trails and their resources.</p> <p>Access and Transportation — Implementation of additional auto-tour routes would potentially increase traffic volumes on the designated state and federal highways over the long term. However, potential increases in traffic volumes on these highway segments would likely be very small, and in general dispersed along many miles of highway. Consequently, there would be negligible adverse effects on traffic flows and levels of service along these routes.</p> <p>Localized adverse impacts on traffic flows would occur at sites of periodic commemorative activities. These effects might include increased traffic volumes and corresponding increases in travel times. However, impacts would likely be confined to areas in the immediate vicinity of the site and would be temporary, occurring only during relatively infrequent commemorative activities. No long-term adverse impacts on transportation would occur at these sites under either alternative.</p>	<p>Economy — Increasing promotional activities and cooperative efforts associated with this alternative would be expected to generate increases in visitor use and associated spending. In general these economic impacts would be localized and might not result in long-term economic benefits. However, some communities in the trails corridor could benefit from increased spending associated with trail promotion and heritage tourism.</p> <p>Economic benefits from trail marking and developing of wayside exhibits would be short-term, accrue to relatively few individuals and firms, and probably not have any lasting positive effects on local economies.</p> <p>Landownership and Use — Same as alternative 1</p> <p>Access and Transportation — Same as alternative 1.</p>

Affected Environment





OREGON NATIONAL HISTORIC TRAIL
 CALIFORNIA NATIONAL HISTORIC TRAIL
 MORMON PIONEER NATIONAL HISTORIC TRAIL
 PONY EXPRESS NATIONAL HISTORIC TRAIL



OREGON • CALIFORNIA • MORMON PIONEER • PONY EXPRESS
NATIONAL HISTORIC TRAILS

United States Department of the Interior • National Park Service
 485 • 481 • 657 • 658 • 20023A • DSC • 5/99

Introduction

The Oregon, California, Mormon Pioneer, and Pony Express National Historic Trails extend from the Mississippi and Missouri Rivers to the Pacific Coast, a distance of about 2,000 miles. While the trails overlap for significant distances, they also follow separate routes for hundreds of miles. The California Trail includes numerous connecting trails and alternate routes that add thousands of miles to its cumulative length. Overall, the routes of the four trails total almost 11,000 miles and traverse the Central Lowlands, the Rocky Mountains, the Great Basin, the Cascades, and the Sierra Nevada.

This “Affected Environment” section describes the trails from the Missouri River to the Pacific Coast for the Pony Express and California National Historic Trails. Descriptions of the Oregon and Mormon Pioneer National Historic Trails are available in their respective Comprehensive Management and Use Plans and have not been reprinted in this document.

This section also addresses trail resources. This plan regards the natural and cultural resources associated with the trails holistically. It stresses the importance of managing them as trail resources having both natural and cultural components.

For the purpose of this plan, seven distinct environmental settings have been identified along the route of the trails. The main physical features of these settings become the character-defining features that are usually the basis of cultural landscape studies. The changes in these character-defining features, in this case the variations in physiography, vegetation, climate, and soils, allow a preliminary classification of trail resources, as they exist today, and a determination of their degree of integrity — that is, the extent to which the landscapes have

evolved since the emigrants moved across the land. The landscape settings identified for this plan are as follows: the Mississippi and Missouri Rivers starting points, the Platte River, the Rocky Mountains and the Continental Divide, the Snake River–Columbia Plateau, the Cascades, the Great Basin, and the Sierra Nevada (see map 17). Because the majority of the routes emigrants used followed major river systems, these environmental settings center around the major water bodies that became essential to the survival of most emigrant parties. Brief descriptions of physiography, soils, climate, water resources, vegetation, and fauna are included for each landscape setting. These descriptions are based on the Description of the Ecoregions of the United States (Forest Service 1985).

This section also includes a brief summary of ethnographic information pertinent to the large areas crossed by the trails. The extent and complexity of this topic requires a more systematic assessment of ethnographic resources along these trails. This will become an ongoing task for the Long Distance Trails Office.

A description of landownership and use is presented for the California and Pony Express Trails. This document recommends updating information on landownership and use for all four trails in the future.

Socioeconomic conditions vary from region to region and from state to state. Because of the length of the four trails, their administration and management can have potentially important social implications for the affected counties. Socioeconomic information that focuses primarily on population and income has been compiled on a statewide basis. In addition, population and per capita income have been identified for the counties crossed by these trails.

General Geographic Description of the Routes — California and Pony Express National Historic Trails

The California and the Pony Express Trails are characterized by numerous routes, cutoffs, and branches that evolved chronologically in an effort to save time and to reach different destinations. The Pony Express Trail primarily followed existing routes between St. Joseph, Missouri, and Sacramento, California in an effort to minimize the amount of time it took to deliver the mail.

Emigrants departed for their long journeys from major points on the Mississippi River, such as Nauvoo, Illinois, and on the Missouri River, such as Independence, Westport, Ft. Leavenworth, and St. Joseph, Missouri; Council Bluffs, Iowa; and Omaha and Nebraska City, Nebraska. Emigrants proceeding west from Council Bluffs followed the Platte River from its confluence with the Missouri. Travelers from Independence, Westport, Ft. Leavenworth, and St. Joseph moved overland, generally following the ridgelines to minimize gains and losses of elevation in this landscape of rolling hills. These emigrants forded a number of rivers and streams as they moved northwest across Kansas and Nebraska. These drainages included the Wakarusa, Kansas, Wolf, Nemaha, and Big and Little Blue Rivers. Emigrants on these routes eventually joined the Platte River, east of Fort Kearny, in what is now central Nebraska.

After their convergence at Fort Kearny, the trails followed the Platte River into east-central Wyoming. There, the trail corridor was confined within the floodplain of the Platte River. Western emigrants used the Platte Valley as their lifeline as the environment became increasingly arid. West of the confluence of the North and South Platte Rivers, the trails turned north and west along the North Platte toward the Rocky Mountains. For most of this stretch, overland emigrants encountered gentle grades, but also faced some significant elevations at California Hill, Scotts Bluff, and Robidoux Pass. Pony Express riders followed the Oregon/California alternate route (established in 1859), which ran southwest from Ogallala along the South Platte River and Lodgepole Creek. Then they rejoined the main route near Courthouse and Jail Rocks.

From the confluence of the North Platte and the Sweetwater Rivers, west of Casper, Wyoming, emigrants followed the Sweetwater River south and then west to the Continental Divide, skirting the Great Basin. At this point the Continental Divide is at a relatively low elevation — an imperceptible rise in this stark landscape of sagebrush and alkaline flats. After crossing the divide, emigrants tried alternate routes and cutoffs as they moved southwest toward the Green River.

After leaving Parting of the Ways in southwestern Wyoming, some California-bound travelers moved south and west toward Fort Bridger and through the Wasatch Range. Others moved north and west through southern Idaho to the Snake River at Fort Hall. From there the emigrants traveled southwest to rejoin the southern route of the California Trail at City of Rocks near the borders of Idaho, Utah, and Nevada. None of the Pony Express Trail passes through this area.

A small portion of the California and the Pony Express Trails overlapped in east-central Nevada, but they crossed the Great Basin on divergent courses. The California Trail traversed northern Nevada, following the Humboldt River to the deserts near the base of the northern and central Sierra Nevada. The Hastings Cutoff of the California Trail moved south of the Great Salt Lake to join the main trail on the Humboldt. The Pony Express route swung far south of the Great Salt Lake and the Humboldt River Valley to cross central Nevada.

Just below the big bend of the Humboldt River the Applegate Trail crossed the northwestern corner of Nevada, traversing imposing areas such as Black Rock Desert and High Rock Canyon. It touched the northeastern corner of California and moved west and north into Oregon to terminate south of present-day Portland.

After leaving the deserts of western Nevada, travelers on the California and Pony Express Trails confronted the Sierra Nevada, the last and most daunting barrier on their overland trek. The passes in this virtually unbroken chain are few, steep, and difficult to traverse. In the Sierra Nevada, the California Trail split into numerous alternate routes as emigrants, racing against time, sought to find an easier pathway before winter storms made the mountains impassable. Pony Express riders defied enormous odds in forcing their way through winter storms to demonstrate that the Sierra Nevada could be used as an all-weather route for transportation and communication.

The trails splintered over the Sierra Nevada to reach final destinations such as Auburn, Sonora, Murphy, Volcano, Placerville, Georgetown, Johnson's Ranch, Sacramento, and San Francisco.

Trail Resources

Trail resources are numerous and complex; they have extended periods of use and multiple periods of significance; and they present challenges for protection and preservation. They fall under a variety of jurisdictions, including federal, state, local, and private. These resources provide opportunities for exploration and discovery, as well as research and interpretation. In some cases they contain important scientific information that can be collected and analyzed to address fundamental questions of importance in understanding the trails.

Trail resources combine natural and cultural elements, including routes, segments, and more than 60 different kinds of historic sites, from river crossings and springs to graves. Trail resources also include the terrain that directly affected the emigrants' experience. In designing strategies for the protection and use of trail resources, it is necessary to include both a natural and a cultural perspective.

Trail ruts and swales, graves, and inscriptions are the resources that tend to receive most of the attention from trail aficionados because they provide one of the most important pieces of visual evidence of the existence of the trails. Although the original trail users valued the trails themselves, it was the broader landscape that presented the greatest challenge and received most of their attention. As their diaries indicate, environmental factors defined the emigrants' courses of travel and the nature of their experiences. Emigrants were concerned with weather, the availability of water, food, fuel, and game. Emigrants also used natural landmarks, such as Chimney and Split Rocks, to guide their travel.

Regional Landscapes

This section briefly describes the natural resources contained in each of the seven major regional landscapes identified for the trail corridors. Differences in vegetation and physiography provide the main bases for distinguishing the different regional landscapes (or biogeographic regions) used in this plan. The presence of major water bodies, which became essential to the survival of most emigrant parties, is another important consideration in separating the various settings. The prevalent climate, soils, and wildlife are also briefly described for each regional landscape.

County-specific information pertaining to threatened or endangered species has been compiled as a technical appendix and is currently available at the Denver Service Center. Upon completion of the plan the information will also be available through the Long Distance Trails Office.

Information about prime and unique farmlands, wetlands, and floodplains is so extensive that it is impracticable to collect and include in

this document. This is because the alternative actions are programmatic, and specific locations have not been identified for signs and waysides. Site-specific information may be obtained through the following agencies:

- Prime and unique farmlands — Natural Resources Conservation Service
- Wetlands — U.S. Fish and Wildlife Service, Bureau of Reclamation, Natural Resources Conservation Service, and U.S. Army Corps of Engineers
- Floodplains — Federal Emergency Management Agency

MISSISSIPPI AND MISSOURI RIVERS STARTING POINTS

Physiography and Soils

The landscape is comprised mostly of gently rolling plains, but steep bluffs define a number of valleys. Some areas are nearly flat, while others have high rounded hills. Elevations in this region range from 300 to 2,000 feet. Mollisols dominate this region.

Climate

Weather can be extreme, with hot summers and frequently cold winters. Average annual temperatures range from 40°F to 60°F. The average annual precipitation ranges from 20 to 40 inches.

Water Resources and Floodplains

This region is marked by well-defined drainage systems, with the Mississippi and Missouri Rivers as the major river systems. Other important rivers associated with the trails network are the Wakarusa, Wolf, Kansas, Nemaha, and Big and Little Blue Rivers. Numerous reservoirs have been constructed along many of these streams, and large aquifers underlie significant portions of this region.

Vegetation

Vegetation is characterized by intermingled prairie, groves, and strips of deciduous trees. In the west where trail routes converge in the Platte Valley, local soil conditions and slope exposures combine to create a mix of forest and prairie. Trees are found on north-facing slopes and near streams. The thin soils on the limestone hills support little

tree growth, unlike the eastern part, where trees often cover the highest hills.

Moderately tall bunch grasses are the predominant vegetation on the prairies. Bluestem prairie is the most prevalent grassland and is dominated by big bluestem, little bluestem, switchgrass, and Indian grass, along with many species of wildflowers and legumes. In some areas deciduous forest is encroaching on the prairies. Little original vegetation remains because of extensive cultivation.

Upland forests are dominated by oak and hickory. Forests in the floodplains and on well-watered hillsides are richer and more diverse, consisting of eastern cottonwood, black willow, and American elm. Tallgrass species include little bluestem and needle-and-thread grass. Shorter dominants include blue grama, hairy grama, and buffalo grass. Other species found in the mixed-grass steppe are green needlegrass, sand dropseed, slender wheatgrass, galleta, and purple three-awn.

Wildlife

Common animals in this region include mule deer, white-tailed deer, raccoon, opossum, coyote, jackrabbit, cottontail, badger, gray fox, and various rodent species. Large mammal species are more commonly found in forested areas. Aquatic animals include river otter, beaver, mink, and various species of waterfowl. Birds of the riverine forests include belted kingfisher, bank swallow, spotted sandpiper, and green-backed heron. Upland species include horned lark, western meadowlark, sharp-tailed grouse, greater prairie chicken, bobwhite, quail, ring-necked pheasant, and mourning dove.

PLATTE RIVER

Physiography and Soils

This is an area characterized by rolling plains and tablelands of moderate relief. The ecosystem of the Platte River floodplain consists of river channel islands and sandbars, lowland riverine forests, and lowland and upland native prairie.

This region is predominated by Mollisols with smaller areas of Entisols, such as the sandhills of Nebraska. The dominant soil formation process is calcification; salinization is dominant on poorly drained sites. Soils contain a large excess of precipitated calcium carbonate and are rich in bases.

Climate

Summers are warm to hot, and winters are cold and dry with an average annual temperature of 45°F. Precipitation ranges from 20 inches in the eastern part of the region to around 10 inches in the more westerly reaches.

Water Resources and Floodplains

The Platte River and its tributaries are the major aboveground water sources for the region, which is also underlain by large aquifers. The Platte's major tributaries include the Elkhorn and the Loup Rivers. The Ogallala is the major aquifer. Lake McConaughy, a large reservoir on the North Platte above its confluence with the South Platte River, serves as an important recreational and storage facility for the water of the middle Platte Valley.

Vegetation

The upland native prairie of the Platte Valley features short grasses, usually bunched and sparsely distributed. Commonly found grasses include blue grama, buffalo grass, western wheatgrass, and needlegrass. Lowland native prairie resembles the upland prairie with the addition of shrubs such as snowberry and wild rose. Riverine forest species include American elm, slippery black locust, cottonwood, and osage orange. Trees on the islands and sandbars include salt cedar and sandbar willow.

Wildlife

The Platte Valley is home to a rich and diverse animal and bird population. Common mammals include mule deer, white-tailed deer, pronghorn, opossum, coyote, red fox, gray fox, striped skunk, badger, and numerous species of shrews and rodents. Aquatic mammals include beaver, mink, and muskrat. The U.S. Fish and Wildlife Service has determined that the area supports about 142 species of breeding birds. Among these are great blue heron, American bittern, Canada goose, blue-winged teal, golden eagle, bald eagle, sharp-tailed grouse, and sandhill crane.

The Platte River is home to more than 60 species of fish, many of which have been introduced. Among the more common species are plains minnow, bigmouth shiner, fathead minnow, river carpsucker, carp, channel catfish, white bass, white crappie, black crappie, and walleye.

ROCKY MOUNTAINS / CONTINENTAL DIVIDE

Physiography and Soils

In this area landforms are predominantly arid plains interspersed with isolated hills and low mountains. Elevations range between 6,000 and 8,000 feet on the plains with the hills and mountains rising between 1,000 and 2,000 feet above the plains. The Sweetwater River floodplain defines much of the trails corridor in this landscape setting.

In the Wyoming basin soils are alkaline Aridisols. Subsoils contain a layer enriched with lime and/or gypsum, which may develop into a caliche hardpan. In the Rocky Mountains soil orders occur in zones corresponding to vegetation, ranging from Mollisols and Alfisols in the montane zone to Aridisols in the foothill zone. In addition, because of steep slopes and recent glaciation, there are areas of Inceptisols.

Climate

Climate is semiarid and cool with average annual temperatures ranging between 40°F and 52°F. Winters are cold, and summers are short and hot. Average annual precipitation ranges from 5 to 14 inches and is evenly distributed throughout the year.

Water Resources and Floodplains

Water resources in this arid region are limited. The major streams are the Sweetwater and Green Rivers. The trail corridor follows the Sweetwater floodplain for most of its 175-mile length through the Wyoming basin. As the only sizable perennial stream between the Platte and the Green Rivers, the Sweetwater served as an essential lifeline for westbound emigrants. There are some scattered freshwater springs in the region, and beaver activity has helped create wetland environments in some areas.

Vegetation

This region is characterized by patches of shrublands. The dominant species in this region is the Wyoming big sagebrush. Other common species are the black sagebrush, gardner saltbrush, greasewood, western wheatgrass, junegrass, prickly pear cactus, and rabbitbrush. Trees and large shrubs are rare, even in the Sweetwater floodplain. Common plant species include alkali sacaton, fringed sagewort, silver sagebrush, and rubber rabbitbrush.

Wildlife

Despite its arid character, this area supports a variety of animals. The most common large mammal is the pronghorn, although mule deer may be found in the more sheltered areas of the floodplain and in gulches. Herds of mule deer and elk occasionally will descend into the basin during unusually harsh winters. Other species include coyote, red fox, swift fox, badger, bobcat, and several species of burrowing rodents. The black-footed ferret, an endangered species, is also found in the area.

This area is an important breeding and resting ground for migrating waterfowl. Common species include mallard, pintail, green-winged teal, gadwall, and Canada goose. Sage grouse is the most common upland bird species. Numerous raptors inhabit the area, including Swainson's hawk, bald and golden eagles, the ferruginous hawk, red-tailed hawk, prairie falcon, great horned owl, and burrowing owl.

Common reptiles include sagebrush lizard, horned lizard, and prairie rattlesnake.

SNAKE RIVER–COLUMBIA PLATEAU / PACIFIC NORTHWEST

Physiography and Soils

The various trail corridors move into Idaho north of Bear Lake and then pass through parts of five small Idaho mountain ranges — the Portneuf, Bannock, Sublette, and Cotterell Ranges and the Deep Creek Mountains.

Elevations range between 5,000 and 8,000 feet. Monumental rock outcroppings, such as City of Rocks, characterize parts of this landscape setting.

Along the Columbia–Snake River Plateau soils are similar to those in the Wyoming Basin. This area also has extensive alluvial deposits in the floodplains of streams and in the fans at the foot of the mountains. Dry lake beds are numerous, and there are extensive eolian deposits, including both dune sand and loess. Aridisols dominate all basin and lowland areas; Mollisols are found at higher elevations.

Climate

Average annual temperatures range between 45°F and 50°F. Precipitation ranges between 10 and 20 inches annually. Summers are warm and dry, with most precipitation falling in the winter months.

Water Resources and Floodplains

This region's surface water resources include Bear Lake and several streams and rivers, such as the Snake River, Bear River, and Raft River.

Vegetation

Lower elevations are arid grasslands dominated by big sagebrush, rabbitbrush, and crested wheatgrass. Higher elevations feature piñon/juniper woodlands, mixed scrub slopes dominated by big sagebrush, mountain snowberry, bitterbrush, and some conifer/aspens woodlands. Common species in riparian areas include aspen, willow, box elder, chokecherry, sedge, and bluegrasses.

Wildlife

This region supports a large and diverse animal population. Common large mammals include elk, mule deer, black bear, bighorn sheep, mountain lion, bobcat, and porcupine. Several species of burrowing and tree-dwelling rodents are found here. City of Rocks is home to an unusually high number of bat species, including Townsend's big-eared bat, desert pallid bat, big brown bat, small-footed myotis, and silver-haired bat. Aquatic mammals include beaver, river otter, and muskrat.

CASCADE RANGE

Physiography and Soils

Emigrants generally followed the north-south depression between the Cascades and the Coastal Range. Mountains of the Coastal Range rise 5,000 feet above sea level. The interior Cascade Range, which dominated the emigrant experience, has mountains between 8,000 and 9,000 feet.

Crossing major rivers, such as the Klamath, the Rogue, the North and South Umpqua, and the Willamette, challenged travelers in this extremely rugged terrain.

Andisols are extensive where underlain by volcanic ash. Most Inceptisols are found west of the Cascades. Dry soils predominate in the rain shadow east of the mountains.

Climate

The climate is generally mild throughout the year. Annual temperatures average 48°F to 55°F. Moderate rainfall reaches its maximum in the winter; in the summer precipitation is quite scarce. Average annual precipitation ranges from 15 to 60 inches, but in much of the area, the range is from 30 to 45 inches. The rain shadow created by the Coastal Range is responsible for the drier climate. Fog partially compensates for the summer drought.

Water Resources and Floodplains

Major rivers, going from east to west, include the Klamath, the Rogue, and the North and South Umpqua. These rivers characterize this region and carry the abundant precipitation of the Cascade Range to the Pacific. The Willamette River is another major waterway, but unlike the other rivers in the area, it turns north until its waters meet the Columbia River at Portland. Poorly drained sites with swamp or bog communities are abundant in this region.

Other rivers in the area running through Lane, Benton, and Polk Counties, such as the Long Tom, Mary's River, both branches of the Luckiamute and the Rickreall, were all crucial to the emigrants as they neared their final destination.

Vegetation

The principal trees are western red cedar, western hemlock, and Douglas-fir. In the interior valleys, the coniferous forest is less dense than along the coast and often contains deciduous trees, such as big-leaf maple, Oregon ash, and black cottonwood. There are prairies that support open stands of oaks or are broken by groves of Douglas-fir and other trees. Principal indicator species are Oregon white oak and Pacific madrone.

Wildlife

The mule deer is the most common large mammal. Others include elk, mountain lion, and bobcat. Small mammals include mice, Douglas squirrels, martens, Townsend chipmunks, red tree voles, and bushtail wood rats. The western gray squirrel lives in oak trees, and the bushytail wood rat builds nests on shrub-covered stream margins and at forest edges. Isolated thickets are inhabited by brush rabbit and gray fox.

AFFECTED ENVIRONMENT

Ruffed grouse inhabit the same scattered thickets. Canada goose winters exclusively in the Willamette Valley. The periodically abundant acorn crop attracts flocks of band-tailed pigeons, acorn woodpeckers, and mountain quail.

The dry terrain is ideal for reptiles, including the northern Pacific rattlesnake, the only poisonous snake in the Pacific Northwest.

GREAT BASIN

Physiography and Soils

The topography of the Great Basin is extremely varied. Elevations range from 5,000 feet to over 13,000 feet. Much of the region is made up of separate interior basins, some of which are dry lake beds.

Aridisols dominate all basins and lowland areas; forest soils are found at higher elevations. Narrow bands of Entisols lie in stream floodplains and rocky landscapes. Salt flats and playas without soils are extensive in the lower parts of basins with interior drainage.

Climate

Climatic conditions vary significantly. Summers in the semidesert and desert areas are hot and dry, while winters are generally cool with periods of near or below-freezing temperatures. Average annual temperatures range from 40°F to 55°F. Annual precipitation may be as low as 5 to 8 inches.

In Nevada and Utah, summers are dry; winters are long and often cold with average annual temperatures as low as 38°F. Average precipitation may reach 25 to 35 inches in the higher elevations, most of it falling as snow.

Water Resources and Floodplains

There are a few perennial streams in the lower elevations of the Great Basin. The Humboldt, Truckee, Walker, and Carson Rivers are the only sizable permanent streams, and even the Humboldt eventually disappears in the Nevada desert. Permanent and intermittent streams are more common in the higher elevations of the mountain province, and there are some small subalpine and alpine lakes in the mountains. Some valleys are underlain by substantial aquifers that produce ground-surface springs. Riparian and wetland communities are extremely rare throughout this landscape setting, but are essential to the health of the ecosystem.

Vegetation

Sagebrush, including Wyoming big sagebrush and black sagebrush, dominate the lower elevations. Other common plants include antelope bitterbrush, shadscale, rubber rabbitbrush, horsebrush, and winterfat on the salt desert, and alkali-tolerant greasewood on the alkali flats.

At higher elevations common plants include piñon pine and juniper, mountain serviceberry and snowberry, ponderosa pine, aspen, Douglas-fir, and Engelmann spruce. In the Humboldt River valley, common plants include the bluebunch wheatgrass, Indian ricegrass, winterfat, greasewood, needle-and-thread grass, horsebrush, and Great Basin wildrye.

Wildlife

Large mammals include mule deer, pronghorn, mountain lion, badger, and spotted skunk. Other mammals include pocket gopher, kangaroo rat, and other rodents. Beaver and raccoon are found in riparian areas. Reptile species include fence lizard, gopher snake, and prairie rattlesnake.

Upland bird species include sage grouse, chukar partridge, and California quail. A variety of raptors inhabit the Great Basin, including golden eagle, bald eagle, ferruginous hawk, Swainson's hawk, and red-tailed hawk.

The Humboldt River contains a variety of warm-water fish species, including channel and bullhead catfish, blue gill, yellow perch, white crappie, largemouth bass, smallmouth bass, and white bass.

SIERRA NEVADA

Physiography and Soils

From the Great Basin, the east slopes of the Sierra Nevada rise abruptly from elevations around 4,000 feet to over 14,000 feet.

Ultisols are extensive on mountain slopes where the air is humid; dry Alfisols predominate at lower elevations. Entisols occupy the narrow floodplains and alluvial fans of the valleys.

Climate

Temperatures and precipitation vary widely in the Sierra Nevada. The lower east slopes of the mountains, which are in the rain shadow,

receive as little as 10 inches of rain or less annually. The west slopes receive about 10 to 15 inches. At higher elevations precipitation may reach 70 inches, most of which falls as snow. Average annual temperatures also vary greatly from 52°F on the lower slopes to only 35°F at higher elevations.

Water Resources and Floodplains

There are many lakes in the Sierra Nevada. Most of these lakes were formed by morainal dams or water trapped in glacial cirques. Several large rivers, including the Sacramento, Feather, Yuba, American, and San Joaquin, drain the well-watered western slopes. The drier eastern slopes have fewer substantial streams. The Owen, Carson, Truckee, Susan, Mono, and Walker Rivers drain the eastern Sierra Nevada.

Vegetation

Vegetation zones in the Sierra Nevada are exceptionally well-delineated. The lower slopes and foothills, from about 1,500 to 4,000 feet, are covered by coniferous and shrub associations. On higher slopes, digger pine and blue oak dominate, forming typical open or woodland stands. Close-growing evergreen shrub or chaparral, dominated by buckbrush or manzanita, cover most of the low hills. Several species of oak also grow at this elevation.

In the central Sierra Nevada, which range in elevation from between 4,000 and 7,000 feet, common tree species include ponderosa pine, Jeffrey pine, Douglas-fir, sugar pine, white fir, red fir, and incense cedar. Giant sequoias are found in only a few groves on the western slopes. Jeffrey pine replaces ponderosa pine in the Sierra Nevada rain shadow on the eastern slopes. At lower elevations pine forests are replaced by sagebrush/piñon forest.

The Sierra Nevada's subalpine zones begin at 6,500 to 7,000 feet and range to around 9,500 feet. Mountain hemlock, California red fir, lodgepole pine, western white pine, and whitebark pine predominate.

The alpine zone covers the treeless areas above timberline.

Wildlife

Common large mammals in the Sierra Nevada include mule deer, mountain lion, coyote, and black bear. Smaller mammals include golden-mantled squirrel, bushytail wood rat, flying squirrel, red fox, fisher, yellow-haired porcupine, long-eared chipmunk, and Trowbridge's shrew.

Common birds are mountain quail, Cassin's finch, Hammond's flycatcher, Lincoln's sparrow, Audubon's warbler, pine siskin, William's sapsucker, and mountain chickadee. Raptors include western screech owl, Cooper's hawk, northern pygmy owl, and great gray owl. Ospreys and eagles are returning to the Carson Pass area.

Cultural Landscapes

The emigrants' trail experience focused neither on a set of ruts nor on many isolated places along the way, but instead on the physical nature of the regions they traversed. Today, we define such areas as landscapes. A cultural landscape is defined as a geographic area, including both natural and cultural resources, and the wildlife and domestic animals associated with an historic event, activity, or person or exhibiting other cultural or aesthetic values.

The term landscape has tremendous variations in status, meaning, and usage. Ecologists often use the term ecoregion or ecosystem when they refer to landscapes. Among cultural geographers its definition has changed dramatically during the last half century and it continues to evolve. The cultural aspects of a landscape are as important as the natural features in defining management alternatives for different trail resources.

Although landscapes have not been considered essential trail resources, they should be a high priority for managers because they define the nature of the trail, both at the time of the original use and at the present. Landscapes are a very important trail resource, and they need as much attention and protection as ruts and swales. Legally they merit the same treatment and protection as other cultural resources.

There is a historic precedent for this approach. The 1990 El Malpais General Management Plan identified a natural/cultural management zone instead of the traditional separation into natural and cultural resources. The two types of resources were put into one category for the following reasons:

- Natural and cultural sites were closely related.
- Knowledge of the location and the extent of numerous natural and cultural resources was so incomplete that their separate identification was not practicable.
- Significant sites were of special importance to one or more American Indian groups.
- The entire natural landscape is part of the cultural landscape.

The same rationale applies to the present plan.

The major character-defining features of landscapes along historic trails depend on the local vegetation, hydrology, topography, and soil, and sometimes the human modification of these elements. Variations in vegetation, land forms, water sources, and soils also help identify boundaries among the various component landscapes of a linear resource. For example, High Rock Canyon — a segment of the California National Historic Trail's Applegate Trail in northwestern Nevada — is notably distinct from other segments of the Applegate Trail. Here, landforms and the physical remnants of the trail are keys to identifying the landscape boundaries. Nebraska and Kansas in general are part of another distinct landscape unit. The land is flat or gently rolling. Here, openness of the terrain is one of the most important character-defining features of the trail landscapes.

Pristine landscapes are still widespread along these trails. They provide an exceptional example of the interplay between the movement of people across the continent and the natural environment.

Archeological Resources

Thousands of archeological sites along the trails provide mute testimony to centuries of human occupation. The prehistoric sites lack written documentation and often date from a period prior to contact with Europeans and Americans. However, the physical remains found along the trails provide a glimpse of American Indian lives and of the earliest communication and trade routes.

These prehistoric routes were selected on the basis of environmental factors, such as physiography, vegetation, soils, and the presence of water. Indian trail routes led over mountain passes, from water source to water source, stopping at campsites with good fuel and water. Some of the sites that have been excavated, and many that have not, mark areas occupied and used by Indian tribes that the emigrants encountered. Many of the descendants of these historic tribes still occupy lands near the trails.

The emigrants followed many of these prehistoric routes as they moved westward, leaving behind both an impressive written legacy and a substantial legacy of inscriptions to mark their presence. Their campsites, wagon ruts, graves, and lost and discarded goods line the trail corridors, forming a linear outdoor record of their passage.

A number of constraints preclude the specific identification and discussion of trail-associated prehistoric and historic sites in this plan. Although the various state historic preservation offices have identification and documentation programs in place and federal agencies have the responsibility to survey and consider the effect of actions on archeological resources on public lands, the magnitude and the cost of

completing regional surveys on these trails have discouraged them. Very often information on sites is contained in the files of these agencies, but because this information is not always uniformly collected or reported, the task of synthesizing massive data becomes overwhelming.

Some federal and state offices have undertaken specific archeological research in response to proposed undertakings. Often these are excellent studies that provide valuable information; however, they usually focus on such relatively small pieces of land (compared to close to 11,000 miles of trail addressed in this document) that they need a broader and more adequate context.

Some individual federal and state offices have completed specific archeological research studies in response to proposed undertakings. Coordination and cooperation among all the agencies and offices would be necessary for a program to inventory and summarize research conducted to date and the identification of areas where additional studies are needed.

Furthermore, many of these resources are located on private land, and unless they are certified or an agreement is reached with their owner, they are not available for public viewing. Currently, information on such sites is limited.

Finally, because vandalism can easily destroy fragile archeological remains, anonymity regarding the names and locations of these archeological sites offers some measure of protection.

Historic Resources

The historic resources associated with the California and Pony Express National Historic Trails are extensive. This plan identifies 244 high-potential sites and 52 high-potential segments, totaling 2,077 miles. In addition, the update for the Mormon Pioneer National Historic Trail identifies 59 high-potential sites and 6 high-potential segments, totaling 307 miles. The update for the Oregon National Historic Trail identifies 131 high-potential sites and 15 high-potential segments, totaling 445 miles.

Ethnographic Resources

Ethnographic resources are any natural or cultural resources that are ascribed value by any ethnic group. Such resources may include various types of vegetation, wildlife, waterways and water resources, buildings, landscapes, places, archeological sites, and other natural or man-made features. Such ethnographic resources are assigned tradi-

tional legendary, religious, subsistence, or other significance in the cultural system of a contemporary group traditionally associated with it. Such groups include living peoples of many cultural backgrounds — American Indians, Eskimos, native Euro-Americans, farmers, ranchers, fishermen, and others.

This section, however, provides a very general background on American Indians, their use of the trails, and their interaction with the emigrants. It describes the historical and cultural complexity of American Indian tribes associated with the four trails and explores how their indigenous presence and interactions with white settlers profoundly shaped the experiences of emigrants on the trails.

The Oregon, California, Mormon Pioneer, and Pony Express trails cross various lands having important connections to a large number of American Indian tribes. Peoples such as the Lakota, Cheyenne, Arapaho, Ute, Pawnee, Blackfoot, Shoshone, Bannock, Salish, Mandan-Hidatsa, Gros Ventre, Sans Arcs, Kansa, Osage, Paiute, Washoe, Modoc, Klamath, and others had made the lands west of the Missouri River their home before the American Revolution.

Additionally, U.S. government policies of the 1830s forced eastern tribes, such as the Delaware, Wyandotte, Shawnee, Cherokee, Choctaw, Weas, Piankashaw, and others, onto reservations laid over the lands of the earlier inhabitants. Beginning in the 1840s American and European emigrants also moved into these lands, establishing communities and contributing to the rich ethnographic tapestry of the American West. By 1893, many Indians had been relegated to reservations managed by the Department of the Interior.

More than 100 American Indian groups were affected to a greater or lesser degree by overland migration. Map 12 presents a general overview of the major Indian tribes at the time of the overland migration.

CULTURAL SKETCHES AND CULTURE AREAS

Comprehensively addressing such a lengthy and complex topic as the ethnography of the territories traversed by the trails is beyond the scope of this document. For this reason some of the ethnographic information has been synthesized around the concept of cultural areas. This concept addresses relatively large geographical regions characterized by societies that exhibit significant similarities in their social structure and in the way they adapt to the environment. The four emigrant trails involved approximately five different cultural areas of native North America. In an easterly to westerly direction, these are the Plains, Great Basin, Plateau, Northwest Coast, and California cultural areas.

Brief cultural sketches are given for the Lakota, who occupied areas near the beginning of the trails corridor, and for the Paiute, who inhabited areas near the end. The Lakota were and still are part of the Plains culture area, and the Paiute were and still are part of the Great Basin culture area, even though the latter overlapped into what is now California.

Although similar beliefs and behaviors among cultural groups are implied within a culture area, it is interesting to note that there were probably more cultural similarities (rather than differences) between the Lakota and Paiute peoples despite occupying different cultural areas. Nevertheless, these and all other native groups were distinct peoples. Being able to accurately distinguish among the various Indian tribes encountered along the trail corridor would have been advantageous to the emigrants, but often distinctions were not made. Different culture areas and tribes meant behavioral differences that the emigrants often did not perceive — sometimes to the detriment of the emigrants and the Indians alike. Stereotypical perceptions of behavior resulted in potential friends being regarded as enemies and vice versa. Of course, sometimes friends and enemies existed within the same culture area, which added to the complexity of the situation.

THE LAKOTA (SIOUX)

Politically the Lakota people were comprised of the following seven traditional tribal divisions:

- Hunkpapa — campers at the horns (or heads or ends) of a camp circle
- Itazipcola — sans arcs (without bows)
- Mnikowoju (also spelled Minneconjou) — planters beside a stream
- Oglala — those who scatter or sow their own grain or seed
- Oohenunpa — two kettles or two boilings
- Sicangu — brules or burned thighs
- Sihasapa — blackfeet or those whose feet are darkened from burnt grass

The Lakota are known as the Teton or Western Sioux. The term Sioux is a French corruption of a Chippewa Indian word for the peoples living to the west of them, west of the edge of the Eastern Woodlands or Northeast culture area. The term collectively refers to three large tribes — from east to west, the Dakota, Nakota, and Lakota. All speak related Siouan languages.

According to archeologists and anthropologists, several centuries ago the Lakota lived in the Carolinas. In the early 18th century the Lakota

peoples migrated north and west, arriving in the central and southwestern parts of present-day South Dakota — their classic territory in American history and their home today. The Lakota themselves hold beliefs about their origins that indicate that their origin occurred in the Black Hills of South Dakota, from the earth according to the wishes of the Great Spirit.

Subsistence for the Lakota, after acquiring horses, was highly bison- or buffalo-dependent in remarkable and specialized ways utilizing all parts of the animal for food, clothing, tools, and other artifacts. Less than 15% of the traditional Lakota subsistence economy was based on the gathering of wild plants and small land animals; the rest involved hunting large animals, mostly buffalo. Occasional fishing occurred. There was no agriculture and no animal husbandry, except for taking care of their all-important horses. Horse care was an activity associated exclusively with men. Both sexes gathered, but women did appreciably more than men. To the extent that fishing took place, it was associated primarily with men.

At marriage, bride price was called for in the form of horses and/or goods; that is, a substantial consideration was expected to be transferred from the groom or his relatives to the bride's relatives. Small extended families were the norm as a domestic unit in seminomadic bands, with independent polygynous families sometimes forming comparable domestic units. Polygyny was accepted in which a man could have more than one wife if he could afford them. There was some tendency for a man to marry sisters, a practice known as sororal polygyny. There was a greater tendency to marry out of the group; that is, to find a wife from another band. Residence at marriage was generally with the husband's kin in an extended family situation, but sometimes the wife's relatives provided a spot in their band, again by way of an extended family. The house type was round in configuration, the famous portable tepee of buffalo hide.

The Lakota conventional community was a seminomadic band that by and large had a permanent reference location or home base to which it regularly returned. Prairie grass conditions, water sites, and the movements of the buffalo herds were major determinants of where and when the band moved from one encampment to another.

Kinship descent is bilateral, like Euro-American reckoning, in which relatives are defined through both one's mother and father. Sons had an expectation that they might follow their fathers as band headmen or other political leaders, but assumption of office was by consensus through recognition of merit, not any inherited status. This applied to the statuses of war leaders, buffalo-hunt leaders, and religious specialists, as well as the so-called peace chiefs, who constituted normal civic leadership when the band was not under attack or conducting a raid of its own.

THE PAIUTE PEOPLE

The Paiute were dispersed in kin-based groups with seasonal rounds tied to water sources and the harvesting cycles of mountain and valley. Seasons and altitude made a difference as to what was hunted and/or gathered and when. Some environmental or ecological adaptations were quite creative. For example, at a certain time each summer the larvae of caterpillars of the pandora moth were gathered to eat by the Owens Valley Paiute. The Paiute also practiced an aboriginal form of irrigation, whereby streams were diverted at certain times of the year to enhance long-term gathering. It was not large-scale agriculture, but it had elements of horticulture, and it was direct manipulation and management of an ecological niche of the environment based on indigenous knowledge.

Subsistence in general among the Paiute was heavily based on the gathering of wild plants and small land animals, often rabbits and other rodents. A significant but smaller percentage of their subsistence economy was based on hunting larger animals like deer and antelope. The gathering of pine nuts and, to a lesser extent, acorns was especially important. There was no reliance aboriginally on raising domesticated animals or the large-scale planting of field crops. Plots of wild

plants were cultivated through irrigation, however, as mentioned above. Fishing figured in where possible, but not nearly as much as hunting and gathering. A form of fishing was practiced in conjunction with Paiute irrigation. Fishing and hunting were men's activities; gathering was the women's pursuit.

At marriage a small or token bride price was required by means of a symbolic payment or transfer of goods to the family of the bride. Small extended families were the norm, with some activities centering at times on the nuclear family. Here, the father and mother, along with their dependent children, would temporarily act independently of other family members or family groups. Residence at marriage was sometimes with the wife's kin or in their immediate locality, but most often it was with the husband's kin. The basic house type was round in configuration and of brush construction that varied with the season. Rock shelters augmented by brush, poles, and logs also served as dwellings.

Paiute kinship descent is bilateral, like the Lakota and Euro-American rules of descent whereby relatives are determined equally through both one's mother and father. Also like the Lakota, there was a tendency to marry out of the group by finding a spouse from another

group. Unlike the Lakota, Great Basin sociopolitical groups or bands were largely autonomous, with essentially no reference to any larger or regional decision-making groups. However, the idea of home districts has been suggested in which aboriginal bands may have come together to meet on a regular cycle to discuss and seek consensus on regional economic, ecological, and political matters.

Sons might have followed their fathers as political leaders, but like the Lakota, assumption of office was by recognition of individual merit, not by any concept of foreordained status.

Religious specialists existed as helpers and healers of people through recognition of their spiritual powers. The down side of being known to be in touch with the supernatural was that some persons could be perceived as harboring evil and thus be accused of witchcraft.

Prescribed burning is often an overlooked part of traditional American Indian cultures. Controlled prescribed burning is the purposeful setting of brush and groundcover on fire to promote new plant and seed growth. Like the Lakota, various Paiute groups also engaged in this activity, which indicates that they had indigenous knowledge of the ecosystems and niches in which they lived.

Socioeconomic Conditions along the Trails

Landownership and Use

The authorized routes of the Oregon, California, Pony Express and Mormon Pioneer Trails cover over 11,000 miles and cross 12 states, 145 counties, and hundreds of communities, ranging from metropolitan areas to villages, farms, and ranches. The trails also pass through, or are adjacent to, federal lands under a variety of jurisdictions, including the Forest Service, the Bureau of Land Management, the National Park Service, the Bureau of Reclamation, the Fish and Wildlife Service, and the Department of Defense.

The information on landownership and use presented in tables 13 through 16 comes from the 1987 Feasibility Study and is provided as a general reference. Route data from the GIS mapping effort associated with this project show that much of the information available is incomplete. Similar data for the Oregon and Mormon Pioneer National Historic Trails from the 1981 plans is not provided in this document, because it also needs to be updated.

Table 13: Landownership and Use along the California National Historic Trail (in miles)

	Federal Lands			Indian	Nonfederal Lands		Total
	BLM	FS	Other		State	Private	
Missouri & Kansas	—	—	—	—	5	128	133
Nebraska	—	—	?	—	327	740	1,067
Wyoming	556	31	?	—	94	407	1,088
Idaho	58	35	?	65	82	217	457
Utah	111	4	—	—	124	110	349
Nevada	691	2	—	—	117	268	1,136
California	63	416	—	6	155	354	994
Oregon	55	—	—	—	194	112	361
Total	1,534	488	80*	71	1,158	2,336	5,665
Percent of Total	27.1%	8.6%	1.4%	1.3%	20.4%	41.2%	100%

**Includes Fish and Wildlife Service, Bureau of Reclamation, Department of Defense, and other miscellaneous federal lands*



CALIFORNIA NATIONAL HISTORIC TRAIL

Using data from the Feasibility Study, approximately 1,202 miles (28%) of the 5,665-mile network of routes are on federal lands. The Bureau of Land Management manages 1,534 miles (27%) of the trail system, which represents the majority of the federal lands. The Forest Service manages 488 miles (8.6%), primarily in California. Other federal agencies manage 80 miles, including portions now flooded by federal impoundment projects.

States and their political subdivisions administer 1,158 miles (20.4%) of the trail system. Most of this mileage is within rights-of-way of state- and county-owned roads and highways.

Private ownership totals 2,336 miles (41.2%). The routes also cross Indian reservations for 71 miles.

Table 13 summarizes landownership along the California Trail, including the alternate routes and cutoffs identified in the 1987 Feasibility Study.

Major land uses along the trail route include grazing, agriculture, forestry, and urban development. Table 14 categorizes use by state for the entire route. The most prominent use is rangeland in Wyoming, Idaho, Utah, and Nevada, whereas agriculture is the major land use along the route in Nebraska, Kansas, California, and Oregon. In California and Oregon the route also traverses extensive tracts of forest land. Urban areas comprise a relatively small proportion of the route and include Kansas City, St. Joseph, Omaha, Salt Lake City, Reno, Sacramento, and Eugene.



PONY EXPRESS NATIONAL HISTORIC TRAIL

For 698 miles (38%), the Pony Express National Historic Trail is in private ownership. The route crosses Indian lands for 12 miles (1%) in eastern Nevada. The remaining 1,145 miles (61.7%) are on land owned either by federal, state, or local governments (see table 15).

Of the 729 miles (39.3%) that are federally owned, the Bureau of Land Management manages 650 miles (35%). The Forest Service manages lands along 75 miles (4%), most of which are in California. Other miscellaneous federal agencies account for about 4 miles. States and their political subdivisions administer 416 miles (22%) of the

Table 14: Land Uses along the California National Historic Trail (in miles)

	Agriculture	Forest Land	Rangeland	Urban Development	Ungrazed (Desert Shrubland)
Missouri & Kansas	122	—	—	10	—
Nebraska	648	16	193	90	—
Wyoming	220	72	730	62	—
Idaho	148	62	210	34	—
Utah	103	25	107	65	46
Nevada	95	28	750	85	148
California	303	425	100	128	—
Oregon	123	135	40	64	—
Total	1,762	763	2,130	538	194

trail, the majority being owned where the trail lies within rights-of-way of state- and county-owned roads and highways.

Major land uses along the trail include rangeland, agriculture, forests, urban development, and desert (see table 16). Rangeland is the dominant use (49%) along the route, followed by agriculture (29%) and combinations of other land uses.

Population

The Oregon, California, Mormon Pioneer, and Pony Express National Historic Trails traverse 145 counties (see table 17 for a list of the counties for each trail). The trails cross some of the most rural, unpopulated areas of the United States, but they are also near some of the most urbanized areas in the United States, such as Kansas City, Omaha, Salt Lake City, and San Francisco. A total of 12,777,200

people were listed in the 1994 census as living in the counties crossed by the trails.

There is great variability among the states and the counties, and summary statistics do not always reflect local conditions. While the national population growth average was slightly under 1% per year, counties traversed by the trails in four states experienced population losses, from -1.2% per year in Colorado (Sedgwick County) to -0.7 in Illinois, -0.5% in Iowa, and -0.3% in Wyoming. The two counties in Missouri had a flat growth rate, and counties in some states experienced moderate growth rates (Nebraska 0.2%, and Oregon 0.8%). Counties in Kansas and Idaho were slightly above the national average, with 1.1% and 1.4% respectively. Utah, California, and Nevada underwent the most dramatic growth, with annual averages of 2.0%, 2.3%, and 3.5%, respectively (see table 18 for average population growth rates for the counties crossed by the trails).

Income

The combined income for people living in counties through which the trails pass has grown dramatically in the last 15 years. In 1980 it was close to \$75 billion. By 1994 it had reached \$190 billion, a growth of 10.2% per year — almost twice the national average of 5.5% per year.

There is great variability among the states and their counties, but in general growth in per capita income greatly exceeds the national average. All states crossed by the trails, with the exception of Wyoming, surpassed that growth rate (see table 19). As in the case of population figures, there is a great deal of variability, and summary statistics do not always provide a good assessment of overall conditions in certain states.

Socioeconomic Conditions within Affected States

MISSOURI

In 1980 Missouri had a population of 4,923,300. By 1994 it had grown 6.3% to 5,235,100 (16th in the nation). Trail segments cross only two of the 115 Missouri counties — Buchanan and Jackson (see table 17). In 1994 these two counties had a combined population of 717,700, almost no change since 1980 when they had 717,400 people (see table 18).

In 1994 the state's average per capita personal income was \$19,557 (the national average of was \$21,696). Growth in per capita personal income averaged 5.4% annually between 1980 and 1994, nearly the same as the national average, but the two counties crossed by the trail did substantially better with an average growth of 7.4% (see table 19).

In 1994 total personal income in Missouri exceeded \$102.4 billion and accounted for 1.9% of the nation's total personal income (17th in the nation).

Earnings increased from nearly \$41.0 billion in 1980 to about \$73.8 billion in 1994, representing an average annual growth rate of 6.1%. In 1994 the largest economic sectors in terms of earnings were services (25.6%), durable goods manufacturing (11.3%), state and local government (10.0%), and retail trade (9.9%).

Table 15: Landownership and Use along the Pony Express National Historic Trail (in miles)

	Federal Lands			Indian	Nonfederal Lands		Total
	BLM	FS	Other		State	Private	
Missouri & Kansas	—	—	—	—	5	127	132
Nebraska	—	—	?	—	131	313	444
Colorado	—	—	?	—	—	16	16
Wyoming	213	—	?	—	70	170	453
Utah	142	1	—	—	71	36	244
Nevada	305	18	—	12	58	16	409
California	—	56	—	—	81	20	157
Total	650	75	4*	12	416	698	1,855
Percent of Total	35%	4%	0%	1%	22%	38%	100%

*Includes Fish and Wildlife Service, Bureau of Reclamation, Department of Defense, and other miscellaneous federal lands

ILLINOIS

In 1980 Illinois had a population of 11,441,700; by 1994 it had grown 2.7% to 11,751,700 (6th in the nation). The Mormon Pioneer National Historic Trail begins in Hancock County. In 1994 Hancock County had a population of 21,400, a decline of 10.4% from 1980 (see table 18).

In 1994 the per capita income in the state was \$23,611 (10th in the nation) and above the national average. The state's total personal income was over \$277 billion (5th in the nation) and it accounted for almost 5% of the nation's total. It reflected an annual growth of close to 7% since 1980. Per capita income in Hancock County between 1980 and 1994 grew 7.9%, well above the national average of 5.5% (see table 19).

In 1994 the largest economic sectors in terms of earnings were services, durable goods, manufacturing, and state and local government.

IOWA

In 1980, 2,916,000 people lived in Iowa; by 1994 the state's population had declined by 3.2% to 2,821,300 (30th in the nation). During this 15-year time period, the country as a whole experienced a 13.4% growth in population. Portions of the Mormon Pioneer National Historic Trail are found in 11 of Iowa's 99 counties (see table 17). These 11 counties had a combined 1994 population of 211,400, which represents an average decline of -0.5% per year (see table 18).

In 1994 total personal income in Iowa exceeded \$51.6 billion and accounted for 1.0% of the nation's total personal income (30th in the nation).

Table 16: Land Uses along the Pony Express National Historic Trail (in miles)

	Agriculture	Forest Land	Rangeland	Urban Development	Ungrazed (Desert Shrubland)
Missouri & Kansas	122	—	—	10	—
Nebraska	314	8	88	34	—
Colorado	16	—	—	—	—
Wyoming	68	6	357	22	—
Utah	15	34	157	38	—
Nevada	—	8	357	24	20
California	—	77	10	70	—
Total	535	133	905	198	84

Earnings increased from \$20.3 billion in 1980 to \$35.7 billion in 1994, an average annual growth rate of 5.8%. In 1994 the largest economic sectors in terms of earnings were services (22.0%), state and local government (14.1%), durable goods manufacturing (13.5%), and retail trade (10.5%).

KANSAS

In 1980 Kansas had a population of 2,370,300. By 1994 it had grown by 7.0% to 2,535,100 (32nd in the nation). Trail segments are in 12 of the 105 Kansas counties (see table 17). In 1994, these counties had a combined population of 899,300 and experienced an average growth of 1.1% per year since 1980 (see table 18).

In 1994 Kansas had a per capita personal income of \$19,489 (22nd in the nation) and 90% of the national average. Between 1980 and 1994 growth in the state's per capita personal income averaged 5.0% annually, slightly below the national average. However, the 12 counties crossed by the trails experienced substantial growth (8.8%) in per capita personal income (see table 19).

In 1994 total personal income in Kansas exceeded \$50.3 billion and accounted for 0.9% of the nation's total personal income (31st in the nation).

Earnings by employed persons increased from approximately \$19.9 billion in 1980 to nearly \$35.2 billion in 1994, an average annual growth rate of 5.9%. In 1994 the largest economic sectors in terms of earnings were services (22.2%), state and local government (12.9%), durable goods manufacturing (11.1%), and retail trade (10.0%).

NEBRASKA

In 1980 Nebraska had a population of 1,573,100, growing by 1994 to 1,613,300, an increase of 2.6% (37th in the nation). Portions of the four trails cross 34 of Nebraska's 93 counties (see table 17). These 34 counties had a combined 1994 population of 936,900 and experienced an average growth of 0.2% per year since 1980 (see table 18).

Nebraska's 1994 per capita personal income was \$19,672, close to the national average. Growth in per capita personal income averaged

5.8% annually between 1980 and 1994. This rate was only slightly higher than the national average of 5.5%. The 34 Nebraska counties crossed by the trails experienced an increase of 9% in per capita personal income, the highest among all the states affected (see table 19).

Employment earnings increased from approximately \$12.5 billion in 1980 to more than \$23.3 billion in 1994, an average annual growth rate of 6.5%. In 1994 the largest economic sectors in terms of earnings were services (22.2%), state and local government (13.3%), retail trade (9.3%), and transportation and public utilities (8.6%).

COLORADO

In 1980 the population of Colorado was 2,909,700. By 1994 it had grown by 22.5% to 3,563,600 (26th in the nation). Most of this growth occurred in urban areas and along the front range of the Rocky Mountains. Only Sedgwick County, in the northeasternmost corner of the state, is crossed by the trails. This predominantly rural county had a 1994 population of 2,700, an 18% decline from 1980 (see table 18).

In 1994 the per capita personal income in Colorado was \$21,498 (16th in the nation), or 3% above the national average. In Colorado the annual growth in per capita personal income averaged 4.9% between 1980 and 1994. This growth rate was nearly 11% below the national average of 5.5% during the same time period. Sedgwick County, however, averaged a 6% per capita income growth per year during the same period (see table 19).

In 1994 total personal income in Colorado was nearly \$76.6 billion and accounted for 1.4% of the nation's total personal income (22nd in the nation).

Employment earnings increased from about \$31.5 billion in 1980 to more than \$57.7 billion in 1994, an average annual growth rate of 6.3%. In 1994 the largest economic sectors in terms of earnings were services (27.5%), state and local government (11.2%), retail trade (9.9%), and transportation and public utilities (8.5%).

WYOMING

In 1980 the population of Wyoming was 474,600. By 1994 it had declined by 1.0% to 469,700 and was the least populous state in the nation. Several trail segments pass through nine of Wyoming's 23 counties (see table 17). These nine counties had a combined 1994 population of 212,500, an average loss of 0.3% per year since 1980 (see table 18).

Wyoming's 1994 average per capita personal income was \$19,719 (24th in the nation), or 91% of the national average. Between 1980 and 1994 Wyoming's average per capita personal income grew 4.9% annually, below the national average of 5.5%. The nine counties crossed by the trails grew at the same rate as the rest of the state (see table 19) and had an average per capita income of \$18,404, substantially below the nation's average of \$21,696.

Wyoming's 1994 total personal income exceeded \$9.3 billion and accounted for only 0.2% of the nation's total personal income (50th in the nation).

Earnings by employed persons increased from approximately \$4.7 billion in 1980 to more than \$6.4 billion in 1994, an average annual growth rate of 3.2%. In 1994 the largest economic sectors in terms of earnings were services (17.1%), state and local government (17.0%), and mining (16.9%).

IDAHO

In 1980 the population of Idaho was 948,600; by 1994 it had grown to 1,100,400. Although the state's population growth was nearly 16.0% more than the national average, Idaho's 1994 population ranked only 42nd in the nation. Parts of several of the historic trails pass through 14 of the state's 44 counties (see table 17). These 14 counties had a combined population of 618,600 in 1994, over 54% of the state's population. They experienced an average growth of 1.4% per year since 1980 (see table 18).

The per capita personal income for Idaho in 1994 was \$17,512 (39th in the nation), or 81% of the national average. Growth in per capita

personal income averaged 5.7% (slightly higher than the national average) between 1980 and 1994. The counties crossed by the trails, however, experienced a healthy 6.9% in per capita personal income (see table 19); however, their average per capita income was \$16,062, substantially below the national average.

In 1994 total personal income in Idaho exceeded \$19.3 billion and accounted for only 0.4% of the nation's total personal income (43rd in the nation).

Earnings by employed persons increased from approximately \$7.0 billion in 1980 to nearly \$14.3 billion in 1994, an average annual growth rate of 7.3%. In 1994 the largest economic sectors in terms of earnings were services (20.4%), durable goods manufacturing (12.8%), state and local government (11.8%), and retail trade (10.6%).

UTAH

Utah experienced above-average population growth, increasing by 26.3% in 14 years — from 1,472,600 in 1980 to 1,908,000 in 1994 (34th in the nation). Segments of the historic trails are in 10 of Utah's 29 counties (see table 17). These 10 counties contained 1,435,700 persons in 1994 — three-quarters of the state's population. They grew an average of 2% per year since 1980 (see table 18).

Utah's per capita personal income in 1994 was \$16,136, with an average annual growth of 5.4% between 1980 and 1994. This rate was just slightly below the national average. In 1994 the counties crossed by the trails had an average per capita income of \$17,065

(more than \$4,000 dollars below the national average), but were growing at a healthy 7.6% per year.

In 1994 total personal income was nearly \$30.0 billion and accounted for 0.6% of the nation's total personal income (36th in the nation).

Employment earnings increased from about \$11.7 billion in 1980 to nearly \$23.3 billion in 1994, an average annual growth rate of 7.1%. In 1994 the largest economic sectors in terms of earnings were services (26.9%), state and local government (12.2%), and durable goods manufacturing (11.0%).

NEVADA

Nevada experienced the highest rate of population growth (70.6%) of any of the states affected by this plan. Nevada's population jumped from 809,900 in 1980 to 1,382,000 in 1994 (38th in the nation). Parts of several of the historic trails are found in 12 of Nevada's 17 counties (see table 17 for a list of these counties). In 1994 the combined population of these counties was 486,200, 35% of the state's total population. They had grown an average of 3.5% a year since 1980 (see table 18).

In 1994 Nevada's per capita personal income was, 110% of the national average (9th in the nation). Growth in per capita personal income averaged 5.7% annually between 1980 and 1994, slightly higher than the national average. The 12 counties crossed by the trails had an average per capita income of \$22,191. They grew at a rate of 6.8% per year, substantially higher than the national average (see table 19).

Table 17: Counties Crossed by the Four National Historic Trails

State County	Oregon National Historic Trail	California National Historic Trail	Mormon Pioneer National Historic Trail	Pony Express National Historic Trail
Missouri				
<i>Buchanan</i>		.		.
<i>Jackson</i>		.		
State Total:	0	2	0	1
Illinois				
<i>Hancock</i>			.	
State Total:	0	0	1	0
Iowa				
<i>Lee</i>			.	
<i>Van Buren</i>			.	
<i>Davis</i>			.	
<i>Appanoose</i>			.	
<i>Wayne</i>			.	
<i>Decatur</i>			.	
<i>Clarke</i>			.	
<i>Union</i>			.	
<i>Adair</i>			.	
<i>Cass</i>			.	
<i>Pottawattami</i>			.	
State Total:	0	0	11	0
Kansas				
<i>Johnson</i>	.	.		
<i>Wyandotte</i>		.		
<i>Atchison</i>		.		.
<i>Doniphan</i>		.		.
<i>Douglas</i>	.	.		
<i>Jefferson</i>		.		
<i>Brown</i>		.		.
<i>Shawnee</i>	.	.		
<i>Pottawatomie</i>	.	.		
<i>Nemaha</i>	.	.	.	
<i>Marshall</i>	.	.	.	.
<i>Washington</i>		.		.
State Total:	6	12	0	6
Nebraska				
<i>Otoe</i>		.		
<i>Cass</i>		.		
<i>Douglas</i>		.	.	
<i>Gage</i>	.	.		.
<i>Saunders</i>		.		
<i>Dodge</i>		.	.	
<i>Jefferson</i>	.	.		.
<i>Seward</i>		.		
<i>Butler</i>		.		
<i>Colfax</i>		.	.	
<i>Thayer</i>	.	.		.
<i>York</i>		.		
<i>Polk</i>		.		

State County	Oregon National Historic Trail	California National Historic Trail	Mormon Pioneer National Historic Trail	Pony Express National Historic Trail
Nebraska (cont.)				
<i>Platte</i>		.	.	
<i>Nuckolls</i>	.	.		.
<i>Clay</i>	.	.		.
<i>Hamilton</i>		.		
<i>Merrick</i>		.	.	
<i>Nance</i>		.	.	
<i>Adams</i>	.	.		.
<i>Hall</i>		.	.	
<i>Kearney</i>	.	.		.
<i>Buffalo</i>		.	.	
<i>Phelps</i>	.	.		.
<i>Gosper</i>	.	.		.
<i>Dawson</i>	.	.	.	.
<i>Lincoln</i>	.	.	.	.
<i>Keith</i>	.	.	.	.
<i>Deuel</i>	.	.		.
<i>Garden</i>	.	.	.	
<i>Cheyenne</i>		.		.
<i>Morrill</i>	.	.	.	.
<i>Scotts Bluff</i>	.	.	.	.
State Total:	16	34	14	16
Colorado				
<i>Sedgwick</i>		.		.
State Total:	0	1	0	1
Wyoming				
<i>Goshen</i>	.	.	.	.
<i>Platte</i>	.	.	.	.
<i>Converse</i>	.	.	.	.
<i>Natrona</i>	.	.	.	.
<i>Sweetwater</i>	.	.	.	.
<i>Fremont</i>	.	.	.	.
<i>Sublette</i>	.	.	.	.
<i>Lincoln</i>	.	.	.	.
<i>Uinta</i>	.	.	.	.
State Total:	9	9	8	8
Idaho				
<i>Bear Lake</i>	.	.		
<i>Caribou</i>	.	.		
<i>Franklin</i>		.		
<i>Bannock</i>	.	.		
<i>Bingham</i>	.	.		
<i>Oneida</i>		.		
<i>Power</i>	.	.		
<i>Cassia</i>	.	.		
<i>Twin Falls</i>	.			
<i>Gooding</i>	.			
<i>Elmore</i>	.			
<i>Owyhee</i>	.			
<i>Ada</i>	.			
<i>Canyon</i>	.			
State Total:	12	8	0	0

Table 17: Counties Crossed by the Four National Historic Trails (continued)

State County	Oregon National Historic Trail	California National Historic Trail	Mormon Pioneer National Historic Trail	Pony Express National Historic Trail
Oregon				
Malheur	.			
Baker	.			
Union	.			
Umatilla	.			
Morrow	.			
Gilliam	.			
Sherman	.			
Wasco	.			
Hood River	.			
Clackamas	.			
Multnomah	.			
Polk		.		
Klamath		.		
Jackson		.		
Douglas		.		
Lane		.		
Benton		.		
Josephine		.		
State Total:	11	7	0	0
Utah				
Summit		.	.	.
Morgan		.	.	.
Salt Lake		.	.	.
Utah				.
Weber		.		
Cache		.		
Juab				.
Tooele		.		.
Box Elder		.		
Davis		.		
State Total:	0	8	3	6
Nevada				
Elko		.		.
White Pine		.		.
Eureka		.		.
Carson City		.		.
Lander		.		.
Churchill		.		.
Pershing		.		.
Humboldt		.		.
Lyon		.		.
Douglas		.		.
Storey		.		.
Washoe		.		.
State Total:	0	12	0	7

State County	Oregon National Historic Trail	California National Historic Trail	Mormon Pioneer National Historic Trail	Pony Express National Historic Trail
California				
Mono		.		
Alpine		.		
El Dorado		.		.
Placer		.		.
Nevada		.		
Sierra		.		
Plumas		.		
Lassen		.		
Modoc		.		
Contra Costa				.
Tuolumne		.		
Calaveras		.		
Amador		.		
Yuba		.		
Butte		.		
Tehama		.		
Shasta		.		
Alameda				.
Sacramento		.		.
Solano				.
Yolo				.
State Total:				
Trails Total	54	110	37	52

Table 18: Average Population Growth Rates for Counties Crossed by National Historic Trails between 1980 and 1994

State	Average Growth Rate per Year (%)
Nevada (12)	3.5%
California (21)	2.3%
Utah (10)	2.0%
Idaho (12)	1.4%
Kansas (14)	1.1%
Oregon (18)	0.8%
Nebraska (34)	0.2%
Missouri (2)	0%
Wyoming (9)	-0.3%
Iowa (11)	-0.5%
Illinois (1)	-0.7%
Colorado (1)	-1.2%

Note: number of counties affected shown in parenthesis

In 1994 total personal income in Nevada exceeded \$31.6 billion and accounted for 0.6% of the nation's total personal income (40th in the nation). Earnings increased from approximately \$9.0 billion in 1980 to more than \$23.7 billion in 1994, an average annual growth rate of 10.2%. In 1994 the largest economic sectors in terms of earnings were services (45.9%), state and local government (10.3%), and retail trade (9.4%).

Table 19: Average Per Capita Income for Counties Crossed by the Trails

State (Counties)	1980 PCI	1994 PCI	Average Percentage in Growth per Year
Nebraska (34)	8,102	19,096	9.0
Kansas (12)	8,423	19,567	8.8
Iowa (11)	7,728	16,878	7.9
Illinois (1)	8,226	17,829	7.8
Utah (10)	7,957	17,066	7.6
Missouri (2)	9,592	20,210	7.4
Idaho (14)	7,889	16,062	6.9
Nevada (12)	10,990	22,192	6.8
California (21)	9,938	19,397	6.3
Colorado (1)	13,972	26,523	6.0
Oregon (18)	10,089	18,354	5.5
Wyoming (9)	9,544	16,563	4.9

Note: The total 1994 U.S. per capita income average was \$21,696.

OREGON

In 1980 the population of Oregon was 2,641,500. By 1994 it had grown to 3,086,200 (29th in the nation). Oregon's population growth was 16.8%. Segments of historic trails are in 18 of Oregon's 36 counties (see table 17). In 1994 these counties had 1,926,300 people, 60.2% of the state's population. They had experienced an average growth of 0.8% per year since 1980 (see table 18).

Oregon's per capita income in 1994 was \$20,471 (27th in the nation), slightly below the national average. The state's total personal income was over \$63 billion and it accounted for 1.1% of the nation's total. It reflected an average annual growth rate of 9.5% since 1980. In 1994 the largest economic sectors in terms of earnings were services, manufacturing, retail trade, and state and local government. The 18 counties crossed by the California and Oregon Trails account for over 51% of the total personal income in the state. They experienced an average growth in per capita personal income of 5.5%, the same as the national average (see table 19).

CALIFORNIA

In 1980 the population of California was 23,796,800, growing to 31,216,900 by 1994 (first in the nation). California's population growth rate was more than double the national average of 13.4% during this time period. The trail corridors pass through 21 of California's 58 counties (see table 17). The combined population of these 21 counties was 4,885,900, with Sacramento and Alameda Counties having more than 1 million residents each, for near 16% of the total population in the state. These counties experienced a healthy 2.3% average growth between 1980 and 1994 (see table 18).

In 1994 California's per capita personal income was \$21,895. Growth in per capita personal income averaged 4.5% annually between 1980 and 1994. This rate of growth was noticeably lower than the national average. The 21 counties crossed by the trails, however, had an average per capita income of \$19,397, substantially below the national average. However, their per capita personal income grew at a strong annual rate of 6.3% (see table 19).

In 1994 total personal income in California exceeded \$683.5 billion and accounted for 12.7% of the national total (1st in the nation). Between 1980 and 1994, total personal income in California grew at an annual rate of 6.7%, slightly higher than the national average of 6.5%.

Employment earnings increased from approximately \$259.3 billion in 1980 to nearly \$500.9 billion in 1994, an average annual growth rate of 6.8%. In 1994 the largest economic sectors in terms of earnings were services (31.2%), state and local government (11.8%), and durable goods manufacturing (10.4%).

Environmental Consequences



Introduction

The alternatives in this plan present general strategies for the long-term administration and protection of trail resources and related visitor use. The broad nature of the strategies comprising the alternatives requires that the analysis of environmental consequences also be general. 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.

This environmental impact statement serves as a foundation or basis for evaluating the impacts of future actions related to the plan's alternatives. Should specific development or management actions be proposed in the future as a result of this plan, appropriate NEPA and other regulatory compliance would be conducted before those actions were implemented.

This plan recognizes that the management of trail resources requires an understanding of the relationship between natural and cultural elements. Impacts to the natural environment also affect cultural resources, in particular the landscapes that provide the historic context for these trails.

Impact topics were selected to provide a focus for environmental discussion and to ensure that the comparison of alternatives focuses on the most relevant topics. The following impact topics are based on federal laws, orders, and regulations; NPS management policies; and the issues and concerns identified for this document: trail resources (including both natural and cultural resources), visitor experience and use, and the socioeconomic environment. As required by the National Environmental Policy Act, this section also addresses cumulative impacts, unavoidable and adverse effects, irreversible and irretrievable commitments of resources, and the relationship between short-term uses and the enhancement of long-term productivity.

This "Environmental Consequences" section is structured by impact topic, with the effects of alternative 1 and alternative 2 presented under each impact topic. This format allows the direct comparison of impacts for the two alternatives under each topic.

Given the programmatic nature of the alternatives and their similarities in some areas, this format helps highlight how potential impacts differ between the alternatives. Table 12 in the "Alternatives" section summarizes the impacts associated with the two alternatives.

Impacts have not been considered in detail for threatened and endangered species, prime and unique farmlands, wetlands, and floodplains. The data for these resources are so extensive that it is impracticable to collect, analyze, and include in this document. Furthermore, the actions are programmatic in nature, and specific sites have not been

identified for implementation. Regulatory compliance with federal laws, executive orders, and regulations would be conducted when specific sites were identified for development, such as trail signs and waysides (also see the "Compliance" section).

- **Threatened and Endangered Species** — In the event of any specific site development associated with this plan, the National Park Service and local managers would contact the Fish and Wildlife Service to initiate consultation under section 7 of the Endangered Species Act of 1973. Potential adverse effects on listed and proposed species would be eliminated or reduced in compliance with the provisions of the act. Mitigation of adverse impacts might include relocating or redesigning sites and monitoring the effects of trail use. If necessary, trail use could be limited seasonally, the number of users could be restricted, a reservation system could be established for very popular sites, or other strategies could be developed to limit negative impacts.
- **Prime and Unique Farmlands** — Federal agencies are required to assess the effects of their actions on soils classified by the Natural Resources Conservation Service as prime or unique. Soil types qualifying as prime or unique farmlands likely occur in various locations along the trails. However, potential impacts on prime and unique farmlands from the implementation of alternative 1 or 2 would be negligible. The installation of signs and waysides would affect very small areas at dispersed sites in many locations. In addition to the limited area affected, the majority of signs and waysides would be placed in previously disturbed, accessible areas.
- **Wetlands** — Consistent with Executive Order 11990, "Protection of Wetlands," as well as NPS wetland guidelines, wetlands would be avoided during site selection for the placement of signs and waysides to the extent possible. If specific site development or other initiatives associated with this plan that could be proposed in the future might adversely affect wetlands, the National Park Service would evaluate and implement appropriate mitigation measures to avoid or minimize potential effects, in consultation with appropriate federal and state agencies.
- **Floodplains** — The objective of Executive Order 11998, "Floodplain Management," is to avoid, to the extent possible, impacts associated with the occupancy and modification of floodplains. Although floodplains undoubtedly occur in the vicinity of various trail segments, the actions associated with the alternatives would have no discernible effect on local flood potential or hydrology. In addition, foot trails and associated trail signs and waysides are functions exempt from the 1993 NPS Floodplain Guideline.

Impacts on Trail Resources

Air Quality

ALTERNATIVE 1

This alternative would allow for the potential construction of interpretive waysides or signs. Any increase in fugitive dust emissions related to construction would be minor and short term.

Current levels of foot traffic have not had any measurable effect on air quality, and the slight increase in foot traffic expected under this alternative would probably not have any adverse effects on air quality.

Commemorative activities, particularly those associated with the use of many trailers and other large vehicles, would continue to cause a temporary, but localized, increase in pollutants from vehicle emissions, as well as an increase in dust along dirt roads. The extent of the negative impacts would depend on the soil type, soil moisture, and the number and type of vehicles.

ALTERNATIVE 2

As in alternative 1, any increase in fugitive dust emissions related to construction would be minor and short term.

The increased levels of foot traffic that are possible under this alternative would probably not have any adverse effects on air quality.

Increased trail promotion could result in more commemorative activities taking place in the trail corridors. These activities would continue to result in an increase in temporary and localized pollutants from vehicle emissions, as well as an increase in dust along dirt roads. However, the periodic resource monitoring program and improved coordination among the partners could limit adverse effects on air quality by carefully selecting sites and regulating the speed of heavy vehicles.

Soils

ALTERNATIVE 1

Current levels of visitor use would continue to result in erosion and soil compaction throughout the trail corridors, particularly at and along popular sites and segments. Adverse impacts on soils from inappropriate use of all-terrain vehicles or the excessive use of support vehicles during commemorative activities could continue at current levels; however, the extent of the impacts would be determined by the

soil types occurring at specific areas and therefore is not assessed for any particular trail.

Potential adverse impacts on unstable soils from future construction activities would be minimized because these areas would continue to be avoided as much as possible.

ALTERNATIVE 2

The increased levels of visitor use, including foot traffic and the use of all-terrain vehicles, could increase erosion and soil compaction throughout the trail corridors, especially if this use was concentrated in areas that are already popular. Adverse impacts on soils from inappropriate use of all-terrain vehicles or the excessive use of support vehicles during commemorative activities could also increase.

Mitigation such as increased visitor education and interpretation could deter some inappropriate trail uses and could disperse visitors so that impacts on soils would not be as concentrated in specific areas.

The assessment of resource vulnerability and regular monitoring of especially fragile resources could limit adverse effects on soils. Managers would be able to identify those areas where soil damage was more likely to occur and could limit or mitigate negative impacts in these areas.

As in alternative 1, potential adverse impacts on unstable soils from construction activities would be minimized because these areas would continue to be avoided as much as possible.

As in alternative 1, the extent of any soil impacts would be determined by the nature of the soils at specific areas and therefore is not assessed for any particular trail.

Water Quality

ALTERNATIVE 1

Current use levels would continue to result in minor sedimentation in watersheds along the trail corridors. This sedimentation would result in minor adverse impacts on water quality. As in other natural resource areas, the variability in conditions along the trail would determine the extent of the impact.

ALTERNATIVE 2

While visitor use could potentially increase, adverse impacts on water quality from sedimentation would continue to be minor. The assessment of resource vulnerability and the regular monitoring of especially fragile resources would limit adverse effects on watersheds and drainages. Managers would be able to identify any watersheds or drainages where damage was likely to occur and would limit or mitigate negative impacts from visitor use in these areas.

As in alternative 1, the variability in conditions of watersheds and drainages along the trails would determine the extent of any impacts.

Vegetation

ALTERNATIVE 1

Current use levels would continue to result in vegetation trampling both off and on the trails. The presence of people along the trails would continue the potential for the introduction of nonnative species along the trail corridors.

The development of wayside exhibits and trail marking would have minor adverse impacts on vegetation, consisting of the removal or trampling of vegetation in the immediate area. However, the areas affected would be very limited because these activities would take place mostly on previously disturbed areas near roads.

ALTERNATIVE 2

Increased levels of visitor use, which are possible under this alternative, would continue to result in vegetation trampling both off and on the trails. Increased numbers of people along the trails would heighten the potential of introducing new nonnative species within the trail corridors.

The assessment of resource vulnerability and the regular monitoring of especially fragile resources would limit adverse effects on vegetation. Managers would be able to identify areas where damage to vegetation was likely to occur and to limit or mitigate negative impacts from visitor use in these areas.

As in alternative 1, the development of wayside exhibits and trail marking would have minor adverse impacts on vegetation, consisting of the removal or trampling of vegetation in specific areas. However, the areas affected would be very limited because these activities would take place mostly on previously disturbed areas near roads.

Wildlife

Both alternatives would allow for the potential construction of waysides and signs throughout the trail corridors; however, the sites would continue to be near roads and in previously disturbed areas in most cases, limiting any adverse effects on animals and their habitat. There would be short-term disturbance to wildlife during construction, with most wildlife species expected to reoccupy nearby habitat after construction activities were completed.

The effects of current levels of visitation on wildlife would depend on the species and would have to be considered on a case-by-case basis. Potential impacts on wildlife would be minimized by avoiding important habitat altogether or by employing various measures to limit or restrict human activity.

Cultural Landscapes

ALTERNATIVE 1

Interpretive wayside exhibits and trail markings would continue to intrude on the trail landscapes, but sensitive siting and design would minimize any negative impacts.

Current levels of visitation would continue to affect the visual character of resources through the trampling of vegetation, soil compaction, and the development of widespread human trails. These activities would continue to affect the visual and aesthetic values of these resources.

The lack of a comprehensive approach for resource inventory and monitoring means that resources would continue to be at risk due to overuse, inappropriate activities, or inadvertent destruction.

Site certification would continue to have beneficial impacts on resources because the program would encourage landowners to meet preservation standards in order to maintain certified status.

ALTERNATIVE 2

As in alternative 1, interpretive wayside exhibits and trail markings would continue to intrude on the trail landscapes, but sensitive siting and design would minimize any negative impacts.

The increased levels of visitation expected under alternative 2 could increase adverse impacts on the visual character of trail resources. Visitor-related impacts such as the trampling of vegetation, soil compaction, and the development of widespread human trails would

probably increase. However, the systematic inventory and monitoring of resources recommended in this alternative could prevent some of this resource deterioration.

The identification of management units and the protection of resources within them would have beneficial impacts on the cultural landscapes associated with the trails because their historical character would be protected from inappropriate visual intrusions.

Enhanced trail education programs and the resulting increase in public awareness would make visitors more sensitive to the significance and fragile nature of trail resources, in particular cultural landscapes. This in turn might have beneficial impacts on cultural landscapes, as visitors would be more likely to appreciate and respect resources contained therein.

Archeological Resources

ALTERNATIVE 1

Future compliance documents would continue to address impacts on unidentified archeological resources along the trail corridors during construction.

Visitor use and natural erosion would continue to damage some diagnostic artifacts and trail features.

Vandalism, illegal collecting, and inadvertent damage would continue to reduce the number and quality of sites, which over time would have a negative impact on the archeological database.

Site certification would continue to have beneficial impacts on archeological resources, as the program would encourage landowners to meet preservation standards in order to maintain certified status.

ALTERNATIVE 2

As in alternative 1, future compliance documents would continue to require special actions to prevent or minimize impacts on unknown archeological resources during construction.

Increased visitation, which is expected under alternative 2, could increase erosion. As a result, there could be an increase in the amount of diagnostic artifacts and features unable to be preserved for future analysis. The amount of vandalism, illegal collecting, and inadvertent damage could increase, further reducing the number and quality of archeological sites. As described in alternative 1, a loss in the number

and quality of these sites would over time have a negative impact on the archeological database.

The systematic inventory and monitoring of resources recommended in this alternative could prevent some impacts on archeological resources, as could increasing the level of interpretation and education about the trails. Both proposals could benefit archeological resources by either preventing resource impacts as a result of restricting use or fostering a greater respect for trail resources.

As in alternative 1, site certification would continue to have beneficial impacts on archeological resources as the program would encourage landowners to meet preservation standards in order to maintain certified status.

Historic Resources

ALTERNATIVE 1

Federal recognition would probably continue to provide some protection of historic sites not on the National Register of Historic Places and might lead to register listing of eligible resources that have not yet been documented or evaluated.

Recreational use of historic sites and route segments might continue to contribute to the deterioration of trail resources.

Site certification would continue to benefit privately owned historic sites because it would afford these sites a degree of protection.

ALTERNATIVE 2

As in alternative 1, federal recognition would probably continue to provide some protection for historic sites not on the National Register of Historic Places and might lead to register listing of eligible resources that have not yet been documented or evaluated.

Increased use, which is expected under this alternative, could further contribute to the deterioration of historic trail resources.

Increasing public awareness of national historic trails could result in greater appreciation of resources, which in turn could lead to more successful protection efforts and benefits for resources.

As in alternative 1, site certification would continue to benefit privately owned historic sites because it would afford these sites a degree of protection.

The systematic inventory and monitoring of resources recommended in this alternative could prevent some impacts on historic resources, as could increasing the level of interpretation and education about the trails. Both proposals could benefit historic resources by either preventing resource impacts as a result of restricting use or fostering a greater respect for trail resources.

Ethnographic Resources

No systematic inventory exists regarding ethnographic resources along the trail routes. Under both alternatives, ethnographic surveys and studies would be initiated by the cooperators when appropriate. The cooperators would continue to maintain an open dialogue with all groups that ensures respect and protection for these resources.

Impacts on Interpretation, Visitor Experience, and Use

Alternative 1

A failure to identify research needs and to support research projects under alternative 1 would limit the ability of trail administrators and advocates to better understand the history of the trails, to incorporate new interpretations, and to enhance the existing interpretive messages presented to the public. Consequently, historical knowledge and interpretive potential for the trails would remain unfulfilled.

The role that American Indians played in the history of the emigrant trails is currently only minimally interpreted, and themes related to Indians would not be expanded in most cases. This does provide a balanced view of the history of the trails. The potential for greatly expanding and improving interpretation for this important theme would not be realized.

Continuing efforts to provide consistent and accurate trail markings would benefit visitors seeking to follow trail routes. In some cases, visitors would continue to be inconvenienced by a lack of both regulatory and educational / interpretive information. Also visitors could be confused by conflicting information.

The potential for adverse impacts on the visitor experience would continue because the condition of trail resources would go largely unmonitored, and visitor use would continue to be unregulated in most cases. Unmonitored use, especially if it increased, could adversely affect the visitor experience because fragile or character-defining trail resources could be damaged or destroyed. These affected resources often comprise the visual scene that visitors come to experience.

Site certification would continue to benefit the visitor experience by opening access to privately owned sites that might not be currently open to the public. The certification of programs and facilities would continue to enhance the visitor experience by ensuring the accuracy, consistency, and quality of interpretive messages presented to the public.

ALTERNATIVE 2

The inventory and monitoring program proposed under alternative 2 would benefit visitors by increasing their awareness, sensitivity, and understanding of trail resources. This program would also benefit the visitor experience because preserved resources would contribute to the improvement of the interpretive programs.

Identifying research needs and coordinating research projects would greatly enhance the trails' interpretive program and would lead to greater appreciation of the significance of the trails and a much-improved visitor experience.

The development of a coordinated interpretive wayside system would be of great benefit to visitors. It would provide for consistent interpretation that met high standards. Visitors would benefit because they would be able to place the information presented at each wayside within the context of the trail. There would also be visual benefits as the exhibits would eventually be standardized to meet the guidelines identified in this plan in appendix M.

Improved consultation with culturally affiliated groups would ensure that interpretive media and programs presented a culturally sensitive and accurate picture of the role of American Indians in the establishment of the overland trails and the westward migrations of the mid 19th century.

The use of traveling exhibits would benefit visitors because information would be presented without causing long-term negative visual impacts on trail resources. Traveling exhibits would also allow for the use of timely interpretive materials that could be tied to special commemorative or seasonal events, which could benefit those who attend.

A biennial report on outreach activities would result in beneficial effects because new ideas could be shared and incorporated into programs at a relatively low cost. This is a good example of the benefits of cooperation among partners.

The development of appropriate audiovisual presentations would greatly enhance the visitor experience. Updating the presentations to include up-to-date research and information, making presentations relevant to various age groups, and developing presentations of adequate length would greatly enhance the visitor experience.

An interpretive plan would be of great assistance to trail managers and many of the partners, potentially resulting in enhanced interpretation and visitor experience.

As described in alternative 1, site certification would continue to benefit the visitor experience by opening access to privately owned sites that might not be open to the public. The certification of programs and facilities would enhance the visitor experience by ensuring the accuracy, consistency, and quality of interpretive messages.

Impacts on Socioeconomic Conditions

Economy

ALTERNATIVE 1

The overall economic effect would be minimal and limited to the counties crossed by the trails.

The expenditures associated with heritage tourism and other activities compatible with the protection of resources would not likely have significant economic impacts on the affected counties because the increase in visitation is expected to be limited.

ALTERNATIVE 2

Increasing promotional activities and cooperative efforts associated with this alternative would be expected to generate increases in visitor use and associated spending. In general these economic impacts would be localized and might not result in long-term economic benefits. However, some communities along the trail corridors could benefit from increased spending associated with trail promotion and heritage tourism.

Economic benefits from trail marking and developing wayside exhibits would be short-term, accrue to relatively few individuals and firms, and probably not have any lasting positive effects on local economies.

Landownership and Use

Land use and development could threaten trail resources under both alternatives. Left unchecked, heritage tourism and economic development could have a substantial effect. Zoning and easement patterns could be used to protect resources; however, the inappropriate application of these and similar concepts could foster incompatible development. All groups should be encouraged to share plans and goals on a regular basis through regular meetings to ensure communication that could lead to the protection of the trails and their resources.

Access and Transportation

The marking of additional auto-tour routes under both alternatives would potentially increase traffic volumes on the designated state and federal highways over the long term. However, potential increases in traffic volumes on these highway segments would likely be very small, and in general dispersed along many miles of highway. Consequently, there would be negligible adverse effect on traffic flows and levels of service on these routes.

Localized adverse impacts on traffic flows would continue to occur at sites of periodic commemorative activities. These could include increased traffic volumes and corresponding increases in travel times. However, impacts would likely be confined to areas in the immediate vicinity of the site, and they would occur only during relatively infrequent commemorative activities. No long-term adverse impacts on transportation would occur at these sites under either alternative.

Other Impact Considerations

Cumulative Impacts

A cumulative impact is one that “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 would include developments or activities that would add to the impacts from implementing the alternatives.

Many areas with significant trail resources have undergone substantial energy development, including oil and gas drilling and pipeline and powerline construction. Continued drilling and construction in these areas could pose adverse cumulative impacts on natural and cultural trail resources. Powerlines, pipelines, and drilling equipment could adversely impact significant trail landscapes, which could also adversely affect the visitor experience.

Future highway construction could have cumulative adverse effects on trail resources such as ruts and swales, adversely affecting some trail resources. In many areas modern highways closely parallel the original routes of historic trails, and the construction of new or additional highways could directly affect trail resources by eradicating trail ruts and swales, or indirectly by compromising the integrity of a significant landscape.

While most of the historic trail routes pass through rural areas, urban and suburban development could adversely affect trail resources or associated historic landscapes in some areas. Western cities in particular are vulnerable to urban sprawl, and continued growth in cities such as Sacramento, Carson City, Salt Lake City, Casper, and numerous smaller communities could have adverse impacts on trail resources.

Some recreational activities, most notably the use of off-road recreational vehicles, could also have adverse impacts on trail resources. Off-road vehicles such as 4x4s, ATVs, and motorcycles could eradi-

cate trail remnants or contribute to erosion, which could seriously compromise the integrity of trail resources.

Some agricultural activities might have adverse impacts on trail resources. Increases in grazing or the cultivation of previously unplowed pasture land could affect or eradicate trail ruts and swales or significant archeological resources.

Unavoidable Adverse Effects

Under both alternatives unavoidable adverse impacts would result from the installation of route signs along paved highways, trail markers, and interpretive waysides. These impacts would be site specific and negligible. Such development would visually intrude on the integrity of the historical scene along trail routes. There could be adverse impacts on soils and vegetation from increased use, particularly under alternative 2.

Irreversible and Irrecoverable Commitments of Resources

No resources would be irreversibly or irretrievably committed under either alternative. Any potential loss of historic trail resources (for example, from natural deterioration) would be irreversible.

Relationship between Short-Term Uses and the Maintenance and Enhancement of Long-Term Productivity

Under both alternatives short-term uses of lands for signs and waysides would have no effect on long-term productivity.

Compliance Consultation Coordination



Compliance

Compliance with the laws described below would be required of all federal land management agencies when implementing the proposed actions of this plan. Other state and local regulations and permits would be identified and adhered to as site-specific proposals were implemented.

Cultural Resources

Section 106 of the National Historic Preservation Act (16 USC 470 et seq.) requires (1) that federal agencies consider the effect of their projects on historic properties (including archeological resources) eligible for the National Register of Historic Places, and (2) that agencies give the Advisory Council on Historic Preservation and the state historic preservation office an opportunity to comment on projects.

As required by section 110 of the National Historic Preservation Act, federal land management agencies survey cultural resources on lands under their jurisdiction and evaluate these resources by applying the criteria for the National Register of Historic Places. A number of surveys and studies have been completed or are underway, and further resource evaluation and documentation will continue along the trail corridors.

Before any ground-disturbing activities near a historic trail, a professional archeologist would determine the need for an archeological inventory or testing evaluation. Any such studies, including large-scale archeological investigations, would be conducted before construction and would occur in consultation with the state historic preservation office.

Representatives of the Advisory Council on Historic Preservation and the state historic preservation offices had an opportunity to review and comment on the draft plan. In the future, as parts of the approved plan are implemented, site-specific information on proposed actions and affected historic properties would be sent to the appropriate state historic preservation office and the advisory council for review and comment, as applicable.

In the interim no historic properties would be inalterably changed without consultation with the state historic preservation office and the Advisory Council on Historic Preservation. Discovery of significant archeological resources would be followed by appropriate treatment.

Provisions of the American Indian Religious Freedom Act (42 USC 1996) and the Native American Graves Protection and Repatriation Act (25 USC 3301 et seq.) would apply to all planning and projects for the national historic trails.

Under the 1992 amendments to the National Historic Preservation Act, information about archeological and ethnographic sites could be withheld from public disclosure to prevent resource damage.

Natural Resources

In implementing the approved plan for the California and Pony Express National Historic Trails and the updates for the Mormon Pioneer and Oregon National Historic Trails, the National Park Service, the Bureau of Land Management, the Forest Service, and other state and local agencies would comply with all applicable laws, regulations, and executive orders, including those listed below.

The National Environmental Policy Act of 1969 (42 USC 4321 et seq.) requires that the environmental effects of proposed federal actions be considered. The prescribed procedures ensure that public officials and members of the general public are able to review environmental information and impacts before decisions are made and before actions are taken on a project. This Final Environmental Impact Statement associated with the final plan provides for review and further action under the act. Following a 30-day no-action period for this Final Comprehensive Management and Use Plan / Environmental Impact Statement, the National Park Service will issue a record of decision.

The Architectural Barrier Act of 1968 (42 USC 4151 et seq.) requires all facilities and programs to be accessible to visitors with disabilities.

Section 118 of the Clean Air Act, as amended (42 USC 7401 et seq.) requires all federal facilities to comply with existing federal, state, and local air pollution control laws and regulations.

Section 7 of the Endangered Species Act of 1973, as amended (16 USC 1531 et seq.) 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 an agency does not jeopardize the continued existence of listed species or critical habitat.

Executive Order 11988 ("Floodplain Management"; 42 FR 26951) requires all federal agencies to avoid construction in the 100-year floodplain unless no practicable alternative exists.

Executive Order 11990 ("Protection of Wetlands"; 42 FR 26961) requires federal agencies to avoid impacts on wetlands wherever possible.

The "Analysis of Impacts on Prime or Unique Farmlands in Implementing the National Environmental Policy Act" (45 FR

ENVIRONMENTAL CONSEQUENCES

59189) requires federal agencies to analyze the impacts of federal actions on agricultural lands. This policy was developed to minimize the effect of federal programs in converting prime, unique, or locally important farmland to nonagricultural uses.

According to an August 11, 1980, memorandum from the Council on Environmental Quality, federal agencies must assess the effects of their actions on soils classed by the Soil Conservation Service (Natural Resources Conservation Service) as prime or unique. Prime or unique farmlands are defined as soils particularly suited for growing general or specialty crops. Prime farmland produces general crops such as common foods, forage, fiber, and oil seed; unique farmland produces specialty crops such as fruits, vegetables, and nuts.

Consultation and Coordination

Federal Agencies

[Note. An asterisk indicates that a comment letter was received and is reprinted in this section.]

UNITED STATES DEPARTMENT OF AGRICULTURE

Forest Service

Boise National Forest
Bridger-Teton National Forest
Caribou National Forest
Columbia River Gorge, National Scenic Area
El Dorado National Forest
Fremont National Forest
Gifford Pinchot National Forest
Humboldt National Forest
Lassen National Forest
Modoc National Forest
Mt. Hood National Forest
Pacific Southwest Regional Office*
Plumas National Forest
Rocky Mountain Regional Office
Rogue River National Forest
Sawtooth National Forest
Stanislaus National Forest*
Tahoe National Forest
Tahoe National Forest
Toiyabe National Forest
Truckee Ranger District*
Umatilla National Forest
Wallowa-Whitman National Forest
Wasatch National Forest
Whitman National Forest

UNITED STATES DEPARTMENT OF THE INTERIOR

Bureau of Land Management Offices

California State Office

Alturas, CA
Eagle Lake, CA
Redding, CA
Surprise, CA
Susanville, CA

Idaho State Office

Bruneau, ID
Idaho Falls, ID
Jarbridge, ID
Malad, ID
Malheur, ID
Owyhee, ID
Pocatello, ID
Shoshone, ID
Snake River, ID

Nevada State Office*

Battle Mountain, NV
Carson City, NV
Elko, NV
Ely, NV
Winnemucca, NV

Oregon/Washington State Office*

Ashland, OR
Baker, OR
Cascade, OR
Central, OR
Lakeview, OR
Roseburg, OR

Utah State Office

Fillmore, UT
Salt Lake, UT

Washington, D.C., Office

Wyoming State Office

Casper, WY
Green River, WY
Kemmerer, WY
Lander, WY
Pinedale, WY
Rawlins, WY
Rock Springs, WY*

Bureau of Reclamation

Provo Area Office*

ENVIRONMENTAL CONSEQUENCES

National Park Service

Intermountain Region

City of Rocks National Reserve
Craters of the Moon National Monument
Fort Laramie National Historic Site
Hagerman Fossil Beds National Monument*

Midwest Regional Office*

Chimney Rock National Historic Site
Homestead National Monument of America
Scotts Bluff National Monument

Pacific West Region

Ft. Vancouver National Historic Site
Lassen Volcanic National Park
Whiskeytown-Shasta-Trinity National Recreation Area
Whitman Mission National Historic Site

Washington, D.C. Office

United States Fish and Wildlife Service

Fort Snelling (MN) Office
Nebraska (NE) Field Office
Portland (OR) Office
Salt Lake City (UT) Office
Snake River Basin (ID) Office
Clear Lake National Wildlife Refuge, CA
Fish Springs National Wildlife Refuge, UT
Grays Lake National Wildlife Refuge, ID
Lower Klamath National Wildlife Refuge, OR
Seedskaadee National Wildlife Refuge, WY
Ruby Lake Wildlife Refuge, NV

UNITED STATES ENVIRONMENTAL
PROTECTION AGENCY*

American Indian Tribes

Battle Mountain Band, Nevada*

State Agencies

CALIFORNIA

Department of Parks and Recreation
Trade and Commerce Agency*

COLORADO

Historical Society*
State Parks

IDAHO

State Historical Society
State Parks

ILLINOIS

Department of Natural Resources*
Department of Transportation*
Historic Preservation Agency*

IOWA

Department of Natural Resources*
Department of Tourism
Department of Transportation
Iowa Sesquicentennial Commission
State Historical Society*
Western Historic Trails Center*

KANSAS

State Historical Society*

MISSOURI

Department of Natural Resources
Office of the Secretary of State*

NEBRASKA

Department of Economic Development
State Game and Parks Commission
State Historical Society
Rock Creek Station State Historic Park
Ash Hollow State Historic Park
Fort Kearny State Historic Park

NEVADA

Department of Transportation
State Historic Preservation Office*
Division of State Parks
Commission on Tourism

OKLAHOMA

Office of the Governor*

OREGON

Oregon Trail Coordinating Council
Parks and Recreation Department
Department of Transportation
State Tourism
Travel Information Council*

UTAH

Department of Transportation
Parks and Recreation Trails
Division of State History
Historic Trail Consortium

WASHINGTON

Department of Community Development

WYOMING

State Historic Preservation Office*
 Department of Transportation
 State Parks and Historic Sites
 Office of Federal Land Policy*

Local Agencies

California

Lassen County *

Colorado

Douglas County Department of Public Works*

Oregon

Lane County*

Wyoming

Green River*

Trail Associations

Iowa Mormon Trails Association
 Mormon Trails Association
 National Pony Express Association
 Nebraska Mormon Trails Association
 Oregon-California Trails Association
 Pony Express Trail Association

Planning Process and Public Involvement

INTERAGENCY COOPERATION

From the start this project has focused on the need to establish strong working relationships with partners from federal, state, and local agencies, the various trail associations, American Indian groups, and private landowners. An initial meeting took place in Denver in May 1994 with representatives from the Bureau of Land Management and the U.S. Forest Service to pledge cooperation and support for this planning project. Since that time the NPS planning team has attempted to maintain a close working relationship with the designated representatives from these groups.

WORKSHOPS

Workshops were held in the spring and fall of 1994 to develop purpose and significance statements, identify primary interpretive themes, and generate goals and objectives for the trails. Obstacles to achieving the goals and objectives were also identified. Among the participants of these workshops were representatives from the Oregon-California Trails Association (OCTA), National Pony Express Association, Bureau of Land Management, Forest Service, National Park Service, Mormon Trails Association, Iowa Mormon Trails Association, and other state and local agencies.

Another workshop in Denver on July 23–24, 1996, provided the fundamental framework for the trails partnership concept that is central to the proposal presented in this document. This workshop was attended by representatives from federal, state, and local agencies; trail associations; and private landowners. Major topics addressed were management objectives, visitor experience and trail use, and resource protection. Alternatives for the plan were also the topic of discussion, as well as the importance of increased communication and cooperation among all of the partners.

In May 1997 a two-day workshop was conducted in Denver to address issues associated with the identification of California Trail high-potential sites and segments. Two OCTA representatives attended this meeting and agreed to submit a consolidated list of high-potential sites and segments, representing the trail association's expertise to the NPS planning team by the beginning of August 1997.

Early in August 1997 representatives from the Bureau of Land Management, the Forest Service, and the National Park Service met in Denver to discuss the preliminary alternatives that form the basis of this plan. Comments and concerns raised during this meeting were considered and incorporated into the document where appropriate.

In early September 1997, Dana Supernowicz from El Dorado National Forest and Jude Carino, the Wyoming BLM historic trails coordinator, cooperated in drafting and revising several sections of the current document.

Comments and suggestions have been incorporated whenever possible.

PRELIMINARY RESOURCE INVENTORY

Between May 1994 and August 1995 planning team members made 10 trips to familiarize themselves with some of the major resources associated with the trails. Local experts representing federal, state, and local agencies, trail associations, and other groups greatly assisted during these trips to identify resources and their locations and to raise issues of concern. Many of them participated in a Delphi process and in preparing the GIS maps and the lists of high-potential sites and segments.

CONSULTATION WITH FEDERAL AND STATE PARTNERS

In July 1994 informal consultation began with the various state historic preservation offices. Letters were sent apprising them of the planning effort and requesting their assistance in consultation and review.

Between July 1994 and February 1995 meetings took place with representatives of the federal partners and other state agencies in Lincoln (NE), Des Moines (IA), Reno (NV), Salt Lake City (UT), Sacramento (CA), Boise (ID), Salem (OR) Cheyenne (WY), Topeka (KS), and Jefferson City (MO) to share information about the planning work and to discuss issues and concerns regarding the management of historic trails.

In June 1995 letters were sent to the pertinent U.S. Fish and Wildlife Service regional directors advising them of work on the management plans and of the need to start informal consultation requesting information on federally listed threatened and endangered species that could be affected along the routes. A second request was mailed on November 1996. As a result, a comprehensive list of threatened and endangered species for the affected counties has been compiled and is available from the Long Distance Trails Office.

NOTICE OF INTENT

A notice of intent to complete an environmental impact statement was published in the Federal Register on August 15, 1995 (p. 42180).

DELPHI PROCESS

To assist in the identification of high-potential sites and segments a two-tiered Delphi process was carried out in April 1995 and May 1996. During the first phase, input was requested from trail experts to generate preliminary lists of high-potential sites and segments. A total of 90 sites and 34 segments were identified by the respondents. During the second phase of the process the same experts were asked to review the list for accuracy in name, location, and trail association. All of the identified resources are part of the database maintained by the Long Distance Trails Office.

INTERNAL REVIEW DRAFTS

A preliminary draft was distributed for review in January 1997. After substantial revisions, a second internal review draft was sent out to about 100 reviewers in February 1998. Nearly 60 individuals and agencies responded. A matrix identifying the comments, questions, and concerns of the respondents was generated to allow for a systematic analysis of these comments. Whenever the comments seemed appropriate and within the constraints of the National Trails System Act, an effort was made to incorporate them into the present document.

NEWSLETTERS

Newsletter 1, distributed to the public in February 1995, outlined the planning process and the public involvement strategy. The public was invited to return their comments on the purpose and significance statements generated in the workshops.

Newsletter 2, distributed to the public in February 1996, updated the public on the status of the project. This newsletter announced the opening of the Long Distance Trails Office in Salt Lake City, Utah.

Letters have been sent to the close to 2,000 individuals listed in the mailing list keeping them informed of progress on the project.

INTERNET

Copies of the first and second newsletters were put on Internet.

PRESS RELEASE

In an effort to contact landowners along the trail corridors, the study team prepared and distributed a press release to 95 newspapers in communities along the trail corridors.

TRAILS ASSOCIATION NEWSLETTERS

Several trails association publications printed excerpts of the newsletters. These publications were distributed to their constituents.

AMERICAN INDIANS

The study team identified nearly 100 American Indian tribes and groups with current or historic ties to lands within the trail corridors. Both newsletters were distributed to representatives of these American Indian peoples. The study team provided representatives of each group with the current list of identified high-potential sites and segments and requested information regarding tribal use of these areas.

Personal telephone calls were made during March 1998 to all the tribes identified along the trail corridors. An additional letter was also sent at this time encouraging participation in the review process.

Copies of the Draft Comprehensive Management and Use Plan / Draft Environmental Impact Statement were distributed to all of these groups. During November 1998 phone calls were made to more than 100 American Indian groups to ensure that they did not have any comments on the document. Only one group responded.

TRAILS ASSOCIATIONS

Numerous representatives of trails associations and local historical societies have provided essential information on trail routes and high-potential sites and segments.

Representatives from the Oregon Trail Coordinating Council submitted a list of proposed high-potential sites and segments for the Applegate Trail in Oregon and of updates and additional sites and segments for the Oregon National Historic Trail. That information is part of appendixes G and H.

Dr. Stanley Kimball submitted a list of additions for the Mormon Pioneer National Historic Trail. That information is reflected in appendixes I and J.

OCTA submitted sites and segments for the main route and various alternate routes and cutoffs of the California Trail. Part of the information received is included among the high-potential resources identified in appendixes E and F.

PUBLIC REVIEW DRAFT AND PUBLIC MEETINGS

The availability of the Draft Comprehensive Management and Use Plan / Draft Environmental Impact Statement was announced in the Federal Register on August 21, 1998; the review comment period closed on October 19, 1998. Close to 1,000 copies were sent out, including 154 copies to the county libraries of all the counties crossed by the four trails.

Public meetings were held in late September and early October 1998 at nine locations—Sacramento, California; Casper, Wyoming; Salt Lake City, Utah; Reno, Nevada; Boise, Idaho; Oregon City, Oregon; Lincoln, Nebraska; Creston, Iowa; and Independence, Missouri. About 180 individuals attended the public meetings. Written comments were received from close to 140 individuals; federal, state, and local agencies; and private organizations.

In general the plan was well-received, and most respondents supported the proposal. The most often mentioned concern was that not all of the historic routes were identified as part of the authorized national historic trails.

Federal agencies (Bureau of Land Management, Bureau of Reclamation, and Forest Service) raised several questions. They requested that a few additional sites and segments be included, that "fresh" themes be integrated into the interpretive matrix, that some factual errors be corrected, and that emphasis be placed on the need for further environmental impact analysis and public involvement in any future plans completed by land-managing agencies.

State historic preservation officers responding (Colorado, Idaho, Illinois, Kansas, Missouri, Nevada, and Wyoming) noted the need to obtain funds and personnel (at both the federal and state levels) to adequately address the issue of trail protection, and to develop strategies to quickly protect threatened fragile resources. They also called for specific guidance on the management of trail resources, and the possible transfer of ownership of sites and segments to the National Park Service.

All substantive comments have been addressed in detail in this Final Environmental Impact Statement. The Council on Environmental Quality defines substantive comments as those that:

- (1) question, with reasonable basis, the accuracy of the information in the Draft Comprehensive Management and Use Plan / Draft Environmental Impact Statement
- (2) question, with reasonable basis, the adequacy of the environmental analysis
- (3) present reasonable alternatives other than those presented in the plan
- (4) cause changes or revisions in the proposal

In other words, substantive comments raise, debate, or question a point of fact or policy. Comments in favor of or against the proposed action, or those that only agree or disagree with NPS policy, are not addressed individually.

As required by the CEQ regulations, all written responses from public agencies have been printed in this document. All substantive comments in these letters have been bracketed and responses are included next to each bracket.

Substantive comments from individuals and private organizations have been summarized under five categories as follows: (1) the definition of the California Trail; (2) the need to designate additional routes and cutoffs as part of the Oregon and California National Historic Trails; (3) comments on the administration and management of the trails, including the alternatives; (4) questions on the procedure followed during the planning and review process; and (5) comments on the accuracy of the information presented, including additions and/or modifications to the document maps and text. Table 20 summarizes the issues raised by reviewers according to the categories identified above, presents the actual text of the comment, and indicates the NPS response.

The following private organizations and individuals submitted substantive comments that are presented in table 20, along with responses.

Organizations

Ernest and Lillian E. Campbell Foundation (Anna R. Scott), Cave Spring Association (Susan Walsh, Jodie Smith, Walter Cook), Fort Caspar Museum (Richard L. Young), High Rock Trekkers 4WDC (Ed Dunkley), National Historic Trails Center (Edna Kennell), National Pony Express Association (Mike Ryan, Dale Ryan; Virginia Hilton, Judy and Wayne Howard, Melba Leal), Oregon-California Trails Association (Roger P. Blair, Charles H. Dodd, Levida Hileman, Jacqueline Lewin, Ross Marshall, Ken and Arleta Martin, Al Mulder, Walter H. Meyer,

Gene Potter), The Patrice Press (Gregory M Franzwa), Pony Express Trail Association (Joe Nardone), Pottawattamie County Historic Trails Association (Robert A. Schulze), San Joaquin County Historical Society and Museum (Michael W. Bennett), San Jose Museum (John and Jeanette M. Roberts), Western Emigrant Trails Research Center (Robert L. Berry)

Individuals

Richard W. Ackerman, Warner H. Anderson, James M. Armstrong, Don Buck, James E. Budde, Angeline Carleton, Rebecca Conard, Michael F. Cooley, Fred W. Dykes, Laurence L. Falk, Thomas S. Fee, Andrew Hammond, Patrick Hearty, Gail Holmes, Arlie Holt, Connie Johnson, Nancy B. Johnson, Valda Kennedy, Stanley Kimball, Kathy Lewin, James Linebaugh, Ronald R. Lund, Barbara Magerl, Charles W. Martin, Les McKenzie, Linda Meigs, Tim Monroe, Byron W. Oldham, James A. Rankin, Ryan Roenfeld, Roy Tea, Frank Tortorich, Dave Welch, Patti Wood.

The following private organizations and individuals submitted non-substantive comments:

Organizations:

Iowa Mormon Trails Association (Marilyn Geidel), Lane County Historic Society (Robert Cox), Memorial Museum of Sutter County, Oregon-California Trail Association (Vic Bolon, Lowell E. Tiller)

Individuals

Will Bagley, David L. Bigler, Craig Crease, Marguerite Griffin, Karla Gunzenhauser, Dale Hom, Gary Lancaster, Kathryn L. McCulloch, Leon Schegg.

The following letters from private organizations and individuals had no substantive comments on the draft plan, but expressed specific support for the inclusion of the Cherokee Trail as part of the California National Historic Trail:

Organizations

Bulter County Historical Society, Cherry Creek Valley Historical Society, Douglas Public Library District, Fayetteville Public Library, Kirkwood Resort Company, Muskogee County Historical Society, Oregon-California Trail Association (Bill and Jeanne Watson), Parker Area Historical Society, Sweetwater County Historical Museum

Individuals

Roberta L Baldwin, Karen Kenealy Beagle, David E. Beagle, Virginia Beagle, Joyce P. Bolerjack, Evelyn Brown, Mary Conrad, Ward R. Crowley, Connie Crump, Marjorie and Ralph E. Crump, Louise Erb, Joyce and Michael Evans, Jack E. Fletcher, Patricia K. A. Fletcher, Kay S. and Warren L. Forsythe, Richard and Mary Ann Gehling, Marilyn Hicks, Wesley and Mary Ann Hogan, Jim Huss, Robert L. Kabel, Robert and Betty Kenealy, Elaine McNabney, Virginia Nelson, Ray Ring, Robert Rogers, Shirley Rousell, Martin H. Schloo, Ron Vance, Nelson S. Weller, Peter White, Lee Whiteley, Wilton L. Wilkinson, Irene Wilson, Edith Winchester.

DELPHI CONTRIBUTORS

Ackerman, Richard
 Bagley, Will
 Bigler, David
 Bunten, Hugh
 Chilcote, Gary
 Del Bene, Terry
 Genung, Russ
 Hammond, Andrew
 Leal, Melba
 Lewin, Jackie
 Martin, Jr., Charles
 Martin, Charles
 Martin, Ken and Arleta
 Nicholson, David
 Renner, Jim
 Ryan, Dale and Bonnie
 Supernowicz, Dana
 Tiller, Lowell
 Tortorich, Frank and Mary Ann
 Underbrink, Lee
 Watson, Bill and Jeanne

ENVIRONMENTAL CONSEQUENCES

SITES AND SEGMENTS/MAPPING CONTRIBUTORS

Ackerman, Dick
Berry, Bob and Bill
Brown, Randy
Buck, Donald
Bunker, Mike
Crease, Craig
Del Bene, Terry
Falk, Laurence and Carol
Fletcher, Jack and Patricia
Hammond, Andrew
Hunt, Thomas
Johnson, David

Jones, Larry
Kimball, Stanley
Kroh, Lee
Larson, Glenn
Leamon, John
Lewin, Jacqueline
Malan, Kent
Marshall, Ross
Martin, Ken and Arleta
Meyer, Walter
Murphy, David
Nardone, Joe
Oldham, Bryon W.
Renner, Jim

Ryan, Dale
Schmidt, Earl
Silcock, Burt
Silva, Richard and Orsola
Spedden, Rush
Tanner, Russ
Taylor, Marilyn
Tea, Roy
Watson, Bill and Jeanne
Whiteley, Lee
Wiggins, Don
Wolf, Margaret

Comments and Responses

COMMENTS

RESPONSES

United States Department of Agriculture	Forest Service	Pacific Southwest Region	Regional Office, R5 630 Sansome Street San Francisco, CA 94111-2214 415-705-1098 Text (TTY) 415-705-2898 Voice
---	-------------------	--------------------------------	--

File Code: 2360

Date: August 31, 1998

Jere L. Krakow, Superintendent
Long Distance Trails Office
National Park Service
P.O. Box 45155
Salt Lake City, UT 84145

RECEIVED
SEP 03 1998
LODT National Park Service

Dear ^{Jere} Superintendent Krakow:

I appreciate having the opportunity to discuss the draft management plan and Environmental Impact Statement for the California, Pony Express, Oregon, and Mormon trails with you earlier today. To follow-up on our phone conversation, I am enclosing several pieces of information that may clarify some points.

1

First, I have included a photocopy of a tribal territory map. The Miwok, Maidu and Nisenan, Atsugewi and Achumawi, and Washoe were probably the tribes most affected by or interacting with emigrants and others using the trails through California. However, the Northern Paiute, Modoc, and other tribes immediately adjacent were also affected. The California northwest coast tribes you show on your map were more affected by coastal traffic than by emigrant routes. Please also note that Washoe territory is very much centered around Lake Tahoe, rather than Reno, although the Reno area is within Washoe territory.

I have enclosed three interpretive brochures for parts of the California Trail on National Forest lands in California. Each one provides references for more detailed data. Many trail segments and sites are interpreted.

2

The one I wanted to ensure is added to your list is that of the George and Jacob Donner party campsite at Alder Creek on the Tahoe National Forest, along the Truckee route of the California Trail. This is a site separate from Donner Memorial State Park. It is a National Historic Landmark, located six miles north of Truckee, in Nevada County, California, on the Hobart Mills 7.5' topographic map. George and Jacob Donner, their family and teamsters, never made it to Donner Lake; their wagon broke down, and they camped--and most perished--at Alder Creek during the winter of 1846-1847. The site is interpreted with signs along a handicap accessible trail. This site has been the location of several Forest Service Passport in Time public outreach projects that include trail reconstruction to meet handicap accessibility standards, interpretation, and scientific investigation; its historic environmental setting is almost pristine.

U.S. Department of Agriculture, Forest Service, Pacific Southwest Region

1. Map 12 has been modified.
2. The proposed site has been included as a high-potential site for the California National Historic Trail.

COMMENTS

RESPONSES

Over the past several years, many Passport in Time and other public outreach projects have been conducted along portions of the California and Pony Express Trails. These are very popular tourist attractions. I have enclosed a copy of our current PIT Traveler, which highlights Passport in Time projects this summer on the Lassen route of the California Trail. As you can see by this example, ecotourism related to the emigrant trails is a reality here.

Forests have detailed recording of portions of the California and Pony Express Trails, although, in most cases, this recording is not comprehensive for all portions of the trails passing through the Forests. The following Heritage Program specialists can provide detailed information about recorded trail segments and sites, and interpreted locations, for National Forests in the Pacific Southwest Region, California and a portion of Nevada:

Denise McLemore Dana Supernowicz Eldorado National Forest 100 Forni Road Placerville, CA 95667 530-622-5061 530-621-5297 (FAX)	Jim Johneton Deborah Fibbetts Lassen National Forest 55 South Sacramento Street Susanville, CA 96130 530-257-2151 530-257-8282 (FAX)
Gerald Gates Modoc National Forest 800 W. 12th Street Alturas, CA 96101 530-233-5811 530-233-5817 (FAX)	Kevin McCormick Plumas National Forest P.O. Box 11500 159 Lawrence Street Quincy, Ca 95971 530-534-6500 530-532-1210 (FAX)
Pam Conners Stanislaus National Forest 19777 Greenley Road Sonora, CA 95370 209-532-3671 209-533-1890 (FAX)	Donna Day Carmel Schweyer Tahoe National Forest P.O. Box 6003 631 Coyote Street 530-478-6214 530-478-6109 (FAX)
John Maher Lake Tahoe Basin Management Unit 870 Emerald Bay Road, Suite 1 South Lake Tahoe, CA 96150 530-573-2671 530-573-2693 (FAX)	

Detailed trail information is also available from National Forests in other regions, particularly the Intermountain Region for portions of trails through western Wyoming, southern Idaho, Utah, and Nevada; the Pacific Northwest Region for portions of trails in Oregon; the Southwest Region for portions of trails in New Mexico and Arizona; and perhaps the Southern Region for portions of trails in Oklahoma and Texas. As you develop more information about the possible southern trail routes, please keep in touch, so that we can coordinate with Forests that may be involved. Additional Forests in the Pacific Southwest Region, such as the Angeles or the San Bernardino, may also need to be contacted about potential southern routes for the California Trail.

COMMENTS AND RESPONSES

COMMENTS

RESPONSES

Dana Supernowicz will be our regional representative at the Cameron Park meeting. I will be unable to attend, as I will be at our national Heritage Program meeting that week. Other Forest Heritage Program specialists are being invited to your meeting.

Should you have any questions about the enclosed information, please contact me at the above address and phone number. I look forward to continued work with you on this project.

Sincerely,



Judy A. Rose
Regional Historic Preservation Officer

Enclosures

COMMENTS

RESPONSES



United States
Department of
Agriculture

Forest
Service

Stanislaus National Forest 19777 Greenley Road
Sonora, CA 95370
(209) 532-3671
FAX: (209) 533-1890
TTY/TDD: (209) 533-0765
<http://www.r5.pswfs.gov/stanislaus>

File Code: 2360

Date: October 7, 1998

RECEIVED
OCT 16 1998
LODT National Park Service

Mr. Jere Krakow, Superintendent
Long Distance Trails Office
California, Mormon Pioneer, Oregon & Pony Express National Historic Trails
National Park Service
P.O. Box 45155
Salt Lake City, UT 84145-0155

Re: Draft Comprehensive Management and Use Plan and Draft EIS for the
California National Historic Trails

Dear Mr. Krakow:

These comments will focus on those parts of the subject document that directly relate to lands administered by the Stanislaus National Forest (STF).

Purpose of and Need for the Plan

1
2
3

All or part of three California trails segments were identified as "high potential" on lands administered by the STF: Summit Creek Canyon (35), the Hermit Valley portion of Faith, Hope, and Charity valleys (36), and Lake Alpine (37). Since the STF did not provide this information, it would be helpful if you indicated the data sources in the table (appendix C). This same comment applies to the table of "high potential sites" (appendix D), wherein the STF administers the land for six identified sites: Upper Little Emigrant Valley/Emigrant Pass, Hubbs Grave Site, Relief Camp, Commemorative Tire Iron, Burst Rock, and Pacific Grade.

The historical overview was, of necessity, broad-brushed. However, given that necessity, it would be very useful to include citations. Without them, the document has far less utility as a starting point resource document for trail research and interpretation.

Map 12 (tribes encountered) should be revisited for California. For example, though the Yurok, Hupa, and Pomo were indirectly affected by the California trails depicted, other groups, such as the Maidu, Me Wuk, and Yokuts, were directly affected. (See also p. 94, paragraph 3.)

U.S. Department of Agriculture, Forest Service, Stanislaus National Forest

1. Members of the Oregon-California Trails Association provided the information at various times during the planning process. Their names are listed in the "Consultation and Coordination" section. Including the name of the individuals who provided information for every specific site and segment listed in this document would require an additional column in the appendixes and would lengthen the document unnecessarily. This information is available by contacting the Long Distance Trails Office at Salt Lake City or the California-Nevada chapter of the Oregon-California Trails Association.
2. The National Park Service does not usually include specific citations for broad historical overviews, such as the one presented in the current plan. However, the document contains a fairly extensive bibliography documenting the sources used in developing it.
3. The information on American Indian tribes has been incorporated in map 12.



COMMENTS

RESPONSES

4	Another suggested subtheme for the Sierra Nevada region is that native people did not perceive the mountain range as a "Great Wall;" they readily traded and traveled back and forth and often assisted explorers and others who made the crossing at inopportune times. It might also be noted that the eastern escarpment of the Sierra is far more abrupt than the western slope.
5	Why was the Bartleson-Bidwell "attempt to reach California" labeled a "failure" (p. 37)? Their trans-Sierra route left much to be desired, but they definitely made it to California in 1841.
	<u>Alternatives</u>
6	It seems odd to have only two alternatives: No action (current conditions) and the proposal (enhanced conditions and a historic trails partnership). Implications of the proposal for key federal entities--other than for the Long Distance Trails Office--are vague, except for "pooling funds from the trails budgets of each agency" (p. 61).
7	Regarding the interpretive themes and subthemes (p. 51), provision should be made, under both alternatives, for fresh themes/subthemes from fresh research to be integrated into the framework and guidance for interpreting trails.
8	In the comparison of alternatives table, wouldn't/shouldn't the challenge-cost-share program be strengthened under the enhanced conditions alternative (p. 74)? Also, regarding interpretation and visitor experience under the enhanced conditions alternative, would you truly want to "standardize the content" of interpretive information? I would anticipate value in a great variety of content hinged upon the particular trail, geographic region, and historically significant story to be told.
9	Regarding "ethnographic resources," there is no difference between alternatives (p. 78). However, page 63 notes that "systematic research" regarding tribes affiliated with the trails will be part of alternative 2, but is not part of alternative 1. It also seems odd to anticipate that "lack of Indian-related interpretation would not adversely affect the visitor experience" (p. 79).
	<u>Affected Environment</u>
10	At the risk of sounding provincial, I suggest adding Sonora and Murphys to the list of final destinations, since, as such, those tow towns were of far greater import than, for example, Volcano (p. 87). In the same vein, I suggest adding the Stanislaus and Mokelumne rivers to the list, given the location of high potential trail segments and sites within those large watersheds.
	<u>Environmental Consequences/Compliance</u>
11	Given the definition, it seems that either of the alternatives constitutes an "undertaking." At least for alternative 2, it would be an immense service for the Long Distance Trails Office to initiate a PA to eliminate the need for individual consultation of National historic trail related signage placement, maintenance, etc.. This would also be a means of achieving some measure of standardization for trail maintenance and enhancements. Also, historians are qualified "to determine the need for archaeological inventory or testing" (p. 119). The paragraph regarding AIRFA and NAGPRA are confusing (p. 119). Perhaps simply say: "Provisions of the American Indian Religious Freedom Act and the Native American Graves Protection and Repatriation Act apply to National Historic Trail related planning and projects."

4. This new interpretive theme has been added.
5. The document has been modified.
6. NPS national historic trail plans seldom have more than one alternative because no site-specific action is involved. The proposal tends to be general because the Long Distance Trails Office has mostly administrative responsibilities and is not in charge of day-to-day management of trail resources.
7. This suggestion has been incorporated.
8. The challenge-cost share would remain the same under both alternatives.

The statement regarding "standardizing the content" is an attempt to discourage conflicting and/or incorrect information encountered along the trail. There is no intent that all information be the same except in regard to accuracy and consistency; however, design and layout would follow interpretive guidelines.
9. The statement has been rewritten to state, "This does provide a balanced view of the history of the trails."
10. The document has been modified.
11. The Long Distance Trails Office would seek to develop programmatic agreements under section 106 of the National Historic Preservation Act, as you suggest. In cooperation with federal, state, and local organizations, an effort would be made to achieve some level of standardization for trail maintenance and enhancements. The document has been modified to reflect wording suggestions regarding the American Indian Religious Freedom Act and the Native American Graves Protection and Repatriation Act.

COMMENTS

RESPONSES

Appendices

C: p. 144	Summit Creek Canyon:	Description: Include the approximate mileage (3?).
	Faith and Charity valleys:	Ownership: Include that the STF administers Hermit Valley.
D: p. 170	Little Lost Canyon:	Ownership: Public/Toiyabe NF.
	Upper Leavitt Meadow:	Ownership: Public/Toiyabe NF.
p. 171	Browder Flat:	Ownership: Public/Toiyabe NF (not in Emigrant Wilderness).
	Approach to Fremont Lake:	Ownership: Public/Toiyabe NF.
	Upper Little Emigrant Valley:	Ownership: As described, it would be on public land, on both the Toiyabe NF (Hoover Wilderness) and the Stanislaus NF (Emigrant Wilderness).
	Hubbs Grave	Ownership: Public/Stanslaus NF.
	Relief Camp	Ownership: Public/Stanslaus NF.
E: p. 195	Commemorative Tire Iron	Ownership: Public/Stanslaus NF.
	Burst Rock	Ownership: Public/Stanslaus NF.
	Hermit Valley:	NR status: Not listed Ownership: Public/Stanslaus NF.

12. Specific comments, as well as the correction of typographical errors and omissions, have been incorporated directly into the text of the document.

COMMENTS

RESPONSES

Avery Hotel:	Ownership: Private.
Black Springs:	NR status: Not listed Ownership: Public/St Stanislaus NF and private.
Calaveras Big Trees:	Ownership: State of California (Calaveras Big Trees State Park).
Murphys:	NR status: Please check on the particulars, but a historic inventory is completed for the town's buildings. Ownership: Private.

N:
Recommend that you include the publication date for the NPS booklet on wayside exhibits and/or include that source in the bibliography.

Below are some minor typographical errors or omissions that you may wish to correct in your final document:

1. Print the address, phone, and web site address for the Long Distance Trails Office on the preface pages.
2. p. 4, center column; "appendices" (not appendixes)
3. p. 32, right column; "Sierra" (not Sierras)
4. p. 33, left column; "rich" (not rick)
5. p. 74, left column; Should items 1-7 under H not be there? They appear under "Resource Protection," part A.
6. p. 81, left column; remove extra space in "maintenance"
7. p. 104, right column; "nearly" (not near)
8. p. 119; Recommend referring to the "state historic preservation officer" (rather than "office").
9. p. 125; "preparers" (not prepares)
10. p. 172; Pacific Grade: Ownership: USFS
11. p. 195; Black Springs: Description: Capitalize the "W" in West Point

COMMENTS

RESPONSES

12

12. p. 195; Calaveras Big Trees: Description: Capitalize the "S" in Sequoia and lower case the "g" in gigantea.

In closing, I wish to commend the overall effort; the document was handsomely presented, with easy to read maps and tables. I appreciate the opportunity for review and hope these comments are useful. I look forward to closer relations with your office in the future as we work to inventory, assess, protect, and interpret our national historic trails and related sites. If you have any questions, please contact our Historian, Pamela Conners, at extension 362.

Sincerely,


BEN L. DEL VILLAR

cc: Karen Caldwell
Dave Freeland

COMMENTS

RESPONSES

To: Ben del Villar, Karen Caldwell, and Dave Freeland

Re: Pam Conners' review of the California National Historic Trails Draft Plan and EIS

Though a generic, regional comment letter on the Draft Comprehensive Management and Use Plan and Draft EIS for the California National Historic Trail and Pony Express National Historic Trail, I was asked by the Superintendent of the Long Distance Trails Office (NPS), Mr. Jere Krakow, to specifically review it for the Stanislaus. The same document also serves as the Draft Management and Use Plan Update and Draft EIS for the Oregon National Historic Trail and Mormon Pioneer National Historic Trail. It seems the comment letter should be signed by Ben and that the two rangers most likely to be affected by the decisions related to the document should be briefed on its contents.

Of note is that, although California encompasses only 8.6% of the total mileage of the California National Historic Trail(s) passing through nine states, USFS lands account for 416 of the 994 miles of this trail system existing within California.

Though this document addresses over 14,000 miles of trail and identifies 74 high potential trail segments (totaling 2,680 miles), and 459 high potential trail-related sites, I narrowed my review to direct implications for the Stanislaus National Forest.

Although we did not provide direct input, three high potential trail segments--aggregating about 10 miles--and six potential trail-related sites were identified in this document which are on lands administered by the Stanislaus. Moreover, under both alternatives presented in the plan/EIS, auto tour routes have been delineated in consultation with state departments of transportation including, for the Stanislaus, one that will commemorate the Sonora-Walker River Route along Highway 108 and another that will commemorate the Big Trees Route along Highway 4. (The document lays-out two alternative actions: 1. Business as usual, and 2. "Enhanced conditions with a historic trail partnership.")

Interagency cooperation is promoted under both alternatives, but is more pronounced for alternative 2 (the proposal). Though, understandably, no great detail is provided, under alternative 2, the NPS, BLM, and USFS would: "Provide resources to carry out trail programs... by pooling funds from the trails budgets of each agency" (p. 61).

The comment letter is attached.

Kindly,
-Pam Conners



COMMENTS

RESPONSES



United States
Department of
Agriculture

Forest
Service

Truckee
Ranger
District

10342 Hwy 89 North
Truckee, CA
96161
530 587-3558
530 587-6907 TDD
530 587-6914 FAX

File Code: 2360

Date: October 19, 1998

Jere L. Krakow
Superintendent Long Distant Trails Office
324 S State St, Suite 250
P.O. Box 45155
Salt Lake City, Ut 84145

RECEIVED
OCT 26 1998
LODT National Park Service

Dear Jere:

This letter is generated in response to the Public Draft of the Comprehensive Management and Use Plan for the California and Pony Express National Historic Trails. I attended the public meeting held in Reno, Nevada and wanted to provide a few written comments as I believe the document needs to be changed to reflect what was stated at the public meeting.

1

I see funding as a primary issue. The proposal is very vague concerning the probability that no funding may be forthcoming from the large land management agencies, particularly the Forest Service. While it may be true that NPS will fund the Long Distance Trails Office in Salt Lake City, how will other positions be effected if there is no funding from or within the Forest Service? If there is a Forest Service trail coordinator position created and funded by the Forest Service, the proposal should identify where the duty station for this position will be located (not the Washington Office as I heard at the public meeting).

2

On page 61, there is a paragraph that needs clarification. "The BLM and FS would exchange personnel with the NPS, as necessary, to promote interagency cooperation in historic trails administration and management. These individuals would be assigned term or permanent positions." What does this mean? Are these positions in addition to the FS trails coordinator position and in addition to the increase in four positions for your office (as described on page 62)? Where would they be stationed and where would the funding come from? On the topic of increased staffing in your office, would there be three staff positions in Salt Lake city and four additional positions, noted as interagency staff, along the trail corridors? Again, are these four interagency staff positions NPS staff? Where should they be located? I think the proposal of increased staffing, funding, location, and what "interagency" means should be clarified as it is all rather vague and extremely important.

3

On page 61 of the document, it is stated that the proposal would result in increased efficiency and closer communication. I would like this section to clearly identify exactly how implementing this proposal will result in closer communication between the Forest Service and your office, especially in light of the fact that communication has been intermittent. How will the communication be closer in the event the Forest Service does not provide funding for a trails coordinator position?

U.S. Department of Agriculture, Forest Service, Truckee Ranger District

1. It is up to the individual land-managing agencies to request funding to enhance the protection of trail resources. It would not be appropriate for a National Park Service plan to identify the duty station for a trail coordinator position, which still needs approval. While the Forest Service currently has a trails coordinator duty-stationed in Washington, D.C., this position is not related to the proposal under review.
2. At some point in the future some interagency staffing could be provided. These might be term or permanent positions working from the Long Distance Trails Office. Those duty stationed elsewhere might work for either the National Park Service or another federal agency; locations have not been determined at this point. Cooperative funding of these positions would be preferable.
3. It is hoped that all agencies would agree to mutually fund a trails coordinator position to improve communications between federal agencies. However, the Long Distance Trails Office has developed strong and effective communications with several offices of the Bureau of Land Management without such a position. If a trails coordinator position is not funded, the Long Distance Trails Office would seek to establish more effective communication links among the various trail-managing agencies.



Caring for the Land and Serving People

Printed on Recycled Paper



COMMENTS

RESPONSES

Krakow Page 2

- 4 Under Public Awareness, there needs to be a stronger commitment by NPS on the promotion of protection and conservation in addition to helping communities or individuals make money. This is an ongoing theme in all heritage resource circles and is inadequately portrayed in this section of the document. We still have illegal metal detecting along the trail and tourism that includes picking up artifacts.
- 5 Under Trail Marking, there is strong wording for preparing a sign plan and reducing the amount of existing sign clutter. This makes it sound like your office is advocating taking all of the signs down that currently mark the trail to reduce clutter. From the public meeting, what I heard was the sign plan was for marking the trail at interpretive areas and for consistent use of the trail specific logo and not the removal of the "sign clutter" out on the ground.
- 6 Under Volunteers and Liability on page 64, there is the consistent use of how volunteers "could be of" assistance and how "it might be beneficial to use already-existing networks of historic trail supporters, such as the...Oregon-California Trails Association..." This segment has a negative tone to it. We should be encouraged to work with these people on a deeply committed basis otherwise we are missing the boat on working with volunteers. So far my experience with OCTA people has shown me they are dedicated with a lot of spirit. We should not ignore the years of efforts these people have put into their passion for learning, walking, and protecting the trail. It just comes off like Big Government is here and we are taking over now.
- 7 One last comment on funding. If NPS does not receive the funding they request, the proposal should identify the top priority objectives that would be implemented and identify a phased approach for the other objectives.
- 8 We also would like to know why the Donner Camp Site, the final campsite for the George and Jacob Donner families during the winter of 1846-47, was not identified as a high potential site. This site has also received archaeological investigations and is interpreted by the Tahoe National Forest. There is not much discussion presented on why or how segments or sites were included as high potential while others were not. Did the NPS even visit the Donner site? There is also a pristine segment of trail, recently recorded, from Verdi to First Summit that is not included as a high potential segment. Was this segment overlooked? A better discussion within the appendices of the high potential segments and sites would be useful or another section which details the segments and sites that were not looked at and why (not enough time, funding, personnel, etc.).

Thank you for giving me the opportunity to comment. I also look forward to enhanced communication as the proposal states.

Sincerely,

Carrie E. Smith
District Archaeologist

- 4. The plan proposes a strong program to protect trail resources. It is a resource-driven plan. The plan does not intend to help communities and individuals make money. Even though heritage tourism might result in vandalism, any type of trail visitation could also result in vandalism. There is no evidence in the literature that heritage tourism is more detrimental to trail resources than "regular" visitation. There is concern about the need for additional funds for trail preservation; such funding is more likely to become available as a result of popular pressure on congressional members as more people begin to appreciate these trails. That is the reason for the emphasis on promotion and heritage tourism — the development of a heightened awareness of the importance of these resources among the American public.
- 5. The current plan does not intend to take down all of the signs that currently mark the trail.
- 6. There was no intent to diminish the importance of the role of volunteers in the protection of trail resources. The National Pony Express Association, the Pony Express Trail Association, and the Oregon-California Trails Association have been and continue to be among the most important partners in protecting and interpreting the trails. Their assistance was fundamental to the completion of the current document, and their continued support will be necessary for the future success of this plan. Please see the text on page 64 (second column, last paragraph) of this final. The subjunctive verbs "could be" and "might be" were used to reflect the fact that their efforts are voluntary, not mandatory.
- 7. If funds did not become available, objectives would have to be prioritized.
- 8. The Donner camp site has been added to the list of high-potential sites, and the high-potential segment list has been revised for the California National Historic Trail.

COMMENTS

RESPONSES



United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Nevada State Office
P.O. Box 12000 (1340 Financial Blvd.)
Reno, Nevada 89520-0006
http://www.nv.blm.gov

RECEIVED
OCT 19 1998
LUU1 National Park Service

In Reply Refer To:
8100(NV-930)

OCT 15 1998

Jere L. Krakow
Superintendent
Long Distance Trails Office
National Park Service
P.O. Box 45155
Salt Lake City, Utah 84145-0155

Dear Mr. Krakow:

I appreciate the opportunity to comment on the Draft Comprehensive Management and Use Plans and Draft Environmental Impact Statements for The California, Pony Express, Oregon, and Mormon Pioneer National Historic Trails. This plan represents a significant accomplishment on your part and it stands as a good example of inter-agency cooperation and partnership with diverse public interests. You and your staff have done a great job in bringing this difficult project to the point where a reasonable plan can be completed and implemented.

The Bureau of Land Management (BLM) staff in Nevada have reviewed several earlier drafts of the proposed plans and environmental documentation and this version shows significant improvement over earlier drafts. Based on the staff review of this document, BLM Nevada has the following comments:

Introduction:

1

Page 28, Map 12. Please change the names of the tribes. "Paiute" should be "Northern Paiute" and "Southern Shoshone" should be "Western Shoshone". You also ignore the Southern Paiute in Southern Nevada. They are separate from the Paiute you show for Utah.

Historical Overview and Interpretive Themes: No Comments

Historic Routes and Significant Resources: No Comments

Alternative 1: No Comments

Alternative: 2

2

Page 63, Trails Promotion Section, paragraph 7, states that, "the National Park Service

U.S. Department of the Interior, Bureau of Land Management, Nevada State Office

- 1. Changes have been incorporated on map 12.
2. The paragraph has been modified as follows: "In cooperation with local management, the National Park Service might authorize . . ."

COMMENTS

RESPONSES

2

2

(NPS) might authorize limited use of the trail markers for selected special events...”, this could be read to mean that NPS could authorize the placement of trail markers independently from local managers. The decision to place markers must rest clearly with local management. This paragraph should be clarified to make this point or be deleted.

3

Page 63, paragraph 9, in addition to NPS standards for development, sponsors will be required to comply with local management standards as well. Please refer to standards other than NPS standards here.

4

Page 63, Resource Monitoring Section, paragraph 2, states that the Long Distance Trails Office would act as the focal point for a trailwide alert system. This could put the Office in the position of inciting local and national opposition to actions proposed by other agencies. This could lead to strong interagency conflicts that could damage trail management. The plan also needs to clarify how potential threats to the trails will be identified and verified before NPS triggers the alert system and posts the threat on a website. What would it take for a threat to be included? Who defines what the threats are and which cases merit triggering an alert? What if one person claims that there is a threat to a trail segment? Is this enough to trigger an alert? What if it is 10 people, or a hundred? This section also inserts the NPS in what is normally routine consultation between an agency and the State Historic Preservation Office (SHPO) that usually mitigates effects to eligible trail segments. When in the process would the NPS contact SHPO's, etc. What would happen if an agency and the SHPO agree that an undertaking would have no effect on the trail and NPS, without a clear understanding of the situation, inserts itself in the process? What is the exact decision process for positing an alert? This section also raises false hopes that NPS can change or influence local decision making between SHPO's and other agencies. The threat/alert system needs to be carefully considered and more fully specified before it is implemented.

5

Page 67, Interpretive Media and Outreach Activities Section, paragraph 2. This paragraph should reference local management guidelines as well as NPS wayside guidelines. BLM has guidelines for such projects, as doe the Nevada Department of Transportation (NDOT). We would follow NDOT and BLM guidelines where they differ from NPS. Please refer to agency and local guidelines as well as NPS standards and guidelines throughout the document.

Alternative Considered but Rejected: No Comments

Affected Environment: No Comments

Environmental Consequences:

6

Page 119, Compliance, Cultural Resources Section, paragraph 1. The BLM is not bound by the provisions of any agreement among the NPS, Council, and NCSHPO. We have our own national agreement and a State Protocol that will be followed in Nevada.

3. The paragraph has been modified as follows: “Such sponsors would be required to adhere to all local management and NPS standards for development.”
4. The paragraph has been replaced with the following statement: “When resource threats become known, information would be shared with partners.”
5. The paragraph has been modified as follows: “an interpretive wayside exhibit system in accordance with local management guidelines as well as NPS wayside guidelines.”
6. The sentence has been deleted.

COMMENTS

RESPONSES

3

7

Page 119, Paragraph 5. The statement "no potentially significant historic property would be inalterably changed without consultation with the SHPO and ACHP" is not accurate. First, all resources more than 50 years old are "potentially eligible", while only those determined to be eligible are by definition significant and subject to mitigation. This should be changed to refer to "historic properties" which are by definition both eligible and significant. Also, in the normal application of Section 106, there are hundreds of undertakings a year in Nevada that "inalterably change" historic resources with consultation with the SHPO but not with the ACHP. Finally, The statement that "discovery of significant archaeological resources would be followed by protective measures" is misleading. Substitute "appropriate treatment" for "protective measures".

Appendixes:

8

Appendix D, pages 176-177. Sites 244, 245, 246, 247, 249, 250. In the Threats to Resources/Visitor Services column you have the comment "A major interpretive/protective campaign needs to be instigated all along the trail in this area." This comment seems to be limited to these sites and no other sites on any other parts of the trails. Surely this comment is valid for most or all of the High Potential Sites identified on any or all of the trails. It is unclear why it is applied to the sites in Nevada and not elsewhere. There is no rationale for applying it to Nevada sites and not any others in the Appendix. Also, since this plan is supposed to define an overall management strategy for the trails, with individual site management being left to local managers, the comment is inappropriately specific and directive. Either it should be applied to the majority of the sites, where it may be appropriate, or it should be deleted from the comments for the few sites where it has been made. As a minimum I am asking you to delete it from Appendix D.

Once again, thank you for the opportunity to review the draft plan. Please feel free to contact me at (702) 861-6482 if you have any questions.

Sincerely,



Pat Barker, Ph.D.
Historic Trails Coordinator, Nevada

cc: Field Managers, Nevada
Alice Baldrice, Nevada SHPO

7. The text has been modified to reflect this comment. The paragraph has been changed to delete "potentially significant" and to replace "protective measures" with "appropriate treatment."
8. The database in appendix F in this final document has been modified to reflect this comment.

COMMENTS

RESPONSES



United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Elko District Office
3900 East Idaho Street
Elko, Nevada 89801

In Reply Refer To:
8100/8300
NV-013
11/5/1998

MEMORANDUM

Mr. Carl Barna
Department of Interior
Bureau of Land Management
1620 L Street, Room 204
Washington D.C. 20240

Dear Mr. Barna:

Enclosed are the comments from the Bureau of Land Management, Elko Field Office on the Draft Comprehensive Management Plan and Use Plans and Draft Environmental Impact Statements for the California, Pony Express, Oregon and Mormon Pioneer National Historic Trails.

- 1

1) This document does not address how Alternative 2 will affect land use programs, for example range, lands, minerals, timber harvesting, etc.
--
- 2

2) Additional funding and personnel are needed in order to fully record and evaluate sections of the Pony Express and California Trail that cross Nevada. We at BLM are mostly compliance oriented-- Section 106 and Section 110 so that only the sections that have fallen within specific projects have been recorded and evaluated for eligibility to the National Register of Historic Places.
--
- 3

3) All maps of section of trail crossing Nevada should show Carlin (City of) for purposes of reference. The existing maps show no cities in between Elko and Battle Mountain.

U.S. Department of the Interior, Bureau of Land Management, Elko (NV) District Office

- 1. Comprehensive management and use plans for national historic trails developed by the National Park Service do not address specific land use programs since the Long Distance Trails Office does not manage any of the trails lands.
- 2. Comment noted.
- 3. The maps now include the city of Carlin, Nevada.

COMMENTS

RESPONSES

4 4) On pg. 32, under heading "Great Basin", ¶2, change from "lifeline of life giving water..." to "offered sustenance to both emigrants and their livestock".

5 5) On pg. 33, under "California National Historic Trails", ¶1, change from "get rick" to "get rich".

6 6) On pg. 37, why isn't the Greenhorn Cutoff considered part of the National Historic Trails system?

7 7) On pg. 48, under "Cooperative Management Agreements, ¶1, change from "memorandums of agreement" to "memoranda of agreements".
8) On pg. 93, Ethnographic section should include all other tribes/bands associated with the four trails listed in this document.

9) pp. 9-23: excellent maps: this document is already a good resource. 17 high-potential sites are in the Elko District.

8 10) P. 28 (map): change "Southern Shoshone" to "Western Shoshone".

9 11) P. 33: California National Historic Trail: "Settlement was so rapid that California became a state in 1850 without having been a territory - the only western state to do so." What about the annexation of the Republic of Texas following the Mexican-American war? It would seem that the issue of whether the U.S. could admit another slave state to the Union (Texas) in 1846 was offset in part by admitting other states. Is Texas a western state? I guess so. Were changing economics in the East and South a reason that emigration to California was so popular? Why did so many people catch "gold fever"? Obviously, you want the themes to be short on this page but we should check the accuracy of the Texas/California statehood statement again.

10 12) There are only two alternatives, one of which is a no action alternative; the plan lacks specific actions which makes it hard to analyze costs and impacts. It's full of good ideas so far.

11 13) P. 47: alternative 1. Cost 380,000 (present) - 440,000 (projected costs in near future). What's the cost of alternative 2?

12 14) P. 49: how do you define "carrying capacity"? It appears to be better defined on p. 65. Perhaps the reader could be referred to page 65 somehow.

15) P. 50: challenge cost-share; BLM-Elko should request cost-share funding for the following: Goose Creek, California Backcountry Byway, and the Hastings Cut-off through South Fork Canyon. If the project occurs on federal land, it has to relate to a need identified in an approved planning document. ...Funds can be used for any project that protects, preserves, improves, or interprets sites and segments recognized as components of the national historic trails, whether on federal, state or private lands. This is a reimbursable program where BLM or another organization would do the work and then be reimbursed for the costs.

4. The paragraph has been modified as follows: "The Humboldt . . . offered sustenance to emigrants and their livestock. The emigrants followed it for 300 miles across the Nevada desert to the Humboldt Sink. Without the Humboldt, overland migration to California might have been impossible."
5. The typographical error has been corrected.
6. The Greenhorn Cutoff is not part of the authorized route for the California National Historic Trail since it was not included among the 23 routes identified in the NPS 1987 *Feasibility Study*.
7. The importance of American Indian tribes in the western migration is clear to the authors of this plan. Nevertheless, because of the magnitude of this project, it has not been possible to include a description of all the tribes associated with the four trails listed in this document.
8. The map has been changed.
9. The statement has been deleted.
10. The office in charge of administering the trails does not directly manage any specific resource; therefore, it is not possible to identify specific actions.
11. The estimated budget of \$1,200,000 for alternative 2 is indicated on page 62 of the draft document.
12. Alternative 1 (p. 49) does not include a definition of carrying capacity; it merely states that the National Trails System Act requires the identification of the carrying capacity of trails and a plan for its implementation. Alternative 2 actually proposes a specific methodology to address this issue.

COMMENTS

RESPONSES

13	16) Pp. 51-52: Backcountry Byways are another way of bringing the Historic Trail system to the people. As hinted at on p. 52, one possible drawback to increased visitation is increased damage from vehicles, vandalism and looting. "Backcountry Byway" is a key program for the BLM and should be integrated into the National Historic Trail DEIS.
14	17) Alternative 2 P. 61: historic trails coordinator required to assist NPS. To what extent has NPS discussed this with BLM and USFS? Is this a single national coordinator or is there one per each state or district? The idea of an exchange is excellent though the objectives of this are still unclear.
15	18) P. 61: "The National Park Service, the Bureau of Land Management, and the Forest Service would each provide resources to carry out trail programs. This would be accomplished by pooling funds from the trails budgets of each agency." Does the BLM have a trails budget? How much is it? How do I tap in?
16	19) p. 62: State Level: this appears to be undeveloped. Perhaps this section could be enhanced via communications with the national SHPOs group or conference (the group that negotiated with the BLM for the National PA). Perhaps a national PA could be developed for a trail system between SHPOs and NPS. 20) P. 65: index of vulnerability. I think the greatest impact to the trails in this district is grazing: cattle, water pipelines, fences and vehicles on the trail.
17	21) P. 65: The Long Distance Trails Office would also have the lead in coordinating research projects..." This is a natural task for the office in many instances but not all, perhaps. Also, what does "coordinating research projects" mean? Will there be a money pot at the Office for us to do research?
18	22) P. 68: Archaeological Resources: who, what, where, when, why, how? Who pays? Who surveys and writes? Etc. This is an obvious component of the plan but is completely undeveloped with the problem that no real analysis of this alternative can be done.
19	23) P. 89: Mississipi - typo.
20	24) P. 111: Sites, whether historic or prehistoric, are considered to be archaeological in nature.
21	25) What's lacking: The plan focusses entirely on historic archaeological resources: segments and sites along the trail. However, HISTORY is still a driving force as to why the sites are important and if historic research and conservation is not accomplished, then the sites themselves are greatly diminished.
22	26) Funding and aid for conservation and recording of Emigrant diaries, museum collections, historic works of the period, and recordation of private collections need to be made available and

13. The following sentence has been added under the "Wayside Exhibits" section: "In a few locations BLM backcountry byways have trail waysides along them." Another sentence has been added in the "Visitor Experience and Use" section: "Driving along BLM backcountry byways is another opportunity to experience the trails."
14. The designation of one historic trails coordinator to assist the National Park Service has been discussed with both the Bureau of Land Management and the Forest Service. All of the paragraphs in this section address the various objectives — coordination of overall policy for trail resources, facilitation of information sharing on issues related to resource protection and management, improved communication, development of consistent policies and approaches, etc.
15. The Bureau of Land Management does not have a trails budget per se. No funds are directly appropriated for historic trails. However, the recreation budget at the national level includes \$500,000 of directed money to be divided among scenic and historic trails. These funds can be tapped through the annual state work plans and budgeting process.
16. This is a good idea, and the Long distance Trails Office would try to facilitate a discussion about such an approach. However, it would not be possible for the Long Distance Trails Office to sign a national programmatic agreement for these historic trails since it does not have management authority over trail resources and has no responsibilities under sections 106 and 110 of the National Historic Preservation Act.
17. There would not be a permanent research account at the Long Distance Trails Office, but NPS funds could be made available for one-of-a-kind, specific research projects.
18. This would be an ambitious project that would require extensive coordination, as well as substantial funding and time to complete. It is not possible at this time to be more specific on this issue.
19. The typographical mistake has been corrected.
20. While this is technically correct, NPS planning documents always make a distinction between archeological and historic resources.
21. The plan provides extensive information on the history of these trails and of the sites and segments. It also calls for additional historical research for both the Oregon and California National Historic Trails.
22. The planning team agrees that this would be a very worthwhile goal; however, it is not possible for the National Park Service to fund all these activities for more than 11,000 miles of trail. The assistance of other federal, state, and local agencies, as well as trail organizations and the general public, is necessary to achieve these objectives.

COMMENTS

RESPONSES

22 specifically addressed in this document. I am sure that many universities, private individuals and even the Trails Office have amassed a decent bibliography. An annotated bibliography should be made available to government offices.

23 27) Whether an historic archaeological site can be considered to be National Register-eligible can occur under four criteria: A-D. My assumption is that the Trails Office is very familiar with this and there is no need to explain this other than to mention it. However, when there is lack of context, sites that might have been eligible under criteria A-C may be ignored as could be the research potential for each of the sites.

The Trails Office could produce a series of Historic Contexts for each trail or region in cooperation with each affected state's SHPO as well as from various agencies. This would help to address site eligibility under the NHPA.

28) In fact, NHPA has really not been addressed much at all in this document.

29) Actually, this is a very informative document in places and I can tell the amount of work that has gone into it thus far. I do believe that this draft plan does require more revision.

24 30) The plan and EIS seem to fall short of detailing the impacts that implementation of the plan will have on other uses of the public lands. I was thinking that I would see such things as mitigation for protection of the trail resources, but maybe they are to be considered in a case by case basis such as our cultural (resource) inventories for federally authorized actions. From what I can gather...I understand that one option (Alternative 2) call for the development of a historic (trail) partnership to include BLM. Maybe it is through this partnership that corridor designations will be made. Obviously, my concern is what constraints, if any, will be placed on the grazing administration program. For example, we are currently proposing a pasture division fence that would cross the trail. It is my understanding that we may not be able to construct this fence (designated to improve rangeland resources in the vicinity of the trail) because of its potential impacts to the trail. This is where I feel the draft plan EIS falls short of letting the reader understand what constraints would be placed on other resource use through implementation of the plan. As long as we have the flexibility to address them on a case by case basis, that would be fine.

25 31) On soils: Some additional impacts to soils and water that are associated with compaction are destruction of microbiotic soils crusts and an increase in runoff. Microbiotic crusts are poorly adapted to compressional disturbances. The EIS mentions increased sediments in streams as an impact. Although the impact would be small, did they consider using Best Management Practices for areas where this could be a problem? Other mitigation, such as the use of water bars, could reduce impacts in high traffic areas.

23. An effort to develop a series of historic contexts for each trail or region would be quite valuable and would address site eligibility under the National Historic Preservation Act.

24. As indicated throughout the document, this plan does not propose any site-specific actions; therefore, the analysis of the environmental consequences tends to be general.

25. This is a very general plan that does not include that level of detail. Mitigation strategies, as identified in the "Environmental Consequences" section, are not site specific. Whenever any specific undertaking is contemplated, appropriate treatment would have to be identified.

COMMENTS

RESPONSES

UNITED STATES DEPARTMENT OF THE INTERIOR
 BUREAU OF LAND MANAGEMENT
 Oregon/Washington
 P.O. Box 10226 (2890 Chad Drive)
 Eugene, Oregon 97440-2226

RECEIVED
 OCT 22 1998
 LODOT National Park Service
 October 21, 1998

Memorandum

To: Jere L. Krakow, Superintendent Long Distance Trails Office
 From: Oregon/Washington BLM
 Subject: Review of Draft Comprehensive Management and Use Plan

Thank you for the opportunity to review and comment on the Draft Comprehensive Management and Use Plan (CMP)/Environmental Impact Statement for the California and Pony Express National Historic Trails and the Management and Use Plan Update for the Oregon and Mormon Pioneer National Historic Trails.

General Comments

The partnership facilitation, assistance and coordination role of the National Park Service (NPS) is a valuable direction described in this plan. Clearly there is a leadership role for the NPS in coordinating volunteers, public awareness, challenge cost-share, educational outreach, and trail studies among partners and across administrative boundaries. A great deal of emphasis is given in the CMP to administration by the NPS Long Distance Trails Office. For balance, in the Administration and Management sections for both Alternatives you should indicate that other agencies have jurisdiction and make on-the-ground management decisions affecting trail resources.

1

Specific Comments

Page 26 - Issues and Concerns/Administration and Management:

It would be appropriate to recognize that preservation and protection of historic trail resources has been a high priority for the BLM, and many of the protection actions identified in the 1981 plan for the Oregon Trail have been implemented. Strategies for protecting Oregon Trail resources while providing for appropriate public use have been developed for BLM lands in Oregon. These include protection through special designation actions, management plans and land use plans developed with input and coordination between interest groups, state and other federal agencies. In the Vale District, sites of the Oregon Trail were designated as an Area of Critical Environmental Concern with defined management corridors, objectives and direction for other uses. Statewide, Oregon Trail routes have been marked and interpreted in a coordinated manner. Although BLM trail resources in Oregon are less extensive than in Idaho or Wyoming,

2

U.S. Department of the Interior, Bureau of Land Management, Oregon / Washington

1. The jurisdiction and responsibilities of the other agencies for on-the-ground management decisions affecting all trail resources are acknowledged in the draft document in the "Summary" (page v), the "Introduction" (page 13), and both alternatives.
2. Comment noted.

COMMENTS

RESPONSES

sites and segments have been appropriately protected and interpreted for visitor use. In particular, BLM's National Historic Oregon Trail Interpretive Center is an excellent example of protection, major education and interpretation for this National Historic Trail.

Page 64-66 - Protection Plan

Resource inventory, trail mapping, research project clearinghouse, and a specific monitoring system for existing condition/change indicators are much needed tasks that certainly require partnership and coordination between the NPS, other agencies and interests. We agree that the further studies as identified would be useful for trail managers, and recommend a database associated with GIS mapping needs to be coordinated at the outset with BLM and USFS. In general, we consider that protection plans and monitoring will be most useful if tailored to sites and segments based upon their condition, potential for change, and management objectives. However, additional BLM funding and staffing would be required to participate as a partner and fully implement these interagency actions.

Page 66 - Management Corridors

A "flexible accordion" approach to defining widths for management corridors along high-potential segments is greatly preferred over a rigid uniform one-half mile corridor. However, rather than emphasizing landscape "corridors", a more useful approach would be for the NPS and partners to develop guidelines for historic trail cultural landscape inventory and evaluation, with a suite of suggested design measures or techniques to minimize visual intrusions on significant trail landscapes. This would provide the foundation for locally developed best management practices for cultural landscapes, and a tool for agencies when making decisions affecting trail landscapes in a multiple use context.

Whether or not management "corridors" are even needed should be based upon the condition and significance of trail resources and compatibility of local land uses. Current wording of this section seemingly requires formally establishing corridors - width and protection conditions to be later defined - specifically along designated high potential segments. However, the section should recognize that formal corridors may not need to be established when other management approaches such as land use plan management actions, best practices and project design measures provide redundant protection for cultural landscapes.

The body of the EIS should state that BLM land use plans and management objectives currently exist for public land along trail routes, and that any proposed plan creating or affecting the management of trail landscape corridors may require further environmental impact analysis, and public involvement, under the Bureau's planning procedures. Although future plan amendments are mentioned in the Summary and Introduction sections (page v. and 3), it would be appropriate to include this information under the Alternatives and Environmental Consequences. Otherwise, the potential environmental impacts from establishing cultural or visual landscape management corridors upon existing resource uses and allocations on BLM land are not sufficiently analyzed by this programmatic EIS.

Page 66 - Resource Monitoring

The last two sentences referring to a trailwide alert system casts the Long Distance Trails Office as a special "crisis" intervenor, apparently overlooking the utility of early review and comment on proposed federal actions or plans. With respect to federal undertakings, the

3. While the suggestion of developing guidelines for a historic trail cultural landscape inventory and evaluation appears to be a good idea, its implementation would be quite difficult. There are no agreed upon guidelines for such inventories and evaluations. Little consistency exists, even within agencies, regarding the implementation of the Oregon National Historic Trail plan in this regard. Certain BLM districts identify a 0.5-mile protection corridor, others expand it to 2 miles, while in some areas there is no specific protection corridor. The length and complexity of trail resources make the task even harder.
4. As noted in this comment, statements to this effect are already included in the draft document (p. v, 3). Since there are no specific actions proposed in the current plan, it does not seem appropriate to discuss them under "Environmental Consequences."
5. This paragraph has been deleted.

3

4

5

COMMENTS

RESPONSES

5

appropriate avenue for LDTO/NPS review and comment on potential threats to trail resources is through established NEPA and National Historic Preservation Act processes for federal, state and public involvement. In a facilitating role, NPS could more constructively use the web site as a place to post opportunities for public review of agencies' NEPA actions or plans.

6

Page 97: Table 13 Landownership and Use
Please provide the specific source for the 1987 Feasibility Study information stating that 55 miles of BLM lands in Oregon include the California National Historic Trail. Does this include general route adjacent to BLM lands or specific route locations crossing BLM lands? We have not yet verified the Table 13 number.

7

Appendices: High Potential Segments and Sites
In general, to assist in local coordination and planning, where the ownership of the segment or site is listed as "Public", the agency or entity which has jurisdiction should be identified in the table.

8

Appendix G: Oregon Trail High-Potential Sites
Corrections to the table are needed as follows.
No. 112: National Register Status
Keeney Pass Oregon Trail Ruts on BLM land are listed on the National Register of Historic Places as a Historic District.

9

No. 121/122: Ownership
BLM does not have jurisdiction of any properties in the City of Echo, which is the focus of the "Echo Complex" - therefore delete BLM under the ownership column for Echo Complex. However, BLM does have jurisdiction of public land in the "Echo Meadows" site (122) with its interpretive wayside and visible ruts - therefore add BLM under the ownership column for Echo Meadows.

If you have any questions please contact Ken White at 503-952-6061 or Richard Hanes at 541-683-6669.

6. The NPS 1987 *Feasibility Study* identifies BLM status maps as the specific source for the information (see p. 115).
7. The appropriate agency has been identified in the appendixes and the resource database whenever the information is available.
8. The change has been made in the document appendixes and the resource database.
9. The correction has been made.

COMMENTS

RESPONSES



United States Department of the Interior

BUREAU OF LAND MANAGEMENT
 Rock Springs District Office
 280 Highway 191 North
 Rock Springs, Wyoming 82901 8100(480)
Cultural Case Number: 048-99-008

October 9, 1998

RECEIVED
 OCT 15 1998
 LODD National Park Service

Mr. Jere L. Krakow
 Superintendent
 Long Distance Trails Office
 324 South State Street, Suite 250
 P.O. Box 45155
 Salt Lake City, Utah 84145-0155

Re: Comments on the Draft Comprehensive Management Plan/Environmental Impact Statement for the Oregon, California, Mormon Pioneer and Pony Express National Historic Trails

Dear Mr. Krakow:

Thank you for the opportunity to review the subject document. The document clearly represents a substantial investment in time and effort. We support the National Park Service's attempts to direct more resources towards trail protection and management.

In reviewing the alternatives we have been making Alternative 1 work for the past years. Other Bureau of Land Management Offices have not been as aggressive. However, we do support the National Park Service attempting to implement Alternative 2 providing there is no erosion of our ability to actually manage the trails in the field. We would like to recommend more sharing of NPS resources with those field offices charged with day to day management of the trails as well as local communities. We are especially interested in employing the results of GPS surveys, carrying capacity studies, viewshed analysis, and visitor experience studies. We hope implementation of this plan will usher in a new era of cooperation between our agencies.

Specific Comments:

Page 36ff- We are gratified that the plan recognizes Congressional intent to include all routes and cutoffs within the National Trails System. The Cherokee Trail routes definitely belong in that category. In looking at the mileage in Table 2 it is not clear all three recognized routes of the Cherokee Trail has been included. This could add over 200 more miles of California Trail to Wyoming. The Overland Trail apparently was in the main route taken by the Brown Company. Two other Cherokee companies blazed routes which would serve for later emigration through this same area of Wyoming.

7

U.S. Department of the Interior, Bureau of Land Management, Rock Springs District Office

1. The opinion of the U.S. Department of the Interior's Office of the Solicitor regarding the authorized routes of the California Trail addresses this issue. According to his opinion, only the routes and cutoffs identified in the 1987 *Feasibility Study* constitute the authorized California National Historic Trail. Additional routes, such as the Cherokee Trail, could be authorized in the future, pending a feasibility study and congressional action amending the original act for each trail.

COMMENTS

RESPONSES

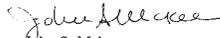
2 Page 40- Brigham Young did indeed enter modern Wyoming in June of 1847. However, it was not "Wyoming Territory" at that time.

3 Page 41ff- It is clear that there will be an ongoing debate as to what constitutes High-Potential Sites and Segments. We have many of the best segments of trail extant in our jurisdiction. Perhaps much of the disagreement would disappear if we changed the label from "High Potential" versus non-high potential to one which recognized a variety of status designations ranging from high to low. The current system would suggest that perfectly good trail remnants which have highly compromised setting lack importance. There should be some way to recognize the importance of these remains.

4 Page 97ff- It is not clear how the actual numbers for mileage of trails were determined. As noted earlier the map of the California Trails System apparently leaves off Evans' Route of the Cherokee Trail in Wyoming as well as other segments of that California Trail variant. Additionally all lands held in Trust for Native Americans are Federal lands and should be in that portion of the table.

Should you have any questions please contact Rock Springs Field Office Archaeologist, Terry Del Bene at (307) 382-5350.

Sincerely,


John S. McKee
Field Manager

2. The correction has been made.
3. The National Trails System Act requires the identification of high-potential sites and segments.
4. The mileage tables have been modified to reflect the solicitor's opinion.

COMMENTS

RESPONSES



IN REPLY REFER TO:

PRO-406
ENV-3.00/6.00

NOT RE-TRANSMITTED

United States Department of the Interior

BUREAU OF RECLAMATION
Upper Colorado Region
Prowe Area Office
302 East 1860 South
Provo, Utah 84606-7317

OCT 22 1998

FAXOGRAM

To: Mr. Jere Krakow, Superintendent, Long Distance Trails Office, Department of the Interior, National Park Service, 324 South State, Suite 250, Salt Lake City UT 84145- 0155

FROM: Bruce C. Barrett
Area Manager

Subject: Comments on the Long Distance Trail Plan

We appreciate the opportunity to comment on the *Draft Comprehensive Management and Use Plan, Draft Environmental Impact Statement (DEIS), California National Historic Trail, Pony Express National Historic Trail, and the Draft Management and Use Plan Update, Draft Environmental Impact Statement, Oregon National Historic Trail, Mormon Pioneer National Historic Trail*. We also appreciate the opportunity to attend the open house held on September 24, 1998, in Salt Lake City. Kerry Schwartz, of my staff, and Nancy Coulam of the Upper Colorado Regional Office staff attended the meeting.

At the open house, Kerry and Nancy expressed concerns about the plan. Kerry also left a copy of a land status map showing acreage owned/controlled by the Bureau of Reclamation in Southwest Wyoming.

Following are some comments that may assist you in your preparation of the Final Environmental Impact Statement:

Page Comment

Reclamation manages many acres of land along the trails, including some of your "high-potential" trail segments in Utah and Wyoming, and it is surprising that land ownership of some of the significant trail segments was not verified (Big Sandy to Green River, Castle Rock to This Is The Place). In the final plan, please include

U.S. Department of the Interior, Bureau of Reclamation, Upper Colorado Region

- 1. The document has been modified to include the Bureau of Reclamation as a trail-managing entity.

COMMENTS

RESPONSES

	COMMENTS	
	2	
1	Reclamation as a trail-managing partner under your administration and management section, particularly in your Alternative 2 entitled "Enhanced Conditions and a Historic Trails Partnership".	2. This has been clarified in the text.
2	3 This section is not clear on what the purpose and need are for the proposed action. The purpose and need should state the underlying purpose and need to which the agency is responding. The current purpose and need statement appears to allow only one reasonable solution. A purpose and need statement should allow for exploring a reasonable range of alternatives. This section should describe what the Federal action is-it is unclear.	3. The National Park Service differentiates between objectives (a desired future condition) and current problems that must be addressed. Current problems constitute the need for the plan. The planning team realizes that there are various ways in which the information can be presented to the public.
	25 This section is confusing. It confuses the reader as to whether or not this is actually the purpose and need section of the document.	4. The text has been changed.
3	26 The section titled, "Administration" is a good summary of what could be considered needs for the proposed project. Move this section to page three of the document and include it with a clearly marked section titled, "Need for the Proposed Action".	5. The Oregon Trail interpretive facility in Montpelier, Idaho, has been added to list of interpretive programs and facilities.
4	47 Add the following, "Some trail resources are managed by the Fish and Wildlife Service, Department of Defense, and the Bureau of Reclamation."	6. The text has been changed.
5	51 Add the new interpretive facility located in Montpelier, Idaho (United States Forest Service (USFS) Office/Oregon Trail Interpretive Facility) to the section titled, "Interpretive Programs and Facilities".	7. Permission pertains only to the use of trail markers; it does not pertain to the use of trail resources.
6	61 Add the following, "Other Federal agencies, such as the Fish and Wildlife Service, Department of Defense, and the Bureau of Reclamation...."	8. All the elements of the preservation plan are included in the present document. There is no other preservation plan for high-potential segments.
7	63 The document states that National Park Service (NPS) might authorize use of the trail for special events if there were no liability consequences. This seems inadequate given the overall mandate to preserve and protect the trails, and to comply with Section 304 of the National Historic Preservation Act, as amended in 1992. This amendment states that agencies can only disclose to the public the location and character of historic resources that the agency can protect. Therefore, to remain in compliance with this statute, you need to insert a sentence that special events might be approved if the agency can guarantee preservation and protection of the physical elements of the trail, not just liability.	
8	64 The document mentions that the NPS, Bureau of Land Management (BLM), and USFS developed a preservation plan for high-potential trail segments. We would appreciate receiving a copy of this plan.	

COMMENTS

RESPONSES

3

65 The document discusses a limit of acceptable change approach to carrying capacity for the trails and mentions an index of vulnerability to predict overuse. We support such an approach and recommend that you add the potential impacts from the promotion described under the alternatives.

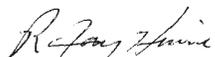
50, 66,

Appendix L The protection tools are limited and should be expanded to include some of the actions you list in interpretation. We recommend that some of the "promotional" tools you propose such as signage and special events, be designed as protective devices. For example, your standardized signs could include a resource protection message, as well as the Archeological Resources Protection Act warning of prohibited acts and associated fines. Given the impacts you describe of vandalism, cumulative ORV use, etc. on the physical resources, we recommend inclusion of additional protective policies and strategies in the plan.

9

In addition to the comments listed above, it was also noted that the document did not include any discussion about Indian Trust Assets (Secretarial Order 3175), Environmental Justice (Executive Order 12898), and Indian Sacred Sites (Executive Order 13007). According to CEQ regulations (40 CFR 1502.10), a distribution list should also be included in the EIS.

If we can be of further assistance, please contact Nancy Coulam at (801) 524-3684 or Kerry Schwartz at (801) 379-1167.



cc: Manager, Resources Management Division, Salt Lake City UT
Attention: UC-325 and UC-333

9. Signs are placed by land-managing agencies, and message content is subject to their approval.

COMMENTS

RESPONSES



IN REPLY REFER TO:

United States Department of the Interior

NATIONAL PARK SERVICE
 Hagerman Fossil Beds National Monument
 221 North State Street
 P.O. Box 570
 Hagerman, Idaho 83332-0570

RECEIVED
 SEP 16 1998
 LODT National Park Service

D18

September 14, 1998

Long Distance Trails Office
 National Park Service
 P.O. Box 45155
 Salt Lake City, Utah 84145-0155

Dear Kay:

Thank you for the opportunity to comment on the Draft Management and Use Plan Update for the Oregon National Historic Trail.

- 1 On page 57, the auto tour route should show the road leading to the ruts and visitor facilities located in Hagerman Fossil Beds National Monument. On your map, this would start below the Highway 30 symbol where the road changes direction. It would extend six miles west. See the enclosed Park brochure map for more detail. Visitors can drive on a paved county road to access Oregon Trail features.
- 2 1. At 2.8 miles from Highway 30, there is a wayside exhibit discussing the emigrants trading with American Indians for fish at Salmon Falls at the Snake River Overlook. This parking area also serves as a trail head for the Emigrant Trail. This three mile long interpretive trail leads up a canyon that wagons traveled parallel to the main trail. A brochure with wagon journal quotes allows visitors to hike or horseback ride on their mounts to "Experience the Oregon Trail." Please see the enclosed brochure. These features should be added to the chart on page 201, item #7 under Visitor Services.
- 3 2. The road continues past a number of marked rut segments and at 5.7 miles, a parking lot serves a wheel-chair accessible overlook and wayside exhibit of the Oregon Trail. This facility was mentioned on page 201.
- 4 Page 121 under National Park Service should have the words "National Monument" follow Hagerman Fossil Beds. This also applies to the chart on page 201, item #7.

U.S. Department of the Interior, National Park Service,
 Hagerman Fossil Beds National Monument

- 1. The auto tour route does not identify spur roads to trail sites. In collaboration with agencies and landowners, consideration would be given to signs indicating directions to such sites. The Auto-Tour Route map has been modified to reflect this comment.
- 2. Information has been added to the resource database.
- 3. This information has been incorporated into the resource database.
- 4. The text has been changed.

COMMENTS

RESPONSES

5

On Page 219, items #9 and #10 need to be reversed if sequential order of travel is to be maintained.

Your document should provide good guidance in future years.

Sincerely,

Neil King
Neil King
Superintendent

Enclosures

5. The document has been changed.

COMMENTS

RESPONSES

Author: Michelle Watson at NP-MWRO
 Date: 11/23/98 10:26 AM
 Priority: Normal
 Receipt Requested
 TO: Michelle Watson
 CC: Sue Thompson, Craig Kenkel
 TO: Jere Krakow at NP-DENVER
 CC: Sandra Washington, Sherda Williams
 Subject: In-house Review: Ca, Pone Exp, Oregon, Mormon NHT
 November 23, 1998

RECEIVED
 NOV 23 1998
 U.S. National Park Service

Attention: Jere Krakow

Thank you for the opportunity to review the draft document titled, "Draft Comprehensive Management & Use Plan, Draft EIS: "Ca Natl Historic Trail; Pony Express Natl Historic Trail; Oregon Natl Historic Trail; Mormon Pioneer Natl Historic trail." Below are my comments. Should you have any questions, please feel free to contact me at any time at telephone 402-221-3786 or by e:mail.

Overall the document is well written. The amount of effort put into this plan clearly shows a commitment to the development of partnerships for long-term resource protection throughout the multi-state area. The Servicewide Memorandum of Understanding between the NFS, BLM and USFS, and the coordination with private landowners, American Indian tribes and nations, other organizations and government entities and the public, shows the cooperation necessary to carry-out the responsibilities of the National Trails System Act.

More specifically,

While the maps throughout the document are informative, they would be much more user friendly if they were in color (at least one of them) in the final document, clearly delineating the Oregon, Mormon Pioneer, California and Pony Express Trails.

P. 67 - I highly recommend that interpretive planning involve cultural anthropologists who can assist in the process of consultation with not only European American community representatives, but especially with American Indian tribal representatives.

P. 93 - Under the section titled, "Cultural Landscapes," the discussion of the 1990 El Malpais GMP is a very good example of how cultural and natural resources are closely linked and related. This precedent should help to guide this current effort.

P. 93 - The discussion under the umbrella section titled, "Ethnographic Resources" is very misleading. It suggests that ethnographic resources are only those resources which are ascribed historic and cultural significance by American Indian tribes and nations. Ethnographic resources can really be any natural or cultural resource which is ascribed value by any ethnic group. Such resources may be various types of vegetation (plants, wetlands), wildlife, waterways and water resources, buildings, landscapes, places, archeological sites (both prehistoric and historic), other natural or man-made features, etc. Such ethnographic resources are assigned traditional legendary, religious, subsistence, or other significance in the cultural system of a contemporary group traditionally associated with it. Such groups include living peoples of many cultural backgrounds - American Indians, Inuit (Eskimos), Native

U.S. Department of the Interior, National Park Service, Midwest Regional Office

1. This comment has been incorporated into the text of the document.

COMMENTS

RESPONSES

Hawaiians, African Americans, Hispanics, Chinese Americans, Euro-Americans, and farmers, ranchers, and fishermen. I recommend that this is somehow conveyed to the reader.

2

P. 94-95 - It should be noted on these pages that these and hundreds of other traditional American Indian tribes and nations within the study area are vibrant and alive today. It would be offensive to speak about them simply in past-tense, as if they no longer exist.

Thanks Again!

/s/ Michelle L. Watson,
Cultural Anthropologist, NPS, Midwest Support Office, Omaha, NE
Tel. 402-221-3786

2. On page 94 the document indicates that more than 100 American Indian groups were affected by the overland migration. A serious effort was made to contact many of these groups during the course of this planning effort. There was no intent to imply that these tribes and nations are not vibrant and alive today.

COMMENTS

RESPONSES



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OCT 14 1998

RECEIVED
OCT 23 1998
LODT National Park Service

OFFICE OF
ENFORCEMENT AND
COMPLIANCE ASSURANCE

US Park Service
Superintendent, Long Distance Trails Office
324 State Street., Suite 250
Salt Lake City, UT 84145

Dear Superintendent:

In accordance with Section 309 of the Clean Air Act and our responsibilities under the National Environmental Policy Act, the Environmental Protection Agency (EPA) has reviewed the U. S. National Park Service's (NPS) Draft Comprehensive Management and Use Plan/Draft Environmental Impact Statement for the California, Pony Express, Oregon and Mormon National Historic Trails. The EPA's review resulted in a lack of objections ("LO") rating to either of the alternatives presented. EPA believes that the preferred alternative would provide a framework to enhance resource protection and improve visitor experience through an integrated development of programs, and a comprehensive strategy for resource protection. EPA also supports the Park Service stated goal for updating and completing its resource inventory and more active monitoring plan which should promote more efficient and consistent management of the Historic Trails System.

The EPA appreciates the opportunity to comment on the Draft Comprehensive Management and Use Plan/ Environmental Impact Statement. If you wish to discuss any of our comments further please call me at 202/564-2400 or Elaine Suriano of my staff at 202/564-7162.

Sincerely yours,


Richard E. Sanderson
Director
Office of Federal Activities

United States Environmental Protection Agency

COMMENTS

RESPONSES

NOV-06-98 02:36 PM BATTLE MOUNTAIN BAND 17026358016 P.02

Facsimile Transmittal

Tribal Environmental Desk

(702) 635-2004

(702) 635-8016

, Battle Mountain NV 89801

Address 2 37 Mountain View DR 4c

Address 3

Address 4

Date: 11-6-98

Attention: Susan Boyle FAX (303) 969-2736

From: Bernice Lalo, Environmental Coordinator (702) 635-8016

Number of pages (including this cover): 3

Comment(s): I will reiterate the comments that I made during our conversation of July 9, 1998. This was given as a report to the Tribal Chairperson and she agreed with that we should make comments. This trail markers would be a historical document which would be read as "gospel" and accepted by overseas and American people.

Our people gave up our lives and had no concept that in the future, this earth we walk on would no longer be "ours." We understand the emigrants had religions and financial gain as the result of "taking" our land by the Manifest Destiny. We feel it is only fair as the monuments are put up along the roads, there should be two sides to the story. We feel that in this time in history, the loss of the indigenous people be recognized as a valuable loss of culture. Some of the degradations are a part of history and I am faxing you one of the pages of history as written by one of the military people.

As you indicated yesterday, some people felt the National Park Service was being "too Indian friendly", let me remind you of the pages of history and the discrimination our people have had to suffer during the emigrants' migrations east. Also, the staff may need to be reminded of the Executive order which spells out the kinds of relations the President has asked of all departments. We are nation to nation and, as such, should respect the pain and loss suffered on both sides. Ours was a loss of culture, language, land, lives and dignity. Our suggestions for the trail sides is that as the trail markers indicate the history, those markers should also indicate the aboriginal lands on which the person stands to read this information. For example, when you ~~travel through the state of Nevada,~~ it should read: This is the aboriginal lands and territories of the Western Shoshone, Washoes, and Paiutes. At least the records and trail markers should acknowledge us—At the very least! This is written on behalf of the Battle Mountain Band Council and all of our future young people who will also read the markers.

Battle Mountain Band Council, Te-Moak Tribe of Western Shoshone

1. All the interpretive efforts associated with this project would incorporate the perspective of American Indians affected by the migration. These efforts would acknowledge their contributions and would explore how the loss of the indigenous people resulted in a dramatic loss of culture.

COMMENTS

RESPONSES

NOV-06-98 02:36 PM

BATTLE MOUNTAIN BAND

17026358016

P.03

Thursday, July 09, 1998

NATIONAL PARK SERVICE

Earlier on, I had called Susan Boyle. She returned my call on June 29, 1998 @ 3:31 PM 303 969-2319

Answered 8:15, July 9, 1998. We talked about the Comprehensive Management Trails that are going to go through 4 states--Oregon & Mormon trail & California & the Pony Express(Nevada) S/w/b sending me a copy of the plan for review. She said that she had called & s/named them: People from Dresserville, (Washoe country) and s/sd also Fallon & Elko. At first, she told me that "160 Indian groups" had been involved and said "And you are 161." Well, after while when I questioned about which ones in Nevada had responded, she said no one had responded. She read off a list of the people s/sd called. The copy of the plan w/b completed around July 28th & s/b/sent out approx. Aug

She was very happy to hear from me and said I was the only one who had shown any interest. We talked for a while and I told her I had seen some scenic markers and some did not portray WS in a good light--that it was about time, after about 200 years of (American) history the side of the Western Shoshone people be viewed in a positive light & that whatever trail it was, it w/b/running through WS aboriginal territory and w/needed to be seen in a different light than had been portrayed. She was quite agreeable and said s/felt the same way. I told her I would like to have some input into these signs. She w/from Argentina but I didn't ask her if s/were a Native.

Anyway, she guided me to another person: Jere (pronounced Jerry)--Krakow. She said this input would be handled by the "interpretive themes." She spoke very highly of him and said w/would benefit from 'a long term relationship' with him.

Jere Krakow, Superintendent of the 4 trails in SLC. (801) 539-4094. F (801) 539 4098
 Superintendent, ??? District Trails Office, 324 S. State ST #250, P O Box 45135, SLC UT 84145-0155. To make a long story short, he w/pleased about our response. I told him the same thing about the WS people, etc. He said that in this endeavor, they had w/landowners & Public Management people, BLM, et al. In developing for the Pony Express trail, there s/b/signs along highways - example: Genoa (St Pk). The study w/b/available for public review.

We need to offer comments if w/want to b/seen in a positive light. He sd an example of these signs was 1 mile west of Shilo (Elko). It's a little gazebo (I've seen it but never bother to stop. I will now.) He sd they previously worked on a project (finished) with the Sho-Bans in Idaho.

We are on the mailing list. bl

Notes
 Only

COMMENTS

RESPONSES

NOV-06-98 02:37 PM

BATTLE MOUNTAIN BAND

17026350016

P.04

144 OPERATIONS ON THE PACIFIC COAST. (CLASSIFIED)

was not sold by the Government at the time of the sale of the other property. Inclosed I have the honor to transmit a communication from Captain Rowe, and charges against Private Cox, of Company M, Second Cavalry. I have now in confinement three general prisoners, and would respectfully ask that a general court-martial be convened at as early a day as practicable. A reply to the application of Captain Rowe by telegraph is respectfully requested.

P. EDW. CONNOR.

Colonel Third Infantry California Volunteers, Comdg. District.

HEADQUARTERS DISTRICT OF UTAH.

Fort Ruby, September 29, 1862.

Maj. EDWARD McJARRET.

Second Cavalry California Volunteers, Fort Ruby.

MAJOR: You will proceed hence to-morrow morning with Company I of your regiment, to the confluence of the South Fork with the main Humboldt River, and there await until joined by Captain Smith's company (K), of your regiment. On the route thence you will examine every valley or place where you have reason to believe guerrillas or hostile Indians are congregated, whom you will capture; but if they resist you will destroy them. In no instance will you molest women or children. If on the route to Humboldt friendly Indians deliver to you Indians who were concerned in the late murder of emigrants, you will (being satisfied of their guilt) immediately hang them, and leave the bodies thus exposed as an example of what evil doers may expect while I command in this district. When you are joined by Captain Smith's company you will proceed by the northern overland route via Chief Rocks to a point about ten miles north of Salt Lake City, where you will leave your command and report to me in person if I am in the vicinity of the city. If not, await further orders at the point designated. On the route from South Fork of Humboldt to Bear River you will spare no pains to discover the whereabouts of a band of traitorous guerrillas reported to be encamped in the vicinity of Humboldt, and who are believed to be the instigators, if not the participants, in the late Indian murders. If you should discover such a band you will take them prisoners and convey them to headquarters near Salt Lake, but if they should resist you will destroy them without mercy. You will also destroy every male Indian whom you may encounter in the vicinity of the late massacres. This course may seem harsh and severe, but I desire that the order may be rigidly enforced, as I am satisfied that the end it will prove the most successful.

Very respectfully, your obedient servant,

P. EDW. CONNOR.

Colonel Third Infantry California Volunteers, Comdg. District.

ADJUTANT-GENERAL'S OFFICE.

October 2, 1862.

Brig Gen. G. WRIGHT, U. S. Volunteers,
San Francisco, Cal.

Assignments to brevet rank as in case of Major Lugenheer are now sanctioned. Your action in case of Mallan's escort is approved.

D. THOMAS,
Adjutant-General.

*The other inclosures are omitted as unimportant.

COMMENTS

RESPONSES



Pete Wilson
Governor

Lee Grissom
Secretary

CALIFORNIA TRADE AND COMMERCE AGENCY

November 19, 1998

RECEIVED
NOV 23 1998
LOOT National Park Service

Jere L. Krakow, Superintendent
Long Distance Trails Office
National Park Service
324 South State Street, Suite 250
Salt Lake City, Utah 84145-0155

Dear Superintendent Krakow:

Thank you for including the California Division of Tourism (CalTour) in the review process for the Comprehensive Management Plan for the California and Pony Express National Historic Trails. I have received your letter of November 10, 1998 regarding comments received on the Plan, and would like to add to the many positive comments you received.

I asked Eileen Hook, Rural Tourism Liaison for CalTour, to review the plan and your recent letter. She was most appreciative of the incredible amount of work that went into preparing the plan, commenting that it is extremely comprehensive and well written. All the major trails into California, as well as many of the minor ones, are included.

Recognition of California's trails is particularly important during our present Sesquicentennial commemoration of the Gold Rush and the routes taken by the Forty-niners to the gold fields. Beyond this milestone celebration, the information and opportunities provided by the Trails Plan are a boon to future tourism in the rural areas of this state.

You and your staff are to be congratulated on a job well done.

Sincerely,

John Poimiroo
Executive Director

801 K Street, Suite 1918
Sacramento, CA
95814-3520
(916) 322-3962

California Trade and Commerce Agency

COMMENTS

RESPONSES

Colorado
Historical
Society

August 14, 1998

Jere L. Krakow
Superintendent Long Range Trails Office
PO Box 45155
Salt Lake City, UT 84145

RECEIVED
AUG 24 1998
LODT National Park Service

Re: National Historic Trails

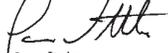
Dear Mr. Krakow:

Thank you for the opportunity to review the Draft of the Comprehensive Management and Use Plan for the California and Pony Express National Historic Trails and the associated Environmental Impact Statement. Our office has not closely followed the development of these long distance trails, so we may have missed out on previous studies or reports specifically related to the California National Historical Trail.

Throughout this document, a route of the California National Historic Trail through Colorado, known locally as the Cherokee Trail, is identified on both general project maps and in the narrative. However, the route is excluded in all report tables and detailed route maps. For example, in the table on page 102, the Pony Express Trail is identified as going through only one Colorado county, Sedgwick, which is correct. However, the table also indicates that the California Trail also crosses through one Colorado county, again Sedgwick. This is not correct. If the Cherokee Trail is being included in the overall California Trail, then the trail passes through some 13 Colorado counties (but not Sedgwick) as shown on the map on page xi of the report. If the Cherokee Trail route is being excluded from the California National Historic Trail at this time, then this exclusion should be noted in the plan document (we could find no such notation). Are we correct in assuming that no activities are anticipated on the Cherokee Trail portion of the California National Historic Trail?

If you have any questions regarding our comments, please contact Dale Heckendorn, National Register Coordinator, at 303-866-4681.

Sincerely,



Lane Ittelson
Deputy State Historic Preservation Officer

(LI/dah)

Visit the Colorado Preservation Information Network on the Internet
www.CoPIN.org
Information on archaeology and historic preservation in Colorado

Office of Archaeology and
Historic Preservation

1300 Broadway
Denver, Colorado 80203-2137

303-866-3392 Fax: 303-866-4464

E-mail: chssysop@usa.net

Internet: <http://www.aclin.org/other/historic/chs/index.html>

Colorado Historical Society

1. The Department of the Interior's Office of the Solicitor rendered an opinion on October 1998 regarding the California National Historic Trail. In that opinion only the routes and cutoffs identified in the 1987 *Feasibility Study* constitute the authorized California National Historic Trail. Additional routes, such as the Cherokee Trail, could be authorized in the future pending a feasibility study and congressional action amending the original act for each trail.

COMMENTS

RESPONSES



Our mission: to educate through the identification, preservation, and interpretation of Idaho's cultural heritage.

Philip E. Batt
Governor of Idaho
Steve Guerber
Director

Administration
1109 Main Street, Suite 250
Boise, Idaho 83702-5642
Office: (208) 334-2662
Fax: (208) 334-2774

Archaeological Survey
210 Main Street
Boise, Idaho 83702-7264
Office: (208) 334-3647
Fax: (208) 334-2776

Historical Museum and Education Programs
631 North Idaho Falls Drive
Boise, Idaho 83702-7969
Office: (208) 334-2120
Fax: (208) 334-4099

Historic Preservation Office
210 Main Street
Boise, Idaho 83702-7264
Office: (208) 334-3661
Fax: (208) 334-2775

Historic Sites Office
2445 Old Penitentiary Road
Boise, Idaho 83702-4284
Office: (208) 334-2644
Fax: (208) 334-3227

Library/Historical Collection
450 North Fourth Street
Boise, Idaho 83702-6027
Office: (208) 334-3286
Fax: (208) 334-3198

Library/Genealogical Collection
450 North Fourth Street
Boise, Idaho 83702-6027
Office: (208) 334-3387
Fax: (208) 334-3198

Oral History
450 North Fourth Street
Boise, Idaho 83702-6027
Office: (208) 334-3663
Fax: (208) 334-3198

Memberships and Outreach and Development
1109 Main Street, Suite 250
Boise, Idaho 83702-5642
Office: (208) 334-3986
Fax: (208) 334-2774

Publications
450 North Fourth Street
Boise, Idaho 83702-6027
Office: (208) 334-3428
Fax: (208) 334-2536

State Archives/Manuscripts
450 North Fourth Street
Boise, Idaho 83702-6027
Office: (208) 334-3286
Fax: (208) 334-3198

October 22, 1998

Ms. Susan Boyle
Resource Planning
National Park Service
Denver Service Center
P.O. Box 25287
Denver, Colorado 80225-0287

RE: California and Pony Express National Historic Trails Draft Comprehensive Management and Use Plan/Environmental Impact Statement and Oregon and Mormon National Historic Trails Management and Use Plan Update/Environmental Impact Statement

Dear Ms. Boyle:

Thank you for sending the draft document referenced above for our review and comment. The current version of the comprehensive management plan is much more presentable than the earlier edition. As written, however, the plan succeeds in identifying numerous areas needing management recommendations or further research but falls short of offering specific management directives, ideas, or solutions, and specific products that will be provided by the Long Distance Trails Office.

Trail states have been attempting to deal with recognized trail preservation and interpretation problems for a number of years. What has been missing is a lack of funds and personnel at both federal and state levels to adequately address the needs of our nation's historic trails. NPS involvement with trail issues has been sporadic at best since they assumed administrative responsibility for the Oregon and Mormon Trails. Regional NPS offices have attempted to provide aid but usually have not received the necessary support from the national office. We look forward to the day when NPS national headquarters finally decides to make the preservation of our national historic trails a priority.

Since BLM is the largest landowner, why not offer an alternative that better reflects their legal responsibilities and recognizes their past contributions--with NPS serving in a support capacity? There will always be conflicts when an agency with administrative responsibilities oversees property managed by another agency. Attempting to dictate personnel and management decisions to the land-managing agency will only work if there is the desire, support, and funding on the part of the land-managing agency to incorporate those decisions. To avoid these conflicts, it might prove more workable to either transfer ownership of trail segments and sites to the NPS or give the actual land manager more authority and funds to specifically address trail needs.



The Idaho State Historical Society is an Equal Opportunity Employer.

Idaho State Historical Society

1. The current plan is an NPS document, and as such it cannot discuss in detail the legal responsibilities of another federal agency. For the purposes of this plan, the Long Distance Trails Office works with 44 offices of the Bureau of Land Management. Many of these offices have specific plans, and often these plans do not dovetail with the plans of adjacent offices.

The current proposal presents the Long Distance Trails Office in a support capacity, as it does not directly manage any resource. It has no authority over lands managed by other federal agencies. It mostly acts as a clearinghouse for providing information and assisting trail managers.

At the present there is no intention on the part of the Bureau of Land Management to transfer ownership of sites and segments to the National Park Service. The National Park Service is not at this time interested in acquiring and managing such resources.

There is no authority for the current plan to "give the actual land manager more authority and funds to specifically address trail needs."

COMMENTS

RESPONSES

Susan Boyle
 October 22, 1998
 page 2

With regard to details, we found a number of items (listed below) that need to be corrected, clarified, or embellished:

2	Page 19 - The Portneuf Crossing - Ross Fork segment is listed as high potential for C.T. (P. 9; #18) - it should also be included as a high potential O.T. segment.
3	Page 19 - An excellent eight mile segment of O.T. ruts that run west from Raft River junction should be included as a high priority segment.
4	Page 19 - The Utter massacre site (South Alternate O.T.), starvation camp (mouth of Owyhee River) and Van Ornum massacre site and graves (just east of Huntington, Ore.) should be included as high potential sites. Military Fort Boise should also be included as a high potential site.
5	P. 28 - need to properly identify Shoshone and Northwest Shoshone territory.
6	P. 29 - In Idaho, the departure of the Hudson's Bay Company played a significant role in the conflicts between Native Americans and emigrants.
7	p. 30, paragraph 4 - should be noted that new routes were also blazed across Idaho.
8	p. 33 - Should be noted that Oregon Trail routes continued to see heavy traffic throughout the 19th century. Routes also received use in the 20th century until arrival of motorized vehicles.
9	p. 49 - GIS mapping at 1:100,000 is not suitable for use as a management tool or a trail guide. Trails need to be depicted on at least 1:24,000 scale to be of any use.
10	p. 51 - should add a category of new facilities planned or currently in the course of construction - e.g. Casper, Wyo., Montpelier and Three Island Crossing. The nearly completed O.T. Historic Reserve in S.E. Boise should also be identified.
11	P. 52 & 68 - Color coordination of auto tour signs is needed.
12	p. 61 - If LDT becomes a central depository, who becomes the initial contact for trail-related matters? LDT or federal land manager?
13	p. 62 - Where will states receive funds and staff to carry out projects identified?
14	p. 64 - Should be noted that some federal land managers currently have management plans, but once again lack funding and personnel to address identified needs.

2. This segment has been listed as a high-potential segment. The description in appendix E (segment # 16) clearly indicates its starting and ending points.
3. No other information was provided for this listing. It has not been included at this time because there is not enough data to determine its specific location and to assess its historic significance and integrity.
4. The Utter site has been included among the high-potential sites. No information was supplied for Starvation Camp or the Van Ornum sites and graves (just east of Huntington). Fort Boise (1863) is not included or two reasons: (1) the Oregon National Historic Trail legislation focuses on the 1841-48 period, more than a decade before the establishment of the fort, and (2) the lack of public access due to medical and residential priorities on the grounds of the fort.
5. Map 12 has been modified to reflect this comment.
6. The statement might be historically correct, but the narrative included in the document is so general that it would not be pertinent to speak of specific conditions in Idaho while ignoring what occurred elsewhere along the trail.
7. The text has been changed.
8. Many trail routes continued to be used throughout the 19th century, and in some cases they would become important roadways, such as the Lincoln Highway. For the purposes of this plan, however, the historical focus is the Oregon-Trail authorization of 1841-48.
9. It would be highly desirable to map all these trails at the 1:24,000 scale. Unfortunately, the National Park Service does not have the funds required to complete such an extensive undertaking. It would require digitizing 10,120 maps.
10. It is not clear why a category of new facilities is needed in this plan. The list presented in the plan does not claim to be exhaustive; it is representative of some of the facilities along the trails at the time the plan was developed.
11. There would be color coordination for the triangular portion of the signs. The various state departments of transportation have specific guidelines that are at variance with one another.
12. The local manager would be the initial contact for trail-related matters. What the plan proposes is that the Long Distance Trails Office be the one place where information on all the trails can be compiled. Individual land managers cannot be expected to keep track of trail developments outside their jurisdiction.
13. The plan does not specify any new tasks for state agencies. What the plan does is to request that an effort be made to develop a higher degree of cooperation and communication among the various state agencies. General activities, such as the identification of trail resources, should be an ongoing responsibility for each state historic preservation office.
14. It is not clear why this information is pertinent to the current plan.

COMMENTS

RESPONSES

Susan Boyle
October 22, 1998
page 3

- 15

p. 68 - If U.S. Army sites are considered important, why was military Fort Boise deleted from the original O.T. list of significant sites?
--
- 16

p. 69 - A route from Fort Hall north through Montana to the Mullan Road needs further study. A number of emigrants utilized this route in 1862.

- 17

p. 69 - Who is to conduct the studies for recognition of additional O.T. routes as part of the National Historic Trails system?

- 18

p. 111 - Under Environmental Consequences, NPS recognizes that the increased visitation expected in alternative 2 could increase erosion of the trail-related archaeological sites and the trail itself. It is then suggested that this effect will be mitigated by the systematic inventory and monitoring recommended in the plan. Indeed, the plan recommends that such studies be conducted but fails to offer personnel or monies to conduct such studies. This passive reference to inventory and monitoring does not provide much assurance that this work will be accomplished or will effectively reduce the expected erosion. Moreover, these responsibilities are already assigned to federal agencies (including the National Park Service) under Sections 106 and 110 of the National Historic Preservation Act but are frequently neglected. We have no reason to believe that the recommendations in this plan, or the Long Distance Trails Office itself, will trigger more diligent management of the trails, let alone avoid or reduce the increased effects anticipated under alternative 2.

- 19

p. 165 - Fort Hall is a National Historic Landmark.

- 20

p. 212 - Add to high potential site list - Little Pilgrim Gulch (emigrant campground; scene of Indian/white conflict; and burial site of Naomi Sager) - Military Fort Boise; Blacks Creek Road - Amity Road (National Register segment); Bonneville Point interpretative park (BLM ownership)

- 21

p. 213 - Add - Utter Massacre Site, Starvation Camp and Van Ornum massacre site/burial.

- 22

p. 218 - No. 1-7 - Northside Alternate sites/segments

- 23

p. 219 - No. 8 - northside alternate; No. 9 - north alternate; no. 11-13 - north alternate
--
- 24

p. 220 - no. 19 & 20 - north alternate; no. 25 should be high potential site
--

- 15. Fort Boise was deleted because it dates from 1863, which is after the dates of 1841–48 that Congress recognized for the Oregon National Historic Trail.
- 16. The plan acknowledges that there are several additional routes that are in need of further study; however, this route of 1862 is outside the historic period (1841–48) recognized by Congress for the Oregon National Historic Trail.
- 17. Congress would recommend what federal agency conduct the new feasibility studies.
- 18. The current plan applies only to the Long Distance Trails Office. The Long Distance Trails Office does not manage any lands; therefore, it has no responsibilities under sections 106 and 110 of the National Historic Preservation Act. The systematic monitoring and inventory of trail resources should be of prime importance to federal land managers and state agencies, such as the state historic preservation offices. To complete such a project at the national level by one entity would be extremely costly and time-consuming. What the plan proposes is that the various land managers work cooperatively at the local or state levels to complete and systematize information that is already available, although not always containing the same level of detail.
- 19. The text has been modified to reflect this comment.
- 20. Little Pilgrim Gulch has been added to the resource database maintained at the Long Distance Trails Office. Fort Boise has been removed for the reasons cited above. No information was supplied to document the Blacks Creek Road – Amity Road segment. Bonneville Point is included as a high-potential site.
- 21. The Utter massacre site has been added to the list of high-potential sites. Information was not provided for the Starvation Camp and Van Ornum sites.
- 22. These sites have been included in the resource database maintained by the Long Distance Trails Office.
- 23. These sites have been included in the resource database maintained by the Long Distance Trails Office.
- 24. Numbers 19 and 20 have been included in the resource database maintained by the Long Distance Trails Office; 25 has been added to the list of high-potential sites and is listed in appendix H.

COMMENTS

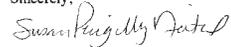
RESPONSES

Susan Boyle
October 22, 1998
page 4

Overall, we feel that alternative 1 has not proven to be effective in addressing the needs of the trails. Therefore, we will support alternative 2 as the preferred alternative in that it generally identifies areas and problems that need to be addressed if we are to save our historic trails.

We appreciate your interest in our views. If you have any questions, feel free to contact either myself at 208-334-3847 or Larry Jones at 208-334-3428.

Sincerely,



Susan Pengilly Neitzel
Deputy SHPO and
Compliance Coordinator

COMMENTS

RESPONSES



ILLINOIS
DEPARTMENT OF
NATURAL RESOURCES

524 South Second Street, Springfield 62701-1787

Jim Edgar, Governor • Brent Manning, Director

October 7, 1998

RECEIVED
OCT 15 1998
LODT National Park Service

Ms. Jere L. Krakow, Superintendent
United States Department of the Interior
National Park Service
324 South State Street, Suite 250
P.O. Box 45155
Salt Lake City, UT 84145-0155

Dear Ms. Krakow:

Thank you for keeping us informed on the progress of the Management Plan and EIS for the Morning Pioneer Trail. Please continue to do so.

If you need specific information for this effort, please contact Mr. Robert Thornberry of the Department's Division of Planning at (217) 782-3715).

Sincerely,


Tom Flattery
Director
Office of Realty and Environmental Planning

TBF:dI

cc: Brent Manning

[printed on recycled and recyclable paper]

Illinois Department of Natural Resources

COMMENTS

RESPONSES



Illinois Department of Transportation

Office of the Secretary
2300 South Dirksen Parkway / Springfield, Illinois / 62764
Telephone 217/782-5597

RECEIVED
NOV 23 1998
LOU National Park Service

November 6, 1998

Mr. Jere L. Krakow
Superintendent Long Distance Trails Office
324 South State Street, Suite 250
P. O. Box 45155
Salt Lake City, UT 84145

Dear Mr. Krakow:

Thank you for the opportunity to review the Public Draft of the Comprehensive Management and Use Plan for the California and Pony Express National Historic Trails, the Update for the Oregon and the Mormon Pioneer National Historic Trails, and the Environmental Impact Statement (EIS) associated with the document. The department supports the National Park Service's efforts to preserve, promote and interpret these historic trails for visitor use.

None of the trails passes entirely through Illinois. One trail, the Mormon Pioneer National Historic Trail, begins in Nauvoo, Illinois and continues for two miles before it crosses the Mississippi River into Iowa. According to the draft report, Nauvoo will not be adversely impacted by the promotion of the trail, even though traffic may increase slightly. Therefore, the department supports the plan to commemorate these four significant historic routes.

Again, thank you for the opportunity to review this draft plan.

Sincerely,


Kirk Brown
Secretary

Illinois Department of Transportation

COMMENTS

RESPONSES

OCT-28-1998 16:26 IL HIST PRES AGY

217 524 7525 P.01



Post-It® Fax Note	7671	Date	10/28/98	# of Pages	1
To	Jere Krakow	From	Ann Swallow		
Co./Dept.		Co.			
Phone #		Phone #	217-785-0315		
Fax #	801-539-4098	Fax #			

RECEIVED
OCT 28 1998
U.S. National Park Service

MEMORANDUM

TO: Jere Krakow, Superintendent, Long Distance Trails Office, National Park Service, Salt Lake City, Utah

FROM: Ann V. Swallow, Survey & National Register Coordinator *AVS*

DATE: October 28, 1998

SUBJECT: Mormon Pioneer National Historic Trail Comprehensive Management and Use Plan

Thank you very much for this opportunity to comment on the Comprehensive Management and Use Plan draft report for the Mormon Pioneer National Historic Trail. The following are non-substantative corrections in the text and graphics:

1 Add Illinois to the list of states on the auto tour route on page 53, and the small section of the state of Illinois should also be highlighted in gray. Also, please include the Illinois Historic Preservation Agency in the list of state agencies on page 122.

2 Appendix J: Sites 1 and 2 are located within the Nauvoo Historic District which is listed as a National Historic Landmark. The ownership of the Mormon-related properties within the district is both the LDS (visitor center and Nauvoo Restoration, Inc. buildings) and the RLDS (Joseph Smith Historic Center, Smith Homestead and other buildings). The Mormons themselves make a distinction between the sites owned by the two churches, and they both consider the community a "pilgrimage" site. Nauvoo also has a house museum operated by the Nauvoo Historical Society on the grounds of the Nauvoo State Park (Illinois Department of Natural Resources - park owner) where Mormon history is interpreted.

3 Appendix Q, Table C: "Historic Nauvoo" is listed as a major trail museum. I think the phrase "Historic Nauvoo" is used exclusively by the LDS church in their interpretive materials. I think the entry should read "Nauvoo Historic District", thus not specifying only one of the Mormon interpretative programs. See the above note on Appendix J.

If you have any questions, please contact me at 217-785-0315, or <aswallow@hpa084r1.state.il.us>

Illinois Historic Preservation Agency

1. The maps have been modified to reflect this comment. The Illinois Historic Preservation Agency has been included among the state agencies consulted.
2. The document has been changed.
3. The document has been changed.

COMMENTS

RESPONSES



TERRY E. BRANSTAD, GOVERNOR

DEPARTMENT OF NATURAL RESOURCES

LARRY J. WILSON, DIRECTOR

September 4, 1998

RECEIVED
SEP 11 1998
LOOT National Park Service

Jere L. Krakow
Superintendent Long distance Trails Office
324 South State Street, Suite 250
P.O. Box 45155
Salt Lake City, Utah 84145

RE: Draft Comprehensive Management and Use Plan/Draft EIS for the California and Pony Express National Historic Trails

Draft Management and Use Plan Update/Draft EIS for the Oregon and Mormon Pioneer National Historic Trails

Dear Mr. Krakow:

Thank you for inviting our comments on the impact of the above referenced project on protected species and rare natural communities. Because the draft environmental impact statement is programmatic and the plan does propose any action resulting in ground disturbance, no environmental concerns arose during our review of the project.

This letter is a record of review for protected species and rare natural communities in the project area. It does not constitute a permit and before proceeding with the project, you may need to obtain permits from the DNR or other state and federal agencies.

If you have any questions about this letter or if you require further information, please contact Kim Bogenschutz at (515) 281-8675.

Sincerely,

LARRY J. WILSON, DIRECTOR
IOWA DEPARTMENT OF NATURAL RESOURCES

LJW:ksb

98-438L.DOC

WALLACE STATE OFFICE BUILDING / DES MOINES, IOWA 50319 / 515-281-5145 / TDD 515-242-5967

Iowa Department of Natural Resources

COMMENTS

RESPONSES

The Historical Division of the Department of Cultural Affairs

STATE HISTORICAL SOCIETY OF IOWA

Where past meets future

September 8, 1998

American Gothic House
Eldon

Mr. Jere L. Krakow, Superintendent
Long Distance Trails Office
324 South State Street, Suite 250
Salt Lake City, UT 84145

RECEIVED

SEP 14 1998

LODT National Park Service

Dear Mr. Krakow:

Blood Run NHL
Larchwood

Centennial Building
Iowa City

Matthew Edell Blacksmith Shop
Marshalltown

Abbie Gardner Cabin
Arnolds Park

It has been called to my attention by Gail Holmes, that the recent draft of the Comprehensive Management and Use Plan is leaving out the Council Bluffs area as a significant point on the historic trails. The Western Historic Trails Center here at Council Bluffs was just constructed last October by NPS to interpret Lewis & Clark, Mormon, California and Oregon Trails. The center's exhibits include sculpture, film, and audio descriptions to interpret early travel and to relate it to travel today, also the grounds are on the river bottom and include a hiking trail to the Missouri River. Some of the points to consider in the plan are as follows:

Iowa Historical Building
Des Moines

- thousands of Mormons camped in this area during the winter of 1846, some crossed the Missouri and camped at Winter Quarters in Florence, NE (today North Omaha) and others camped on this side of the Missouri at Grand Encampment - both groups crossed the Missouri River in the general area of the Western Historic Trails Center

Montauk Governor's Home
Union Sunday School
Clermont Museum
Clermont

- a few years after the heavy use of the trails by the Mormons, the trails were used by the 49'ers and their rush to California, many of these early travelers brought success to the local economy, by their purchasing of flour and other supplies in the early town or Kanesville or Council Bluffs

Plum Grove Governor's Home
Iowa City

Tooksboro Indian Mounds
Tooksboro

Western Historic Trails Center
Council Bluffs

- historian Merrill Mattes demonstrated by reviewing thousands of pioneer journals that by 1852 more persons headed for California by way of the Council Bluffs than any other point along the Missouri River

- a quote that the State Historical Society of Iowa recently published from a diary of a 17 year old woman who left Mount Pleasant, Iowa to meet her father who was in

WESTERN HISTORIC TRAILS CENTER

3434-34th Avenue • Council Bluffs, Iowa 51501
Phone: (712) 366-4900 • Fax: (712) 366-5080
www.uiowa.edu/~shsi/index.htm

Iowa State Historical Society, Western Historic Trails Center

1. The Council Bluffs area has been included in the description of the emigrant starting points, which developed through time. Council Bluffs is also noted on all document maps.

1

COMMENTS

RESPONSES

California searching for a fortune in gold – she wrote, “Monday, May 10th (1852). Got to Kanesville, four miles from the Missouri River about noon. After a short delay we went on to the river and camped as near the ferry as we could get. There are thousands of wagons waiting to be ferried over.”

Please give your consideration for the inclusion of the Council Bluffs area in the Comprehensive Plan – we feel the Western Historic Trails Center was a step in the right direction to better educate the public about their “trail history”. Thank you.

Sincerely,



Kathy A. White, Site Manager
Western Historic Trails Center

COMMENTS

RESPONSES

The Historical Division of the Department of Cultural Affairs

STATE HISTORICAL SOCIETY OF IOWA

Where past meets future

November 19, 1998

In reply refer to:

RC# 970200002

RECEIVED
NOV 30 1998

LOU: National Park Service

American Gothic House
Eldon

Jere L. Krakow, Superintendent
National Park Service
Long Distance Trails Office
324 South State Street, Suite 250
Post Office Box 45155
Salt Lake City, UT 84145-0155

Blood Run NHL
Larchwood

Centennial Building
Iowa City

RE: NPS - COMPREHENSIVE MANAGEMENT PLAN FOR THE CALIFORNIA AND PONY EXPRESS NATIONAL HISTORIC TRAILS AND UPDATE FOR OREGON AND MORMON PIONEER NATIONAL HISTORIC TRAILS (NHT) - D18 (DSC-RP), RMRO D532-15 - RECOMMENDED CORRECTIONS

Matthew Edd Blacksmith Shop
Marshalltown

Abbie Gardner Cabin
Arnolds Park

Dear Jere Krakow:

Iowa Historical Building
Des Moines

Please forgive our late comments on the copy of the Public Draft. The work was informative and useful to better understanding Iowa's role in the proposed program for developing National Historic Trails.

Montrose Governor's Home
Union Sunday School
Clermont Museum
Clermont

There are a few corrections we want to bring to your attention with respect to the Mormon Trail table in Appendix J. Five properties are incorrectly identified as being listed in the National Register of Historic Places (see attached copy). The five places that should be identified as Not Listed are: Montrose Landing, Sugar Creek Camp, Des Moines River Crossing, Garden Grove, and Mt. Pisgah.

Elm Grove Governor's Home
Iowa City

Should you have any questions regarding our findings and recommendations, please feel free to contact me (515) 281-3306.

Tooleboro Indian Mounds
Tooleboro

Sincerely,

Western Historic Trails Center
Council Bluffs

Lowell Soike

Lowell J. Soike, Ph.D.
Historian, Community Programs Bureau
e-mail: lsoike@max.state.ia.us

IOWA HISTORICAL BUILDING

600 East Locust • Des Moines, Iowa 50319-0290
Phone: (515) 281-6412 • Fax: (515) 242-6498 or (515) 282-0502
www.uiowa.edu/~shsi/index.htm

Iowa State Historical Society

1. The document has been changed.

COMMENTS

RESPONSES

APPENDIX J. MORMON PIONEER NATIONAL HISTORIC TRAIL—HIGH-POTENTIAL SITES

NO.	SITE NAME	COUNTY	STATE	ZIP	DESCRIPTION	NATIONAL HISTORIC LAND STATUS	OWNERSHIP	THREATS TO RESOURCES/STATUS
1	Nauvoo National Historic District	Hancock	IL	61800	This site contains 1,100 acres of historically oriented sites and structures in the town of Nauvoo, Illinois. The site includes the city's homes, shops, and a visiting center.	Listed	Private (Nauvoo Foundation)	None known
2	Nauvoo Landing	Hancock	IL	Burlington	The site marks the eastern terminus of the Mormon migration from Nauvoo, Illinois, to the Salt Lake Valley in 1846. It is a major river crossing site.	Listed	Private (Nauvoo Foundation)	None known
3	Monroes Landing	Lee	IA	Burlington	The site marks the eastern terminus of the Mormon migration from Nauvoo, Illinois, to the Salt Lake Valley in 1846. It is a major river crossing site.	Listed	Public (City Park)	An accessible wayside exhibit has been installed.
4	Sugar Creek Camp	Lee	IA	Burlington	The site marks the eastern terminus of the Mormon migration from Nauvoo, Illinois, to the Salt Lake Valley in 1846. It is a major river crossing site.	Listed	Private	Need for signage.
5	Des Moines River Crossing	Van Buren	IA	Burlington	This is the site where the pioneers made their first major river crossing west of the Mississippi on March 5, 1846. A site marker is located on the east bank of the river.	Listed	Private	An accessible wayside exhibit has been installed.
6	Chariton River Crossing	Appanoose	IA	Centerville	This is the site where the pioneers made their first major river crossing west of the Mississippi on March 5, 1846. A site marker is located on the east bank of the river.	Not listed	Public (State of Iowa)	Signage and site marker are needed to increase public access to the site. A wayside exhibit is also needed.
7	Lacout Creek Camp	Wayne	IA	Leola	This site is where an early U.S. Army settlement was made in 1804. The site is now a National Historic Landmark.	Not listed	Private	None known; wayside exhibit have been placed in the Thurg. Cemetery.
8	Genet's Grove	Dowling	IA	Leola	This site is historically known as the first place of permanent settlement of the Mormon pioneers in Iowa.	Listed	Public (County) / Private	Signage, wayside exhibit have been placed at the site.
9	St. Paul's	Union	IA	Clinton	The area was maintained as a Mormon settlement from 1846 to 1852. The site is now a National Historic Landmark.	Listed	Public (County) / Private	Signage, wayside exhibit have been placed at the site.
10	Grand Encampment	Pottawatomie	IA	Omaha	This area was used as a staging point for pioneers en route to the Rocky Mountains. The settlement of the historic Mormon pioneers is located here.	Not listed	Private (Iowa School for the Deaf)	None known; several wayside exhibits and a site marker are needed.
11	Kennettville Tabernacle	Pottawatomie	IA	Omaha	The 1847 Kennettville Tabernacle was the first tabernacle built by the Church of Jesus Christ of Latter-day Saints. On December 19, 1847, the first general conference was held here.	Not listed	Private	None known; wayside exhibit have been placed at the site.
12	Mormon Ferry (Missouri River)	Pottawatomie	IA	Omaha	This site is on the east bank of the Missouri River where the Pioneer Party began its 1847 journey. The site includes the remains of the original building.	Not listed	Private	None known; wayside exhibit have been placed at the site.
13	Winter Quarters	Douglas	NE	Omaha	This site was an important Mormon community and the place where the Pioneer Party began its 1847 journey. The site includes the remains of the original building.	Not listed	Private (LDS Church)	A major interpretive center was built here in 1997.
14	Crossing of the Elkhorn River	Douglas	NE	Premont	This site marks the first major river crossing west of the Missouri River.	Not listed	Private	None known; an exhibit is planned.

COMMENTS

RESPONSES



**KANSAS
STATE
HISTORICAL
SOCIETY**



**Cultural Resources
Historic Preservation
Office (ext. 240)**



October 19, 1998

RECEIVED
OCT 26 1998
LODT National Park Service

Jere L. Krakow, Superintendent
Long Distance Trails Office
324 South State Street, Suite 250
P.O. Box 45155
Salt Lake City, UT 84145-0155

Mr. Krakow:

In response to your request for comments on the Comprehensive Management Plan/Environmental Impact Statement for the Oregon, California, Mormon Pioneer and Pony Express National Historic Trails, we offer these corrections and comments:

Corrections:
(To improve consistency in the plan, corrections should be made in all places where entries discuss these sites)

1	6425 S.W. 6th Avenue Topeka, Kansas 66615-1099	1. The Shawnee Methodist Mission is a National Historic Landmark. The report has it listed as a National Register property.
2	PHONE# (785) 272-8681 FAX# (785) 272-8682 TTY# (785) 272-8683 ◆	2. The Potawatomi Baptist Mission is a National Register property. The report has no information about it. Also the Potawatomi Mission is not used as offices for the museum; the building contains interpretive materials on the Mission and provides KSHS with meeting and classroom space.
3	KANSAS HISTORY CENTER Administration	3. The Grinter House is a National Register property. The report has no information about it.
4	Center for Historical Research Cultural Resources Education / Outreach Historic Sites Kansas Museum of History Library & Archives	4. The report makes no mention of Cottonwood Creek Crossing which is a well-defined trail feature associated with the Hollenberg Station. Mr. Hollenberg established his station at this creek crossing because it was just north of the point where the main Oregon Trail and the St. Joseph branch of the trail merged. There was a large campground on both sides of the crossing.

HISTORIC SITES

Adair Cabin
Constitution Hall
Cottonwood Ranch
First Territorial Capitol
Fort Hays
Goodnow House
Grinter Place
Hollenberg Station
Kaw Mission
Marais des Cygnes Massacre
Mine Creek Battlefield
Native American Heritage Museum
Pawnee Indian Village

Comments:

The Kansas State Historical Society supports the enhanced plan for increasing its trail related activities. The agency has limited resources, however, and it would be difficult to enter into many proposed activities without additional funding.

Kansas State Historical Society

1. This site is on a route determined by the U.S. Department of the Interior's Office of the Solicitor as not being part of the congressionally authorized route of the California National Historic Trail.
2. This site is not on an authorized route of the California National Historic Trail, but changes have been incorporated into the resource database maintained by the Long Distance Trails Office to reflect pertinent sections of this comment.
3. This site is not on an authorized route of the California National Historic Trail. National register properties do not necessarily meet the criteria for inclusion as a high-potential trail sites.
4. The Cottonwood Creek crossing is noted in the description of the Hollenberg Station.

COMMENTS

RESPONSES

KSHS owns the Shawnee Mission, Grinter House and the Hollenberg Station and manages them as historic sites. Additional NPS trail interpretation would be helpful, but we would want to work with NPS prior to any decisions about additional activities, new signage, or other points of concern related to these sites.

We recognize that KSHS would benefit from the National Park Service's expanded and re-energized efforts for the Oregon, California, Mormon Pioneer and Pony Express National Historic Trails, but remain cautious about committing agency resources without additional financial support for trail-related inventories, research, interpretation and preservation.

Sincerely yours,



Ramon Powers
Executive Director

COMMENTS

RESPONSES



State of Missouri
Office of Secretary of State
 State Capitol, Room 208
 Jefferson City 65101
 (573) 751-4936

Rebecca McDowell Cook
 Secretary of State

RECEIVED
 OCT 05 1998
 U.S. National Park Service

State Information Center
 600 West Main

September 25, 1998

Dr. Jere Krakow, Superintendent
 Long Distance Trails Office
 324 South State Street, Suite 250
 P.O. Box 45155
 Salt Lake City, Utah 84145-0155

Dear Dr. Krakow,

I understand that the National Park Service is conducting public hearings to discuss the potential inclusion of the Cherokee Trail as a branch of the California National Historic Trail and thus include the Cherokee Trail in a comprehensive management plan.

I would like to lend my support to this proposal. Although I am not a Western historian, I favor professional and governmental attention to this subject based upon two observations.

First, over the past twenty years I have seen various documentary trails leading from Southwest Missouri into the Indian Territory and virtually disappearing from the Missouri view. There are a number of Missouri speculators, traders, and immigrants that are included in this observation—some returned to Missouri and many did not. I feel that future discoveries in our country's long distance trade and immigration history will be encouraged by official recognition from the Park Service.

Secondly, my confidence in the observation above is supported by what I have seen happen in Missouri and Arkansas over the past generation. Official recognition and subsequent policy development in the Scenic

Missouri Office of the Secretary of State

1. The National Park Service conducted public hearings on the current document, not on the potential inclusion of the Cherokee Trail as part of the California National Historic Trail. The Department of the Interior's Office of the Solicitor rendered an opinion in October 1998 regarding the California National Historic Trail. According to that opinion, only the routes and cutoffs identified in the 1987 *Feasibility Study* constitute the authorized California National Historic Trail. Additional routes, such as the Cherokee Trail, could be authorized in the future pending a feasibility study and congressional action amending the original act for each trail.

1

COMMENTS

RESPONSES

Riverways of Current and Buffalo Rivers has led to multi-disciplinary explorations that would not have occurred otherwise. These riverine properties stretching through several rural counties were among the least documented, and hence "least known historically," in either state prior to involvement by the National Park Service. New understandings in these histories (much desired by tourists, government managers, scholars in the humanities and sciences, graduate students, and finally by the residents themselves) have provided interpretive frameworks now used by newspaper journalists, television producers, and tourists seeking substantial communication about the cultural heritage of the region.

Governments, national and state, simply have the ability to collect, preserve, and serve as a catalyst to attract the interpretation of the collective American experience that transcends the efforts of most private enterprises. I welcome the inclusion of placing the Cherokee Trail "back on the national and state maps."

Sincerely yours,



Lynn Morrow, Director
Local Records Program
Missouri State Archives
573-751-9047

lmorrow@mail.sos.state.mo.us

COMMENTS

RESPONSES



BOB MILLER
Governor

JOAN G. KERSCHNER
Department Director

STATE OF NEVADA
DEPARTMENT OF MUSEUMS, LIBRARY AND ARTS
STATE HISTORIC PRESERVATION OFFICE
100 N. Stewart Street
Carson City, Nevada 89701-4285

RECEIVED
OCT 09 1998
LOD National Park Service

RONALD M. JAMES
State Historic Preservation Officer

October 6, 1998

Jere L. Krakow
Superintendent
National Park Service
Long Distance Trails Office
324 South State Street, Suite 250
P. O. Box 45155
Salt Lake City, UT 84145-0155

Dear Mr. Krakow:

1

I have had the opportunity to review the comprehensive Management Plan/Environmental Impact Statement for the Oregon, California, Mormon Pioneer and Pony Express National Historic Trails. I am writing you to express our concerns about promoting the interpretation and encouraging the retracing of fragile trails, particularly the Applegate-Lassen segment of the California Trail. Trail ruts, axle grease smeared on boulders, names etched in rocks are only part of the features needing more protection, not more visitation. I don't think you should wait to develop management ratings and strategies (page 65) for resources identified as fragile within the proposed inventory. This could be a lengthy and not very cost-effective exercise. I suggest you use the information available currently to field check and create strategies to implement on segments considered fragile and vulnerable as soon as possible.

2

Both the Bureau of Land Management and the U. S. Forest Service have conducted a number of inventories to map trails, using information provided by the Oregon California Trails Association and other groups. Information is available in federal agency and state inventories and in publications such as "Emigrant Trails of the Black Rock Desert", BLM Technical Series Number 6, by Peggy McGuckian Jones.

I strongly urge you not to wait until a costly and lengthy survey of the trails is completed because NPS actions in Alternative 2 will likely provoke additional advertisement and visitation. Instead, act on available information now to designate sensitive areas to be protected.

If you wish to discuss this further please call me at (702) 687-6361.

Sincerely,

ALICE M. BALDRICA, Deputy
State Historic Preservation Officer

L 44

Nevada State Historic Preservation Office

1. The need to protect fragile and vulnerable trail resources is evident. The plan does not advocate waiting to develop management ratings and strategies. It provides suggestions for managers to use in the future and in no way precludes managers of the Applegate-Lassen segment of the California Trail from using the information currently available to field check and create strategies for vulnerable segments. The National Park Service, however, does not have the authority to compel the other federal agencies to comply with the provisions of this plan.
2. The National Park Service is familiar with the inventories conducted for certain trail segments, such as the one mentioned in this letter.

COMMENTS

RESPONSES



Frank Keating
Governor

48-02182
PWR

October 7, 1998

Director Robert Stanton
National Park Service
1849 C Street NW
Washington, DC 20240

Dear Director Stanton,

A number of Oklahomans have contacted me to enlist my support for inclusion of the historic Cherokee Trail route as part of the Comprehensive Management Plan for the California Trail. I am pleased to offer that support and to urge that the National Park Service continue to include the Cherokee Trail in these plans.

Should the Oklahoma Historical Society or other appropriate state agencies be able to assist with these efforts, please feel free to contact the agency directors.

Sincerely,

Frank Keating

fak/mb

Governor, State of Oklahoma

1. The Department of the Interior's Office of the Solicitor rendered an opinion in October 1998 regarding the California National Historic Trail. In that opinion only the routes and cutoffs identified in the 1987 *Feasibility Study* constitute the authorized California National Historic Trail. Additional routes, such as the Cherokee Trail, could be authorized in the future pending a feasibility study and congressional action amending the original act for each trail.

COMMENTS

RESPONSES



Oregon
John A. Kitzhaber, M.D., Governor

Travel Information Council
229 Madrona Avenue SE
Salem, OR 97302-4609
(503) 378-4508
FAX (503) 378-6282
800-574-9397

RECEIVED
OCT 09 1998
LOD1 National Park Service

October 6, 1998

Jere Krakow, Superintendent
USDI, National Park Service
Long Distance Trails Office
PO Box 45155
Salt Lake City, UT 84145-0155

Re: Comments on Draft Plan for National Historic Trails

Dear Mr. Krakow:

For the public record I wish to submit my endorsement of Alternative 2: Enhanced Conditions and a Historic Trails Partnership as presented in the public draft of the Comprehensive Management and Use Plan for the California and Pony Express National Historic Trails with update for the Oregon and Mormon National Historic Trails.

Alternative 2 represents a grass roots approach to preserving and developing these national historic trails by involving the people who have the greatest influence and interest in the trail's administration: land owners and land managers, individuals and membership organizations, and local staff of government agencies.

Having participated since 1994 in the process that created this draft plan, I believe its greatest strength comes from the collaboration and input of the numerous agencies, organizations, and individuals that helped create it. I commend the National Park Service and the planning team who put it all together.

Sincerely,

Jim Renner
Deputy Director

cc: Oregon Historic Trails Advisory Council

Oregon Travel Information Council

COMMENTS

RESPONSES

Karyl Denison Robb, Ph. D.



DIVISION OF CULTURAL RESOURCES State Historic Preservation Office Barnett Building 2301 Central Ave. Cheyenne, WY 82002 (307) 777-7697 FAX (307) 777-6421	
October 9, 1998	RECEIVED OCT 16 1998 LODT National Park Service
Ms. Jere L. Krakow Superintendent Long Distance Trails Office 324 S. State Street, Suite 250 P.O. Box 45155 Salt Lake City, UT 84145	
RE: National Park Service, California, Oregon, Pony Express and Mormon Trails Management Plan and EIS; SHPO #1094TPT015	
Dear Ms. Krakow:	
We have received a copy of the Draft Comprehensive Management and Use Plan (Plan) and Draft Environmental Impact Statement (EIS) for the California, Oregon, Pony Express, and Mormon Pioneer National Historic Trails (Trails). Thank you for providing us the opportunity to comment on this document.	
The preferred alternative within the EIS includes many elements that are essential for protection and interpretation of the Trails. Specifically, we support creating a central information repository, treating each trail as one continuous entity instead of a series of independent segments, and improving coordination among trail managers, administrators and the interested public. We also agree that there should be an increased emphasis on visitor use and interpretation. We especially like the guidance provided for interpretative waysides and signage.	
1	The plan also does a good job of identifying high potential sites and segments along the Trails; however, there is little guidance for management of these resources once they have been identified. Identification and evaluation are important components of resource management, but these are only the first steps in protecting and proactively managing trail resources. The document is titled a "Comprehensive Management and Use Plan", and as such, it should provide managers with concise guidance for administration and use of the Trails. We understand the National Park Service Long Distance Trails Office is not a trail manager, but a plan of this type must provide guidance for managing entities.
2	Management plans should identify a desired future condition for the resource in question and then demonstrate how implementation of the plan will help attain this goal. This Plan does not clearly identify a desired future condition for the Trails, except for a vague vision statement that states there should be a collaborative effort "...to protect, maintain, and promote the trails corridor" (p. 25). The Trails are dynamic resources that are subject to constant change. This is especially true during their period of significance. The Trails had a decidedly different appearance in the early 1840s and 1850s then they did in the late 1860s. In some cases, trail

THE STATE OF WYOMING
Jim Geringer, Governor



DEPARTMENT OF COMMERCE
Gene Bryan, Director

Wyoming Division of Cultural Resources

1. The reviewer correctly notes that the National Park Service Long Distance Trails Office is not a trail manager. Other federal, state, and local agencies, as well as private individuals, manage and own trail resources. This plan, even though it is titled a "Comprehensive Management and Use Plan," does not and cannot tell owners how to manage their properties; it identifies provisions that could be incorporated in developing protection strategies at the local level.
2. There are various opinions as to what a management plan should do. In general, such plans tend to be quite specific and focus on federal actions to be carried out within the property owned by the agency preparing the plan. The current document is a different type of plan. It is a broad document that serves as a tool to assist in the administration of trail resources and that highlights the need for coordinated management. It would not be possible or desirable for the current document to identify a desired future condition for the hundreds of resources along these trails. The National Park Service does not have the authority to compel other federal agencies to comply with the provisions of this plan.

The trails extend over thousand of miles and involve hundreds of owners. As the reviewer rightfully notes, trails are dynamic resources, which exhibit great variability. It might be possible to develop specific strategies for sites and segments, but these would have to be done in cooperation and with the support of current managers. It cannot be done at a national level.

COMMENTS

RESPONSES

-2-

2 segments have remained in continual use acquiring historic significance after the Trails era had ended. The Plan does not clearly address how managers are to contend with this variability in trail resources. Additionally, the Plan does not provide guidance on how trail boundaries will be identified. It is very difficult to manage a resource that has undefined boundaries.

3 The Plan contains considerable discussion pertaining to protection of the Trails, but never identifies what constitutes an effect to trail resources. For example, is modern vehicle use of a trail segment an adverse effect? Is taking steps to arrest erosion and in-fill eroded trail segments considered an effect? A management plan must provide direction on how to protect the resource.

4 It would be useful to outline standard methodologies for monitoring trail impacts within the Plan. For Example, in Wyoming, we have established controlled photo points along certain segments of the Trails to record effects caused by different activities. We would like direction on what other tools and methods are available to evaluate Trail conditions.

5 On pages 49 and 69 of the Plan, it is stated that GIS maps will be produced of all of the Trails at a 1:100,000 scale. However, this discussion then goes on to point out that unground-truthed maps at this scale are of little use for management purposes. It appears that it would make more sense to ground-truth and produce 1:24,000 scale maps of high potential segments, than to create a map of all the Trails that has limited management value. Over the past several years our office has been very active in creating a GIS database for cultural resources in Wyoming. Several miles of the Trails have already been ground-truthed and mapped at a 1:24,000 scale in Wyoming. It would perhaps be productive to hold a meeting between our offices to discuss development of a cooperative GIS program for the Trails.

In conclusion, there are numerous aspects of the Draft Comprehensive Management and Use Plan and Draft Environmental Impact Statement that we support; including identifying and evaluating high potential trail segments, creating a central information repository, treating each trail as one continuous entity, and improving coordination among trail managers, administrators and the interested public. However, this document is missing some basic components of a fully developed comprehensive management plan. Specifically, the document lacks an identified desired future condition for the Trails, criteria of effect for trail resources, and concise management guidance for a dynamic resource with unclear boundaries. We commend your efforts to identify and evaluate high potential trail sites and segments; however, this is only the first step in developing a proactive management plan to protect and interpret the legacy of our Nation's immigrant trails.

Please refer to SHPO project control number #1094TPT015 on any future correspondence dealing with this project. If you have any questions contact Todd Thibodeau at 307-777-6694 or Judy Wolf, Deputy SHPO, at 307-777-6311.

Sincerely,



John T. Keck
State Historic Preservation Officer

JTK:TPT:jh

3. No federal action is proposed in this document, therefore, it was not necessary to identify specific adverse effects. The plan makes various suggestions regarding the protection of trail resources. For example, it provides for the systematic inventory and analysis of trail resources.
4. There is a great need to establish standard methodologies for monitoring trail resources. Unfortunately, there is little consensus or coordination among the trail partners in this regard. One of the most important goals of this plan is to highlight the need to develop a workable and consistent approach to deal with resource monitoring.
5. The Long Distance Trails Office in Salt Lake City does not directly manage any trail resources, and this was taken into consideration in making the decision to map the trails at the 1:100,000 scale. Furthermore, mapping all four trails at the 1:24,000 scale would have required digitizing 10,120 maps. This planning project could not support that level of effort.

COMMENTS

RESPONSES

Office of Federal Land Policy

122 West 25th Street • Herschler Bldg., 3 West • Cheyenne, WY 82002-0600 • 307-777-7331 • 307-777-5400 fax

October 16, 1998

RECEIVED
OCT 21 1998
LODT National Park Service

Jere L. Krakow, Superintendent
Long Distance Trails Office
324 S. State Street, Suite 250
P.O. Box 45155
Salt Lake City, UT 84145

Re: Draft of the Comprehensive Management and Use Plan for the California and Pony Express National Historic Trails and Update for the Oregon and Mormon Pioneer National Historic Trails and associated Environmental Impact Statement

Dear Mr. Krakow:

I have reviewed the referenced document on behalf of the State of Wyoming. In accordance with State Clearinghouse procedures, agencies of the State were provided copies for review as well. The Wyoming Game and Fish Department was the only commenting agency at this stage and they have concluded that, as the main emphasis of this plan is preservation of sites and areas, that there will be no wildlife impacts.

Thank you for the opportunity to comment.

Sincerely,



Julie L. Hamilton
Planning Consultant

Wyoming Office of Federal Land Policy

COMMENTS

RESPONSES



RECEIVED
OCT 26 1998
LOCAL NATIONAL PARK SERVICE

October 23, 1998

Mr. Jere L. Krakow, Superintendent
Long Distance Trails Office
P. O. Box 45155
Salt Lake City, Utah 84145

Dear Mr. Krakow:

Douglas County Parks and Trails Division (and the Douglas County Parks and Trails Advisory Board) support the inclusion of the Cherokee Trail in Alternative Two of the *Comprehensive Management and Use Plan for the California and Pony Express National Historic Trails*.

1

The Cherokee Trail represents a rich and unique chapter in western exploration and expansion. Its place in western history is well documented by letters, dairies, journals and maps. By including it in the *Comprehensive Management and Use Plan*, a greater understanding and appreciation of its role will be recognized.

We are planning to install historical, interpretive signage in 1999, in cooperation with Johanna Harden, Archivist for the Douglas Public Library District, to recognize the Cherokee Trail through Douglas County. I welcome the opportunity to work with you to tell the story of this historic trail to the public.

Please feel free to contact me at (303) 660-7490 if I may be of any additional assistance.

Respectfully,

A handwritten signature in cursive script that reads 'Ron Benson'.

Ron Benson, CLP
Director, Parks and Trails Division

RB:sef

cc: Johanna Harden, Archivist, Douglas Public Library District
Douglas County Parks Advisory Board

P:\USFAS\SPORTS\RON\KRKOW.LTR

100 Third Street • Castle Rock, Colorado 80104 • (303) 660-7490

Douglas County, Colorado, Department of Public Works

1. The Department of the Interior's Office of the Solicitor rendered an opinion in October 1998 regarding the California National Historic Trail. In that opinion, only the routes and cutoffs identified in the 1987 *Feasibility Study* constitute the authorized California National Historic Trail. Additional routes, such as the Cherokee Trail, could be authorized in the future, pending a feasibility study and congressional action amending the original act for each trail

COMMENTS

RESPONSES

MAYOR



RECEIVED

OCT 19 1998

U.S. National Park Service

October 14, 1998

Jere L. Krakow
Superintendent, Long Distance Trails Office
P O box 45155
Salt Lake City, UT 84145-0155

Dear Mr. Krakow:

1

Thank you for the opportunity to review the California-Pony Express Trails Comprehensive Management Plan. The City of Green River has a portion of the California Trail (Cherokee/Overland Trail) within its city limits. We would like to express our support for Alternative 2 in the plan. The emphasis on cooperation between State, Federal, and Local Governments is the only way to adequately manage resources as complex as the National Historical Trails.

2

It is recommended that should the plan be modified, that a larger role be provided for Local Governments which have the desire to participate. We would like to see the potential for Local Governments to compete for grant monies related to managing trail segments within their jurisdiction. We are gratified that segments of the Cherokee Trail, which had been previously omitted from the California Trail, have now been included in the management plan.

Sincerely,

Norman C. Stark, Mayor

City of Green River, Wyoming

1. The Department of the Interior's Office of the Solicitor rendered an opinion in October 1998 regarding the California National Historic Trail. As determined in this opinion, only the 23 routes and cutoffs identified in the 1987 *Feasibility Study* constitute the authorized California National Historic Trail. Additional routes, such as the Cherokee Trail, could be authorized in the future, pending a feasibility study and congressional action amending the original act for each trail.
2. Local governments are encouraged to participate in this plan. They are eligible to compete for funds provided by the challenge cost-share program.

COMMENTS

RESPONSES



PETER SORENSON
Lane County Commissioner
South Eugene District

RECEIVED
NOV 30 1998
LODT National Park Service

November 16, 1998

WP bc/ps/98752/M

National Parks Service
US Department of the Interior
Long Distance Trails Office
324 S. State St., Suite 250
Box 45155
Salt Lake City, UT 84145

Dear Long Distance Trails Office:

Thank you for sending me a copy of the November 10, 1998 mailing concerning the status of a comprehensive management plan for the California and Pony Express National Historic Trails and the update for the Oregon and Mormon Pioneer National Historic Trails.

I am interested in knowing whether the "lost wagon train" on the Oregon Trail will be part of the Oregon Trail National Historic Trail.

The "lost wagon train" was a wagon train which went west from Ontario, Oregon to what is now Bend, Oregon and crossed into the Willamette Valley near Eugene. As you may know, the main route of the Oregon Trail went northwest from Ontario, Oregon, continuing to Pendleton, Oregon and down the Columbia River to Oregon City.

Please let me know what we, as Lane County residents, could do to make certain that the "lost wagon train" is not lost into historic ignorance.

Very truly yours,

Peter Sorenson
Lane County Commissioner

PS:md

PUBLIC SERVICE BUILDING / 125 EAST 8TH AVENUE / EUGENE, OR 97401 / (541) 682-4203 / FAX (541) 682-3803

Lane County, Oregon, Commission

1. The route described in this letter is not part of the authorized Oregon National Historic Trail.

COMMENTS

RESPONSES

LASSEN COUNTY OFFICE OF EDUCATION

"Investing in the Future" through • Leadership • Service • Partnership

472-013 Johnstonville Road North, Susanville, California 96130-9710
Telephone: (916) 257-2196 Fax: (916) 257-2518

Llaniss Dickinson, Superintendent

RECEIVED
NOV 30 1998
COU National Park Service

November 16, 1998

Mr. Carl Barna
Bureau of Land Management, 204-LS
U.S. Department of the Interior
18th and C Streets, N.W.
Washington, D.C. 20240

Dear Mr. Barna:

I have been privileged to come across the *Draft Comprehensive Management and Use Plan/Environmental Impact Statement* for the Oregon, California, Mormon Pioneer, and Pony Express National Historic Trails. The Plan is shaped, in part, by the planning requirements found in section 5(f) of the National Trails System Act. It focuses on the trails' purpose and significance, issues, and concerns related to current conditions along the trails, resource protection, visitor experience and use, and long-term administrative and management objectives. This broad-based document covers policies, guidelines, and standards for administering the four trails in such a manner as to ensure the protection of trail resources, their interpretation, and their continued use.

In the course of this document, there are historical references to incidents that occurred in history along these trails or that led to the beginning of the trails. The document is very reader friendly; however, it is historically incorrect in a very significant area.

I, as Lassen County Superintendent of Schools, find it necessary to bring to your attention that in this document there is absolutely no mention of the Shoshone Indian Tribe anywhere. All four trails in this draft document pass through all or a portion of Shoshone territory. The Shoshone Tribe, according to Shoshone Indians (not Euro-Americans) covered a very large area. Some areas were exclusively theirs, with pass-through privileges for other tribes, and some areas were mutually shared. The Shoshone Tribe was in the eastern portions of California and Oregon, all of the "Great Basin," the Great Plains, and southwest to the western side of the Mississippi River.

I would be interested in an explanation as to why the Department of the Interior and Park Services left a major Indian tribe out of this document. I can understand why the Seminoles in Florida, Iroquois in New York, and Tlingit in Alaska were left out, but the Shoshone Tribe should most definitely be included in this comprehensive document.

Sincerely,


LLANISS DICKINSON
County Superintendent of Schools

LD/sar
shoshone

cc: Steve Elkinton, National Park Service
Brent Botts, Forest Service

Lassen County, California, Office of Education

1. The document includes the Shoshone tribe on map 12. They were inadvertently left out of the listing of tribes in the "Ethnographic Resources" section, but this omission has been rectified in response to this comment.

More than 100 American Indian tribes were affected by the western migration. A serious effort was undertaken throughout the planning process to compile an accurate and complete listing of these tribes. This document does not intend to provide a comprehensive history of the trails or of the Indian tribes affected by the western migration. This plan has been developed principally as a tool to assist in the administration of trail resources.

1

Table 20: Responses to Individual Public Comments

Respondent's Name	Comment	Response
The Definition of the California Trail		
Roger P. Blair OCTA President	There are still some flaws; the most glaring and important revolves over what constitutes the California Trail.	In October 1998 Department of the Interior's Office of the Solicitor rendered an opinion on this issue (see appendix D). According to that opinion, only the routes identified in the NPS 1987 <i>Feasibility Study</i> for the California and Pony Express Trails constitute the congressionally authorized route of the California National Historic Trail. The section "Historic Routes and Significant Resources" in this document identifies the authorized routes and cutoffs as mapped on pp. 35–36 and listed on pp. 49–50 of the NPS 1987 <i>Feasibility Study</i> .
Charles H. Dodd OCTA Member	First, and most significantly, it [the plan] doesn't clearly define the subject of the proposed management — the California Trail. It tap dances around the subject and includes woefully inadequate lists of high potential sites and segments, but nowhere does it identify the routes that comprise the California National Historic Trail.	A comprehensive management and use plan is not a comprehensive history of the trails and their resources; it is a tool to assist in the administration and management of trail resources. Nevertheless, a serious effort was undertaken throughout the planning process to compile an accurate and complete listing and description of historic routes, sites, and segments, given time and financial constraints. Furthermore, the flexibility of the plan will make possible additions and modifications to the list of sites and segments when additional information becomes available. The section "Historic Routes and Significant Resources" in this document identifies the authorized routes and cutoffs as mapped on pp. 35–36 and listed on pp. 49–50 of the NPS 1987 <i>Feasibility Study</i> .
Charles W. Martin	I am troubled that in a document as extensive as this, there is not a straightforward and unambiguous definition of what constitutes the California Trail. There are maps (on a scale that limits their usefulness) and there are lists of both high potential, and additional segments and sites (with, I think, some inconsistencies between the maps and the lists), but nowhere is there a statement of exactly what is included in "The California Trail". This would seem to me an essential first step in establishing any management and use plan, and certainly it is necessary for me to know what is included as California Trail in order to fully evaluate the appropriateness of the plan. The failure to clearly define the entity whose management and use this document is meant to describe is, I think, a serious flaw, and one that opens the door for all sorts of future problems. I would urge, as others have, that the Plan be modified to include a complete listing of the components of the California Trail accompanied by an accurate and complete map that shows them all.	The section "Historic Routes and Significant Resources" in this document identifies the authorized routes and cutoffs as mapped on pp. 35–36 and listed on pp. 49–50 of the NPS 1987 <i>Feasibility Study</i> .
Walter H. Meyer OCTA Board of Directors	The Comprehensive Management Plan must include a clear definition of what comprises the California Trail since there is such a variety of routes.	The section "Historic Routes and Significant Resources" in this document identifies the authorized routes and cutoffs as mapped on pp. 35–36 and listed on pp. 49–50 of the NPS 1987 <i>Feasibility Study</i> .
Jeanette M. Roberts OCTA Member	I support the following definition of the California Trails: The Cal. Trail complex is comprised of all emigrant routes which join into the basic Platte-River-Corridor-to-California Trail alignment at any point along that alignment. In order to qualify for inclusion as a component of the Cal Trail Complex, a branch of the complex must be supported by written historical accounts. This definition will exclude those routes generally considered to be included under the generic term "the Southern Routes," but will accurately reflect the true extent of the Cal Trail Complex.	While this definition might have merit, the solicitor's opinion (see appendix D) indicates that the authorized routes will be limited to those identified in the NPS 1987 <i>Feasibility Study</i> .
Dave Welch	The "all routes and cut-offs" issue needs resolution. I note that page 36 of the Comprehensive Management Plan states that the enabling legislation "authorizes all routes and cut-offs." Thus the Comprehensive Management Plan acknowledges this fact, but a clear definition is lacking.	The section "Historic Routes and Significant Resources" in this document identifies the authorized routes as mapped on pp. 35–36 and listed on pp. 49–50 of the NPS 1987 <i>Feasibility Study</i> . The language used in the enabling legislation has been interpreted by the U.S. Department of the Interior's Office of the Solicitor to mean all the routes and cutoffs identified in the NPS 1987 <i>Feasibility Study</i> .

Note: Specific affiliations are included when identified by the author.

Table 20: Responses to Individual Public Comments (continued)

<i>Respondent's Name</i>	<i>Comment</i>	<i>Response</i>
Additional Routes and Cutoffs Need to be Designated as Part of the California or Oregon National Historic Trails		
Warner H. Anderson	"How to add trails to the plan at a later date is not made clear"	The U.S. Department of the Interior's Office of the Solicitor issued opinions for both the California and the Oregon Trails (see appendixes C and D), which indicate that the inclusion of additional routes will require Congress to authorize an additional feasibility study and to amend the authorizing legislation for each trail to add such routes.
Roger P. Blair OCTA President	There are still some flaws, the most glaring and important revolves over what constitutes the California Trail. Specifically, a number of trails and cutoffs have not been included in this plan, for lack of documentation or other reasons. Absent California segments include Henness Pass Trail, Luther Pass Trail, and Volcano Road. The trails noted here should not be construed as a comprehensive listing, but only illustrative. Individual reviewers have cited concerns about those trails they are most familiar with. You should rely on those reviews and comments for a list of omitted trails as well as other specific concerns.	This <i>Comprehensive Management and Use Plan</i> acknowledges that there are many additional trails and cutoffs that are not part of the congressionally authorized California National Historic Trail route. As indicated in the U.S. Department of the Interior's Office of the Solicitor's opinion (see appendix D), additional routes can be added in the future, but Congress will have to authorize a feasibility study and amend the original legislation to make these inclusions possible. Some of the routes included in the <i>Comprehensive Management and Use Plan / Draft Environmental Impact Statement</i> have been deleted from this final document as a result of the solicitor's opinion, which states that only those routes identified in the NPS 1987 <i>Feasibility Study</i> constitute the authorized California National Historic Trail. An automated database, maintained at the Long Distance Trails Office, still includes this information and can be accessed by those who are interested in these resources.
Mary Conrad	I do wish to see the Cherokee Trail included in the Comprehensive Management Plan. Primary research has shown many Cherokee individuals traveled from Oklahoma to California during the gold rush years. If the Cherokee Trail would be included as a branch of the California Trail, this would allow a number of site managers to interpret the California Trail experiences of some Cherokees. This would provide a number of excellent opportunities to help break down the monolithic stereotype of nineteenth century American Indians. The experiences of the Cherokees who traveled to California as part of the American westward movement to California, while other Cherokee individuals remained behind, shows that all Cherokees (and other American Indians) did not think or act en masse. Inclusion of the Cherokee Trail would provide opportunities for the public to learn of the diversity of American Indian experiences.	More than 40 letters supported the inclusion of the Cherokee Trail as part of the California National Historic Trail. The draft plan included the Cherokee Trail as part of the California National Historic Trail. However, the U.S. Department of the Interior's Office of the Solicitor issued an opinion that only those routes identified in the NPS 1987 <i>Feasibility Study</i> constitute the authorized California National Historic Trail. As a result, the Cherokee Trail has been deleted from the maps and final document appendixes. The inclusion of additional routes will require Congress to authorize an additional feasibility study and to amend the authorizing legislation for each trail to add such routes.
Michael F. Cooley	I have reviewed the Draft Plan and Draft Environmental Impact Statement for the California, Pony Express, Oregon, and Mormon Pioneer trails with great interest. I applaud the Park Service for working to enhance and preserve these priceless legacies of American history. However, I found one omission related to your plan for the Oregon Trail which I believe needs to be corrected to preserve a complete record of the epic migration that took place there. I believe any complete record of the Oregon trail must include mention and management direction for Meeks Cutoff. It is simply an integral part of the history of the Oregon Trail and I hope you will take the time and effort to make sure it is not lost to the ages.	The U.S. Department of the Interior's Office of the Solicitor issued an opinion for the Oregon Trail on this issue (see appendix C), indicating that Congress will have to authorize a feasibility study and amend the original legislation to include the Meek Cutoff as part of the Oregon National Historic Trail.
Ed Dunkley President, High Rock Trekkers	The Draft Plan does not include all known historical points and routes used by emigrants, such as the Henness Pass route, an important and heavily used branch of the Truckee route.	This document acknowledges that there are many additional trails and cutoffs that are not part of the congressionally authorized California Trail route. As indicated in the opinion of the U.S. Department of the Interior's Office of the Solicitor (see appendix D), additional routes can be added in the future, but Congress will have to authorize a feasibility study and amend the original legislation to make these inclusions possible. Some of the routes included in the <i>Comprehensive Management and Use Plan / Draft Environmental Impact Statement</i> have been deleted from this final document as a result of the solicitor's opinion that only those routes identified in the NPS 1987 <i>Feasibility Study</i> constitute the authorized California National Historic Trail.

Table 20: Responses to Individual Public Comments (continued)

Respondent's Name	Comment	Response
Fred W. Dykes	The basis for any trail management has to be an accurate description of the trails in question, without political influence. My review is concerned solely with a correct and uniform treatment of these trails. My chief area of interest the Jeffrey / Goodale Cutoff, and I will have much to say about its elimination from the document. A document prepared in 1998 should reflect the trail knowledge at this time, not as it was in 1978 when the Oregon and Mormon trails were recognized, or 1981 when the first plan was approved (v). It defies logic to limit the Oregon Trail to trails in use in 1841-48 (35) and have no limit on the California Trail. This results in the map on the cover and Map 5 on page 11, with ten splinter trails shown in California, while Oregon Trail maps ignore the major Jeffrey / Goodale Cutoff and the fewer than a half-dozen other variations.	The opinion of the U.S. Department of the Interior's Office of the Solicitor for the Oregon Trail on this issue (see appendix C) indicates that Congress will have to authorize a feasibility study and amend the original legislation to include the Jeffrey / Goodale Cutoff as part of the Oregon National Historic Trail.
Thomas S. Fee	Include the missing branches and segments of the California Trail as recommended by OCTA trails experts.	All the information submitted by OCTA trail experts was considered for inclusion in the draft plan. In some cases incomplete entries and failure to document the historical significance of a segment or a site meant that the resources could not be included among the high-potential sites and segments at this time. However, with additional research, such resources could become part of the authorized California National Historic Trail.
Andrew Hammond	Please add "Beckwourth Trail" to the index.	The Beckwourth Trail has been added to the index.
Levida Hileman OCTA Board of Directors	<p>First of all the definitions of the different trails are inadequate and nothing is said whether the NPS has pursued any action in regards to including additional routes and cutoffs to both the Oregon and Mormon trails. When the definition of these two trails is incomplete you should not repeat the same mistake with the California Trail. The California Trail definition should be such to include all routes and cutoffs taken by the emigrants along the basic Platte River to California corridor. (This is true of the other two trails also.) These are long trails by which hundreds of thousands of travelers crossed, not just sites and segments, and somewhere should be treated as a flowing related entity. As written the California Trail is woefully lacking. . . . The trails as depicted in Wyoming show nothing on the north side of the Platte River after Fort Laramie. Between Fort Laramie and present day Casper this was known as Child's route and still today as Mormon Trail.</p> <p>Much the same can be said for the Sublette Cutoff, Slate Creek Cutoff, Kinney Cutoff, Lander Cutoff, etc. These things should be rectified. They cannot be dismissed with just a brief paragraph. The western part of Wyoming is under constant threat from gas and mineral exploration. We must [have] something more definitive in order to protect these trail cutoffs. I do not see how you can have the Oregon Trail going across Wyoming without showing the Sublette and the Lander Cutoffs. If we look at just the cutoffs in relation to the California Trail there are discrepancies between the scanty text and the maps</p>	<p>The Long Distance Trails Office in Salt Lake City requested an opinion about this matter from the U.S. Department of the Interior's Office of the Solicitor (see appendixes C and D).</p> <p>The Sublette, Slate Creek, and Kinney Cutoffs and the Lander Road are included on all of the document trail maps. All the sites and segments that were submitted that meet the high-potential criteria identified in the National Trails System Act, and that are located on the congressionally authorized California National Historic Trail routes, have been included in this final document and are listed in appendixes E and F.</p>
Robert Kabel	I would like to urge the retention of the Cherokee Trail, and other similar branches and alternative routes, in the plan. The Cherokee Trail is less familiar than some other more heavily traveled routes but it shares the same kind of pioneer activity and retains identifiable ruts and sites. The origin of the Pike's Peak Gold Rush is just one interesting story. The Cherokee Trail has joint segments with other trails, no one of which should have priority. My philosophy here is that the ecumenical responsibility for promotion of the long distance historic trails should be reflected in the acknowledgment of the logical overlap of trail segments. The pioneers did not know or care who would claim oversight on their trails one hundred and fifty years later.	More than 40 letters supported the inclusion of the Cherokee Trail as part of the California National Historic Trail. The draft plan included the Cherokee Trail as part of the California National Historic Trail. However, the U.S. Department of the Interior's Office of the Solicitor issued an opinion that only those routes identified in the NPS 1987 <i>Feasibility Study</i> constitute the authorized California National Historic Trail. As a result, the Cherokee Trail has been deleted from the maps and final document appendixes.

Table 20: Responses to Individual Public Comments (continued)

Respondent's Name	Comment	Response
<p>Ross Marshall OCTA Board of Directors</p>	<p>On page 69 are listed some possible additional routes for the Oregon NHT. This is a very incomplete list. Any effort to add routes to the Oregon NHT should be far more comprehensive. The statement on page 65 under "Trail Mapping" referring to additional Oregon Trail should include the phrase "...as well as other routes..."</p> <p>One other issue. I hear there is [sic] continuing questions about the inclusion of the Cherokee Trail as part of the California NHT. This is distressing, particularly if it is only because it overlaps some other Historic Trail. Many of the Historic Trails overlap, particularly in our area with the Santa Fe Trail, Oregon, and California NHT's being on the same routes. If the objection is because it maybe did not carry as much traffic as some of the key routes, I think we are going at this subject with the wrong handle. The California NHT legislation called for "all routes and cutoffs."</p> <p>Could an effort be made to enlist the help of those of us who have been on the team for this draft to collaborate on a comprehensive listing of the potential additional routes? This should not be a difficult or unmanageable process.</p> <p>By the way, many of the names of people who have worked very hard on this Draft have been omitted on page 265. For future reference, this list should be as comprehensive as it was on the internal review draft. Saving space is not a good enough reason.</p>	<p>The list of the additional routes for the Oregon Trail were submitted by the Oregon Trails Coordinating Council. They have been well-documented, and their inclusion would satisfy the supporters of the trail in the states of Oregon and Washington. Additional routes in Idaho have been identified by the Idaho Bureau of Land Management and the State Historic Preservation Office, as described on page 69 of the <i>Comprehensive Management and Use Plan / Draft Environmental Impact Statement</i>. Support also exists for the designation of St. Joe's Road as part of the authorized Oregon National Historic Trail. No other Oregon Trail routes have been submitted for inclusion.</p> <p>The solicitor's opinion that only those routes identified in the NPS 1987 <i>Feasibility Study</i> constitute the authorized California National Historic Trail resulted in the deletion of the Cherokee Trail from the maps in this document.</p> <p>The solicitor's opinion regarding the authorized route of the California National Historic Trail would nullify the value of such a list, although it could be used by various trail organizations to obtain congressional support for the inclusion of additional routes.</p> <p>Page 265 of the draft document includes the names of those who collaborated in an official capacity in preparing the environmental impact statement. A more comprehensive listing of those who contributed to the plan can be found on pages 123–24 of the draft document (pp. 131–32 of this final document).</p>
<p>Charles W. Martin</p>	<p>I am also troubled by the omission of several important trails which are part of the California Trail system, particularly if the only way to make additions in the future is through legislative action as indicated by the recent decision of the Solicitor. Of particular concern to me are trails I am most familiar with, specifically the Overland Trail, the Lodgepole Trail, Child's Cutoff, and the various trails between Big Sandy and the Bear River. Ample documentation exists for all of these trails, and I believe all, or certainly almost all, of them meet the requirements for high potential segments as defined in the National Trails System Act and on page 4 of the document</p>	<p>The Overland Trail, the Lodgepole Trail, and other trails between Big Sandy and Bear River were not included as part of the NPS 1987 <i>Feasibility Study</i>. The opinion of the U. S. Department of the Interior's Office of the Solicitor makes it clear that congressional action will be required in order to add such routes to the California National Historic Trail.</p> <p>The Julesburg Cutoff and Child's Cutoff have been included.</p>
<p>Ken and Arleta Martin OCTA Board of Directors, NPEA Members</p>	<p>Another concern of ours, is that we would like to see the St. Joe Road included in the Oregon Trail. We know that this would require additional legislation, as Congress only designated the "Primary Route" from Independence, Missouri to near Portland, Oregon.</p>	<p>As the respondents indicate, the addition of this route would require a feasibility study and congressional action to amend the original authorizing trail legislation.</p>
<p>Walter H. Meyer OCTA Board of Directors</p>	<p>I don't understand why DOI solicitors have established that additional routes and cutoffs may be added to the Oregon NHT only through Congressional action. This conflicts with Section 6 of the National Trails System Act which stipulates that connecting and side trails on public lands administered by the Secretary of the Interior or Secretary of Agriculture may be designated by the appropriated Secretary as components of a national historic trail. This is a very important point! The solicitor's opinion, including the rationale for the decision, must be summarized here and included within the appendixes of this Comprehensive Management Plan. I've read the Field Solicitor's letter of Sept. 2, 1998 and feel that his opinion should be challenged through the appeal process. The letter does not even refer to Section 6 of P.L. 90-543. I realize that new NHTs can be designated only by Congress, but these additional routes would be added to a NHT already designated by Congress. The establishment of a new NHT would not be required. Therefore, I feel that Section 6 would apply.</p> <p>Page 69-Why are these additional routes for the Oregon NHT in Idaho and Oregon not covered in appendix H? There are numerous sites and segments along these routes. This fact should be stated here as should the reason for not including them in appendix H. Better still, include them in the appendix.</p> <p>The Comprehensive Management Plan must also include a full listing of and give consideration to all the branches of the California Trail complex. A complete listing is necessary to facilitate preservation and management now omitted from the Comprehensive Management Plan will questioned in the future. I believe that OCTA has provided the NPS with a complete list.</p>	<p>The opinions of the U.S. Department of the Interior's Office of the Solicitor are currently included in appendixes C and D. The solicitor's opinions were requested because the National Trails System Act does not clearly specify a procedure to include additional routes. The NPS planners, who prepared this document, do not have the authority to make decisions regarding the power of the secretary of the interior or of agriculture to designate new routes.</p> <p>Appendix H in the draft plan included only additional sites and segments submitted during the preparation of the plan. The additional routes are not part of the authorized Oregon National Historic Trail and cannot be part of the document at this time. They are, however, part of the database that is being kept at the Long Distance Trails Office. Furthermore, routes would not be included in such an appendix; only significant segments along these routes could be potentially incorporated as part of the plan after Congress approved the routes as components of the Oregon National Historic Trail.</p> <p>This document acknowledges that many additional trails and cutoffs are not part of the congressionally authorized California Trail route. As indicated in the solicitor's opinion (see appendix C), additional routes can be added in the future, but Congress will have to authorize a feasibility study and amend the original legislation to make these inclusions possible.</p> <p>The draft document includes all the information that OCTA provided to the National Park Service.</p>

Table 20: Responses to Individual Public Comments (continued)

Respondent's Name	Comment	Response
Byron Oldham	<p>It is unfortunate the Colorado gold rush and the city of Denver were not included in this program. When weighed against the very short-lived colossal failure, the Pony Express, there is little doubt where the importance lies. It should also be noted that after 1860, a large part of the freight, as well as emigrant traffic, to Santa Fe went over the Nebraska City Cut-off.</p> <p>The Comprehensive Management Plan, however, reflects that the plan is flexible and provides a mechanism for continuing the process of identifying and designating additions to the trail network. We applaud this provision. We do, however, wish to see a listing of trails and issues to be addressed. By identifying these trails and concerns up front in this document, there is recognition that they are important but undergoing further evaluation and documentation.</p> <p>Our concern as pointed out in previous correspondence, is that unless some recognition is afforded these trails and cutoffs now, this document could, in fact, be used against efforts to preserve the trails, by citing lack of inclusion in the comprehensive plan. Furthermore, the current funding picture for the NPS in general and in turn the Long Distance Trails Office (LDTO) could impact the LDTO's ability to participate fully or in a timely fashion in the update and evaluation process.</p> <p>The Oregon Trails portion of the plan also lacks some important cutoffs in Washington, Oregon, and Idaho. We recognize that in this instance the problem is the narrow legal definition of the Oregon Trail National Historic Trail. It is important that we resolve the approach to use in addressing the future addition of these trails, sites, and segments, whether through legislative redress or some administrative procedure.</p>	<p>The geographical scope of this plan has been determined by congressional authorization.</p> <p>The document includes descriptions for all the California routes that were submitted by trail experts. The opinion of the U.S. Department of the Interior's Office of the Solicitor, however, means that many of these routes will not be part of the official trail unless Congress authorizes a feasibility study and amends the original legislation. Federal land-managing agencies, such as the Bureau of Land Management, the Forest Service, and the Bureau of Reclamation, are mandated to protect significant historic resources; their protection is not dependent on being listed as high-potential sites or segments, but on the agency's recognition of their historical significance.</p> <p>According to the solicitor's opinion on the addition of routes to the Oregon National Historic Trail (see appendix C), Congress will have to authorize a feasibility study and amend the original legislation to include additional routes and cutoffs in Idaho, Washington, and Oregon.</p>
Jeanette M. Roberts OCTA Member	I support [the suggestion] that there should be a statement that the Secretary of the interior [sic] and the Secretary of Agriculture do have the power to make changes in the trails without going through the legislative process.	The opinion of the U.S. Department of the Interior's Office of the Solicitor does not concur with this perspective.
Frank Tortorich	My main concern is the legal definition of the wording "all trails and cutoffs." I believe that this needs to be clear before the final adoption occurs.	An opinion from the U.S. Department of the Interior's Office of the Solicitor was requested to clarify this issue. Please see appendixes C and D.
Comments on the Administration and Management of the Trails, Including the Management Alternatives		
James E. Budde	<p>The reader has been presented with two alternatives. In reality, there is only one alternative (#2) because the first alternative, for the most part, was nullified by Congress when the California and Pony Express Trails were added to the National Trails System several years back.</p> <p>Alternative 2 is not an acceptable alternative because it does not conform to the Congressional mandate to include "including all routes and cutoffs" (see page 128, middle column, #18).</p> <p>This alternative should be modified to incorporate a provision that fulfills the Congressional intent, and provides for the inclusion of "all routes and cutoffs." Much to my surprise the Cherokee Trail was included, but provisions for other routes were left out. Appropriate wording should be included in Alternative #2 that would enable the Service to address the other routes and cutoffs.</p> <p>One of our shared concerns is the preservation of the historic trails. While the DESI / CMP recognizes the need for trail preservation, the overall document does not provide a plan or a strategy for the actual preservation. I looked in vain for some element that would provide the Service or the various trails supporters with some new tool or element that would enhance our ability to save those endangered trail sites but came up empty handed.</p>	<p>This statement is incorrect. The addition of the California and Pony Express to the national trails system does not nullify alternative 1.</p> <p>According to the opinion of the U.S. Department of the Interior's Office of the Solicitor, the authorized routes of the California National Historic Trail are only those described in the NPS 1987 <i>Feasibility Study</i>.</p> <p>At this time the only way to add routes and cutoffs would be through congressional action.</p> <p>Alternative 2, the proposal, includes a detailed description of a far-reaching protection plan (pp. 64–66) that was developed by the National Park Service in cooperation with staff from the Bureau of Land Management and the Forest Service.</p>

Table 20: Responses to Individual Public Comments (continued)

<i>Respondent's Name</i>	<i>Comment</i>	<i>Response</i>
Thomas S. Fee	<p>Obtain a determination from Washington, D.C. regarding one agency being responsible for protecting the trails . . . rather than "cooperation" between agencies and no one with real protection or power.</p> <p>Encourage more funding for trail protection and preservation.</p> <p>Emphasize trail protection over trail interpretation.</p>	<p>According to the National Trails System Act, the agencies that manage the lands crossed by the trails are responsible for resource protection.</p> <p>The plan includes a request for a substantial budget increase for the Long Distance Trails Office in Salt Lake City. If authorized, such an increase should result in a higher level of cooperation and coordination among those who manage trail resources.</p> <p>The National Trails System Act provides not only for the preservation of trails, but also for public access to, travel within, and enjoyment and appreciation of the resources. Interpretation, therefore, merits the same level of treatment as protection.</p>
Valda Kennedy	<p>My only wish would be to have more National Park Service personnel [sic] to manage some of our historic properties-both publicly and privately owned. I would suppose that this is not possible with budget restrictions and governing laws.</p>	<p>The Long Distance Trails Office does not directly manage any of the trail resources. Even if its budget was increased, it still would not have the authority to manage trail resources.</p>
Edna Kennell	<p>As I read through the plan I did not sense input from any agencies or organizations other than the NPS, Forest Service and BLM.</p> <p>Use of "standardize the content and the display of interpretive information" causes concern as each historic site is very unique unto itself. Each site has many individual stories to tell because of the multitudes who passed through the area. Under tones in the plan bring questions as to the true role of the Long Distance Trails office in administering the four trails.</p>	<p>The Bureau of Land Management and the Forest Service have cooperated in this planning project since its official start. Staff from the three federal agencies worked together to develop the internal draft that went out on review February 1998.</p> <p>The plan acknowledges that each historic site is unique in itself. The goal of standardizing content and display is to focus on the consistency of how that information is presented, not on the specific content. Also, contradictory information should not be presented at various sites along the trail.</p>
Ronald R. Lund	<p>The certification process should be highlighted more separately so that its restrictions are not considered to apply to outside certification.</p>	<p>The certification process is described in the draft on page 50 under alternative 1, on page 66 under alternative 2, and on page 233 under "Protection Tools."</p>
Ross Marshall OCTA Board of Directors	<p>All of us can't help but wish, as I know you [Jere Krakow] do, that the various Federal agencies like the NPS, BLM, USFS, etc. could be more homogeneous and operate on the same page on matters like the management of a single National Trail. But with the statement on page 26 that the "NPS is not understood by the other Federal partners" and the statement on Page 64 that the National Park Service, the administrating agency for these trails, will "assist" rather than lead the management effort, it is clear that trail preservation strategies are yet to be defined.</p>	<p>The statement on page 26 of the draft does not include the word "federal"; the partners the plan has in mind are mostly the members of trail associations who fail to understand the restrictions that the National Trails System Act places on the Long Distance Trails Office.</p> <p>The word "assist" was used instead of "lead" in response to comments from federal partners who own the trail resources and who have responsibility for managing resources under their jurisdiction.</p>
Charles W. Martin	<p>I am not encouraged by the wording on page 62 under Cooperative Management Agreements that indicates that the working relationship between the Park Service, the BLM, and the Forest Service is not yet in place. How can this be a "Comprehensive Management and Use Plan for the California and Pony Express National Historic Trails" if this essential aspect of their management is not firmly established?</p>	<p>One of the purposes of a comprehensive management and use plan is to provide the legal mechanism for such agreements. They do not exist at the present time, and there is no legal mandate that requires them.</p>

Table 20: Responses to Individual Public Comments (continued)

Respondent's Name	Comment	Response
Les McKenzie	<p>The subject of "management corridors" is controversial and, as far as I concerned, is a [sic] overly promoted aspect of the trail plan. Depending on whose definition of "adversely impact" is used, corridors 2 miles wide could prevent any economic use on 1,280 acres for every mile of trail protected. Conceivably, several million acres could be withdrawn from urban development, motorized recreation and other uses. This business of <i>Maintaining the physical integrity of the trail landscape...to ensure a rich and evocative visitor experience</i> is GARBAGE! How can anyone arriving in air conditioned comfort of a four-wheel drive vehicle or pickup truck possibly complain about an encampment of hippies, a race car trying to set a speed record, a few cows in the vicinity, a power line in the horizon, or some mining activity on a visible hillside? If all of our OCTA tours and individual visits were conducted on foot, on a horse, or in an oxen propelled Conestoga wagon there would be some justification for trying to accomplish this objective. However, this is not the case! What "viewshed" protection and "management corridors" amount to is a series of linear mini-wilderness areas with modifications to allow certain activities by those who profess to be trail advocates.</p> <p>The site certification program appears to have little to offer the private land owner. The way I read your description, the owner could be obligated to meet a number of onerous requirements, but would receive very limited benefit. The Park Service would essentially be given the management of the segment or site if the owner wished to retain his certification. I can see that the Trails program would be enhanced, but to be really successful, both parties must benefit. I know of no law that prevents a private individual from creating an interpretive center on his own property and charging admission. This allows the individual to benefit from his efforts without all the red tape and controls that the certification program would entail.</p>	<p>The concept of management corridors is controversial, but it is not an overly promoted aspect of the trail plan. The current plan for the Oregon National Historic Trail theoretically protects a 2-mile-wide corridor only along the 318 miles of high-potential segments. Of those, only 128 miles are on private property. The concept of management corridors was developed because federal agencies are mandated to protect the cultural landscapes associated with the trails. The current proposal (alternative 2) acknowledges that it will not be possible to protect and preserve all the existing landscapes along the designated high-potential segments; it introduces a level of flexibility that was not in the original Oregon Trail plan. Furthermore, protecting the viewsheds does not mean the areas under protection would become linear mini-wilderness areas. What the plan envisions is to protect within limits the visual character of the high-potential segments identified in this plan.</p> <p>The certification process is totally voluntary, and private landowners are free to participate if they wish. As described on page 233 of the draft, the National Park Service would not be given the management of the segment or site, but would cooperate with the willing landowner to document trail resources and to provide technical assistance. Benefits need not only be defined in terms of economic gain. Many private landowners feel pride in the resources they own and want to share them with others.</p>
Walter H. Meyer OCTA Board of Directors	Under Alternative 2, wouldn't there be some improvement over Alternative 1 for Landownership and Use and Cumulative Impacts?	It is not clear how alternative 2 would improve landownership and use. From the discussion of cumulative impacts for alternative 2 (page 81 of the draft) is not evident that the proposal would have less impacts than current conditions.
Tim Monroe	There is some language that gives me great concern. On Pages 67-68 there is language discussing review and approval of interpretive wayside exhibits. The language also seems to imply that exhibits inside interpretive centers would be subject to National Park Service review and approval. The language on these pages must be changed to reflect that the National Park Service will be responsible for review and approval of exhibits, language, etc., of National Park Service facilities/areas, etc. The language must state clearly that NPS' role in non-Service [facility] reviews will be advisory and when requested. The last thing the Federal managing agencies need is another layer of bureaucratic review that is costly, confusing, and time-consuming. And, when the National Historic Trails Center is built in Casper, the NPS' role will be minimal under current guidelines. We do not want NPS to have review and approval authority for any exhibits within that center. We may ask for assistance but we will strongly resist through any means possible any attempt by the National Park Service to interject the views of staff members in Harpers Ferry or Denver or anyplace else on interpretive materials.	The language on pages 67-68 of the draft applies to managers of facilities who desire certification by the National Park Service. To obtain such certification, the facilities would have to meet NPS standards.
Frank Tortorich	It is not clear to me, of the process for the partnership between your office and the other agencies, [e.g.] BLM, etc.. Many field people are not informed as to the Trail its location or the legislation. I know about this because I work with these people and I inform them, but they need documentation from the NPS to the field level people. How do we do this and what is OCTA's role in the process?	Some BLM and FS field staff may be unaware of the trails, their location, or the legislation authorizing them. However, it is inappropriate for the National Park Service to tell other federal agencies how to train their staff. The Park Service is willing to work with the staff from the other federal agencies involved, but it would not be possible to include such a provision in the current plan.
Questions Regarding the Planning Process		
Levida Hileman OCTA Board of Directors	The answers to my questions about what the Park Service is going to do with the public comments were unsatisfactory. "They will look at them and see if they are important." (maybe misquoted a little). I see where the Park Service can go through all of these motions of public comments and still just change the front cover and first page eliminating the 'draft' from the text and use that as the final plan. This leaves me very uncomfortable.	The planning team explained that all substantive comments would be addressed and, whenever appropriate, changes would be made in the document to reflect those comments. Substantive comments are defined by the Council on Environmental Quality's regulations for implementing the National Environmental Policy Act (see p. 133 of this final document for a definition of substantive).

Table 20: Responses to Individual Public Comments (continued)

Respondent's Name	Comment	Response
James Linebaugh	<p>Make sure that producer interests are included in all phases of planning, not just by notice of public participation meetings which they may not attend. Industry representatives need to be contacted for direct input. Hear and seriously consider what they have to say.</p> <p>Seek out and involve people in the public land agencies other than cultural resource and recreation specialists. Those involved with forestry, grazing, and mining will be quite helpful for they are the ones working with the producer interests.</p>	<p>A concerted effort was made throughout the planning process to contact producer interests. Unfortunately, as the commenter notes, they have not attended public meetings and have not responded to any of the requests for comments. In a project of this magnitude it is not possible to contact individuals representing producer groups outside the public response process. The project does not have the resources that such a task would require. An effort was made to contact most of the major landowners along the trails.</p> <p>Once again the magnitude of this project has prevented the planning team from making contacts with federal staff outside the areas of planning, recreation, and natural and cultural resources. Personnel from 41 BLM offices, 25 Forest Service offices, 15 NPS offices, 11 Fish and Wildlife Service units, and numerous state and local agencies were consulted (see pp. 127–29 of this final document). Some reviews included those involved in forestry, grazing, and mining.</p>
Questions Regarding the Accuracy of Data in the Plan		
Gail Holmes	<p>Failure to show Iowa trails links with California trails going west in Nebraska from the Missouri River along both north and south sides of the Platte River. Anyone familiar with Oregon and California pioneer journals knows alternate trails should be shown across Iowa along the Mormon Trail and north through western Iowa to Council Bluffs.</p> <p>Failure to show the South (of the Platte) Mormon Trail which carried 5,000 Mormons and 5,000 Gold Rushers in 1850 alone. Failure to include that alternate bypasses significant related historic sites.</p> <p>Your map, page 21, shows "Mormon Ferry" over the Missouri River about where the Middle Mormon Ferry was in 1846. It shows the actual Mormon crossing of the Missouri, however, at the North Mormon Ferry site without showing a ferry. The third and South Mormon Ferry over the Missouri, south of the Platte is not shown. Nor is Middle Ferry II, between Point aux Poules and Bellevue, or Lone Tree Ferry west of Kanesville shown. Mormon support towns for their ferries, Council Point, Ferryville, and Bethlehem, are all overlooked despite their services to tens of thousands of pioneers and migrants.</p> <p>Your map, page 28, of <i>Tribes Encountered Along the Trails, 1840s, 1850s</i>, is misleading. The time-span is too long when Iowa/Nebraska/Kansas tribes were in flux. The Iowa, Omaha, Ponca, and Pawnee, even with this exaggerated time scale, are grossly out of place.</p>	<p>According to the opinion of the U.S. Department of the Interior's Office of the Solicitor, such routes are not part of the authorized California National Historic Trail route.</p> <p>The document maps depict the authorized route of the Mormon Pioneer Trail. While it is clear that many Mormons and gold rushers used other routes, this plan focuses on those that have been legally authorized. In the future, it might be possible to include other routes as part of these trails.</p> <p>The planning team realizes that the plan does not include all sites and segments associated with these trails. For some sites, information was inadequate. Routes have been included if they meet the high-potential criteria described in the National Trails System Act.</p> <p>The planning team realizes the difficulty of mapping the location of American Indian tribes at a time when they were in flux. The information presented on this map tries to address a very complex issue. The current map reflects the best information available and reflects comments received during the public review process.</p>
Connie Johnson	<p>I have never seen the estimate of 500,000 before. Usually, the number 300,000 to 350,000 is used. John Unruh in his book "The Plains Across" (p. 85) has a chart that gives a grand total of 296,259 for all three major trails during the years 1849-1860. Your 500,000 figure would be hard to accept.</p>	<p>That figure was agreed upon by a group of trail experts that met in Denver at the beginning of the planning process. It was included as part of the first newsletter associated with this project and in several review drafts. The planning team has not received any comments challenging the accuracy of this figure.</p>
Les McKenzie	<p>Page 37 - The fifth sentence in the paragraph describing the route of the Bidwell-Bartleson party starts out: "Though their attempt to reach California was a failure.....". My recollection of the story of the Bidwell-Bartleson party was that they DID make it to California, but as a pack train, rather than as a wagon train as they started out.</p> <p>The second sentence of the paragraph describing the Applegate Trail says, in part: "from the Willamette Valley into the northeastern corner of California, south around Goose Lake, then southwest through High Rock Canyon." Check your map, I find two errors in this statement. (1) Goose Lake is quite a ways from the northeastern corner of California. (2) The Applegate party traveled <i>southeast</i> through High Rock Canyon rather than southwest.</p>	<p>The statement has been corrected to indicate that the Bidwell-Bartleson party did reach California.</p> <p>Goose Lake is in the northeastern corner of California, but the direction of travel through High Rock Canyon has been changed to southeast instead of southwest.</p>
Gene Potter OCTA Member	<p>As to the federal government funding a mail delivery to SLC [Salt Lake City] in "1849" (see page 31, 2nd paragraph, 1st sentence): You may want to check your records. In 1849 the Federal Government did establish a post office at SLC and appointed J.L. Heywood as postmaster with a bimonthly mail service to run between SLC and Council Bluffs, Iowa (Independence, Missouri). I have no record that such a service was federally funded that year.</p>	<p>The statement on page 31 does not mention Salt Lake City. It merely states that the U.S. government began the first regular overland mail service by private mail carrier to the western United States from Independence, Missouri.</p>

Table 20: Responses to Individual Public Comments (continued)

Respondent's Name	Comment	Response
Robert A. Schulze Pottawattamie County Historic Trails Association.	I do think we are running down the trail. Independence was first so they get all the marbles. The Kanesville Konnection as it relates to the Oregon / California Gold Rush trails is largely ignored in your draft, despite evidence that these trails switched and passed through Iowa in the 1850's and 60's based on sheer numbers.	Independence shares with many other communities the start of the trail. However, the opinion of the U.S. Department of the Interior's Office of the Solicitor requires that only the routes identified in the NPS 1987 <i>Feasibility Study</i> be included as part of the authorized trail.
Anna R. Scott South Platte River Trail	Concerning the California Trail, it is our belief (with some supporting evidence) that by 1855, much, if not most of the westbound traffic passed through here [Julesburg], rather than on the route up the North Platte River.	The Julesburg Cutoff has been included in the section "Historic Routes and Significant Resources." It has also been added to the document maps.
Additions and/or Modifications to the List of High-Potential Sites and Segments and the Auto Tour Route		
Cave Springs Association, Fort Caspar Museum, National Pony Express Association, Levida Hileman, Jacqueline Lewin, Ross Marshall, Al Mulder, Walter Meyer, Gregory Franzwa, Joe Nardone, Richard Ackerman, Don Buck, Angeline Carleton, Fred W. Dykes, Patrick Hearty, Melba Leal, Gail Holmes, Nancy B. Johnson, Stanley B. Kimball, Barbara Magerl, Les McKenzie, Linda Meigs, and James Rankin	Concerns were expressed by several individuals about modifications, inclusions or deletions of sites and segments, and the auto tour routes.	In several instances sites and segments submitted with adequate documentation have been included. Several recommendations did not adequately document the historical record of a particular trail with the site. Some submittals had inadequate information, precluding the listing of the site or segment. Some sites submitted are not on routes authorized by Congress. With respect to auto-tour routes, some changes have been incorporated, while others were deleted along trail routes removed due to the opinion of the U.S. Department of the Interior's Office of the Solicitor.

Appendixes
Bibliography
Preparers
Index



Appendix A. National Trails System Act

National Trails System Act (Relevant Portions Only)

THE NATIONAL TRAILS SYSTEM ACT
(P.L. 90-543)
(16 U.S.C. 1241 et. seq.)
as amended through P.L. 104-333, November 12, 1996

AN ACT

To establish a national trails system, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SHORT TITLE

SECTION 1. This Act may be cited as the "National Trails System Act."

STATEMENT OF POLICY

SEC. 2.(a) In order to provide for the ever-increasing outdoor recreation needs of an expanding population and in order 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, trails should be established (i) primarily, near the urban areas of the Nation, and (ii) secondarily, within scenic areas and along historic travel routes of the Nation which are often more remotely located.

(b) The purpose of this Act is to provide the means for attaining these objectives by instituting a national system of recreation, scenic and historic trails, by designating the Appalachian Trail and the Pacific Crest Trail as the initial components of that system, and by prescribing the methods by which, and standards according to which, additional components may be added to the system.

(c) The Congress recognizes the valuable contributions that volunteers and private, nonprofit trail groups have made to the development and maintenance of the Nation's trails. In recognition of these contributions, it is further the purpose of this Act to encourage and assist volunteer citizen involvement in the planning, development, maintenance, and management, where appropriate, of trails.

NATIONAL TRAILS SYSTEM

SEC. 3. (a) The national system of trails shall be composed of the following:

(1) National recreation trails, established as provided in section 4 of this Act, which will provide a variety of outdoor recreation uses in or reasonably accessible to urban areas.

(2) National scenic trails, established as provided in section 5 of this Act, which will be extended trails so located as to provide for maximum outdoor recreation potential and for the conservation and enjoyment of the nationally significant scenic, historic, natural, or cultural qualities of the areas through which such trails may pass. National scenic trails may be located so as to represent desert, marsh, grassland, mountain, canyon, river, forest, and other areas, as well as landforms which exhibit significant characteristics of the physiographic regions of the Nation.

(3) National historic trails, established as provided in section 5 of this Act, which will be extended trails which follow as closely as possible and practicable the original trails or routes of travel of national historic significance. Designation of such trails or routes shall be continuous, but the established or developed trail, and the acquisition thereof, need not be continuous onsite. National historic trails shall have as their purpose the identification and protection of the historic route and its historic remnants and artifacts for public use and enjoyment. Only those selected land and water based components of a historic trail which are on federally owned lands and which meet the national historic trail criteria established in this Act are included as Federal protection components of a national historic trail. The appropriate Secretary may certify other lands as protected segments of an historic trail upon application from State or local governmental agencies or private interests involved if such segments meet the national historic trail criteria established in this Act and such criteria supplementary thereto as the appropriate Secretary may prescribe, and are administered by such agencies or interests without expense to the United States.

(4) Connecting or side trails, established as provided in section 6 of this Act, which will provide additional points of public access to national recreation, national scenic or national historic trails or which will provide connections between such trails.

The Secretary of the Interior and the Secretary of Agriculture, in consultation with appropriate governmental agencies and public and private organizations, shall establish a uniform marker for the national trails system.

(b) For purposes of this section, the term 'extended trails' means trails or trail segments which total at least one hundred miles in length, except that historic trails of less than one hundred miles may be designated as extended trails. While it is desirable that extended trails be continuous, studies of such trails may conclude that it is feasible to propose one or more trail segments which, in the aggregate, constitute at least one hundred miles in length.

NATIONAL RECREATION TRAILS

SEC. 4.(a) The Secretary of the Interior, or the Secretary of Agriculture where lands administered by him are involved, may establish and designate

national recreation trails, with the consent of the Federal agency, State, or political subdivision having jurisdiction over the lands involved, upon finding that —

- (i) such trails are reasonably accessible to urban areas, and, or
 - (ii) such trails meet the criteria established in this Act and such supplementary criteria as he may prescribe.
- (b) As provided in this section, trails within park, forest, and other recreation areas administered by the Secretary of the Interior or the Secretary of Agriculture or in other federally administered areas may be established and designated as “National Recreation Trails” by the appropriate Secretary and, when no Federal land acquisition is involved —
- (i) trails in or reasonably accessible to urban areas may be designated as “National Recreation Trails” by the appropriate Secretary with the consent of the States, their political subdivisions, or other appropriate administering agencies;
 - (ii) trails within park, forest, and other recreation areas owned or administered by States may be designated as “National Recreation Trails” by the appropriate Secretary with the consent of the State; and
 - (iii) trails on privately owned lands may be designated ‘National Recreation Trails’ by the appropriate Secretary with the written consent of the owner of the property involved.

NATIONAL SCENIC AND NATIONAL HISTORIC TRAILS

SEC. 5.(a) National scenic and national historic trails shall be authorized and designated only by Act of Congress. There are hereby established the following National Scenic and National Historic Trails:

[two trail names are deleted]

- (3) The Oregon National Historic Trail, a route of approximately two thousand miles extending from near Independence, Missouri, to the vicinity of Portland, Oregon, following a route as depicted on maps identified as ‘Primary Route of the Oregon Trail 1841-1848’, in the Department of the Interior’s Oregon Trail study report dated April 1977, and which shall be on file and available for public inspection in the office of the Director of the National Park Service. The trail shall be administered by the Secretary of the Interior.
- (4) The Mormon Pioneer National Historic Trail, a route of approximately one thousand three hundred miles extending from Nauvoo, Illinois, to Salt Lake City, Utah, following the primary historical route of the Mormon Trail as generally depicted on a map, identified as, ‘Mormon Trail Vicinity Map, figure 2’ in the Department of the Interior Mormon Trail study report dated March 1977, and which shall be on file and available for public inspection in the office of the Director, National Park Service,

Washington, D.C. The trail shall be administered by the Secretary of the Interior.

[thirteen trail names are deleted]

(18) The California National Historic Trail, a route of approximately five thousand seven hundred miles, including all routes and cutoffs, extending from Independence and Saint Joseph, Missouri, and Council Bluffs, Iowa, to various points in California and Oregon, as generally described in the report of the Department of the Interior prepared pursuant to subsection (b) of this section entitled “California and Pony Express Trails, Eligibility/Feasibility Study/Environmental Assessment” and dated September 1987. A map generally depicting the route shall be on file and available for public inspection in the Office of the National Park Service, Department of the Interior. The trail shall be administered by the Secretary of the Interior. No lands or interests therein outside the exterior boundaries of any federally administered area may be acquired by the United States for the California National Historic Trail except with the consent of the owner thereof.

(19) The Pony Express National Historic Trail, a route of approximately one thousand nine hundred miles, including the original route and subsequent route changes, extending from Saint Joseph, Missouri, to Sacramento, California, as generally described in the report of the Department of the Interior prepared pursuant to subsection (b) of this section entitled “California and Pony Express Trails, Eligibility/Feasibility Study/Environmental Assessment” and dated September 1987. A map generally depicting the route shall be on file and available for public inspection in the Office of the National Park Service, Department of the Interior. The trail shall be administered by the Secretary of the Interior. No lands or interests therein outside the exterior boundaries of any federally administered area may be acquired by the United States for the Pony Express National Historic Trail except with the consent of the owner thereof.

[Related language from section 2, P.L. 102-328: The Secretary of the Interior (hereinafter referred to as the Secretary) shall undertake a study of the land and water route used to carry mail from Sacramento to San Francisco, California, to determine the feasibility and suitability of designation of such route as a component of the Pony Express National Historic Trail designated by section 1 of this Act. Upon completion of the study, if the Secretary determines such a route is a feasible and suitable addition to the Pony Express National Historic Trail, the Secretary shall designate the route as a component of the Pony Express National Historic Trail. The Secretary shall publish notice of such designation in the Federal Register and shall submit the study along with his findings to the Committee on Interior and Insular Affairs of the United States House of Representatives and the Committee on Energy and Natural Resources of the United States Senate.]

[one trail name is deleted]

(b) The Secretary of the Interior, through the agency most likely to administer such trail, and the Secretary of Agriculture where lands administered by him are involved, shall make such additional studies as are herein or may hereafter be authorized by the Congress for the purpose of determining the

feasibility and desirability of designating other trails as national scenic or national historic trails. Such studies shall be made in consultation with the heads of other Federal agencies administering lands through which such additional proposed trails would pass and in cooperation with interested interstate, State, and local governmental agencies, public and private organizations, and landowners and land users concerned. The feasibility of designating a trail shall be determined on the basis of an evaluation of whether or not it is physically possible to develop a trail along a route being studied, and whether the development of a trail would be financially feasible. The studies listed in subsection (c) of this section shall be completed and submitted to the Congress, with recommendations as to the suitability of trail designation, not later than three complete fiscal years from the date of enactment of their addition to this subsection, or from the date of enactment of this sentence, whichever is later. Such studies, when submitted, shall be printed as a House or Senate document, and shall include, but not be limited to:

- (1) the proposed route of such trail (including maps and illustrations);
- (2) the areas adjacent to such trails, to be utilized for scenic, historic, natural, cultural, or developmental purposes;
- (3) the characteristics which, in the judgment of the appropriate Secretary, make the proposed trail worthy of designation as a national scenic or national historic trail; and in the case of national historic trails the report shall include the recommendation of the Secretary of the Interior’s National Park System Advisory Board as to the national historic significance based on the criteria developed under the Historic Sites Act of 1935 (40 Stat. 666; 16 U.S.C. 461);
- (4) the current status of land ownership and current and potential use along the designated route;
- (5) the estimated cost of acquisition of lands or interest in lands, if any;
- (6) the plans for developing and maintaining the trail and the cost thereof;
- (7) the proposed Federal administering agency (which, in the case of a national scenic trail wholly or substantially within a national forest, shall be the Department of Agriculture);
- (8) the extent to which a State or its political subdivisions and public and private organizations might reasonably be expected to participate in acquiring the necessary lands and in the administration thereof;
- (9) the relative uses of the lands involved, including: the number of anticipated visitor-days for the entire length of, as well as for segments of, such trail; the number of months which such trail, or segments thereof, will be open for recreation purposes; the economic and social benefits which might accrue from alternate land uses; and

the estimated man-years of civilian employment and expenditures expected for the purposes of maintenance, supervision, and regulation of such trail;

(10) the anticipated impact of public outdoor recreation use on the preservation of a proposed national historic trail and its related historic and archeological features and settings, including the measures proposed to ensure evaluation and preservation of the values that contribute to their national historic significance; and

(11) To qualify for designation as a national historic trail, a trail must meet all three of the following criteria:

(A) 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. Such deviations shall be so noted on site. Trail segments no longer possible to travel by trail due to subsequent development as motorized transportation routes may be designated and marked onsite as segments which link to the historic trail.

(B) 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. Trails significant in the history of native Americans may be included.

(C) It must have significant potential for public recreational use or historical interest based on 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.

(c) The following routes shall be studied in accordance with the objectives outlined in subsection (b) of this section.

[thirty-five trail names are deleted]

(d) The Secretary charged with the administration of each respective trail shall, within one year of the date of the addition of any national scenic or national historic trail to the system, and within sixty days of the enactment of this sentence for the Appalachian and Pacific Crest National Scenic Trails, establish an advisory council for each such trail, each of which councils shall expire ten years from the date of its establishment, except that the Advisory Council established for the Iditarod Historic Trail shall expire twenty years

from the date of its establishment. If the appropriate Secretary is unable to establish such an advisory council because of the lack of adequate public interest, the Secretary shall so advise the appropriate committees of the Congress. The appropriate Secretary shall consult with such council from time to time with respect to matters relating to the trail, including the selection of rights-of-way, standards for the erection and maintenance of markers along the trail, and the administration of the trail. The members of each advisory council, which shall not exceed thirty-five in number, shall serve for a term of two years and without compensation as such, but the Secretary may pay, upon vouchers signed by the chairman of the council, the expenses reasonably incurred by the council and its members in carrying out their responsibilities under this section. Members of each council shall be appointed by the appropriate Secretary as follows:

(1) the head of each Federal department or independent agency administering lands through which the trail route passes, or his designee;

(2) a member appointed to represent each State through which the trail passes, and such appointments shall be made from recommendations of the Governors of such States;

(3) one or more members appointed to represent private organizations, including corporate and individual landowners and land users, which in the opinion of the Secretary, have an established and recognized interest in the trail, and such appointments shall be made from recommendations of the heads of such organizations: Provided, That the Appalachian Trail Conference shall be represented by a sufficient number of persons to represent the various sections of the country through which the Appalachian Trail passes; and

(4) the Secretary shall designate one member to be chairman and shall fill vacancies in the same manner as the original appointment.

(e) Within two complete fiscal years of the date of enactment of legislation designating a national scenic trail, except for the Continental Divide National Scenic Trail and the North Country National Scenic Trail, as part of the system, and within two complete fiscal years of the date of enactment of this subsection for the Pacific Crest and Appalachian Trails, the responsible Secretary shall, after full consultation with affected Federal land managing agencies, the Governors of the affected States, the relevant advisory council established pursuant to section 5(d), and the Appalachian Trail Conference in the case of the Appalachian Trail, submit to the Committee on Interior and Insular Affairs of the House of Representatives and the Committee on Energy and Natural Resources of the Senate, a comprehensive plan for the acquisition, management, development, and use of the trail, including but not limited to, the following items:

(1) specific objectives and practices to be observed in the management of the trail, including the identification of all significant natural, historical, and cultural resources to be preserved (along with high-potential historic sites and high-potential route segments in the case of national historic trails), details of any anticipated cooperative agreements to be consummated with other entities, and an

identified carrying capacity of the trail and a plan for its implementation;

(2) an acquisition or protection plan, by fiscal year for all lands to be acquired by fee title or lesser interest, along with detailed explanation of anticipated necessary cooperative agreements for any lands not to be acquired; and

(3) general and site-specific development plans including anticipated costs.

(f) Within two complete fiscal years of the date of enactment of legislation designating a national historic trail or the Continental Divide National Scenic Trail or the North Country National Scenic Trail as part of the system, the responsible Secretary shall, after full consultation with affected Federal land managing agencies, the Governors of the affected States, and the relevant Advisory Council established pursuant to section 5(d) of this Act, submit to the Committee on Interior and Insular Affairs of the House of Representatives and the Committee on Energy and Natural Resources of the Senate, a comprehensive plan for the management, and use of the trail, including but not limited to, the following items:

(1) specific objectives and practices to be observed in the management of the trail, including the identification of all significant natural, historical, and cultural resources to be preserved, details of any anticipated cooperative agreements to be consummated with State and local government agencies or private interests, and for national scenic or national historic trails an identified carrying capacity of the trail and a plan for its implementation;

(2) the process to be followed by the appropriate Secretary to implement the marking requirements established in section 7(c) of this Act;

(3) a protection plan for any high-potential historic sites or high-potential route segments; and

(4) general and site-specific development plans, including anticipated costs.

CONNECTING AND SIDE TRAILS

SEC. 6. Connecting or side trails within park, forest, and other recreation areas administered by the Secretary of the Interior or Secretary of Agriculture may be established, designated, and marked by the appropriate Secretary as components of a national recreation, national scenic or national historic trail. When no Federal land acquisition is involved, connecting or side trails may be located across lands administered by interstate, State, or local governmental agencies with their consent, or, where the appropriate Secretary deems necessary or desirable, on privately owned lands with the consent of the landowners. Applications for approval and designation of connecting and side trails on non-Federal lands shall be submitted to the appropriate Secretary.

ADMINISTRATION AND DEVELOPMENT

SEC. 7. (a) (1)(A) The Secretary charged with the overall administration of a trail pursuant to section 5(a) shall, in administering and managing the trail, consult with the heads of all other affected State and Federal agencies. Nothing contained in this Act shall be deemed to transfer among Federal agencies any management responsibilities established under any other law for federally administered lands which are components of the National Trails System. Any transfer of management responsibilities may be carried out between the Secretary of the Interior and the Secretary of Agriculture only as provided under subparagraph (B).

(B) The Secretary charged with the overall administration of any trail pursuant to section 5(a) may transfer management of any specified trail segment of such trail to the other appropriate Secretary pursuant to a joint memorandum of agreement containing such terms and conditions as the Secretaries consider most appropriate to accomplish the purposes of this Act. During any period in which management responsibilities for any trail segment are transferred under such an agreement, the management of any such segment shall be subject to the laws, rules, and regulations of the Secretary provided with the management authority under the agreement except to such extent as the agreement may otherwise expressly provide.

(2) Pursuant to section 5(a), the appropriate Secretary shall select the rights-of-way for national scenic and national historic trails and shall publish notice thereof of the availability of appropriate maps or descriptions in the Federal Register; Provided, That in selecting the rights-of-way full consideration shall be given to minimizing the adverse effects upon the adjacent landowner or user and his operation. Development and management of each segment of the National Trails System shall be designed to harmonize with and complement any established multiple-use plans for the specific area in order to insure continued maximum benefits from the land. The location and width of such rights-of-way across Federal lands under the jurisdiction of another Federal agency shall be by agreement between the head of that agency and the appropriate Secretary. In selecting rights-of-way for trail purposes, the Secretary shall obtain the advice and assistance of the States, local governments, private organizations, and landowners and land users concerned.

(b) After publication of notice of the availability of appropriate maps or descriptions in the Federal Register, the Secretary charged with the administration of a national scenic or national historic trail may relocate segments of a national scenic or national historic trail right-of-way with the concurrence of the head of the Federal agency having jurisdiction over the lands involved, upon a determination that: (i) Such a relocation is necessary to preserve the purposes for which the trail was established, or (ii) the relocation is necessary to promote a sound land management program in accordance with established multiple-use principles: Provided, That a substantial relocation of the rights-of-way for such trail shall be by Act of Congress.

(c) National scenic or national historic trails may contain campsites, shelters, and related-public-use facilities. Other uses along the trail, which will not substantially interfere with the nature and purposes of the trail, may be permitted by the Secretary charged with the administration of the trail.

Reasonable efforts shall be made to provide sufficient access opportunities to such trails and, to the extent practicable, efforts be made to avoid activities incompatible with the purposes for which such trails were established. The use of motorized vehicles by the general public along any national scenic trail shall be prohibited and nothing in this Act shall be construed as authorizing the use of motorized vehicles within the natural and historical areas of the national park system, the national wildlife refuge system, the national wilderness preservation system where they are presently prohibited or on other Federal lands where trails are designated as being closed to such use by the appropriate Secretary: Provided, That the Secretary charged with the administration of such trail shall establish regulations which shall authorize the use of motorized vehicles when, in his judgment, such vehicles are necessary to meet emergencies or to enable adjacent landowners or land users to have reasonable access to their lands or timber rights: Provided further, That private lands included in the national recreation, national scenic, or national historic trails by cooperative agreement of a landowner shall not preclude such owner from using motorized vehicles on or across such trails or adjacent lands from time to time in accordance with regulations to be established by the appropriate Secretary. Where a national historic trail follows existing public roads, developed rights-of-way or waterways, and similar features of man's nonhistorically related development, approximating the original location of a historic route, such segments may be marked to facilitate retracement of the historic route, and where a national historic trail parallels an existing public road, such road may be marked to commemorate the historic route. Other uses along the historic trails and the Continental Divide National Scenic Trail, which will not substantially interfere with the nature and purposes of the trail, and which, at the time of designation, are allowed by administrative regulations, including the use of motorized vehicles, shall be permitted by the Secretary charged with administration of the trail. The Secretary of the Interior and the Secretary of Agriculture, in consultation with appropriate governmental agencies and public and private organizations, shall establish a uniform marker, including thereon an appropriate and distinctive symbol for each national recreation, national scenic, and national historic trail. Where the trails cross lands administered by Federal agencies such markers shall be erected at appropriate points along the trails and maintained by the Federal agency administering the trail in accordance with standards established by the appropriate Secretary and where the trails cross non-Federal lands, in accordance with written cooperative agreements, the appropriate Secretary shall provide such uniform markers to cooperating agencies and shall require such agencies to erect and maintain them in accordance with the standards established. The appropriate Secretary may also provide for trail interpretation sites, which shall be located at historic sites along the route of any national scenic or national historic trail, in order to present information to the public about the trail, at the lowest possible cost, with emphasis on the portion of the trail passing through the State in which the site is located. Wherever possible, the sites shall be maintained by a State agency under a cooperative agreement between the appropriate Secretary and the State agency.

(d) Within the exterior boundaries of areas under their administration that are included in the right-of-way selected for a national recreation, national scenic, or national historic trail, the heads of Federal agencies may use lands for trail purposes and may acquire lands or interests in lands by written

cooperative agreement, donation, purchase with donated or appropriated funds or exchange.

(e) Where the lands included in a national scenic or national historic trail right-of-way are outside of the exterior boundaries of federally administered areas, the Secretary charged with the administration of such trail shall encourage the States or local governments involved (1) to enter into written cooperative agreements with landowners, private organizations, and individuals to provide the necessary trail right-of-way, or (2) to acquire such lands or interests therein to be utilized as segments of the national scenic or national historic trail: Provided, That if the State or local governments fail to enter into such written cooperative agreements or to acquire such lands or interests therein after notice of the selection of the right-of-way is published, the appropriate Secretary, may (i) enter into such agreements with landowners, States, local governments, private organizations, and individuals for the use of lands for trail purposes, or (ii) acquire private lands or interests therein by donation, purchase with donated or appropriated funds or exchange in accordance with the provisions of subsection (f) of this section: Provided further, That the appropriate Secretary may acquire lands or interests therein from local governments or governmental corporations with the consent of such entities. The lands involved in such rights-of-way should be acquired in fee, if other methods of public control are not sufficient to assure their use for the purpose for which they are acquired: Provided, That if the Secretary charged with the administration of such trail permanently relocates the right-of-way and disposes of all title or interest in the land, the original owner, or his heirs or assigns, shall be offered, by notice given at the former owner's last known address, the right of first refusal at the fair market price.

(f) (1) The Secretary of the Interior, in the exercise of his exchange authority, may accept title to any non-Federal property within the right-of-way and in exchange therefor he may convey to the grantor of such property any federally owned property under his jurisdiction which is located in the State wherein such property is located and which he classifies as suitable for exchange or other disposal. The values of the properties so exchanged either shall be approximately equal, or if they are not approximately equal the values shall be equalized by the payment of cash to the grantor or to the Secretary as the circumstances require. The Secretary of Agriculture, in the exercise of his exchange authority, may utilize authorities and procedures available to him in connection with exchanges of national forest lands.

(2) In acquiring lands or interests therein for a National Scenic or Historic Trail, the appropriate Secretary may, with consent of a landowner, acquire whole tracts notwithstanding that parts of such tracts may lie outside the area of trail acquisition. In furtherance of the purposes of this act, lands so acquired outside the area of trail acquisition may be exchanged for any non-Federal lands or interests therein within the trail right-of-way, or disposed of in accordance with such procedures or regulations as the appropriate Secretary shall prescribe, including: (i) provisions for conveyance of such acquired lands or interests therein at not less than fair market value to the highest bidder, and (ii) provisions for allowing the last owners of record a right to purchase said acquired lands or interests therein upon payment or agreement to pay an amount equal to the highest bid price. For lands designated for exchange or disposal, the appropriate Secretary may convey these lands with any reservations or covenants deemed

desirable to further the purposes of this Act. The proceeds from any disposal shall be credited to the appropriation bearing the costs of land acquisition for the affected trail.

(g) The appropriate Secretary may utilize condemnation proceedings without the consent of the owner to acquire private lands or interests, therein pursuant to this section only in cases where, in his judgment, all reasonable efforts to acquire such lands or interest therein by negotiation have failed, and in such cases he shall acquire only such title as, in his judgment, is reasonably necessary to provide passage across such lands: Provided, That condemnation proceedings may not be utilized to acquire fee title or lesser interests to more than an average of one hundred and twenty-five acres per mile. Money appropriated for Federal purposes from the land and water conservation fund shall, without prejudice to appropriations from other sources, be available to Federal departments for the acquisition of lands or interests in lands for the purposes of this Act. For national historic trails, direct Federal acquisition for trail purposes shall be limited to those areas indicated by the study report or by the comprehensive plan as high-potential route segments or high-potential historic sites. Except for designated protected components of the trail, no land or site located along a designated national historic trail or along the Continental Divide National Scenic Trail shall be subject to the provisions of section 4(f) of the Department of Transportation Act (49 U.S.C. 1653(f)) unless such land or site is deemed to be of historical significance under appropriate historical site criteria such as those for the National Register of Historic Places.

(h) (1) The Secretary charged with the administration of a national recreation, national scenic, or national historic trail shall provide for the development and maintenance of such trails within federally administered areas, and shall cooperate with and encourage the States to operate, develop, and maintain portions of such trails which are located outside the boundaries of federally administered areas. When deemed to be in the public interest, such Secretary 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, provisions providing volunteer in the park or volunteer in the forest status (in accordance with the Volunteers in the Parks Act of 1969 and the Volunteers in the Forests Act of 1972) to individuals, private organizations, or landowners participating in such activities, or provisions of both types. The appropriate Secretary shall also initiate consultations with affected States and their political subdivisions to encourage —

(A) the development and implementation by such entities of appropriate measures to protect private landowners from trespass resulting from trail use and from unreasonable personal liability and property damage caused by trail use, and

(B) the development and implementation by such entities of provisions for land practices compatible with the purposes of this Act, for property within or adjacent to trail rights-of-

way. After consulting with States and their political subdivisions under the preceding sentence, the Secretary may provide assistance to such entities under appropriate cooperative agreements in the manner provided by this subsection.

(2) Whenever the Secretary of the Interior makes any conveyance of land under any of the public land laws, he may reserve a right-of-way for trails to the extent he deems necessary to carry out the purposes of this Act.

(i) The appropriate Secretary, with the concurrence of the heads of any other Federal agencies administering lands through which a national recreation, national scenic, or national historic trail passes, and after consultation with the States, local governments, and organizations concerned, may issue regulations, which may be revised from time to time, governing the use, protection, management, development, and administration of trails of the national trails system. In order to maintain good conduct on and along the trails located within federally administered areas and to provide for the proper government and protection of such trails, the Secretary of the Interior and the Secretary of Agriculture shall prescribe and publish such uniform regulations as they deem necessary and any person who violates such regulations shall be guilty of a misdemeanor, and may be punished by a fine of not more than \$500 or by imprisonment not exceeding six months, or by both such fine and imprisonment. The Secretary responsible for the administration of any segment of any component of the National Trails System (as determined in a manner consistent with subsection (a)(1) of this section) may also utilize authorities related to units of the national park system or the national forest system, as the case may be, in carrying out his administrative responsibilities for such component.

(j) Potential trail uses allowed on designated components of the national trails system may include, but are not limited to, the following: bicycling, cross-country skiing, day hiking, equestrian activities, jogging or similar fitness activities, trail biking, overnight and long-distance backpacking, snowmobiling, and surface water and underwater activities. Vehicles which may be permitted on certain trails may include, but need not be limited to, motorcycles, bicycles, four-wheel drive or all-terrain off-road vehicles. In addition, trail access for handicapped individuals may be provided. The provisions of this subsection shall not supersede any other provisions of this Act or other Federal laws, or any State or local laws.

(k) For the conservation purpose of preserving or enhancing the recreational, scenic, natural, or historical values of components of the national trails system, and environs thereof as determined by the appropriate Secretary, landowners are authorized to donate or otherwise convey qualified real property interests to qualified organizations consistent with section 170(h)(3) of the Internal Revenue Code of 1954, including, but not limited to, right-of-way, open space, scenic, or conservation easements, without regard to any limitation on the nature of the estate or interest otherwise transferable within the jurisdiction where the land is located. The conveyance of any such interest in land in accordance with this subsection shall be deemed to further a Federal conservation policy and yield a significant public benefit for purposes of section 6 of Public Law 96-541.

STATE AND METROPOLITAN AREA TRAILS

SEC. 8. (a) The Secretary of the Interior is directed to encourage States to consider, in their comprehensive statewide outdoor recreation plans and proposals for financial assistance for State and local projects submitted pursuant to the Land and Water Conservation Fund Act, needs and opportunities for establishing park, forest, and other recreation and historic trails on lands owned or administered by States, and recreation and historic trails on lands in or near urban areas. The Secretary is also directed to encourage States to consider, in their comprehensive statewide historic preservation plans and proposals for financial assistance for State, local, and private projects submitted pursuant to the Act of October 15, 1966 (80 Stat. 915), as amended, needs and opportunities for establishing historic trails. He is further directed in accordance with the authority contained in the Act of May 28, 1963 (77 Stat. 49), to encourage States, political subdivisions, and private interests, including nonprofit organizations, to establish such trails.

(b) The Secretary of Housing and Urban Development is directed, in administering the program of comprehensive urban planning and assistance under section 701 of the Housing Act of 1954, to encourage the planning of recreation trails in connection with the recreation and transportation planning for metropolitan and other urban areas. He is further directed, in administering the urban open space program under title VII of the Housing Act of 1961, to encourage such recreation trails.

(c) The Secretary of Agriculture is directed, in accordance with authority vested in him, to encourage States and local agencies and private interests to establish such trails.

(d) The Secretary of Transportation, the Chairman of the Interstate Commerce Commission, and the Secretary of the Interior, in administering the Railroad Revitalization and Regulatory Reform Act of 1976, shall encourage State and local agencies and private interests to establish appropriate trails using the provisions of such programs. Consistent with the purposes of that Act, and in furtherance of the national policy to preserve established railroad rights-of-way for future reactivation of rail service, to protect rail transportation corridors, and to encourage energy efficient transportation use, in the case of interim use of any established railroad rights-of-way pursuant to donation, transfer, lease, sale, or otherwise in a manner consistent with the National Trails System Act, if such interim use is subject to restoration or reconstruction for railroad purposes, such interim use shall not be treated, for purposes of any law or rule of law, as an abandonment of the use of such rights-of-way for railroad purposes. If a State, political subdivision, or qualified private organization is prepared to assume full responsibility for management of such rights-of-way and for any legal liability arising out of such transfer or use, and for the payment of any and all taxes that may be levied or assessed against such rights-of-way, then the Commission shall impose such terms and conditions as a requirement of any transfer or conveyance for interim use in a manner consistent with this Act, and shall not permit abandonment or discontinuance inconsistent or disruptive of such use.

(e) Such trails may be designated and suitably marked as parts of the nationwide system of trails by the States, their political subdivisions, or other appropriate administering agencies with the approval of the Secretary of the Interior.

RIGHTS-OF-WAY AND OTHER PROPERTIES

SEC. 9.(a) The Secretary of the Interior or the Secretary of Agriculture as the case may be, may grant easements and rights-of-way upon, over, under, across, or along any component of the national trails system in accordance with the laws applicable to the national park system and the national forest system, respectively: Provided, That any conditions contained in such easements and rights-of-way shall be related to the policy and purposes of this Act.

(b) The Department of Defense, the Department of Transportation, the Interstate Commerce Commission, the Federal Communications Commission, the Federal Power Commission, and other Federal agencies having jurisdiction or control over or information concerning the use, abandonment, or disposition of roadways, utility rights-of-way, or other properties which may be suitable for the purpose of improving or expanding the national trails system shall cooperate with the Secretary of the Interior and the Secretary of Agriculture in order to assure, to the extent practicable, that any such properties having values suitable for trail purposes may be made available for such use.

(c) Commencing upon the date of enactment of this subsection, any and all right, title, interest, and estate of the United States in all rights-of-way of the type described in the Act of March 8, 1922 (43 U.S.C. 912), shall remain in the United States upon the abandonment or forfeiture of such rights-of-way, or portions thereof, except to the extent that any such right-of-way, or portion thereof, is embraced within a public highway no later than one year after a determination of abandonment or forfeiture, as provided under such Act.

(d) (1) All rights-of-way, or portions thereof, retained by the United States pursuant to subsection (c) which are located within the boundaries of a conservation system unit or a National Forest shall be added to and incorporated within such unit or National Forest and managed in accordance with applicable provisions of law, including this Act.

(2) All such retained rights-of-way, or portions thereof, which are located outside the boundaries of a conservation system unit or a National Forest but adjacent to or contiguous with any portion of the public lands shall be managed pursuant to the Federal Land Policy and Management Act of 1976 and other applicable law, including this section.

(3) All such retained rights-of-way, or portions thereof, which are located outside the boundaries of a conservation system unit or National Forest which the Secretary of the Interior determines suitable for use as a public recreational trail or other recreational purposes shall be managed by the Secretary for such uses, as well as for such other uses as the Secretary

determines to be appropriate pursuant to applicable laws, as long as such uses do not preclude trail use.

(e) (1) The Secretary of the Interior is authorized where appropriate to release and quitclaim to a unit of government or to another entity meeting the requirements of this subsection any and all right, title, and interest in the surface estate of any portion of any right-of-way to the extent any such right, title, and interest was retained by the United States pursuant to subsection (c), if such portion is not located within the boundaries of any conservation system unit or National Forest. Such release and quitclaim shall be made only in response to an application therefor by a unit of State or local government or another entity which the Secretary of the Interior determines to be legally and financially qualified to manage the relevant portion for public recreational purposes. Upon receipt of such an application, the Secretary shall publish a notice concerning such application in a newspaper of general circulation in the area where the relevant portion is located. Such release and quitclaim shall be on the following conditions:

(A) If such unit or entity attempts to sell, convey, or otherwise transfer such right, title, or interest or attempts to permit the use of any part of such portion for any purpose incompatible with its use for public recreation, then any and all right, title, and interest released and quitclaimed by the Secretary pursuant to this subsection shall revert to the United States.

(B) Such unit or entity shall assume full responsibility and hold the United States harmless for any legal liability which might arise with respect to the transfer, possession, use, release, or quitclaim of such right-of-way.

(C) Notwithstanding any other provision of law, the United States shall be under no duty to inspect such portion prior to such release and quitclaim, and shall incur no legal liability with respect to any hazard or any unsafe condition existing on such portion at the time of such release and quitclaim.

(2) The Secretary is authorized to sell any portion of a right-of-way retained by the United States pursuant to subsection (c) located outside the boundaries of a conservation system unit or National Forest if any such portion is —

(A) not adjacent to or contiguous with any portion of the public lands; or

(B) determined by the Secretary, pursuant to the disposal criteria established by section 203 of the Federal Land Policy and Management Act of 1976, to be suitable for sale.

Prior to conducting any such sale, the Secretary shall take appropriate steps to afford a unit of State or local government or any other entity an opportunity to seek to obtain such portion pursuant to paragraph (1) of this subsection.

(3) All proceeds from sales of such retained rights of way shall be deposited into the Treasury of the United States and credited to the Land and Water Conservation Fund as provided in section 2 of the Land and Water Conservation Fund Act of 1965.

(4) The Secretary of the Interior shall annually report to the Congress the total proceeds from sales under paragraph (2) during the preceding fiscal year. Such report shall be included in the President's annual budget submitted to the Congress.

(f) As used in this section —

(1) The term "conservation system unit" has the same meaning given such term in the Alaska National Interest Lands Conservation Act (Public Law 96-487; 94 Stat. 2371 et seq.), except that such term shall also include units outside Alaska.

(2) The term "public lands" has the same meaning given such term in the Federal Land Policy and Management Act of 1976.

AUTHORIZATION OF APPROPRIATIONS

SEC. 10. (a) (1) There are hereby authorized to be appropriated for the acquisition of lands or interests in lands not more than \$5,000,000 for the Appalachian National Scenic Trail and not more than \$500,000 for the Pacific Crest National Scenic Trail. From the appropriations authorized for fiscal year 1979 and succeeding fiscal years pursuant to the Land and Water Conservation Fund Act (78 Stat. 897), as amended, not more than the following amounts may be expended for the acquisition of lands and interests in lands authorized to be acquired pursuant to the provisions of this Act: for the Appalachian National Scenic Trail, not to exceed \$30,000,000 for fiscal year 1979, \$30,000,000 for fiscal year 1980, and \$30,000,000 for fiscal year 1981, except that the difference between the foregoing amounts and the actual appropriations in any one fiscal year shall be available for appropriation in subsequent fiscal years.

(2) It is the express intent of the Congress that the Secretary should substantially complete the land acquisition program necessary to insure the protection of the Appalachian Trail within three complete fiscal years following the date of enactment of this sentence.

(b) For the purposes of Public Law 95-42 (91 Stat. 211), the lands and interests therein acquired pursuant to this section shall be deemed to qualify for funding under the provisions of section 1, clause 2, of said Act.

(1) There is hereby authorized to be appropriated such sums as may be necessary to implement the provisions of this Act relating to the trails designated by paragraphs 5(a)(3), (4), (5), (6), (7), (8), (9) and (10): Provided, That no such funds are authorized to be appropriated prior to October 1, 1978: And provided further, That notwithstanding any other provisions of this Act or any other provisions of law, no funds may be expended by Federal agencies for the acquisition of lands or interests in lands outside the exterior boundaries of existing Federal areas for the Continental

Divide National Scenic Trail, the North Country National Scenic Trail, The Ice Age National Scenic Trail, the Oregon National Historic Trail, the Mormon Pioneer National Historic Trail, the Lewis and Clark National Historic Trail, and the Iditarod National Historic Trail, except that funds may be expended for the acquisition of lands or interests therein for the purpose of providing for one trail interpretation site, as described in section 7(c), along with such trail in each State crossed by the trail.

(2) Except as otherwise provided in this Act, there is authorized to be appropriated such sums as may be necessary to implement the provisions of this Act relating to the trails designated by section 5(a). Not more than \$500,000 may be appropriated for the purposes of acquisition of land and interests therein for the trail designated by section 5(a)(12) of this Act, and not more than \$2,000,000 may be appropriated for the purposes of the development of such trail. The administering agency for the trail shall encourage volunteer trail groups to participate in the development of the trail.

VOLUNTEER TRAILS ASSISTANCE

SEC. 11. (a) (1) In addition to the cooperative agreement and other authorities contained in this Act, the Secretary of the Interior, the Secretary of Agriculture, and the head of any Federal agency administering Federal lands, are authorized to encourage volunteers and volunteer organizations to plan, develop, maintain, and manage, where appropriate, trails throughout the Nation.

(2) Wherever appropriate in furtherance of the purposes of this Act, the Secretaries are authorized and encouraged to utilize the Volunteers in the Parks Act of 1969, the Volunteers in the Forests Act of 1972, and section 6 of the Land and Water Conservation Fund Act of 1965 (relating to the development of Statewide Comprehensive Outdoor Recreation Plans).

(b) Each Secretary or the head of any Federal land managing agency, may assist volunteers and volunteers organizations in planning, developing, maintaining, and managing trails. Volunteer work may include, but need not be limited to—

(1) planning, developing, maintaining, or managing (A) trails which are components of the national trails system, or (B) trails which, if so developed and maintained, could qualify for designation as components of the national trails system; or

(2) operating programs to organize and supervise volunteer trail building efforts with respect to the trails referred to in paragraph (1), conducting trail-related research projects, or providing education and training to volunteers on methods of trails planning, construction, and maintenance.

(c) The appropriate Secretary or the head of any Federal land managing agency may utilize and to make available Federal facilities, equipment, tools, and technical assistance to volunteers and volunteer organizations, subject to such limitations and restrictions as the appropriate Secretary or the head of any Federal land managing agency deems necessary or desirable.

DEFINITIONS

SEC. 12. As used in this Act:

(1) The term “high-potential historic sites” means 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.

(2) The term “high-potential route segments” means those segments of a trail which would afford high quality recreation experience in a portion of the route having greater than average scenic values or affording an opportunity to vicariously share the experience of the original users of a historic route.

(3) The term “State” means each of the several States of the United States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Trust Territory of the Pacific Islands, the Northern Mariana Islands, and any other territory or possession of the United States.

(4) The term “without expense to the United States” means that no funds may be expended by Federal agencies for the development of trail related facilities or for the acquisition of lands or interest in lands outside the exterior boundaries of Federal areas. For the purposes of the preceding sentence, amounts made available to any State or political subdivision under the Land and Water Conservation Fund Act of 1965 or any other provision of law shall not be treated as an expense to the United States.

Appendix B. Servicewide Memorandum of Understanding

for Cooperative Management and
Administration of National Historic Trails
Among the U.S. Department of the Interior,
Bureau of Land Management and National
Park Service, and U.S. Department of
Agriculture Forest Service

I. BACKGROUND

- A. Whereas, the National Trails System Act of 1968 (PL 90-543), as amended, recognized the importance of long-distance trails to American culture. The Act identifies four types of national trails: scenic, historic, recreation, and side/connecting. This Service-wide Memorandum of Understanding (SMU addresses only the national historic trails (NHTs), and;
- B. Whereas, each NHT is established by law and assigned to be administered by a specific Federal agency, through either the Secretary of the Interior or Agriculture, to exercise the administrative responsibilities of the national Trails System Act. These responsibilities include: overall trailwide coordination, planning and marking, site and segment certification, resource preservation and protection, interpretation, cooperative/interagency agreements, and limited financial assistance to other government agencies, landowners and interest groups, and;
- C. Whereas, the responsibility for on-the-ground management of the trail corridor rests with private landowners, government land managing agencies, and other organizations which have ownership jurisdiction. These responsibilities include: planning and development of trail segments or specific sites, site interpretation, site stabilization and protection, and management of visitor use, and;
- D. Whereas, each trail has its own unique pattern of land ownership and, at time, the administering federal agency has little or no land which it manages along the trail thus necessitating greater coordination and cooperation with private landowners, other government entities, and interested publics, and;
- E. Whereas, interagency cooperation is desirable and can be a productive means of implementing the intention of the National Trails System Act for improving communication and achieving better management of the trail and its associated resources for the public use and enjoyment, and;
- F. Whereas, each Federal agency involved with a NHT has its own budget for carrying out trail activities, coordination with other agencies requests for and obligation of funds can be improved to eliminate duplication of effort, and;
- G. Whereas, persons visiting public lands seek and enjoyable and memorable quality experience, regardless of jurisdiction, and;
- H. Whereas, interagency cooperation should be a means of achieving more efficient public service and less duplication of government operations, and;

Therefore, the parties to this SMU, the Bureau of Land Management (referred to as "BLM" hereinafter) and National Park Service ("NPS" hereinafter) (Department of the Interior), and the Forest Service ("FS" hereinafter) (Department of Agriculture), desire to enter into this agreement so as to promote and further the spirit and intent of the National Trails System Act.

II. LEGISLATIVE AUTHORITY

This SMU is entered into under the authorities of the National Trails System Act of October 2, 1968 (16 U.S.C. 1241 et. seq.), as amended, and the Federal Land Management and Policy Act of 1976 (43 U.S.C. 1701 et. seq.) as amended.

III. PURPOSES

The purposes of this SMU are:

- A. To assure and expand continued long-term interagency coordination and cooperation for the planning, preservation, administration, management, and operation of national historic trails as authorized in the National Trails System Act through the identification, protection, interpretation, and management of national historic trail resources for appropriate public access and use.
- B. To carry out the full administrative and management responsibilities of the National Trails System Act with an emphasis on quality public service and efficient and effective expenditure of Federal funds through cooperation among the Federal agencies involved.
- C. To facilitate Federal coordination of national historic trails by agreeing to the transfer of funds (where appropriate and by separate agreement), personnel, and services as appropriate, ensuring efficient and effective use of each participating agency's full spectrum of programs and expertise.
- D. To promote efficient coordination of public and private funding to support national historic trail activities.
- E. To provide interagency points of contact for collaboration with non-Federal entities for identifying, mapping, studying, protecting, and interpreting national historic trails.

IV. SCOPE

The scope of this SMU consists of:

- A. Coordinating and unifying planning efforts at all levels for the historic trails to ensure consistency and avoid duplication of effort.
- B. Coordinating on-the-ground projects as planned by each agency to ensure consistency and avoid duplication of effort.
- C. Coordinating NPS, BLM, and FS budget submission and legislative initiatives to ensure effective use of public funds pertaining to national historic trails, as well as working together to complete development of separate agreement to transfer funds when appropriate between and among the parties to this SMU to carry out the purposes of the National Trails System Act.

D. Developing, as appropriate, staff assignments from trail managing agencies to the administrative office responsible for over-all coordination of a specific NHT.

V. STATEMENT OF WORK

The BLM, NPS, and FS mutually agree to:

- A. Establish a point of contact for each national historic trail over which it has administrative or on-the-ground management responsibilities.
- B. When responsible under the National Trails System Act for the administration of a specific trail or group of trails, establish interagency positions or an electronic communication network in their trail office(s) to coordinate planning, administration, and management. In addition, for actions which require interagency transfer of funds, they will cooperate to develop separate agreements to transfer funds, as available and appropriate, between agencies, to other Federal agencies involved in the management, protection, interpretation, and promotion of each trail and facilitate and support the work of on-the-ground managers of segments and sites along these trails to bring the trail story to the visiting public and preserve and protect trail resources which enhance the values for which these trails were created.
- C. Foster appropriate actions which enhance each trail through such means as local and statewide agreements, land use authorizations and permits, regulations, resource management and protection, development projects, interpretive services, trail marking, site-specific planning, and regulatory and compliance functions.
- D. Identify agency personnel at all levels of the organization who work with national historic trails as part of their regular duties. Further, each agency shall provide the services of these individuals, as appropriate and feasible, to cooperatively implement this SMU.
- E. Capitalize on the talents, skills, and knowledge of appropriate agency staff to avoid redundancy and duplication of effort. Key staff contacts will be designated to maintain good internal and external communication.
- F. Develop appropriate organizational structures to facilitate this interagency cooperation and identify contributing program specializations in which each agency is expert.
- G. Coordinate agency budget submissions for these historic trail activities through the respective Departments.
- H. Cooperatively coordinate contacts with external constituents to avoid public confusion and duplication.

- I. Coordinate and cooperatively conduct planning efforts affecting national historic trails, integrating the concept of ecosystem management. Each agency with administrative responsibility for a specific NHT will arrange for trailwide plans in conjunction with other agencies and jurisdictions which conduct on-the-ground planning.
- J. Efficiently carry out all necessary natural and cultural resource compliance associated with the planning and management of these historic trails.
- K. Initiate supplemental and trail-specific interagency agreements to carry out the intentions of this SMU. Activities which require interagency transfer of funds shall be addressed under separate Interagency Agreements.
- L. Participate regularly in the Inter-Agency Council on Trails, in Washington, D.C., to coordinate policy, budget, and other relevant matters pertaining to the implementation of relevant authorities of the national Trails System Act under this SMU.

VI. TERM OF AGREEMENT

- A. Effective Date of Agreement: This instrument is executed as of the last date shown below and shall run for a period not to exceed 5 years, at which time it will be subject to review, renewal, or expiration.
- B. Modifications: Modifications within the scope of this instrument shall be made by the issuance of a bilaterally executed modification prior to any changes being performed.
- C. Termination: Either party(s), in writing, may terminate the participation in this instrument in whole, or in part, at any time before the date of expiration.

VII. PRINCIPAL CONTACTS: THE PRINCIPAL CONTACTS FOR THIS INSTRUMENT ARE:

NPS: Steve Elkinton
 address: National Park Service
 U.S. Department of the Interior
 P.O. Box 37127
 Washington, D.C. 20013-7127

BLM: Carl Barna
 address: Bureau of Land Management
 U.S. Department of the Interior
 18th and C Streets, N.W.
 Washington, D.C. 20420

FS: Brent Botts
 address: Forest Service
 U.S. Department of Agriculture
 P.O. Box 96090
 Washington, D.C. 20090-6090

VIII. SPECIAL PROVISIONS

- A. Non-Fund Obligor Document. This instrument is neither a fiscal nor a funds obligation document. Any endeavor involving reimbursement or contribution of funds between the parties to this instrument will be handled in accordance with applicable laws, regulations, and procedures including those for Government procurement and printing. Such endeavors will be outlined in separate agreements that shall be made in writing by representatives of the parties and shall be independently authorized by appropriate statutory authority. This instrument does not provide such authority. Specifically, this instrument does not establish authority for noncompetitive award to the cooperator of any contract or other agreement. Any contract or agreement for training or other services must fully comply with all applicable requirements for competition.
- B. Restriction for Delegates. Pursuant to section 22, Title 41, United States Code, no member of, or delegate to, Congress shall be admitted to any share or part of this instrument, or any benefits that may arise there from.
- C. Participation in Similar Activities. This instrument in no way restricts the Forest Service or the Cooperator(s) from participating in similar activities with other public or private agencies, organizations, and individuals.
- D. Nothing in this SMU abrogates the accountability of the designated administering agency for achieving the purposes of the National Trails System Act.
- E. Nothing in this SMU abrogates the responsibility of any Federal land managing agency to manage its trail resources according to the laws, rules, and regulations providing its management authority over such lands.

IX. NON-DISCRIMINATION

During the performance of this agreement, the participants agree to abide by the terms of Executive Order 11264 on non-discrimination and will not discriminate against any person because of race, color, religion, sex, or national origin. The participants will take affirmative action to ensure that applicants are employed without regard to their race, color, religion, sex, or national origin.

X. APPROVALS

For the U.S. Department of the Interior
National Park Service

Roger Kennedy, Director

Date 9/17/95

For the U.S. Department of Agriculture
Forest Service

Jack Ward Thomas, Chief

Date 6/28/95

For the U.S. Department of the Interior
Bureau of Land Management

Michael Dombeck, Director

Date 9/17/95

Appendix C.
Solicitor's Opinion
Oregon National
Historic Trail

Appendix D.
Solicitor's Opinion
California
National Historic
Trail



United States Department of the Interior

OFFICE OF THE SOLICITOR
SUITE 6201, FEDERAL BUILDING
125 SOUTH STATE STREET
SALT LAKE CITY, UTAH 84138

RECEIVED
OCT 14 1998
LODT National Park Service

October 14, 1998

To: Superintendent, Long Distance Trails Office, National Park Service
From: Field Solicitor, Salt Lake City Field Office, Pacific Southwest Region
Subject: Additional Routes to the California National Historic Trail

ISSUE

You have requested our opinion as to whether the language "including all routes and cutoffs" found in the legislation designating the California National Historic Trail (hereafter California NHT) allow the National Park Service (hereafter NPS) to designate newly discovered sections of the historic trail that were not included in the 1987 feasibility study, such as the Cherokee Route, in an administrative process without Congressional action. For the reasons stated in this memorandum, it is our opinion that additional routes and cutoffs that were not specifically identified in the 1987 feasibility study, such as the Cherokee Route, may be added to the California NHT only through amending the original California Trail Act.

DISCUSSION

In construing a statute we look to the traditional elements of statutory construction: first, the language of the statute itself; second, its legislative history; and third, as an aid in interpreting Congress' intent, the interpretation given to it by its administering agency, "the ultimate objective being to discern, if possible, the intent of Congress." *Amgen Inc. United States Int'l Trade Comm'n*, 902 F.2d 1532 (Fed. Cir. 1990). See also *Aulston v. United States*, 915 F.2d 584, 588-89 (10th Cir. 1990); *Funbus Systems, Inc. v. C.P.U.C.*, 801 F.2d 1120, 1125-26 (9th Cir. 1986); *United States v. Jerge*, 738 F.Supp. 181, 183 (E.D. Va. 1990). ("[T]he primary rule of statutory construction is to ascertain declare the intention of the legislature and to carry such intention into effect to the fullest degree."). However, if we ascertain that Congress had an intention on the precise question at issue, that intention is the law and must be given effect." *Chevron U.S.A., Inc. v. Natural Resources Defense Council*, 467 U.S. 837, 843 n.9, 104 S.Ct. 2778, 2781 n.9, 81 L.Ed.2d 694 (1984).

In interpreting statutes we begin with the relevant language. Section 1244 of Title 16 of the United States Code provides for the establishment and designation of national scenic and

historic trails. Section 1244(a) States, "National scenic and national historic trails shall be authorized and designated only by Act of Congress." (emphasis added). The legislative history States that: "[t]he Appalachian Trail . . . is authorized as the initial component of the national trails system and other trails are authorized to be studied in accordance with the guidelines outlined in the bill. Additional detailed studies may be undertaken only after authorization by Congress." H.R. Rep. No. 1630, reprinted in 1968 U.S. Code Cong. & Ad. News at 3860. It is significant that the original legislation, proposed by the Department of the Interior in 1967, did not require Congressional approval to study trails for possible future authorization as national scenic trails. However, this requirement was specifically added to the bill prior to its adoption by Congress. H.R. Conf. Rep. No. 1891 (1968), reprinted in 1968 U.S. Code Cong. & Ad. News 3872. Unfortunately, Congress did not include in the Act a definition of the terms "routes or cutoffs", or procedures for additional routes or cutoffs to an historic trail. Moreover, there are no implementing regulations or relevant case authority. Therefore, we turn to the enactment of the California NHT.

H.R. 479, a bill amending § 1244 to include approximately 5,700 miles stretching from Missouri and Iowa to California as the California National Historic Trail, was signed into law on August 3, 1992. Public Law 102-328.

The Act describes the California NHT as:

a route of approximately five thousand seven hundred miles, including all routes and cutoffs, extending from Independence and Saint Joseph, Missouri, and Council Bluffs, Iowa, to various points in California and Oregon, as generally described in the report of the Department of the Interior prepared pursuant to subsection (b) of this section entitled "California and Pony Express Trails, Eligibility/Feasibility Study/Environmental Assessment" and dated September 1987. A map generally depicting the route shall be on file and available for public inspection in the Office of the National Park Service, Department of the Interior. The trail shall be administered by the Secretary of the Interior. No lands or interests therein outside the exterior boundaries of any federally administered area may be acquired by the United States for the California National historic Trail except with the consent of the owner thereof.

16 U.S.C. § 1244 (a)(18). The bill also designated the historic routes of the Pony Express as the Pony Express National Historic Trail (hereafter Pony Express NHT). Arguments for the two trails were presented together, thus, comments on the Pony Express NHT are useful in

interpreting the meaning of language designating the California NHT.

The California Trail was "one of a number of thoroughfares used by settlers and prospectors in their movement to the West during the mid-1800's. . . . There were many branches and side trails which were all heavily utilized, particularly by prospectors." 134 Cong. Rec. E2401-01 (1988) (introduction of bill by Rep. Shumway). 1988 WL 173969 (Cong. Rec.). Apparently, Congress intended to include all of these branches and side trails as part of the California NHT. Therefore, the bill contains the phrase "including all routes and cutoffs" to mean those routes and cutoffs for trails identified in the 1987 feasibility study. What is not clear, however, is whether Congress intended to designate only those parts of the trail that were studied by the Department of the Interior prior to the Trail's designation, or if Public Law 102-328 serves as blanket authorization for the Secretary to add additional branches discovered subsequent to the enactment of the California NHT.

One argument in favor of authorization to add subsequently discovered routes to the California NHT is found in the plain language of the law. Public Law 102-328 includes "all routes and cutoffs," rather than "major routes and cutoffs" or merely "routes and cutoffs". See Public Law 102-328, 16 U.S.C. § 1244 (a)(18) (1992). Denis P. Galvin, an Associate Director for the NPS, testified before a House subcommittee that H.R. 479 was identical to a proposal that the Department of the Interior had submitted to Congress (with two changes not related to this issue). With this preface, Mr. Galvin commented that the Department's recommendation would authorize "the entire system . . . including . . . both pre-and post 1849 gold rush feeder routes and segments." S. Rep. No. 102-319 (1992), available at 1992 WL 167267 (Leg. Hist.). This comment may also lend credibility to a more expansive reading of the terms "all routes and cutoffs."

However, the expansive interpretation of "all routes and cutoffs" is substantially weakened by consideration of the language "as generally described in the report of the Department of the Interior prepared pursuant to subsection (b) of this section . . . dated September 1987." 16 U.S.C. § 1244(a)(18). This language indicates that inclusion in this report would be a threshold matter for a trail to be authorized under Public Law 102-328. This more restrictive interpretation of the language is supported § 2 of Public Law 102-328.

Section 2 of Public Law 102-328 "directs the Secretary to undertake a study of the land and water route used to carry mail from Sacramento to San Francisco to determine the feasibility and suitability of designating such route as a component of the Pony Express National Historic Trail, if the Secretary determines that the route is a feasible and suitable addition to the trail." S. Rep. No. 102-319 (1992), available at 1992 WL 167267 (Leg. Hist.). Although the Pony Express Trail designation does not include the phrase "including all routes and cutoffs," it does include "the original route and subsequent route changes." Public Law 102-328, 16 U.S.C. § 1244(a)(19). The fact that Congress felt it necessary to specifically grant discretion to the Secretary to study and designate an additional route to the Pony Express NHT in Section 2 indicates that absent such authorization the Secretary is not to add additional routes.

3

Representative Miller, who requested the addition of Section 2, explained, "The San Francisco-Sacramento segment was not addressed in the National Park's study of the Pony Express Trail. However, according to historical records brought to my attention by the Contra Costa Historical Society, the Pony Express riders traveled overland at least eight times between Sacramento and San Francisco during the Pony Express' 18-month history." 137 Cong. Rec. H2789-04 available at 1991 WL 72203 (Cong. Rec.).

CONCLUSION

For the reasons stated in this memorandum, it is our opinion that additions to the California National Historic Trail of routes that were not specifically identified in the 1987 feasibility study, such as the Cherokee Route, may be added only through amending the original California NHT Act. Our conclusion has been reviewed and approved by the Office of the Solicitor, Division of Conservation and Wildlife, Branch of Parks and Recreation, Washington, D.C.,

If you have any questions please feel free to contact G. Kevin Jones, 801-524-5677 ext. 229.

BRUCE HILL
Field Solicitor

G. Kevin Jones
G. KEVIN JONES
Attorney-Advisor

4

Appendix E.
California and
Pony Express
National Historic
Trails:
High-Potential
Segments

APPENDIX E. CALIFORNIA AND PONY EXPRESS NATIONAL HISTORIC TRAILS—HIGH-POTENTIAL SEGMENTS

NO	SEGMENT NAME	LENGTH (miles)	COUNTY/ STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	TRAIL	THREATS TO RESOURCES/ VISITOR SERVICES
1	St. Marys-Red Vermillion Crossing	16	Shawnee, Pottawatomie, KS	Manhattan	This segment begins three miles northwest of present-day Rossville and follows U.S. Highway 24 along the north side of the Kansas River to St. Marys Mission. From St. Marys, Oregon Trail Road follows the actual route of the Oregon-California Trail along the foot of the Kansas River Bluffs, past Oregon Trail Park, to Red Vermillion Crossing. This 11 miles of twisting gravel road has been graded, but its alignment has not been significantly changed. The Kansas River flood plain was swampy, forcing the emigrants to follow a path along a bench at the edge of the bluffs. Edwin Bryant eloquently described his day's travel on May 22, 1846: "The trail along which we have traveled Today . . . runs over a high undulating country, exhibiting a great variety of rich scenery. As the traveler rises the elevated swells of the prairie, his eye can frequently take in at a glance, a diameter of 60 or 80 miles of country, all clothed at this season with the deepest verdure and the most luxuriant vegetation."	Vermillion Creek Crossing is listed	Private	Oregon, California (Independence Road)	None known. Oregon Trail Park has a shelter house and restroom.
2	Fort Laramie to Warm Springs	14	Goshen, Platte, WY	Torrington	The trail remains virtually intact and continuous, except when crossed by pipelines and county roads, from the climb out of the Laramie River Valley to Mexican Hill. Huge swales are visible in places; the junction of various branches is clearly visible where the Bluff and River routes join east of Mexican Hill.	Not listed	Public (Wyoming National Guard)/Private	Oregon, California, Mormon Pioneer, Pony Express	National Guard activities near Guernsey impact the area.
3	Prospect Hill	3	Natrona, WY	Casper	Just west of Willow Springs is a low ridge called Prospect Hill. Here emigrants climbed 400 feet to gain their first sight of the Sweetwater Mountains to the west. The view, or prospect, of the gentle valley gave travelers hope for better water and an easier road ahead.	Determined eligible	Public (BLM)/ Private	Oregon, California, Mormon Pioneer	Mineral development threatens the historic viewshed. There is a BLM interpretive panel at the top of the hill.

NO	SEGMENT NAME	LENGTH (miles)	COUNTY/ STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	TRAIL	THREATS TO RESOURCES/ VISITOR SERVICES
4	South Pass (Horse Creek to Little Sandy Crossing)	145	Natrona, Carbon, Fremont, Sublette, Sweetwater, WY	Casper, Bairol, Rattlesnake Hills, Lander, South Pass, Farson	The quality of the resources and the visual experience make South Pass one of the most impressive segments on the entire trail. It starts where the trail fords Horse Creek and heads southwest to cross Wyoming Highway 220 a half mile northeast of Steamboat Rock. The segment continues southwest past present-day Pathfinder Reservoir to strike the Sweetwater River south of Saleratus Lake. Following the banks of the Sweetwater, the route heads generally west—past Independence Rock; around Devil's Gate; past Soda Lake, Split Rock, and Castle Rock—to Three Crossings. The segment follows the main trail along the Sweetwater, fords the river three times within two miles at Three Crossings, passes Names Rock, and fords again at Fifth Crossing. Some emigrants chose to take the Deep Sand Route to the south to avoid these river crossings. The segment next passes Ice Slough; crosses Warm Springs Creek; passes the Seminole Cutoff junction; fords the Sweetwater three more times at Sixth, Seventh, and Eighth crossings; and arrives at the foot of Rocky Ridge. The trail climbs away from the Sweetwater River to cross the high, barren, and rocky ridgeline of Rocky Ridge. Passing north of Lewiston Lakes and crossing Strawberry, Rock, and Willow creeks, the trail leaves the Sweetwater River at the Ninth Crossing—a site known as Burnt Ranch. The route then climbs past Twin Mounds and crosses the Wind River Range and the Continental Divide at South Pass. On July 12, 1849, Edwin Bryant recorded his impressions as he crossed South Pass on his way to California: "There is, I believe, considerable misconception in regard to the South Pass of the Rocky Mountains. The general supposition is, that it is a difficult and narrow passage by steep ascent and descent, between elevated mountain-peaks. This conjecture is very far from the fact. The gap in the mountain is many miles in breadth, and . . . the ascent up the Platte and Sweetwater has been so gradual, that although the elevation of the Pass above the sea is . . . between seven and eight . . . thousand feet [actually 7,412 feet], yet from the surface we have travelled over, we have been scarcely conscious of rising to the summit of a high ridge of mountains." Descending into the Pacific drainage, the segment passes Pacific Springs and Plume Rock, crosses Dry Sandy Creek, and follows the north side of Dry Sandy Creek past Parting of the Ways to end at Little Sandy Crossing.	South Pass is a National Historic Landmark	Public (BLM)/ Private	Oregon, California, Mormon Pioneer, Pony Express	Mining exploration around Lewiston and Dickie Springs has been a low-level threat to the trail and its viewshed for many years. If large-scale development is proposed, the threat would increase greatly. Ranchette development on the upper Sweetwater River near Split Rock is a concern.
5	Big Sandy to Green River	50	Sweetwater, WY	Farson, Rock Springs	This segment begins at the Big Sandy Crossing near present-day Farson, site of the Big Sandy Pony Express station. It follows unimproved roads southwest along the north side of the Big Sandy River and passes the Big Timber Pony Express Station. The segment ends at the Lombard Ferry crossing of Green River, three miles north of the confluence of the Big Sandy and Green rivers.	Not listed	Public (BLM, BOR)/ Private	Oregon, California, Mormon Pioneer, Pony Express	Access to the eastern end of the segment is possible from Wyoming Highway 28 at a state historical marker. The segment crosses public and private lands. Visitors should acquire written permission from private landowners before entering private land. Access is not continuous along the trail by automobile. Travelers may park their vehicles and hike portions of the trail.
6	Anderson Ridge to Buckskin Crossing	27	Fremont, Sublette, WY	South Pass, Farson, Pinedale	Part of the Fort Kearny-South Pass-Honey Lake Wagon Road, or the Lander Road, this segment begins at Anderson Ridge and runs northwest. It crosses the Sweetwater River and climbs the Wind River Mountains to cross the Continental Divide near Jensen Meadows. It then descends to Buckskin Crossing on the Big Sandy River, where it ends.	Not listed	Public (BLM)/ Private	California (Lander Road)	None known.

NO	SEGMENT NAME	LENGTH (miles)	COUNTY/ STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	TRAIL	THREATS TO RESOURCES/ VISITOR SERVICES
7	North Piney Creek to Smiths Fork	42	Sublette, Lincoln, WY	Afton, Fontenelle Reservoir	The almost-pristine landscape along this segment of the Lander Road offers an opportunity to experience impressive trail remnants. It begins at North Piney Creek, follows a gravel road across Johnson Ridge, ascends South Piney Creek, passes the David Bond and Snyder Basin emigrant graves, climbs through Thompson Pass, passes the Elizabeth Paul Grave on La Barge Creek, goes through La Barge Meadows, ascends to Wagner Pass, and ends on Smiths Fork.	Not listed	Public (BLM, USFS-Bridger National Forest)/Private	California (Lander Road)	None known.
8	Bear River Divide	31	Uinta, Lincoln, WY	Kemmerer	The Oregon-California Trail follows two-track and ranch roads for 31 miles as it crosses the rugged Bear River Divide. The segment begins where the trail crosses U. S. Highway 189 near Cumberland Gap, crosses Cumberland Flats, ascends Little Muddy Creek and Chicken Creek, crosses the Bear River Divide, descends Bridger Creek, and ends at Wyoming Highway 89.	Not listed	Public (BLM)/ Private	Oregon, California	None known.
9	Fort Bridger to Cache Cave	44	Uinta, WY; Summit, UT	Evanston, Ogden	This segment includes a series of high-quality trail remnants, historic resources, and natural landmarks. It begins at Fort Bridger; ascends Cottonwood Creek, passing between Bridger Butte and Sugar Loaf Butte; climbs onto Bigelow Bench; descends to Muddy Creek; ascends Soda Hollow; and climbs the flanks of Aspen Mountain. The trail crosses the rim of the Great Basin at Aspen Mountain. Its elevation of more than 8,300 feet makes it the highest point on the trail thus far. The segment then descends Sulphur Creek to cross the Bear River, climbs up Coyote Creek past the Needles, crosses Yellow Creek, and ends at Cache Cave, an elongated cavity in a yellow sandstone formation.	Not listed	Public (BLM)/ Private	California (Hastings Cutoff), Mormon Pioneer, Pony Express	None known.
10	Castle Rock to This Is the Place Heritage Park	51	Summit, Morgan, Salt Lake, UT	Ogden, Salt Lake	Beginning at Castle Rock, a geologic formation that towers 200 feet above the trail, this segment goes down Echo Canyon to the present-day town of Echo, where it turns northwest along the Weber River, past Witch Rocks, to present-day Henefer. After crossing the Weber River, the trail turns south up Main Canyon to Hogsback Summit. It then goes down Dixie Hollow, up Broad Hollow, and descends to East Canyon Creek (now inundated by East Canyon Reservoir). The trail then ascends East Canyon Creek to Little Emigration Canyon. The four-mile trail through Little Emigration Canyon climbs 1,400-feet to the top of Big Mountain, the longest sustained climb on the entire trip thus far. Today, it provides a rare opportunity to walk a pristine section of the original trail in Utah. From Big Mountain Pass, the trail descends Clear Creek to Mountain Dell Canyon, makes its last ascent to Little Mountain Summit, and follows Emigration Canyon to This Is the Place Heritage Park.	Not listed	Public (USFS-Wasatch National Forest, Utah Division of Parks and Recreation)/ Private	California (Hastings Cutoff), Mormon Pioneer, Pony Express	None known.

NO	SEGMENT NAME	LENGTH (miles)	COUNTY/ STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	TRAIL	THREATS TO RESOURCES/ VISITOR SERVICES
11	Fairfield to Ruby Valley (Simpson Segment)	217	Tooele, Juab, UT; White Pine, NV	Rush Valley, Lynndyl, Fish Springs, Wildcat Mountain, Currie, Kern Mountains, Ruby Lake	George M. Chorpennig's field superintendent, Howard Egan, developed much of this segment for the mail and freight service called the Jackass Express, which operated on this route between 1858 and 1860. Captain James H. Simpson surveyed the trail for the army in 1859. The Pony Express, stage and freighting operations, and the Lincoln Highway used the route well into the 20 th century. This segment begins at Camp Floyd/Stagecoach Inn State Park, climbs through Fivemile Pass, crosses Rush Valley, passes through Faust, climbs Lookout Pass, and arrives at Simpson Springs. The segment from Simpson Springs to Callao (Willow Springs Station) is particularly pristine. It crosses Old River Bed (just north of Table Mountain), traverses Dugway Valley, climbs through Dugway Pass, passes Fish Springs and Boyd stations, and arrives at Callao. The route then goes north through Overland Canyon, turns south and crosses Deep Creek (just north of Ibapah), and enters present-day Nevada. The segment descends West Deep Creek; crosses Antelope Valley; ascends Spring Valley Creek; crosses the Schell Creek Range; descends Schell Creek; crosses Steptoe Valley, the Cherry Hill Range, and Butte Valley; climbs the Butte Mountains; crosses Long Valley; climbs over the Maverick Springs Range; and ends on the west side of Ruby Valley at Fort Ruby Spring.	National Historic Landmarks (Stagecoach Inn and Camp Floyd)	Public (BLM, Utah Division of Parks and Recreation)/ Private	Pony Express	Part of this segment is a designated National Backcountry Byway, administered by the BLM. BLM maintains interpretive sites at Faust Junction, Simpson Springs Station, Boyd Station, and Canyon Station. Simpson Springs also has a replica station. Camp Floyd/Stagecoach Inn State Park has a restored inn, visitor center, and a BLM wayside exhibit.
12	Grantsville to Franklin River Crossing	177	Tooele, UT; Elko, NV	Tooele, Bonneville Salt Flats, Newfoundland Mountains, Wendover, Elko	Extensive sections of pristine trail can be found in this segment, some discovered only recently. The segment is a combination of gravel roads, 4x4 two-tracks, and some sections that should only be attempted by horseback or on foot. It starts on the northwest corner of present-day Grantsville, runs northwest to round the northern end of the Stansbury Mountains at Timpie Point, and turns southwest along the western edge of Skull Valley to reach Hope Wells, the last good water before reaching Donner Spring (83 miles away). The route traverses Skull Valley, passes Redlum (or Redden) Spring, and crosses the Cedar Mountains at Hastings Pass. From Hastings Pass, the route climbs over Grayback Hills and heads northwest across the seemingly endless salt flats of the Great Salt Lake Desert. Composed of sand dunes and mud flats, this was the worst section of the Hastings Cutoff for emigrants and animals alike. In places the flat surface was firm and in others soft and wet with salt water. The trail passes the isolated butte of Floating Island, crosses the Silver Island Mountains at Donner-Reed Pass, and arrives, at last, at the oasis of Donner Spring. The route turns southwest around the shoulder of Pilot Peak and enters present-day Nevada. It passes Halls Spring and climbs through Bidwell Pass and Silver Zone Pass (in the Toano Mountains on today's I-80). While traveling across Pilot Creek Valley east of Silver Zone Pass, John Wood lamented: "This morning we traveled over one of the most uninhabitable parts of God's creation; not a thing but the bare earth to be seen, but I suppose if it was not for these there would be no pretty places." The segment then passes Big Springs, Flowery Lake Springs, Mound Springs, and Warm Springs and ends at the Franklin River Crossing in Ruby Valley.	Not listed	Public (BLM)/ Private	California (Hastings Cutoff)	None known.
13	Curlew Valley to Salt Lake Cutoff Junction	45	Box Elder, UT; Cassia, ID	Tremonton, Grouse Creek, Oakley	The Salt Lake Cutoff was developed to bypass the desert trail established by Lansford W. Hastings. The route goes north from Salt Lake City along the base of the Wasatch Mountains, past Brigham City, and turns northwest into southern Idaho. This segment starts in Curlew Valley; travels west past Pilot, Emigrant, and Cedar springs; traverses the Raft River Narrows; passes Emigrant Canyon Spring; and rejoins the main California Trail near City of Rocks.	Not listed.	Public (BLM, Idaho Department of Parks and Recreation)/ Private	California (Salt Lake Cutoff)	None known. City of Rocks National Reserve maintains a small museum in Almo and plans to place interpretive wayside exhibits throughout the park.

NO	SEGMENT NAME	LENGTH (miles)	COUNTY/ STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	TRAIL	THREATS TO RESOURCES/ VISITOR SERVICES
14	Granite Pass to Humboldt River	98	Cassia, ID; Box Elder, UT; Elko, NV	Oakley, Grouse Creek, Jackpot, Wells, Double Mountain	This California Trail segment begins at Granite Pass on the Utah/Idaho border. The route descends from Granite Pass to Goose Creek and ascends gradually along Goose Creek, past Record Bluff, to Little Goose Creek. From Little Goose Creek an impressive four-mile hiking segment on the original trail climbs over the ridge to Big Draw. The trail then passes Rock Spring, Emigrant Springs, and Chicken Springs. From Chicken Springs to the head of Thousand Springs Valley is a three-mile hiking segment on original trail. Halfway down Thousand Springs Valley is another two-mile section of ruts. The route next ascends West Brush Creek Canyon, where five miles of trail can be hiked or driven over a largely intact historical viewshed. The original 1843 trail descended Bishop Creek to the Humboldt River. The route of the segment through today's town of Wells was developed in 1845. After crossing Willow Creek, this segment descends Town Creek to Humboldt Wells, the source of the Humboldt River. The trail turns northwest, crosses a sand ridge on a three-mile hiking or four-wheel-drive route, and descends again to the Humboldt River, where it ends.	Not listed	Public (BLM)/ Private	California	None known. The route is a BLM Backcountry Byway from Goose Creek to U.S. Highway 93.
15	Auburn to Wayan	25	Lincoln, WY; Caribou, ID	Soda Springs	Ruts are very evident in the rugged terrain crossed by this Lander Road segment. Beginning just north of Auburn, Wyoming, the route ascends the north bank of Stump Creek to the Idaho border. In Idaho, the route heads northwest along the west bank of Stump Creek, past the site of the Oneida Salt Works, to the mouth of Terrace Canyon. The route ascends Terrace Canyon, passes Lane's grave on Lanes Creek, and ends on Gravel Creek, south of the town of Wayan. The trail through the Caribou National Forest is marked with concrete posts and the ruts are very evident.	The Terrace Canyon portion of the Stump Creek ruts is listed.	Public (USFS-Caribou National Forest)/Private	California (Lander Road)	None known.
16	Portneuf Crossing to the Narrows of Ross Fork	12	Carabou, Bingham, Bannock, ID	Palisades, Blackfoot	This segment, containing several traces of the Lander Road, begins at the crossing of the Portneuf River on the Fort Hall Indian Reservation. It continues west across rolling rangeland and descends Ross Fork to intersect the main Oregon-California Trail at the Narrows of Ross Fork.	Not listed	Private (Fort Hall Indian Reservation)	California (Lander Road)	None known.
17	Arbon Valley to Sublett Reservoir	25	Oneida, Power, Cassia, ID	Malad City, Oakley	The Hudspeth Cutoff was opened by a large Missouri party led by Benoni M. Hudspeth and John J. Meyers in July 1849. The route went west from Soda Springs and avoided the long swing north to Fort Hall. This segment begins in Arbon Valley, approximately four miles south of Buist, Idaho, and ends at Sublett Reservoir, on the east side of the Raft River Valley. This is a very remote and evocative section of trail. A series of primitive roads, often the original trail itself, follow the emigrant route through a largely undisturbed landscape. The trail passes Twin Springs, ascends South Fork Rock Creek, climbs to Summit Springs, descends Sublett Creek Canyon, and ends at the eastern edge of Sublett Reservoir. Ruts can still be seen at Summit Springs and descending Sublett Creek Canyon.	Not listed	Public (BLM, USFS-Sawtooth National Forest, Curlew National Grassland)/ Private	California (Hudspeth Cutoff)	The segment needs to be marked and interpreted for public use.
18	Bear Valley	10	Klamath, OR	Klamath Falls, Medford	This potential hiking segment extends from Bear Valley to the Lower Klamath River Crossing. In 1847, Levi Scott opened this alternate route to cut several miles off the original route.	Not listed	Public/Private	California (Applegate Trail)	The segment needs trail development and marking. There are markers and an Applegate Trail Coalition wayside at the Lower Klamath River Crossing.

NO	SEGMENT NAME	LENGTH (miles)	COUNTY/ STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	TRAIL	THREATS TO RESOURCES/ VISITOR SERVICES
19	Cascade Mountain Crossing	30	Klamath, Jackson, OR	Medford	With excellent hiking potential, this segment stretches from the Klamath River and over the summit of the Cascade Mountains to the confluence of Tyler Creek with Emigrant Creek, near the head of Emigrant Lake and the Rogue River Valley. Lindsay Applegate described this country as "an immense forest, principally of yellow pine." Today, Green Springs Highway crosses, parallels, and runs within a mile or two of the route. The crossing took the exhausted travelers up to four days, and killed many oxen. J. Quinn Thornton recalled that on October 13, 1846, "Some of the emigrants were busied in making arrangements for diminishing in some manner the weight of the load in their wagons. Others were silent, and appeared to be stupefied with their distresses. Children were crying for bread. Over all this scene, the sun shone as clear as ever."	Not listed	Public/Private	California (Applegate Trail)	There are interpretive waysides at Lower Klamath River Crossing and Tub Springs, and markers at Sheepy Creek, Jenny Creek Wagon Slide, Round Prairie, Lincoln, Hyatt Lake, Keen Creek Wagon Slide, Cascade Summit, Tyler Creek, Emigrant Creek, Songer Gap, and Emigrant Lake.
20	Canyon Creek Pass	9	Douglas, OR	Canyonville	This segment stretches from Canyon Creek Pass to South Umpqua River. No place on the Applegate Trail caused greater suffering than the descent of Canyon Creek, which broke wagons and caused deaths as emigrants were forced down a narrow defile through icy waters.	Not listed	Public/Private	California (Applegate Trail)	None known.
21	Overland Canyon	10	White Pine, NV	Ruby Lake	This segment, used by the Pony Express and the Hastings Cutoff of the California Trail, begins at Fort Ruby Spring, at the eastern base of the Ruby Mountains. The trail climbs through Overland Canyon, crosses Overland Pass, and descends Big Wash. On August 10, 1850, Madison Berryman Moorman described the trail through Overland Pass: "The road made a right turn over the mountain, in a very nearly due West course. The pass is an excellent one—no rocks—not very steep and the road very firm. Right on the summit is a spring of only tolerable water." The segment ends where Big Wash opens onto the Huntington Valley. This was the first pass south of the Humboldt River that wagons could cross. Although pack trains cut across the Ruby Mountains through Secret or Harrison passes, wagons were forced to swing far south, cross through Overland Canyon, and then head north to reach the Humboldt River.	Not listed	Public (USFS-Humboldt National Forest)	California (Hastings Cutoff), Pony Express	None known.
22	Overland Canyon to Simpson Park Station	84	White Pine, Eureka, Lander, NV	Ruby Lake, Newark Lake, Simpson Park Mountains, Summit Mountain	From the mouth of Overland Canyon, the Pony Express route crosses the same vast and lonely stretches of mountains and sagebrush flats that the pony riders covered in 1860. This is typical Basin and Range country, where few modern developments intrude upon the viewshed. The segment heads out across Huntington Valley, crosses Diamond Mountains, and descends Telegraph Canyon to Diamond Springs Station. It continues across Diamond Valley, traverses the Sulphur Springs Range south of Mount Hope, and crosses Kobeh and Monitor valleys to reach Dry Creek Station. Remnants of the old trail are barely visible as the segment leaves Dry Creek station heading west. The route goes around the north end of Simpson Park Mountains, crosses Rye Patch Canyon, descends Simpson Park Canyon, and ends at Simpson Park Station on Willow Creek.	Not listed	Public (BLM, USFS- Toiyabe National Forest)	Pony Express	None known.
23	South Fork Humboldt River Gorge	14	Elko, NV	Elko	This rugged canyon was a curiosity described by many emigrants. The Bidwell-Bartleson Party was the first to traverse it in 1841. The Hastings parties and the gold-seeking forty-niners followed. It was used through 1850, when the Hastings Cutoff was abandoned. Heinrich Lienhard told of his journey through the canyon in 1846: "We entered the deep gorge through which the river cut its way, and through which our road led. The mass of rock rose in several places nearly perpendicular, around which the stream twisted in several great bends, now to the right, now to the left, the gorge becoming more contracted. . . . Each moment we had to recross the stream, the water often coming nearly as high as the wagon bed."	Not listed.	Public (BLM)/ Private	California (Hastings Cutoff)	None known.

NO	SEGMENT NAME	LENGTH (miles)	COUNTY/ STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	TRAIL	THREATS TO RESOURCES/ VISITOR SERVICES
24	Carlin to Gravelly Ford	15	Elko, Eureka, NV	Battle Mountain	This segment begins approximately three miles west of present-day Carlin, Nevada, where the trail leaves the Humboldt River and ascends a low gravelly hill to an elevated ridge. The route climbs to Emigrant Pass over a six-mile hiking, equestrian, and four-wheel-drive route, on or near the original trail, paralleling I-80. Just west of Twin Summit, the trail turns south, leaving I-80, and descends Emigrant Canyon along a pristine six-mile section of trail that can be easily followed all the way to Gravelly Ford.	Not listed	Public (BLM)/ Private	California	None known.
25	North Battle Mountain to Ellison	12	Lander, Humboldt, NV	Battle Mountain, Winnemucca	The trail along the north side of the Humboldt River from North Battle Mountain to Ellison retains its original historic viewshed and contains some exceptional trail remains. The segment begins one mile northwest of present-day North Battle Mountain and follows a seldom used four-wheel-drive road northwest along the north side of McIntyre Slough. It crosses Sheep Creek and ends near the Valmy power plant, southeast of present-day Ellison.	Not listed	Public (BLM, BOR)/ Private	California	None known.
26	Iron Point to Edna Mountain Pass	5	Humboldt, NV	Winnemucca	A five-mile hiking segment on original trail starts at the beginning of the steep ascent up the sand hill at Iron Point, crosses over the sandy point, and ascends a narrow, pristine ravine to Edna Mountain Summit. The historical viewshed from the pass is still intact.	Not listed	Public (BLM)	California	Recent mining exploration and drilling threaten the area.
27	Golconda to Winnemucca	17	Humboldt, NV	Winnemucca, Osgood Mountains	This segment on the north side of the Humboldt River traces the eastern end of the river's "Big Bend." It starts two miles north of present-day Golconda, Nevada, and follows primitive ranch roads as the river swings northwest in a long loop along the south edge of the Osgood Mountains. After crossing the Little Humboldt River, the trail and Humboldt River swing south again, and the segment ends two miles north of present-day Winnemucca.	Not listed	Public (BLM)/ Private	California	None known.
28	Humboldt River – North Side Trail	22	Humboldt, Pershing, NV	Winnemucca, Eugene Mountains	Ranch roads trace the trail along the north and west sides of the Humboldt River, beginning two miles northwest of present-day Rose Creek, Nevada. The route stays close to the Humboldt River for the first eight miles and then heads southwest across sagebrush flats. In about 13 miles the trail rejoins the river, which has made a long loop south and then west. The segment ends at the Callahan Bridge at the north end of Rye Patch Reservoir. The road maintains its historic viewshed.	Not listed	Public (BLM)/ Private	California	None known.
29	Humboldt River – South Side Trail	20	Humboldt, Pershing, NV	Winnemucca Eugene Mountains	The trail can be followed on ranch roads along the south and east sides of the Humboldt River, beginning one mile northwest of present-day Rose Creek, Nevada. The segment stays near the Humboldt River as it heads southwest for approximately four miles and then swings south, ending at a sharp bend in the river, one mile north of today's Mill City. The road maintains its historic viewshed.	Not listed	Public (BLM)/ Private	California	None known.
30	Rye Patch Reservoir to Woolsey	22	Pershing, NV	Eugene Mountains, Lovelock	Heading south from Rye Patch Reservoir, ranch roads follow the west side of the Humboldt River. These roads cross pristine landscapes on, or very near, the original route of the trail. The segment ends at the north end of Upper Valley, two miles west of Woolsey.	Not listed	Public (BLM)/ Private	California	None known.

NO	SEGMENT NAME	LENGTH (miles)	COUNTY/ STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	TRAIL	THREATS TO RESOURCES/ VISITOR SERVICES
31	Humboldt Sink to Dayton	81	Churchill, Lyon, NV	Carson Sink, Fallon, Carson City	On the western edge of the Humboldt Sink, the Carson and Truckee routes divide. The Carson Route heads south across the infamous Forty-mile Desert. This desert was the most difficult part of the journey to California. Emigrants found abandoned wagons and dead animals strewn all along the route. Trail ruts survive at the crossing of Salt Creek, between the Mopung Hills and the Hot Springs Mountains. From here, the trail passes through sand hummocks, crosses alkali Parran Flat, and heads south across the desert on dirt roads to Soda Lake. Much of this segment still retains its historic viewshed. In Lahontan Valley, the trail meets the Carson River, the first water since the Humboldt Sink. The route then turns west and ascends the Carson River. It runs beneath present-day Lahontan Reservoir, crosses Churchill Valley, and arrives at Fort Churchill. The segment continues up the Carson River, past Table Mountain, and ends on the west side of the Carson Plains at the present-day town of Dayton.	Not listed	Public/Private	California (Carson Route)	None known.
32	Mickey Canyon	14	Lyon, NV	Smith Valley	The Walker River-Sonora Trail was forced away from the West Walker River when it passed through narrow Wilson Canyon. As a consequence, emigrants swung south through Mickey Canyon, a fourteen-mile diversion that brought them back to the river only a few miles from their starting point. Clear traces of the trail are visible today as it sweeps up the hillside and over the ridge top.	Not listed	Public (USFS)	California (Walker River- Sonora Route)	None known.
33	Summit Creek Canyon	3	Tuolumne, CA	Bridgeport	The trail descends one thousand feet down Summit Creek Canyon from Sheep Camp to Saucer Meadow, winding between boulders and plunging through steep ravines, where ropes were required to keep the wagons in check. Passing through dense forest along the bank of Summit Creek from Saucer Meadow to Relief Valley, this segment is one of the few pristine sections of emigrant trail remaining in the Sierra Nevada. While much of the Walker River-Sonora route is protected in the Hoover and Emigrant Wilderness areas, most of its course has been used as hiking and stock trails. This particular section, however, appears essentially as it was when abandoned in the early 1860s.	Not listed	Public (USFS- Stanislaus National Forest- Emigrant Wilderness Area)	California (Walker River- Sonora Route)	None known.
34	Genoa to Union House	72	Douglas, NV; Alpine, El Dorado, Amador, CA	Carson City, Smith Valley, Placerville	This segment includes the ascent of the arduous West Carson Canyon and the various crossings of West Fork of the Carson River. Midway up West Carson Canyon is a Trails West marker installed by the Nevada Historical Society. This marks the start of a stretch of original trail ruts that pass Snowshoe Thompson cave. Reportedly, Thompson stopped here overnight while delivering mail to Washoe miners in the 1850s before the Pony Express was established.	Not listed	Public	California (Carson Route)	In 1997, Cal Trans was widening Highway 88 at the eastern part of Carson Canyon by putting in a passing lane. Work on the uphill side does not impact the trail, but it is not clear what is happening on the downhill side, or how it might affect the trail.

NO	SEGMENT NAME	LENGTH (miles)	COUNTY/ STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	TRAIL	THREATS TO RESOURCES/ VISITOR SERVICES
35	Humboldt Sink to Fernley	37	Churchill, Lyon, NV	Carson Sink, Reno	The Carson and Truckee routes divide on the western edge of the Humboldt Sink. The Truckee Route crosses the Humboldt Bar and heads west across the infamous Forty-mile Desert, the most difficult part of the journey to California. Emigrants found abandoned wagons and dead animals strewn all along the route. Much of the trail can still be followed, both on foot along pristine remnants and by vehicle along dirt roads that maintain their historical views. The route runs southwest along the I-80 corridor, passes Boiling Springs, and skirts the northern boundary of Fernley State Wildlife Management Area. Crossing impressive sand swales and passing emigrant graves, the trail turns west, paralleling the 1868 Central Pacific Railroad bed, which is now used as an access road. After passing the Fernley Ruts, an excellent set of sandy swales, the segment ends one mile north of present-day Fernley and two miles east of the long-awaited Truckee River.	Not listed	Public (BLM, State of Nevada)/ Private	California (Truckee Route)	None known. Negotiations are underway to create a conservation easement on a two-mile section of the trail that contains the Fernley Ruts.
36	Verdi to Steephollow Crossing	74	Washoe, NV Sierra, Placer, CA	Reno, Portola, Truckee	This segment includes some remarkable resources, many of which would make desirable hiking trails. It starts near the Truckee River, one mile northwest of Verdi, and proceeds northwest up the steep, narrow valley of the south branch of Dog Creek. Sections of pristine trail ascend the creek, but the Hennis Pass/Dog Valley Road has impacted the trail in some areas. The trail crests at First Summit and drops down a steep slide into beautiful Dog Valley. At the bottom of the slide, the trail turns southwest, where wagon swales can still be seen. The route climbs up a draw to Second Summit, where emigrants had their first view of the crest of the Sierra Nevada. Proceeding down the center of Hoke Valley, the route skirts the southeastern edge of Stampede Reservoir, crosses Little Truckee River and Russell Valley, and arrives at Woodchopper Spring. The eroded trail soon crosses a gravel road just below the spring and heads for Prosser Creek. Prosser Creek crossing is clearly defined, and a 0.75-mile section of pristine trail ascends Station Creek Valley. One mile east of present-day Truckee, California, an 800-foot section of ruts can be seen where the trail descends into the Truckee River Valley. West of Truckee, the segment passes Donner Memorial State Park and ascends Coldstream Valley and Emigrant Canyon, where the views is still pristine and undisturbed trail ruts can be found. The trail climbs Roller Pass and descends to join the route from Donner Pass just east of Summit Valley. This valley was identified in many diaries as a welcome resting-place after the torturous summit crossing. After passing Lake Van Norden, Kidd Lake, and Cascade Lakes, the trail descends to the South Yuba River, which it follows to Cisco Butte. Here the trail turns up a rocky shelf, climbs to Crystal Lake; crosses Sixmile Valley and Carpenter Flat; and makes the hazardous descent through Emigrant Gap into Bear Valley. The steep river canyon below Bear Valley forced emigrants to ascend Lowell Hill Ridge to the north. Following this ridge, the trail crosses Deadmans Flat, passes Mule Spring, goes over the top of Camel's Hump, and makes the precipitous descent to Steephollow Crossing, where this segment ends. The last major obstacle on the Truckee Route, the descent to Steephollow Creek was the steepest encountered in the entire mountain crossing.	Not listed	Public (USFS - Toiyabe National Forest)/Private	California (Truckee Route)	Residential development, logging, and highway construction all threaten both the trail remains and the historic views. The California State Park system plans to protect the segment from Donner Memorial State Park to Summit Meadow. The beginning of the ascent of Dog Valley is marked by a Nevada Emigrant Trail Marking Committee marker near the old Crystal Peak Cemetery on Dog Valley Road.

NO	SEGMENT NAME	LENGTH (miles)	COUNTY/ STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	TRAIL	THREATS TO RESOURCES/ VISITOR SERVICES
37	Grizzly Valley/Grizzly Ridge	15	Plumas, CA	Portola	This superb hiking route from Lake Davis to Spring Garden over a 7,000-foot ridge was a severe test for emigrants. The segment has a historically intact viewshed and ten trail markers at sites/ruts along the route.	Not listed	Public (USFS-Plumas National Forest)/Private	California (Beckwourth Trail)	None known.
38	Quincy to Spanish Ranch	7	Plumas, CA	Portola, Chico	The 1851-1855 route over Emigrant Hill has an essentially intact viewshed. Trail traces with six trail markers enhance a good hiking trail.	Not listed	Public (USFS-Plumas National Forest)/Private	California (Beckwourth Trail)	None known.
39	Bucks Summit to Lake Oroville	34	Plumas, Butte, CA	Chico	An ideal auto tour could be made of this Beckwourth Trail segment. There are numerous nearby ruts, swales, prehistoric and historic sites, and 18 related trail markers.	Not listed	Public (USFS-Plumas National Forest)/Private	California (Beckwourth Trail)	None known.
40	Lassen Meadows to Pothole Springs	206	Pershing, Humboldt, Washoe, NV; Modoc, CA	Eugene Mountains, Jackson Mountains, High Rock Canyon, Vya, Cedarville	This exceptional Applegate Trail segment includes some of the most dramatic landscapes and notable sites along the emigrant routes. Beginning at Lassen Meadows, where the Applegate Trail left the Humboldt River and the California Trail, the segment heads northwest to Willow Springs, veers southwest past Antelope Springs, and crosses Antelope Summit. Turning northwest, the route crosses Kamma Pass, descends Painted Canyon to Rabbit-hole Springs, and heads out across the punishing Black Rock Desert. At Black Rock Springs, the first good source of water and grass since Lassen Meadows, the segment turns north, passes Double Hot Springs and the Lassen and Clapper burial site, and parallels Mud Meadow Creek to reach Mud Meadows. The segment then turns west, passes through Fly Canyon, and negotiates the steep 200-foot descent of the Fly Canyon Wagon Slide near High Rock Lake. Again turning northwest, the trail enters High Rock Canyon with its petroglyphs, axle grease records, and exceptional ruts. Continuing west the route passes Bruff's Singular Rock, Massacre Creek, Emigrant Spring, Long Valley, and crosses Fortynine Pass northwest of Fortynine Mountain. Beyond Sand Creek, the route crosses Surprise Valley and passes Seyferth Hot Springs. Passing between Upper and Middle Alkali Lakes, the trail turns north along the western edge of Upper Alkali Lake. It crosses numerous small streams, including Plum Creek, and arrives at Nesham Creek. An excellent hiking segment begins where the trail leaves the Surprise Valley Road at the eastern base of the Fandango Pass ascent. In 1849, Alonzo Delano found, "The ascent was easy generally. . . . at the steepest part our company doubled teams; but many did not, and the summit was gained without difficulty." After climbing through Fandango Pass, the route descends to Fandango Valley, crosses Willow and Lassen creeks, and meets the eastern edge of Goose Lake. The original trail is now under Goose Lake, so the segment follows the 1853 road around the south end of the lake, where the Lassen Trail separated from the Applegate Trail at Davis Creek. The segment leaves Goose Lake at McGinty Creek, passes through Devils Garden Natural Area, and descends Fletcher Creek for almost 12 miles. It crosses the southern shoulder of Blue Mountain before ending at Pothole Spring, originally named for David Goff of the 1846 Southern Road Expedition.	The section of trail from Rabbit-hole Springs to Fly Canyon is listed	Public (BLM, USFS-Modoc National Forest)/Private	California (Applegate Trail)	Overuse of trails and campsites may degrade the area. Large public events are a substantial threat. The trail needs to be marked, and some sections should be developed as hiking trails. Existing markers identify important sites, including the starting and ending points.

NO	SEGMENT NAME	LENGTH (miles)	COUNTY/ STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	TRAIL	THREATS TO RESOURCES/ VISITOR SERVICES
41	1856 Nobles Trail Junction to Granite Creek	30	Pershing, Washoe, NV	Eugene Mountains, Gerlach	Beginning one mile northwest of Rabbit Hole Springs, where the 1856 route of the Nobles Trail left the Applegate Trail, this segment closely approximates the bladed road between Gerlach and Winnemucca. The route heads west across the desert to Trego Springs, the water source that made the opening of this route possible. J.B. Brown described a miserable nights camp here in 1859: "Such a scene I never wish to see again as being enacted here. . . . Some of the loose cattle which have had no grass for two days nor water for 20 miles travel . . . and of course are nearly crazed are running about in all directions lowing and bellowing in search of water and grass." The trail continued west across the playa for another 12 miles before good water and grass was found at Granite Creek.	Not listed	Public (BLM)	California (Nobles Trail)	Mining, geothermal exploration, and recreational overuse of the area are all potential threats.
42	Deep Hole Springs to Smoke Creek Canyon	26	Washoe, NV	Gerlach	An improved gravel road provides access to a pristine segment of the Nobles Trail along the west edge of the Smoke Creek Desert. From Deep Hole Springs, "a good place to lie over a day or two," the segment runs southwest. The main route stayed on the desert playa, but a side trip could be made to Wall Spring, two miles northwest. In 1859, J.B. Brown found this playa "level as floor, not a spear of living shrub or plant." The route continues southwest, passes Buffalo Springs, and ends at the mouth of Smoke Creek Canyon.	Not listed	Public (BLM)/ Private	California (Nobles Trail)	Modern intrusions threaten the viewshed.
43	Rush Creek Valley to Viewland	18	Washoe, NV; Lassen, CA	Eagle Lake, Susanville	Pristine trail ruts run on alternating sides of a bladed road from Rush Creek Valley to present-day Viewland, California. The route ascends a drainage of Rush Creek for about three miles, crosses Bull Flat, and arrives at Mud Springs. Continuing west over a road that Mary C. Fish described as "an awful rough road it being perfectly macadamized with rocks only the rocks were about a foot high," the segment ends northwest of the town of Viewland.	Not listed	Public (BLM)/ Private	California (Nobles Trail)	Modern intrusions threaten the viewshed.
44	Bridge Creek to Feather Lake	9	Lassen, CA	Eagle Lake, Burney	This heavily forested segment leaves Bridge Creek and climbs to the Sierra Crest. Passing Summit Springs (exact location unknown), the segment ends at Feather Lake, where the Nobles and Lassen trails merge. Mary C. Fish painted a vivid picture of the region in 1850: "The timber here grows to an amazing size. . . . There is also plenty of game in the mountains consisting of Grizzly Bears, Mountain Sheep, Deer, Foxes, &c. I saw the track of a Grizzly bear which being measured . . . was found to be eight inches long and six inches in diameter."	Not listed	Public (USFS-Lassen National Forest)	California (Nobles Trail)	Logging threatens the area.
45	Butte Creek to Manzanita Chute	25	Lassen, Shasta, CA	Burney	The Nobles Trail through the spectacular scenery of Lassen Volcanic National Park would make a superb hiking route. The route ascends Butte Creek to Butte Lake and passes between Black Butte and Prospect Peak. In 1854, Lieutenant E.G. Beckwith recorded his impressions of the lava field the trail crosses: "After leaving the creek [Butte Creek] we passed two or three small ponds, and entered one of the most recently formed and strongly marked volcanic fields we have seen in these mountains. . . . The lava rocks are black, and about 100 feet high, occupying the valley in a confused mass, which would be difficult to cross on foot." The segment continues west past Pine Meadows, crosses Hat Creek and Lost Creek, climbs Nobles Pass, and ends at Manzanita Chute.	Listed	Public (USFS-Lassen National Forest; NPS-Lassen Volcanic National Park)/Private	California (Nobles Trail)	None known.

NO	SEGMENT NAME	LENGTH (miles)	COUNTY/ STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	TRAIL	THREATS TO RESOURCES/ VISITOR SERVICES
46	Trail to North Fork of Pit River	5	Modoc, CA	Cedarville	Six miles south of Davis Creek, a five-mile section of the original Lassen Trail can still be followed. The segment leaves U.S. Highway 395 heading south, passes over a low saddle in the hills and drops into Joseph Creek bottom, an emigrant camping area. On September 5, 1949, Elijah Preston Howell recorded, "By a very rough road, passed over a low divide from where the waters fall off south. On the first creek [Joseph Creek] coming down from the mountains on the left, which we came to we camped." The trail went south from Joseph Creek over two ridges, separated by Thomas Creek and turned abruptly west down a canyon for half a mile to the North Fork of Pit River. The segment ends where the trail rejoins U.S. Highway 395 north of Conical Rocks.	Not listed	Public (BLM)/ Private (XL Ranch Indian Resrvation)	California (Lassen Trail)	None known.
47	Pit River Canyon	5	Modoc, CA	McArthur	This section of trail through the deep Pit River Canyon maintains its original environment and can be followed by a hiker or horseback rider. The segment begins where the trail leaves Bushy Road, passes the often-mentioned landmark of Hanging Rock, and ends where the trail intersects Stone Coal Road. The trail crosses the circuitous Pit River five times in this five-mile stretch and passes through a narrow canyon with 400-500 foot high volcanic walls. On September 9, 1849, Elijah Preston Howe recorded, "In one mile we crossed the creek [Pit River] to the North West side. We crossed four times more in the Cañon. Heavy Pine timber and steep rocky ridges on each side. We turned out early for noon, our Cattle being quite weak and road bad."	Not listed	Public (USFS-Modoc National Forest)	California (Lassen Trail)	None known. The USFS plans to make the Pit River Canyon an interpretive hiking trail. A Trails West marker is located near the start of the segment.
48	Pit River to Feather Lake	46	Lassen, CA	McArthur, Burney	This extended segment of the Lassen Trail begins six miles south of the present-day town of Bieber, where the eastern (1849) and western (1848) branches of the Lassen Trail split. The segment follows the eastern branch south past Hunter Spring and makes an unbelievable descent to Horse Creek at the present-day town of Little Valley. On October 10, 1849, J. Goldsborough Bruff recorded this descent: "And then an awful descent:—a long and rather steep, winding road, deep dust, and volcanic stones, and rocks; Broken wheels, capsized wagons, tires, hubs, &c broken wagons profusely strewn all the way down,—At the bottom, . . . ran a clear, cold, and rapid mountain stream. . . . Some trouble fording, but greater at the ascent of the opposite bank—Mules very weak, and we had to double team each wagon successively, and bang and shout the mules up." Emigrants then headed southwest to Beaver Creek Pasture, where the two routes rejoin, passed the west and south flanks of Blacks Mountain, and headed east through Patterson Flat to Aspen Well. Now turning south, the segment skirts the west edge of Harvey Valley and the east edge of Grays Valley to reach present-day Bogard Ranger Station, where the Lassen and Nobles trails join. The two trails share the same corridor for the next four miles through Pine Creek Valley—Lassen travelers heading southeast and Nobles travelers heading northwest. The segment ends northwest of Feather Lake, where the two routes again separate. The segment contains impressive rock swales, and extensive ruts in the Pine Creek area. Forest Service roads closely parallel the original trail. Though the forest has been logged at least once, the second growth allows one to feel the original ambiance of the trail.	Not listed	Public (USFS-Lassen National Forest, BLM)/Private	California (Lassen Trail)	None known. Trails West markers are located all along this route.

NO	SEGMENT NAME	LENGTH (miles)	COUNTY/ STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	TRAIL	THREATS TO RESOURCES/ VISITOR SERVICES
49	Clover Valley Branch to Robbers Creek	6	Lassen, CA	Burney, Lake Almanor	The Norvell Flat and Clover Valley routes of the Lassen Trail divide just south of Long Lake, where the trail intersects the Susan River. This segment is on the western branch. The route turns west up the Susan River for a short distance, swings north of Bennett Knob, crosses the Susan River, and heads south through Clover Valley. As the route approaches Robbers Creek, it turns southeast and parallels that drainage to intersect the Norvell Flat route 0.75 mile north of Robbers Creek and about three miles northwest of the spur trail to Duck Lake. When J. Goldsborough Bruff arrived at the Susan River on October 14, 1849, he "reached a large pine tree, where the trails branched. —The tree was struck full of card and notices: —directing acquaintances, and travelers in general, to take the right-hand road, —which led to grass and water in two miles [in Clover Valley], and the left, or main road was very rocky and for some distance destitute of either. We, of course took the most desirable trail."	Not listed	Public (USFS-Lassen National Forest)/Private	California (Lassen Trail)	None known. Trails West markers are located all along this route.
50	Norvell Flat Branch to Robbers Creek	6	Lassen, CA	Burney, Lake Almanor	The Norvell Flat and Clover Valley routes of the Lassen Trail divide just south of Long Lake, where the trail intersects the Susan River. This segment is on the eastern branch. The route turns east down the Susan River for 1.5 miles, crosses that river in Norvell Flat, and follows Forest Service roads south to intersect the Clover Valley Route 0.75 mile north of Robbers Creek and about three miles northwest of the spur trail to Duck Lake. Despite the warnings posted on the tree at the junction, Amos Batchelder chose to take the original 1848 trail. He camped on Norvell Flat the night of October 4, 1849: "After traveling through the large timber, we reached a very large opening, and encamped. . . . Here, there was an abundance of grass, wood, and water."	Not listed	Public (USFS-Lassen National Forest)/Private	California (Lassen Trail)	None known. Trails West markers are located all along this route.
51	Deer Creek Meadows to Acorn Hollow	46	Tehama, CA	Lake Almanor	Much of the Lassen Trail between Deer Creek Meadows and Acorn Hollow can be followed on logging roads along the dividing ridge between Deer Creek and Mill Creek. Traces are available to hike or view. From Deer Creek, it was 50 long, dry miles to Lassen's Ranch in the Sacramento Valley. Emigrants knew they could not expect to find much grass or water along the route, and with worn out stock and a rough, rocky road ahead they had reason for concern. It was now a race against time. Climbing out of Deer Creek on October 10, 1849, Simon Doyle was worried: "Our road today was . . . mostly up hill and Rocky . . . Last night snow fell on the mountains. . . . Everybody is pushing forward as fast as possible, fearing that winter has set in and they may be caught in the snow. God help the hindermost." The segment begins at Deer Creek Meadows; crosses Swamp, Slate, Round Valley, and Forked creeks as it climbs onto the ridge between Deer and Mill creeks; traverses the Narrows; passes Cedar Spring and Bruff's Camp; and runs between Barkley Mountain and Flatiron Mountain. Now in the Ishi Wilderness Area, the segment passes Obie Fields Spring, makes a steep descent into and ascent out of Steep Hollow, and exits Lassen National Forest. Now crossing private land, the segment passes south of Cave Spring and Emigrant Spring, heads southwest above Twentymile Hollow, crosses Dry Creek, and ends at Acorn Hollow, five miles northeast of Lassen's Ranch at present-day Vina, California.	Not listed	Public (USFS-Lassen National Forest, Ishi Wilderness Area)/Private	California (Lassen Trail)	None known. Trails West markers are located all along this route.

Appendix F.
California and
Pony Express
National Historic
Trails:
High-Potential
Sites

APPENDIX F. CALIFORNIA AND PONY EXPRESS NATIONAL HISTORIC TRAILS—HIGH-POTENTIAL SITES

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	TRAIL	THREATS TO RESOURCES/ VISITOR SERVICES
1	Upper Independence Landing (Wayne City)	Jackson	MO	Kansas City	Wayne City, a "paper city" on the south bank of the Missouri River about 3.5 miles north of Independence Courthouse Square, was the closest Missouri River landing to the town of Independence, but the climb up the bluffs was steep and tortuous. It rivaled the landing at Blue Mills during the 1830s and 1840s and that at Westport from the 1840s through the 1850s. It was very popular until the flood of 1844 washed away the landing.	Not listed	Private	Oregon, California (Independence Road)	Modern developments have altered the historic scene, and flooding has changed the landing dramatically. A small overlook at the north end of Cement City Road is fenced, but it needs additional interpretation.
2	Independence Courthouse Square Complex	Jackson	MO	Kansas City	The location of frenzied outfitting activity throughout the 1840s and early 1850s, Independence was the jumping-off point for the Santa Fe Trail and the Independence Road. The town includes several historic buildings, monuments, and Independence Spring. As the place of convergence of early routes from the Mississippi Valley, this square was the last significant point of supply until the mid-1840s, when Westport also became an outfitting town. When J. Quinn Thornton visited Independence in 1846, he found "a great Babel of African slaves, indolent dark-skinned Spaniards, profane and dust-laden bullwhackers going to and from Santa Fe with their immense wagons, and emigrant families bound for the Pacific, all cheerful and intent on their embarkation upon the great prairie wilderness."	Several structures are listed	Public (City of Independence)	Oregon, California (Independence Road)	Modern development may alter the historic scene.
3	Santa Fe Trail Park Ruts	Jackson	MO	Kansas City	The Independence Road is visible as a swale south of this Independence city park, near Santa Fe Road and 29 th Street. There are intermittent swales and traces in an undeveloped field owned by the RLDS Church, up through a couple of backyards to the southwest, and ending on the east side of 3122 Santa Fe Road.	Listed	Public	Oregon, California (Independence Road)	Future development may impact the historic scene. The site needs additional interpretation.
4	Rice-Tremonti Home	Jackson	MO	Kansas City	Built by Archibald Rice in 1844, this farmhouse was mentioned as a camping site by many California Trail diarists, especially in 1849. Foodstuffs were often purchased here. On his way to Santa Fe in 1839, Mathew Field "got a Christian supper of Bacon, Corn bread and milk at Farmer Rice's." Owned by the Tremonti family until recently, the house was purchased by a non-profit group that is seeking funds for a complete restoration.	Listed	Private (Friends of Rice-Tremonti Home Association)	California (Independence Road)	The site could become a Missouri State Park when the mortgage is paid off. Santa Fe Trail historical markers have been erected by the DAR and the town of Raytown.
5	Eighty-fifth Street Ruts	Jackson	MO	Olathe	A preserved trail swale, rare in this urban setting, can be found in a grassed lot at Eighty-fifth and Manchester, heading southwest. This alignment is the only one of up to three alternates in the area that has traces remaining.	Not listed	Private	Oregon, California (Independence Road)	Some interpretation may be possible with the owners' consent.
6	Heart (Hart) Grove Campground	Jackson	MO	Olathe	Both Oregon and California-bound emigrants traveling the Independence Road used this campground on Heart Grove Creek, a tributary of the Big Blue River. Many 1846 emigrants camped here, including the families of George and Jacob Donner and James Frazier Reed. Hiram O. Miller, traveling with the Donner-Reed Party, made this brief journal entry in 1846: "May 14 15 Camped at 'Heart Grove' Jackson County near the Indian line twenty two miles from Independence on the Big Blue."	Not listed	Private	Oregon, California (Independence Road)	The area has been severely impacted and there are no extent remains of the campsite or trail. Some interpretation should be done on the site.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	TRAIL	THREATS TO RESOURCES/ VISITOR SERVICES
7	Minor Park/Red Bridge Crossing of the Big Blue River	Jackson	MO	Olathe	This 27-acre park in a beautiful setting and landscape has both recreational and historic overtones. Its prominent feature is a gentle swale that cuts across the park, obviously created by wet wagons and teams pulling up the hill after crossing the Big Blue River. Emigrants heading west from Independence encountered their first river crossing at this site, a preview of the many rivers and streams to be negotiated on their long journey. On May 8, 1846, Virgil Pringle "Went 12 miles to the Blue and encamped, it being too high to cross. Another wagon capsized at the encampment. . . . No injury to persons or property." The next day his party "Crossed the Blue soon in the morning." The crossing was initially a ford; Red Bridge was constructed in 1859.	Listed	Public (Kansas City Parks and Recreation)	Oregon, California (Independence Road)	The ruts and swales need to be interpreted.
8	New Santa Fe	Jackson	MO	Olathe	This village, also called Little Santa Fe, had its beginnings in the 1840s and was incorporated in 1852. It was the last place for emigrants from Independence to buy supplies before entering Indian territory. Although never an important outfitting town, it was mentioned by many diarists. New Santa Fe grew up at the western edge of Missouri. Trading stores were established here, especially to sell liquor, which was prohibited in the Indian lands west of Missouri. A cemetery, historical marker, two homes from the trail era, and a faint trail swale are all that remain of this site today.	Not listed	Private (New Santa Fe Church)	Oregon, California (Independence Road)	None known. There is a Santa Fe Trail DAR marker at 122nd and State Line Road, one block west of the church and cemetery. An interpretive wayside exhibit is planned for the site.
9	Lone Elm Campground	Johnson	KS	Olathe	Located at the head of Cedar Creek, the 40-acre Lone Elm Campground was the first campground in Indian country for parties following the Santa Fe Trail/Independence Road from Independence, Missouri. It was first known as Round Grove but was later called Lone Elm, named for its single surviving tree. The site was mentioned in many journals. In May 1849, James Pratt found the tree was "fast being hacked away by the travelers, for firewood," and by 1852, Gilbert Cole reported "no Lone Tree to be found." In use from 1820 through the 1850s, Lone Elm was one of the most important frontier trail campgrounds.	Not listed	Private	Oregon, California (Independence Road)	Encroaching subdivisions and commercial development by the city of Olathe may impact the area.
10	Parting of the Oregon-California and Santa Fe Trails	Johnson	KS	Olathe	So far, California-bound emigrant trains had been traveling in the wrong direction—southwest toward Santa Fe instead of west. They did this to stay on the divide between the Kansas and Osage river drainages and avoid numerous difficult stream crossings. Now it was necessary to move north; so the Oregon and California trails branched to the right (northwest) and the older Santa Fe Trail branched to the left (southwest). The site is relatively flat farmland. The actual junction probably moved around the surrounding area over the years. Historian William Ghent reported that the junction had been marked with a signpost: "Here, in the early days, some well-disposed person had set up a sign with the words, 'Road to Oregon.'" The Westport and Independence roads came together just east of this junction.	Not listed	Private	Oregon, California (Westport and Independence Roads)	Farming impacts the whole area. A roadside park, 0.25 mile south on U.S. Highway 56, contains a Kansas State Historical Society marker describing the junction.
11	Lower Bluejacket Crossing of the Wakarusa River	Douglas	KS	Lawrence	The Wakarusa River was the first difficult stream crossing on the Independence Road. Micajah Littleton complained, "We shall break down all our wagons!" The Bluejacket Crossings were named for Charles Bluejacket, a mixed-blood Shawnee Indian who operated a roadhouse and a ferry here. The Lower Bluejacket Crossing was heavily used, especially in the 1850s, but it is only one of at least four Wakarusa River crossings on various branches of the Oregon-California Trail. It was a major crossing for emigrants on the Westport-Lawrence Road but also served the Independence Road.	Not listed	Private	California (Independence and Westport-Lawrence Roads)	With the landowner's consent, some interpretation could be done 0.25 mile south on the county road.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	TRAIL	THREATS TO RESOURCES/ VISITOR SERVICES
12	Upper Bluejacket Crossing of the Wakarusa River	Douglas	KS	Lawrence	Highly visible and well-preserved ruts survive on the southeast side of this Wakarusa River crossing. Evidence of the crossing on the northwest bank has been obliterated by flooding and excavation work. The river has a smooth rock bottom here with flat rock ledges on the east bank. This crossing may have been used as much as the Lower Bluejacket Crossing, and is the one with extant remains. In 1841, Rufus B. Sage reported, "The remainder of the day was occupied in crossing the creek—a task by no means easy,—its banks being so precipitous we were compelled to lower our wagons by means of ropes. In so doing it required the utmost caution to prevent them from oversetting or becoming broken in the abrupt descent." Along with the Lower Bluejacket and Upper Wakarusa (Blanton's) crossings, this was one of at least four places where Oregon-California Trail routes crossed the Wakarusa River.	Not listed	Private	California (Independence Road)	Some interpretation might be done on the nearby county road with the consent of the owners.
13	Blue Mound	Douglas	KS	Lawrence	Blue Mound was a major camp site and the first natural landmark encountered by emigrants, many of whom climbed to the top for the view. Its oval, tree-covered summit, approximately 150 feet high and 0.5 mile long, is one of a series of mounds in this area. In 1843, John C. Fremont placed signal fires atop the mound to summon his Indian hunters. The trail passed the south edge of the mound on its way to the Upper Wakarusa Crossing.	Not listed	Private	Oregon, California (Independence Road)	The mound has been used as a ski slope, but it is now a tree-covered pasture. Wayside exhibits should be installed on nearby county roads to interpret the trail and this landmark.
14	Upper Wakarusa Crossing/Blanton's Bridge	Douglas	KS	Lawrence	This difficult crossing of the Wakarusa River rivaled the lower Bluejacket Crossings. In 1846, Virgil Pringle reported that about half the migration "missed the road [at the Bluejacket Crossings] and crossed about 4 miles above [at the Upper Wakarusa Crossing]." He described the Wakarusa as "a fine stream of clear water, between a creek and a river in size with fine timber on its banks." The bridge was built by James Abbott in 1854. Napoleon Blanton bought the farmland around it the next year, thus the name.	Not listed	Private	Oregon, California (Independence Road)	There are no extant remains. Interpretation is needed on nearby U.S. Highway 59.
15	Pellant Ruts	Shawnee	KS	Topeka	Named for the current owner of the property, these three dramatic swales run for about 100 yards.	Not listed	Private	Oregon, California (Independence Road)	The house is fairly new and the owner is very proud of the site.
16	Kansas River Crossing/Papin's Ferry	Shawnee	KS	Topeka	Upsets and drownings were frequent at the Kansas River crossings, for the river was 600 feet wide with, as John Charles Fremont described, a "swollen, angry, yellow turbid current." Papin's Ferry, the lower of the three crossings, was the most popular. It was established by Joseph and Louis Papin, two mixed-blood brothers, in 1843 and lasted into the mid-1850s. The ferry consisted of a platform floating on three dugout canoes. William Johnson described this operation in 1849: "By means of a rope, one end of which was coiled around a tree, the wagons were let down the steep banks of the river, and placed in the boat. Two wagons and twelve mules were taken over at a time, the boat being propelled by poles. . . . Double teams were required to haul the wagons up the northern bank, and through the deep sands extending _ mile back from the river." The river has moved very little in this area, and the site is now an industrial park at the river's edge.	Not listed	Private	Oregon, California (Independence Road)	None known.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	TRAIL	THREATS TO RESOURCES/ VISITOR SERVICES
17	St. Marys Mission	Pottawatomie	KS	Manhattan	St. Marys was a Catholic mission and school established among the Potawatomi Indians by Belgian Jesuits from Florissant, Missouri, in 1848. An important emigrant campground, the site was often mentioned in emigrant diaries. Lorena L. Hays passed the mission on May 10, 1853: "Came by the Catholic mission today. There is a log church in the shape of a cross. Most of the best houses have been white washed and the place had a very neat appearance. The Indians dress very fine in broadcloth but wear their clothes in rather an odd and slovenly manner." St. Marys is still operated as a Catholic school, named St. Mary's College.	Not listed	Private	Oregon, California (Independence Road)	None known.
18	Vieux Cemetery/Red Vermillion Crossing	Pottawatomie	KS	Manhattan	In 1847 or 1848, Louis Vieux, a mixed-blood Potawatomi Indian, established a toll bridge at the crossing of the Red (or Little) Vermillion River. Vieux charged \$1.00 to cross the bridge and also sold hay and grain to the emigrants. Plentiful water, grass, and wood made the east bank of the Red Vermillion River a favorite camping spot. On May 22, 1846, Edwin Bryant camped on the east bank and forded the stream the following morning: "The ford of the small creek on which we encamped last night was difficult, owing to its steep banks and muddy channel. We were obliged to fell small trees and a large quantity of brush, and fill up the bed of the stream, before the wagons could pass over." In 1849, an epidemic of Asiatic cholera struck a large wagon train camped at the river and left 50 dead within a week. Survivors carefully buried the victims and marked each grave with a slab of limestone, upon which the name and date of burial was carved. One stone, protected by a fence, survives from the cholera victims' cemetery.	Listed	Public	Oregon, California (Independence Road)	The modern bridge intrudes on the historic scene. The fence around the remaining grave is also intrusive but discourages vandalism. Both the cemetery and the crossing site need interpretation.
19	Scott Spring	Pottawatomie	KS	Manhattan	At a favorite emigrant campground on Rock Creek, Scott Spring was noted for its delicious cold water. The spring is at the base of a rocky ridge, and an emigrant grave can be found a few yards north. Edwin Bryant's party stopped to refresh themselves on May 24, 1846: "We found here, gushing from a ledge of limestone rock, a spring of excellent water, from which we refreshed ourselves in draughts that would be astonishing to the most fanatical cold water advocate." Adjacent Oregon Trail Park was a cooperative pride project to commemorate the 150 th anniversary of the Oregon Trail that involved four historical societies. The site contains a covered-wagon and ox-team sculpture, historic signs, and Burr Oak trees (planted in all seven states that the Oregon Trail crossed).	Not listed	Public	Oregon, California (Independence Road)	None known.
20	Coon Creek/Marshall Grave	Pottawatomie	KS	Manhattan	The Oregon-California Trail crossed Coon Creek on a solid rock ford, passing a clear spring and campsite. S.M. Marshall's grave is on the high promontory to the west. Two swales, fifteen feet deep, are north of the spring. Climbing the hill, the trail is seven swales wide. Marshall's grave is marked with an iron fence erected by the Rock Creek Historical Society.	Not listed	Private	Oregon, California (Independence Road)	None known.
21	Black Vermillion Crossing	Marshall	KS	Blue Rapids	The Black (or Big) Vermillion River was a considerable obstacle for overland emigrants—its steep banks requiring heavy spading and rope work. On May 25, 1846, Edwin Bryant's company spent several hours getting their wagons across the river: "The Vermilion is the largest water-course we have crossed since leaving the Kansas. Its current is more rapid than has been usually exhibited by the streams of these prairies, and would afford very good water-power. The timber at this point on its banks, is about a quarter of a mile in width, and consists chiefly of oak and elm."	Not listed	Private	Oregon, California (Independence Road)	None known. Although the site is now inundated by Tuttle Creek Lake and there are no extant resources, a marker commemorates the site on a nearby roadway. It has been there for 70 years, indicating the crossing was "70 rods north and 38 rods west" of the marker.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	TRAIL	THREATS TO RESOURCES/ VISITOR SERVICES
22	Alcove Spring	Marshall	KS	Blue Rapids	This picturesque area was a favorite campsite near the Independence Crossing of the Big Blue River. The spring originates in an unusual rock formation and falls over a rock ledge into a pool below. Emigrants carved their names in the rocks surrounding the spring, and many of these carvings are still visible. Edwin Bryant, traveling with the ill-fated Donner-Reed Party, wrote a detailed description of the spring on May 27, 1846: "We found a large spring of water, as cold and pure as if it had just been melted from ice. It gushed from a ledge of rocks, which composes the bank of the stream, and falling some ten feet, its waters are received into a basin. . . . A shelving rock projects over this basin, from which falls a beautiful cascade of water, some ten or twelve feet. The whole is buried in a variety of shrubbery of the richest verdure. . . . Altogether it is one of the most romantic spots I ever saw. . . . We named this the 'Alcove Spring,' and future travelers will find the name graven on the rocks, and on the trunks of the trees surrounding it." Sarah Keys, Margaret Reed's mother, died here while the party was waiting for the river to fall enough to cross. She was buried somewhere in the area.	Listed	Private (Alcove Spring Historical Trust)	Oregon, California (Independence Road)	Vandalism and vegetation overgrowth threaten the site. A monument to Sarah Keys is next to the parking lot.
23	Pony Express Stable (Pike's Peak Stable)	Buchanan	MO	St. Joseph	The original building, known as the Pike's Peak Stable, was built in 1858 to accommodate horses used by the local freight and stagecoach company. In 1860, the Central Overland California and Pike's Peak Express Company purchased the building for the Pony Express, to serve the same purpose. On April 3, William (Billie) Richardson left this stable, rode the short distance to the Patee House, picked up the waiting mochilla, and headed west on the first Pony Express run to Sacramento, California, nearly 2,000 miles away. The original wooden structure was replaced by a brick building in 1888, but some of the original posts and beams were reused. In 1950, the Goetz Foundation restored the building to its 1888 brick appearance and established a museum dedicated to the Pony Express.	Listed	Private (Pony Express, Inc.)	Pony Express	None known. The stable now houses an excellent museum—the Pony Express National Memorial.
24	Patee House (Eastern Terminus)	Buchanan	MO	St. Joseph	The 140 room Patee House, built by John Patee in 1858, was recognized at that time as the most luxurious hotel west of the Mississippi River. In 1860, Russell, Majors, & Waddell established the St. Joseph offices of the Central Overland California and Pikes Peak Express Company on the first floor of the hotel. Here, on April 3, 1860, Mayor M. Jeff Thompson gave a rousing address to the excited crowd before the first pony-rider headed west: "This is a great day in the history of St. Joseph. For more than a decade she has been the portal through which passed the wagon trains for the great west . . . Now she is to become the connecting link between the extremes of the continents. For the first time in the history of America, mail will go by an overland route from east to west. . . . Citizens of St. Joseph, I bid you three cheers for the Pony Express!" The original four-story brick structure, now 140 years old, still stands at the corner of 12 th and Penn Streets.	National Historic Landmark	Private	Pony Express	None known. The Patee House is presently a museum of communications and transportation, which includes the restored Pony Express office.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	TRAIL	THREATS TO RESOURCES/ VISITOR SERVICES
25	St. Joseph Riverfront Ferry Landing	Buchanan	MO	St. Joseph	Once emigrants reached St. Joseph, they had to cross the Missouri River. In 1852, the ferry cost \$5.00 a person and 50 cents per head of livestock. On May 7, 1849, J. Goldsborough Bruff described the waterfront scene while waiting his own turn to cross: "As far as we could see . . . the country was speckled with the white tents and wagon-covers of the emigrants. There were but two very indifferent scows at the ferry, and these were being plied from earliest day till midnight, every day; had been so for weeks, and from the mass here, would continue for several weeks more. From the principle street . . . to the river bank was one dense mass of wagons, oxen, and people, and as soon as a wagon entered the scow, the next moved down to the water's edge, and the mass in the rear closed up to the front, affording the opportunity to one or more lucky wagons to fall in the extreme rear." The historic landing itself has been obliterated by Missouri River flooding and the presence of a double-deck highway, but the city has created a small park at the foot of Francis Street, with a monument to the Oregon-California Trail and the Pony Express. The city has been restoring this block and would like to do some interpretation.	Not ed	Public (St. Joseph Parks and Recreation Department)	California (St. Joe Road), Pony Express	Urban development and a gambling casino moored on the left bank of the Missouri River intrude on the historic scene. Additional interpretation should be developed.
26	Swale Leading to Wolf River Crossing	Doniphan	KS	Atchison	At the Wolf River, emigrants often met Indians who requested payment as compensation for crossing Indian Lands. Some years Indians charged a toll for crossing a bridge or for their assistance in fording the river. James Hutching crossed the river on June 9, 1849: "We were soon met by 7 or 8 rather tall, well-built men, one of whom . . . understood enough English to ask for 50 cents toll, and since we were passing through their territory . . . we gave the sum asked. By signs, we requested these men to help us push our wagon to the opposite side of Wolf Creek. The chief consented and the whole number put their shoulders to the back of the wagon . . . but the load was too heavy . . . and we had to unload and carry the whole of the provisions on our backs up the steep bank." Today a wagon swale can be seen crossing the crest of the hill where the trail drops down into the Wolf River Valley.	Not listed	Private	California (St. Joe Road)	The site needs to be interpreted.
27	Iowa, Sac, and Fox Presbyterian Mission	Doniphan	KS	Atchison	The St. Joe Road came out of the Wolf River Valley and swung northwest following the ridges for about 1.5 miles, heading toward the Iowa, Sac, and Fox Presbyterian Mission. The mission was located near the Great Nemaha Sub-agent's Headquarters, at the junction of the main route of the St. Joe Road and the feeder trail from Iowa Point. The mission building, constructed in 1846, and the missionary site were almost universally described in emigrant diaries. In 1852, John Clark wrote, "Here we find a Smith to mend our broken waggon, also we see here a large farm under excellent cultivation with store & schoolhouse where they teach the young Indians & learn the old ones how to raise corn. This is a beautiful spot indeed; land rich & rolling, scattered trees, & small groves in the distance." A 30-yard trail swale east of the mission building is a remnant of the road to Iowa Point.	Listed	Public (Kansas State Historical Society)	California (St. Joe Road)	None known. The mission now houses the Native American Heritage Museum, operated by the Kansas State Historical Society.
28	Nemaha River Crossing	Nemaha	KS	Blue Rapids	The South Fork of the Big Nemaha River was one of three major river crossings on the St. Joe Road branch of the California Trail in present-day Kansas. (The first was the Wolf, the second the Nemaha, and the third the Big Blue). Fording the Nemaha was fairly easy because a limestone deposit extended across the river from bank to bank. This ledge is still visible today. On May 15, 1849, James Tate described the crossing: "Camped on the Nemahaw river about Fifty feet wide gravelly bottom and very high banks and a very beautiful ledge of lime stone rocks all along the east bank, skirted with a narrow strip of timber principally post oak, low and scrubby."	Not listed	Private	California (St. Joe Road)	None known.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	TRAIL	THREATS TO RESOURCES/ VISITOR SERVICES
29	Clear Creek Swale	Nemaha	KS	Blue Rapids	The swale is on the west side of the crest of the hill where the trail came down into Clear Creek Valley. Today, trees have grown in the swale. The fertile mid-western soil makes it possible for trees to grow in an area formerly crossed by a trail if that trail has not been used for many years. On May 12, 1853, Dr. R. J. Bradway found this "road very good but very crooked."	Not listed	Private	California (St. Joe Road)	None known.
30	Guittard's Station Swales	Marshall	KS	Blue Rapids	This site contains one of the few swales of the Pony Express left in Kansas. The Guittard family arrived in Kansas in 1857, establishing their ranch on Vermillion Creek as the earliest permanent settlement in that part of Marshall County, Kansas. George's son, Xavier Guittard, managed the station, which served as a home station for the Pony Express as well as a stage stop. On August 8, 1860, Richard Burton described Guittard's Station as "a clump of board houses on the far side of a shady, well-wooded creek. . . The house and kitchen were clean, the fences neat; the ham and eggs, the hot rolls and coffee, were fresh and good, and, although drought had killed the salad, we had [an] abundance of peaches and cream."	Not listed	Private	Pony Express	None known. A stone marker was placed near the site in June 1931 by the Oregon Trail Memorial Association.
31	Marysville Pony Express Barn	Marshall	KS	Blue Rapids	In 1859, Joseph H. Cottrell and Hank Williams built a stone barn in Marysville, Kansas. In 1860, they contracted with Russell, Majors, & Waddell to lease the barn as a livery stable for the Pony Express. The north end of the structure served as a blacksmith shop and stalls were on the other side. This stable now serves as a museum. The Pony Express station was located in the Barrett Hotel, on the corner of Eighth Street and Broadway about one block north of the stable.	Listed	Private	Pony Express	None known. The barn is now operated as a museum and is open to the public.
32	Marshall Ferry on the Big Blue River	Marshall	KS	Blue Rapids	Francis Marshall established the first ferry on the west edge of Marysville, Kansas, in 1852. This was the third major river crossing on the St. Joe Road in Kansas. Richard Burton described the Big Blue River as "a pretty little stream, brisk and clear as crystal, about forty or fifty yards wide." On May 16, 1852, John Hawkins Clark described the business he encountered at this crossing, "On the east bank of this river is located a private postoffice, a dramshop, hotel and a ferry, the business all under one roof. If we mail a letter we pay \$1; if we take a dram of good whisky, seventy-five cents; a square meal, \$1.50; if it is a wagon we want carried over the river, \$4, and no grumbling. The proprietor is doing a rushing business. During our stay of two and a half hours he crossed forty wagons."	Not listed	Private	California (St. Joe Road), Pony Express	None known. Interpretive panels and a reconstructed ferry can be found in a roadside park on U.S. Highway 36. A large, round, stone monument marks the ferry site next to the Shibley House. (Shibley was the second ferry operator.)
33	Junction of the St. Joe and Independence Roads	Washington	KS	Blue Rapids	The St. Joe and Independence roads joined on this prairie west of Marysville, Kansas. By traveling two days farther up the Missouri River from Independence and starting their overland journey from St. Joe, emigrants were able to save two weeks of travel time. Where these two main feeder routes met, emigrants commonly reported a maze of wagons, animals, and humanity that stretched to the horizon. In 1849, it seemed to William Johnson that there was "an unending stream of emigrant trains, while in the still farther distance . . . could be seen great clouds of dust, indicating that yet others of these immense caravans were on the move. It was a sight which once seen can never be forgotten; it seemed as if the whole family of man had set its face westward." Today, the junction is in an area of isolated farmland that has been plowed for decades. No traces of either trail remain.	Not listed	Private	Oregon, California (St. Joe and Independence Roads), Pony Express	None known. There are two commemorative Oregon Trail monuments in the vicinity.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	TRAIL	THREATS TO RESOURCES/ VISITOR SERVICES
34	Hollenberg Station	Washington	KS	Blue Rapids	The Hollenberg ranch house was built on Cottonwood Creek about 1857 by Gerat H. Hollenberg to capitalize on the Oregon-California emigrant trade that passed his door. In addition to living quarters for the Hollenberg family, the building served as a neighborhood grocery store, a tavern, and an unofficial post-office. Emigrants were able to obtain provisions at the ranch. Three years later, it became a Pony Express home station and later a stage station. Dr. C.M. Clark reached Cottonwood Creek in 1860 and found "a small stream which is dry during the summer months. The approach to it is winding and steep, and as the bed of the stream contains several large stones at the ford, some care is necessary in driving. There are two good springs here, but no wood. The Stage Company have a station here, and there is also one or two other buildings." The original building still stands and houses a museum. It is a rare example of a Pony Express station that still stands unaltered in its original location.	National Historic Landmark	Public (Kansas State Historical Society)	Oregon, California, Pony Express	The site is well-protected and the restored station is a museum. Several historical markers and monuments stand on the grounds. There is a new visitor center with interpretive exhibits near the historic building.
35	Rock Creek Station	Jefferson	NE	Fairbury	This site on the Oregon-California Trail was a supply point for later emigrants, a stagecoach station, and a Pony Express station. About 1,600 feet of trail ruts are still visible.	Listed	Public (Nebraska Game and Parks Commission)	Oregon, California, Pony Express	None known. The site is well run as a Nebraska State Park. It has a new visitor center with excellent displays.
36	George Winslow Grave	Jefferson	NE	Fairbury	George Winslow, a 25-year-old machinist from Newton Upper Falls, Massachusetts, died June 8, 1849, from the complications of cholera while traveling to the California Gold Fields. Winslow's sons found the original gravestone and embedded it in a newer stone monument. A short stretch of Oregon-California Trail ruts can be seen nearby.	Listed	Private	California	None known. The site is marked with a stone monument and an Oregon-California Trails Association marker.
37	The Narrows	Nuckolls	NE	Fairbury	The trail was confined at the Narrows between the Little Blue River and the bluffs, making travelers vulnerable to Indian attacks. A small monument on the bluff above the Little Blue River and an Oregon-California Trails Association wayside exhibit on the county road near the entrance to the site interpret the story of the 1864 Indian attacks and their effects on the territory.	Listed	Private	Oregon, California, Pony Express	Nuckolls County officials and the Nebraska chapter of the Oregon-California Trails Association could negotiate an agreement with the owner to allow visitors to hike to the bluffs above the river.
38	Ayr Ruts	Adams	NE	Red Cloud	Approximately three miles northeast of the present-day town of Ayr, Nebraska, is a 300-yard stretch of clearly defined Oregon-California Trail ruts. The ruts are adjacent to the grave of eight members of the Simonton-Smith wagon train, en route from St. Joseph to Denver with a consignment of hardware, which was attacked by Cheyenne Indians in August 1864.	Not listed	Private	Oregon, California	None known.
39	Thirty-two Mile Station	Adams	NE	Grand Island	This way station served emigrants, stagecoaches, freight trains, and the Pony Express. It was named for its distance from Fort Kearny. The station, consisting of one long low building, was abandoned in August 1864, following several Indian attacks in that locality. Indians later burned it to the ground.	Listed	Private	Oregon, California, Pony Express	None known. The site needs improved interpretation.
40	Susan Hail Grave/Sand Hill Station	Adams	NE	Grand Island	This is the marked grave of a woman who died June 2, 1852—probably of cholera. The grave is protected by a pipe fence. The story is told that her grieving bridegroom walked back to St. Joseph, had a granite stone engraved, and brought it back to her grave in a wheelbarrow. The present stone is not the original. Pristine ruts near the grave run for a quarter mile through unbroken sod. Emigrants on the main Oregon-California Trail got their first view of the Platte River Valley from this site. The Sand Hill Pony Express Station was near the grave. The name refers to the difficult sandy road that sometimes called for double-teaming. Visible depressions can still be seen where the buildings once stood.	Listed	Private	Oregon, California, Pony Express	Interpretation and preservation of the site, surrounding swales, and viewshed are needed.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	TRAIL	THREATS TO RESOURCES/ VISITOR SERVICES
41	Nebraska City Complex	Otoe	NE	Nebraska City	The Nebraska City Ferry landing and Old Freighters Museum are located at this site. Old Fort Kearny was established on Table Creek in 1846 at the future site of Nebraska City (which was established in 1854). When the new Fort Kearny was begun in 1848 on the main Platte River trail in central Nebraska, old Fort Kearny was abandoned. Later, the city grew and became a significant jumping-off place for emigrants and freighters. In 1849, Elijah Preston Howell "crossed the Missouri River in a common flat-boat . . . at Old Fort Kearney, and struck out into the Great plains."	Not listed	Public	California (Oxbow Trail, Nebraska City Cutoff)	None known.
42	Military Road Ruts	Douglas	NE	Omaha	This 100-foot section of ruts is one of the very few remaining in the Omaha area. The Mormon Pioneer Company passed this way in 1847 and the route was subsequently used by California gold seekers on the Council Bluffs Road.	Not listed	Public	California (Council Bluffs Road), Mormon Pioneer	Urban development is a threat to the site.
43	Crossing of the Elkhorn River	Douglas	NE	Fremont	This was the first major river crossing on the Council Bluffs Road west of the Missouri River. Described as a "wide and rambunctious stream" the river could not generally be forded in the spring, but wagons could be floated across or ferried on rafts. The crossing was located just south of where Nebraska Highway 36 crosses the Elkhorn River. This crossing was heavily used by those who traveled west along the north side of the Platte River.	Not listed	Private	California (Council Bluffs Road), Mormon Pioneer	None known. A wayside exhibit is planned.
44	Lower Loup River Ford	Nance	NE	David City	Emigrants traveling along the north side of the Loup River often crossed here and proceeded west along the south bank. There was another ford 17 miles farther up the river, where both routes turned south and headed back toward the Platte River. Creeks and marshy ground between the two rivers prevented emigrants from turning south before reaching the second ford.	Not listed	Private	California (Council Bluffs Road-Loup River Route), Mormon Pioneer	None known.
45	Lone Tree Site	Merrick	NE	St. Paul	A giant cottonwood tree once stood two miles south of present-day Central City, Nebraska. Being the only big tree on the level prairie, it could be seen for many miles and served as a landmark for travelers on the north side of the Platte River. The tree finally died, as hundreds of passing travelers stopped to carve their initials or names on its massive trunk. It was finally destroyed during a storm in 1865. A concrete replica, erected in 1911, marks the approximate site.	Not listed	Private	California (Council Bluffs Road-Platte River Route)	None known.
46	Murdock Site	Hall	NE	Grand Island	The trail crossed this 2.4-acre site on the south side of the Wood River in a northeast-to-southwesterly direction. During the 1860s, a sawmill and dwelling, referred to as the Murdock Homestead, were located here.	Not listed	Private (Hall County Historical Society)	California (Council Bluffs Road), Mormon Pioneer	None known. A wayside exhibit is being planned.
47	Fort Kearny	Kearney	NE	Kearney	Fort Kearny was established by the U.S. Army in 1848 to protect travelers going west from Indian attacks. This military post was strategically located at a junction where various eastern feeder trails merged, forming one broad trail. The Pony Express station, 0.5 mile northwest of the military post, was in use from April 1860 until November 1861. Fort Kearney was the telegraph terminus from the beginning of November 1860 until July 1861, when the line was built farther west toward Salt Lake City. This allowed riders to carry west the very latest news from the east coast. Although none of the original buildings have survived, the Nebraska Game and Parks Commission has reconstructed two of the fort buildings.	Listed	Public (Nebraska Game and Parks Commission)	Oregon, California, Pony Express	The Nebraska Game and Parks Commission needs to increase interpretation of historic trails at this site.
48	Plum Creek	Phelps	NE	Kearney	Although no plums grew here, Plum Creek was noted as a good campsite for overland emigrants. In later years, a Pony Express station and an Overland Stage station were located near the creek. On August 7, 1864, Cheyenne Indians attacked the station and a wagon train camped nearby, killing 11 men from the train and three occupants of the station. The victims are now commemorated in the Plum Creek cemetery.	Not listed	Public	Oregon, California, Pony Express	None known.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	TRAIL	THREATS TO RESOURCES/ VISITOR SERVICES
49	Dan Smith's West Ranch	Dawson	NE	Gothenberg	This was one of a series of road ranches that sprang up along the Oregon-California Trail in the late 1850s to cater to the ever-increasing number of emigrant trains passing through Nebraska.	Not listed	Private	Oregon, California	None known.
50	Fort McPherson	Lincoln	NE	North Platte	Fort McPherson was established in September 1863, when the Army foresaw the need for an intermediate military post between Forts Kearny and Laramie. The fort protected emigrants, stagecoaches, freighters, and railroad workers who traveled the "Great Platte River Road" from the threat of attack by Plains Indians. The fort became a camping and refitting spot for emigrants and was an important military post during the Indian Wars.	Listed	Public (Veterans Administration)	California	None known.
51	O'Fallon's Bluff	Lincoln	NE	Ogallala	Oregon-California Trail ruts can be found near this natural landmark on I-80. Here a series of high, sandy bluffs crowded the south bank of the Platte River, forcing emigrants to make a wearisome three-mile detour up and over the rolling, sandy hills. A Pony Express station was also located near the bluffs.	Listed	Public (Nebraska Department of Roads)	Oregon, California, Pony Express	Signs are needed on I-80 to direct visitors to the area.
52	Sand Hill Ruts	Lincoln	NE	Ogallala	This is one of the few points where emigrants had to leave the north side of the North Platte River and go across the hills. There are excellent swales still visible in the sand hills.	Not listed	Private	California (Council Bluffs Road), Mormon Pioneer	None known.
53	California Hill/Upper Crossing of the South Platte River (later known as Old California Crossing or Lower California Crossing)	Keith	NE	Ogallala	Crossing the South Platte River allowed emigrants to reach the North Platte River and follow it toward South Pass. Several crossing sites were used, but the Upper Crossing was the most important because it led directly into Ash Hollow, the best approach to the North Platte. California Hill, encountered immediately after crossing the South Platte, was the first major grade faced by the emigrants. Imposing trail ruts are visible at this site.	Listed	Private (Oregon-California Trails Association)	Oregon, California	Improved access and interpretation are needed.
54	Ash Hollow Complex/Windlass Hill	Garden	NE	Chappell	Ash Hollow is a natural landmark that served as the gateway to the North Platte Valley. Windlass Hill was a difficult descent, which left five scars of trail ruts down its side. The source of the name is unknown. Emigrants never referred to it as Windlass Hill. The complex includes Ash Hollow Spring, Rachel Pattison's grave, Windlass Hill, an emigrant campsite, and good drinking water. An often-mentioned grave at the north end of Ash Hollow in a small cemetery contains the remains of other emigrants.	Listed	Public (Nebraska Game and Parks Commission)	Oregon, California, Mormon Pioneer	None known. A visitor center with interpretive exhibits is operated at Ash Hollow State Historical Park. There are also interpretive waysides at Windlass Hill.
55	Ancient Bluff Ruins	Morrill	NE	Crescent Lake	This frequently mentioned landmark is the most dramatic and extensive bluff formation along the north side of the North Platte River. These three erosional remnant buttes were named by English Mormons who thought they resembled castles in their homeland. Emigrants often explored and climbed on the bluffs. Trail ruts are found nearby.	Not listed	Private	California (Council Bluffs Road), Mormon Pioneer	The site needs interpretation and adequate access.
56	Amanda Lamin Grave	Morrill	NE	Crescent Lake	Amanda Lamin was a 28-year-old emigrant, born in Devonshire, England, who died of cholera in 1850. The gravesite stands on the top of a small knoll, in the middle of private pastureland, overlooking the North Platte River. One mile east is an excellent set of Oregon-California Trail ruts.	Listed	Private	Oregon, California	None known. The site needs additional interpretation. On nearby Nebraska Highway 92 there is a large Nebraska State Historical Society marker.
57	Courthouse Rock/Jail Rock	Morrill	NE	Scottsbluff	Courthouse Rock was first noted by Robert Stuart in 1812 and quickly became one of the guiding landmarks for fur traders and emigrants. It is a massive monolith of Brule clay and Gering sandstone south of the trail, which was variously likened to a courthouse or a castle. A smaller feature just to the east was called the Jail House or Jail Rock. Courthouse Rock was the first of several impressive natural landmarks along the trail in western Nebraska.	Listed (Courthouse Rock)	Public (City of Bridgeport, Nebraska State Historical Society)	Oregon, California, Mormon Pioneer, Pony Express	Dirt bikes, vandalism, and all-terrain vehicles pose threats to resources at this site. Interpretation is needed.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	TRAIL	THREATS TO RESOURCES/ VISITOR SERVICES
58	Chimney Rock	Morrill	NE	Scottsbluff	This prominent column of clay and sandstone, resembling a tall factory chimney, was mentioned in more diaries than any other landmark on the Oregon-California Trail. Visible for miles, Chimney Rock was more than a wonder of nature. As a milepost on a journey noted so far for its monotony, the column was a significant landmark in measuring the emigrants' progress west.	Listed	Public (Nebraska State Historical Society)	Oregon, California, Mormon Pioneer, Pony Express	None known but ongoing erosion. A new visitor center contains excellent interpretive exhibits.
59	Scotts Bluff National Monument/Mitchell Pass	Scotts Bluff	NE	Scottsbluff	Scotts Bluff was the first of many imposing barriers that travelers encountered as they made their way west. It was also the last famous landmark along the Great Platte River Road in Nebraska. Early travelers were forced to swing south away from the river and go through Robidoux Pass, a natural gateway in the great bluffs. In 1850, a shorter route was opened through Mitchell Pass, which stayed closer to the river and eliminated the eight-mile swing through Robidoux Pass. A Pony Express relay station was located approximately three miles west of the gap and close to the river, near where Fort Mitchell once stood.	National Historic Landmark/ National Natural Landmark	Public (NPS)	Oregon, California, Mormon Pioneer, Pony Express	Visual intrusions and potential urban sprawl from Gering and Scottsbluff encroach on the site.
60	Robidoux Pass	Scotts Bluff	NE	Scottsbluff	The pass forms a broad U-shaped opening in the semicircular line of bluffs composing the Wildcat Hills. The climb to its summit was mitigated by fresh spring water and wood, two commodities that were quite scarce along the Platte River. The pass takes its name from Antoine Robidoux, an early trader whose family established a trading post and a blacksmith shop here in 1848. At that time, Robidoux's post was the first habitation encountered west of Fort Kearny on the Oregon-California Trail.	National Historic Landmark	Private	Oregon, California	Threats have been made by a landowner to turn under the ruts.
61	Horse Creek Treaty Grounds	Scotts Bluff	NE	Scottsbluff	This is the site of the signing of the first Fort Laramie Treaty in 1851. The assembly of some 10,000 Plains Indians was the largest in history. The Federal government made the treaty to protect the traffic along the Oregon-California Trail, as the Indians became increasingly resentful of the growing numbers of emigrants. The document established tribal grounds and the right of emigrant travel along the trails.	Not listed	Private	Oregon, California	None known.
62	Fort Laramie	Goshen	WY	Torrington	Fort Laramie traces its origin to Fort William, a fur-trading post constructed on the Laramie River in 1834. For the next 15 years, it served as an important outfitting and resupply point for fur trappers, emigrants, and military expeditions. Acquired by the U.S. Army in 1849, it became one of the most important military posts in the trans-Mississippi West. It continued to serve as a stop for overland emigrants and also as a station for the Pony Express. Important diplomatic negotiations with the tribes of the northern plains were held here. Fort Laramie was a key installation during the Indian conflicts of 1850-1890. The Bedlam Ruts (administered by BLM) are nearby.	National Historic Landmark	Public (NPS)	Oregon, California, Mormon Pioneer, Pony Express	None known. Fort Lamamie National Historic Site maintains a visitor center/museum with interpretive exhibits and several restored buildings from the military era.
63	Mexican Hill	Platte	WY	Torrington	At Mexican Hill the trail made a steep and dramatic cut through the river bluffs from the benchland to the floodplain of the North Platte River. Where the Bluff and River routes intersected, ruts lead up to the hill from 0.75 mile to the east. They are some of the most-memorable swales anywhere on the trails. The origin of the name is obscure.	Not listed	Private	Oregon, California, Mormon Pioneer	The site has been impacted by erosion and unauthorized vehicle use.
64	Register Cliff	Platte	WY	Torrington	Among the most famous of the surviving emigrant registers, thousands of names were inscribed on this mile-long prominent sandstone cliff on the south side of the North Platte River. Cliffs to the east and west also contain hundreds of well-preserved emigrant inscriptions.	Listed	Public (State of Wyoming)	Oregon, California, Mormon Pioneer	Natural deterioration, housing development, vandalism, and National Guard activities to the west all impact the site. The state of Wyoming needs to update the interpretive materials.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	TRAIL	THREATS TO RESOURCES/ VISITOR SERVICES
65	Guernsey Ruts (Deep Rut Hill)	Platte	WY	Torrington	At this site, where the trail was forced away from the river and crossed a ridge of soft sandstone, the track is worn to a depth of five feet, creating some of the most-spectacular ruts remaining along the entire length of the Oregon-California Trail. The geography of the area dictated that practically every wagon that went west crossed the ridge in exactly the same place, with impressive results.	National Historic Landmark	Public (State of Wyoming)	Oregon, California, Mormon Pioneer, Pony Express	This site needs better marking and interpretation. Visitor use should be channeled to protect the ruts and surrounding terrain from the effects of indiscriminate wandering. National Guard activities in the area have caused major visual intrusions.
66	Warm Springs Canyon	Platte	WY	Torrington	These two free-flowing springs, one gushing from a ledge of rock and the other bubbling up in a large pool, were only slightly warm. Often called the "emigrants' wash tub," this was a particularly popular camping place, available to travelers on both the Black Hills Road and the River Route. Pursey Graves, who camped nearby on June 24, 1850, wrote, "After I finished my letter to send back to the Ft. I proceeded to the spring a distance of 1_ miles with my bucket of dirty clothes." The spring still flows strongly and the site is in nearly pristine condition.	Not listed	Private	Oregon, California, Mormon Pioneer	National Guard activities threaten the canyon. The site has been marked by the Oregon-California Trails Association.
67	Laramie Peak	Albany	WY	Laramie Peak	This famous 10,272 foot landmark in the Black Hills (named for the dark appearance of its tree-covered slopes) guided emigrants' travel for many days. First sighted when descending from Robidoux or Mitchell passes, this mountain was constantly in view for almost 100 miles. It must have seemed that the peak would never be passed.	Not listed	Public (USFS-Medicine Bow National Forest)	Oregon, California, Mormon Pioneer, Pony Express	None known.
68	Ayres Natural Bridge	Converse	WY	Douglas	This natural feature was often mentioned in emigrant diaries, and spring-fed La Prele Creek was used as a campsite. The natural bridge is in a beautiful red-rock canyon, which offered good water and plentiful forage for animals.	Not listed	Public (Wyoming State Parks and Historic Sites)	Oregon, California, Mormon Pioneer	The site shows signs of overuse. Improved interpretation is needed.
69	Unthank Grave	Converse	WY	Douglas	Nineteen-year-old Alvah Unthank was one of a group of young men who left Wayne County, Indiana, for the gold fields of California in 1850. On June 23, he cut his name in the soft sandstone of Register Cliff. That inscription can still be seen, along with the names of two of his relatives. Five days later, the party camped on the banks of the North Platte River (five miles southeast of present-day Glenrock, Wyoming) where Alva died of cholera on July 2, 1850.	Not listed	Private	California	Public access is not permitted.
70	Reshaw Bridge (Richard's Second Bridge)	Natrona	WY	Casper	Constructed in 1852-53 by mountain man and Indian trader John Richard, this bridge replaced Richard's First Bridge near Deer Creek. Located six to seven miles below Fort Caspar, the bridge cost about \$15,000 to build and competed with the 1849 Mormon Ferry. Many 1853 diaries mentioned the ferry and the \$5.00-per-wagon toll charged during high-water. Richard's name was pronounced "Reshaw" and he was identified as a "Canadian Frenchman," but J. R. Brown reported in 1856 that Richard and his brother were from Florissant, Missouri, and had gambled away the \$400,000 he claimed they made at the bridge. It served as the primary crossing of the North Platte River until Guinard's Bridge was built near Fort Caspar in 1859.	Not listed	Public (City of Evansville, State of Wyoming)	California	The site could use more interpretation. In 1996, the replica bridge had begun to deteriorate, and its status is not clear at this time.
71	Mormon Ferry (1849)	Natrona	WY	Casper	Mormons operated a ferry at this North Platte River crossing in 1847 and 1848, but it is best-remembered for its service in the gold rush. Mormons ran three boats alongside an operation called the "Missouri Ferry." They told M. B. Moorman on June 19, 1849, that each day they crossed 300 wagons at \$5.00 each using "decidedly the best boats I ever saw." Bill Hickman ran a similar operation here in 1850. At the Casper-area ferries, emigrants finally left the Platte River system, which they had followed from Fort Kearny, Nebraska, over 440 miles to the east.	Not listed	Public (City of Casper)	Oregon, California	None known. The ferry is located on the grounds of the North Casper ball fields. An interpretive sign is placed near the entrance and the concessions stand.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	TRAIL	THREATS TO RESOURCES/ VISITOR SERVICES
72	Fort Caspar	Natrona	WY	Casper	Established in 1858 near the point where the Mormon Pioneer Company crossed the North Platte River in 1847, Mormon Ferry Post was renamed in honor of Lieutenant Caspar Collins after his death in battle at Red Buttes in 1865. The fort protected emigrant trails, the Overland Stage, the transcontinental telegraph line, and served as a Pony Express station. Abandoned in 1867, Indians quickly burned the post, but an excellent reconstruction marks the site.	Listed	Public (City of Casper)	California, Pony Express	None known. Fort Caspar has a museum/visitor center with interpretive exhibits.
73	Upper Platte Ferry and Ford (1847)	Natrona	WY	Casper	In 1847, the Mormon pioneers used timber from the nearby mountains to build a ferry across the North Platte River. Brigham Young left nine men behind to trade ferry services for money and provisions. Consisting of two 30-foot dugout canoes with a plank bed, this ferry was soon moved downstream to respond to competition. The Pony Express later crossed the river here on Guinard's Bridge, which was built in 1859.	Not listed	Public (City of Casper)	California, Mormon Pioneer, Pony Express	None known. Nearby Fort Caspar has a replica of the raft.
74	Bessemer Bend/Red Buttes Crossing	Natrona	WY	Casper	The last place to cross the North Platte River, Bessemer Bend was the preferred crossing prior to the establishment of the Mormon Ferry in 1847, after which its use declined. The Red Buttes, a physical feature to the north of the river, made the crossing a minor landmark. The Pony Express crossed the North Platte River on Guinard's Bridge at Fort Caspar, but the route stayed close to the north bank of the river until reaching Red Buttes Crossing, where a Pony Express station was located.	Not listed	Public (BLM)	California, Mormon Pioneer, Pony Express	The site is adequately protected and well interpreted by the BLM.
75	Emigrant Gap	Natrona	WY	Casper	Most emigrants who crossed the North Platte River on the ferries and bridges below Fort Caspar passed through Emigrant Gap, a shallow pass through a ridge west of present-day Casper, Wyoming. From this point, travelers were afforded a sweeping view to the west, the scene of their next week's travel. Here they began their ascent into the Rocky Mountains, which gradually led up and over the Continental Divide at South Pass.	Not listed	Public (BLM)	Oregon, California	None known. A BLM interpretive marker is located here.
76	Avenue of Rocks	Natrona	WY	Casper	These natural rock formations jut out of the Wyoming rangeland, and the Oregon-California Trail was forced to wind through the rocks as it vaulted the rocky spine. At the end of Rock Avenue is the Devil's Backbone, described by British traveler Richard Burton in 1860 as a "jagged, broken ridge of huge sandstone boulders, tilted edgeways, and running in a line over the crest of a long roll of land . . . like the vertebrae of some great sea-serpent."	Not listed	Public (State of Wyoming)	Oregon, California, Mormon Pioneer, Pony Express	Vandalism and increasing erosion on country roads are the main threats. This site needs interpretation of the natural formation and the emigrant trails.
77	Willow Springs	Natrona	WY	Casper	Willow Springs provided the first safe water west of Casper. These free-flowing springs offered cool refreshing water and nearby forage for animals. The area quickly became a popular campsite. To the southwest, visible ruts ascend Prospect Hill. A Pony Express relay station, a small, rough building with no corral, was built at the site.	Not listed	Private	Oregon, California, Mormon Pioneer, Pony Express	Low-key and unobtrusive interpretive panels should be selectively placed to point out trail-related geographical features.
78	Prospect (Ryan) Hill	Natrona	WY	Casper	Just west of Willow Springs is a low ridge called Prospect Hill, where emigrants gained their first sight of the Sweetwater Mountains to the west. The 400-foot climb was very hard on draft animals. It was reportedly named because emigrants could see the gentle valley of the Sweetwater River from the top of the hill, giving them a view—or prospect—of an easier road ahead. Prospect Hill has clearly visible ruts on its eastern slope. The view from the top has changed little from the one seen by emigrants 150 years ago.	Not listed	Public (BLM)	Oregon, California, Mormon Pioneer, Pony Express	Mineral development may impact the site. Two BLM interpretive markers are located at the top of Prospect Hill.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	TRAIL	THREATS TO RESOURCES/ VISITOR SERVICES
79	Saleratus Lake	Natrona	WY	Rattlesnake Hills	This alkali deposit, or "pan," about a quarter-section in size, provided emigrants a soda compound used in baking. Sir Richard Burton passed the lake on August 17, 1860: "It [Saleratus Lake] lies to the west of the road, and is only one of a chain of alkaline waters and springs whose fetor, without exaggeration, taints the land. . . . The appearance of the Saleratus Lake startles the traveler. . . . On a near inspection, the icy surface turns out to be a dust of carbonate of soda, concealing beneath it masses of the same material, washed out of the adjacent soil, and solidified by evaporation. . . . It is still transported westward, and declared to be purer than the saleratus of the shops."	Not listed	Private	Oregon, California, Mormon Pioneer	An agreement to permit access should be negotiated with the private owner.
80	Independence Rock	Natrona	WY	Bairoil	Independence Rock was the most-noted landmark on the emigrant trails west of Fort Laramie. An oval outcrop of granite rock, it is 1,900 feet long, 700 feet wide, and rises 128 feet above the range. The rock derived its name from a party of fur trappers who camped there and celebrated Independence Day in their own style on July 4, 1830. Independence Rock was also widely used by emigrants as a place to inscribe their names and to leave messages for those coming behind.	National Historic Landmark	Public (State of Wyoming)	Oregon, California, Mormon Pioneer, Pony Express	The site shows signs of overuse. A complete inventory of inscriptions is needed. Lichen growth is encroaching on several panels. A highway rest area provides parking and interpretive wayside exhibits.
81	Devil's Gate	Natrona	WY	Bairoil	Devil's Gate is a narrow cleft carved by the Sweetwater River, 370 feet deep, 1,500 feet long, and only 50 feet wide in places. Devil's Gate is among the more interesting geographical landmarks along the emigrant trails. This natural feature became visible approximately 15 miles to the east. It was a rest stop and campground and is thought to have more than 20 graves in the immediate vicinity, although only one is marked. There are inscriptions on the rocks.	Listed	Public (BLM)	Oregon, California, Mormon Pioneer, Pony Express	The impacts of visitor use should be closely monitored. The BLM manages the Devil's Gate interpretive site.
82	Split Rock	Fremont	WY	Bairoil	This famous "gun sight" cleft in the mountains is another prominent geographical feature within the South Pass segment. It was noted in many diaries. The Split Rock Pony Express station site is on private land, two miles east of the existing ranch homestead, but no physical evidence of the station remains.	Not listed	Public (BLM)/ Private	Oregon, California, Mormon Pioneer, Pony Express	Access to the trail should be improved. Just east of Split Rock Station, the BLM has developed an attractive interpretive site that describes the area and its history.
83	Three Crossings/Deep Sand Route	Fremont	WY	Rattlesnake Hills	At this narrow canyon, emigrants had a choice. They could follow the Sweetwater River through the canyon, a trip that required three difficult river crossings within two miles, or they could travel via the "deep sand" route to the south of the Sweetwater River. Most emigrants followed the river route because pulling the wagon across the deep sand was exhausting. A Pony Express station and a military outpost station were located at the first (eastern most) of the three crossings.	Not listed	Public (BLM)/ Private	Oregon, California, Mormon Pioneer, Pony Express	A nearby uranium processing plant has been torn down, and a reclamation effort has been underway at the mill site for several years. The BLM would like to acquire the site but might not be able to do so if the area is contaminated.
84	Ice Slough	Fremont	WY	Lander	At this cold spring, emigrants occasionally found ice underneath the soil until late summer. The ice was insulated by four to six inches of water above the ice and by rich grassy sod that grew thick enough to bear a man's weight. Ice Slough became a major camping site for travelers, who enjoyed the cold refreshment after several days of dry and dusty terrain.	Not listed	Public (BLM)	Oregon, California, Mormon Pioneer	Hydric soils are susceptible to trampling damage by wild horses and the season-long livestock grazing that has occurred for over a century. This has caused a loss of the humus that provided the insulation that preserved the ice. Access to the site is across private land. There is a state historical marker nearby.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	TRAIL	THREATS TO RESOURCES/ VISITOR SERVICES
85	Rocky Ridge Station	Fremont	WY	South Pass	A Pony Express station and later military outpost were located here. The site was sometimes referred to as St. Marys Station. In 1860, Richard Burton described the site: "The station rather added to than took from our discomfort: it was a terrible unclean hole; milk was not procurable within thirty-five miles . . . there was no sugar, and the cooking was atrocious . . . not sorry when night came, but then the floor was knobby, the mosquitos seemed rather to enjoy the cold, and the bunks swarmed with 'chinchies'."	Not listed	Private	Pony Express	A cooperative agreement for access is needed with the private landowner.
86	Rocky Ridge	Fremont	WY	South Pass	Here the emigrants were forced up and away from the Sweetwater River to cross a high, barren, and rocky ridgeline. The crossing required much jarring travel over a rock-strewn landscape. There is no specific spot that can be labeled Rocky Ridge. The name refers to a geographic area spread over two square miles, where wind and erosion have kept soil from collecting and have laid bare a washboard of bedrock. Well-defined ruts still wander over the top of the ridge.	Not listed	Public (BLM)	Oregon, California, Mormon Pioneer, Pony Express	The site needs a cultural landscape report. The area has great visual integrity. Overuse may be a problem with increased visitation.
87	Burnt Ranch (Ninth Crossing of the Sweetwater River)	Fremont	WY	South Pass	Burnt Ranch, at the ninth and final crossing of the Sweetwater River, was one of the great hubs of emigrant trail activity. By 1862, this popular campsite had grown into such a key communications and transportation center that a detachment of the 11 th Ohio Volunteers was sent out to protect the mail and stage station and overland travelers from Indian attack. When the soldiers departed in 1868, Indians promptly burned the station to the ground; hence the name—Burnt Ranch.	Nominated	Private	Oregon, California, Pony Express	None known. An Oregon-California trail marker from 1913 still stands.
88	South Pass	Fremont	WY	South Pass	South Pass was perhaps the most important landmark along the emigrant trails. It marked the end of the long ascent to the Continental Divide and the emigrants' arrival at the frontier of the Oregon country. It was also thought to be the halfway point along the trail. South Pass dictated the location of the emigrant trail, for only via its gradual ascent was wagon travel over the Continental Divide practical for large-scale emigration. South Pass is the wide, flat summit of a long and gradually ascending plateau, with low ridges and hills on both sides and a wide sage and grass covered saddle between. Many emigrants commented that they scarcely noticed the ascent or the crossing.	National Historic Landmark	Public (BLM)	Oregon, California, Mormon Pioneer, Pony Express	In spite of an abandoned railroad grade, a diversion ditch, and an AT&T buried cable, this site should be protected from additional visual intrusions. Any pipeline crossing of this area might intrude on the extraordinary historic character of the site. Historic monuments are at the pass and a wayside exhibit is nearby.
89	Pacific Springs	Fremont	WY	South Pass	Pacific Springs was the first good water source after emigrants crossed South Pass and entered the Pacific watershed. The springs created an extensive marsh, which appeared as a green oasis in the dry landscape. Emigrants often camped at the site and many commented on the destination of its waters. In the 1860s, a Pony Express and stage station stood near the springs.	Not listed	Private	Oregon, California, Mormon Pioneer, Pony Express	Vandalism is a continuing problem. An impressive overlook/rest area on Wyoming Highway 28 contains several interpretive waysides about the South Pass/Pacific Springs area.
90	Dry Sandy Crossing	Sublette	WY	Farson	The Dry Sandy was the first water reached west of Pacific Springs. It was crossed below a broad basin that collected subsurface water. In dry seasons, water could be found here by digging in the streambed, but it was tainted with alkali. Many emigrants reported the loss of livestock. The river flowed more below the surface than above ground. Emigrants only stopped here when absolutely necessary. This site was later the location of a Pony Express and stage station. Evidence of "tanks" dug by emigrants to water their oxen can still be found in the area.	Not listed	Private	Oregon, California, Mormon Pioneer, Pony Express	None known.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	TRAIL	THREATS TO RESOURCES/ VISITOR SERVICES
91	Parting of the Ways	Sweetwater	WY	Farson	The Oregon Trail and the Sublette Cutoff separated at Parting of the Ways. In the midst of a wide-open expanse of land, both trails are plainly visible, and the eye can follow them for miles toward the horizon. At this point, emigrants had to make a hard decision. Should they save 46 miles by taking the Sublette Cutoff, which bypassed the southern loop to Fort Bridger but also demanded 50 miles of travel with no water? Decisions were based on the condition of the grass, animals, people, and supplies. In 1849, about one-third of the emigrants took the cutoff.	Listed	Public (BLM)	Oregon, California, Mormon Pioneer, Pony Express	Encroaching mineral exploration and development threaten the viewshed.
92	Little Sandy Crossing	Sweetwater	WY	Farson	Little Sandy Crossing, a popular campsite on the road to Fort Bridger, was the first good water west of Pacific Springs. Numerous emigrant graves are located in the area. A Pony Express relay station and stage station was established on the west bank of the stream about 1,500 feet from the crossing.	Not listed	Public (BLM)	Oregon, California, Mormon Pioneer, Pony Express	Visitors need to travel through a half mile of private property to access the site. There is a BLM marker east of the creek.
93	Big Sandy Crossing	Sweetwater	WY	Farson	Emigrants on the trail to Fort Bridger made the difficult crossing of the Big Sandy River here and followed its north bank to the Green River. There are excellent examples of pristine ruts nearby. A Pony Express and stage station was established near the crossing.	Not listed	Public (BLM)/ Private	Oregon, California, Mormon Pioneer, Pony Express	Currently there are few threats to the site because of limited access, but vehicle overuse could threaten nearby ruts, as well as damage the river crossing.
94	Lombard Ferry (Green River Mormon Ferry)	Sweetwater	WY	Rock Springs	Lombard Ferry, named after the trail era for its proximity to Lombard Buttes, was the main crossing of the Green River. During periods of low water, wagons could ford the river, but the shallow sand bar they used was only 10 feet wide. When the Mormon pioneers arrived on June 30, 1847, they built rafts and floated their wagons across the river. Later that year, they built ferryboats and provided a commercial ferry service, both to assist subsequent Mormon companies and as a commercial venture. The crossing is mentioned in many travelers' journals. George Shepard was held up here for two days on June 14-15, 1850. He found Green River "uncommon high at this time having risen 2 ft in two days it is about 9 ft deep in the deepest part there is a ferry here they only charge 5\$ a wagon and 1\$ a horse . . . not much prospect of crossing tomorrow there is so many before us [60 to 80 wagons]." On June 15, Shepard continued, "we continue here at green river lying over waiting for our turn to be ferried over we thought of trying it ourselves with our wagon boxes but the current [in] the river is so swift and stream so high that we did not hardly dare to do it."	Listed	Public (USFWS- Seedskaadee National Wildlife Refuge)	Oregon, California, Mormon Pioneer	Gas development and fossil collectors are threats. The site is interpreted.
95	Church Butte	Uinta	WY	Kemmerer	This large butte, with its temple-like shape, deeply eroded walls, and flattop mesa, is about 1,000 feet in diameter and rises 75 to 100 feet above the plain of the Blacks Fork Valley. Believed to have been first named by fur traders, it became one of the landmarks along the trail and excited the comment of many emigrants.	Not listed	Private	Oregon, California, Mormon Pioneer, Pony Express	Gas wells and mineral development negatively impact the historic viewshed. Vandalism and litter are also problems.
96	Name Rock	Uinta	WY	Evanston	Name Rock itself is unimposing, being but a short section of cliff about 400 feet long and 20 feet high. On the face of the cliff, which is protected from the weather by a natural overhang, several dozen emigrants wrote dates, their names, and places of origin, mostly with wagon tar. Most of the names and dates are still clearly visible.	Not listed	Private	Oregon, California	Vandalism is a big problem. The inscriptions need to be stabilized, protected, and interpreted.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	TRAIL	THREATS TO RESOURCES/ VISITOR SERVICES
97	Fort Bridger	Uinta	WY	Evanston	Jim Bridger established Fort Bridger in 1843 as a fur-trading post. It was composed of two double-log houses about 40 feet long that were joined by a pen for horses. To the emigrants, Fort Bridger offered the chance to obtain supplies, have essential blacksmith work done, and trade worn-out livestock for fresher animals. Here the main Oregon-California Trail turned north toward Fort Hall, and the Mormon Trail/Hastings Cutoff continued west to the Valley of the Great Salt Lake. The fort served as a Pony Express, Overland Stage, and transcontinental telegraph station in the 1860s and was garrisoned by the U.S. Army between 1857 and 1890.	Listed	Public (State of Wyoming)	Oregon, California, Mormon Pioneer, Pony Express	None known. The fort has a museum/visitor center and a reconstruction of Bridger's log trading post.
98	West End of the Sublette Cutoff	Lincoln	WY	Fontenelle Reservoir	Three miles south of present-day Cokeville, Wyoming, the main route of the Sublette Cutoff, which left the Oregon-California Trail at Parting of the Ways, rejoined the primary emigrant route. There is nothing on the ground to indicate the junction, for both trails have been erased by subsequent development.	Not listed	Private	Oregon, California (Sublette Cutoff)	None known.
99	Bear River Crossing	Uinta	WY	Evanston	This was the last major river crossing in Wyoming on the Hastings Cutoff/Mormon Pioneer/Pony Express route. William Clayton of the Mormon Pioneer Company found "a very rapid stream about six rods wide and two feet deep, bottom full of large cobbles, water clear, banks lined with willows and a little timber, good grass, many strawberry vines and the soil looks pretty good." It was also the location of the last Pony Express Station in Wyoming.	Not listed	Private	California (Hastings Cutoff), Mormon Pioneer, Pony Express	None known. There is a marker east of the river.
100	The Needles	Uinta	WY	Ogden	This prominent landmark rising abruptly near the Wyoming-Utah border is a formation of conglomerate rock that looks like cobblestones in hardened mud. A Mormon emigrant described it as "a mountain of pudding stone composed of gravel and rock so its spires were reaching up like the pyramids of Egypt." From here, emigrants got their first look at present-day Utah.	Not listed	Private	California (Hastings Cutoff), Mormon Pioneer, Pony Express	None known.
101	Big Mountain Pass	Morgan	UT	Salt Lake City	Following the route blazed in 1846 by the Donner-Reed Party, the trail climbed Little Emigration Canyon to Big Mountain Pass, the third-highest point on the entire trail thus far and an important and difficult crossing. From this vantage point, thousands of emigrants caught their first glimpse of the Valley of the Great Salt Lake. When Orson Pratt first saw this view on July 21, 1847, he recorded, "beholding in a moment such extensive scenery open before us, we could not refrain from a shout of joy which almost involuntarily escaped from our lips the moment this grand and lovely scenery was within our view."	Not listed	Public (Utah Department of Transportation highway right-of-way)	California (Hastings Cutoff), Mormon Pioneer, Pony Express	None known. There is an interpretive marker at the pass.
102	Little Mountain Summit	Salt Lake	UT	Salt Lake City	This was the last summit the emigrants crossed before entering the Valley of the Great Salt Lake. They hitched multiple teams together to pull the wagons straight up the slope. On the summit, they locked their wheels for brakes and slid down the other side into Emigration Canyon, which led directly, and finally, into the Valley of the Great Salt Lake.	Not listed	Public (Utah Department of Transportation highway right-of-way)	California (Hastings Cutoff), Mormon Pioneer, Pony Express	None known. There is an interpretive marker by the side of the road.
103	Indian Ford on the Jordan River	Utah	UT	Provo	This site on a bend in the Jordan River was originally a fishing location for American Indians. Later, this historic crossing was used by settlers, emigrants, and the Pony Express—even after a bridge was built farther south on the Lehi road.	Not listed	Private	Pony Express	This once-pristine site has been impacted by development at Thanksgiving Point and is threatened by further development. Permission is required to visit the site.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	TRAIL	THREATS TO RESOURCES/ VISITOR SERVICES
104	Camp Floyd/Stagecoach Inn	Utah	UT	Rush Valley	Camp Floyd, established in 1858, was named for the secretary of war and commanded by Albert S. Johnston. It was the first military installation built in present-day Utah and formed the state's third largest community. Camp Floyd was located southwest of Salt Lake City near the present-day town of Fairfield, Utah. At the time of the Pony Express, Camp Floyd provided troops for protection against Indian attacks and served to keep the trail open for the Pony Express, stage lines, and other travelers.	Listed	Public (State of Utah)	Pony Express	None known. The restored inn is open for visitation, the commissary building serves as a visitor center, and there is an interpretive wayside exhibit in the picnic area.
105	Faust's Station	Tooele	UT	Rush Valley	Mail contractor George Chorpenning originally established this station in late 1858 for the Jackass Express. Henry J. "Doc" Faust later purchased the land as a ranch and raised horses for the Pony Express and military expeditions. Faust served as the stationkeeper during the Pony Express era and lived on the land until 1870. The first home station west of Salt Lake City, its house was a log structure with a low-pitched roof and perhaps as many as seven rooms. Pony Riders were changed at this station and the mail stage stopped for rest breaks. The remains of a stone building west of the site are not the ruins of the Pony Express station but a home built by Seth Fletcher after the demise of the Pony Express.	Not listed	Private	Pony Express	Vandalism is a concern, planes fly over regularly, and nerve gas sensors are nearby. In 1939, a marker was constructed three miles northeast of the station by the Civilian Conservation Corps, as part of a project to mark the Pony Express Trail.
106	Simpson Springs	Tooele	UT	Rush Valley	This station bears the name of explorer Captain James H. Simpson, a Camp Floyd topographical engineer, who stopped here in 1858 while laying out an overland mail route between Salt Lake City and California. The availability of excellent water made Simpson Springs one of the most prominent stations in the West Desert. George Chorpenning established his second mail station at this site in 1858, which was later used by the Pony Express and the Overland Stage. A number of structures have been built and destroyed in the vicinity of Simpson Springs over the years. It is not known for sure which served as the station for the Pony Express. The current building is a replica, built in 1975 by the Future Farmers of America under the direction of the BLM.	Not listed	Public (BLM)	Pony Express	None known. The BLM maintains interpretive wayside exhibits and a nearby campground. A monument was erected in 1965 to mark the station site.
107	Boyd Station	Juab	UT	Fish Springs	This station is one of the best-preserved Pony Express stations in Utah. The relay station derived its name from Bid Boyd, a stationkeeper who continued to live here until the turn of the century. The structure was small and contained gun ports. The living quarters consisted of bunks built into the walls, with boxes and benches used as furniture. Only portions of the rock walls now remain.	Not listed	Public (BLM)	Pony Express	None known. The BLM has placed interpretive waysides at the site.
108	Willow Springs Station	Juab	UT	Fish Springs	The old Willow Springs Pony Express Station still stands on the Bagley Ranch in present-day Callao, Utah. The Bagley family has owned the ranch for well over 100 years, and the building has been used for various aspects of ranch life during most of that time. The structure has been modified and a concrete floor added. Artifacts dating to the Pony Express/Telegraph era have been found on the site.	Not listed	Private	Pony Express	The site is not threatened as long as the present family maintains ownership. They are very proud of the structure and welcome visitors. A monument stands at the entrance to the Bagley Ranch.
109	Benson's Mill	Tooele	UT	Tooele	Benson's Mill is the oldest building in Tooele County. E.T. Benson supervised its construction for the LDS Church in 1850. Wooden pegs and rawhide strips hold the timbers together. The mill produced flour until 1938, and much of the original machinery is still inside. Several California-bound emigrants mentioned the mill in their diaries. Madison Berryman Moorman noted on July 26, 1850, "We nooned upon a creek near to a lone house where some men were engaged in fitting some timbers for a sawmill."	National Historic Landmark	Public (Utah Division of Parks and Recreation)	California (Hastings Cutoff)	None known.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	TRAIL	THREATS TO RESOURCES/ VISITOR SERVICES
110	Timpie Point	Tooele	UT	Tooele	Timpie Point is the northern tip of the Stansbury Mountains. From this location, the Hastings Cutoff can be seen as it hugs the point and passes Big Springs, often mentioned in emigrant journals. On August 10, 1846, James Mathers recorded, "encamped by a point of the mountain at a very large spring of brackish water and but little grass, and that so salt that the cattle would not eat it." The Hastings Cutoff, Lincoln Highway, Union Pacific Railroad, and I-80 all cross the same narrow strip of land between the Stansbury Mountains and the Great Salt Lake.	Listed	Public (BLM)/ Private	California (Hastings Cutoff)	None known.
111	Spring at Dell Ranch	Tooele	UT	Tooele	This site functioned as a campsite and source of fresh water for gold seekers. In 1850, John Wood mentioned that 50 wagons were camped at these springs.	Not listed	Private	California (Hastings Cutoff)	None known.
112	Rock Ledge Overlook	Tooele	UT	Tooele	This rock ledge overlooks the junction of the Forty-niner Trail and the Hastings Cutoff. The Forty-niner Trail left the Hastings Cutoff just north of Horseshoe Springs and climbed the foothills to the spring at Dell Ranch. The trail then rejoined the main Hastings Cutoff just below the overlook. There is a good view of Skull Valley from the overlook, and interesting Indian drawings can be found on rocks in the area.	Not listed	Public (BLM)	California (Hastings Cutoff)	None known.
113	Hope Wells	Tooele	UT	Tooele	Hope Wells, at the southern end of Skull Valley, was the last good water source before the "fearsome long drive" across the Great Salt Lake Desert. It was 83 miles from Hope Wells to the oasis of Donner Spring at the base of Pilot Peak. Heinrich Lienhard recorded his preparations for the journey on August 16, 1846: "With our pocket knives we cut as much grass as we could, binding it in bundles to carry with us. Every receptacle that would hold water was placed in readiness for our departure by being filled with this indispensable fluid."	Not listed	Private	California (Hastings Cutoff)	None known.
114	Redlum Spring	Tooele	UT	Tooele	Redlum Spring was a camping site and brackish spring in the Cedar Mountains. Recent research indicates it was originally named after Return Jackson Redden of the 1847 Mormon Pioneer Company. It was the last possible place to get water before the long desert crossing. However, the spring was not much use to emigrant parties, because the cattle were not yet thirsty enough to drink this salty water.	Not listed	Public (BLM)	California (Hastings Cutoff)	None known.
115	Big Hill at Hastings Pass	Tooele	UT	Tooele	The difficult 0.3-mile ascent of Big Hill was a difficult climb for emigrants and their stock. From Hastings Pass at the top of the Cedar Mountains, the emigrants saw their first view of the Great Salt Lake Desert and the difficult country they would have to cross. Heinrich Lienhard "came finally to the place the road climbed over very steep hills. . . . By the time we had attained this high summit and bent our steps toward the wide, desolate valley below, the great, dark-red disk of the sun had reached the northwestern edge of a boundless flat plain lying before us, an oppressive solitude as silent as the grave."	Not listed	Public (BLM)	California (Hastings Cutoff)	None known.
116	Grayback Hills	Tooele	UT	Bonneville Salt Flats	Grayback Hills, a rocky ridge of volcanic origin 8.5 miles northwest of Aragonite, rises 70 feet above the desert plain and is thickly strewn with sharp fragments of basalt and vitreous gravel. The Hastings Cutoff went over a low spot in these hills. Just west of the summit, wheel marks are visible for 0.25 mile in the basaltic rocks.	Not listed	Public (BLM, State of Utah)	California (Hastings Cutoff)	None known.
117	Floating Island	Tooele	UT	Bonneville Salt Flats	This small isolated mountain was an important emigrant landmark on one of the most difficult sections of the Hastings Cutoff. Edwin Bryant "reached and passed, leaving it on our left, a small butte rising solitary from the plain. Around this the ground is uneven, and a few scattering shrubs, leafless and without verdure, raised themselves above the white sand and saline matter, which seemed recently to have drifted so as nearly to conceal them."	Not listed	Public (BLM)	California (Hastings Cutoff)	None known.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	TRAIL	THREATS TO RESOURCES/ VISITOR SERVICES
118	Playa Wagon Tracks	Tooele	UT	Newfoundland Mountains	Wagon tracks can still be seen on the mud flats a mile east of Donner Spring. This site is only accessible during dry weather and at the end of summer.	Not listed	Public (BLM)	California (Hastings Cutoff)	None known.
119	Donner Spring	Tooele	UT	Newfoundland Mountains	Originally named Pilot Spring by John C. Fremont in 1845, this is the famous spring at the base of Pilot Peak where emigrants finally quenched their thirst after crossing many miles of barren desert. Edwin Bryant reported searching "among the reeds, willows, and luxuriant grass" for some time before locating the actual spring. His party sounded the spring to a depth of 35 feet but could not find the bottom.	Not listed	Private	California (Hastings Cutoff, Bidwell-Bartleson Route)	None known. In 1994, an interpretive kiosk was dedicated by the Oregon-California Trails Association.
120	Halls Spring	Tooele	UT	Wendover	The Bidwell-Bartleson Party was the first emigrant company to stop at Halls Spring. They ate dinner here on September 14, 1841. John James wrote, "We started early this morning and passed a number of good springs, took dinner at one of them [Halls Spring]. We travelled on the border of the salt plains till night." The main route of the Hastings Cutoff passed right by the spring. The Harlan-Young, Lienhard, and Donner-Reed parties all traveled past this spring on their way to California.	Not listed	Public (BLM)	California (Hastings Cutoff, Bidwell-Bartleson Route)	None known.
121	Haight Creek (Kaysville)	Davis	UT	Salt Lake City	The first camping place on the Salt Lake Cutoff after leaving Salt Lake City was at the residence of Hector Haight, a Mormon settler. In the spring of 1853, on her way to California, Cornelia Ferris met Mr. Haight "of whom we had engaged some choice butter for our own use and where we spent the night. This man is a large farmer, living in a fair sized adobe house within a mile of the lake. A very pretty stream coursed rapidly a few rods in the rear; and . . . the whole scene looked more like eastern life than we usually see. On the other side of the way was a large and convenient barn, and in the yard adjacent contained some fine Durham and Devon cows."	Not listed	Private	California (Salt Lake Cutoff)	None known. The Utah Crossroads Chapter of the Oregon-California Trails Association has built an interpretive kiosk on this site.
122	Hampton Ford on the Bear River	Box Elder	UT	Tremonton	Hampton Ford was the primary crossing of the Bear River. The river was bounded by very steep bluffs about 50 feet high that had to be descended to reach the narrow, flat valley. The river itself was about 200 feet wide, deep, and swift. John Charles Fremont was at Hampton Ford in 1843, and the first emigrant party crossed there in 1849. By 1853, the Mormons had established a ferry, which made the crossing easier but cost \$1.00 per wagon. A toll bridge was finally constructed in 1859. Mormon entrepreneurs maintained a presence at the site until 1869.	Not listed	Private	California (Salt Lake Cutoff)	The proposed Honeyville Dam and reservoir threaten this entire area.
123	Rocky Ford on the Malad River	Box Elder	UT	Tremonton	This crossing of the Malad River had been used for years by Indians and fur trappers when the Bidwell-Bartleson Party found it in 1841. Though narrow, this river was a big obstacle for early travelers because of its steep high banks and muddy bottom. After 1848, emigrants on the Salt Lake Cutoff also used this crossing.	Not listed	Private	California (Salt Lake Cutoff, Bidwell-Bartleson Route)	None known.
124	Pilot Springs	Box Elder	UT	Grouse Creek	These springs in Curlew Valley were used by American Indian tribes, the returning Mormon Battalion, and after 1848, by California-bound emigrants. In 1849, travelers could expect to find "2 lone springs in a desert place, with little or no grass." The springs were directly on the line of travel between the crossing of Deep Creek and Emigrant Spring and served as a landmark to "pilot" emigrants between these two points.	Not listed	Private	California (Salt Lake Cutoff)	None known.
125	Goose Creek	Box Elder; Elko	UT NV	Jackpot	Goose Creek was an area of good water and grass in very scenic volcanic country, but it was noted for Indian-emigrant conflicts. There are many emigrant names and figures of unknown origin carved into soft rock formations along the creek. Franklin Langworthy reported in 1850, "We find a greatly increased number of the carcasses of dead animals. Crow, hawks, and buzzards, fare sumptuously, and collect along the road in great numbers."	Not listed	Public (BLM)/ Private	California	None known.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	TRAIL	THREATS TO RESOURCES/ VISITOR SERVICES
126	Thomas Fork Crossing	Bear Lake	ID	Preston	This crossing of swift-flowing Thomas Fork was particularly difficult because of steep, muddy inclines into and out of the stream. A toll bridge solved the problem in the early 1850s for those emigrants who could afford its \$1.00 charge. Emigrants found traders and large numbers of Indians camping here and good grass and water along the fork and in the Bear River bottoms. Excellent trail traces are present in the Sheep Creek Hills west of the fork.	Not listed	Private	Oregon, California	None known. There is an Idaho state historical marker on U.S. Highway 30.
127	Big Hill	Bear Lake	ID	Preston	Big Hill was one of the greatest impediments on the whole Oregon Trail route. To avoid the marshy bottoms of the Bear River, it was necessary to make a very steep, difficult ascent and descent of the Sheep Creek Hills. Ruts caused by the locking of wheels for the descent are visible from the west.	Not listed	Public (BLM)	Oregon, California	This site can only be reached by crossing private land. BLM has no easement for access. An Idaho state historical marker is located on U.S. Highway 30.
128	Smith's Trading Post	Bear Lake	ID	Preston	Fur trapper and mountain man Thomas L. "Pegleg" Smith—so-called for his cork leg, the result of an accident and self-amputation—established a trading post on the east bank of the Bear River about 1845. Smith was often mentioned in 1849 emigrant accounts, a year in which he did a thriving business. The post, which consisted of four log buildings, was abandoned by 1850.	Not listed	Private	California	None known. The actual site of the post is not determined. An Idaho state historical marker is located on U.S. Highway 30.
129	Soda Springs Complex	Caribou	ID	Soda Springs	The natural fountains at "Beer Springs" were rightfully considered to be one of the marvels of the overland trails. Almost every emigrant account noted the picturesque scenery and the natural curiosities of the area. The development of the town and the building of Alexander Reservoir have destroyed or covered many of these historic springs. Steamboat Spring, Wagonbox Grave, Hooper Spring, Octagon Spring, and two short traces of ruts can still be seen in the area.	Not listed	Public (City of Soda Springs)/ Private	Oregon, California	None known. The City of Soda Springs has completed a historical resource study of Oregon Trail sites in the area, is preparing a visitor brochure, and hopes to develop wayside exhibits. There is a historic monument at the west end of town.
130	Sheep Rock (Soda Point)	Caribou	ID	Soda Springs	Rising 1200 feet above the trail, this tree-covered point was a prominent landmark for emigrants. The Bear River flows through this gap between the Bear River Range and the Soda Springs Hills and turns south toward the Great Salt Lake. At this important junction, the Oregon-California Trail headed northwest and the Bidwell-Bartleson Route turned south along the west bank of the Bear River. After 1849, the Hudspeth Cutoff went directly west from this site. This point and the volcanic craters to the west were often noted in emigrant journals.	Not listed	Public (BLM)/ Private	Oregon, California (Main Trail, Bidwell- Bartleson Route)	None known.
131	Fort Hall	Bingham	ID	Blackfoot	Fort Hall was built by American Nathaniel Wyeth in 1834 but became the property of the Hudson's Bay Company in 1838. The fort was an important camping spot and trading center on the Oregon-California Trail until the middle of 1849, when the Hudspeth Cutoff was opened west of Soda Springs. From that time on, almost all travel to California took the Hudspeth Cutoff. Those traveling to Oregon continued to pass the fort until it was abandoned in 1856. An excellent replica now stands south of the site in present-day Pocatello, Idaho.	National Historic Landmark	Private (Fort Hall Indian Reservation)	Oregon, California	Erosion caused by the flooding of the Snake River seriously threatens the future existence of the site.
132	American Falls	Power	ID	Pocatello	American Falls was one of the great natural wonders of the overland trails. These impressive falls were enthusiastically noted in the accounts of all who passed by. The roar of the falls, as the Snake River dropped 50 feet, could be heard several miles away. The area below the falls became a favorite camping and resting spot for emigrants. Below modern American Falls Dam, the still-impressive river enters a rugged volcanic canyon.	Not listed	Public	Oregon, California	None known.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	TRAIL	THREATS TO RESOURCES/ VISITOR SERVICES
133	Massacre Rocks	Power	ID	Pocatello	Massacre Rocks are two rock masses south of the trail, with just enough gap between them to allow the passage of a wagon. Three to five miles northeast of these rocks, on August 9-10, 1862, a skirmish took place between several emigrant wagon trains and Indians. The fight, one of the last hostile encounters between emigrants and Indians in this part of Idaho, ended with the death of ten whites and an unknown number of Indians.	The ruts between Massacre Rock and Coldwater Hill are listed	Public (Idaho Department of Parks and Recreation)	Oregon, California	Massacre Rocks State Park maintains a museum with interpretive exhibits. Pristine ruts and interpretive waysides can be accessed from the Massacre Rocks Rest Area off I-86, two miles east of Massacre Rocks State Park. The ruts near the wayside exhibits show the impact of heavy visitation.
134	Register Rock	Power	ID	Lake Walcott	Register Rock is a half-buried boulder, 25 feet in diameter, with many clearly visible names and dates inscribed upon it by emigrants, some dating from 1849. The small stream that provided water at this campsite was known to the emigrants as both Fall Creek and Rock Creek. Today the area has been developed as a day-use picnic area. Register Rock is enclosed by a chain link fence and protected from weathering by an octagonal pavilion.	Listed	Public (Idaho Department of Parks and Recreation)	Oregon, California	None known. Massacre Rocks State Park maintains the site and an interpretive sign.
135	Coldwater Hill	Power	ID	Lake Walcott	Cold Water was a camping area along the Snake River. At the western end of the valley, the trail climbed Coldwater Hill and turned southwest, away from the Snake River and toward the crossing of the Raft River. Intact trail remnants are clearly visible as the trail ascends this hill. They are easily accessible from an eastbound rest stop off I-84.	Listed	Private	Oregon, California	None known.
136	California Trail Junction/Raft River Crossing	Cassia	ID	Lake Walcott	Immediately after fording Raft River, the California Trail branched south and traveled up the Raft River Valley to Cassia Creek and City of Rocks. The Oregon Trail continued west over rolling rangelands to rejoin the Snake River. Joseph R. Walker opened the California Trail through the Raft River Valley in 1843, and it was the main route to California until the opening of Hudspeth Cutoff in 1849. There are trail markers at the parting of the two trails, and nearby emigrant graves have been fenced and marked. There are traces of the trail on public lands both west (the Oregon Trail) and south (the California Trail) of the junction.	Not listed	Public (BLM)	Oregon, California	None known. Access to the site from the east is over private land.
137	Summit Springs	Oneida	ID	Malad City	When emigrants reached Summit Springs at the crest of the Sublett Mountain Range, they knew the most difficult part of the Hudspeth Cutoff was behind them. It was mostly downhill from here to the Raft River. Elisha Perkins described the view from Summit Springs Pass in 1849: "We finally emerged upon a hill overlooking a valley with fine grass and a creek of pure water [from Summit Springs] and bounded by high bluffs and mountains."	Not listed	Public (USFS-Sawtooth National Forest)	California (Hudspeth Cutoff)	None known. The site has been marked but needs additional interpretation.
138	Sublett Creek Canyon	Oneida	ID	Malad City	The descent of Sublett Creek Canyon was often mentioned in emigrant accounts. In 1849, William Swaine wrote, "The height of the hills was left behind and the road began to descend a defile winding gradually among the hills." Today the route through this canyon can be driven in a high clearance vehicle, but the area still retains its natural setting and beautiful scenery.	Not listed	Public (USFS-Sawtooth National Forest)	California (Hudspeth Cutoff)	None known. The canyon should be interpreted and made accessible to the public.
139	Raft River Narrows	Cassia	ID	Oakley	The Raft River Narrows, a canyon about two miles in length, posed great difficulty for emigrants on the Salt Lake Cutoff. It was necessary to cross the Raft River three times: once on the southeast side of the narrows, once on the west side, and another crossing six miles farther west. Although the original trail has been obliterated in the canyon bottom, excellent trail remnants can be found both east and west of the actual canyon, and a pristine dugway can be clearly seen cut into the talus slope on the south side of the river. Descriptions of this dugway by later emigrants tell us they tied ropes to their wagons to prevent them from falling into the river.	Not listed	Public (BLM)	California (Salt Lake Cutoff)	None known.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	TRAIL	THREATS TO RESOURCES/ VISITOR SERVICES
140	City of Rocks Complex	Cassia	ID	Oakley	One of the great scenic and historic landmarks along the California Trail, the City of Rocks was mentioned in almost every emigrant account. It is an area of fantastically weathered granite formations, which the emigrants fancied as steeples, hotels, houses, temples, and palaces in a "Silent City of Rocks." It includes a series of sites: Twin Sisters, a natural historic landmark; Pinnacle Pass, wide enough for one wagon; Emigrant Canyon Spring, where remnants of the Kelton to Boise stage station and excellent trail ruts can be seen; and Salt Lake Cutoff Junction, where this alternate route comes up Emigrant Canyon to join the California Trail in an open valley approximately one mile south of the Twin Sisters.	National Historic Landmark	Public (Idaho Department of Parks and Recreation- NPS)/Private	California (Main Trail, Salt Lake Cutoff)	The area needs to be protected from development and from rock-climbing within the designated historic trail corridor. City of Rocks National Reserve maintains a small museum and plans to place interpretive wayside exhibits throughout the park.
141	Granite Pass	Cassia	ID	Grouse Creek	As the only route into Nevada north of the Hastings Cutoff that was passable for emigrant wagons, Granite Pass (elevation 6,960 feet) played a key role in determining the path of the California Trail. An easy ascent from the east terminated with a very steep and treacherous descent westward into Goose Creek. The pass was never referred to in emigrant accounts as Granite Pass, but there are several emigrant graves at the summit and along the ascent. Alonzo Delano described the view from the top of the pass in 1849: "From the summit of the hill, a fine and peculiarly interesting view afforded. . . Far as the eye could reach, cones, tables, and nebulae, peculiar to the country, extended in a confused mass."	Listed	Private	California	None known. The pass should be acquired in conjunction with the City of Rocks National Reserve.
142	Natural Bridge on Lost River	Klamath	OR	Klamath Falls	The 1846 Applegate party learned of the "Stone Bridge on Lost river" from an Indian who took them to "two natural bridges of conglomerate sandstone" from 10 to 15 feet wide. This phenomenon consisted of two parallel formations under the surface of the Lost River. The bridge was a key Applegate Trail site, since as Lt. H. L. Abbot noted in 1855, "There is no ford for a considerable distance above, and none below," although in 1846 Fremont crossed at a ford some 4.5 miles above the bridge. Located just north of the Oregon-California border, one bridge has washed away, but the surviving formation is now the foundation of an irrigation-diversion dam.	Not listed	Private	California (Applegate Trail)	None known. There is an Applegate Trail Coalition interpretive wayside exhibit at the site.
143	Upper Klamath River Crossing	Klamath	OR	Klamath Falls	Tolbert Carter, an 1846 emigrant, thought the Applegate Trail's encounter with the Klamath River "one of the worst crossings that wagons ever made."	Not listed	Private	California (Applegate Trail)	The site is under water. There are interpretive waysides on the Lower Klamath River Crossing at Sportsman's Park.
144	Lower Klamath River Crossing	Klamath	OR	Medford	In 1847 Levi Scott opened a shortcut through Bear Valley to this Klamath River ford as an alternative to the 1846 Applegate Trail upper crossing. George Riddle recalled that in 1851 the Klamath ford "was rocky and deep, with a swift current," so he rode Bill, "my big near ox" across the river to keep his light wagon from capsizing.	Not listed	Public	California (Applegate Trail)	The site is under water.
145	Jenny Creek Wagon Slide	Klamath	OR	Medford	Here Virgil Pringle noted "the steep hill to go down" on October 7, 1847, as he made the sharp descent to Jenny Creek ford north of today's Pinehurst.	Not listed	Private	California (Applegate Trail)	None known. Two trail markers are located .75 mile apart.
146	Tub Springs State Wayside	Jackson	OR	Medford	Located on a "good but very rough and broken" section of trail, J. Quinn Thornton abandoned a wagon here in 1846. This Oregon State Park contains a short trail along wagon ruts of the Cascade Wagon Road.	Not listed	Public (Oregon Parks and Recreation Department)	California (Applegate Trail)	None known. There are Applegate Trail Coalition interpretive waysides at Tub Springs.
147	Cascade Mountain Summit	Jackson	OR	Medford	Here emigrants crested the Cascade Mountains at Green Springs Summit to cross the divide between the Klamath River and Rouge River drainages. Lindsay Applegate recalled the eastbound "route was good, not rocky, and the ascent was very gradual," but "the descent was, in Places, very rapid." Today this is the junction with the Pacific Crest National Scenic Trail.	Not listed	Public	California (Applegate Trail)	None known. There is an Applegate Trail Coalition interpretive wayside at Tub Springs.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	TRAIL	THREATS TO RESOURCES/ VISITOR SERVICES
148	Junction of the Trappers Trail to California and the Applegate Trail	Jackson	OR	Medford	At today's Emigrant Lake, about five miles west of the confluence of Emigrant and Tyler creeks, the trail's two routes passed Songer Butte and joined the Hudson's Bay Company trappers trail to California. Here the east bound 1846 South Road exploring party left the trappers trail and turned east to seek a pass over the Cascade Mountains.	Not listed	Private	California (Applegate Trail)	None known.
149	Valley of the Rogue State Park	Jackson	OR	Grants Pass	This Oregon State Park is located on the trail corridor that follows the Rogue River. Exhausted after crossing the Cascades, here emigrants rested their cattle. A. S. Crews recalled that in 1846 the emigrants "thought they could get through to [the] settlements be fore winter and they strougled on."	Not listed	Public (Oregon Parks and Recreation Department)	California (Applegate Trail)	None known.
150	Grave Creek	Josephine	OR	Canyonville	This is the site of Martha Leland Crowley's 1846 grave and a historic covered bridge. "I was a carpenter and made coffins for the members of our party who died," recalled David M. Guthrie. "We had no boards left when Martha died, but I knocked some boxes to pieces and made her a coffin. There were 26 pieces of board in her coffin. We buried her by the stream and then corralled the cattle over her grave so the Indians would not find her body."	Listed	Public (Josephine County)	California (Applegate Trail)	None known.
151	Wolf Creek Tavern State Heritage Site	Josephine	OR	Canyonville	This Oregon State Park is located on the Applegate Trail. The tavern opened in the 1880s to serve the Oregon-to-California stagecoach route.	Listed	Public (Oregon Parks and Recreation Department, Oregon Department of Transportation)	California (Applegate Trail)	None known.
152	Canyonville Pioneer Park	Douglas	OR	Canyonville	The descent of Canyon Creek was one of the most arduous portions of the entire Applegate Trail. Tabitha Brown recalled that in 1846, "Out of hundreds of wagons, only one came through without breaking. The canyon was strewn with dead cattle, broken wagons, clothing, and everything but provisions, of which latter we were nearly all destitute." Levi Scott and David Goff remained behind to help the exhausted emigrants, who "presented the appearance of a defeated and retreating army." Refusing to abandon his library, Rev. J. A. Cornwall spent the winter of 1846-47 here in a log cabin. The first land claims were made at Canyonville in 1851.	Not listed	Public (City of Canyonville)	California (Applegate Trail)	None known.
153	Pleasant Valley/Yoncalla Complex	Douglas	OR	Cottage Grove	In the northern Umpqua Valley, the Applegate Trail split into two branches. The eastern fork, opened in 1846-47, crossed the Calapooya Mountains to the Coast Fork of the Willamette River, where it followed the Willamette Valley north along the line of today's Highway 99. The western branch closely followed the Hudson's Bay Company trappers trail to California. It became the western branch of the Applegate Trail after the Scott and Applegate families settled the area in 1849 and developed the route as a shorter way to the west side of the Willamette Valley.	Charles Applegate House is listed.	Public/Private	California (Applegate Trail)	None known. In Yoncalla, an Applegate monument is located at the corner of Front and Applegate Avenue, near the historic Charles Applegate house. North of Yoncalla, a marker commemorates the Jesse Applegate homestead
154	Long Tom River Crossing	Benton	OR	Eugene	This Oregon State Park is located on the eastern branch of the Applegate Trail near the crossing of the Long Tom River. In 1846, Tolbert Carter ferried a mother and her newborn child across the Long Tom. "A woman and child had died the night before under the same circumstances," he recalled. "She was another member of the unfortunate Crowley family. But the woman and child I speak of both lived." The eastern and western branches of the trail rejoined at today's Monroe.	Not listed	Public (Oregon Parks and Recreation Department)	California (Applegate Trail)	None known.
155	Mary's River Crossing	Benton	OR	Corvallis	In 1846, Mary's River was the last place emigrants had to disassemble their wagons and cross a river on a canoe ferry.	Not listed	Public (City of Corvallis)	California (Applegate Trail)	None known.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	TRAIL	THREATS TO RESOURCES/ VISITOR SERVICES
156	Dallas/La Creole Creek Complex	Polk	OR	Corvallis	La Creole Creek, in present-day Dallas, Oregon, was the official start and end of the Applegate Trail. The South Road Company assembled here in 1846 under Jesse Applegate to seek a southern route from Soda Springs to the Willamette Valley. Applegate relied on a map and excellent advice from Peter Skene Ogden, who had explored the Great Basin for the Hudson's Bay Company. Members of an earlier exploring party, including Moses Harris, Levi Scott, and David Goff, joined Applegate, his brother Lindsay, and others on the expedition. The original Applegate land claims are four miles to the northwest. Today, La Creole Creek is known as Rickreall Creek.	Not listed	Public/Private	California (Applegate Trail)	None known. There are interpretive waysides, but local directional signing is needed. There is an OCTA sign at Dallas City Park.
157	Edwards Creek Station	Churchill	NV	Smith Creek Valley	Edwards Creek Station was on the north side of the Desatoya Mountains, midway between Smith Creek and Cold Springs stations. The station was built in July 1861 to serve both the Pony Express and the Overland Stage, which operated daily, except Sunday. One of the best-preserved Pony Express stations, its ruined stone walls still stand today.	Not listed	Private	Pony Express	The ruins need to be stabilized.
158	Cold Springs Station	Churchill	NV	Smith Creek Valley	Cold Springs Station was hurriedly constructed by Bolivar Roberts, J. G. Kelly, and their crew in March 1860 as they prepared for the first run of the Pony Express. The station was repeatedly attacked by Indians. When Richard Burton reached the station in October 1860, he found "a wretched place, half built and wholly unroofed; the four boys, an exceedingly rough set, ate standing, and neither paper nor pencil was known among them." Today, remnants of thick stone walls, complete with windows, gun ports, and a fireplace, identify the station. The ruins of a corral can be found nearby. As in Burton's day, the structure has no roof. The station has been structurally stabilized for preservation and safety reasons.	Listed	Public (BLM)	Pony Express	None known. The BLM maintains interpretive wayside exhibits nearby on U.S. Highway 50.
159	Sand Springs Station	Churchill	NV	Fallon	Boliver Roberts and crew also built Sand Springs Station in March 1860. Travelers found a reliable source of water at Sand Springs, but its poor quality often poisoned animals and probably made people ill. Richard Burton recorded his negative reaction to the place: it was "roofless and chairless, filthy and squalid, with a smoky fire in one corner, and a table in the center of an impure floor, the walls open to every wind, and the interior full of dust." In addition to the Pony Express, the site served as a telegraph, freight, milling, and ranching center. Structural ruins from many of these activities still exist and the station remains have been stabilized.	Listed	Public (BLM)	Pony Express	None known. The BLM excavated and stabilized the ruins in 1977 and maintains interpretive signs at the site.
160	Fort Churchill	Lyon	NV	Carson City	Indian raids and the interruption of Pony Express mail service spurred the construction of Fort Churchill on the banks of the Carson River. Captain Joseph Stewart and his men began building the fort on July 20, 1860, as a permanent installation, consisting of adobe buildings erected on stone foundations. This fort housed the Pony Express station in its headquarters building, which is still standing. When Richard Burton arrived on October 19, 1860, he gave it a positive review and named Captain F. F. Flint as the commander.	National Historic Landmark	Public (Nevada Division of State Parks)	Pony Express	None known. Fort Churchill Historical State Monument preserves the ruins of the adobe fort and maintains a visitor center with interpretive exhibits in the headquarters building.
161	Pilot Peak	Elko	NV	Wells	This 10,700-foot peak, named by John C. Fremont, served as a landmark to all emigrant parties moving west in this part of the country. From the top of the peak, it is possible to get an overview of the Hastings Cutoff from the Utah border to Silver Zone Pass. It also offers a good view of the salt flats. This was the route taken by Bidwell-Bartleson (1841), Fremont (1845), Bryant-Russell and the Donner-Reed Party (1846), and others.	Not listed	Public	California (Hastings Cutoff)	None known.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	TRAIL	THREATS TO RESOURCES/ VISITOR SERVICES
162	Bidwell Pass	Elko	NV	Wendover	The pass has not officially been named, but should be. The 1841 Bidwell-Bartleson Party was the first emigrant company to pass through Bidwell Pass. John James recorded, "In the evening we left the salt plain, turned our course to the west, crossed the mountain through a gap [Bidwell Pass] and could find no water." In 1846, Edwin Bryant discovered the Bidwell-Bartleson wagon tracks here and followed them for two or three miles. Bryant recorded, "We struck a wagon-trail, which evidently had been made several years. From the indentations of the wheels, where the earth was soft, five or six wagons had passed here. The appearance of this trail in this desolate region was at first inexplicable; but I soon recollected that some five or six years ago a emigrating expedition to California was piloted out by Colonel Bartlettson, Mr. J. Chiles, and others, of Missouri." A nice section of trail remnants can still be found near the Wendover-to-Lucien Road, about one mile east of Bidwell Pass, heading west.	Not listed	Public (BLM)	California (Hastings Cutoff, Bidwell-Bartleson Route)	None known. The Crossroads Chapter of the Oregon-California Trails Association has erected a wayside exhibit at the eastern base of the pass and two carsonite posts (one brown and one white) have been placed in the pass.
163	Silver Zone Pass Spring	Elko	NV	Wendover	The spring in Silver Zone Pass was mentioned and used by the early emigrants. It was the only water between Halls Spring and Big Springs. Heinrich Lienhard recorded, "With our breakfast we were soon enough finished, after which we yoked up and again proceeded slowly on down the gorge. We had gone scarcely 100 yards before we actually found near the road a spring hole perhaps 12 feet deep. We stopped, naturally, and equipping myself with a bucket and a small receptacle I forced my way the few steps down to the water. The water was clear, cool, and pleasant to the taste." Sarah Davis described Silver Zone Pass as "a large canon barely enuf of rume for the wagons to pass each other and vary ruff roads."	Not listed	Private	California (Hastings Cutoff)	None known.
164	Big Springs (In Goshute Valley)	Elko	NV	Wendover	Big Springs is at the eastern base of the Pequop Mountains. In 1841, the Bidwell-Bartleson Party abandoned their remaining seven wagons here and packed their necessities on horses, mules, and oxen. Edward M. Kern, topographer with Fremont's 1845 expedition, recorded seeing the Bidwell trail, as did Edwin Bryant in 1846. The Hastings wagon trains followed the Bidwell-Bartleson trail from Donner Spring to Big Springs, as did the gold rushers through 1850. In 1850, Madison Berryman Moorman "came to a fertile little valley—two or three hundred yards wide—where we had plenty of fine grass and water," and Sarah Davis' party "lay buy all day . . . and washed and grased our cattle."	Not listed	Private	California (Hastings Cutoff)	None known.
165	Flowery Lake Springs	Elko	NV	Wendover	About two miles east of Flowery Lake Pass, these springs were used by emigrant parties from 1846 through 1850, including the Fremont, Clyman, Bryant-Russell, and Donner-Reed parties. James Reed called them Mad Woman Springs because all the women in their company were angry while camped at these springs. Edwin Bryant described "an oasis of about fifty acres of green grass, reeds, and other herbage, surrounding a number of springs, some of cool fresh water, others of warm sulphur water. There waters rise and immediately sink in the sands. . . . The grass immediately around the springs, although not of the best quality, is very luxuriant, and on the whole, it being a favorable place for grazing our mules . . . we determined to encamp for the day."	Not listed	Public	California (Hastings Cutoff)	None known.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	TRAIL	THREATS TO RESOURCES/ VISITOR SERVICES
166	Mound Springs	Elko	NV	Wendover	These springs were a curiosity to all the emigrants because they flowed out of low mounds of earth. Edward M. Kern called them Whitten's Springs. Edwin Bryant described his days travel across Independence Valley to Mound Springs on August 7, 1846: "Crossing this valley, the sun pouring its scorching rays down upon us with such fervor as nearly to parch our bridle reins into a crisp, we found on the slope of the western side, near the foot of the mountains [Spruce Mountains], another small oasis, of an acre or two of green vegetation, near the center of which were one or two small springs or wells of cool fresh water. The waters of these springs [Mound Springs] rise to the surface and sink immediately, moistening only the small patch of fertile ground." Here Fremont split his 1845 pack party, sending Lieutenant T.H. Talbot with the majority of the party west to the Humboldt, while he and the rest of the men went south and west.	Not listed	Private	California (Hastings Cutoff)	None known.
167	Warm Springs	Elko	NV	Elko	These springs at the foot of the Humboldt Mountains were noted for the large volume of water flowing from them. In 1846, Edwin Bryant "found a bold spring gushing forth a volume of water sufficient to turn the most powerful millwheel." On September 5, 1850, Sarah Davis described "water cold as ice a butifull creek comin right from the mountain it roars like a cataract and springs all round in every direction and cattle are giten fat on this grass." From here, pack parties could turn northwest and cross Secret Pass, a gap between the East Humboldt and Ruby mountain ranges, to rejoin the primary California Trail on the Humboldt River. Wagons could not get through this way, so the wagon road headed southwest and crossed the Rubys through Overland Canyon.	Not listed	Private	California (Hastings Cutoff)	None known.
168	Sulphur Hot Springs	Elko	NV	Elko	These springs at the foot of the Ruby Mountains were a curiosity to the early emigrants. Some used the hot springs to cook their food. Madison Berryman Moorman described the springs in 1850: "We came to a group of boiling springs. I did not count them, but there can not be less than twenty . . . One of the springs I supposed to be twenty feet in diameter, of unfathomable depth and boiling like a pot. From the appearance of the ground around which is perfectly bare of vegetation, they sometimes overflow. They attract the attention of every passer-by, and this strange phenomenon of nature is only beheld with wonder and surprise."	Not listed	Private	California (Hastings Cutoff)	None known.
169	Cave Creek	Elko	NV	Ruby Lake	A large spring or creek flows out of a cave at the foot of the Ruby Mountains about 12 miles north of Overland Pass. T.H. Jefferson and James Reed noted the existence of Cave Spring in 1846. On September 19, Reed recorded, "Encamped at a large Spring breaking out of from the and part of large Rock Stream la[r]ge enough to turn one pr [pair] Stone." Curiously, no mention of it is made in any of the journals of 1850. This spring is located 19.5 miles south of the old Ruby Valley post office and lies at the base of Pearl Peak, which is 11,000 feet high.	Not listed	Public	California (Hastings Cutoff)	None known.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	TRAIL	THREATS TO RESOURCES/ VISITOR SERVICES
170	Overlook of the South Fork of the Humboldt River Gorge	Elko	NV	Elko	This rugged canyon was often mentioned in emigrant journals, some giving extensive descriptions of travel through the gorge. The 1841 Bidwell-Bartleson Party was the first emigrant company to travel down this gorge to the Humboldt River. John Bidwell wrote: "The creek became perfectly dry and its banks rose to high perpendicular precipices, so that there was no other road than the dry bed of the stream. Having come about 15 miles, we encamped in a place affording a little grass and water, where we could see nothing but sky. But the men who ascended the precipice to see what was the prospect ahead said that in about a mile we would come to a valley—this was delightful news." The view from the overlook down into the canyon is very impressive. One can see what the emigrants went through, winding back and forth across the river. A hiking tour through the gorge is well worth the effort.	Not listed	Public/Private	California (Hastings Cutoff, Bidwell Bartleson Route)	None known.
171	Record Bluff	Elko	NV	Jackpot	Emigrants marked their names on this cliff near Goose Creek. It is generally considered to be the finest display of emigrant names and dates in Nevada and California. David DeWolf reported in 1849, "We passed a singular rock composed of sandstone the outside being hard and the inside quite soft, so soft one can cut it with a knife. It was singularly shaped with large cavities in it and in the different cavities were a large number of names."	Not listed	Private	California	Natural erosion and boring insect damage are destroying the inscriptions.
172	Rock Spring	Elko	NV	Jackpot	Water still wells from the rocks at this emigrant campground at the head of Rock Spring Creek. In 1849, Alonzo Delano recorded in his journal, "From the appearance of many wagons standing together on the plain below, I knew water was near. A mile brought me to them, where I found a small stream of lukewarm water, flowing in a trifling brook under the point of a rock."	Not listed	Public (BLM)	California	Rock Spring would be a good location for an interpretive wayside exhibit. There is a Trails West marker at the site.
173	Thousand Springs Valley	Elko	NV	Jackpot	Thousand Springs Valley is another key site in determining the path of the California Trail from Fort Hall to the headwaters of the Humboldt River. The valley contains both hot and cold springs at today's Winecup Ranch. Numerous diaries recount the emigrants passage through this valley. In 1849, E. D. Perkins wrote, "The valley where we are Encamped is a remarkable fine one abounding in rich grass, and presents quite a live appearance just now, there being wagons and camps up and down as far as we can see. . . . About noon we came to a hot spring. . . . Certainly there is something very mysterious in the appearance of nearly boiling water at the surface of the ground. . . . What is a little singular is that a spring of clear cold water issues from the ground not of a mile from the other."	Not listed	Public (BLM)/ Private	California	None known. BLM has established an interpretive kiosk at Winecup Ranch. There is also a Trails West marker located here.
174	Humboldt Wells	Elko	NV	Wells	These unique natural wells and camping area are located at the headwaters of the Humboldt River. The springs were described as marshy spots and small ponds of water. In 1850, Lorenzo Sawyer wrote, "Five miles brought us to several deep holes in a wet marshy valley to the left of the road filled with water." Emigrants frequently rested here before beginning the grueling 300-mile journey down the Humboldt River.	Not listed	Public/Private	California	Humboldt Wells would be an excellent site for an interpretive wayside exhibit.
175	Carlin Canyon	Elko	NV	Battle Mountain	This three-mile loop along the Humboldt River through beautiful, steep-walled Carlin Canyon was the route of the main California Trail (including the Bidwell-Bartleson in 1841), the Central Pacific Railroad (remnants still visible), and State Route 1 (later known as the Victory Highway, then U.S. Highway 40). Some emigrants took the Greenhorn Cutoff to the north to avoid high water and the canyon's four river crossings.	Not listed	Public (BLM)	California	The last two fords are accessible along the old highway and would be excellent locations for interpretive wayside exhibits. A Trails West marker is located in the canyon.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	TRAIL	THREATS TO RESOURCES/ VISITOR SERVICES
176	Gravelly Ford	Eureka	NV	Battle Mountain	This Humboldt River crossing was named Gravelly Ford because of the gravel in the riverbed that made it a good crossing for wagons. Here the trail returned to the river after the long, dry trip across Emigrant Pass and down rocky Emigrant Canyon. Travelers were glad to get back to water. In 1849, J. A. Pritchard "found a luxury here such as we had not seen, in the shape of wild curren[t]s. . . . The flavor of them was very fine indeed." The site of many Indian conflicts, there are several signed and fenced graves near the ford.	Not listed	Private	California	Erosion and dust occasionally make the ford unsafe for vehicles. A Trails West marker is located at the site.
177	Iron Point	Humboldt	NV	Winnemucca	One of the most historic sites along the Humboldt River Route, Iron Point is located west of the steep ascent of the sand hill where James Reed probably killed John Snyder on October 5, 1846. This fight led to Reed's banishment from the Donner-Reed Party, which had such an important impact on the fate of the emigrants.	Not listed	Public (BLM)	California	A Trails West marker is located at the base of the ascent to Iron Point.
178	Humboldt Sink	Pershing, Churchill	NV	Lovelock, Carson Sink	The Humboldt Sink, or Great Meadows, was a place of celebration. Here emigrants completed the exhausting 300-mile trip down the length of the Humboldt River and arrived at a place to rest themselves and their animals. Here the river ended, spread its waters to create a vast marsh, and, in wet years, formed Humboldt Lake. G.W. Thissell described the area in 1849: "We arrived at the sink of the river. It empties out on the desert, forming a great marsh or meadow of coarse grass, that covers more than a thousand acres. In many places the grass was higher than a man's head." This celebration was tempered by anxiety, because the grueling Forty-mile Desert lay dead ahead.	Not listed	Public (BOR)/ Private	California	None known.
179	Parting of the Truckee and Carson Routes	Churchill	NV	Carson Sink	At this spot, emigrants had to decide which route to take across the Forty-mile Desert. They could head west to the Truckee River and go over Donner or Roller passes on the Truckee Route. Or they could head southwest to the Carson River and cross West Pass on the Carson Route or Sonora Pass on the Walker River-Sonora Route. The preferred route changed from year to year. The original trail over Donner Pass was used through 1846. For the next two years, Roller Pass was preferred, until West Pass was opened in 1848. The Dutch Flat Wagon Road was cut over Donner Pass in 1852, and emigrants began to favor this route. Sonora Pass was also opened in 1852 for those going farther south.	Not listed	Public (BOR)/ Private	California	None known.
180	Humboldt Bar	Churchill	NV	Carson Sink	Humboldt Dike was created by wave action on prehistoric Lake Lahonton. Before Rye Patch Dam was built, this natural earthen dam impounded the waters of the Humboldt River into Humboldt Lake. In wet years, excess water escaped through a gap in this dike and flowed out into the Humboldt Slough at the western base of the dike. The Carson and Truckee routes split at the eastern base of Humboldt Bar and both routes travel over this dike as they enter the Forty-mile Desert. In 1849, John Edwin Banks described the dike as, "An embankment some twenty feet high extends across the bed of the river, extending from mountain to mountain, perhaps one and a half miles wide." The view from the top of the bar looking out over the Forty-mile Desert is impressive, and this unique site must be protected and preserved.	Not listed	Public (BLM, BOR)/Private	California (Carson and Truckee Routes)	There are Trails West markers on both of these trails on top of the Bar.
181	Little Lost Canyon	Mono	CA	Bridgeport	The trail leaves the desert in Little Antelope Valley and climbs abruptly up Little Lost Canyon to the ridge overlooking Lost Cannon Creek.	Not listed	Public (USFS- Toiyabe National Forest)	California (Walker River- Sonora Route)	None known.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	TRAIL	THREATS TO RESOURCES/ VISITOR SERVICES
182	Upper Levitt Meadow	Mono	CA	Bridgeport	Unable to follow the West Walker River through its narrow gorge out of Levitt Meadow, emigrants created a trail up a narrow cleft in the granite. The route is clogged with boulders, making it appear impossible that wagons could have actually passed through such a rugged canyon, but physical evidence confirms that they did. Once they had struggled to the top of the ridge, emigrants were forced to lower their wagons down the other side with ropes anchored around juniper trees.	Not listed	Public (USFS-Toiyabe National Forest, Hoover Wilderness Area)	California (Walker River-Sonora Route)	None known.
183	Browder Flat	Mono	CA	Bridgeport	Here, the emigrants faced the most difficult and precarious climb of the entire route, a half-mile haul up to Fremont Lake. Many wagons were abandoned and equipment jettisoned as emigrants lightened their loads to prepare for the arduous ascent. Later travelers, such as James "Grizzly" Adams, noted the number of abandoned wagons at the site. It may also have been the location of a trading post set up on the eastern side of the summit in 1853 to provide aid to travelers.	Not listed	Public (USFS-Toiyabe National Forest)	California (Walker River-Sonora Route)	None known.
184	Approach to Fremont Lake	Mono	CA	Bridgeport	This short section of trail is one of the steepest and most challenging portions of any emigrant route, traversing granite and winding circuitously among boulders. In one place, the emigrants paved a steep ramp with granite slabs to take their wagons up the side of a rock wall. Diary accounts describe the wreckage of numerous wagons along this section. At the northern end of Fremont Lake the first party to use the trail (1852) dug a ditch to lower the level of the lake so that their wagons could ford the shallows along one bank.	Not listed	Public (USFS-Toiyabe National Forest, Hoover Wilderness Area)	California (Walker River-Sonora Route)	None known.
185	Upper Little Emigrant Valley	Mono	CA	Bridgeport	The actual summit of the Walker River-Sonora Trail is mislabeled on most maps. The original Sonora Pass of 1853 was one mile north of the Emigrant Pass shown on government maps and almost eight miles south of today's Sonora Pass on U.S. Highway 395. The emigrants climbed along the side of a deep, winding chasm as they worked their way toward the summit. They described crossing over snowfields as they neared the crest of the Sierra Nevada, the highest emigrant wagon pass in the United States at 9,780 feet.	Not listed	Public (USFS-Toiyabe National Forest, Hoover Wilderness Area; and Stanislaus National Forest, Emigrant Wilderness Area)	California (Walker River-Sonora Route)	None known.
186	Hubbs Grave Site	Tuolumne	CA	Bridgeport	The Hubbs grave near Saucer Meadow is marked by a carving set deep into a tree, indicating the name Hubbs and the year 1853. The stones that once covered the grave have since been used to build a fire ring. Nothing is known of Hubbs or of the circumstances of his or her death.	Not listed	Public (USFS-Stanislaus National Forest)	California (Walker River-Sonora Route)	None known.
187	Relief Camp	Tuolumne	CA	Bridgeport	Relief Camp was the meeting place of a relief party and the emigrants of the first wagon company to use this route in 1852. The following year, Sonora citizens set up a trading post to help emigrants along the trail. Parties stopped here to rest their stock and allow sick members to recuperate. On one occasion, a dance was held upon bare earth to celebrate the successful arrival in California.	Not listed	Public (USFS-Stanislaus National Forest)	California (Walker River-Sonora Route)	None known.
188	Commemorative Iron Tire	Tuolumne	CA	Bridgeport	An iron wagon tire has been affixed to a rock along the trail between Relief Meadow and Upper Relief Meadow. A plaque there commemorates the emigrants of 1852-1854.	Not listed	Public (USFS-Stanislaus National Forest)	California (Walker River-Sonora Route)	None known.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	TRAIL	THREATS TO RESOURCES/ VISITOR SERVICES
189	Burst Rock (Birth Rock)	Tuolumne	CA	Bridgeport	Birth Rock stands prominently overlooking the canyon of the South Fork of the Stanislaus River, near today's Pinecrest. In 1853, the Fischer family was caught in a snow storm while descending the Walker River-Sonora Trail. Under the overhang of the rock, Martin Fischer built a bark shelter for his family and then went to help other emigrants bring their wagons down the mountains. When his wife Katherina went into labor, four-year-old Martin George struggled through the snow to get help from an Indian guide. Little Marika Fischer was born in the lee of Birth Rock.	Not listed	Public (USFS-Stanislaus National Forest)	California (Walker River-Sonora Route)	None known.
190	Mormon Station	Douglas	NV	Carson City	In the spring of 1850, the DeMont-Beattie-Blackburn party, a group of about 80 Mormons from Salt Lake City, headed for the gold fields of California. When they reached the Carson Valley, they "concluded to start a station for trade" and built a large log blockhouse at the north end of present-day Genoa, Nevada. This station conducted a lively trade, supplying food, supplies, and fresh livestock, at a steep price, to emigrant parties bound for California on the Carson Route. A later station has been reconstructed and is run by Nevada State Parks. The old post office in Genoa was used as the Pony Express station. The building was razed years ago, and the site is now a vacant lot, just south of the courthouse. The livery stable across the street supplied riders with fresh horses. That site is now the picnic area for Mormon Station State Park	Non-contributing element within the National Historic District	Public (Nevada State Parks)	California (Carson Route), Pony Express	None known. Mormon Station State Park has a museum with exhibits, picnic area, and a replica of the old trading post.
191	Woodfords Station	Alpine	CA	Smith Valley	From April 3 to April 29, 1860, a remount station for the Pony Express was located at the site. When the route was changed to go up the new Kingsbury Grade, the pony riders no longer went past Woodfords. The modern Old Emigrant Road to the east is on top of the Carson branch of the California Trail and the Pony Express route. A nice swale on the edge of the highway can be found at the junction of Old Emigrant Road and Highway 88.	Not listed	Public/Private	California (Carson Route), Pony Express	The site needs interpretation and listing on California Department of Transportation records to protect the swale from future destruction. There are markers near the site.
192	Snowshoe Thompson Cave and Ruts	Alpine	CA	Smith Valley	This cave was said to be Snowshoe Thompson's shelter; there is a pristine trail segment near the 3rd Crossing.	Not listed	Public	California (Carson Route)	An electric power line follows the trail.
193	Hope Valley	Alpine	CA	Smith Valley	Hope Valley was an important camping place for emigrants after reaching the top of West Carson Canyon. An excellent description appears in the 1859 diary of Charles True. Here, at junction of California Highways 88 and 89, the original route of the Pony Express cut north across the mountains and on to Placerville. Farther up the valley, the Big Trees Road left the main Carson Route to cross the mountains into the gold mines at Angels Camp and Murphys.	Not listed	Public (USFS)/ Private	California (Carson Route and Big Trees Road), Pony Express	Vandalism is a problem. A Pony Express marker near the junction of California Highways 88 and 89 was found and replaced in June 1997 by the California Division of the National Pony Express Association. The area needs California Trail interpretation.
194	Devil's Ladder/Carson Pass	Alpine	CA	Smith Valley	Vividly described in most emigrant diaries, this was the covered wagon route up the first summit of the Sierra Nevada on the Carson Route. Emigrants had to wait their turn, haul the wagon contents up first, then double or triple team their empty wagon to get it over "slippery rock" (a major obstacle) to reach Carson Pass. The trail crosses the Pacific Crest Trail behind the Forest Service log cabin at the highway summit. The 1849 grave of an unknown member of the Independent Order of Odd Fellows, pioneer names on rocks with the date Aug. 24, 1849 (the names have been retouched over the years yet many have disappeared), and a metal plaque can be found on the upper part of the trail.	Not listed	Public (USFS-Toiyabe and El Dorado National Forests)	California (Carson Route)	The trail needs additional marking and trailhead interpretation. There is a Trails West marker nearby.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	TRAIL	THREATS TO RESOURCES/ VISITOR SERVICES
195	East Shore Caples Lake	Alpine	CA	Placerville	There are beautiful swales between Carson Pass and the east shore of Caples Lake. The trail leads through meadows and forests, but California Highway 88 crosses it in four places before the trail descends a steep slope to the lakeshore. In pioneer days, Caples Lake was a large meadow crossed by streams flowing into two small lakes. Many emigrant diaries describe resting here before starting the second and final ascent of the Sierra Nevada. One can see where the trail begins its climb up the mountain and over the Perpetual Snow Bank to West Pass and Covered Wagon Summit.	Not listed	Public (USFS- El Dorado National Forest)	California (Carson Route)	Highway widening and off-highway parking were planned a few years ago but the project was stopped because it would have destroyed swales and the vista from Covered Wagon Summit. The site needs interpretation.
196	West Shore Caples Lake	Alpine	CA	Placerville	Wagon trains came up from the meadows now covered by Caples Lake and began their final ascent of the Sierra Nevada from here. Emigrant Summit National Recreation Trail goes west from this point up to Covered Wagon Summit, West Pass, and Melissa Coray Peak. The trail continues to follow the Carson Route on Squaw Ridge, goes west to the old Plasse Trading Post, and on to Tragedy Spring (past the Maiden's grave), Leek Springs Road (Mormon Emigrant Trail Road), and Placerville.	Not listed	Public (USFS- El Dorado National Forest)	California (Carson Route)	Evidence of use by mountain bikers has recently been found.
197	Emigrant Valley	Alpine	CA	Placerville	This valley was the halfway resting point, where livestock could be refreshed before the final climb up Covered Wagon Summit to West Pass and "California." Some pioneer diaries refer to this area and speak of stopping for lunch here while waiting their turn to ascend the summit. In 1853, there was literally a "traffic jam" here with wagons waiting in line. In his 1849 diary, Jasper Hixson comments on looking up and seeing large crows silhouetted against the snow banks near the summit. He later realized that these were wagons.	Not listed	Public (USFS- El Dorado National Forest)	California (Carson Route)	This multiple use area serves hikers, horseback riders, and skiers. The site needs interpretation of the California Trail. Possible development of another ski run across the face of the mountain may impact the site. Oregon-California Trails Association volunteers work with the ski resort to call attention to trail preservation and to inform skiers of this historic area.
198	Covered Wagon Summit/West Pass	Alpine	CA	Placerville	At 9,600 feet elevation, this is the summit of the Sierra Nevada on the Carson Route of the California Trail. When the pioneers reached this point, most felt they had arrived in California. They could look across the west slope of the Sierra Nevada and on a clear day see Mount Diablo in the San Francisco Bay area. The viewscape to the west remains essentially as it was in pioneer times. The trail west of Covered Wagon Summit is located primarily under a dirt road, opened after World War II for use by campers and hunters.	Not listed	Public (USFS- El Dorado National Forest)	California (Carson Route)	Mountain bikers and four-wheel-drive vehicles use the road west of the summit. Others access the relatively pristine east slope of the California Trail. An interpretive wayside is needed at the top of the pass. Trails West has placed a marker at the site.
199	Plasse Trading Post	Amador	CA	Placerville	The trail leads from West Pass along Squaw Ridge to the site of a trading post on the edge of the Mokelumme Wilderness. Remains of this post and two marked, but unidentified, emigrant graves can be located at the site.	Not listed	Public (USFS- El Dorado National Forest)	California (Carson Route)	None known.
200	Melissa Coray Peak	Amador	CA	Placerville	In 1848, veterans of the Mormon Battalion left California for Salt Lake City. In crossing the Sierra Nevada from west to east, they opened the Carson branch of the California Trail. The new route was described to west-bound pioneers they encountered during their journey up the Humboldt River. Melissa Coray accompanied her husband, a member of the Mormon Battalion, on their trip west to California in 1846. She was the only woman in the company that blazed the Carson Pass Trail in 1848. In 1993, this peak was named in her honor and also for all pioneer women on the California Trail.	Not listed	Public (USFS- El Dorado National Forest)	California (Carson Route)	There is a remote weather station located on top of the peak. There was talk about moving it elsewhere, but nothing has been done. Motor bike tracks have been seen on this peak.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	TRAIL	THREATS TO RESOURCES/ VISITOR SERVICES
201	Tragedy Springs	El Dorado	CA	Placerville	Tragedy Spring was named by Henry Bigler. Mormons, who had been at Sutter's Mill when gold was discovered, opened the Carson Trail while blazing a new route over the Sierra. They sent three scouts ahead to find a pass, but the men never returned. Upon reaching this hillside, a grave was discovered that contained their bodies. The names of the three men (Daniel Browett, Ezra H. Allen, and Henderson Cox) were cut into a red fir tree. This section is on display at the Marshall Gold Discovery Museum in Coloma. Along the trail west of the spring (which is covered by a wooden enclosure) is the stump of a dead tree with a blaze and the inscription "P. R. Wright, Aug. XIX, Second Company." Sgt. Phineas R. Wright was a member of another Mormon party that followed the first group during the summer of 1848, and the date matches current research.	Not listed	Public/ Private	California (Carson Route)	Nothing is being done to preserve the Wright stump. Due to vandalism, the spring outlet in the parking area has been capped. Some years ago, a section of trail leading from Tragedy Springs Meadow to the spring itself was destroyed when a water line was installed for nearby summer cabins. A few rocks still show marks from wagon tires.
202	Leek Spring Valley	El Dorado	CA	Placerville	Leek Spring Valley was an important emigrant camping area on the Carson Route of the California Trail.	Not listed	Private	California (Carson Route)	None known.
203	Brockliss Bridge Crossing	El Dorado	CA	Placerville	The Brockliss Bridge was built in the late 1850s and used by emigrants, freighters, stagecoaches, and the Pony Express.	Eligible	Public (USFS-El Dorado National Forest)	California (Johnson Cutoff), Pony Express	A new bridge needs to be constructed to provide a continuous route for the Pony Express. Wildfires and logging may damage the viewshed. The site has significant potential as an interpretive site.
204	Union House	El Dorado	CA	Placerville	This was the site of a way station (not related to the Pony Express) and the junction of the Johnson Cutoff/Pony Express route and the Mormon-Carson Trail.	Not listed	Private	California (Carson Route and Johnson Cutoff)	None known.
205	Sutter's Fort	Sacramento	CA	Sacramento	Sutter's Fort has been reconstructed at its original location. It commemorates John Sutter's creation of the "kingdom of New Helvetia" near the confluence of the American and Sacramento rivers. Following the discovery of gold on the south fork of the American River in 1848, Sutter's empire collapsed in the chaos of the rush for wealth, but Sacramento grew up between the fort and the river. For many, Sutter's Fort represented the end of the California Trail. The fort is of adobe-stucco construction and takes up the better portion of a large city block.	California State Historical Landmark.	Public (California Department of Parks and Recreation)	California (Carson Route)	Sacramento Area State Parks maintains the replica fort and provides exhibits and living history interpretive services. Most of the interpretation is from John Sutter's point of view and does not emphasize the oppression of native California tribes who operated the fort.
206	B.F. Hastings Building	Sacramento	CA	Sacramento	The Pony Express route follows J Street, passing through the city of Sacramento, heading directly to the B. F. Hastings Building, which served the Pony Express. Old Sacramento includes two Pony Express historic sites—the B.F. Hastings Building and a Pony Express statue. Other points of interest are found along the urban corridor, which is well marked.	Listed (Old Sacramento Historic Area)	Public (California Department of Parks and Recreation)	Pony Express	The B.F. Hastings Building has sustained considerable water damage. It is closed to visitation and needs major structural stabilization.
207	Fernley Ruts	Washoe, Lyon	NV	Reno	An extensive sand flat north of Fernley contains a two-mile long segment of ruts. Many artifacts have been located in this area, because when the exhausted emigrants reached the edge of the Forty-mile Desert, they abandoned as many of their possessions as possible.	Not listed	Public/Private	California (Truckee Route)	Currently private developers are negotiating with BLM to acquire these sand swales for an industrial park.
208	Dog Valley Overlook and Slide	Sierra	CA	Portola	The trail crested at First Summit and dropped down a steep slide into beautiful Dog Valley. Today, a shallow eroded slide covered by thick underbrush marks the descent. There are many diary descriptions of Dog Valley. In 1849, Wakeman Bryarly wrote, "We opened upon a beautiful little valley with a very steep hill to descend to it. . . . This valley is oval in shape and had plenty of good grass and water in it." Another emigrant said they had, "slid down the mountain like otters."	Not listed	Public (USFS-Toiyabe National Forest)	California (Truckee Route)	None known.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	TRAIL	THREATS TO RESOURCES/ VISITOR SERVICES
209	Donner Camp Site	Nevada	CA	Truckee	The George and Jacob Donner families and their teamsters (about 20 people) spent the winter of 1846-47 at a campsite near Alder Creek. Due to injuries and a broken wagon, they could not reach the Donner Lake site, where the rest of the Donner-Reed Party wintered, six miles west. They were unable to build cabins and spent the winter under makeshift tents and quilts. Most of the people at this camp perished. The historic environmental setting is almost pristine.	National Historic Landmark	Public (USFS-Tahoe National Forest)	California (Truckee Route)	None known. The USFS has developed interpretive signs along a handicapped-accessible trail and there is a picnic area nearby, but there is some question about the camp's actual location.
210	Donner Memorial State Park	Nevada	CA	Truckee	About 60 members of the Donner-Reed Party spent the winter of 1846-47 near Donner Lake in three hastily constructed cabins. The Murphy cabin site is protected by the state park. The Breen and Graves cabin sites can be approximately located by diary descriptions but appear to be under state highway or private developments. The park contains a monument, museum, and a walking trail to the Murphy cabin site. The viewshed is not pristine, but this is an important place in trail history.	Not listed	Public	California (Truckee Route)	None known.
211	Donner Pass	Nevada	CA	Truckee	The Elisha Stevens Party, accompanied by mountain men Caleb Greenwood and Isaac Hitchcock, first took wagons into California over Donner Pass in November 1844, thus earning credit for the first successful wagon crossing of the Sierra Nevada. In 1846, Edwin Bryant wrote, "Standing at the bottom and looking upwards at the perpendicular . . . granite cliffs, the observer . . . would doubt that man or beast ever made good a passage over them." The Donner Party and their rescuers used Donner Pass in 1846. It was also used by foot and horseback traffic, even after the Roller Pass route opened in 1846. After veterans of the Mormon Battalion discovered a route over West Pass in 1848, the Carson Route became the preferred course for wagon travel. The Central Pacific built the first transcontinental railroad over Donner Pass, and today, I-80 runs nearby. Despite the impact of modern transportation, the pass still has a great viewshed.	Not listed	Public	California (Truckee Route)	None known.
212	Roller Pass	Placer	CA	Truckee	In late September of 1846, Caleb Greenwood found an easier route over the Sierra Nevada. He led his party south of Donner Pass, up Coldstream Valley and Emigrant Canyon, and over the pass between Mt. Judah and Mt. Lincoln. Roller Pass, at 7,860 feet, was the highest pass on the Truckee Route. There are many rich diary descriptions that describe the difficulty of reaching the pass and the joy of arrival. The view from the top, which caused many emigrants to gaze in awe, has not been impacted by modern development. The original 1846 route went straight up the slope, using logs as "rollers" to help pull the wagons up the last 400 feet of the steep, 30-degree slope. The logs acted as a bearing for chains connecting multiple yokes of oxen at the crest with a wagon below. In 1847, the Charles Hopper Party cut a switchback into the hillside near the top of the pass to make the ascent easier and eliminate the need for the "roller." Sections of pristine trail survive on both routes. This trail continued to see use until the Dutch Flat Road was cut over Donner Pass in 1852.	Not listed	Public (USFS)	California (Truckee Route)	None known. The top of the pass is marked by a USFS sign.
213	Bear Valley	Nevada, Placer	CA	Truckee	The Truckee Route descended into Bear Valley through Emigrant Gap and down a 30-degree slide, using whatever braking devices emigrants could invent. Halfway down, an old cedar stump bears deep scars from snubbing ropes. John Steel described his descent in 1850: "The wagons were then shoved off, when one after another thundered down over the rocks through a cloud of dust, into the valley below." The valley was characterized by wet, swampy areas on both sides of the river. The site was mentioned in emigrant diaries as a resting place for people and animals.	Not listed	Public/Private	California (Truckee Route)	None known.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	TRAIL	THREATS TO RESOURCES/ VISITOR SERVICES
214	Mule Spring	Nevada	CA	Truckee	Lying at the head of a small meadow, Mule Spring was an emigrant campsite and the staging area for the Donner Party rescue. Heavy snow caused one of the relief parties to leave their mules here and continue eastward on foot.	Not listed	Public/Private	California (Truckee Route)	None known. The site is marked with a USFS sign.
215	Johnson's Ranch	Yuba	CA	Yuba City	Johnson's Ranch was the first settlement reached on the Truckee-Donner Trail prior to the gold rush. This site played an important role in the rescue of the Donner Party.	Not listed	Private	California (Truckee Route)	The site is so threatened with unauthorized use that all visitors have been barred.
216	Beckwourth Pass	Plumas	CA	Portola	The discovery of this pass by Jim Beckwourth led to the opening of the Beckwourth Trail in 1851. There is a good hiking route along eroded wagon ruts from a stone marker at the summit to a trail marker 0.25 miles west.	Not listed	Public (BLM)/ Private	California (Beckwourth Trail)	None known.
217	Willow Springs (West of Lassen's Meadows)	Pershing	NV	Eugene Mountains	Located some 10 miles from where the southern route to Oregon left the California Trail near the head of today's Rye Patch Reservoir, Willow Springs offered welcome relief to travelers. Alonzo Delano noted on August 15, 1849, that these small springs provided "the first draught of pure, cold water which we had drunk for many days." By September 15, Simon Doyle found "about 175 wagons there encamped waiting their turn to water their stock. The springs were so small that water could only be dipped up with a tin cup into the buckets and did not come in half as fast as it could be dipped out with one cup." From this spring the Applegate Trail headed southwest to cross Antelope Summit, and a later stage route veered northwest over Imlay summit.	Listed	Private	California (Applegate Trail)	None known.
218	Antelope Springs	Pershing	NV	Eugene Mountains	About a mile south of the trail, these three small springs were "mere drippings," but in 1849 "hollow reservoirs below each spring" let emigrants water their animals. The view of "ragged, barren mountains" with "not a blade of grass to be seen" gave travelers a hint of the ordeal they were to experience while crossing to Black Rock Springs. The marked grave of Susan Coons, who died here in childbirth in 1860, is nearby.	Listed	Private	California (Applegate Trail)	Efforts should be continued to protect and interpret trail resources. The spring should be fenced to protect it from stock. Water could be piped out to a stock tank.
219	Antelope Pass	Pershing	NV	Eugene Mountains	This is the first pass through which the emigrants traveled after leaving the Humboldt River. It was an easy passage. On August 16, 1849, Alonzo Delano wrote, "We pursued our way in a north-west direction up the gorge to the ridge [Antelope Range]. . . . We were upon the north-eastern rim of another barren sand-basin, in view of a broken country far below." The road from Antelope Pass to Rabbithole Springs is a primitive two-track with an evocative viewshed.	Not listed	Public (BLM)	California (Applegate Trail)	Mining operations intrude on the viewshed.
220	Kamma Pass	Pershing	NV	Eugene Mountains	Through this pass, emigrants approached Rabbithole Springs and the awesome Black Rock Desert. The exhausted, starved, and dehydrated oxen could hardly continue pulling the wagons. On September 22, 1849, Joseph Middleton described their plight: "People are driving their poor exhausted cattle behind or sometimes before their wagons—and when they lie down from exhaustion, they will sometimes wait a while for them to rest, at others they will beat them. . . . This is all an appalling desert of desolation . . . vestiges of the intensity of its power and heat being equalled only by its incomprehensible extent and magnitude." An impressive section of trail runs northwest from Kamma Pass, passing up and down the drainage draws of Painted Canyon. The multi-hued rock formation described by Alonzo Delano as "the most beautiful hills of colored earth I ever saw, with the shades of pink, white, yellow and green brightly blended" can still be seen on the western slope of the canyon.	Not listed.	Public (BLM)	California (Applegate Trail)	Mining operations intrude on the viewshed.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	TRAIL	THREATS TO RESOURCES/ VISITOR SERVICES
221	Rabbithole Springs	Pershing	NV	Eugene Mountains	Rabbit trails led to this waterhole, where Lindsay Applegate found a "little puddle of water" in 1846. Emigrants later sank wells here and at nearby Barrel Springs that provided "cool, clear water but a little saline." Animals suffered from a lack of both water and grass all along this stretch of trail, and during 1849 J. G. Bruff noted there "was scarcely space for wagons to reach the holes, for the ox-carcasses." Alonzo Delano realized that instead of avoiding the desert, the Applegate Trail crossed "a more dreary and wider waste, without either grass or water, and with a harder road before us."	Listed	Public (BLM)	California (Applegate Trail)	High recreational use of Black Rock Desert is a threat. Non-historic uses and mineral development threaten the integrity of this site. Efforts should be continued to protect and interpret trail resources.
222	Black Rock/Black Rock Springs	Humboldt	NV	Eugene Mountains	Volcanic Black Rock "looked like a mass of black cinders" and resembled "a blacksmith's forge." This "oasis in the desert" with its complex of impressive boiling springs was the first adequate source of water and grass on the 50-mile trek from the Humboldt River and the first water after the Black Rock Desert. The water irrigated about 20 acres of meadow and was "too hot for the hand," but Joseph Middleton noted in 1849 that "the water when cold is good for drinking" and "tasted good to the thirsty traveller." The 1852 route of the Nobles Trail left the Applegate Trail at Black Rock Springs and headed southwest to meet the 1856 Nobles route on Granite Creek.	Listed	Public	California (Applegate Trail, Nobles Trail)	Motorcycle use is probably damaging the desert near the site. Efforts should be continued to protect and interpret trail resources.
223	Deep Hole Springs	Washoe	NV	Gerlach	In 1853, J. B. Dreibelbis found "grass and water in abundance, of the very best quality," at Deep Hole Springs. The springs were noted for their depth. Mary C. Fish noted in 1860 that "some of them have been sounded 75 feet and no bottom found." Emigrants often stayed here for several days to prepare their stock to cross the Smoke Creek playa. Ladue Vary built a trading post here in 1856, and the original stone structure remains intact.	Not listed	Private	California (Nobles Trail)	Mining, geothermal exploration, and recreational overuse of the area are all potential threats.
224	Bridge Creek/Nancy Allen Grave (1857)	Lassen	CA	Eagle Lake	Known to emigrants as Summit Creek, this heavily timbered campsite is the location of Nancy Allen's 1857 grave. This is one of the few extant emigrant graves and gravestones on trails in the Far West. Traveling near Bridge Creek in 1854, Lieutenant E.G. Beckwith commented "The nights are cold in the mountains, but during the day the sun is hot, making the shade agreeable. Our path continued to-day through the same dense forest."	Not listed	Public	California (Nobles Trail)	Logging threatens the site.
225	Pine Creek Valley	Lassen	CA	Burney	The three miles between the northern and southern junctions of the Nobles and Lassen trails include a unique section of emigrant trail. Traffic here ran north on the Nobles and south on the Lassen. Pristine ruts are associated with this important camping area. Camped on Pine Creek in 1850, Mary C. Fish reported, "There is plenty of water and grass in places and timber in inexhaustible quantities consisting of pines, spruce, cedar &c."	Not listed	Public	California (Nobles Trail, Lassen Trail)	Logging threatens the site.
226	Manzanita Chute	Shasta	CA	Burney	This important section of trail passed north of Manzanita Lake through an "extensive plain of Manzanita" that was "full of wild bees." It is a rough, two-track jeep trail that has been kept open since emigrant days and is well worth preserving.	Not listed	Public/Private	California (Nobles Trail)	Logging is an immediate threat.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	TRAIL	THREATS TO RESOURCES/ VISITOR SERVICES
227	Double Hot Springs	Humboldt	NV	High Rock Canyon	These two azure "large round sinks" marked the end of a series of springs that extended over five miles from Black Rock. Alonzo Delano stopped here on August 18, 1849: "On looking around us we saw a beautiful plat of green grass, covering about an hundred acres, which was irrigated by the water of several hot springs. Two of these were very large, and from them ran a rivulet of sufficient capacity to turn a mill; but fifty rods below the brook was too hot to bear the hand in. The water in the springs was clear and deep, and hot enough to boil bacon. We boiled our coffee by setting the coffee-pot in the water." The scalding waters of Double Hot Springs resulted in occasional tragedies for unwary overlanders and are still dangerous. Emigrants dug ditches 0.25 mile long to let the water run off and cool down. The water was still very hot at the far end of those ditches.	Listed	Private	California (Applegate Trail)	Efforts should be continued to protect and interpret trail resources.
228	Lassen and Clapper Burial Site	Humboldt	NV	High Rock Canyon	<i>The Mountain Messenger</i> reported on April 30, 1859 that Paiutes had killed Peter Lassen and a companion, later identified as Edward Clapper, at Black Rock Springs while the Danish emigrant and trail-promoter was on a prospecting trip. Later, H. H. Bancroft thought "possibly white men disguised as Indians" committed the murders. Both bodies were reportedly buried in Clapper Canyon. Lassen's body was later exhumed and buried in a more elegant grave. In the early 1990s, what is believed to be Clapper's remains were found and reburied near Susanville, next to Lassen's grave.	Listed	Public (BLM)	California (Applegate Trail)	Nonhistorical uses and mineral and other development threaten the integrity of this site. An interpretive monument has been installed by the Oregon California Trails Association and the BLM.
229	Mud Meadows	Humboldt	NV	High Rock Canyon	At Mud Meadows in 1849, P. F. Castleman noted "several Springs some two or three of them cold and all the others warm," some "blood warm" and others "almost scalding hot." The springs feed several hundred acres of level plain covered "with grass of several species mostly co[a]rse swamp grass." William Swain reported, "Our teams are growing weak very fast." Here emigrants began to have frequent encounters with Indians. In 1847, Lester Hulin wrote, "These prowling indians are as hard to find as the deer."	Listed	Public/Private	California (Applegate Trail)	Efforts should be continued to protect and interpret trail resources.
230	Fly Canyon Wagon Slide	Humboldt	NV	High Rock Canyon	J. G. Bruff thought he had reached "the jumping-off place" when he came to this rocky, 45-degree descent of about 200 feet into Fly Creek near High Rock Lake. Emigrants lowered their wagons with ropes, locked the wheels with chains or poles, or added an extra team of oxen to keep from pitching down this "very precipitous rocky descent." Although most efforts were successful, occasionally they lost control and wagons crashed to the bottom of the canyon. "It was truly frightful," wrote A. E. Garrison.	Listed	Public	California (Applegate Trail)	Emigrant writings in Fly Canyon are subject to defacement. Efforts should be continued to protect and interpret trail resources.
231	High Rock Canyon	Washoe	NV	High Rock Canyon	This marvelous 21-mile canyon provides an exceptional trail experience. In 1843, John C. Fremont noted High Rock Canyon's "stupendous and curious rocks, which at several places so narrowed the valley, that scarcely a place was left for the camp." Indian Cave, Register Rock, Stevens Camp, and Stevens Springs are important sites associated with the canyon. At its upper end, an excellent mile-long hike winds through this unique, narrow, high-walled canyon — "a singular place to travel through."	Listed	Public (BLM)	California (Applegate Trail)	None known. There is a Trails West marker at the entrance to Upper High Rock Canyon.
232	Bruff's Singular Rock	Washoe	NV	Vya	J.G. Bruff sketched this "Singular Rock on left of road" by today's Massacre Ranch on September 19, 1849. Near this large volcanic rock formation, he noted an "old codger" who "was in the habit of catching loose animals; and appropriating them to his own use, without further enquiry." Trail ruts pass in front of the rock.	Not listed	Public (BLM)	California (Applegate Trail)	None known.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	TRAIL	THREATS TO RESOURCES/ VISITOR SERVICES
233	Seyfeyth's Hot Springs/ Surprise Valley	Modoc	CA	Cedarville	Upon entering Surprise Valley, emigrants encountered hot springs between Upper and Middle Alkali lakes. After the long drive from the Humboldt River, this lush valley provided an excellent area to recruit their stock. Alonzo Delano found "good grass and plenty of sage for firewood." Some trains spent a week or more resting and letting their starved, exhausted animals feed on the lush grass. In 1849, Simon Doyle described the "Hot Springs in Last [Surprise] Valley. . . . We camp tonight in a valley or sage plain laying between the two main ridges of mountains, from 20 to 25 miles wide extending N. & S. as far as the eye can reach. The steam from Boiling Springs is visible in many places."	Not listed	Public (BLM)/ Private	California (Applegate Trail)	None known. A Trails West marker is located here.
234	Fandango Pass (Lassen's Pass)	Modoc	CA	Cedarville	The east base of Fandango Pass was an important staging area for the "toilsome ascent" that often required double-teaming. From this Sierra Nevada crossing, Alonzo Delano described, "The view of mountain scenery is grand and beautiful. Below, on the west, is a broad, green, and grassy valley [Fandango Valley], abounding in springs. . . . At the extremity of the valley, is seen the broad, beautiful water of Goose Lake, adding a charming variety to the scene." P. F. Castleman looked west in 1849 to see "a great many trains encamped near the margin of this valley," making "the grandest scene." Blazes and deep swales survive from the earliest trail days.	Not listed	Public (BLM, USFS-Modoc National Forest)/ Private	California (Applegate Trail)	None known. There is an Applegate Trail Coalition interpretive wayside and a Trails West marker at Fandango Pass.
235	Conical Rocks	Modoc	CA	Cedarville	These very visible, numerous, and unique conical rock formations are located where the Lassen Trail entered the valley of the North Fork of Pit River. These formations were often mentioned in emigrant diary accounts. On September 26, 1849, Andrew Loop Murphy wrote, "Striking the river this morning I noticed a cluster of singular shaped rocks sticking up in spires of a conical shape 20 to 30 feet high."	Not listed	Private (XL Ranch Indian Reservation)	California (Lassen Trail)	None known. A Trails West marker is located at the base of these rocks.
236	Hanging Rock	Modoc	CA	Modoc	This towering cliff on a bend in the rugged Pit River Canyon was often noted by passing emigrants. On October 8, 1849, Israel Lord recorded in his journal, "On the east is a smooth overhanging basalt bluff, which is 40 or 50 rods long and some (I know not how many) hundreds of feet high. I . . . ascended to the summit. It was a rich scene . . . trees, trees, trees, in all directions—everywhere, except on the beautiful valley bottom, which winds and turns and twists among the mountains, garnished with the river's silver stripe."	Not listed	Public (USFS- Modoc National Forest)	California (Lassen Trail)	None known. The USFS plans to make the Pit River Canyon an interpretive hiking trail.
237	Feather Lake	Lassen	CA	Burney	Feather Lake, so named for the great quantities of waterfowl feathers around the lake, was a major camping area near the south crossroads of the Lassen and Nobles trails. Often described in emigrant diaries, this grassy, mile-long pond can still be found about five miles south of the Bogard Ranger Station off California Highway 44. Alonzo Delano found the water unappetizing in 1849: "Came to a broad valley, near a lake of water, so filled with insects and animalculae, that a cupfull could not be dipped up without having multitudes in it. It seemed as if every insect that lives in water was there. The only way it could be used was by digging wells near the margin, and letting the water filter through the ground, and then it proved to be sweet and good."	Not listed	Public (USFS- Lassen National Forest)	California (Lassen and Nobles Trails)	None known.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	TRAIL	THREATS TO RESOURCES/ VISITOR SERVICES
238	Duck Lake	Lassen	CA	Susanville	This major camping area was often described in emigrant diaries. It is located about 4.5 miles north of Westwood, just off County Road A21. Charles Glass Grey camped at Duck Lake on September 20-21, 1849. He wrote, "We came to a small lake, being the head waters of the north fork of 'Feather River,' around which the grass was excellent & the water very good. A great number of teams were encamp'd nearby. . . . Washed clothes, mended, roasted coffee, clean'd my gun, read Shakespeare & took a nap! Last night there were a tremendous number of fires kindled in every direction by the numerous camps & such shooting of guns & pistols & yelling & laughing I never heard."	Not listed	Private (but surrounded by USFS land)	California (Lassen Trail)	None known.
239	Deer Creek Meadows	Tehama	CA	Lake Almanor	Emigrants often lay over in this valley to recruit their stock and store grass before starting the 50-mile "mountain desert" route to Lassen's Ranch in the Sacramento Valley. Henry St. Clair described the general condition of the migration on September 17, 1849: "This being the general recruiting place, there is a great many wagons and cattle here. Men are getting so near worn out that we, with an ox team, travel as far in a week as foot-men, mule packers, horses or mule teams. The teams are nearly worn out as well as the men. Many are suffering for provisions here now." The meadow was also the site of major government relief efforts for straggling, destitute emigrants in late September 1849.	Not listed	Private	California (Lassen Trail)	Owners are receptive to the placement of interpretive signs.
240	The Narrows	Tehama	CA	Lake Almanor	Emigrants looked down from this narrow dividing ridge into the deep canyons of Deer and Mill creeks. To the southwest, the ridge drops off precipitously 1,300 feet to Deer Creek, and to the northwest, the drop is 1,700 feet to Mill Creek. Alonzo Delano described the area in 1849: "The road ascends to a high ridge, with gulfs on each side more than a thousand feet deep, and in some places only wide enough for the road, and seldom over fifty rods. The country around is a confused broken mass of mountains, to the utmost limit of vision . . . with stupendous out-crops of slate & white quartz."	Not listed	Public (USFS-Lassen National Forest)	California (Lassen Trail)	A Trails West marker is located at the Narrows.
241	Bruff's Camp	Tehama	CA	Lake Almanor	This area was a camp for J. Goldborough Bruff and a few fellow emigrants from October 1849 to April 1850. It contains the graves of the Alford family—Ormond Alford, 54; William M. Alford, 19; Lorenzo D. Alford, 15; and John W. Cameron, 22. They were killed in their sleep by a falling tree while camped here. Bruff described the incident on October 21, 1849: "We were awakened by a man, crying at the top of his voice,—'Hallow, here! Turn out and assist, a tree has fallen on a couple of tents, and killed and wounded several persons!' We raised the bloodstained tent, cut it off from the chords, and extricated the broken tent-poles, etc. And there lay a shocking site!—An aged, grey headed man, and his grown son, with their hips buried in the ground, and their ghastly eyes turned up in death! Next another son, and beside him, a young man, his comrade, slowly dying in agony, with broken legs and mutilated bodies."	Not listed	Private	California (Lassen Trail)	The site is now protected by the private landowner and is marked by three historical markers.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	TRAIL	THREATS TO RESOURCES/ VISITOR SERVICES
242	Steep Hollow	Tehama	CA	Lake Almanor	Steep Hollow was the last major obstacle for emigrants on the Lassen Trail before reaching Lassen's Ranch, about 12 miles ahead. The ridge they had been following narrowed down to such a sharp edge that wagons had to detour south down a very steep, V-shaped ravine and drop almost 400 feet in elevation. They climbed almost as steep a slope to regain the ridge. Archeological site surveys have located numerous emigrant artifacts at the bottom of the hollow, where wagons had to be abandoned. Elijah Preston Howe described his journey through the hollow on September 24, 1849: "We descended a very steep long hill, with deep dust and some rock into 'Deep Hollow' [Steep Hollow]. This place is very rocky and uneven at the foot of the hill, so that it is difficult to find room for the waggons to stand which were crowded into this place, and stopped for water. The road ascends the opposite very bad hill immediately from the foot of the one we came down. . . . In the evening we doubled teams and got up the hill, having very hard pulling."	Not listed	Public (USFS-Lassen National Forest)	California (Lassen Trail)	Trails West markers locate the descent and ascent at Steep Hollow.
243	Fiddlers Green	Modoc	CA	Tule Lake	The spring at Fiddlers Green on the edge of today's Clear Lake Reservoir provided a camping spot for emigrants and later for volunteers sent to help wagon trains through Modoc country. It served as army headquarters and was site of the Indian surrender during the Modoc War. Later, it was Jesse Carr's ranch where Jesse Applegate had a home. Some of the old emigrant road is under the waters of Clear Lake.	Not listed	Public	California (Applegate Trail)	None known.
244	Bloody Point	Modoc	CA	Tule Lake	The history of Bloody Point at Tule Lake is complex and controversial. Peter Bennett's Oregonians left the southern road here on their way to California in 1849. Modoc Indians attacked several wagon trains in 1852 and killed a number of emigrants; witnesses claimed they entirely destroyed an earlier party. Militia companies retaliated and killed many Modocs; casualties on both sides may have reached 150. The historic Indian camp and petroglyphs between Bloody Point and the nearby Natural Bridge are under jurisdiction of Lava Beds National Monument.	Not listed	Private	California (Applegate Trail)	None known.

Appendix G.
Oregon National
Historic Trail:
High-Potential
Segments

APPENDIX G. OREGON NATIONAL HISTORIC TRAIL—HIGH-POTENTIAL SEGMENTS

NO	SEGMENT NAME	LENGTH (miles)	COUNTY/ STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	THREATS TO RESOURCES/ VISITOR SERVICES
1	St. Marys-Red Vermillion Crossing	16	Shawnee, Pottawatomie KS	Manhattan	This segment begins three miles northwest of present-day Rossville and follows U.S. Highway 24 along the north side of the Kansas River to St. Marys Mission. From St. Marys, Oregon Trail Road follows the actual route of the Oregon-California Trail along the foot of the Kansas River Bluffs, past Oregon Trail Park, to Red Vermillion Crossing. This 11 miles of twisting gravel road has been graded, but its alignment has not been significantly changed. The Kansas River flood plain was swampy, forcing the emigrants to follow a path along a bench at the edge of the bluffs. Edwin Bryant eloquently described his day's travel on May 22, 1846: "The trail along which we have traveled today . . . runs over a high undulating country, exhibiting a great variety of rich scenery. As the traveler rises the elevated swells of the prairie, his eye can frequently take in at a glance, a diameter of 60 or 80 miles of country, all clothed at this season with the deepest verdure and the most luxuriant vegetation."	Vermillion Creek Crossing is listed	Private	None known. Oregon Trail Park has a shelter house and restroom.
2	Fort Laramie to Warm Springs	14	Goshen, Platte, WY	Torrington	The trail remains virtually intact and continuous, except when crossed by pipelines and county roads, from the climb out of the Laramie River Valley to Mexican Hill. Huge swales are visible in places; the junction of various branches is clearly visible where the Bluff and River routes join east of Mexican Hill.	Not listed	Public (Wyoming National Guard)/Private	National Guard activities near Guernsey impact the area.
3	Prospect Hill	3	Natrona, WY	Casper	Just west of Willow Springs is a low ridge called Prospect Hill. Here emigrants climbed 400 feet to gain their first sight of the Sweetwater Mountains to the west. The view, or prospect, of the gentle valley gave travelers hope for better water and an easier road ahead.	Determined eligible	Public (BLM)/ Private	Mineral development threatens the historic viewshed. There is a BLM interpretive panel at the top of the hill.

NO	SEGMENT NAME	LENGTH (miles)	COUNTY/ STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	THREATS TO RESOURCES/ VISITOR SERVICES
4	South Pass (Horse Creek to Little Sandy Crossing)	145	Natrona, Carbon, Fremont, Sublette, Sweetwater, WY	Casper, Bairoil, Rattlesnake Hills, Lander, South Pass, Farson	The quality of the resources and the visual experience make South Pass one of the most impressive segments on the entire trail. It starts where the trail fords Horse Creek and heads southwest to cross Wyoming Highway 220 a half mile northeast of Steamboat Rock. The segment continues southwest past present-day Pathfinder Reservoir to strike the Sweetwater River south of Saleratus Lake. Following the banks of the Sweetwater, the route heads generally west—past Independence Rock; around Devil's Gate; past Soda Lake, Split Rock, and Castle Rock—to Three Crossings. The segment follows the main trail along the Sweetwater, fords the river three times within two miles at Three Crossings, passes Names Rock, and fords again at Fifth Crossing. Some emigrants chose to take the Deep Sand Route to the south to avoid these river crossings. The segment next passes Ice Slough; crosses Warm Springs Creek; fords the Sweetwater three more times at Sixth, Seventh, and Eighth crossings; and arrives at the foot of Rocky Ridge. The trail climbs away from the Sweetwater River to cross the high, barren, and rocky ridgeline of Rocky Ridge. Passing north of Lewiston Lakes and crossing Strawberry, Rock, and Willow creeks, the trail leaves the Sweetwater River at the Ninth Crossing—a site known as Burnt Ranch. The route then climbs past Twin Mounds and crosses the Wind River Range and the Continental Divide at South Pass. On his way to Oregon in 1854, Winfield Scott Ebby waxed poetic at his July 10 th campsite on the Sweetwater River: "This is the last night I shall sleep on the waters that flow to the rising sun I shall soon place this great barrier [South Pass] between me & the home of My Youth Well Good Bye Westward the Star of Empire takes it[s] way While I have been Traveling on Streams that mingle their waters with those that flow from the Hills & valleys of 'Home' I have not felt as if I was in reality leaving that home, placing so great a distance between us Now I say 'Adieu adieu my native land' 'Yon Sun that sets behind the Sea, We follow in his flight,' Farewell, awhile to him and thee My nat[iv]e land Good Night' ." Descending into the Pacific drainage, the segment passes Pacific Springs and Plume Rock, crosses Dry Sandy Creek, and follows the north side of Dry Sandy Creek past Parting of the Ways to end at Little Sandy Crossing.	South Pass is a National Historic Landmark	Public (BLM)/ Private	Mineral exploration around Lewiston and Dickie Springs has been a low-level threat to the trail and its viewshed for many years. If large-scale development is proposed, the threat would increase greatly. Ranchette development on the upper Sweetwater River near Split Rock is a concern.
5	Big Sandy to Green River	50	Sweetwater, WY	Farson, Rock Springs	This segment begins at the Big Sandy Crossing near present-day Farson, Wyoming. It follows unimproved roads southwest along the north side of the Big Sandy River. The segment ends at the Lombard Ferry crossing of the Green River, three miles north of the confluence of the Big Sandy and Green rivers.	Not listed	Public (BLM, BOR)/ Private	Access to the eastern end of the segment is possible from Wyoming Highway 28 at a state historical marker. The segment crosses public and private lands. Visitors should acquire written permission from private landowners before entering private land. Access is not continuous along the trail by automobile. Travelers may park their vehicles and hike portions of the trail.
6	Bear River Divide	31	Uinta, Lincoln, WY	Kemmerer	The Oregon-California Trail follows two-track and ranch roads for 31 miles as it crosses the rugged Bear River Divide. The segment begins where the trail crosses U. S. Highway 189 near Cumberland Gap, crosses Cumberland Flats, ascends Little Muddy Creek and Chicken Creek, crosses the Bear River Divide, descends Bridger Creek, and ends at Wyoming Highway 89.	Not listed	Public (BLM)/ Private	None known.

NO	SEGMENT NAME	LENGTH (miles)	COUNTY/ STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	THREATS TO RESOURCES/ VISITOR SERVICES
7	Hagerman Fossil Beds	4	Twin Falls, ID	Twin Falls	This short segment within the boundaries of Hagerman Fossil Beds National Monument begins one mile west of Upper Salmon Falls at the mouth of Yahoo Gulch, where emigrants camped and grazed their stock. It climbs a ridge adjacent to the Snake River, which features a narrow spot that Jesse Applegate called the Devil's Backbone. On parts of the ridge, two parallel ruts are visible. The steep section near the top of the ridge has three rut segments. Artifacts from trail segments are in the museum collection at the park.	Not listed	Public (NPS)	Natural erosion continues to impact trail remnants. There is a wheelchair-accessible interpretive trail to the overlook at the top of the ridge. Hagerman Fossil Beds National Monument maintains a visitor center and museum in the town of Hagerman.
8	North Trail	83	Elmore, Ada, ID	Glenns Ferry, Mountain Home, Murphy, Boise	The North Trail segment extends from the Twin Falls-Elmore County line to the outskirts of present-day Boise, Idaho, and contains the best overall stretch of Oregon Trail left in Idaho. The segment features scenery varying from the Snake River Valley in the south to the broken foothills southeast of Boise. The trail winds through rangelands and the foothills, at times passing through beautiful canyons and along the edges of mountain streams. Over two-thirds of the segment has relatively pristine trail ruts. About one-third of the segment follows dirt roads that have been laid directly on top of the Oregon Trail. The segment heads northwest across rangeland, following trail remnants and passing near Pilgrim Stage Station and the camping area at Little Pilgrim Gulch. The route crosses Black Mesa and fords the Snake River at Three Island Crossing. Leaving the Snake River Valley, the segment crosses Alkali, Cold Springs, Ryegrass, and Bennett creeks. It enters the foothills and passes Teapot Dome Hot Springs, Rattlesnake Station, Canyon Creek Station, Inscription Rock, and Ditto Station, where a branch of the Goodale Cutoff comes in from Fort Hall. The segment continues past Indian Creek Station and Blacks Creek Station before reaching its highest elevation at Bonneville Point and descending to the Boise River. It ends at an electrical substation on the southeast edge of Boise.	Not listed	Public (BLM, Idaho Department of Parks and Recreation, Idaho State Lands)/ Private	None known. Land on the southern approach to Three Island Crossing was recently purchased by the Nature Conservancy. It will be managed as a part of Three Island Crossing State Park.
9	Sinker Creek	18	Owyee, ID	Murphy	This segment crosses one of the driest, hottest, and dustiest stretches of the entire Oregon Trail. Emigrants who were forced to travel the South Alternate Route compared their appearance at the end of each day to a man who had been dipped into a flour barrel. The segment begins two miles northwest of Castle Butte and ends about four miles north of present-day Murphy, Idaho. The trail crosses the broken and arid mesas that stretch along the south bank of the Snake River, passing Wild Horse Butte, crossing Sinker Creek, and climbing Sinker Creek Butte. On August 27, 1853, Rebecca Ketchum described the steep climb out of Sinker Creek: "It was all the horses could do to draw the empty carriage. The other wagon they were obliged to unload before they could get up. We were an hour and a half getting up." Pristine ruts are still evident for most of the segment.	Not listed	Public (BLM)/ Private	None known.
10	Alkali Springs	13	Malheur, OR	Brogan	Starting at a point about six miles north of present-day Vale, Oregon, and continuing to Willow Springs Camp, the Oregon Trail survives as a dirt ranch road. Emigrants often stopped at midday at Alkali Springs, whose name indicates the quality of the only water in the 22-mile crossing from the Malheur River to Birch Creek.	Not listed	Public (BLM)/ Private	The segment needs adequate road signage and public access. There is a BLM interpretive wayside at Alkali Springs.

NO	SEGMENT NAME	LENGTH (miles)	COUNTY/ STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	THREATS TO RESOURCES/ VISITOR SERVICES
11	Ladd Canyon	2	Union, OR	Enterprise, La Grande	The Ladd Canyon Ruts extend for two miles as they climb up and over a high ridge that overlooks the Grande Ronde Valley to the northwest. As the emigrants crested this ridge, they were greeted with an excellent view of the fertile valley and the Blue Mountains beyond. After enjoying the view, they were forced to negotiate a difficult descent down into the valley along several switchbacks, for the hill was too steep for a direct descent. The best portion of the ruts are cut into this hill.	Not listed	Private	Preservation of resources on private land is a concern.
12	Blue Mountains	17	Union, Umatilla, OR	La Grande	This segment, stretching from the western edge of present-day La Grande, Oregon, northwest to the Mount Emily Interchange of I-84, includes many miles of ruts through the picturesque and heavily forested Blue Mountains. This was the first forested terrain the emigrants had encountered since leaving the rolling hills of Kansas. The trail became rougher as it wound up the mountains and through the forests, but the shade was welcome in the summer's heat, and wood and water were now plentiful.	Not listed	Public (Wallowa-Whitman National Forest, Hilgard Junction State Park)/ Private	Preservation of resources on private land is a concern. There are interpretive waysides at Hilgard Junction State Park and Blue Mountain Crossing Interpretive Park and a monument at Summit Road.
13	Emigrant Hill	4	Umatilla, OR	Pendleton	This segment includes the long descent from Deadman Pass to the Umatilla River Valley. In spite of the visual intrusion of the pipeline and the powerlines, this segment provides an excellent feeling for the landscape.	Not listed	Public (U.S. Forest Service)/ Private	Leasing land for grazing has impaired and continues to threaten trail resources.
14	Boardman	12	Morrow, OR	Hemiston	This segment stretches from the eastern boundary of the Boardman Bombing Range to Immigrant Road and includes traces of the Oregon Trail. This appealing landscape of rough sagebrush-covered desert is much as it must have been during the emigrant years.	Not listed	Public/Private	Military use restricts access to the trail.
15	Barlow Road	32	Wasco, Hood River, Clackamas, OR	Mount Hood	The segment begins at Barlow Gate, swings south around Mount Hood, and ends at the West Barlow Tollgate. Ruts remain along most of the distance, and the scenic qualities are exceptional. On September 7, 1853, Amelia Stewart Knight wrote a graphic description of her day's journey over the Barlow Road: "Traveled 14 miles over the worse road that was ever made up and down very steep rough and rocky hills, through mud holes, twisting and winding round stumps, logs, and fallen trees. now we are on the end of a log, now bounce down in a mud hole, now over a big root of a tree, or rock, then bang goes the other side of the wagon and woe to be whatever is inside. . . .These mountains are a dense forest of pine, fir, white cedar, or redwood, the handsomest timber in the world must be here in these Cascade Mountains."	Barlow Road Historic District	Public (US Forest Service)/ Private	None known.

Appendix H.
Oregon National
Historic Trail:
High-Potential
Sites

APPENDIX H. OREGON NATIONAL HISTORIC TRAIL—HIGH-POTENTIAL SITES

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	THREATS TO RESOURCES/ VISITOR SERVICES
1	Upper Independence Landing (Wayne City)	Jackson	MO	Kansas City	Wayne City, a "paper city" on the south bank of the Missouri River about 3.5 miles north of Independence Courthouse Square, was the closest Missouri River landing to the town of Independence, but the climb up the bluffs was steep and tortuous. It rivaled the landing at Blue Mills during the 1830s and 1840s and that at Westport from the 1840s through the 1850s. It was very popular until the flood of 1844 washed away the landing.	Not listed	Private	Modern developments have altered the historic scene, and flooding has changed the landing dramatically. A small overlook at the north end of Cement City Road is fenced, but it needs additional interpretation.
2	Independence Courthouse Square Complex	Jackson	MO	Kansas City	The location of frenzied outfitting activity throughout the 1840s and early 1850s, Independence was the jumping-off point for the Santa Fe and Oregon trails. The town includes several historic buildings, monuments, and Independence Spring. As the place of convergence of early routes from the Mississippi Valley, this square was the last significant point of supply until the mid-1840s, when Westport also became an outfitting town. When J. Quinn Thornton visited Independence in 1846, he found "a great Babel of African slaves, indolent dark-skinned Spaniards, profane and dust-laden bullwhackers going to and from Santa Fe with their immense wagons, and emigrant families bound for the Pacific, all cheerful and intent on their embarkation upon the great prairie wilderness."	Several structures are listed	Public (City of Independence)	Modern development may alter the historic scene.
3	Santa Fe Trail Park Ruts	Jackson	MO	Kansas City	The Oregon Trail/Independence Road is visible as a swale south of this Independence city park, near Santa Fe Road and 29 th Street. There are intermittent swales and traces in an undeveloped field owned by the RLDS Church, up through a couple of backyards to the southwest, and ending on the east side of 3122 Santa Fe Road.	Listed	Public	Future development may impact the historic scene. The site needs additional interpretation.
4	Eighty-fifth Street Ruts	Jackson	MO	Olathe	A preserved trail swale, rare in this urban setting, can be found in a grassed lot at Eighty-fifth and Manchester, heading southwest. This alignment is the only one of up to three alternates in the area that has traces remaining.	Not listed	Private	Some interpretation may be possible with the owners' consent.
5	Heart (Hart) Grove Campground	Jackson	MO	Olathe	Both Oregon and California-bound emigrants traveling the Independence Road used this campground on Heart Grove Creek, a tributary of the Big Blue River. Many 1846 emigrants camped here, including the families of George and Jacob Donner and James Frazier Reed. Hiram O. Miller, traveling with the Donner-Reed Party, made this brief journal entry in 1846: "May 14 15 Camped at 'Heart Grove' Jackson County near the Indian line twenty two miles from Independence on the Big Blue."	Not listed	Private	The area has been severely impacted and there are no extent remains of the campsite or trail. Some interpretation should be done on the site.
6	Minor Park/Red Bridge Crossing of the Big Blue River	Jackson	MO	Olathe	This 27-acre park in a beautiful setting and landscape has both recreational and historic overtones. Its prominent feature is a gentle swale that cuts across the park, obviously created by wet wagons and teams pulling up the hill after crossing the Big Blue River. Emigrants heading west from Independence encountered their first river crossing at this site, a preview of the many rivers and streams to be negotiated on their long journey. On May 8, 1846, Virgil Pringle "Went 12 miles to the Blue and encamped, it being too high to cross. Another wagon capsized at the encampment. . . . No injury to persons or property." The next day his party "Crossed the Blue soon in the morning." The crossing was initially a ford; Red Bridge was constructed in 1859.	Listed	Public (Kansas City Parks and Recreation)	The ruts and swales need to be interpreted.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	THREATS TO RESOURCES/ VISITOR SERVICES
7	New Santa Fe	Jackson	MO	Olathe	This village, also called Little Santa Fe, had its beginnings in the 1840s and was incorporated in 1852. It was the last place for emigrants from Independence to buy supplies before entering Indian territory. Although never an important outfitting town, it was mentioned by many diarists. New Santa Fe grew up at the western edge of Missouri. Trading stores were established here, especially to sell liquor, which was prohibited in the Indian lands west of Missouri. A cemetery, historical marker, two homes from the trail era, and a faint trail swale are all that remain of this site today.	Not listed	Private (New Santa Fe Church)	None known. There is a Santa Fe Trail DAR marker at 122nd and State Line Road, one block west of the church and cemetery. An interpretive wayside exhibit is planned for the site.
8	Lone Elm Campground	Johnson	KS	Olathe	Located at the head of Cedar Creek, the 40-acre Lone Elm Campground was the first campground in Indian country for parties following the Santa Fe Trail/Independence Road from Independence, Missouri. It was first known as Round Grove but was later called Lone Elm, named for its single surviving tree. The site was mentioned in many journals. In May 1849, James Pratt found the tree was "fast being hacked away by the travelers, for firewood," and by 1852, Gilbert Cole reported "no Lone Tree to be found." In use from 1820 through the 1850s, Lone Elm was one of the most important frontier trail campgrounds.	Not listed	Private	Encroaching subdivisions and commercial development by the city of Olathe may impact the area.
9	Parting of the Oregon-California and Santa Fe Trails	Johnson	KS	Olathe	So far, Oregon-bound emigrant trains had been traveling in the wrong direction—southwest toward Santa Fe instead of west. They did this to stay on the divide between the Kansas and Osage river drainages and avoid numerous difficult stream crossings. Now it was necessary to move north; so the Oregon and California trails branched to the right (northwest) and the older Santa Fe Trail branched to the left (southwest). The site is relatively flat farmland. The actual junction probably moved around the surrounding area over the years. Historian William Ghent reported that the junction had been marked with a signpost: "Here, in the early days, some well-disposed person had set up a sign with the words, 'Road to Oregon.'" The Westport and Independence roads came together just east of this junction.	Not listed	Private	Farming impacts the whole area. A roadside park, 0.25mile south on U.S. Highway 56, contains a Kansas State Historical Society marker describing the junction.
10	Blue Mound	Douglas	KS	Lawrence	Blue Mound was a major camping site and the first natural landmark encountered by emigrants, many of whom climbed to the top for the view. Its oval, tree-covered summit, approximately 150 feet high and 0.5 mile long, is one of a series of mounds in this area. John C. Fremont used it as a signal mound in 1843. The trail passed the south edge of the mound on its way to the Upper Wakarusa Crossing.	Not listed	Private	The mound has been used as a ski slope, but it is now a tree-covered pasture. Wayside exhibits should be installed on nearby county roads to interpret the trail and this landmark.
11	Upper Wakarusa Crossing/ Blanton's Bridge	Douglas	KS	Lawrence	This difficult crossing of the Wakarusa River rivaled the lower Bluejacket Crossings. In 1846, Virgil Pringle reported that about half the migration "missed the road [at the Bluejacket Crossings] and crossed about 4 miles above [at the Upper Wakarusa Crossing]." He described the Wakarusa as "a fine stream of clear water, between a creek and a river in size with fine timber on its banks." The bridge was built by James Abbott in 1854. Napoleon Blanton bought the farmland around it the next year, thus the name.	Not listed	Private	There are no extant remains. Interpretation is needed on nearby U.S. Highway 59.
12	Pellant Ruts	Shawnee	KS	Topeka	Named for the current owner of the property, these three dramatic swales run for about 100 yards.	Not listed	Private	The house is fairly new and the owner is very proud of the site.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	THREATS TO RESOURCES/ VISITOR SERVICES
13	Kansas River Crossing/Papin's Ferry	Shawnee	KS	Topeka	Upsets and drownings were frequent at the Kansas River crossings, for the river was 600 feet wide with, as John Charles Fremont described, a "swollen, angry, yellow turbid current." Papin's Ferry, the lower of the three crossings, was the most popular. It was established by Joseph and Louis Papin, two mixed-blood brothers, in 1843 and lasted into the mid-1850s. The ferry consisted of a platform floating on three dugout canoes. William Johnson described this operation in 1849: "By means of a rope, one end of which was coiled around a tree, the wagons were let down the steep banks of the river, and placed in the boat. Two wagons and twelve mules were taken over at a time, the boat being propelled by poles. . . . Double teams were required to haul the wagons up the northern bank, and through the deep sands extending _ mile back from the river." The river has moved very little in this area, and the site is now an industrial park at the river's edge.	Not listed	Private	None known.
14	St. Marys Mission	Pottawatomie	KS	Manhattan	St. Marys was a Catholic mission and school established among the Potawatomi Indians by Belgian Jesuits from Florissant, Missouri, in 1848. An important emigrant campground, the site was often mentioned in emigrant diaries. Lorena L. Hays passed the mission on May 10, 1853: "Came by the Catholic mission today. There is a log church in the shape of a cross. Most of the best houses have been white washed and the place had a very neat appearance. The Indians dress very fine in broadcloth but wear their clothes in rather an odd and slovenly manner." St. Marys is still operated as a Catholic school, named St. Mary's College.	Not listed	Private	None known.
15	Vieux Cemetery/Red Vermillion Crossing	Pottawatomie	KS	Manhattan	In 1847 or 1848, Louis Vieux, a mixed-blood Potawatomi Indian, established a toll bridge at the crossing of the Red (or little) Vermillion River. Vieux charged \$1.00 to cross the bridge and also sold hay and grain to the emigrants. Plentiful water, grass, and wood made the east bank of the Red Vermillion River a favorite camping spot. On May 22, 1846, Edwin Bryant camped on the east bank and forded the stream the following morning: "The ford of the small creek on which we encamped last night was difficult, owing to its steep banks and muddy channel. We were obliged to fell small trees and a large quantity of brush, and fill up the bed of the stream, before the wagons could pass over." In 1849, an epidemic of Asiatic cholera struck a large wagon train camped at the river and left 50 dead within a week. Survivors carefully buried the victims and marked each grave with a slab of limestone, upon which the name and date of burial was carved. One stone, protected by a fence, survives from the cholera victims' cemetery.	Listed	Public	The modern bridge intrudes on the historic scene. The fence around the remaining grave is also intrusive but discourages vandalism. Both the cemetery and the crossing site need interpretation.
16	Scott Spring	Pottawatomie	KS	Manhattan	At a favorite emigrant campground on Rock Creek, Scott Spring was noted for its delicious cold water. The spring is at the base of a rocky ridge, and an emigrant grave can be found a few yards north. Edwin Bryant's party stopped to refresh themselves on May 24, 1846: "We found here, gushing from a ledge of limestone rock, a spring of excellent water, from which we refreshed ourselves in draughts that would be astonishing to the most fanatical cold water advocate." Adjacent Oregon Trail Park was a cooperative pride project to commemorate the 150th anniversary of the Oregon Trail that involved four historical societies. The site contains a covered-wagon and ox-team sculpture, historic signs, and Burr Oak trees (planted in all seven states that the Oregon Trail crossed).	Not listed	Public	None known.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	THREATS TO RESOURCES/ VISITOR SERVICES
17	Coon Creek/Marshall Grave	Pottawatomie	KS	Manhattan	The Oregon-California Trail crossed Coon Creek on a solid rock ford, passing a clear spring and campsite. S.M. Marshall's grave is on the high promontory to the west. Two swales, fifteen feet deep, are north of the spring. Climbing the hill, the trail is seven swales wide. Marshall's grave is marked with an iron fence erected by the Rock Creek Historical Society.	Not listed	Private	None known.
18	Black Vermillion Crossing	Marshall	KS	Blue Rapids	The Black (or Big) Vermillion River was a considerable obstacle for overland emigrants—its steep banks requiring heavy spading and rope work. On May 25, 1846, Edwin Bryant's company spent several hours getting their wagons across the river. "The Vermilion is the largest water-course we have crossed since leaving the Kansas. Its current is more rapid than has been usually exhibited by the streams of these prairies, and would afford very good water-power. The timber at this point on its banks, is about a quarter of a mile in width, and consists chiefly of oak and elm."	Not listed	Private	None known. Although the site is now inundated by Tuttle Creek Lake and there are no extant resources, a marker commemorates the site on a nearby roadway. It has been there for 70 years, indicating the crossing was "70 rods north and 38 rods west" of the marker.
19	Alcove Spring	Marshall	KS	Blue Rapids	This picturesque area was a favorite campsite near the Independence Crossing of the Big Blue River. The spring originates in an unusual rock formation and falls over a rock ledge into a pool below. Emigrants carved their names in the rocks surrounding the spring, and many of these carvings are still visible. Edwin Bryant, traveling with the ill-fated Donner-Reed Party, wrote a detailed description of the spring on May 27, 1846: "We found a large spring of water, as cold and pure as if it had just been melted from ice. It gushed from a ledge of rocks, which composes the bank of the stream, and falling some ten feet, its waters are received into a basin. . . . A shelving rock projects over this basin, from which falls a beautiful cascade of water, some ten or twelve feet. The whole is buried in a variety of shrubbery of the richest verdure. . . . Altogether it is one of the most romantic spots I ever saw. . . . We named this the 'Alcove Spring;' and future travelers will find the name graven on the rocks, and on the trunks of the trees surrounding it." Sarah Keys, Margaret Reed's mother, died here while the party was waiting for the river to fall enough to cross. She was buried somewhere in the area.	Listed	Private (Alcove Spring Historical Trust)	Vandalism and vegetation overgrowth threaten the site. A monument to Sarah Keys is next to the parking lot.
20	Junction of the St. Joe and Independence Roads	Washington	KS	Blue Rapids	The St. Joe and Independence roads joined on this prairie west of Marysville, Kansas. By traveling two days farther up the Missouri River from Independence and starting their overland journey from St. Joe, emigrants were able to save two weeks of travel time. Where these two main feeder routes met, emigrants commonly reported a maze of wagons, animals, and humanity that stretched to the horizon. In 1849, it seemed to William Johnson that there was "an unending stream of emigrant trains, while in the still farther distance . . . could be seen great clouds of dust, indicating that yet others of these immense caravans were on the move. It was a sight which once seen can never be forgotten; it seemed as if the whole family of man had set its face westward." Today, the junction is in an area of isolated farmland that has been plowed for decades. No traces of either trail remain.	Not listed	Private	None known. There are two interpretive markers in the vicinity.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	THREATS TO RESOURCES/ VISITOR SERVICES
21	Hollenberg Station	Washington	KS	Blue Rapids	The Hollenberg ranch house was built on Cottonwood Creek about 1857 by Gerat H. Hollenberg to capitalize on the Oregon-California emigrant trade that passed his door. In addition to living quarters for the Hollenburg family, the building served as a neighborhood grocery store, a tavern, and an unofficial post-office. Emigrants were able to obtain provisions at the ranch. Three years later, it became a Pony Express home station and later a stage station. Dr. C.M. Clark reached Cottonwood Creek in 1860 and found "a small stream which is dry during the summer months. The approach to it is winding and steep, and as the bed of the stream contains several large stones at the ford, some care is necessary in driving. There are two good springs here, but no wood. The Stage Company have a station here, and there is also one or two other buildings." The original building still stands and houses a museum. It is a rare example of a Pony Express station that still stands unaltered in its original location.	National Historic Landmark	Public (Kansas State Historical Society)	The site is well-protected and the restored station is a museum. Several historical markers and monuments stand on the grounds. There is a new visitor center with interpretive exhibits near the historic building.
22	Rock Creek Station	Jefferson	NE	Fairbury	This site on the Oregon-California Trail was a supply point for later emigrants, a stagecoach station, and a Pony Express station. About 1,600 feet of trail ruts are still visible.	Listed	Public (Nebraska Game and Parks Commission)	None known. The site is well run as a Nebraska State Park. It has a new visitor center with excellent displays.
23	The Narrows	Nuckolls	NE	Fairbury	The trail was confined at the Narrows between the Little Blue River and the bluffs, making travelers vulnerable to Indian attacks. A small monument on the bluff above the Little Blue River and an Oregon-California Trails Association wayside exhibit on the county road near the entrance to the site interpret the story of the 1864 Indian attacks and their effects on the territory.	Listed	Private	Nuckolls County officials and the Nebraska chapter of the Oregon-California Trails Association could negotiate an agreement with the owner to allow visitors to hike to the bluffs above the river.
24	Ayr Ruts	Adams	NE	Red Cloud	Approximately three miles northeast of the present-day town of Ayr, Nebraska, is a 300-yard stretch of clearly defined Oregon-California Trail ruts. The ruts are adjacent to the grave of eight members of the Simonton-Smith wagon train, en route from St. Joseph to Denver with a consignment of hardware, which was attacked by Cheyenne and Arapaho Indians in August 1864.	Not listed	Private	None known.
25	Thirty-two Mile Station	Adams	NE	Grand Island	This way station served emigrants, stagecoaches, freight trains, and the Pony Express. It was named for its distance from Fort Kearny. The station, consisting of one long low building, was abandoned in August 1864, following several Indian attacks in that locality. Indians later burned it to the ground.	Listed	Private	None known. The site needs improved interpretation.
26	Susan Hail Grave/Sand Hill Station	Adams	NE	Grand Island	This is the marked grave of a woman who died June 2, 1852—probably of cholera. The grave is protected by a pipe fence. The story is told that her grieving bridegroom walked back to St. Joseph, had a granite stone engraved, and brought it back to her grave in a wheelbarrow. The present stone is not the original. Pristine ruts near the grave run for a quarter mile through unbroken sod. Emigrants on the main Oregon-California Trail got their first view of the Platte River Valley from this site.	Listed	Private	Interpretation and preservation of the site, surrounding swales, and viewshed are needed.
27	Fort Kearny	Kearney	NE	Kearney	Fort Kearny was established by the U.S. Army in 1848 to protect travelers going west from Indian attacks. This military post was strategically located at a junction where various eastern feeder trails merged, forming one broad trail. Although none of the original buildings have survived, the Nebraska Game and Parks Commission has reconstructed two of the fort buildings.	Listed	Public (Nebraska Game and Parks Commission)	The Nebraska Game and Parks Commission needs to increase interpretation of historic trails at this site.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	THREATS TO RESOURCES/ VISITOR SERVICES
28	Plum Creek	Phelps	NE	Kearney	Although no plums grew here, Plum Creek was noted as a good campsite for overland emigrants. In later years, a Pony Express station and an Overland Stage station were located near the creek. On August 7, 1864, Cheyenne Indians attacked the station and a wagon train camped nearby, killing 11 men from the train and three occupants of the station. The victims are now commemorated in the Plum Creek cemetery.	Not listed	Public	None known.
29	Dan Smith's West Ranch	Dawson	NE	Gothenberg	This was one of a series of road ranches that sprang up along the Oregon-California Trail in the late 1850s to cater to the ever-increasing number of emigrant trains passing through Nebraska.	Not listed	Private	None known.
30	O'Fallon's Bluff	Lincoln	NE	Ogallala	Oregon-California Trail ruts can be found near this natural landmark on I-80. Here a series of high, sandy bluffs crowded the south bank of the Platte River, forcing emigrants to make a wearisome three-mile detour up and over the rolling, sandy hills.	Listed	Public (Nebraska Department of Roads)	Signs are needed on I-80 to direct visitors to the area.
31	California Hill/Upper Crossing of the South Platte River (later known as Old California Crossing or Lower California Crossing)	Keith	NE	Ogallala	Crossing the South Platte River allowed emigrants to reach the North Platte River and follow it toward South Pass. Several crossing sites were used, but the Upper Crossing was the most important because it led directly into Ash Hollow, the best approach to the North Platte. California Hill, encountered immediately after crossing the South Platte, was the first major grade faced by the emigrants. Imposing trail ruts are visible at this site.	Listed	Private (Oregon California Trails Association)	Improved access and interpretation are needed.
32	Ash Hollow Complex/Windlass Hill	Garden	NE	Chappell	Ash Hollow is a natural landmark that served as the gateway to the North Platte Valley. Windlass Hill was a difficult descent, which left five scars of trail ruts down its side. The source of the name is unknown. Emigrants never referred to it as Windlass Hill. The complex includes Ash Hollow Spring, Rachel Pattison's grave, Windlass Hill, an emigrant campsite, and good drinking water. An often-mentioned grave at the north end of Ash Hollow in a small cemetery contains the remains of other emigrants.	Listed	Public (Nebraska Game and Parks Commission)	None known. A visitor center with interpretive exhibits is operated at Ash Hollow State Historical Park. There are also interpretive waysides at Windlass Hill.
33	Amanda Lamin Grave	Morrill	NE	Crescent Lake	Amanda Lamin was a 28-year-old emigrant, born in Devonshire, England, who died of cholera in 1850. The gravesite stands on the top of a small knoll, in the middle of private pastureland, overlooking the North Platte River. One mile east is an excellent set of Oregon-California Trail ruts.	Listed	Private	None known. The site needs additional interpretation. On nearby Nebraska Highway 92 there is a large Nebraska State Historical Society marker.
34	Courthouse Rock/Jail Rock	Morrill	NE	Scottsbluff	Courthouse Rock was first noted by Robert Stuart in 1812 and quickly became one of the guiding landmarks for fur traders and emigrants. It is a massive monolith of Brule clay and Gering sandstone south of the trail, which was variously likened to a courthouse or a castle. A smaller feature just to the east was called the Jail House or Jail Rock. Courthouse Rock was the first of several impressive natural landmarks along the trail in western Nebraska.	Listed (Courthouse Rock)	Public (City of Bridgeport, Nebraska State Historical Society)	Dirt bikes, vandalism, and all-terrain vehicles pose threats to resources at this site. Interpretation is needed.
35	Chimney Rock	Morrill	NE	Scottsbluff	This prominent column of clay and sandstone, resembling a tall factory chimney, was mentioned in more diaries than any other landmark on the Oregon-California Trail. Visible for miles, Chimney Rock was more than a wonder of nature. As a milepost on a journey noted so far for its monotony, the column was a significant landmark in measuring the emigrants' progress west.	Listed	Public (Nebraska State Historical Society)	None known but ongoing erosion. A new visitor center contains excellent interpretive exhibits.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	THREATS TO RESOURCES/ VISITOR SERVICES
36	Scotts Bluff National Monument/Mitchell Pass	Scotts Bluff	NE	Scottsbluff	Scotts Bluff was the first of many imposing barriers that travelers encountered as they made their way west. It was also the last famous landmark along the Great Platte River Road in Nebraska. Early travelers were forced to swing south away from the river and go through Robidoux Pass, a natural gateway in the great bluffs. In 1850, a shorter route was opened through Mitchell Pass, which stayed closer to the river and eliminated the eight-mile swing through Robidoux Pass.	National Historic Landmark/ National Natural Landmark	Public (NPS)	Visual intrusions and potential urban sprawl from Gering and Scottsbluff encroach on the site.
37	Robidoux Pass	Scotts Bluff	NE	Scottsbluff	The pass forms a broad U-shaped opening in the semicircular line of bluffs composing the Wildcat Hills. The climb to its summit was mitigated by fresh spring water and wood, two commodities that were quite scarce along the Platte River. The pass takes its name from Antoine Robidoux, an early trader whose family established a trading post and a blacksmith shop here in 1848. At that time, Robidoux's post was the first habitation encountered west of Fort Kearny on the Oregon Trail.	National Historic Landmark	Private	Threats have been made by a landowner to turn under the ruts.
38	Horse Creek Treaty Grounds	Scotts Bluff	NE	Scottsbluff	This is the site of the signing of the first Fort Laramie Treaty in 1851. The assembly of some 10,000 Plains Indians was the largest in history. The Federal government made the treaty to protect the traffic along the Oregon-California Trail, as the Indians became increasingly resentful of the growing numbers of emigrants. The document established tribal grounds and the right of emigrant travel along the trails.	Not listed	Private	None known.
39	Fort Laramie	Goshen	WY	Torrington	Fort Laramie traces its origin to Fort William, a fur-trading post constructed on the Laramie River in 1834. For the next 15 years, it served as an important outfitting and resupply point for fur trappers, emigrants, and military expeditions. Acquired by the U.S. Army in 1849, it became one of the most important military posts in the trans-Mississippi West and continued to serve as a stop for overland emigrants. Important diplomatic negotiations with the tribes of the northern plains were held here. Fort Laramie was a key installation during the Indian conflicts of 1850-1890. The Bedlam Ruts (administered by BLM) are nearby.	National Historic Landmark	Public (NPS)	None known. Fort Laramie National Historic Site maintains a visitor center/museum with interpretive exhibits and several restored buildings from the military era.
40	Mexican Hill	Platte	WY	Torrington	At Mexican Hill the trail made a steep and dramatic cut through the river bluffs from the benchland to the floodplain of the North Platte River. Where the Bluff and River routes intersected, ruts lead up to the hill from 0.75 mile to the east. They are some of the most-memorable swales anywhere on the trails. The origin of the name is obscure.	Not listed	Private	The site has been impacted by erosion and unauthorized vehicle use.
41	Register Cliff	Platte	WY	Torrington	Among the most famous of the surviving emigrant registers, thousands of names were inscribed on this mile-long prominent sandstone cliff on the south side of the North Platte River. Cliffs to the east and west also contain hundreds of well-preserved emigrant inscriptions.	Listed	Public (State of Wyoming)	Natural deterioration, housing development, vandalism, and National Guard activities to the west all impact the site. The state of Wyoming needs to update the interpretive materials.
42	Guernsey Ruts (Deep Rut Hill)	Platte	WY	Torrington	At this site, where the trail was forced away from the river and crossed a ridge of soft sandstone, the track is worn to a depth of five feet, creating some of the most-spectacular ruts remaining along the entire length of the Oregon-California Trail. The geography of the area dictated that practically every wagon that went west crossed the ridge in exactly the same place, with impressive results.	National Historic Landmark	Public (State of Wyoming)	This site needs better marking and interpretation. Visitor use should be channeled to protect the ruts and surrounding terrain from the effects of indiscriminate wandering. National Guard activities in the area have caused major visual intrusions.
43	Warm Springs Canyon	Platte	WY	Torrington	These two free-flowing springs, one gushing from a ledge of rock and the other bubbling up in a large pool, were only slightly warm. Often called the "emigrants' wash tub," this was a particularly popular camping place, available to travelers on both the Black Hills Road and the River Route. Pursey Graves, who camped nearby on June 24, 1850, wrote, "After I finished my letter to send back to the Ft. I proceeded to the spring a distance of 1_ miles with my bucket of dirty clothes." The spring still flows strongly and the site is in nearly pristine condition.	Not listed	Private	National Guard activities threaten the canyon. The site has been marked by the Oregon-California Trails Association.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	THREATS TO RESOURCES/ VISITOR SERVICES
44	Laramie Peak	Albany	WY	Laramie Peak	This famous 10,272 foot landmark in the Black Hills (named for the dark appearance of its tree-covered slopes) guided emigrants' travel for many days. First sighted when descending from Robidoux or Mitchell passes, this mountain was constantly in view for almost 100 miles. It must have seemed that the peak would never be passed.	Not listed	Public (USFS-Medicine Bow National Forest)	None known.
45	Ayres Natural Bridge	Converse	WY	Douglas	This natural feature was often mentioned in emigrant diaries, and spring-fed La Prele Creek was used as a campsite. The natural bridge is in a beautiful red-rock canyon, which offered good water and plentiful forage for animals.	Not listed	Public (Wyoming State Parks and Historic Sites)	The site shows signs of overuse. Improved interpretation is needed.
46	Hembree Grave	Converse	WY	Douglas	Six-year-old Joel Hembree was killed when he fell under a wagon on July 18, 1843, and was run over by a wheel. The boy was the first casualty of the "Great Migration" of 1843, and his grave is the oldest marked burial related to the Oregon Trail emigration. The body was moved to this site from a spot 0.25 mile east and was reburied next to the grave of Private Ralston Baker, who was killed in an Indian skirmish in 1867. The Hembree grave is still marked with the original headstone.	Not listed	Private	None known. The grave has been fenced and marked by the Oregon-California Trails Association.
47	Mormon Ferry (1849)	Natrona	WY	Casper	Mormons operated a ferry at this North Platte River crossing in 1847 and 1848, but it is best-remembered for its service in the gold rush. Mormons ran three boats alongside an operation called the "Missouri Ferry." They told M. B. Moorman on June 19, 1849, that each day they crossed 300 wagons at \$5.00 each using "decidedly the best boats I ever saw." Bill Hickman ran a similar operation here in 1850. At the Casper-area ferries, emigrants finally left the Platte River system, which they had followed from Fort Kearny, Nebraska, over 440 miles to the east.	Not listed	Public (City of Casper)	None known. The ferry is located on the grounds of the North Casper ballfields. An interpretive sign is placed near the entrance and the concessions stand.
48	Emigrant Gap	Natrona	WY	Casper	Most emigrants who crossed the North Platte River on the ferries and bridges below Fort Caspar passed through Emigrant Gap, a shallow pass through a ridge west of present-day Casper, Wyoming. From this point, travelers were afforded a sweeping view to the west, the scene of their next week's travel. Here they began their ascent into the Rocky Mountains, which gradually led up and over the Continental Divide at South Pass.	Not listed	Public (BLM)	None known. A BLM interpretive marker is located here.
49	Avenue of Rocks	Natrona	WY	Casper	These natural rock formations jut out of the Wyoming rangeland, and the Oregon-California Trail was forced to wind through the rocks as it vaulted the rocky spine. At the end of Rock Avenue is the Devil's Backbone, described by British traveler Richard Burton in 1860 as a "jagged, broken ridge of huge sandstone boulders, tilted edgeways, and running in a line over the crest of a long roll of land . . . like the vertebrae of some great sea-serpent."	Not listed	Public (State of Wyoming)	Vandalism and increasing erosion on country roads are the main threats. This site needs interpretation of the natural formation and the emigrant trails.
50	Willow Springs	Natrona	WY	Casper	Willow Springs provided the first safe water west of Casper. These free-flowing springs offered cool refreshing water and nearby forage for animals. The area quickly became a popular campsite. To the southwest, visible ruts ascend Prospect Hill. The springs are in the yard of an abandoned ranch, where several deteriorating shacks and outbuildings barely stand.	Not listed	Private	Low-key and unobtrusive interpretive panels should be selectively placed to point out trail-related geographical features.
51	Prospect (Ryan) Hill	Natrona	WY	Casper	Just west of Willow Springs is a low ridge called Prospect Hill, where emigrants gained their first sight of the Sweetwater Mountains to the west. The 400-foot climb was very hard on draft animals. It was reportedly named because emigrants could see the gentle valley of the Sweetwater River from the top of the hill, giving them a view—or prospect—of an easier road ahead. Prospect Hill has clearly visible ruts on its eastern slope. The view from the top has changed little from the one seen by emigrants 150 years ago.	Not listed	Public (BLM)	Mineral development may impact the site. Two BLM interpretive markers are located at the top of Prospect Hill.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	THREATS TO RESOURCES/ VISITOR SERVICES
52	Saleratus Lake	Natrona	WY	Rattlesnake Hills	This alkali deposit, or "pan," about a quarter-section in size, provided emigrants a soda compound used in baking. Sir Richard Burton passed the lake on August 17, 1860: "It [Saleratus Lake] lies to the west of the road, and is only one of a chain of alkaline waters and springs whose fetor, without exaggeration, taints the land. . . . The appearance of the Saleratus Lake startles the traveler. . . . On a near inspection, the icy surface turns out to be a dust of carbonate of soda, concealing beneath it masses of the same material, washed out of the adjacent soil, and solidified by evaporation. . . . It is still transported westward, and declared to be purer than the saleratus of the shops."	Not listed	Private	An agreement to permit access should be negotiated with the private owner.
53	Independence Rock	Natrona	WY	Bairoil	Independence Rock was the most-noted landmark on the emigrant trails west of Fort Laramie. An oval outcrop of granite rock, it is 1,900 feet long, 700 feet wide, and rises 128 feet above the range. The rock derived its name from a party of fur trappers who camped there and celebrated Independence Day in their own style on July 4, 1830. Independence Rock was also widely used by emigrants as a place to inscribe their names and to leave messages for those coming behind.	National Historic Landmark	Public (State of Wyoming)	The site shows signs of overuse. A complete inventory of inscriptions is needed. Lichen growth is encroaching on several panels. A highway rest area provides parking and interpretive wayside exhibits.
54	Devil's Gate	Natrona	WY	Bairoil	Devil's Gate is a narrow cleft carved by the Sweetwater River, 370 feet deep, 1,500 feet long, and only 50 feet wide in places. Devil's Gate is among the more interesting geographical landmarks along the emigrant trails. This natural feature became visible approximately 15 miles to the east. It was a rest stop and campground and is thought to have more than 20 graves in the immediate vicinity, although only one is marked. There are inscriptions on the rocks.	Listed	Public (BLM)	The impacts of visitor use should be closely monitored. The BLM manages the Devil's Gate interpretive site.
55	Split Rock	Fremont	WY	Bairoil	This famous "gun sight" cleft in the mountains is another prominent geographical feature within the South Pass segment. It was noted in many diaries.	Not listed	Public (BLM)/ Private	Access to the trail should be improved. Just east of Split Rock Station, the BLM has developed an attractive interpretive site that describes the area and its history.
56	Three Crossings/Deep Sand Route	Fremont	WY	Rattlesnake Hills	At this narrow canyon, emigrants had a choice. They could follow the Sweetwater River through the canyon, a trip that required three difficult river crossings within two miles, or they could travel via the "deep sand" route to the south of the Sweetwater River. Most emigrants followed the river route because pulling the wagon across the deep sand was exhausting.	Not listed	Public (BLM)/ Private	A nearby uranium processing plant has been torn down, and a reclamation effort has been underway at the mill site for several years. The BLM would like to acquire the site but might not be able to do so if the area is contaminated.
57	Ice Slough	Fremont	WY	Lander	At this cold spring, emigrants occasionally found ice underneath the soil until late summer. The ice was insulated by four to six inches of water above the ice and by rich grassy sod that grew thick enough to bear a man's weight. Ice Slough became a major camping site for travelers, who enjoyed the cold refreshment after several days of dry and dusty terrain.	Not listed	Public (BLM)	Hydric soils are susceptible to trampling damage by wild horses and the season-long livestock grazing that has occurred for over a century. This has caused a loss of the humus that provided the insulation that preserved the ice. Access to the site is across private land. There is a state historical marker nearby.
58	Rocky Ridge	Fremont	WY	South Pass	Here the emigrants were forced up and away from the Sweetwater River to cross a high, barren, and rocky ridgeline. The crossing required much jarring travel over a rock-strewn landscape. There is no specific spot that can be labeled Rocky Ridge. The name refers to a geographic area spread over two square miles, where wind and erosion have kept soil from collecting and have laid bare a washboard of bedrock. Well-defined ruts still wander over the top of the ridge.	Not listed	Public (BLM)	The site needs a cultural landscape report. The area has great visual integrity. Overuse may be a problem with increased visitation.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	THREATS TO RESOURCES/ VISITOR SERVICES
59	Burnt Ranch (Ninth Crossing of the Sweetwater River)	Fremont	WY	South Pass	Burnt Ranch, at the ninth and final crossing of the Sweetwater River, was one of the great hubs of emigrant trail activity. By 1862, this popular campsite had grown into such a key communications and transportation center that a detachment of the 11 th Ohio Volunteers was sent out to protect the mail and stage station and overland travelers from Indian attack. When the soldiers departed in 1868, Indians promptly burned the station to the ground; hence the name—Burnt Ranch.	Nominated	Private	None known. An Oregon-California trail marker from 1913 still stands.
60	South Pass	Fremont	WY	South Pass	South Pass was perhaps the most important landmark along the emigrant trails. It marked the end of the long ascent to the Continental Divide and the emigrants' arrival at the frontier of the Oregon country. It was also thought to be the halfway point along the trail. South Pass dictated the location of the emigrant trail, for only via its gradual ascent was wagon travel over the Continental Divide practical for large-scale emigration. South Pass is the wide, flat summit of a long and gradually ascending plateau, with low ridges and hills on both sides and a wide sage and grass covered saddle between. Many emigrants commented that they scarcely noticed the ascent or the crossing.	National Historic Landmark	Public (BLM)	In spite of an abandoned railroad grade, a diversion ditch, and evidence of an AT&T buried cable, this site should be protected from additional visual intrusions. Any pipeline crossing of this area might intrude on the extraordinary historic character of the site. Historic monuments are at the pass and a wayside exhibit is nearby.
61	Pacific Springs	Fremont	WY	South Pass	Pacific Springs was the first good water source after emigrants crossed South Pass and entered the Pacific watershed. The springs created an extensive marsh, which appeared as a green oasis in the dry landscape. Emigrants often camped at the site and many commented on the destination of its waters.	Not listed	Private	Vandalism is a continuing problem. An impressive overlook/rest area on Wyoming Highway 28 contains several interpretive waysides about the South Pass/Pacific Springs area.
62	Dry Sandy Crossing	Sublette	WY	Farson	The Dry Sandy was the first water reached west of Pacific Springs. It was crossed below a broad basin that collected subsurface water. In dry seasons, water could be found here by digging in the streambed, but it was tainted with alkali. Many emigrants reported the loss of livestock. The river flowed more below the surface than above ground. Emigrants only stopped here when absolutely necessary. Evidence of "tanks" dug by emigrants to water their oxen can still be found in the area.	Not listed	Private	None known.
63	Parting of the Ways	Sweetwater	WY	Farson	The Oregon Trail and the Sublette Cutoff separated at Parting of the Ways. In the midst of a wide-open expanse of land, both trails are plainly visible, and the eye can follow them for miles toward the horizon. At this point, emigrants had to make a hard decision. Should they save 46 miles by taking the Sublette Cutoff, which bypassed the southern loop to Fort Bridger but also demanded 50 miles of travel with no water? Decisions were based on the condition of the grass, animals, people, and supplies.	Listed	Public (BLM)	Encroaching mineral exploration and development threaten the viewshed.
64	Little Sandy Crossing	Sweetwater	WY	Farson	Little Sandy Crossing, a popular campsite on the road to Fort Bridger, was the first good water west of Pacific Springs. Numerous emigrant graves are located in the area.	Not listed	Public (BLM)	Visitors need to travel through a half mile of private property to access the site. There is a BLM marker east of the creek.
65	Big Sandy Crossing	Sweetwater	WY	Farson	Emigrants on the trail to Fort Bridger made the difficult crossing of the Big Sandy River here and followed its north bank to the Green River. There are excellent examples of pristine ruts nearby.	Not listed	Public (BLM)/ Private	Currently there are few threats to the site because of limited access, but vehicle overuse could threaten nearby ruts, as well as damage the river crossing.
66	Lombard Ferry (Green River Mormon Ferry)	Sweetwater	WY	Rock Springs	Lombard Ferry, named after the trail era for its proximity to Lombard Buttes, was the main crossing of the Green River. During periods of low water, wagons could ford the river, but the shallow sand bar they used was only 10 feet wide. When the Mormon pioneers arrived on June 30, 1847, they built rafts and floated their wagons across the river. Later that year, they built ferryboats and provided a commercial ferry service, both to assist subsequent Mormon companies and as a commercial venture. The crossing is mentioned in many travelers' journals.	Listed	Public (USFWS- Seedskadee National Wildlife Refuge)	Gas development and fossil collectors are threats. The site is interpreted.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	THREATS TO RESOURCES/ VISITOR SERVICES
67	Church Butte	Uinta	WY	Kemmerer	This large butte, with its temple-like shape, deeply eroded walls, and flattop mesa, is about 1,000 feet in diameter and rises 75 to 100 feet above the plain of the Blacks Fork Valley. Believed to have been first named by fur traders, it became one of the landmarks along the trail and excited the comment of many emigrants.	Not listed	Private	Gas wells and mineral development have negatively impacted the historic viewshed. Vandalism and litter are also problems.
68	Name Rock	Uinta	WY	Evanston	Name Rock itself is unimposing, being but a short section of cliff about 400 feet long and 20 feet high. On the face of the cliff, which is protected from the weather by a natural overhang, several dozen emigrants wrote dates, their names, and places of origin, mostly with wagon tar. Most of the names and dates are still clearly visible.	Not listed	Private	Vandalism is a big problem. The inscriptions need to be stabilized, protected, and interpreted.
69	Fort Bridger	Uinta	WY	Evanston	Jim Bridger established Fort Bridger in 1843 as a fur-trading post. It was composed of two double-log houses about 40 feet long that were joined by a pen for horses. To the emigrants, Fort Bridger offered the chance to obtain supplies, have essential blacksmith work done, and trade worn-out livestock for fresher animals. Here the main Oregon-California Trail turned north toward Fort Hall, and the Mormon Trail/Hastings Cutoff continued west to the Valley of the Great Salt Lake. The fort served as a Pony Express, Overland Stage, and transcontinental telegraph station in the 1860s and was garrisoned by the U.S. Army between 1857 and 1890.	Listed	Public (State of Wyoming)	None known. The fort has a museum/visitor center and a reconstruction of Bridger's log trading post.
70	West End of the Sublette Cutoff	Lincoln	WY	Fontenelle Reservoir	Three miles south of present-day Cokeville, Wyoming, the main route of the Sublette Cutoff, which left the Oregon-California Trail at Parting of the Ways, rejoined the primary emigrant route. There is nothing on the ground to indicate the junction, for both trails have been erased by subsequent development.	Not listed	Private	None known.
71	Thomas Fork Crossing	Bear Lake	ID	Preston	This crossing of swift-flowing Thomas Fork was particularly difficult because of steep, muddy inclines into and out of the stream. A toll bridge solved the problem in the early 1850s for those emigrants who could afford its \$1.00 charge. Emigrants found traders and large numbers of Indians camping here and good grass and water along the fork and in the Bear River bottoms. Excellent trail traces are present in the Sheep Creek Hills west of the fork.	Not listed	Private	None known. There is an Idaho state historical marker on U.S. Highway 30.
72	Big Hill	Bear Lake	ID	Preston	Big Hill was one of the greatest impediments on the whole Oregon Trail route. To avoid the marshy bottoms of the Bear River, it was necessary to make a very steep, difficult ascent and descent of the Sheep Creek Hills. Ruts caused by the locking of wheels for the descent are visible from the west.	Not listed	Public (BLM)	This site can only be reached by crossing private land. BLM has no easement for access. An Idaho state historical marker is located on U.S. Highway 30.
73	Soda Springs Complex	Caribou	ID	Soda Springs	The natural fountains at "Beer Springs" were rightfully considered to be one of the marvels of the overland trails. Almost every emigrant account noted the picturesque scenery and the natural curiosities of the area. The development of the town and the building of Alexander Reservoir have destroyed or covered many of these historic springs. Steamboat Spring, Wagonbox Grave, Hooper Spring, Octagon Spring, and two short traces of ruts can still be seen in the area.	Not listed	Public (City of Soda Springs)/ Private	None known. The City of Soda Springs has completed a historical resource study of Oregon Trail sites in the area, is preparing a visitor brochure, and hopes to develop wayside exhibits. There is a historic monument at the west end of town.
74	Sheep Rock (Soda Point)	Caribou	ID	Soda Springs	Rising 1200 feet above the trail, this tree-covered point was a prominent landmark for emigrants. The Bear River flows through this gap between the Bear River Range and the Soda Springs Hills and turns south toward the Great Salt Lake. At this important junction, the Oregon-California Trail headed northwest and the Bidwell-Bartleson Route turned south along the west bank of the Bear River. After 1849, the Hudspeth Cutoff went directly west from this site. This point and the volcanic craters to the west were often noted in emigrant journals.	Not listed	Public (BLM)/ Private	None known.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	THREATS TO RESOURCES/ VISITOR SERVICES
75	Fort Hall	Bingham	ID	Blackfoot	Fort Hall was built by American Nathaniel Wyeth in 1834 but became the property of the Hudson's Bay Company in 1838. The fort was an important camping spot and trading center on the Oregon-California Trail until the middle of 1849, when the Hudspeth Cutoff was opened west of Soda Springs. From that time on, almost all travel to California took the Hudspeth Cutoff. Those traveling to Oregon continued to pass the fort until it was abandoned in 1856. An excellent replica now stands south of the site in present-day Pocatello, Idaho.	National Historic Landmark	Private (Fort Hall Indian Reservation)	Erosion caused by the flooding of the Snake River seriously threatens the future existence of the site.
76	American Falls	Power	ID	Pocatello	American Falls was one of the great natural wonders of the overland trails. These impressive falls were enthusiastically noted in the accounts of all who passed by. The roar of the falls, as the Snake River dropped 50 feet, could be heard several miles away. The area below the falls became a favorite camping and resting spot for emigrants. Below modern American Falls Dam, the still-impressive river enters a rugged volcanic canyon.	Not listed	Public	None known.
77	Massacre Rocks	Power	ID	Pocatello	Massacre Rocks are two rock masses south of the trail, with just enough gap between them to allow the passage of a wagon. Three to five miles northeast of these rocks, on August 9-10, 1862, a skirmish took place between several emigrant wagon trains and Indians. The fight, one of the last hostile encounters between emigrants and Indians in this part of Idaho, ended with the death of ten whites and an unknown number of Indians.	The ruts between Massacre Rock and Coldwater Hill are listed	Public (Idaho Department of Parks and Recreation)	Massacre Rocks State Park maintains a museum with interpretive exhibits. Pristine ruts and interpretive waysides can be accessed from the Massacre Rocks Rest Area off I-86, two miles east of Massacre Rocks State Park. The ruts near the wayside exhibits show the impact of heavy visitation.
78	Register Rock	Power	ID	Lake Walcott	Register Rock is a half-buried boulder, 25 feet in diameter, with many clearly visible names and dates inscribed upon it by emigrants, some dating from 1849. The small stream that provided water at this campsite was known to the emigrants as both Fall Creek and Rock Creek. Today the area has been developed as a day-use picnic area. Register Rock is enclosed by a chain link fence and protected from weathering by an octagonal pavilion.	Listed	Public (Idaho Department of Parks and Recreation)	None known. Massacre Rocks State Park maintains the site and an interpretive sign.
79	Coldwater Hill	Power	ID	Lake Walcott	Cold Water was a camping area along the Snake River. At the western end of the valley, the trail climbed Coldwater Hill and turned southwest, away from the Snake River and toward the crossing of the Raft River. Intact trail remnants are clearly visible as the trail ascends this hill. They are easily accessibly from an eastbound rest stop off I-84.	Listed	Private	None known.
80	California Trail Junction/Raft River Crossing	Cassia	ID	Lake Walcott	Immediately after fording Raft River, the California Trail branched south and traveled up the Raft River Valley to Cassia Creek and City of Rocks. The Oregon Trail continued west over rolling rangelands to rejoin the Snake River. There are trail markers at the parting of the two trails, and nearby emigrant graves have been fenced and marked. There are traces of the trail on public lands both west (the Oregon Trail) and south (the California Trail) of the junction.	Not listed	Public (BLM)	None known. Access to the site from the east is over private land.
81	Milner Ruts (Cedars Emigrant Campsite)	Cassia	ID	Lake Walcott	Approaching the Cedars Emigrant Campsite on the Snake River are two extensive traces of the Oregon Trail, which join at the BLM's Milner Interpretive Site. The south trail is marked by both concrete and carsonite trail markers for several miles. The BLM maintains an interpretive kiosk at the site. The north trail is unmarked.	Listed	Public (BLM)	Vandalism at the interpretive site is a continuing problem. Some BLM staff want to develop the north trail into a bike and recreational trail. BLM recently initiated entry fees to the interpretive area.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	THREATS TO RESOURCES/ VISITOR SERVICES
82	Caldron Linn	Twin Falls	ID	Rogerson	Caldron Linn (Linn is a Gaelic word for waterfall) is a narrow, rock-walled chute on the Snake River that terminates with a drop of 40 feet and prevents water transportation through this part of southern Idaho. The roar of the water was audible miles away, and some emigrants took time to visit and comment on the site. In 1812, mountain man Robert Stuart wrote, "At the Caldron Linn the whole body of the River is confined between 2 ledges of Rock somewhat less than 40 feet apart, and here indeed its terrific appearance beggars all description." Today, the Snake River has been tamed with dams and irrigation projects and the Linn is much less impressive.	Listed	Private	None known.
83	Stricker Store/Rock Creek Station	Twin Falls	ID	Rogerson	The Stricker Store was the first trading post on the Oregon Trail west of Fort Hall. Prior to its establishment in 1865, Oregon Trail emigrants used the area as a campsite. They were drawn here by good water and grass along Rock Creek, which flows just south of the store. In later years, the store served as Rock Creek Station on the Ben Holladay Stage Line. The store is still relatively intact, although some intrusive adaptations have been made. Screens cover the windows and a tin roof protects the old sod roof from weathering. Other structures from the 1860s and a two-story frame home built by Herman Stricker in 1890 also remain on the site. The cemetery and a portion of the trail west of the state property are privately owned.	Listed	Public (Idaho State Historical Society)/ Private	The cemetery and intervening land should be purchased and added to the historic site. At the very least, an easement should be negotiated to provide a formal right of way to access the cemetery.
84	Shoshone Falls	Twin Falls, Jerome	ID	Twin Falls	Shoshone Falls was a horseshoe-shaped cataract of impressive dimensions. Here, the Snake River fell 212 feet, creating a roar that was audible for miles. Although the falls were located five miles north of the trail, some emigrants made a trip to investigate the cause of the noise. Today, only a trickle of water normally escapes the upstream dam, but one can still visualize the former power of the cataract and understand why explorers and emigrants were unable to develop the river as a transportation route.	Not listed	Public (City of Twin Falls)	None known. The City of Twin Falls has created a nice little park next to the south side of the falls with facilities for picnicking and sightseeing.
85	Rock Creek Crossing	Twin Falls	ID	Twin Falls	Rock Creek, first encountered by emigrants at Stricker Store, proved to be one of the most difficult streams to cross along the Oregon Trail. This was not due to the width or depth of the stream but because Rock Creek had cut a deep chasm through the volcanic rock of the area—100-200 yards wide and 50-100 feet deep, with almost vertical walls. This was the first cut in the banks of the chasm that permitted emigrant wagons to cross the stream. Traces of the crossing remain in spite of heavy development in the area. A marked grave is located near the site, and emigrant names are still visible on the canyon wall a few hundred feet west of Blue Lakes Boulevard South.	Not listed	Private	None known.
86	Kanaka Rapids	Gooding, Twin Falls	ID	Twin Falls	Having veered south at Caldron Linn, the Oregon Trail returned to the Snake River at Kanaka Rapids. The rapids were a welcome site for most emigrants, for it was the first of several spots along the Snake River where they could trade with Indians for fresh salmon. A natural barrier to migrating salmon, this had long been a favorite Indian fishing spot.	Not listed	Public (Gooding County)	None known.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	THREATS TO RESOURCES/ VISITOR SERVICES
87	Thousand Springs Complex	The springs are in Gooding; the trail remnants are in Twin Falls	ID	Twin Falls	At Thousand Springs numerous streams gush from beneath the rimrock on the north bank of the Snake River and cascade into the river below. A short section of fairly good Oregon Trail ruts are in the vicinity as the trail climbs a low ridge and heads northwest across range and farmland. Another south-side route follows the Snake River. Emigrants could also cross the river near here and head west on the North Alternate Oregon Trail. On August 15, 1851, Elizabeth Wood wrote, "On the opposite side of the river from us is a spring flowing out of a wall of rock, large enough to turn a mill; it is a very beautiful stream, clear as crystal, and runs so rapidly that it looks white as ice as it flows over the rock and roars like a mill race." This spring can still be seen, along with about 100 others in the area.	Not listed	Public (Nature Conservancy, BLM)/ Private	Agricultural use of private lands threatens both the trail ruts and the water supply for Thousand Springs. Off-highway parking is needed near the springs. Carsonite markers have been placed on the trail ruts.
88	Upper Salmon Falls	Gooding, Twin Falls	ID	Twin Falls	Upper Salmon Falls consisted of two rapids where Indians gathered to spear salmon that were so obstructed in their ascent of the Snake River that they could be easily taken. Emigrants bartered with the Indians for this salmon, which was a great help, since many had used up most of the food brought with them from the states. Joel Palmer recorded on August 20, 1845, "Here are eighteen or twenty Indian huts. Salmon came up to these falls; the Indians have an abundance of them, which they very readily dispose of for books, powder, balls, clothing, calico and knives, and in fact for almost anything we have at our disposal."	Not listed	Private (Idaho Power Company)	None known.
89	Three Island Crossing	Elmore	ID	Glenns Ferry	Three Island Crossing was the most-important and difficult river crossing in Idaho. Crossing the Snake River was always dangerous, but when the water was low enough, everyone crossed who could, to take advantage of the more favorable northern route to Fort Boise. During high water, most emigrants were forced to travel along the South Alternate route into Oregon—a dry, sandy, dusty, and hot trail that wore out man and beast. The Nature Conservancy has recently purchased land on the southern approach that will connect the formerly isolated south unit of the park to the crossing and visitor facilities on the north bank.	Listed	Public (Idaho Department of Parks and Recreation)	None known. Three Island Crossing State Park maintains a campground, picnic area, interpretive trails, a museum with exhibits, and other visitor services on the north bank of the river. Each year in August, the park reenacts the river crossing by driving wagons across the ford at Three Island Crossing.
90	Teapot Dome Hot Springs	Elmore	ID	Mountain Home	Teapot Dome Hot Springs, a series of small springs on the primary route of the Oregon Trail, occupied a basin 1,000 feet across at the head of Hot Springs Creek. In 1843, Peter Burnett described them as "hot enough to cook an egg. It runs out at three different places, forming a large branch, which runs off smoking and foaming." The springs were a favorite emigrant campsite.	Not listed	Private	None known.
91	Rattlesnake Station	Elmore	ID	Mountain Home	Rattlesnake Station was established in 1864 as an important stage stop and later as a freighting stop for the Rocky Bar mining area. The station was renamed Mountain Home in 1879. When the railroad arrived in 1883, the town of Mountain Home, which had grown up around the station, was moved nine miles southwest to the Union Pacific tracks. Before and after the establishment of the station, the area was used as a campground by Oregon Trail emigrants.	Not listed	Private	None known.
92	Canyon Creek Station	Elmore	ID	Mountain Home	Canyon Creek Station was another stage station used during the later years of the Oregon Trail. The station was located where the trail crossed Canyon Creek. The availability of water and grass made the creek bottoms a favorite camping spot for emigrants. The station was a private residence until the 1970s, when a fire gutted the structure. The rock walls are all that remain.	Not listed	Private	None known.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	THREATS TO RESOURCES/ VISITOR SERVICES
93	Inscription Rock	Elmore	ID	Mountain Home	This sharp rock outcropping was one of the smaller and less-known inscription points along the Oregon Trail. Names and dates were painted on its sides with wagon tar. Although the names are not clearly legible, it appears that the earliest names are from the 1860s. This site was previously referred to as Register Rock, but the name has been changed to avoid confusion with the Register Rock in Power County, Idaho. The southern variant of the Goodale Cutoff comes down Ditto Creek and rejoins the primary Oregon Trail near this rock.	Not listed	Private	None known.
94	Ditto Station	Elmore	ID	Mountain Home	Ditto Station was built at a spring near Soles Rest Creek and was a stop on the freight and stage routes that followed the Oregon Trail. Little evidence of the station remains, but vegetation and land depressions help to identify the location. The northern variant of the Goodale Cutoff comes down Soles Rest Creek and rejoins the primary Oregon Trail just north of the station.	Not listed	Private	None known. An interpretive wayside exhibit is needed.
95	Indian Creek Station	Elmore	ID	Mountain Home	Indian Creek was a popular emigrant campground. Emigrants were able to purchase fresh vegetables from settlers, who came to the area in 1863. Indian Creek Station was a stop on the Overland and Kelton Road stage routes. A lava-rock structure dates to the stage-station era. A small agricultural community known as Mayfield eventually developed around the station.	Listed	Private	Private land development may impact the site. Protection is needed for the extant stage structures and Mayfield's remaining buildings. An interpretive wayside exhibit is needed.
96	Bonneville Point	Ada	ID	Murphy	Bonneville Point is a high promontory that overlooks the fertile Boise River Valley and present-day Boise, Idaho. The point was named for Captain Benjamin Bonneville, who ascended it in 1833 while on a fur-trading expedition. The primary route of the Oregon Trail crossed this summit before descending to the Boise River, and good ruts are still evident on the site. This point marked the end of the difficult trip across the northern Snake River plains and foothills. From here, it was an easy 59-mile pull to Fort Boise.	Not listed	Public (BLM)	None known. The BLM maintains an interpretive site atop Bonneville Point and has marked the trail as it ascends and descends to the point.
97	Ward Massacre Site	Canyon	ID	Boise	On August 20, 1854, Indians attacked and killed 18 of the 20 emigrants in the Alexander Ward train. The survivors were young boys who were left for dead. Winfield Scott Ebey arrived at the site two days later: "Everything showed signs of a hard struggle. Six bodies lay by the road partly covered. . . . We got our spades & some of us stopped & gave them a decent burial. The ground is covered with blood." Subsequent retaliation by U.S. troops was indiscriminate and resulted in hostilities that imperiled emigrant use of the trail for a decade and caused the Hudson's Bay Company to abandon both Fort Hall and Fort Boise.	Listed	Public (State of Idaho)	None known. A small two-acre park contains a simple monument listing the names of those killed, and there is a historical marker on U.S. Highway 20/26.
98	Canyon Hill Ruts	Canyon	ID	Boise	This 300-foot section of Oregon Trail ruts descends a short, steep break in the cliff leading down to the east bank of the Boise River Crossing, just north of Caldwell, Idaho. Looking up a natural cut in the bluff between two rock outcroppings, one can easily visualize wagons negotiating the steep slope.	Not listed	Private	Private development could threaten the site. The site should be interpreted and made accessible to the public.
99	Fort Boise (Hudson's Bay Company)	Canyon	ID	Vale	Fort Boise was an important Hudson's Bay Company trading post, established on the east bank of the Snake River in 1834. The post was constructed of logs and later covered with adobe. Emigrants paused here to obtain supplies and assistance in crossing the river. The ford was at the head of two islands, 1,200 feet below the fort. The river could be forded when the water was low; otherwise, ferrying above the fort was necessary. On September 2, 1845, Joel Palmer wrote, "At this fort they have a quantity of flour in store, brought from Oregon City, for which they demand twenty dollars per cwt. in cash." The post operated until 1853, when the river flooded and washed away most of the structures. Due to Indian hostilities following the Ward Massacre, the company decided to abandon the post rather than rebuild it.	Listed	Public (State of Idaho)	Nothing remains of Fort Boise. The general area is now a grassy meadow along the banks of the Snake River. No traces of the fort are visible, and only a crudely made statue marks the spot.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	THREATS TO RESOURCES/ VISITOR SERVICES
100	C. J. Strike Ruts	Owyhee	ID	Glenns Ferry	This dramatic, 1.5 mile section of ruts on the South Alternate Oregon Trail has eroded in some places to a depth of several feet. Those who could not cross the Snake River at Three Island Crossing were forced to endure the difficulties of taking wagons through this dry, sandy rangeland. The ruts are located on the west side of the Bruneau River, where those who crossed the Bruneau at the south crossing turned north and headed back to the Snake River.	Not listed	Public (BLM)	None known.
101	Utter Massacre Site	Owyhee	ID	Murphy	A major emigrant campsite was located on the South Alternate Oregon Trail at Henderson Flats near Castle Butte. On Sept 9, 1860, the Elijah Utter party of 44 emigrants was attacked by Indians. During the two-day siege, 11 people were killed. Seventeen others managed to escape but subsequently died or were killed. Only 16 emigrants survived the attack and the hardships that followed. This was one of the rare occasions when Indians sustained a prolonged assault on encircled emigrant wagons. The exact site of the battle has not been located.	Not listed	Private	Private land development and farming impact the site. A survey to locate the exact massacre site and an interpretive wayside exhibit are needed.
102	Givens Hot Springs	Owyhee	ID	Murphy	This series of hot springs bubbling up from a flat near the south bank of the Snake River was first noticed by emigrants using the South Alternate Oregon Trail in 1843. On August 27, 1849, Osborne Cross wrote, "The water was extremely hot—too much so to immerse the fingers. The taste was a little metallic. . . no unpleasant smell." This spot was a favorite campground for both emigrants and American Indians. Today the springs have been extensively modified and capped to provide hot water for a commercial "plunge."	Not listed	Private	None known. The site needs interpretation.
103	Keeney Pass	Malheur	OR	Vale	A half-mile of deeply worn ruts atop Keeney Pass is the centerpiece of this BLM interpretive area. The South Alternate branch of the Oregon Trail rejoins the main northern route four miles southeast of Keeney Pass. The combined route ascends East Cow Hollow to reach this low and relatively flat divide between the Snake and Malheur rivers. Sarah Sutton described this crossing on August 5, 1854: "Come 15 miles without water across the most dusty dry and hot bare desert that any person ever travers'd and camp for the night on the creek Maleher." Keeney Pass may have been named for Joseph B. Keeney and his son Edward Keeney, who operated a stage business between Boise and Walla Walla in the 1880s.	Listed as a Historic District	Public (BLM)	None known. The BLM interpretive site consists of a shelter with interpretive signs, additional signs near the trail ruts, and a hiking trail to an interpretive overlook of the pass.
104	Vale Complex	Malheur	OR	Vale	The town of Vale grew up where the Oregon Trail crossed the Malheur (unlucky or unfortunate) River. This river was the first good water emigrants encountered since crossing the Snake River at Fort Boise. The general area of the crossing site and hot springs was a popular campground. The town contains several Oregon Trail historic and interpretive sites, including Malheur Hot Springs, the Old Stone House, the Malheur River Crossing, and the grave of John D. Henderson. In 1845, Stephen L. Meek lead an estimated 1,000 emigrants west from Vale on a "shortcut" across the desert, now known as the Meek Cutoff.	The Old Stone House is listed.	Public (City of Vale)/Private	None known. There is an Oregon Trail kiosk in the city park, a historical marker at the Malheur River, and an Ezra Meeker marker at the county courthouse.
105	Farewell Bend	Baker	OR	Brogan	Here the Oregon Trail left the Snake River for the last time. Emigrants first encountered the Snake at Fort Hall and generally followed its course for 350 miles through Idaho and eastern Oregon. The Snake swung north, toward its junction with the Columbia, while the Oregon Trail veered northwest across the sagebrush steppes of eastern Oregon. The spot also served as a popular emigrant campground.	Not listed	Public (Oregon Parks and Recreation Division)	None known. There is an Oregon Trail kiosk and a historical marker at the state park. An Ezra Meeker marker is in nearby Huntington.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	THREATS TO RESOURCES/ VISITOR SERVICES
106	Flagstaff Hill/National Historic Oregon Trail Interpretive Center	Baker	OR	Baker	This 23,000 square-foot center overlooks a well-preserved segment of the Oregon Trail. Living history programs, an amphitheater, and an interpretive trail system support the center's theme of describing life along the trail. Trail ruts survive on BLM land and on adjacent private land on Virtue Flat.	Not listed	Public (BLM)	None known. An Ezra Meeker marker and Oregon Trail monument are nearby on Highway 86.
107	Hilgard Junction	Union	OR	La Grande	After crossing the mountain from La Grande, emigrants camped here along the banks of the Grande Ronde River before making the ascent into the Blue Mountains. This state park offers streamside camping and interpretive panels.	Not listed	Public (Oregon Parks and Recreation Division)	None known. There is an Oregon Trail interpretive kiosk at the site.
108	Blue Mountain Crossing Interpretive Park	Umatilla	OR	Pendleton	This Oregon Trail interpretive park features pristine ruts, fully accessible interpretive trails, and living history demonstrations developed by the U.S. Forest Service.	Not listed	Public (USFS-Wallowa-Whitman National Forest)	None known.
109	Meacham	Umatilla	OR	Pendleton	The little town of Meacham has several Oregon Trail related sites. An Oregon Trail campsite is located nearby, and the area has several emigration era graves. The townsite got its start when Major Henry A.G. Lee of the Oregon Rifles camped there during the Indian hostilities following the Whitman Massacre. The town later evolved into a freighting, stagecoach, and railroad stop.	Not listed	Public/Private	The town has a monument honoring "those who died blazing the Old Oregon Trail."
110	Emigrant Springs	Umatilla	OR	Pendleton	Emigrant Springs was discovered in 1834 by Jason Lee, an Oregon-bound missionary. The springs were one of several good water sources in the Blue Mountains and became a favorite camping spot. The springs have been destroyed by pipeline and highway construction, but a beautiful little state park preserves the site. The park contains a facsimile of a covered wagon and interprets the history of the springs and the Oregon Trail through the Blue Mountains.	Not listed	Public (Oregon Parks and Recreation Division)	None known. The park contains an interpretive kiosk and a historic monument that was dedicated by President Warren G. Harding in 1923.
111	Deadman Pass	Umatilla	OR	Pendleton	Deadman Pass is a narrow pass that was the last obstacle before the Oregon Trail left the Blue Mountains. The north end of the pass brought the emigrants to the top of a long sloping hill, which led down out of the Blue Mountains and into the Umatilla Valley. The name comes from the late emigration period, when seven men were killed in three separate incidents during the Bannock War of 1878. Ruts on private land are visible and accessible near the highway rest areas on I-84.	Not listed	Public (Oregon Department of Transportation)/Private (Umatilla Indian Reservation)	Preservation and marking of trail ruts on private land is needed. Oregon Trail interpretive kiosks are easily accessible at both rest areas.
112	Echo Complex	Umatilla	OR	Hemiston	This was an important campsite on the lower crossing of the Umatilla River, offering plentiful grass, water, and wood. The Umatilla Indian Agency headquarters was located on the north bank but was burned in the Yakima War. Fort Henrietta was built in its place. This is the only certified site for the Oregon National Historic Trail.	Not listed	Public/Private	The complex contains interpretive wayside exhibits at Fort Henrietta, the Koontz grave, the Fort Henrietta archeological site, Echo Historic Museum, and various rut segments.
113	Echo Meadows	Umatilla	OR	Hemiston	From the lower Umatilla River crossing, emigrants could travel west across the Columbia Plateau or follow the Umatilla River to the Columbia. Those who chose the plateau route passed through Echo Meadows. A pristine section of Oregon Trail ruts can still be seen cutting across the land.	Not listed	Public (BLM)/Private	None known. BLM maintains an interpretive site and handicapped accessible hiking trail to the ruts.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	THREATS TO RESOURCES/ VISITOR SERVICES
114	Well Spring	Morrow	OR	Hemiston	Well Spring, an important emigrant campsite and water source, made travel possible for weary emigrants and their worn-out teams across this dry stretch of the Columbia Plateau. Most emigrants left the Umatilla River, crossed Butter Creek, and pressed on to camp at Well Spring. The spring was always a meager source of water, but it was a crucial oasis, since this portion of the trail was usually traveled in late August or early September when the intermittent streams were normally dry. Riley Root made the journey from Butter Creek on August 24, 1848, and camped at Well Spring: "18 miles, over a poor tract of the Columbia River valley, to camp, at the foot of a hill, by a spring, called Well spring, rising in the center of a large mound of decayed vegetation, and sinking suddenly again, within a few feet of where it issues. . . . No grass nor water exists along this day's route, where emigrants might refresh themselves and their weary teams. . . . The spring at camp should be watched during the night by a strong guard, to keep thirsty cattle from falling into it, out of which they cannot extricate themselves." The spring has been seriously impacted over the years and is now virtually dry. Remains of a stage station, a graveyard which dates from the emigration era, and trail ruts can be found nearby.	Listed	Public (DOD)	Support of the U.S. Navy is needed to complete the development of Well Spring. Several wayside exhibits have been erected near the spring.
115	Fourmile Canyon	Gilliam	OR	Goldendale	After the Oregon Trail passed the desert-like range near Well Spring, it entered more rolling range country, transected by numerous small canyons. Over a mile of deep ruts can be found at a BLM interpretive site where the trail crossed Fourmile Canyon. Emigrants pressed on as rapidly as possible across this country because of dwindling supplies and their concern that winter would soon be upon them. Lydia A. Rudd struggled across Fourmile Canyon on September 23, 1852: "Continued our tedious journey . . . encamped on the hills wood plenty a little dry grass but no water ice nearly an inch thick this morning Mount Hood a peak of the Cascades loomed in the [sky] covered with snow Henry and myself are just able to move and that is all."	Not listed	Public (BLM)/ Private	Vandalism is a problem. Ruts on private land should be marked and preserved.
116	John Day River Crossing	Gilliam, Sherman	OR	Goldendale	After three days of sand, rock, blustery winds, and shortages of wood and water while crossing the Columbia Plateau, emigrants were relieved to arrive at the John Day River. This was the first of several major rivers flowing north toward the Columbia that would have to be crossed, but the McDonald ford provided an easy crossing. The river is normally only 8-12 inches deep during late summer, and the ford has a smooth, pebbly bottom. Esther Belle McMillan Hanna arrived at McDonald Ford on September 1, 1852: We had a very steep hill to descend in coming to it [John Day River]. We all rejoiced to see water once more as our poor beasts had had none since yesterday noon. We have encamped on the river bottom, which is large and very level. Will remain here until tomorrow to rest out cattle and ourselves and conclude on the route we will take." After ascending the west side of the canyon—"one of the most difficult hills we have met on the whole journey across the plains"—emigrants could take the right fork of the trail to go to the Dalles, or, after 1848, they could take the left fork and follow a cutoff to the Barlow Road.	Not listed	Public (BLM)/ Private	None known.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	THREATS TO RESOURCES/ VISITOR SERVICES
117	Biggs Junction	Sherman	OR	Goldendale	After crossing McDonald Ford, the Oregon Trail slowly wound its way through the hills towards the Columbia River. About 25 miles west of the ford, emigrants abruptly topped a ridge and saw spread out before them the magnificent Columbia River Valley, with Mt. Hood rising from the western horizon. This was one of the most impressive and joyful sights along the trail, for the Oregon country was finally beginning to resemble its publicized beauty, and reaching the Columbia River meant the long overland journey was almost at an end. Michael Fleenen Luark wrote on August 23, 1853, "4 miles further we reached the Columbia river for the first time after going down a long but not a steep hill. . . . the river is quite low at this time leaving large banks of beautiful white sand showing that the river is extremely high at some seasons of the year." A one mile section of trail ruts cross a bench above old highway 30 west of the present-day town of Biggs Junction. This is one of the last remaining stretches of the Oregon Trail along the Columbia River not destroyed by highway and railroad construction in the past century.	Not listed	Private	Permanent signs are needed to explain the rules for accessing the trail segment on private land. There is a small monument on old U.S. Highway 30 just west of the present-day town of Biggs Junction.
118	Deschutes River Crossing	Sherman	OR	Goldendale	Emigrants frequently camped at the mouth of the Deschutes River before attempting the difficult crossing of this "considerable tributary of the Columbia." Some parties crossed at the mouth of the river, using rocky islands as stepping-stones. Wagons were usually floated across, while the animals swam. Joel Palmer wrote a detailed description of the crossing on September 28, 1845: "The river is about one hundred yards wide, and the current very rapid; the stream is enclosed by lofty cliffs of basaltic rock. Four hundred yards from the Columbia is a rapid or cascade. Within the distance of thirty yards its descent is from fifteen to twenty feet. The current of this stream was so rapid and violent, and withal of such depth, as to require us to ferry it. Some of the companies behind us, however, drove over at its mouth by crossing on a bar."	Not listed	Public (State of Oregon)	Trail remnants on private land west of the Deschutes River need to be preserved and marked. The original river crossing is now submerged by Lake Celilo.
119	The Dalles Complex	Wasco	OR	Hood River	Until 1846, the Dalles marked the end of overland travel on the Oregon Trail. At the mouth of Chenoweth Creek, emigrants embarked on steamboats, rafts, or canoes for the 83-mile journey down the Columbia River to Fort Vancouver. With the opening of the Barlow Road, emigrants at The Dalles faced a decision—whether to float their families and wagons down the Columbia or to cross the southern flank of Mount Hood by wagon. Neither option was easy. Rafts and livestock were difficult to maneuver along the river's swift currents and the Barlow Road's steep and rocky grades made travel dangerous for exhausted livestock. When Celinda Heines reached the Dalles on September 19, 1853, her family decided to take the river route. They planned to "go ourselves down the river and send the cattle & horses down the pack trail which goes along near the river. . . . The men engaged a barge to take us to the Cascades & we put our things on board & went on ourselves but it began to leak & we were obliged to get off also to remove our baggage." The next day Celinda reported, "We took what provision and clothing was necessary & repaired on board the stream boat Allan which was already crowded with passengers. It is a poor apology for a boat very small having no cabin & we were obliged to seat ourselves as best we could on the floor or whatever we could find to sit upon."	Listed	Public (City)/ Private	None known. The Columbia Gorge Discovery Center is a major interpretive facility that contains exhibits focusing on the Oregon Trail.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	THREATS TO RESOURCES/ VISITOR SERVICES
120	Cascades of the Columbia	Hood River	OR	Hood River	While the men drove livestock along the river shore, women and children stayed with the wagons and floated the Columbia River as far as the Cascades. This was the last dangerous obstacle on the Oregon Trail for those traveling the Columbia River Route. John C. Fremont described this foaming cataract in November 1843: "The river forms a great cascade, with a series of rapids, in breaking through the range of mountains. . . . In making a short run to the south, the river forms the cascades in breaking over a point of agglomerated masses of rocks . . . the water being white with foam among ugly rocks, and boiling into a thousand whirlpools." Although these rapids were occasionally run with fully loaded boats, the practice was dangerous and fraught with accidents. Most emigrants resorted to a back-breaking three to five mile portage. Local Indians helped the emigrants transport their loads until portage roads were built around the obstruction in the 1850s.	Listed	Public (US Corps of Engineers)	None known.
121	Tygh Valley	Wasco	OR	Mount Hood	Travel along the Columbia River was so slow, expensive, and dangerous, that Samuel K. Barlow decided in 1845 to develop a wagon route across the Cascade Mountains. Barlow and his party left the Dalles in the fall of 1845 and headed south, following broad valleys until he descended Tygh Ridge to camp along Tygh Creek. In later years, emigrants camped in this valley and traded with Indians before turning west to the Barlow Road. On September 4, 1853, Amelia Stewart Knight recorded in her journal, "After descending a long, steep, rocky, and very tedious hill [from Tygh Ridge] we have camped in a Valley on the bank of Indian [Tygh] creek, near some French men who have a trading post, there are also a good many indians encamped around us." The next day, after climbing out of the valley on Tygh Valley Grade, she wrote, "Ascended a long steep hill this morning which was very hard on the cattle, and also on my self as I thought I never should get to the top although I rested two or three times." Today, about 1,000 feet of ruts can still be seen where wagons climbed that grade in the southwest corner of the valley.	Not listed	Private	None known.
122	Barlow Gate	Wasco	OR	Mount Hood	Barlow Gate was the first of five tollgates operated along the Barlow Road to collect a fee from emigrants crossing the Cascade Mountains. This tollgate was in operation from 1846 to 1852. In later years, the tollgate moved to other locations along the Barlow Road, as its operators attempted to thwart the continuous efforts of the emigrants to avoid paying toll for the road whenever possible. In 1852, E.W. Conyers grumbled, "Toll is supposed to be taken for the great benefit to be derived by the poor emigrant, worn out by his long trip of two thousand miles across the continent with an ox team, who now has the privilege of paying a few paltry dollars for crossing the last range of mountains that lays between him and civilization. . . . We find no one here to take toll, and the poor, worn-out emigrants is not one bit sorry.	National Historic District	Public (USFS-Mt. Hood National Forest)/ Private	None known.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	THREATS TO RESOURCES/ VISITOR SERVICES
123	Barlow Pass Complex	Clackamas	OR	Mount Hood	Barlow Pass, where the Barlow Road crosses the summit of the Cascade Mountains, is a historical complex that runs for almost three miles from Devil's Half Acre on the east side of the pass to Summit Meadows on the west. The complex is rich in trail ruts, emigrant graves, and historic sites. Devil's Half Acre is a small meadow, whose name was derived from the "devil" of a climb that faced emigrants between the meadow and the summit of Barlow Pass. At 4,157 feet, Barlow Pass itself is not spectacular, but it was the key to the location of the entire Barlow Road. Joel Palmer discovered the pass in the fall of 1845 by following an Indian trail over the mountains. From the pass, the trail cuts through forest for about a mile to Pioneer Woman's Grave. This grave, a mound of stones six feet wide, 10 feet long, and four feet high, marks the burial of an unknown emigrant woman. Two miles west of the grave is Summit Meadow—the location of Summit House (the toll station between 1866 and 1870) and the Baby Morgan Grave. Grass had been scarce for several days travel, and emigrants were grateful to finally reach a place to rest and recruit their exhausted animals on the lush meadow grasses. In 1852, John Tulley Kerns "found some grass near the divide and some on this side near our camp and grass having been so scarce as 'Morality' for the last two days our cattle & horses were ravenous enough to swallow it whole." Kerns was not too exhausted to enjoy the view from Summit Meadow: " Mt. Hood stands just north of our camp, with its lofty, white dome penetrating the ethereal Blue as if it had sworn to remain an eternal Barrier to the clouds, while time awaits eternity."	National Historic District	Public (USFS- Mt. Hood National Forest)/Private	Trail marking and direction signs are needed.
124	Government Camp	Clackamas	OR	Mount Hood	In 1849, the First U.S. Mounted Rifles arrived in Oregon after a long march overland from Fort Leavenworth. Most of the men were shipped down the Columbia River to Fort Vancouver, but a small contingent, under the command of Lieutenant David M. Frost, was ordered to take animals and wagons over the Barlow Road to Oregon City. The crossing was a disaster. The weakened animals died on their feet, and 45 wagons had to be abandoned on the southwest shoulder of Mt. Hood. In 1851, Lieutenant Frost reported, "Although every effort was made by officers and soldiers to save our animals, still they literally starved to death as we proceeded, until on arriving in Oregon City, we had mere skeletons of only about one hundred left. . . . The road through these mountains [is] about one hundred thirty miles in length through a dense fir forest, where not a single blade of grass could be found for four days. . . . Officers and men were obliged . . . [to] support the poor animals up the steep ascents by putting a rail behind them and pushing them forward." Emigrants who later camped in the area found the abandoned wagons and called the site Government Camp.	National Historic District	Public (USFS- Mt. Hood National Forest)/Private	None known.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	THREATS TO RESOURCES/ VISITOR SERVICES
125	Laurel Hill	Clackamas	OR	Mount Hood	Laurel Hill was the last major obstacle on the Oregon Trail. As emigrants made their way down the western slopes of Mount Hood, lowering their wagons down the various chutes, they frequently resorted to dragging trees behind the wagons or wrapping ropes around trees and belaying the wagons down. Amelia Stewart Knight descended Laurel Hill on September 10, 1853: "It would be useless for me with my pencil to describe the awful road we have just passed over (let fancy picture a train of wagons and cattle passing through a crooked chimney, and we have big laurel hill). . . . It is something more than . . . mile long, very rocky all the way, quite steep, winding, sideling deep down and muddy, made so by a spring running the entire length of the road, and this road is cut down so deep that at times the cattle and wagons are almost out of sight. . . . and to make the matter worse, there was a slow poking train ahead of us . . . and another behind us which kept swearing, and hurrying our folks on."	National Historic District	Public (USFS- Mt. Hood National Forest)	None known.
126	West Barlow Tollgate	Clackamas	OR	Mount Hood	This site, one mile southeast of present-day Rhododendron, was the last of the five locations used to collect tolls on the Barlow Road. It operated from 1883 to 1918, a period more associated with the use of the Barlow Road as a freighting route than for emigration. Emigrants frequently complained about having to pay another toll, an expense that many could ill-afford. On July 5, 1881 (when the toll gate was still at Two Mile Camp) Frank Stevens found the "toll here—4-horse team, \$2.25; 2-horse team, \$2.00; loose cattle, 12 c. per head. Had a small store here for the accommodation of emigrants." A replica of the 1883 tollgate stands today between two maple trees planted by tollgate-keeper Daniel Parker in the 19 th century.	National Historic District	Public (USFS- Mt. Hood National Forest)	Highway 26 impacts the site.
127	Wildwood Recreation Area	Clackamas	OR	Mount Hood	After traveling down the ash flows of the Zigzag River, emigrants looking for a campsite stopped at present-day Rhododendron or continued west along the south bank of the Sandy River to the present-day town of Wildwood. Between 1845 and 1847, emigrants crossed to the north bank of the Sandy River near present-day ZigZag. After 1847, almost all emigrants stayed on the south bank of the Sandy through Wildwood on their way to the lower crossing. Benjamin Cleaver took this route on September 12, 1848: We traveled about 3 miles & struck Sandy Creek [near present-day Zigzag] a Rapid muddy stream 30 or 40 paces wide. We then traveled 4 miles further & Camped on Sandy [just west of Wildwood], the Road runs down Sandy, the road today is tolerable level but Rocky & sandy. we had no grass to night—tied up our cattle & horses & fed them Alder leaves."	Listed	Public (BLM)	None known.
128	Philip Foster Farm	Clackamas	OR	Oregon City	In 1846, Philip Foster joined Sam Barlow's efforts to build and operate the Barlow Road. For many emigrants, Foster's farm was their first sign of settlement at the end of the trail. Here they could rest, buy food, or sample one of Mrs. Foster's home-cooked meals. Amelia Hadley stopped here on August 23, 1851: "Camp tonight at a farm, the man's name is Foster from the state of Maine was kind and entertained us very fine I could not walk straight after not being in a house for so long. . . . They had about 2 hundred bushels of peaches which looked delightful." Foster succeeded Barlow as the primary owner of the toll road in 1851 and operated it under territorial charter until 1857. The house, built in 1882, still stands on the site.	Listed	Private	None known.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	THREATS TO RESOURCES/ VISITOR SERVICES
129	Oregon City Complex	Clackamas	OR	Oregon City	The Oregon Trail officially ended at Abernethy Green in Oregon City. The town was not much to boast of in the 1840s. Maria Belshaw called it the "worst looking place for a City I ever saw." The town was started in 1842 by Dr. John McLoughlin, who chose the site because of its location next to the falls of the Willamette River. The falls prohibited water navigation farther south and provided power for McLoughlin's sawmill. From here, emigrants fanned out across the fertile Willamette Valley to the south in search of the new homes they had come so far to find. Today, the End of the Oregon Trail Interpretive Center is located at Abernethy Green.	Listed	Public (Oregon City)/Private	None known. The interpretive center, consisting of three buildings in the shape of covered wagons, contains museum exhibits, educational facilities, and a museum store. During the summer an outdoor drama on the Oregon Trail is presented in front of the center.
130	Whitman Mission	Walla Walla	WA	Walla Walla	Although Whitman Mission is 31 miles north of the primary route of the Oregon Trail, its history is indelibly tied to the early years of Oregon migration. The mission was established in 1836 by Dr. Marcus Whitman, a Presbyterian missionary determined to bring religion and civilization to the Indians of the Pacific Northwest. Whitman, his wife Narcissa, and Reverend Henry and Eliza Spaulding made the long overland journey to Oregon, helping to blaze what would become the Oregon Trail. In 1843, Marcus Whitman guided members of the first great emigrant wagon train to the mission, which served as a vital way station and supply point. John C. Fremont arrived at the site in October while the emigrants were still there. He found "some cleared patches, where corn and potatoes were cultivated . . . [and] one adobe house—i.e., built of unburnt bricks, as in Mexico." Although the mission was bypassed after 1844, when a shorter route was developed thirty miles to the south, it still served as an emergency station for emigrants who needed the services of a blacksmith, had run out of food, or were too sick or destitute to travel farther. The mission was abandoned after 1847, when Cayuse Indians killed Marcus, Narcissa, and 11 others.	National Historic Site	Public (NPS)	Future incompatible development on surrounding private farmland could impact the character of the trail.
131	Fort Vancouver	Clark	WA	Vancouver	Founded by the Hudson's Bay Company in the winter of 1824-1825 as a fur trading post and supply depot, Fort Vancouver was the most important settlement in the Pacific Northwest for more than 20 years. Dr. John McLoughlin, Chief Factor of the post until 1845, greatly assisted the exhausted, penniless emigrants who arrived at his doorstep. He helped them with transportation, lodging, subsistence, and even extended credit for supplies obtained at the post until they could raise their first crops. When John Boardman arrived on November 3, 1843, he was "well received by Doct. McLaughlin, who charged nothing for the use of his boat sent up for us, nor for the provisions, but not satisfied with that sent us plenty of salmon and potatoes, furnished us house room, and wood free of charge, and was very anxious that all should get through safe." The First Regiment of Mounted Riflemen arrived at Fort Vancouver on October 4, 1849, after their long march overland from Fort Leavenworth and established the first U.S. Army base in the Pacific Northwest. Today, Fort Vancouver is operated as a National Historic Site and includes a replica of the original Hudson's Bay Company post.	National Historic Site	Public (NPS)	None known.

Appendix I.
Mormon Pioneer
National Historic
Trail:
High-Potential
Segments

APPENDIX I. MORMON PIONEER NATIONAL HISTORIC TRAIL—HIGH-POTENTIAL SEGMENTS

NO	SEGMENT NAME	LENGTH (miles)	COUNTY/ STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	THREATS TO RESOURCES/ VISITOR SERVICES
1	Fort Laramie to Warm Springs	14	Goshen, Platte, WY	Torrington	On June 4, 1947, the Mormon Pioneers took the "road under the Bluffs" (River Route) out of Fort Laramie, following the river bottom for several miles until it reached a sharp bend in the North Platte. Here they turned due west to climb a long sandy slope to the benchland, where in 1.5 miles they merged with the Plateau Route. Thomas Bullock described the climb to the bluffs: "The road is very irregular & uneven. We came to a very steep bank of Sand where the teams had to halt several times. A Mr. Archibald Little [Lytle] ill used his oxen very bad, striking them on the head & body with the butt end of his Whip." The trail remains virtually intact and continuous, except when crossed by pipelines and county roads, from the climb out of the Laramie River Valley to Mexican Hill. Huge swales are visible in places, and the junction of various branches is clearly visible where the Bluff and River routes join east of Mexican Hill.	Not listed	Public (Wyoming National Guard)/Private	National Guard activities near Guernsey impact the area.
2	Prospect Hill	3	Natrona, WY	Casper	Just west of Willow Springs is a low ridge called Prospect Hill. Here emigrants climbed 400 feet to gain their first sight of the Sweetwater Mountains to the west. The view, or prospect, of the gentle valley gave travelers hope for better water and an easier road ahead. The Mormon Pioneer Company crossed Prospect Hill on June 20, 1847, and Thomas Bullock wrote: "[We] again ascend [a] hill [and] on the summit see Snow on mountains, the Sweetwater, Rocks, Hills, & Plain. Presidents Young, Kimball, & Richards examine Map, then descend hill. One place very steep."	Determined eligible	Public (BLM)/ Private	Mineral development threatens the historic viewshed. There is a BLM interpretive panel at the top of the hill.

NO	SEGMENT NAME	LENGTH (miles)	COUNTY/ STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	THREATS TO RESOURCES/ VISITOR SERVICES
3	South Pass (Horse Creek to Little Sandy Crossing)	145	Natrona, Carbon, Fremont, Sublette, Sweetwater, WY	Casper, Bairoil, Rattlesnake Hills, Lander, South Pass, Farson	The quality of the resources and the visual experience make South Pass one of the most impressive segments on the entire trail. It starts where the trail fords Horse Creek and heads southwest to cross Wyoming Highway 220 a half mile northeast of Steamboat Rock. The segment continues southwest past present-day Pathfinder Reservoir to strike the Sweetwater River south of Saleratus Lake. Following the banks of the Sweetwater, the route heads generally west—past Independence Rock; around Devil's Gate; past Soda Lake, Split Rock, and Castle Rock—to Three Crossings. The Mormon Pioneer Company chose to take the Deep Sand Route to the south, avoiding the three fords of the Sweetwater at Three Crossings and another at Fifth Crossing. The Deep Sand Route rejoined the main trail about a mile west of Names Rock. William Clayton described the spectacular scenery viewed by the Mormon Pioneer Company along the Deep Sand Route on June 23, 1847: "We were suddenly cheered with a very plain view of the Wind river chain of the Rocky Mountains towering high up in the air and perfectly white with snow. Some of the peaks appear to run up very high. . . . The land over which we have traveled . . . is perfectly baren except for wild sage which abounds, but there is scarcely a spear of grass to be seen." The segment next passes Ice Slough; crosses Warm Springs Creek; fords the Sweetwater three more times at Sixth, Seventh, and Eighth crossings; and arrives at the foot of Rocky Ridge. The Mormon Pioneer Company avoided the regular climb up Rocky Ridge by continuing southwest into the narrow canyon of the Sweetwater and then climbing up the steep south slope of the ridge to rejoin the primary route west of Lewiston Lakes. The trail crosses Strawberry, Rock, and Willow creeks and leaves the Sweetwater River at the Ninth Crossing—a site later known as Burnt Ranch. The route then climbs past Twin Mounds and crosses the Wind River Range and the Continental Divide at South Pass. Descending into the Pacific drainage, the segment passes Pacific Springs and Plume Rock, crosses Dry Sandy Creek, and follows the north side of Dry Sandy Creek past Parting of the Ways to end at Little Sandy Crossing.	South Pass is a National Historic Landmark	Public (BLM)/ Private	Mining exploration around Lewiston and Dickie Springs has been a low-level threat to the trail and its viewshed for many years. If large-scale development is proposed, the threat would increase greatly. Ranchette development on the upper Sweetwater River near Split Rock is a concern.
4	Big Sandy to Green River	50	Sweetwater, WY	Farson, Rock Springs	This segment begins at the Big Sandy Crossing near present-day Farson and follows unimproved roads southwest along the north side of the Big Sandy River. William Clayton traveled this segment on June 29, 1848: "Our course still lies about southwest, the road generally good over gently rolling, hard, sandy land and in some places the surface is covered with loose fragments of hard rock. . . . In places the loose fragments of rocks made it very bad traveling, but many were thrown from the road by the spare men." The segment ends at the Lombard Ferry crossing of the Green River, three miles north of the confluence of the Big Sandy and Green rivers.	Not listed	Public (BLM, BOR)/ Private	Access to the eastern end of the segment is possible from Wyoming Highway 28 at a state historical marker. The segment crosses public and private lands. Visitors should acquire written permission from private landowners before entering private land. Access is not continuous along the trail by automobile. Travelers may park their vehicles and hike portions of the trail.

NO	SEGMENT NAME	LENGTH (miles)	COUNTY/ STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	THREATS TO RESOURCES/ VISITOR SERVICES
5	Fort Bridger to Cache Cave	44	Uinta, WY; Summit, UT	Evanston, Ogden	This segment includes a series of high-quality trail remnants, historic resources, and natural landmarks. It begins at Fort Bridger; ascends Cottonwood Creek, passing between Bridger Butte and Sugar Loaf Butte; climbs onto Bigelow Bench; descends to Muddy Creek; and ascends Soda Hollow. The Mormon Pioneer route then detours down Pioneer Hollow to Antelope Creek and climbs the flanks of Aspen Mountain to rejoin the main trail. The trail crosses the rim of the Great Basin at Aspen Mountain. Its elevation of more than 8,300 feet makes it the highest point on the pioneer trek. Thomas Bullock described the danger of this crossing on July 10, 1847: "Ascended the 'dividing ridge' by a zigzag road. . . . Descended by two steep pitches, almost perpendicular, which on looking back from the bottom looks like jumping off the roof of a house to a middle story, then from the middle story to the ground & thank God there was no accident happened. Presidents Young & Kimball cautioned all to be very careful & locked the Wheels of some Wagons themselves. It was a long, steep & dangerous descent." The route then descends Sulphur Creek to cross the Bear River, climbs up Coyote Creek past the Needles, crosses Yellow Creek, and ends at Cache Cave, an elongated cavity in a yellow sandstone formation.	Not listed	Public (BLM)/ Private	None known.
6	Castle Rock to This Is the Place Heritage Park	51	Summit, Morgan, Salt Lake, UT	Ogden, Salt Lake	Beginning at Castle Rock, a geologic formation that towers 200 feet above the trail, this segment goes down Echo Canyon to the present-day town of Echo. Passing through Echo Canyon on July 17, 1847, William Clayton described the canyon's acoustical properties: "There is a singular echo in this ravine, the rattling of wagons resembles carpenters hammering at boards inside the highest rocks. The report of a rifle resembles a sharp crack of thunder and echoes from rock to rock for some time. The lowing of cattle and braying of mules seems to be answered beyond the mountains. . . . The echo, the high rocks on the north, high mountains on the south with the narrow ravine for a road, form a scene at once romantic and more interesting than I have ever witnessed." At the mouth of Echo Canyon, the segment turns northwest along the Weber River, past Witch Rocks, to present-day Henefer. After crossing the Weber River, the trail turns south up Main Canyon to Hogsback Summit. It then goes down Dixie Hollow, up Broad Hollow, and descends to East Canyon Creek (now inundated by East Canyon Reservoir). The trail then ascends East Canyon Creek to Little Emigration Canyon. The four-mile trail through Little Emigration Canyon climbs 1,400-feet to the top of Big Mountain, the longest sustained climb on the entire Mormon Trail. Today, it provides a rare opportunity to walk a pristine section of the original trail in Utah. From Big Mountain Pass, the trail descends Clear Creek to Mountain Dell Canyon, makes its last ascent to Little Mountain Summit, and follows Emigration Canyon to This Is the Place Heritage Park.	Not listed	Public (USFS- Wasatch National Forest, Utah Division of Parks and Recreation)/ Private	None known.

Appendix J.
Mormon Pioneer
National Historic
Trail:
High-Potential
Sites

APPENDIX J. MORMON PIONEER NATIONAL HISTORIC TRAIL—HIGH-POTENTIAL SITES

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	THREATS TO RESOURCES/ VISITOR SERVICES
1	Nauvoo National Historic District	Hancock	IL	Burlington	In the spring of 1839, the Church of Jesus Christ of Latter-day Saints established a new settlement on the banks of the Mississippi River in Illinois. The town was named Nauvoo—reportedly from a Hebrew word meaning beautiful place. Nauvoo was the Mormon headquarters for seven years, during which time the church flourished, and the settlement quickly became one of the largest cities in Illinois. Hostility, suspicion, and trouble increased in direct proportion to the community's growth and success, and the Mormons were forced to flee their homes during the winter and spring of 1846. On April 24, 1846, Newel Knight, who departed with the spring exodus, lamented: "We all halted & took a farewell view of our delightful City. . . . We also beheld the magnificent Temple rearing its lofty tower towards the heavens . . . we also took a farewell look of our Comfortable homes we had labored so hard to rear for the Comfort of our families . . . my heart did swell within me."	National Historic Landmark	Private	None known. This site contains 1,100 acres of authentically restored homes and shops, including Brigham Young's home. The historic district in the town of Nauvoo contains streets, 18 restored houses, shops, and a visitor center.
2	Nauvoo Landing	Hancock	IL	Burlington	The eastern departure point of the 1846 Mormon migration west was at the foot of Parley Street on the riverfront in Nauvoo. Teams and wagons lined up along Parley Street waiting their turn to be ferried across the Mississippi River. When the river froze solid, teams were able to cross on the ice. On February 28, 1846, Brigham Young recorded, "The great severity of the weather, and . . . the difficulty of crossing the river during many days of running ice, all combined to delay our departure, though for several days the bridge of ice . . . greatly facilitated the crossing."	National Historic Landmark	Private	None known. A pavilion, granite marker, bronze plaque, and flagpole commemorate and honor the exodus from Nauvoo.
3	Montrose Landing	Lee	IA	Burlington	The pioneers landed here on the west shore of the Mississippi River during their exodus from Nauvoo in 1846. The first wagon, belonging to Charles Shumway, was ferried across the river on February 4. Orson Pratt recorded his crossing on February 14: "The falling of the snow and the cold northwest wind have made the weather very disagreeable. . . . We found the ferryman and his man standing in the open air around a small fire. We prevailed upon them to venture across and in a short time we found ourself safely landed on the West bank of the great Mississippi." The Mormons continued their exodus from Nauvoo through September, when the last members of the church were run out of town by hostile mobs.	Not Listed	Public (City Park)	None known. An accessible wayside exhibit has been installed.
4	Sugar Creek Camp	Lee	IA	Burlington	The first campsite for the Camp of Israel, Sugar Creek is well known as a place of intense hardship during the late winter of 1846. The Mormons organized at this staging area for the difficult spring trek across Iowa. Orson Pratt found the Sugar Creek Camp "suffering considerably from the storm and cold." Lorenzo Snow crossed the Mississippi River on February 9 and "camped at Sugar Creek . . . having got away in so much haste that we were not so well prepared as we otherwise should have been. There were seven in family: So with Two wagons and a Tent we made ourselves as comfortable as the circumstances of the weather would admit. There were a hundred families gathered in there before us."	Not Listed	Private	None known. The site needs interpretation.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	THREATS TO RESOURCES/ VISITOR SERVICES
5	Des Moines River Crossing	Van Buren	IA	Burlington	On Thursday, March 5, 1846, Brigham Young's advance party crossed their first major river since the Mississippi at the village of Bonaparte, Iowa. The ford had a good rock bottom and the crossing caused few problems. However, the muddy roads made progress slow and difficult after the crossing was completed. Hosea Stout wrote on March 5, 1846, "We came to the little town of Bonaparte. . . . There was a splendid Mill on the des Moines in this town. The mill dam was built entirely across the river with lock to pass boats up and down. . . . The River was beautiful and had a good ford with a rock bottom and was for a river of its size very convenient for travellers to ford at this time."	Not Listed	Private	None known. An accessible wayside exhibit has been installed in the city park on the riverbank.
6	Chariton River Crossing	Appanoose	IA	Centerville	The Mormon Pioneer Company made the difficult crossing of the Chariton River 0.75 mile southwest of present-day Sedan, Iowa. Steep banks on both sides of the river made it necessary to use long ropes as brakes for the wagons going down and to assist the oxen up the hill on the other side. On March 22, William Clayton described the ordeal: "We had to let the teams down into Shariton river by ropes and also helped them up again by the same means. . . . I spent the day helping the teams till I was so sore and tired I could scarcely walk." Poor weather conditions forced the Saints to camp on a ridge just west of the crossing for 10 days, from March 22 to March 31, 1846. There are some extant wagon ruts at the site.	Not Listed	Public (State of Iowa)	None known. Access to the site is across private land. There is a wayside exhibit on the ridge overlooking the valley.
7	Locust Creek Camp	Wayne	IA	Leon	At this site on April 15, 1846, William Clayton wrote the words to the now-famous Mormon hymn "Come, Come Ye Saints." Clayton received word that morning that his wife, Diantha Farr, had safely given birth to a healthy baby boy and wrote the hymn in celebration. Clayton recorded the event in his journal: "This morning Ellen Kimball came to me and wishes me much joy. She said Diantha has a son. I told her I was afraid it was not so, but she said Brother Pond had received a letter. I went over to Pond's and he read that she had a fine fat boy on the 30 th Truly I feel to rejoice at this intelligence but feel sorry to hear of her sickness. . . . This morning I composed a new song—'All is well.' I feel to thank heavenly father for my boy and pray that he will spare and preserve his life and that of his mother."	Not listed	Private	None known. Wayside exhibits have been placed in the Tharp Cemetery.
8	Garden Grove	Decatur	IA	Leon	Garden Grove, the first permanent settlement on Potawatomi Indian lands in territorial Iowa, served as a Mormon way station from 1846 to 1852. Cabins and fences were built, wells were dug, and crops were planted to provide a resting place for those who could not continue and for those who would soon arrive. Orson Pratt recorded on May 10, 1846, "A large amount of labour has been done since arriving in this grove; indeed the whole camp are very industrious. Many houses have been built, wells dug, extensive farms fenced, and the whole place assumes the appearance of having been occupied for years, and clearly shows what can be accomplished by union, industry, and perseverance." The present-day town of Garden Grove, Iowa, grew up near the old Mormon camp.	Not Listed	Public (County)/ Private	None known. Two wayside exhibits have been placed at the site.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	THREATS TO RESOURCES/ VISITOR SERVICES
9	Mount Pisgah	Union	IA	Creston	A Mormon way station from 1846 to 1852, at its height Mount Pisgah had over 2,000 inhabitants. Like Garden Grove, it was a semi-permanent camp for the benefit of Mormons who followed the Pioneer Company. On May 19, 1846, Orson Pratt wrote, "We concluded to form another settlement here, for the benefit of the poor, and such as were unable, for the want of teams, to proceed further. Accordingly, the camp commenced building houses, ploughing, planting, and fencing in farms, an immense quantity of labour was performed in a very few days." Today, the old campsite is a nine-acre park.	Not Listed	Public (Union County Conservation Board)/ Private	None known. The site contains interpretive wayside exhibits, historical markers, and a reconstructed log cabin.
10	Grand Encampment	Pottawattamie	IA	Omaha	The vanguard of the Mormon migration reached the Missouri River on June 14, 1846, and established Grand Encampment on Mosquito Creek as a temporary stopping place. The enlistment of the historic Mormon Battalion took place here in July. Thomas L. Kane, visiting the area that summer, wrote eloquently of the camp: "[The bottomlands] were crowded with covered carts and wagons; each one of the Council Bluff hills opposite were crowned with its own great camp, gay with bright white canvas, and alive with the busy stir of swarming occupants. In the clear blue morning air, the smoke steamed up from more than a thousand cooking fires. . . . Herd boys were dozing upon the slopes; sheep and horses, cows and oxen, were feeding around them . . . in the luxuriant meadow of the then swollen river. From a single point I counted four thousand head of cattle in view at one time. As I approached the camps, it seemed to me the children were to prove still more numerous." The lack of adequate wood, water, and grass for such a large party caused the Mormons to move into the surrounding country, and Grand Encampment was abandoned by late July.	Not listed	Private (Iowa School for the Deaf)	None known. Several wayside exhibits and a trail through a restored section of prairie are at the site.
11	Kanesville Tabernacle	Pottawattamie	IA	Omaha	The 1847 Kanesville Tabernacle, which Norton Jacob called "the biggest log cabin in the world," was the first tabernacle built by the Church of Jesus Christ of Latter-day Saints. Cottonwoods were felled, trimmed, hauled to the site, hewn, and built into a 40-by-60 foot tabernacle in two and a half winter weeks under the direction of Bishop Henry W. Miller. On December 27, 1847, Brigham Young was sustained as the second president of the church in this building. The tabernacle also served as a community center. On February 7, 1849, the Frontier Guardian newspaper reported: "Cotillion Party at the Tabernacle on Tuesday, at 3 o'clock P.M., February 13 th . The Musicians Benefit will come off at the above time and place. This will close the dancing for the season. Company will furnish their own refreshments. . . . Admittance 50 cents per couple." The original structure was dismantled because of underground water problems, but this replica was built in 1996.	Not listed	Private	None known. A visitor center is next to the tabernacle.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	THREATS TO RESOURCES/ VISITOR SERVICES
12	Middle Mormon Ferry (Missouri River)	Pottawattamie	IA	Omaha	In 1846, the Mormon pioneers built a ferry on the east bank of the Missouri River, which was used by emigrants traveling between Grand Encampment/ Kanesville and Winter Quarters. Louisa Barnes Pratt vividly recalled this journey in her memoirs: "There were so many teams ahead of us we had to wait nearly the whole day for our turn [to cross the river]. I was extremely weak! There was great confusion on the boat, the cattle were frightened. I was terrified, and it caused my fever to return. There was a dreadful hill to climb as we drove off the boat, deep mud, and at the top thick woods. It was dark, and we dared not drive on. Had no place to pitch the tent. So there we must remain till morning, musketoos beyond endurance." The site is located five miles west of the Iowa School for the Deaf, just off Iowa Highway 92.	Not listed	Private	None known.
13	Winter Quarters Complex	Douglas	NE	Omaha	Built on Indian land with permission from the U.S. Army, Winter Quarters served as the main settlement of the Mormons on the Missouri River until they moved the fitting-out site to Kanesville in Iowa. The winter of 1846-47 was devastating, and with inadequate shelter and food they died by the hundreds of malaria, scurvy, dysentery, and a host of other unidentified ailments. Louisa Barnes Pratt recalled in her memoirs, "I hired a man to build me a sod cave. He took turf from the earth, laid it up, covered it with willow brush and sods. Built a chimney of the same. . . . I paid a five dollar gold piece for building my sod house, 10 x 12. . . . A long cold rain storm brought more severely again the chills and fever. These with scurvy made me helpless indeed! . . . Many of my friends sickened and died in that place, when I was not able to leave my room, could not go to their bedside to administer comfort to them in the last trying hours, not even to bid them farewell. Neither could I go to see their remains carried to their final resting place where it was thought I would shortly have to be conveyed." Winter Quarters encompassed the area of North Omaha near State and 33 rd Streets. Historic sites include the Mormon Pioneer Memorial Bridge, Florence Mill, Florence Park, Mormon Pioneer Cemetery, Cutler's Park, and the first Mormon pioneer camp after leaving Winter Quarters.	Not listed	Private (LDS Church, City of Omaha, Winter Quarters/ Florence Mill Inc.)	A major interpretive center was built by the LDS Church at Winter Quarters Historical Site in 1997.
14	Military Road Ruts	Douglas	NE	Omaha	This 100-foot section of ruts just west of Little Papillion Creek is one of the very few remaining in the Omaha area. The Mormon Pioneer Company passed this way in 1847, and the route was subsequently used by California gold seekers on the Council Bluffs Road. Thomas Bullock wrote of this day's journey on April 10, 1847: "[We] travelled on the divide of a rolling prairie, crossed the creek 'Tapion' [Little Papillion Creek] and also a marshy creek [Big Papillion Creek], at both which places the 'Mormon team' [men who were assigned to help pull wagons out of difficult spots] was called into requisition. On the banks of this last marsh the Camp halted to feed the cattle."	Not listed	Public	Urban development is a threat to the site.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	THREATS TO RESOURCES/ VISITOR SERVICES
15	Crossing of the Elkhorn River	Douglas	NE	Fremont	This was the first major river crossing west of the Missouri River. Described as a "wide and rambunctious stream" the river could not generally be forded in the spring, but wagons could be floated or ferried across on rafts. Thomas Bullock's party arrived at the Elkhorn River on the afternoon of April 19, 1847: "5 teams arrived at 'the Horn' about 6 o'clock, where the brethren were busily engaged Rafting over the Wagons. . . . Cotton Wood Trees in full blossom, Slippery Elm Trees in leaf, also Willows." The exact site where the Mormon Pioneer Company crossed is in doubt. Some claim it was approximately where U.S. Highway 6 crosses the Elkhorn near Waterloo, Nebraska. But the most-recent research suggests it was upriver, just south of where Nebraska Highway 36 crosses the river. The Highway 36 crossing was heavily used in later years by all who traveled west along the north side of the Platte River.	Not listed	Public/Private	None known. A wayside exhibit is planned.
16	Liberty Pole Camp	Dodge	NE	Fremont	At this important camp, the 1847 pioneers were organized along military lines on April 16. William Clayton recorded the meeting: "About 8:00 a.m. the camp was called together, and organized two Captains of 100's viz. Stephen Markham and A.P. Rockwell were appointed, also five captains of 50's and 14 Captains of 10's. There were 143 men and boys on the list of the pioneer company, three women and Lorenzo Young's two children. There are 73 wagons." The Liberty Pole, was erected on June 14, 1847, to mark the staging ground for the move across Nebraska. Eliza Snow arrived at Liberty Pole Camp on June 15 and recorded in her journal, "The brethren called a meeting around a Liberty pole which was erected yesterday for the purpose of organizing the Camp. Judg'd to be more than 300 wagons cross'd over at noon this day." A reconstructed liberty pole, made from a trimmed cottonwood tree, was erected for the Mormon Trail Sesquicentennial.	Not listed	Private	None known. The liberty pole has been re-erected, and a wayside exhibit is scheduled for installation.
17	Lower Loup River Ford	Nance	NE	David City	On April 24, 1847, the pioneers crossed another major Nebraska river, the Loup, three miles northeast of present-day Fullerton, Nebraska. Thomas Bullock observed the crossing: "The brethren continued rowing the goods over the River in the Boat, while the light loaded wagons continued crossing at the Ford, until a pretty good road was made on the Quicksand. . . . The last wagon crossed over at 20 minutes to 3, thus passing our greatest obstacle on our route without any accident for which blessing from our Heavenly Father all the camp felt to render thanks & praise." After crossing, the pioneer company remained near the Loup River, traveling west along its south bank for approximately 17 miles before turning south and heading back toward the Platte River. Creeks and marshy ground between the two rivers prevented them from turning south earlier.	Not listed	Private	None known.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	THREATS TO RESOURCES/ VISITOR SERVICES
18	Murdock Site	Hall	NE	Grand Island	The Murdock site is located on the south side of the Wood River, two miles south of present-day Alda, Nebraska, and one mile southwest of the Wood River Crossing. The trail crossed this 2.4-acre site in a northeast-to-southwesterly direction. The Mormon Pioneer Party crossed the site on April 29, 1847, and William Clayton reported, "The morning very cool. There seems to be very little rain in this country and no dew. . . . After traveling about two miles came to a pretty stream of good water [Wood River], about ten feet wide on an average, but at the fording place about a rod wide. . . . We then traveled on a table or prairie gently ascending for four or five miles but very even and good traveling." During the 1860s, a sawmill and dwelling, referred to as the Murdock Homestead, were located here.	Not listed	Private (Hall County Historical Society)	None known. A wayside exhibit is being planned.
19	Sand Hill Ruts	Lincoln	NE	Ogallala	This is one of the few points where emigrants had to leave the north side of the North Platte River and go across the hills. William Clayton recorded the detour on May 14, 1847: "We passed among and around the high bluffs, our course lying nearly in a north direction for some time, then turning south and on approaching the river, nearly southwest. When within about three-quarters of a mile of the river, we stopped to feed at twenty minutes to two, having traveled six and a quarter miles. We have got on the level bottom again and are probably not more than three miles in a direct line from where we started this morning." There are excellent swales still visible in the sand hills.	Not listed	Private	None known.
20	Ash Hollow Complex/Windlass Hill	Garden	NE	Chappell	The site is a natural landmark on the south side of the North Platte River. It served as the gateway to the North Platte River Valley for the main Oregon-California Trail. When the Mormon Pioneer Company saw the mouth of the ravine on May 20, 1847, they sent four men across the river in a boat to verify that this was indeed the Ash Hollow on John C. Fremont's maps. This identification allowed them to better test Fremont's mileages on into Fort Laramie. William Clayton recorded, "Opposite where we halted, we can see a ravine running up the bluffs and at the foot, a flat bottom of about fifteen acres. At the farther side of this bottom is a grove of trees not yet in leaf. Brother [John] Brown thinks they are ash and that the place is what is called Ash Hollow. . . . We all felt anxious to ascertain the fact whether this is Ash Hollow or not, for if it is, the Oregon Trail strikes the river at this place."	Listed	Public (Nebraska Game and Parks Commission)	None known. A visitor center with interpretive exhibits is operated at Ash Hollow State Historical Park. There are also interpretive waysides at Windlass Hill.
21	Ancient Bluff Ruins	Morrill	NE	Crescent Lake	This frequently mentioned landmark is the most dramatic and extensive bluff formation along the north side of the North Platte River. These three erosional remnant buttes were named by English Mormons who thought they resembled castles in their homeland. On Sunday, May 23, 1847, Mormon leaders climbed the highest bluff, wrote their names on a buffalo skull, and placed it at the southwest corner. Thomas Bullock "found that all of the Twelve had started on an exploring excursion to the mountains. At 9:24 they visited several of the Bluffs. . . . Professor Pratt took an observation by which he found it was 235 Feet higher than the River. . . . [They] rolled down some large stones from the top, and returned to Camp at 11:05." Trail ruts are found nearby.	Not listed	Private	The site needs interpretation and adequate access.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	THREATS TO RESOURCES/ VISITOR SERVICES
22	Courthouse Rock/Jail Rock	Morrill	NE	Scottsbluff	Courthouse Rock was first noted by Robert Stuart in 1812 and quickly became one of the guiding landmarks for fur traders and emigrants. It is a massive monolith of Brule clay and Gering sandstone south of the trail, which was variously likened to a courthouse or a castle. A smaller feature just to the east was called the Jail House or Jail Rock. Courthouse Rock was the first of several impressive natural landmarks along the trail in western Nebraska. Though located on the south side of the North Platte River, this formation was clearly visible to the Mormon pioneers as they passed by on the north side. The Pioneer Party camped north of here on May 24, 1847, and William Clayton observed, "Opposite the camp on the south side of the river is a very large rock very much resembling a castle of four stories high, but in a state of ruin. A little to the east a rock stands which looks like a fragment of a very thick wall. . . . The scenery around is pleasant and romantic."	Listed (Courthouse Rock)	Public (City of Bridgeport, Nebraska State Historical Society)	Dirt bikes, vandalism, and all-terrain vehicles pose threats to resources at this site. Interpretation is needed.
23	Chimney Rock	Morrill	NE	Scottsbluff	This prominent column of clay and sandstone was a significant landmark in measuring the emigrants' progress west. Though located on the south side of the North Platte River, this formation was clearly visible to the Mormon pioneers as they passed by on the north side on May 26, 1847. The next morning William Clayton noted, "We have seen a number of romantic spots on our journey, but I consider our view this morning more sublime than any other. Chimney Rock lies southeast, opposite detached bluffs of various shapes and sizes. To the southwest, Scott's Bluff looks majestic and sublime. The prairie over which our route lies is very level and green as far as we can see. The bluffs on the north low, and about three miles distant. The scenery is truly delightful beyond imagination."	Listed	Public (Nebraska State Historical Society)	None known but ongoing erosion. A new visitor center contains excellent interpretive exhibits.
24	Scotts Bluff National Monument/Mitchell Pass	Scotts Bluff	NE	Scottsbluff	Scotts Bluff was the first of many imposing barriers that travelers encountered as they made their way west. It was also the last famous landmark along the Great Platte River Road in Nebraska. Though located on the south side of the North Platte River, this formation was clearly visible to the Mormon pioneers as they passed by on the north side. On May 27, 1847, William Clayton wrote, "Passed the meridian of the northernmost peak of Scott's Bluff. . . . These bluffs are very high, steep, and broken like many others, resembling ancient ruins. They are probably two miles from north to south extremity, but not very wide."	National Historic Landmark/ National Natural Landmark	Public (NPS)	Visual intrusions and potential urban sprawl from Gering and Scottsbluff encroach on the site.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	THREATS TO RESOURCES/ VISITOR SERVICES
25	Fort Laramie	Goshen	WY	Torrington	Fort Laramie traces its origin to Fort William, a fur-trading post constructed on the Laramie River in 1834. In 1841, the American Fur Company replaced the old log fort with a larger adobe structure, which they named Fort John. Fort John was noted as an island of civilization where information concerning trail conditions could be obtained from post personnel. Brigham Young found the inhabitants friendly and informative when the Mormon Pioneer Company passed through in 1847. Arriving on June 1, William Clayton reported they were "politely welcomed by Mr. [James] Bordeau who appears to be the principal officer. He conducted us up a flight of stairs into a comfortable room, and being furnished with seats, we rested ourselves. President Young and others entered into conversation with Mr. Bordeau. From him we learned that we cannot travel over four miles farther on the north side of the Platte before we come to bluffs which cannot be crossed with loaded wagons." Thomas Bullock recorded on June 3 that they "commenced ferrying the Wagons over at sunrise and continued all day." Acquired by the U.S. Army in 1849 and renamed Fort Laramie, the post continued to serve emigrants throughout the overland trails era. The Bedlam Ruts (administered by BLM) are nearby.	National Historic Landmark	Public (NPS)	None known. Fort Laramie National Historic Site maintains a visitor center/museum with interpretive exhibits and several restored buildings from the military era.
26	Mexican Hill	Platte	WY	Torrington	At Mexican Hill the trail made a steep and dramatic cut through the river bluffs from the benchland to the floodplain of the North Platte River. The Mormon Pioneer Party descended the bluffs on June 4, 1847, and Thomas Bullock wrote: "We had a very steep hill to descend between 4 & 5. We not only locked Wheels, but had attached ropes to the hind end of the Wagons [with] the brethren holding back [at] the same time. In about 2 hours we got safely thro' & halt for the night at 5:20 in the bottom, near the River." Where the Bluff and River routes intersected, ruts lead up to the hill from 0.75 mile to the east. They are some of the most-memorable swales anywhere on the trails. The origin of the name is obscure.	Not listed	Private	The site has been impacted by erosion and unauthorized vehicle use.
27	Register Cliff	Platte	WY	Torrington	Among the most famous of the surviving emigrant registers, thousands of names were inscribed on this mile-long prominent sandstone cliff on the south side of the North Platte River. Cliffs to the east and west also contain hundreds of well-preserved emigrant inscriptions. The first night west of Fort Laramie, June 4, 1847, the Pioneer Party camped in the pleasant cottonwood-shaded bottoms near Register Cliff. The next morning Thomas Bullock reported they passed "under some very bold Bluffs of Plaster of Paris." He did not record that any names were noted on these cliffs.	Listed	Public (State of Wyoming)	Natural deterioration, housing development, vandalism, and National Guard activities to the west all impact the site. The state of Wyoming needs to update the interpretive materials.
28	Guernsey Ruts (Deep Rut Hill)	Platte	WY	Torrington	At this site, where the trail was forced away from the river and crossed a ridge of soft sandstone, the track is worn to a depth of five feet, creating some of the most-spectacular ruts remaining along the entire length of the Mormon Trail. The geography of the area dictated that practically every wagon that went west crossed the ridge in exactly the same place, with impressive results. On June 5, 1847, Thomas Bullock lamented: "On coming to the hills we had a very difficult spot to ascend, pass thro' & again descend to a prairie."	National Historic Landmark	Public (State of Wyoming)	This site needs better marking and interpretation. Visitor use should be channeled to protect the ruts and surrounding terrain from the effects of indiscriminate wandering. National Guard activities in the area have caused major visual intrusions.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	THREATS TO RESOURCES/ VISITOR SERVICES
29	Warm Springs Canyon	Platte	WY	Torrington	These two free-flowing springs, one gushing from a ledge of rock and the other bubbling up in a large pool, were only slightly warm. Often called the "emigrants' wash tub," this was a particularly popular camping place, available to travelers on both the Black Hills Road and the River Route. The Mormon Pioneer Party nooned here on June 6, 1847, and William Clayton described the area: "Halted for noon opposite a very large spring noticed by Fremont. The water of this spring is very clear and soft, but considerably warmer than the river water." The spring still flows strongly and the site is in nearly pristine condition.	Not listed	Private	National Guard activities threaten the canyon. The site has been marked by the Oregon-California Trails Association.
30	Laramie Peak	Albany	WY	Laramie Peak	This famous 10,272 foot landmark in the Black Hills (named for the dark appearance of its tree-covered slopes) guided emigrants' travel for many days. First sighted when descending from Robidoux or Mitchell passes, this mountain was constantly in view for almost 100 miles. It must have seemed that the peak would never be passed. From Fort Laramie on June 2, William Clayton commented, "One can see the same black hill seen on Sunday evening and which is Laramie Peak. We could see the snow lying on it very plainly. We can also see several ranges of high hills in the distance which are no doubt parts of the Black Hills." On June 7, Thomas Bullock was still commenting on the peak: "Had a full view of Laramie Peak, covered with Timber & tipt with snow."	Not listed	Public (USFS-Medicine Bow National Forest)	None known.
31	Ayres Natural Bridge	Converse	WY	Douglas	This natural feature was often mentioned in emigrant diaries, and spring-fed La Prele Creek was used as a campsite. The natural bridge is in a beautiful red-rock canyon, which offered good water and plentiful forage for animals. The Mormon Pioneer Company camped on nearby La Prele Creek on June 9, 1847. The next day, William Clayton reported, "About a mile from where the road crosses [La Prele Creek], it runs through a tunnel from ten to 20 rods under the high rocky bluffs. The tunnel is high enough for a man to stand upright in, and when standing at the entrance one can see the light through on the other side. It seems as though this tunnel has been formed by some strange feat of nature. Several of the brethren went to see it."	Not listed	Public (Wyoming State Parks and Historic Sites)	The site shows signs of overuse. Improved interpretation is needed.
32	Upper Platte Ferry and Ford (1847)	Natrona	WY	Casper	In 1847, the Mormon pioneers used timber from the nearby mountains to build a ferry across the North Platte River. On June 13, Thomas Bullock recorded, "The Twelve and Captains met at the President's Wagon to take into consideration the manner of crossing the River in the best way. . . . Each company . . . went with Teams to the Pineries for trees to construct their rafts." On June 15, William Clayton noted, "The brethren continued ferrying wagons over on the raft and also built two other rafts." It took them nearly a week to get all of the wagons and provisions across the river. Brigham Young left nine men behind to trade ferry services for money and provisions. Consisting of two 30-foot dugout canoes with a plank bed, the ferry was soon moved downstream to respond to competition and was maintained for the use of both Mormon and non-Mormon emigrants.	Not listed	Public (City of Casper)	None known. Nearby Fort Caspar has a museum/visitor center with interpretive exhibits and a replica of the raft.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	THREATS TO RESOURCES/ VISITOR SERVICES
33	Bessemer Bend/Red Buttes Crossing	Natrona	WY	Casper	The last place to cross the North Platte River, Bessemer Bend was the preferred crossing prior to the establishment of the Mormon Ferry in 1847, after which its use declined. The Red Buttes, a physical feature to the north of the river, made the crossing a minor landmark. The Mormon Pioneer Company crossed the North Platte River at the Upper Platte Ferry and headed west toward Emigrant Gap. They soon turned south, however, until they again reached the North Platte River. They halted for noon opposite the Red Buttes and William Clayton reported, "The Red Buttes are nearly opposite to this place towards the southwest and appear to be two high bluffs of red earth or sand, presenting a very triangular, yet interesting appearance." Turning west, they rejoined the main trail about two miles above Avenue of Rocks.	Not listed	Public (BLM)	The site is adequately protected and well interpreted by the BLM.
34	Avenue of Rocks	Natrona	WY	Casper	These natural rock formations jut out of the Wyoming rangeland, and the Mormon pioneers were forced to wind through the rocks as the trail vaulted the rocky spine. Traveling across this torturous landscape on June 19, 1847, William Clayton wrote, "There is a high ridge of sharp pointed rocks running parallel with the road for near a quarter of a mile, leaving only sufficient space for wagons to pass. At the south point there is a very large rock lying close to where the road makes a bend, making it somewhat difficult to get by without striking it. The road is very rough with cobble stones."	Not listed	Public (State of Wyoming)	Vandalism and increasing erosion on country roads are the main threats. This site needs interpretation of the natural formation and the emigrant trails.
35	Willow Springs	Natrona	WY	Casper	Willow Springs provided the first safe water west of Casper. These free-flowing springs offered cool refreshing water and nearby forage for animals. The area quickly became a popular campsite. On June 20, 1847, William Clayton "arrived at the Willow spring and halted a little while to get water. This spring is about two feet wide and the water ten inches deep, perfectly clear, cold as ice water, and very good tasting. There is a willow grove extending for some distance above and below it which will answer very well for firing purposes. The grass is good and plentiful and it is one of the loveliest camping spots I have seen on the journey." To the southwest, visible ruts ascend Prospect Hill. The springs are in the yard of an abandoned ranch, where several deteriorating shacks and outbuildings barely stand.	Not listed	Private	Low-key and unobtrusive interpretive panels should be selectively placed to point out trail-related geographical features.
36	Prospect (Ryan) Hill	Natrona	WY	Casper	Just west of Willow Springs is a low ridge called Prospect Hill, where emigrants gained their first sight of the Sweetwater Mountains to the west. The 400-foot climb was very hard on draft animals. It was reportedly named because emigrants could see the gentle valley of the Sweetwater River from the top of the hill, giving them a view—or prospect—of an easier road ahead. Clayton continues his narrative: "At a quarter mile beyond the spring [Willow Springs] we began to ascend a very high hill which was one mile from the foot to the top and the ascent pretty steep. . . . From the top can be seen a vast extent of country. . . . The view from this hill is one of romantic beauty which cannot be easily surpassed and as President Young remarked, would be a splendid place for a summer mansion to keep tavern." Prospect Hill has clearly visible ruts on its eastern slope. The view from the top has changed little from the one seen by the Mormon Pioneer Company on June 20, 1847.	Not listed	Public (BLM)	Mineral development may impact the site. Two BLM interpretive markers are located at the top of Prospect Hill.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	THREATS TO RESOURCES/ VISITOR SERVICES
37	Saleratus Lake	Natrona	WY	Rattlesnake Hills	This alkali deposit, or "pan," about a quarter-section in size, provided emigrants a soda compound used in baking. William Clayton of the 1847 Mormon Pioneer Company reported, "After we halted, Sister Harriet Young made some bread using the lake saleratus and when baked was pronounced to raise the bread and taste equal to the best she had ever used and it requires less of this than the common saleratus. A number of the brethren went back during the halt and filled their pails with it, calculating to make use of it during our future journey."	Not listed	Private	An agreement to permit access should be negotiated with the private owner.
38	Independence Rock	Natrona	WY	Bairoil	Independence Rock was the most-noted landmark on the emigrant trails west of Fort Laramie. An oval outcrop of granite rock, it is 1,900 feet long, 700 feet wide, and rises 128 feet above the range. The rock derived its name from a party of fur trappers who camped there and celebrated Independence Day in their own style on July 4, 1830. Independence Rock was also widely used by emigrants as a place to inscribe their names and to leave messages for those coming behind. Louisa Barnes Pratt described her 1848 visit to the site in her memoirs: "Independence Rock was another novelty. The size was immensely large and rather difficult of ascent. A thousand names were inscribed on the rock, which proved we were not the first adventurers. Fremont had been there, also the pioneers to Salt Lake Valley. We left our names with the rest, and as we descended, in a crevice of the rock was water dripping down into a spring. . . . How much romance and beauty there is in nature, where she dwelt alone!"	National Historic Landmark	Public (State of Wyoming)	The site shows signs of overuse. A complete inventory of inscriptions is needed. Lichen growth is encroaching on several panels. A highway rest area provides parking and interpretive wayside exhibits.
39	Devil's Gate	Natrona	WY	Bairoil	Devil's Gate is a narrow cleft carved by the Sweetwater River, 370 feet deep, 1,500 feet long, and only 50 feet wide in places. Devil's Gate is among the more interesting geographical landmarks along the emigrant trails. This natural feature became visible approximately 15 miles to the east. It was a rest stop and campground and is thought to have more than 20 graves in the immediate vicinity, although only one is marked. There are inscriptions on the rocks. On June 22, 1847, William Clayton "went back to view the Devil's Gate where the river runs between two high rocky ridges for a distance of about 200 yards. . . . The river has a channel of about three rods in width through this pass which increases its swiftness and, dashing furiously against the huge fragments of rock which have fallen from the mountain, makes a roar which can be heard plainly in the camp. . . . The scenery is one of romantic grandeur and it seems wonderful how a river could ever find a channel through such a mass of heavy, solid rock."	Listed	Public (BLM)	The impacts of visitor use should be closely monitored. The BLM manages the Devil's Gate interpretive site.
40	Split Rock	Fremont	WY	Bairoil	This famous "gun sight" cleft in the mountains is another prominent geographical feature within the South Pass segment. It was noted in many diaries.	Not listed	Public (BLM)/ Private	Access to the trail should be improved. Just east of Split Rock Station, the BLM has developed an attractive interpretive site that describes the area and its history.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	THREATS TO RESOURCES/ VISITOR SERVICES
41	Three Crossings/Deep Sand Route	Fremont	WY	Rattlesnake Hills	The Mormon Pioneer Company chose to avoid the river route through this narrow canyon, a trip that required crossing the Sweetwater River three times within two miles. Leaving the river, they traveled via the Deep Sand Route to the south of the Sweetwater. This alternate allowed them to avoid the Three Crossings and the Fifth Crossing of the Sweetwater River. On June 23, 1847, Thomas Bullock described this detour: "Start at 1:15 leaving the River, going thro' very heavy Sand. . . . Very bold rocks. Travel thro' much Grease Wood & Artemesia, but very little grass. Get a fine view of the Wind River chain of Mountains. Came to the river at 4:43 & halt at 5:45 on good grass."	Not listed	Public (BLM)/ Private	A nearby uranium processing plant has been torn down, and a reclamation effort has been underway at the mill site for several years. The BLM would like to acquire the site but might not be able to do so if the area is contaminated.
42	Ice Slough	Fremont	WY	Lander	At this cold spring, emigrants occasionally found ice underneath the soil until late summer. The ice was insulated by four to six inches of water above the ice and by rich grassy sod that grew thick enough to bear a man's weight. Ice Slough became a major camping site for travelers, who enjoyed the cold refreshment after several days of dry and dusty terrain. William Clayton passed the spring on June 24, 1847: "There is some water standing around a small, circular, swampy spot of land probably about a half an acre. Near the edge at the northwest corner is a hole dug which is called the Ice Spring. The water in the hole smells strong of sulphur or alkali and is not pleasant tasting, but under the water which is over a foot deep there is as clear ice as I ever saw and good tasting. . . . The ice is said to be four inches thick."	Not listed	Public (BLM)	Hydric soils are susceptible to trampling damage by wild horses and the season-long livestock grazing that has occurred for over a century. This has caused a loss of the humus that provided the insulation that preserved the ice. Access to the site is across private land. There is a state historical marker nearby.
43	Rocky Ridge	Fremont	WY	South Pass	Here the pioneers were forced up and away from the Sweetwater River to cross a high, barren, and rocky ridgeline. The crossing required much jarring travel over a rock-strewn landscape. There is no specific spot that can be labeled Rocky Ridge. The name refers to a geographic area spread over two square miles, where wind and erosion have kept soil from collecting and have laid bare a washboard of bedrock. Well-defined ruts still wander over the top of the ridge. On June 25, 1847, the Mormon Pioneer Company avoided the usual climb to the ridge by turning southwest and entering the "very narrow vale" of Sweetwater Canyon and then climbing its south slope, a "long steep hill," to scale Rocky Ridge. Wilford Woodruff commented, "Early in the afternoon we began to ascend the highest & longest Hill that we have passed over on the Journey. We traveled about 5 miles before [we] reached the top. On the way up the brethren found snow Banks 20 or 30 rods long from 5 to 10 feet deep about a mile from the road. They brought some to me & I ate some."	Not listed	Public (BLM)	The site needs a cultural landscape report. The area has great visual integrity. Overuse may be a problem with increased visitation.
44	South Pass	Fremont	WY	South Pass	South Pass was perhaps the most important landmark along the emigrant trails. It marked the end of the long ascent to the Continental Divide and the emigrants' arrival at the frontier of the Oregon country. South Pass dictated the location of the emigrant trail, for only via its gradual ascent was wagon travel over the Continental Divide practical for large-scale emigration. South Pass is the wide, flat summit of a long and gradually ascending plateau, with low ridges and hills on both sides and a wide sage and grass-covered saddle between. Many emigrants commented that they scarcely noticed the ascent or the crossing. Upon crossing this milestone of the journey on June 27, 1847, William Clayton wrote one understated sentence: "Arrived at the dividing ridge where Elder Pratt took a barometrical observation and found the altitude 7,085 feet above the level of the sea."	National Historic Landmark	Public (BLM)	In spite of an abandoned railroad grade, a diversion ditch, and an AT&T buried cable, this site should be protected from additional visual intrusions. Any pipeline crossing of this area might intrude on the extraordinary historic character of the site. Historic monuments are at the pass and a wayside exhibit is nearby.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	THREATS TO RESOURCES/ VISITOR SERVICES
45	Pacific Springs	Fremont	WY	South Pass	Pacific Springs was the first good water source after emigrants crossed South Pass and entered the Pacific watershed. The springs created an extensive marsh, which appeared as a green oasis in the dry landscape. Emigrants often camped at the site and many commented on the destination of its waters. On June 27, 1847 William Clayton arrived "on the head waters of the Green River and although the stream is small, we have the satisfaction of seeing the current run west instead of east." Here the Pioneer Company met Moses Harris, a mountain man who gave them a very discouraging description of the Valley of the Great Salt Lake. But Clayton was not dismayed by this report: "We generally feel that we shall know best by going ourselves, for the reports of travelers are so contrary it is impossible to know which is the truth without going to prove it." The Mormons later established a station at Pacific Springs.	Not listed	Private	Vandalism is a continuing problem. An impressive overlook/rest area on Wyoming Highway 28 contains several interpretive waysides about the South Pass/Pacific Springs area.
46	Dry Sandy Crossing	Sublette	WY	Farson	The Dry Sandy was the first water reached west of Pacific Springs. It was crossed below a broad basin that collected subsurface water. In dry seasons, water could be found here by digging in the streambed, but it was tainted with alkali. Many emigrants reported the loss of livestock. The river flowed more below the surface than above ground. Emigrants only stopped here when absolutely necessary. The Mormon pioneers camped at the Dry Sandy on June 27, 1847. William Clayton found "very little grass to be seen anywhere and not much near this creek. There is but little water in the creek at first site, but by digging and trampling on the quick sand, sufficient can easily be obtained to supply a large company." Evidence of "tanks" dug by emigrants to water their oxen can still be found in the area.	Not listed	Private	None known.
47	Parting of the Ways	Sweetwater	WY	Farson	The Oregon Trail and the Sublette Cutoff separated at Parting of the Ways. In the midst of a wide-open expanse of land, both trails are plainly visible, and the eye can follow them for miles toward the horizon. At this point, California and Oregon bound emigrants had to make a hard decision. Should they save 46 miles by taking the Sublette Cutoff, which bypassed the southern loop to Fort Bridger but also demanded 50 miles of travel with no water? When the Mormon Pioneer Company arrived at this important junction on June 28, 1847, Thomas Bullock simply stated, "Came to a Cross Road at 10:30. . . . Dr. Richards puts up a guide board to Oregon & California. We turned the left road in a SW direction over a level road." Subsequent Mormon companies would follow in their tracks, turning down the original Oregon Trail, heading southwest to Fort Bridger and on to the Valley of the Great Salt Lake.	Listed	Public (BLM)	Encroaching mineral exploration and development threaten the viewshed.
48	Little Sandy Crossing	Sweetwater	WY	Farson	The Mormon pioneers camped on the banks of Little Sandy Creek, the first good water west of Pacific Springs, on June 28, 1847. Thomas Bullock described it as "a deep, rapid, muddy stream of Water with many Willows, Gooseberry & Tea Rose Trees on its banks [and] pretty good grass." Here the pioneers met Jim Bridger, who gave them valuable advice on the route ahead and his opinions concerning lands suitable for settlement. William Clayton took copious notes of the meeting but decided in the end that "we shall know more about things and have a better understanding when we have seen the country ourselves."	Not listed	Public (BLM)	Visitors need to travel through a half mile of private property to access the site. There is a BLM marker east of the creek.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	THREATS TO RESOURCES/ VISITOR SERVICES
49	Big Sandy Crossing	Sweetwater	WY	Farson	The Mormon Pioneer Company made the difficult crossing of the Big Sandy River on June 29, 1847. William Clayton reported that they "halted for noon on the banks of the Big Sandy. . . . This stream appears to be about seven rods wide at this place and about two feet deep in the channel, but is not generally so wide, but deeper. There is some timber on its banks and plenty of grass in places for teams." The company completed the crossing about 1:30 and followed the Big Sandy's north bank to the Green River. Excellent examples of pristine ruts can still be seen near the crossing.	Not listed	Public (BLM)/ Private	Currently there are few threats to the site because of limited access, but vehicle overuse could threaten nearby ruts, as well as damage the river crossing.
50	Lombard Ferry (Green River Mormon Ferry)	Sweetwater	WY	Rock Springs	Lombard Ferry, named after the trail era for its proximity to Lombard Buttes, was the main crossing of the Green River. During periods of low water, wagons could ford the river, but the shallow sand bar they used was only 10 feet wide. When the Mormon pioneers arrived on June 30, 1847, Thomas Bullock recorded, "Here is a good camping ground, tolerable grass, plenty of Cotton Wood & other Trees, the largest we have seen for upwards of 200 miles. . . . Mosquitoes very troublesome." Brigham Young gave orders to build a raft, and they spent three days floating their wagons across the river. Later that year, the Mormons built ferryboats and provided a commercial ferry service, both to assist subsequent Mormon companies and as a commercial venture.	Not listed	Public (USFWS- Seedskadee National Wildlife Refuge)	Gas development and fossil collectors are threats. The site is interpreted.
51	Church Butte	Uinta	WY	Kemmerer	This large butte, with its temple-like shape, deeply eroded walls, and flattop mesa, is about 1,000 feet in diameter and rises 75 to 100 feet above the level of the Blacks Fork Valley. Believed to have been first named by fur traders, Church Butte became one of the landmarks along the trail and excited the comment of many emigrants. Thomas Bullock described it simply as "the high bluff in the form of a semi circle."	Not listed	Private	Gas wells and mineral development negatively impact the historic viewshed. Vandalism and litter are also problems.
52	Fort Bridger	Uinta	WY	Evanston	Jim Bridger established Fort Bridger in 1843 as a fur-trading post. It was composed of two double-log houses about 40 feet long that were joined by a pen for horses. The Mormon Pioneer Company reached the fort on July 7, 1847, and spent a day there but considered its prices too high. Thomas Bullock commented, "Several brethren go to make trades with the French & Indians, but few succeeded, as they could not obtain sufficient for their goods." Here the main Oregon-California Trail turned north toward Fort Hall, and the Mormon Trail/Hastings Cutoff continued west to the Valley of the Great Salt Lake. The fort served as a Pony Express, Overland Stage, and transcontinental telegraph station in the 1860s and was garrisoned by the U.S. Army between 1857 and 1890.	Listed	Public (State of Wyoming)	None known. The fort has a museum/visitor center and a reconstruction of Bridger's log trading post.
53	Bear River Crossing	Uinta	WY	Evanston	This was the last major river crossing in Wyoming on the Hastings Cutoff/Mormon Pioneer/Pony Express route. On July 12, 1847, Orson Pratt of the Mormon Pioneer Company recorded, "The river here is about 60 feet wide, 2_ feet deep; a very rapid current, and the bottom completely covered with round boulders, some of which were about as large as a human head." William Clayton found the "banks lined with willows and a little timber, good grass, many strawberry vines and the soil looks pretty good."	Not listed	Private	None known. There is a marker east of the river.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	THREATS TO RESOURCES/ VISITOR SERVICES
54	The Needles	Uinta	WY	Ogden	This prominent landmark rising abruptly near the Wyoming-Utah border is a formation of conglomerate rock that looks like cobblestones in hardened mud. Orson Pratt described it as "a pudding stone formation. . . . The rocks are from 100 to 200 feet in height, and rise up in a perpendicular and shelving form, being broken or worked out into many curious forms by the rains. Some quite large boulders were cemented in this rock." Another imaginative traveler suggested that the spires reached up "like the pyramids of Egypt." Near here on July 12, 1847, Brigham Young became violently ill with "mountain fever." As a result, he entered the Valley of the Great Salt Lake two days later than the vanguard party.	Not listed	Private	None known.
55	Cache Cave	Summit	UT	Ogden	The first campsite for the Mormon Pioneer Company after entering present-day Utah on July 12, 1847, was 0.25 mile from Cache Cave. The cave is about 30 feet deep, 15 feet wide, from four to six feet high, and is covered inside with emigrant names. The Pioneer Company found many martins at the entrance and on observing closely could see numerous insects. It was supposed from appearances that trappers had used it as a "cache" for storage. Wilford Woodruff reported, "Many of us cut our names in it."	Not listed	Private	Gradual erosion continues to threaten the signatures. Visitor access is rarely allowed.
56	Big Mountain Pass	Morgan	UT	Salt Lake City	Following the route blazed in 1846 by the Donner-Reed Party, the trail climbed Little Emigration Canyon to Big Mountain Pass, the third-highest point on the entire Mormon Trail and an important and difficult crossing. From this vantage point, the Mormon pioneers of 1847 and thousands of subsequent emigrants caught their first glimpse of the Valley of the Great Salt Lake. When Orson Pratt first saw this view on July 21, 1847, he recorded, "Beholding in a moment such extensive scenery open before us, we could not refrain from a shout of joy which almost involuntarily escaped from our lips the moment this grand and lovely scenery was within our view."	Not listed	Public (Utah Department of Transportation highway right-of-way)	None known. There is an interpretive marker at the pass.
57	Little Mountain Summit	Salt Lake	UT	Salt Lake City	This was the last summit the Mormon pioneers crossed on the long trek. They hitched multiple teams together to pull the wagons straight up the slope. On the summit, they locked their wheels for brakes and slid down the other side into Emigration Canyon, which led directly, and finally, into the Valley of the Great Salt Lake. Mary Rich entered Emigration Canyon after 1,000 miles of ox-driving so ragged that she was not quite decent: "When we arrived in Emigration Canyon, the longest place on my dress was just a little below my knees. I had walked over the brush, driving my team, to keep them in the road, and could not stop to untangle my dress when it got fastened, but had to walk on, leaving part of my dress behind."	Not listed	Public (Utah Department of Transportation highway right-of-way)	None known. There is an interpretive marker by the side of the road.
58	Last Camp	Salt Lake	UT	Salt Lake City	On July 23, 1847, Brigham Young spent his last night on the trail at a campsite in Emigration Canyon, six miles beyond the summit of Big Mountain. The next morning, July 24, 1847, a day revered in Mormon history, Young entered the Valley of the Great Salt Lake. That same day, Orson Pratt of the advance scouting party wrote in his journal, "This forenoon commenced planting our potatoes; after which we turned the water upon them and gave them quite a soaking."	Not listed	Public (State of Utah)	None known. A granite marker was erected by the Daughters of the Utah Pioneers in 1936.

NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	OWNERSHIP	THREATS TO RESOURCES/ VISITOR SERVICES
59	This Is the Place Heritage Park	Salt Lake	UT	Salt Lake City	On July 24, 1847, Wilford Woodruff came out of the mouth of Emigration Canyon "in full view of the great valley or Bason [of] the Salt Lake and land of promise held in reserve by the hand of GOD for a resting place for the Saints upon which a portion of the Zion of God will be built. We gazed in wonder and admiration upon the vast rich fertile valley. . . . Our hearts were surely made glad after a Hard Journey from winter Quarters." In 1947, to commemorate the centennial of the arrival of the Mormon Pioneer Company in the Valley of the Great Salt Lake, a massive memorial was designed by Mahroni M. Young and constructed on this site. Sixty feet high and eighty-four feet wide, it features fifteen plaques and many statues and bas-reliefs honoring the Mormon Pioneers, American Indians, and others who explored the Great Basin. There is a visitor center and a reconstructed pioneer village on this 500-acre park.	Listed	Public (Utah Division of Parks and Recreation)	None known. Extensive visitor facilities and living history programs are operated by the non-profit foundation that manages the site.

Appendix K.

Protection Tools

Resource Protection

A number of resource protection “tools” available to federal, state, and local agencies, as well as private groups, can be used to enhance efforts to protect and manage the trails corridor and related resources. These tools, such as cooperative agreements, easements, and fee-simple ownership are authorized by the National Trails System Act.

CERTIFICATION FOR TRAIL SITES AND SEGMENTS

Trail segments and sites on nonfederal lands that are owned or managed by state agencies, local governments or private entities may be officially designated as part of the national historic trails system if they are certified as protected segments by the secretary of the interior. Trail components that are on federally managed or administered lands and that meet the criteria for high-potential sites and segments as described in the National Trails System Act are called federal protection components and do not require certification (NTSA, sec. 3[a][3]; see Appendix A).

Certification helps to ensure that sites or segments not under federal jurisdiction meet the basic preservation, interpretation, or recreation criteria of the National Trails System Act (sec. 5[b][11]) and any other prescribed criteria. The certification program is one of the most important ways that the National Park Service can foster partnerships throughout the trails corridor.

The proposed certification process for the California, Pony Express, Mormon Pioneer, and Oregon National Historic Trails is as follows:

- 1) The National Park Service would pursue early coordination with potential applicants to ensure that they fully understood the site / segment certification procedures and to aid in their application efforts.
- 2) Applicants would be required to document their resources and interpretive programs. Environmental or other compliance procedures would have to be completed.
- 3) The National Park Service would provide technical assistance on issues related to cultural or natural resource compliance.
- 4) The National Park Service and the applicants would determine management objectives for the site/segment, and management responsibilities would be outlined. For smaller sites and segments, the application could replace more detailed management planning and formal cooperative agreements.

On completion of official certification, the public would be informed through appropriate trail information programs that the site or segment was available for public use and enjoyment.

Certification is not permanent; it can be renewed subject to satisfactory performance of the terms of the agreement. Decertification would result in the

removal of the site or segment from trail information programs and the removal of trail logo markers for the area. (Other actions might be taken as well, depending on the terms of certification.)

COOPERATIVE AGREEMENTS

A cooperative agreement is a written arrangement between two or more parties that allows some specific action to be taken. When it involves a federal agency, a cooperative agreement is defined as a legal instrument reflecting a relationship between the federal government and a state or local government or other party for the purpose of transferring funds, property, or services to accomplish a public purpose of support or stimulation authorized by a federal statute. Cooperative agreements facilitate resource protection and management, provide interpretive or recreational opportunities, allow the posting of signs or markers, or allow others to manage activities or developments, while at the same time protect landowner interests.

Cooperative agreements allow lands to be kept on local tax rolls and the land title and rights to be retained by the owner. The National Trails System Act allows for financial assistance through its cooperative agreement process. A cooperative agreement is not binding and can be terminated by either party at any time with proper notification.

Recognition programs are tools for rewarding special partners and providing an incentive for others to become partners.

EASEMENTS

An easement conveys certain, limited rights to use a property for a specific purpose. Easements can be either purchased or donated. The owner retains fee ownership of the property and is free to sell it; however, the easement is perpetual and remains in place with the new owner.

Easements may provide and guarantee public access to trail sites and segments so that visitors can retrace the trail.

Easement purchase is often expensive. Wherever feasible, the Long Distance Trails Office will encourage other public and private organizations and agencies to accept a donation or acquire an easement for a national historic trail. In situations where this would not be feasible, the National Park Service would consider securing an easement either through purchase or by acceptance of a donation.

FEE-SIMPLE OWNERSHIP

Fee-simple ownership means that all interests in a given property are acquired. Although this type of acquisition is the most expensive, it provides the greatest guarantee that resources can be continuously protected and that opportunities for visitor use can be provided.

Fee-simple purchases would be limited to trail sites or segments that are not currently protected and that have been determined to be especially important for public appreciation, interpretation, or quality outdoor recreation. These sites or segments must be carefully managed to preserve resource integrity. Fee-simple purchases can also be used when a resource is deteriorating and the landowner does not want to enter into a cooperative agreement. In such cases state and local agencies and nonprofit groups will be encouraged to acquire an appropriate interest. Fee-simple acquisition can only occur with the cooperation of a willing donor or seller.

NPS acquisition would generally be a last resort after exhausting local, state, or other avenues to protect resources at the grassroots level. NPS acquisition does not necessarily mean that the National Park Service will directly manage a property. The National Park Service would work with other trails partners to determine an appropriate management entity for any resources that were acquired.

DONATION / BARGAIN SALE

In addition to directly purchasing interest in land from a willing seller, the National Park Service can use two other methods to acquire interest in land from consenting owners: a donation/bargain sale of land or an exchange.

With a donation or bargain sale, a full or partial interest (easement) in a tract of land would be transferred at less than full-market value. Such a transfer could result in beneficial publicity for a project, as well as some tax benefits for the donor or seller (owners should consult a qualified tax advisor for details). Because donations cost the recipient little or nothing, this technique would be an economical means to acquire appropriate interests in trail resources.

A mutually beneficial land exchange between two or more parties could also be used to protect trail resources. Under the authority of National Trails System Act section 7[f], the National Park Service could acquire not only a trail corridor, but the rest of the tract outside the area of proposed acquisition. The interests in the corridor, as well as the rest of the tract, could be acquired by exchanging suitable and available property that the National Park Service administers in the same state. Excess lands acquired by the National Park Service could be banked for future exchanges or disposed of through sale.

The National Park Service would work with federal, state, and local partners in identifying potential properties and would assist private landowners and the appropriate federal agency in reaching an agreement on the donation, bargain sale, or land exchange.

LOCAL LAND PROTECTION AND REGULATORY PROCESSES

Federal, state, and local governments may have a variety of legal or statutory provisions that can be used to protect trail-related resources by regulating or guiding development. These processes include zoning regulations and subdivision ordinances in cities, utility licensing, surface and subsurface mineral extraction permits in rural areas, cultural preservation laws and ordinances, and natural resource protection laws. All these processes can be used as tools to protect trail resources.

The present landscape character along the various trail routes varies greatly with locale. To preserve areas where the landscape probably resembles its appearance more than 150 years ago, a cooperative effort by concerned citizens, county and state planning and zoning offices and local parks take place. Such involvement by local governments and private interests will be vital to maintaining such areas because, in accordance with the National Trails System Act, the National Park Service will limit its acquisition of land for these trails.

Many portions of the trails cross urban or recreation areas where there is little or no semblance of how the landscape looked during the migration period, but many areas still closely resemble the historic setting. Between these extremes are many miles where rural scenery prevails and this is where local interest and action are critical.

The preservation of undeveloped lands will rely heavily on local initiatives. Individual citizens or organized groups could encourage local planning and zoning boards to create and enforce rural/agricultural zones in order to prevent inappropriate development. Land preservation tools available to local land use preservation groups include restricting the buildable density per acre, requiring development setbacks from the street or river frontage, and limiting height and/or the color of buildings to blend with existing surroundings. These techniques can be incorporated into local development guidelines and enforced through local planning and zoning boards. Citizens can monitor development proposals to ensure that the guidelines are fol-

lowed and that no variances are granted. Zoning ordinances can also help to keep large contiguous areas open by requiring large lots in residential or agricultural areas.

The transfer of development rights is another method for maintaining open land areas. This technique has generally been used more in urban areas, but it has also been used as a way to aggregate new development around existing villages, thus leaving the surrounding countryside open to continued farming.

Land preservation groups can also help conserve open agricultural areas and expansive landscapes. In pursuing such goals, local land trusts or conservation organizations can seek guidance from national organizations, such as the Trust for Public Land. These national organizations can provide insight on the use, development, and maintenance of easements, as well as information about organizing local land and preservation groups.

National and local conservation groups frequently work together with state and federal agencies to preserve undeveloped areas while maintaining such areas in private ownership. Both owners and communities can benefit from potential tax advantages available through collaborative efforts to preserve open space. The land remains on the local tax rolls, but it is taxed at the lower, undeveloped parcel rate. Thus, the owner is not forced by rising taxable property values to sell to developers or to subdivide and develop land suitable for farming.

In the case of mineral activity, the states can help protect trail resources through the regulation of subsurface activities or through other compliance procedures. Fee-simple acquisition of a property does not necessarily include subsurface interests (such as mineral rights), which can be retained by the previous owner. How the retention of subsurface interests might affect the character of trail resources must be carefully considered.

Directional drilling and other techniques could be used to reach subsurface mineral resources inside the trail boundary without disturbing surface resources of historic significance; however, some resources could still be affected by extraction activities. The possible impacts of mining or drilling operations include intrusions on scenic and historic vistas as a result of access road or pipeline construction across trail segments, increases in ambient noise levels, and the degradation of air quality.

Appendix L. Federal Programs That Might Be of Assistance in Managing Trails

National Park Service

APPLIED ETHNOGRAPHY PROGRAM

Using cultural anthropology to focus on contemporary human communities and their relationships to heritage resources in general (and parks especially) this program focuses on heritage corridors and minority issues. Special places of attention include sacred sites, legendary places, and subsistence gardens often hidden today. Staff help articulate concerns, conduct and analyze research, provide consultations, identify strategies and links, and bring concerns forward in official planning documents.

CERTIFIED LOCAL GOVERNMENT PROGRAM

This partnership program encourages local, State, and Federal entities to promote historic preservation at the grassroots level. Certification helps develop and maintain local historic preservation programs that will influence the zoning and permitting decisions critical to preserving historic properties and ensures the broadest possible participation of local governments in the national historic preservation program, while maintaining preservation standards established by the Secretary of the Interior. Small grants may also be available.

CULTURAL RESOURCES GIS FACILITY

Using advanced technology, this facility combines spatial data and sophisticated information management systems at low cost to better plan cultural resource preservation through resource identification, mapping, databases, and interpretive programs. Linked to GPS, viewshed analysis, and resource atlases, the program offers specialized training and can help set priorities for resource preservation. The MAPIT program links historic resource inventories to maps, charts, tables, and standard forms.

FEDERAL ARCHEOLOGICAL ASSISTANCE

The program provides national leadership and coordination, including encouragement and support for the interpretation, management, preservation, and protection of America's archeological resources inside the National Park System and beyond it. This function includes carrying out the role of the Departmental Consulting Archeologist.

HISTORIC AMERICAN BUILDING SURVEY AND HISTORIC AMERICAN ENGINEERING RECORD (HABS/HAER)

These twin programs reflect the Federal Government's commitment to preserve important architectural, engineering, and industrial properties by docu-

menting outstanding examples of this country's heritage. Project teams produce measured drawings, large-format photography, and written histories which are then permanently deposited in the Library of Congress.

HISTORIC LANDSCAPES INITIATIVE (OUTSIDE NPS)

This work promotes responsible preservation practices that protect irreplaceable historic landscapes — including both designed landscapes and gardens as well as vernacular historic landscapes, farms, and historic battlefields. The program develops and disseminates guidelines for historic landscape preservation; produces innovative tools to raise the awareness of the general public; organizes training symposia and workshops; and provides technical assistance. This small program has become the national center for questions, information, and research on all aspects of historic landscapes.

HISTORIC PRESERVATION TAX INCENTIVE PROGRAM

This program fosters private-sector rehabilitation of historic buildings, promotes economic revitalization, and provides a strong alternative to government ownership and management of historic properties. Tax incentives are available for buildings listed in the National Register of Historic Places (and certain local historic districts eligible for the National Register) which are rehabilitated according to the Secretary's Standards for Historic Preservation. Since 1976 over 27,000 historic properties have been rehabilitated and saved through this program.

HISTORIC PRESERVATION FUND

This matching grants program enables States, territories, Indian Tribes, and the National Trust for Historic Preservation to assist in efforts to protect and preserve properties listed in the National Register of Historic Places and otherwise expand and accelerate their historic preservation activities. Grants are made through each State's historic preservation office, following Federal and State requirements. To qualify, participating States must develop a statewide historic preservation plan that prioritizes State preservation goals. Average grants range \$10-15,000; over \$800 million has been awarded since 1968.

INTERPRETIVE DESIGN CENTER, HARPERS FERRY, WV

Publications — NPS staff in this office design, produce, and coordinate distribution of many of the interpretive booklets, posters, map brochures, and other printed products which convey the stories and themes of NPS areas to the public.

Waysides — This technical service provides design and installation guidance for interpretive wayside exhibits to national park areas and their partners.

NATIONAL CENTER FOR PRESERVATION TECHNOLOGY AND TRAINING

This Center promotes and enhances the preservation of prehistoric and historic resources in the United States for present and future generations through the advancement and dissemination of preservation technology and training. The Center, created by Congress, is an interdisciplinary effort to advance the art, craft, and science of historic preservation in the fields of archaeology, historic architecture, historic landscapes, objects and materials conservation, and interpretation.

NATIONAL HISTORIC LANDMARKS (IDENTIFICATION AND REGISTRATION)

These sites are designated by the Secretary of the Interior and acknowledged as the Nation's most important historic and archeological properties. The National Historic Landmarks Survey manages the process by which these nationally significant historic properties are identified, evaluated, and designated through historical theme and special studies for their exceptional value in illustrating the Nation's heritage.

NATIONAL HISTORIC LANDMARKS ASSISTANCE INITIATIVE

This program monitors the condition of NHLs and provides technical assistance and training to their owners and partner organizations.

NPS HISTORIC LANDSCAPE PROGRAM

This program addresses landscapes within the National Park System which are significant, based on National Register of Historic Places criteria. Program activities (research, inventory, documentation, analysis and evaluation, and treatment) focus on preserving physical attributes, biotic systems, and contributing land uses. The program uses two primary tools for cultural landscape management — the Servicewide park cultural landscapes inventory and site-specific cultural landscape reports — as well as condition assessments, preservation maintenance guidelines, technical assistance, and training.

NATIONAL REGISTER OF HISTORIC PLACES

This is the official list of the Nation's cultural resources worthy of preservation. The program maintains the published National Register of Historic Places and provides standards and educational materials used nationwide at every level as the basis for identifying and evaluating cultural resources. National Register information is made widely available for use in planning, preservation, education, tourism, and research through demonstration proj-

ects, books, videotapes, the computerized National Register Information System (NRIS), travel itineraries, curriculum materials, the World Wide Web, and other means. Property nominations are considered and approved by each state's historic preservation officer.

RIVERS, TRAILS, AND CONSERVATION ASSISTANCE

This program helps communities protect rivers, trails, and greenways on lands outside the federal domain and without federal ownership. It is based on the principle of partnerships. By working together, residents, landowners, government agencies, and private organizations can meet the challenges of conservation. The National Park Service works with all of these groups to help them establish goals, resolve difficult issues, and reach consensus on how community resources should be used and managed. The program is committed to assisting projects in ways that produce measurable, tangible results in a relatively short time. Specific kinds of assistance programs include river, trail and greenway planning, regional assessments, and conservation workshops and consultations.

TEACHING WITH HISTORIC PLACES

This education partnership, started with the National Trust for Historic Preservation and other partners, uses places listed in the National Register of Historic Places to teach heritage concepts. Some 55 lesson plans have been published, and 50 more are on the way. Many have resulted from workshops on specific sites and areas. Also, an author's packet and other materials provide guidance to those developing or using historic preservation curriculum materials. (See website: <http://www.cr.nps.gov/nr/twhp/home.html>).

TECHNICAL PRESERVATION SERVICES

This service helps American citizens, preservation professionals, organizations, and government agencies preserve and protect historic properties by providing readily available education materials on preservation, restoration, and rehabilitation through such means as preservation briefs, technical notes, books, videos, and its home page on the World Wide Web.

TRIBAL PRESERVATION PROGRAM

This program assists Indian tribes in preserving their historic properties and cultural traditions. The Tribal Program helps Indian tribes participate more fully in the national historic preservation program through direct grants. Section 101(d) of the National Historic Preservation Act further provides for tribes to assume from State government a full range of statutory functions under that law on reservation land in recognition of tribal sovereignty in determining the future of cultural properties for future generations of tribal members.

VOLUNTEERS-IN-THE-PARKS (VIPS)

Authorized by a 1969 law, the VIP program fosters volunteerism throughout the National Park System. In 1996 alone, 90,000 volunteers worked 3.5 million hours, worth a total of \$44 million. This program is administered locally and coordinated nationally. Some compensation may be available for tools, travel, training, and other support. Other benefits include workmen's compensation for on-the-job injuries and tort liability coverage for on-the-job accidents. For trails, the NPS contact is the Federal trail administrator, while local projects may be carried out within other agency volunteer programs.

Other Federal Agencies

USDA-FOREST SERVICE: WINDOWS ON THE PAST

Evolving from the National Recreation Strategy, this set of public benefit programs includes involvement, partnerships, interpretation, and marketing. The programs are tailored to the needs and resources of each forest. One program, Passport in Time (PIT), involves hands-on volunteers in heritage projects throughout the National Forest System. It combines environmental education, stewardship, recreation, and advocacy. Several PIT projects have been geared to the trails, such as excavations and interpretation at the Donner Party Campsite on the Tahoe National Forest. Another program, Heritage Celebration, attracts hundreds of thousands of visitors to heritage fairs in the Pacific Northwest. Most Windows on the Past projects are conducted in partnership with local communities, historical societies, universities, interpretive associations, nonprofit groups, or private individuals. Since 1989, over 7,000 volunteers have been involved.

VOLUNTEERS-IN-THE-FORESTS PROGRAM

Since 1972 the VIF program has fostered volunteerism throughout the National Forest System. Similar to the VIP program in the parks, volunteers in the forests and National Forest programs receive coverage for injuries and liability and may also be compensated for only for incidental expenses. Both individuals and groups can aid in interpretation, visitor services, conservation measures and other activities as needed. Such volunteers should be formally enrolled to receive full credit for their contribution.

BLM AREAS OF CRITICAL ENVIRONMENTAL CONCERN

Areas of critical environmental concern (ACECs) are zones used by the Bureau of Land Management. These areas require special management to protect and prevent irreparable damage to public land and/or related waters that contain resources, values, systems, processes, or hazards identified, designated, and protected through the BLM land-use planning process. Potential areas must meet the following criteria:

1. **Relevance** — The area must contain or support a significant historic, cultural, or scenic value; fish or wildlife resource or natural process or system; or a natural hazard.
2. **Importance** — The above value, resource, process, system, or hazard shall have substantial significance and special worth, consequence, meaning, or distinctiveness, or shall present a cause for concern. A natural hazard can be important if it is a significant threat to human life or property.

NATIONAL CONSERVATION AREA

National Conservation area (NCAs) are areas designated by Congress to provide for the conservation, protection, enhancement, use, and management for sensitive areas. The areas are managed for the benefit and enjoyment of present and future generations in order to protect certain natural, recreational, cultural, wildlife, aquatic, archeological, paleontological, historical, educational, and/or scientific resources and values found in these areas.

FEDERAL HIGHWAYS ADMINISTRATION, ENHANCEMENTS PROGRAM

Between 1992 and 1996 states funded many projects along national scenic and historic trails using funds made available through the Enhancements Program of the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). According to a recent survey of such projects, over 40 projects (totaling over \$20 million) now enhance America's NSTs and NHTs. Eligible projects should be submitted to each state's Enhancements Coordinator, usually located with the state department of transportation.

Appendix M.

Wayside Design Guidelines

Introduction

The purpose of waysides is to augment the visitor's experience at specific sites along a trail. The NPS, in cooperation with other federal agencies, has established suggested guidelines to create wayside exhibits that present trail stories in a professional manner, link a trail's various sites into a cohesive whole, and visually relate the wayside exhibits on various trails with each other through a consistent design system. These suggested guidelines are contained in the National Park Service booklet Wayside Exhibit Guidelines, The ABCs of Planning, Design, and Fabrication.

Selecting Locations for Waysides

Wayside locations are determined by the features to be interpreted, the interpretive message, the views, the access, and available space. With any wayside, the feature, its interpretive message, and, to a large extent, the view of it are given to us and cannot be manipulated. The two variables these guidelines can deal with are access and available space. Since, by definition, there must be access (a traveled way) for there to be a wayside, we are left with available space as the only determining feature of waysides for which we can prescribe guidelines.

For the long distance trails, the normal wayside setting would be alongside a rural road or highway. Generally, the trail routes have been superceded by streets, roads, and highways and could be either rural or urbanized. Rural sites will generally be in private ownership or under public control as part of an existing road right-of-way. Occasionally the trails may cross publicly-owned park land or open space in rural areas. Urban sites would likely be in public ownership and in use as parks or open spaces adjacent to trail routes. Urban sites along the trail routes may also be intensely developed and have high traffic volumes with little opportunity for a wayside pull-off or parking. In those instances, wayside development would probably be limited to pedestrian access and installed along an existing walkway.

No land acquisition is foreseen for the purpose of installing the waysides. Cooperative agreements with land owners would be executed to secure permission to use the necessary land, and to provide for wayside monitoring and maintenance. The variety of land owners along the trails ranges from federal, state, or local stewardship to private ownership, and presents a corresponding variety of potential wayside sites.

Types of Waysides

These trails guidelines consider only low profile, vertical, and kiosk types of wayside exhibits. These three types may be combined in several ways to produce a variety of wayside installations to suit a number of interpretive purposes, site conditions, and dimensions.

Low profile waysides contain a single, pedestal-mounted, interpretive panel, usually measuring 24"x36". These waysides are mounted 30" to 34" above

grade and tilted to an optimum viewing angle to provide full access for all visitors. They can be comfortably installed in an area eight feet deep by six feet wide (8'x6') for each panel. That amount of space will be adequate for the panel, a place for visitors to stand, and for several visitors to view the panel at the same time.

Vertical waysides contain a single interpretive panel and are mounted vertically with the bottom of the panel 24" to 28" above grade. The top of the panel is no higher than 76" above grade. These waysides also offer full access for all visitors. These waysides can be comfortably installed in an area six feet deep by six feet wide (6'x6') for each panel. That amount of space will be adequate for the panel, a place for visitors to stand, and for several visitors to view the panels simultaneously.

Kiosks usually contain more than one interpretive panel within a single structure. They generally deal with interpretive topics requiring more exhibit space or features which have several independent topics to interpret. The wayside panels in kiosks are usually mounted vertically, but they may contain low profile waysides or a combination of vertical and low profile wayside panels. The kiosk may or may not have a roof to shelter the panels and the viewer. These waysides are also full accessible. These waysides can be comfortably installed in an area eight feet deep by variable width (depending upon the structure supports and the number of panels). That amount of space will be adequate for the panels, a place for visitors to stand, and for several visitors to view the panels simultaneously.

Spatial Requirements

The following assumptions were made in the preparation of these guidelines:

- the typical setting for long distance trail waysides will be a rural road;
- there will be no land acquisition;
- cooperative agreements will be executed for use of the necessary wayside area within the public right-of-way;
- an area eight feet deep will be adequate for all wayside installations.

The typical setting where we would place a wayside—a rural road—was also assumed. A realistic average road right-of-way width would be 60 feet and would contain the two travel lanes, the road shoulders, the road drainage ditches, and any highway identification or traffic control signs and devices. The travel lanes are each assumed to be ten feet wide, the road shoulders two feet wide, and the ditches are assumed to require a minimum of six feet each for the ditch sideslopes and bottom. The roadway layout just described is assumed to be symmetrical with (centered on) the right-of-way. In such a typical roadway setting, we can assume that, after all road and ditch development, there will normally be thirteen feet of usable space left on either side of the roadway and ditch within which to install a wayside.

Program elements for these rural waysides are minimal, including only the parking, wayside exhibit, viewing area for the wayside, and necessary site improvements to make the exhibit accessible, such as pavement, ramps, paths, etc. No appurtenances or convenience facilities, such as restrooms, benches, picnic tables, water fountains, and trash facilities, are envisioned for the waysides due to their installation costs and on-going maintenance requirements.

Parking space would be parallel, and connected to, the roadway to conserve space within the right-of-way. Each vehicle space would be ten feet wide by 25 feet long. While most vehicles are less than 20 feet long, the extra length per space would provide adequate maneuvering space when multiple vehicles were parked at the same wayside. At both ends of the parallel parking there would be a tapered segment of parking surface 25 feet long to make the transition from parking back to the roadway. The minimum parking area required would be 75 feet, including 25 feet for one vehicle plus two 25-foot transition segments (refer to wayside plan sketch). The basic 75-foot parking area could be expanded in 25-foot increments for each additional vehicle. It is not expected that wayside viewer demand would be greater than three vehicles at one time, so the largest parking area would likely be 125 feet long by ten feet wide.

The wayside exhibits will require a depth of eight feet or less, depending upon the style. The normal wayside width will be six feet. This eight-foot by six-foot space includes the viewing area for the wayside, which is essentially a "hardened area" for visitors to stand and read the exhibit.

Pedestrian paths may be required between the parking and the wayside exhibit. These paths should conform with the accessibility standards laid out in the Americans With Disabilities Act. In general, paths should be a minimum of 36 inches wide (60 inches is preferable), hard-surfaced, have the least slope gradient possible (never exceed 8% [1:16] and preferably be less than 5% [1:20]), and be located on the shortest route between the parking and the wayside exhibit. The surface must be stable, firm, and slip resistant.

Road drainage is normally handled by ditches which collect the flow and channel it along the roadside until it can be diverted into other drainage ways. In the typical roadway scenario for this project, the optimum situation will allow us only 13 feet on either side of the road for a ditch. To place the drainage in a pipe or culvert under the parking area (a distance of 75 feet, minimum) would require six to twelve inches of fill over the drainage pipe just to support vehicles, and it would be difficult to keep a pipe that length cleaned out and freely flowing. Instead, it is suggested that the roadway drainage ditch be rechanneled away from the pavement edge toward the edge of the right-of-way and placed into a pipe beneath the wayside exhibit,

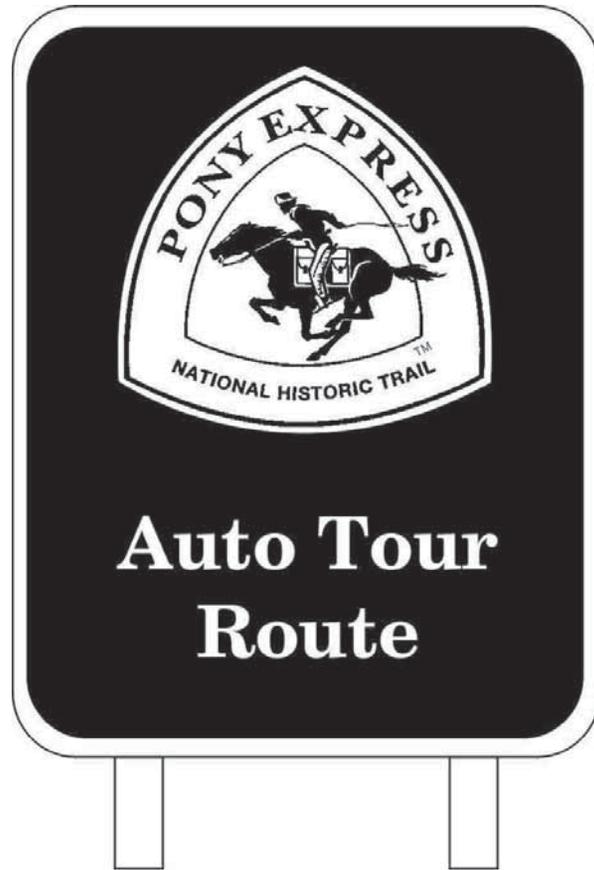
essentially "stacking" the two functions. The length of pipe required for this concept would be about 20 to 25 feet, substantially less material and cost than other scenarios. The amount of cover over the pipe in this area would only need to be adequate to support the weight of the materials and the visitors—not the added weight of the vehicles—so trenching and channelization depths would be minimized, too. In addition, a pipe that short would be easier to clear and maintain. The following conceptual wayside plan sketch and cross-section illustrate this idea.

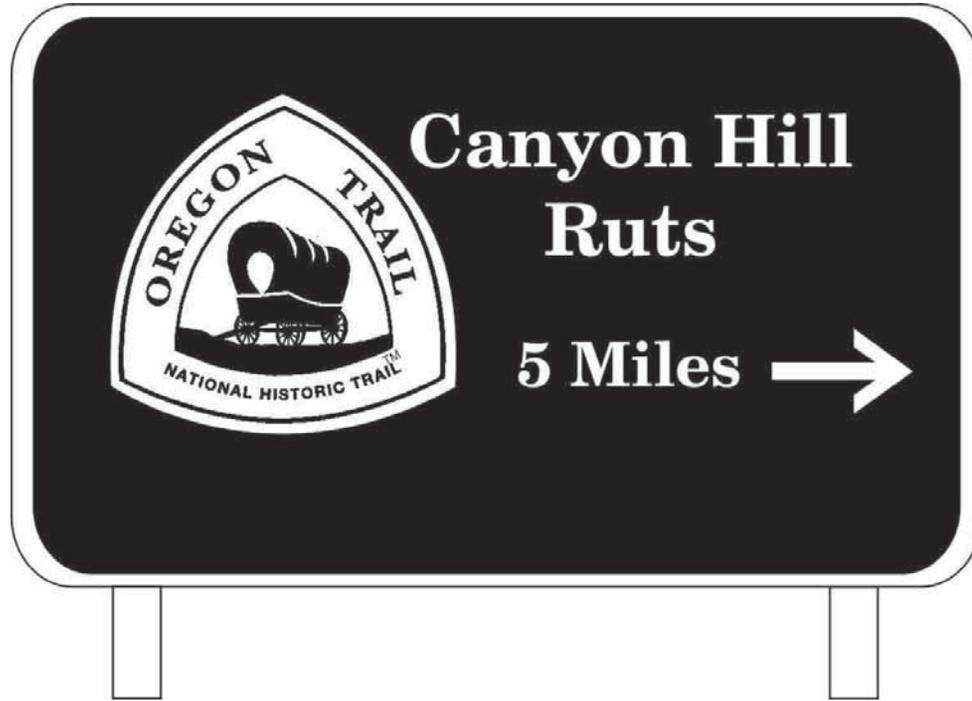
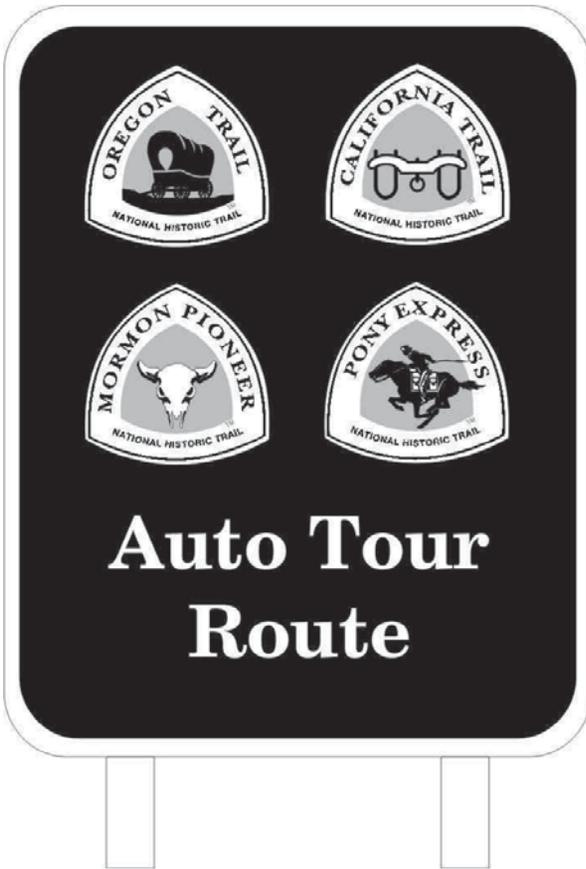
MAINTENANCE

Maintenance is expected to be minimal, depending upon the materials used and the wayside location. There are several different materials available from which the wayside exhibit panels can be fabricated; each with its own durability characteristics, cost, and maintenance requirements. The options in that regard are best left for the Harpers Ferry Center to recommend and/or explain. Normal maintenance of the waysides would include periodic washing, pedestal paint touch-up, and occasional panel replacement.

Site maintenance would be limited to maintaining the integrity of pavement surfaces and keeping the drainage pipes clear and free flowing.

Appendix N. Recommended Signs





Appendix O.
Illustrations of
Logos for the
Oregon, California,
Mormon Pioneer,
and Pony Express
National Historic
Trails



Appendix P. Visitor Experience Matrix

APPENDIX P. VISITOR EXPERIENCE MATRIX

A. OREGON NATIONAL HISTORIC TRAIL

The following table is not comprehensive; it only identifies a sample of resources and different types of interpretive and recreational opportunities available to trail visitors.

<i>Major Trail Museum</i>	<i>Small Interpretive Site</i>	<i>Historic Structures</i>	<i>Historic Landscapes</i>	<i>Selected Sections of the Auto Tour Route</i>	<i>Short Hike to Trail Ruts or Historic Site</i>	<i>4x4 and Horse Access Over Extensive Trail Segment</i>	<i>Hiking Access to Extensive Trail Segments</i>
National Frontier Trails Center, Independence, MO	Schumacher Park, Kansas City, MO	Courthouse Square, Independence, MO	Blue Mound, Lawrence, KS		Minor Park, Red Bridge Crossing of the Blue-River, Kansas City, MO		
			Alcove Springs, Blue Rapids, KS		Alcove Springs, Blue Rapids, KS		
	Rock Creek Station, Fairbury, NE				Rock Creek Station, Fairbury, NE		
	Fort Kearny, Kearney, NE		Susan Hail Grave, near Lowell, NE		Susan Hail Grave, near Lowell, NE		
			California Hill, Brule, NE		California Hill, Brule, NE		
	Ash Hollow, Lewellen, NE		Ash Hollow, Lewellen, NE		Ash Hollow, Lewellen, NE		
			Courthouse and Jail Rocks, Bridgeport, NE	Bridgeport, NE to Fort Laramie, WY, 85 miles			
Chimney Rock, Bridgeport, NE			Chimney Rock, Bridgeport, NE				
Scotts Bluff / Mitchell Pass, Gering, NE			Scotts Bluff / Mitchell Pass, Gering, NE		Scotts Bluff / Mitchell Pass, Gering, NE		
	Fort Laramie / Bedlam Ruts, Fort Laramie, WY	Fort Laramie, Fort Laramie, WY	Fort Laramie / Bedlam Ruts, Fort Laramie, WY		Fort Laramie / Bedlam Ruts, Fort Laramie, WY		
	Register Cliff / Deep Rut Hill, Guernsey, WY		Register Cliff / Deep Rut Hill, Guernsey, WY		Register Cliff / Deep Rut Hill, Guernsey, WY		
	Red Buttes Crossing / Bessemer Bend, west of Casper, WY		Emigrant Gap-Poison Spider Road, west of Casper, WY	Casper, WY, to Farson, WY; Hwys 220, 287, 28; 213 Miles	Avenue of Rocks-Poison Spider Road, west of Casper, WY	Oregon Trail Road, Mills, WY, to WYO-220 just north of Independence Rock, 41.5 miles	
	Prospect Hill, Oregon Trail Road, west of Casper, WY		Prospect Hill, Oregon Trail Road, west of Casper, WY				

<i>Major Trail Museum</i>	<i>Small Interpretive Site</i>	<i>Historic Structures</i>	<i>Historic Landscapes</i>	<i>Selected Sections of the Auto Tour Route</i>	<i>Short Hike to Trail Ruts or Historic Site</i>	<i>4x4 and Horse Access Over Extensive Trail Segment</i>	<i>Hiking Access to Extensive Trail Segments</i>
	Independence Rock, on the Sweetwater River, WY		Independence Rock, on the Sweetwater River, WY		Independence Rock , on the Sweetwater River, WY	South Pass Segment--Horse Creek to Little Sandy Crossing, 140 miles	South Pass Segment--Horse Creek to Little Sandy Crossing, 140 miles
	Devils Gate, on the Sweetwater River, WY		Devils Gate, on the Sweetwater River, WY		Devils Gate, on the Sweetwater River, WY		
	Split Rock, on the Sweetwater River, WY		Split Rock, on the Sweetwater River, WY				
	South Pass, near South Pass City, WY		South Pass, near South Pass City, WY		South Pass, near South Pass City, WY		South Pass, near South Pass City, WY
	Lombard Ferry, on the Green River, WY		Parting of the Ways			Parting of the Ways	
	Fort Bridger, Fort Bridger, WY	Fort Bridger, Fort Bridger, WY				Bear River Divide Segment, U.S. 189 to WY 89, 31 miles	Bear River Divide Segment, U.S. 189 to WY 89, 31 miles
	Fort Hall Replica, Fort Hall, ID			HWY 30 along the Bear River, ID/WY border to Soda Springs, ID, 51 miles			
	Massacre Rocks, west of American Falls, ID				Massacre Rocks, west of American Falls, ID		
	Milner Ruts, Burley, ID	Stricker Store, east of Twin Falls, ID	Thousand Springs, Hagerman, ID		Milner Ruts, Burley, ID		
	Hagerman Fossil Beds, Hagerman, ID		Hagerman Fossil Beds, Hagerman, ID		Hagerman Fossil Beds, Hagerman, ID		
	Three Island Crossing, Glens Ferry, ID				Three Island Crossing , Glens Ferry, ID		
					C. J. Strike Ruts, Hwy 78 west of Glens Ferry, ID		
	Bonneville Point, Boise, ID				Bonneville Point, Boise, ID		
	Keeney Pass, Vale, OR	Old Stone House, Vale, OR			Keeney Pass , Vale, OR	Alkali Springs Segment, Malheur, OR, 13 miles	
Flagstaff Hill / National Historic Oregon Trail Interpretive Center, Baker City, OR	Farewell Bend, I-84 north of Vale, OR				Flagstaff Hill / National Historic Oregon Trail Interpretive Center, Baker City, OR		

<i>Major Trail Museum</i>	<i>Small Interpretive Site</i>	<i>Historic Structures</i>	<i>Historic Landscapes</i>	<i>Selected Sections of the Auto Tour Route</i>	<i>Short Hike to Trail Ruts or Historic Site</i>	<i>4x4 and Horse Access Over Extensive Trail Segment</i>	<i>Hiking Access to Extensive Trail Segments</i>
	Oregon Trail Interpretive Park at Blue Mountain Crossing, La Grande, OR		Oregon Trail Interpretive Park at Blue Mountain Crossing, La Grande, OR		Oregon Trail Interpretive Park at Blue Mountain Crossing, La Grande, OR		Blue Mountain Segment, La Grande, OR to Mount Emily, OR, interchange off I-84, 17 miles
Tamastlikt Cultural Institute, Pendleton, OR	Echo Meadows, Echo, OR				Echo Meadows, Echo, OR		
	Wells Springs, south edge of Boardman Bombing Range, OR		Boardman Segment, Boardman Bombing Range, OR, 12 miles		Wells Springs, south edge of Boardman Bombing Range, OR		Boardman Segment-Boardman Bombing Range, OR, 12 miles
	Fourmile Canyon, south of Arlington, OR			The Dalles to Portland, OR, 84 miles along the Columbia River.	Fourmile Canyon, south of Arlington, OR		
Fort Vancouver, Vancouver, WA		Fort Vancouver, Vancouver, WA					
	Barlow Pass, Hwy 26, OR		Barlow Road Segment, Barlow Gate to Barlow Tollgate, 32 miles		Barlow Pass, Hwy 26, OR	Barlow Road Segment, Barlow Gate to Barlow Pass, 20 miles	Barlow Road Segment, Barlow Gate to Barlow Tollgate, 32 miles
	Laurel Hill, on Hwy 26 between mile posts 50 and 51, OR				Laurel Hill, on Hwy 26 between mile posts 50 and 51, OR		
End of the Oregon Trail Interpretive Center, Oregon City, OR	West Barlow Tollgate, Hwy 26 between mile posts 50 and 51, OR	Philip Foster Farm, Eagle Creek, OR; John McLoughlin House, Oregon City, OR			West Barlow Tollgate, Hwy 26 between mile posts 50 and 51, OR		

B. CALIFORNIA NATIONAL HISTORIC TRAIL

The following table is not comprehensive; it only identifies a sample of resources and different types of interpretive and recreational opportunities available to trail visitors.

<i>Major Trail Museum</i>	<i>Small Interpretive Site</i>	<i>Historic Structures</i>	<i>Historic Landscapes</i>	<i>Selected Sections of the Auto Tour Route</i>	<i>Short Hike to Trail Ruts or Historic Site</i>	<i>4x4 and Horse Access Over Extensive Trail Segment</i>	<i>Hiking Access to Extensive Trail Segments</i>
National Frontier Trails Center, Independence, MO	Schumacher Park, Kansas City, MO	Courthouse Square, Independence MO	Blue Mound, Lawrence, KS		Minor Park, Red Bridge Crossing of the Blue River, Kansas City, MO		
Western Historic Trails Center, Council Bluffs, IA			Alcove Springs, Blue Rapids, KS		Alcove Springs, Blue Rapids, KS		
	Rock Creek Station, Fairbury, NE			Murdock Ruts, near Alda, NE	Rock Creek Station, Fairbury, NE		
	Fort Kearny, Kearney, NE						
			California Hill, Brule, NE		California Hill, Brule, NE		
	Ash Hollow, Lewellen, NE		Ash Hollow, Lewellen, NE		Ash Hollow, Lewellen, NE		
			Courthouse and Jail Rocks, Bridgeport, NE	Bridgeport, NE to Fort Laramie, WY, 85 miles			
Chimney Rock, Bridgeport, NE			Chimney Rock, Bridgeport, NE				
Scotts Bluff / Mitchell Pass, Gering, NE			Scotts Bluff / Mitchell Pass, Gering, NE		Scotts Bluff / Mitchell Pass, Gering, NE		
	Fort Laramie / Bedlam Ruts, Fort Laramie, WY	Fort Laramie, Fort Laramie, WY	Fort Laramie / Bedlam Ruts Fort Laramie, WY		Fort Laramie / Bedlam Ruts, Fort Laramie, WY		
	Register Cliff / Deep Rut Hill, Guernsey, WY		Register Cliff / Deep Rut Hill, Guernsey, WY		Register Cliff / Deep Rut Hill, Guernsey, WY		
	Mormon Ferry / Fort Caspar, Casper, WY		Emigrant Gap-Poison Spider Road, west of Casper, WY	Casper, WY, to Farson, WY, Hwys 220, 287, 28; 213 Miles	Avenue of Rocks-Poison Spider Road, west of Casper, WY	Oregon Trail Road, Mills, WY, to WY-220, just north of Independence Rock, 41.5 miles	
	Prospect Hill, Oregon Trail Road, west of Casper, WY		Prospect Hill, Oregon Trail Road, west of Casper, WY				
	Independence Rock, on the Sweetwater River, WY		Independence Rock, on the Sweetwater River in WY		Independence Rock, on the Sweetwater River, WY	South Pass Segment--Horse Creek to Little Sandy Crossing, 140 miles	South Pass Segment--Horse Creek to Little Sandy Crossing, 140 miles
	Devils Gate, on the Sweetwater River in WY		Devils Gate, on the Sweetwater River, WY		Devils Gate, on the Sweetwater River, WY		

<i>Major Trail Museum</i>	<i>Small Interpretive Site</i>	<i>Historic Structures</i>	<i>Historic Landscapes</i>	<i>Selected Sections of the Auto Tour Route</i>	<i>Short Hike to Trail Ruts or Historic Site</i>	<i>4x4 and Horse Access Over Extensive Trail Segment</i>	<i>Hiking Access to Extensive Trail Segments</i>
	Split Rock, on the Sweetwater River in WY		Split Rock, on the Sweetwater River, WY				
	South Pass, near South Pass City, WY		South Pass, near South Pass City, WY		South Pass, near South Pass City, WY		South Pass, near South Pass City, WY
			Snyder Basin, Lander Road, WY		Thompson Pass, Lander Road, WY	Lander Road, Burnt Ranch, WY, to Fort Hall, ID, approx. 250 miles	Lander Road, LaBarge Creek Ranger Station to Smith's Fork, WY, approx. 10 miles
	Lombard Ferry, on the Green River in WY		Parting of the Ways			Parting of the Ways	
	Fort Bridger, Fort Bridger, WY	Fort Bridger, Fort Bridger, WY				Bear River Divide Segment, U.S. 189 to WY 89, 31 miles	Bear River Divide Segment, U.S. 189 to WY 89, 31 miles
				HWY 30 along the Bear River, ID/WY border to Soda Springs, ID, 51 miles			
	Massacre Rocks, west of American Falls, ID			Bidwell-Bartleson Route, Soda Springs, ID to Corrine, UT, approx. 130 miles	Massacre Rocks, west of American Falls, ID on I-86		
	City of Rocks, Almo, ID		City of Rocks / Twin Sisters / Pinnacle Pass, Almo, ID		City of Rocks / Pinnacle Pass, Almo, ID		
Museum of Church History and Art, Salt Lake City, UT			Hogsback Summit Hwy 65, south of Echo, UT	I-80 mile post 187 (where the trail enters Echo canyon) to Echo, 17 miles		Fort Bridger to Muddy Creek, approx. 14 miles	Little Emigration Canyon, Mormon Flat to Big Mountain, 4.5 miles
			Big Mountain, Hwy 65, UT	Pioneer Memorial Backway, Henefer, UT to Salt Lake City, U, approx.. 40 miles			
	Donner Springs, UT/NV Border; Pilot Peak Interpretive Site, I-80, exit 398, NV; Carlin Canyon, Old U.S. 40, Carlin, NV		Bidwell Pass, UT/NV Border; Black Rock Desert and High Rock Canyon, NV	I-80, Salt Lake City to Wendover, UT/NV, approx. 130 miles; I-80 Wendover, UT/NV, approx. 32 miles; I-80, Wells, NV to Reno, NV, approx. 340 miles; U.S. 95, Humboldt Sink to Fallon, NV, approx. 33 miles; U.S. 50, Fallon NV, to Carson City, NV, approx. 50 miles.	Grayback Hills Swale, north of I-80, west of Grayback Hills in UT	Skull Valley, UT; Timpie Spring to Aragonite segment, exit on I-80, approx. 45 miles	

<i>Major Trail Museum</i>	<i>Small Interpretive Site</i>	<i>Historic Structures</i>	<i>Historic Landscapes</i>	<i>Selected Sections of the Auto Tour Route</i>	<i>Short Hike to Trail Ruts or Historic Site</i>	<i>4x4 and Horse Access Over Extensive Trail Segment</i>	<i>Hiking Access to Extensive Trail Segments</i>
	Mormon Station, Genoa, NV		Thousand Springs Valley, northeast of Wells, NV			California Trail Backcountry Byway, Goose Creek to Hwy 93, in northeast NV, approx. 63 miles	
	Donner Memorial State Park, Truckee, CA		Fandango Pass - Lassen Route, north of Cedarville, CA	Reno, NV to Grass Valley, CA; Truckee Route, I-80, Hwy 20	Lassen Volcanic National Park, Nobles Road-Hwy 89, CA		Red Lake to Carson Pass, Carson Route Hwy 88, CA
	Marshall Gold Discovery State Historic Park, Coloma, CA		West Pass, Carson Route, viewed from Hwy 88, CA	Carson City, NV to Amador City, CA, Carson Route, Hwy 88	Tragedy Springs, Carson Route Hwy 88, CA		Caples Lake to West Pass, Carson Route Hwy 88, CA
	Placerville Historic District, Placerville, CA	Placerville Historic District, Placerville, CA					
	Columbia State Historic Park, Sonora, CA						
	Sutters Fort, Sacramento, CA						

C. MORMON PIONEER NATIONAL HISTORIC TRAIL

The following table is not comprehensive; it only identifies a sample of resources and different types of interpretive and recreational opportunities available to trail visitors.

<i>Major Trail Museum</i>	<i>Small Interpretive Site</i>	<i>Historic Structures</i>	<i>Historic Landscapes</i>	<i>Selected Sections of the Auto Tour Route</i>	<i>Short Hike to Trail Ruts or Historic Site</i>	<i>4x4 and Horse Access Over Extensive Trail Segment</i>	<i>Hiking Access to Extensive Trail Segments</i>
Historic Nauvoo, Nauvoo, IL		Van Buren County Courthouse, Keosauqua, IA	Montrose Landing, Montrose, IA				
	Wayne County Historical Museum, Corydon, IA	Original Mormon Cabin, Drakesville, IA	Locust Creek Camp, near Corydon, IA				
	Garden Grove, Garden Grove, IA		Garden Grove, Garden Grove, IA				
	Mount Pisgah, Union County, IA						
Western Historic Trails Center, Council Bluffs, IA	Grand Encampment, Iowa School for the Deaf, Council Bluffs, IA						
	Kanesville Tabernacle, Council Bluffs, IA						
Winter Quarters, North Omaha, NE			Sand Hill Ruts, near Sutherland, NE	Fremont, NE, to Grand Island, NE	Murdock Ruts, near Alda, NE		
			Ancient Bluff Ruins, Hwy 26 near Broadwater, NE				
	Register Cliff/ Deep Rut Hill, Guernsey, WY		Register Cliff/ Deep Rut Hill, Guernsey, WY		Register Cliff/ Deep Rut Hill, Guernsey, WY		
	Mormon Ferry / Fort Caspar, Casper, WY		Emigrant Gap-Poison Spider Road, west of Casper, WY	Casper, WY, to Farson, WY, Hwys 220, 287, 28; 213 Miles	Avenue of Rocks-Poison Spider Road, west of Casper, WY	Oregon Trail Road, Mills, WY, to WY-220 just north of Independence Rock, 41.5 miles	
	Prospect Hill, Oregon Trail Road, west of Casper, WY		Prospect Hill, Oregon Trail Road, west of Casper, WY				
	Independence Rock, on the Sweetwater River, WY		Independence Rock, on the Sweetwater River, WY		Independence Rock, on the Sweetwater River in WY	South Pass Segment--Horse Creek to Little Sandy Crossing, 140 miles	South Pass Segment--Horse Creek to Little Sandy Crossing, 140 miles

<i>Major Trail Museum</i>	<i>Small Interpretive Site</i>	<i>Historic Structures</i>	<i>Historic Landscapes</i>	<i>Selected Sections of the Auto Tour Route</i>	<i>Short Hike to Trail Ruts or Historic Site</i>	<i>4x4 and Horse Access Over Extensive Trail Segment</i>	<i>Hiking Access to Extensive Trail Segments</i>
	Devils Gate, on the Sweetwater River, WY		Devils Gate, on the Sweetwater Rive, WY		Devils Gate, on the Sweetwater River, WY		
	Split Rock, on the Sweetwater River, WY		Split Rock, on the Sweetwater River, WY				
	South Pass, near South Pass City, WY		South Pass, near South Pass City, WY		South Pass, near South Pass City, WY		South Pass, near South Pass City, WY
	Lombard Ferry, on the Green River, WY		Parting of the Ways			Parting of the Ways	
	Fort Bridger, Fort Bridger, WY	Fort Bridger, Fort Bridger, WY					
Museum of Church History and Art — Salt Lake City, UT	Henefer City Park, Henefer, UT		Hogsback Summit, Hwy 65, south of Echo, UT	I-80 mile post 187 (where the trail enters Echo canyon) to Echo, 17 miles		Fort Bridger to Muddy Creek, approx. 14 miles	Little Emigration Canyon, Mormon Flat to Big Mountain, 4.5 miles
	Hogsback Summit, Hwy 65, south of Echo, UT		Big Mountain, Hwy 65, UT	Pioneer Memorial Backway — Henefer, UT to Salt Lake City, UT, approx. 40 miles			

D. PONY EXPRESS NATIONAL HISTORIC TRAIL

The following table is not comprehensive; it only identifies a sample of resources and different types of interpretive and recreational opportunities available to trail visitors.

<i>Major Trail Museum</i>	<i>Small Interpretive Site</i>	<i>Historic Structures</i>	<i>Historic Landscapes</i>	<i>Selected Sections of the Auto Tour Route</i>	<i>Short Hike to Trail Ruts or Historic Site</i>	<i>4x4 and Horse Access Over Extensive Trail Segment</i>	<i>Hiking Access to Extensive Trail Segments</i>
Pony Express Museum , St. Joseph, MO		Pony Express Barn Museum, Marysville, KS					
Patee House , St. Joseph, MO	Hollenberg Station, west of Marysville, KS	Hollenberg Station, west of Marysville, KS					
	Rock Creek Station, Fairbury, NE	Willow Island Station, Cozad, NE			Rock Creek Station, Fairbury, NE		
	Fort Kearny, Kearney, NE						
			Courthouse and Jail Rocks, Bridgeport, NE	Bridgeport, NE to Fort Laramie, WY, 85 miles			
Chimney Rock, Bridgeport, NE			Chimney Rock, Bridgeport, NE				
Scotts Bluff / Mitchell Pass, Gering, NE			Scotts Bluff / Mitchell Pass, Gering, NE		Scotts Bluff / Mitchell Pass, Gering, NE		
	Fort Laramie, Fort Laramie, WY	Fort Laramie, Fort Laramie, WY	Fort Laramie, Fort Laramie, WY		Fort Laramie, Fort Laramie, WY		
	Mormon Ferry / Fort Caspar-Casper, WY		Emigrant Gap-Poison Spider Road, west of Casper, WY	Casper, WY, to Farson, WY, Hwys 220, 287, 28; 213 miles	Avenue of Rocks-Poison Spider Road, west of Casper, WY	Oregon Trail Road, Mills, WY, to WY-220, just north of Independence Rock, 41.5 miles	
	Prospect Hill, Oregon Trail Road, west of Casper, WY		Prospect Hill, Oregon Trail Road, west of Casper, WY				
	Independence Rock, on the Sweetwater River, WY		Independence Rock, on the Sweetwater River, WY		Independence Rock, on the Sweetwater River, WY	South Pass Segment--Horse Creek to Little Sandy Crossing, 140 miles	South Pass Segment--Horse Creek to Little Sandy Crossing, 140 miles
	Devils Gate, on the Sweetwater River, WY		Devils Gate, on the Sweetwater River, WY		Devils Gate, on the Sweetwater River, WY		
	Split Rock, on the Sweetwater River, WY		Split Rock, on the Sweetwater River, WY				
	South Pass, near South Pass City, WY		South Pass, near South Pass City, WY		South Pass, near South Pass City, WY		South Pass, near South Pass City, WY

<i>Major Trail Museum</i>	<i>Small Interpretive Site</i>	<i>Historic Structures</i>	<i>Historic Landscapes</i>	<i>Selected Sections of the Auto Tour Route</i>	<i>Short Hike to Trail Ruts or Historic Site</i>	<i>4x4 and Horse Access Over Extensive Trail Segment</i>	<i>Hiking Access to Extensive Trail Segments</i>
	Lombard Ferry, on the Green River, WY		Parting of the Ways			Parting of the Ways	
	Fort Bridger, Fort Bridger, WY	Fort Bridger, Fort Bridger, WY	Hogsback Summit, Hwy 65, south of Echo, UT	1-80 mile post 187 (where the trail enters Echo canyon) to Echo, 17 miles		Fort Bridger to Muddy Creek, approx. 14 miles	Little Emigration Canyon, Mormon Flat to Big Mountain, 4.5 miles
			Big Mountain, Hwy 65, UT	Pioneer Memorial Backway, Henefer, UT to Salt Lake City, UT, approx. 40 miles			
	Camp Floyd / Stagecoach Inn State Park, Fairfield, UT	Camp Floyd / Stagecoach Inn State Park, Fairfield, UT	Pony Express Backcountry Byway, Fairfield, UT to Ibapah, UT, 133 miles			BLM Backcountry Byway, Fairfield, UT to Ibapah, UT, 133 miles	
	Faust Junction , POEX Backcountry Byway, UT	Simpson Springs, POEX Backcountry Byway, UT					
	Canyon Station, POEX Backcountry Byway, UT	Boyd Station, POEX Backcountry Byway, UT					
	Cold Springs Station, Hwy 50, NV						
	Sand Springs Station, Hwy 50, NV						
	Fort Churchill State Historic Park, near Carson City, NV			Carson City, NV to Sacramento, CA, along U.S. 50			
	Mormon Station, Genoa, NV						
	Bureau of Land Management. F. Hastings Building, Sacramento, CA	Bureau of Land Management. F. Hastings Building , Sacramento, CA					

Bibliography

- Bagley, Will, ed.
1992 *Frontiersman: Abner Blackburn's Narrative*. Salt Lake City: University of Utah Press.
- 1997 *The Pioneer Camp of the Saints: The 1846 and 1847 Mormon Trail Journals of Thomas Bullock*. Spokane, Wash: The Arthur H. Clark Company.
- Barry, Louise
1972 *The Beginning of the West, Annals of the Kansas Gateway to the American West, 1540–1854*. Topeka: Kansas State Historical Society.
- Becker, Robert H., ed.
1969 *Tomas Christy's Road Across the Plains*. Denver: Old West Publishing Company.
- Beckham, Stephen Dow, ed.
1991 *In Their Own Words: Diaries and Reminiscences of the Oregon Trail in Oregon*. 2 vols. Portland, OR. Submitted to Oregon Trail Coordinating Council.
- Bigler, David L., ed.
1990 *The Gold Discovery Journal of Azariah Smith*. Salt Lake City: University of Utah Press.
- Bigler, David L., Don Buck, and Merrill Mattes, eds.
1992 "O Wickedness, Where is Thy Boundary?": The 1850 California Gold Rush Diary of George Shepard." *Overland Journal* 10 (Winter): 2-33.
- Bruce, Philip A.
1896 *Economic History of Virginia in the Seventeenth Century*. Vol. 1. New York: MacMillan and Company.
- Bryant, Edwin
1967 *What I Saw in California*. New York: D. Appleton & Co., 1848. Reprint, Palo Alto: Lewis Osborne.
- Buck, Don
1995 "The Opening of Emigrant Trails to California." *Trail Talk: The Newsletter of the California-Nevada Chapter* No. 27 (April).
1995 "More on the Opening of Emigrant Trails to California." *Trail Talk: The Newsletter of the California-Nevada Chapter* No. 28 (July).
n.d. "The Opening of California Emigrant Trails: A Chronological Survey." Ms. on file, Denver Service Center, National Park Service, Denver.
- Bureau of the Census, U.S. Department of Commerce
1992 *Census of Population and Housing, 1990: California, Colorado, Idaho, Iowa, Kansas, Missouri, Nebraska, Nevada, Oregon, Utah, and Wyoming*. Washington, DC: U.S. Department of Commerce. CD-ROM
- Bureau of Land Management, U.S. Department of the Interior
1979a *The Pony Express Stations of Utah in Historical Perspective*, by Richard E. Fike and John W. Headley. Washington, DC: U.S. Government Printing Office.
1979b *The Pony Express in Central Nevada: Archeological and Documentary Perspectives*, by Donald L. Hardesty. Reno, NV: Nevada State Office, Bureau of Land Management.
1983 *Prehistory and History of the Winnemucca District: A Cultural Resources Literature Review*, by Regina Smith, Peggy McGuckian Jones, and Kathryn E. Pedrick. Cultural Resources Series No. 6. Reno, NV: Winnemucca District Office, Bureau of Land Management.
1980 *Emigrant Trails in the Black Rock Desert*, by Peggy McGuckian Jones. Contributions to the Study of Cultural Resources, Technical Report No. 6. Reno, NV: Nevada State Office, Bureau of Land Management.
- Bureau of Land Management, Department of the Interior, and Idaho State Historical Society
1993 *Emigrant Trails of Southern Idaho*. Edited by Daniel Hutchinson and Larry R. Jones. *Adventures in the Past — Idaho Cultural Resource Series*, no.1. Boise, ID: Bureau of Land Management.
- Burnett, Peter Hardeman
1946 *Recollections and Opinions of an Old Pioneer*. New York: Appleton, 1880. Reprinted as Peter H. Burnett, *An Old California Pioneer*. Oakland: Biobooks.
- Burton, Richard F.
1990 *The City of the Saints and Across the Rocky Mountain to California*. Reprint, Boulder: The University Press of Colorado.
- Carter, Kate B., ed.
1988 *Utah and the Pony Express. Daughters of the Utah Pioneers*. Salt Lake City: Utah Printing Co.
- Clayton, William
1983 *The Latter-Day Saints' Emigrants' Guide: Being a Table of Distances, showing all the springs, creeks, rivers, hills, mountains, camping places, and all the other notable places, from Council Bluffs to the Valley of the Great Salt Lake*. St. Louis, MO: Republican Steam Press—Chambers and Knapp, 1848. Reprint, S. B. Kimball, ed., St. Louis: Patrice Press.
1994 "The Journal of William Clayton." In *Heart Throbs of the West*, compiled by Kate B. Carter. Vol. 6. Salt Lake City: Daughters of Utah Pioneers.
- Coffman, Lloyd W.
1993 *Blazing a Wagon Trail to Oregon*. Enterprise, OR: Echo Books.

BIBLIOGRAPHY

- Copps, David H.
1995 *Views from the Road: A Community Guide for Assessing Rural Historic Landscapes*. Washington DC: Island Press.
- Crowell, Susan
1995 "Great Basin Numic-Speaking Groups and Their Relationships to Resources and Possibly Each Other." On file at the University of Kentucky Department of Anthropology, Graduate School, Lexington.
- Curran, Harold
1982 *Fearful Crossing, The Central Overland Trail Through Nevada*. Las Vegas, NV: Nevada Publications.
- Davis, Charles George
1995 *Scott-Applegate Trail 1846-1847, Atlas and Gazetteer, Memorial Edition, Celebrating 150 Years 1946-1996, Southern Route to Oregon, Marys River to LaCreole Creek*. North Plains, OR: Soap Creek Enterprises.
- DeDecker, Mary
1988 "Owens Valley [California], Then and Now." In *Mountains to Desert: Selected Inyo [County, California] Readings*, compiled by Friends of the Eastern California Museum. Independence, CA: Eastern California Museum. First published in the August 1977 issue of the Inyo County, California, Museum News Bulletin.
- DeLafosse, Peter, ed.
1994 *Trailing the Pioneers*. Logan: Utah State University Press.
- DeVoto, Bernard
1952 "Introduction" to *Strange Empire*, by Joseph K. Howard. New York: Morrow and Company.
- Doyle, Susan Badger, and Fred W. Dykes, eds.
1997 *The 1854 Oregon Trail Dairy of Winfield Scott Ebey*. Independence, MO: Oregon-California Trails Association.
- Driver, Harold E.
1970 *Indians of North America*. 2nd ed. Chicago: University of Chicago Press.
- Ellsworth, George S., ed.
1998 *The History of Louisa Barnes Pratt: Being the Autobiography of a Mormon Missionary Widow and Pioneer*. Logan: Utah State University Press.
- Economics and Statistics Administration, U.S. Department of Commerce
1996 *Regional Economic Information System 1969-1994*. Bureau of Economic Analysis, Regional Economic Measurement Division. Washington, DC: U.S. Government Printing Office.
- Fletcher, Jack E. and Patricia K. A. Fletcher
1995 "The Cherokee Trail." *Overland Journal* 12 (2, Summer): 21-33.
- Forest Service, U.S. Department of Agriculture
n.d. *Tallac Historic Site Master Plan / Final Environmental Impact Statement*. Washington DC: U.S. Government Printing Office.
- 1985 *Description of the Ecoregions of the United States*, by Robert G. Bailey. Washington, DC: U.S. Government Printing Office.
- 1990 *Nez Perce (Nee-Me-Poo) National Historic Trail, Comprehensive Plan*. Washington, DC: U.S. Government Printing Office.
- Fowler, Catherine S.
1994 "Historical Perspectives on Timbisha Shoshone Land Management Practices, Death Valley, California." Paper presented at the Annual Meeting of the Society of Ethnobiology, March 1994, at the University of Victoria, British Columbia, Canada. On file at the Department of Anthropology, University of Nevada at Reno, Reno, Nevada.
- Fowler, Catherine S., and Nancy Peterson Walter
1985 "Harvesting Pandora Moth Larvae with the Owens Valley Paiute." *Journal of California and Great Basin Anthropology* 7 (2): 155-165.
- Franzwa, Gregory M.
1983 *The Oregon Trail Revisited*. 3rd ed. Gerald, MO: The Patrice Press.
- 1990 *Maps of the Oregon Trail*. St. Louis, MO: The Patrice Press.
- Gibson, Arrell Morgan
1980 *The American Indian: Prehistory to the Present*. Lexington, MA: D. C. Heath and Company.
- Governor's Trail Executive Committee and Idaho/Oregon Trail Working Committee
1991 "A Study and Action Plan for Idaho's Commemoration of the Oregon Trail Sesquicentennial: 1993 and Beyond." Boise, ID: Plannmakers, Planning and Urban Design.
- Graydon, Charles K.
1994 *Trail of the First Wagons Over the Sierra Nevada, A Guide*. Tucson: The Patrice Press. First published in 1986.
- Greene, Jerome A.
1991 *Review of Counting Coup and Cutting Horses: Intertribal Warfare on the Northern Plains, 1738-1889*, by Anthony McGinnis. *The Magazine of Western History* 41 (Autumn): 79-80.
- 1997 "The Character of Army-Indian Warfare on the Northern Plains." On file at the Denver Service Center, National Park Service, Denver.
- Haines, Aubrey L.
1987 *Historic Sites Along the Oregon Trail*. 3rd ed. St. Louis, MO: The Patrice Press.
- Hallowell, A. Irving
1966 "The Backwash of the Frontier: The Impact of the Indian on American Culture." In *Readings in Anthropology*, edited by Jesse D. Jennings and E. Adamson Hoebe, 348-61. New York: McGraw-Hill Book Company.
- 1976 "The Impact of the American Indian on American Culture." In *Contributions to Anthropology: Selected Papers of A. Irving Hallowell*, edited by Raymond D. Fogelson, Fred Eggan, Melford E. Spiro, George W. Stocking, Anthony F. C. Wallace, and Wilcomb E. Washburn, 481-97. Chicago: University of Chicago Press.
- Hardesty, Donald L.
1997 *The Archaeology of the Donner Party*. Reno: University of Nevada Press.
- Harris, Everett W.
1986 *The Overland Emigrant Trail to California: A Guide to Trail Markers Placed in Western Nevada and the Sierra Nevada Mountains in California*. Reno: Nevada Emigrant Trail Marking Committee, Inc., 1975.
- Hassrick, Royal B.
1964 *The Sioux: Life and Customs of a Warrior Society*. Norman: University of Oklahoma Press.
- Hastings, Lansford W.
1845 *The Emigrants' Guide to Oregon and California*. Cincinnati: George Conclin.
- Hawkins, Bruce R., and David G. Madsen
1990 *Excavation of the Donner-Reed Wagons: Historic Archaeology Along the Hastings Cutoff*. Salt Lake City: University of Utah Press
- Helfrich, Devere and Trudy Ackerman, eds.
1993 *The Schreek of Wagons: 1848 Diary of Richard M. May*. Hopkinton, MA: Rigel Publications.
- Henning, Elizabeth R. P.
1982 "Western Dakota Winter Counts: An Analysis of the Effects of Western Migration and Culture Change." *Plains Anthropologist* 27 (95): 57-65.
- Hill, William E.
1993 *The California Trail, Yesterday and Today*. Boise, ID: Tamarack Books, Inc.
- 1996 *The Mormon Trail, Yesterday and Today*. Logan: Utah State University Press.
- Holliday, J. S., ed.
1981 *The World Rushed In. The California Gold Rush Experience: An Eyewitness Account of a Nation Heading West*. New York: Simon and Schuster.

- Holmes, Kenneth L., ed.
1983-93 *Covered Wagon Women: Diaries & Letters from the Western Trails, 1840-1890*. 11 vols. Spokane: The Arthur H. Clark Company.
- Hope, Arthur C.
1990 *Hudspeth Cutoff, Idaho's Legacy of Wheels*. Idaho Falls, ID: Bookshelf Bindery and Press.
- Howard, James H.
1976 "Yanktonai Ethnohistory and the John K. Bear Winter Count." *Memoir No. 11, Plains Anthropologist*.
- Hoxie, Frederick E., ed.
1996 *Encyclopedia of North American Indians*. Boston: Houghton Mifflin Company.
- Hunt, Thomas H.
1974 *Ghost Trails to California*. Palo Alto, CA: American West Publishing Company.
- Hyde, Anne
1997 *Review of The Way to the West: Essays on the Central Plains*, by Elliot West. *The Magazine of Western History* 47 (Autumn): 82-83.
- Irwin, Charles N.
1977 "Aboriginal Shelters of Inyo." In *Saga of Inyo County [California]*, edited by Peggy Streeter and Clarence R. Streeter, 13-15. Covina, CA: Taylor Publishing Company for Chapter 183, Southern Inyo [County], American Association of Retired Persons.
- Jabusch, David M. and Susan C.
1994 *Pathway to Glory: The Pony Express and Stage Stations in Utah*. Salt Lake City: Treasure Press.
- Jackson, W. Turrentine
1952 *Wagon Roads West: A Study of Federal Road Surveys and Construction in the Trans-Mississippi West, 1846-1869*. Berkeley: University of California Press.
- Johnsgard, Paul A.
1992 *The Platte: Channels in Time*. Lincoln: University of Nebraska Press.
- Johnson, Kristin, ed.
1996 "Unfortunate Emigrants": *Narratives of the Donner Party*. Logan: Utah State University Press.
- Kautz, Robert R.
1992 "A Cultural Resources Survey of a Small Block Parcel at Brady Hot Springs, Churchill County, Nevada (MAI Project 730)." Prepared for Brady Power Partners, Geothermal Development Associates, Reno, NV. Reno: Mariah Associates, Inc.
- Kehoe, Alice Beck
1989 *The Ghost Dance: Ethnohistory and Revitalization*. New York: Holt, Rinehart, and Winston, Publishers.
- 1992 *North American Indians: A Comprehensive Account*. 2nd ed. Englewood Cliffs, NJ: Prentice Hall.
- Kelly, Charles
1996 *Salt Desert Trails: A History of the Hastings Cutoff*. Salt Lake City: Western Printing Co., 1930. Third edition, edited and with an introduction by Peter DeLafosse. Salt Lake City: Western Epics.
- Kimball, Stanley B.
1988 *Historic Sites and Markers along the Mormon and Other Great Western Trails*. Urbana: University of Illinois Press.
- Korns, Roderic and Dale L. Morgan, eds.
1994 *West from Fort Bridger: The Pioneering of Immigrant Trails across Utah, 1846-1850*. Revised and updated by Will Bagley and Harold Schindler. Logan: Utah State Univ. Press.
- Kroeber, Alfred L.
1939 *Cultural and Natural Areas of Native North America*. *Publications in American Archaeology and Ethnology*, no. 38. Berkeley: University of California.
- Lamar, Howard R., ed.
1977 *The Reader's Encyclopedia of the American West*. New York: Thomas Y. Crowell Co.
- Langworthy, Franklin
1855 *Scenery of the Plains, Mountains and Mines: A Diary Kept Upon the Overland Route to California, By Way of the Great Salt Lake*. Ogdensburg: J. C. Sprague, Book-Seller.
- Lavender, David
1963 *Westward Vision, The Story of the Oregon Trail*. Lincoln: University of Nebraska Press.
- Lawton, Harry W., Philip J. Wilke, Mary DeDecker, and William M. Mason
1993 "Agriculture among the Paiute of Owens Valley [California]." In *Before the Wilderness: Environmental Management by Native Californians*, compiled and edited by Thomas C. Blackburn and Kat Anderson, 329-377. Menlo Park, CA: Ballena Press.
- Lewin, Jacqueline A., and Taylor, Marilyn S.
1992 *The St. Joe Road. Emigration Mid-1800s. A Traveler's Guide from the Missouri River to the Junction of the St. Joe Road and Independence Roads*. St. Joseph: St. Joseph Museum, Phillips Brothers Printers.
- Lewis, Henry T.
1993 "Patterns of Indian Burning in California: Ecology and Ethnohistory." In *Before the Wilderness: Environmental Management by Native Californians*, compiled and edited by Thomas C. Blackburn and Kat Anderson, 55-116. Menlo Park, CA: Ballena Press.
- Limerick, Patricia Nelson
1997a "Explaining Ourselves: Jefferson, History, and the Changing West." In *Thomas Jefferson and the Changing West, from Conquest to Conservation*, edited by James P. Ronda, 185-194. Albuquerque: University of New Mexico Press.
- 1997b "Western History Lesson: Celebrations Can Be Complex." *Empire Magazine of the West, The Denver Post*. Sunday, October 12, 1997.
- Madsen, Brigham D., ed.
1989 *Exploring the Great Salt Lake: The Stansbury Expedition of 1849-50*. Salt Lake City: University of Utah Press.
- Mattes, Merrill J.
1969 *The Great Platte River Road: The Covered Wagon Mainline via Fort Kearny to Fort Laramie*. Lincoln: Nebraska State Historical Society.
- 1988 *Platte River Road Narratives*. Urbana: University of Illinois Press.
- Mattes, Merrill, and Henderson, Paul
1960 "The Pony Express: Across Nebraska From St. Joseph to Fort Laramie." *Nebraska History* 41 (June).
- McCabe, Allen
1997 "A Cultural Resources Inventory of a 225-Acre Parcel at Brady Hot Springs, Churchill County, Nevada." Prepared for Geothermal Associates, Reno, NV. Virginia City, NV: Archaeological Research Services.
- McGinnis, Anthony
1990 *Counting Coup and Cutting Horses: Intertribal Warfare on the Northern Plains, 1738-1889*. Evergreen, CO: Cordillera Press.
- Moore, John H., ed.
1993 *The Political Economy of North American Indians*. Norman: University of Oklahoma Press.
- Moore, Roger L., and Kelly Barthlow
1998 "The Economic Impacts and Uses of Long-Distance Trails. A Case Study of the Overmountain Victory Trail." *North Carolina State University*.
- Morgan, Dale L.
1947 *The Great Salt Lake*. Indianapolis: Bobbs-Merrill Company.
- 1949 "The Mormon Ferry on the North Platte: The Journal of William A. Empey." *Annals of Wyoming*, 21 (July-October).
- 1953 *Jedediah Smith and the Opening of the West*. Indianapolis: Bobbs-Merrill Company.

BIBLIOGRAPHY

- 1963 Overland in 1846: Diaries and Letters of the California-Oregon Trail. 2 vols. Georgetown, CA: Talisman Press.
- Morgan, Dale L., ed.
1959 The Overland Diary of James Pritchard, from Kentucky to California in 1849. Denver: Old West Publishing Company.
- Morgan, Dale L. and Eleanor Towles Harris, eds.
1987 The Rocky Mountain Journals of William Marshall Anderson: The West in 1834. San Marino, CA: The Huntington Library, 1967. Reprint, Lincoln: University of Nebraska Press.
- Murdock, George P.
1967 Ethnographic Atlas. Pittsburgh: University of Pittsburgh Press.
- National Park Service, U.S. Department of the Interior
1981a Comprehensive Management and Use Plan, Mormon Pioneer National Historic Trail. Washington, DC: U.S. Government Printing Office.
1981b Comprehensive Management and Use Plan, Oregon National Historic Trail. Washington, DC: U.S. Government Printing Office.
1987 Eligibility / Feasibility Study and Environmental Assessment for National Historic Trail Authorization, California and Pony Express Trails. Denver Service Center.
1990 Comprehensive Management and Use Plan, Santa Fe National Historic Trail. Denver Service Center.
1990a General Management Plan / Environmental Assessment / Wilderness Suitability Study, El Malpais National Monument, New Mexico. Denver Service Center.
1990b Historic Resource Study: Mormon Pioneer National Historic Trail, by Stanley B. Kimball. Prepared by Department of History, Southern Illinois University. Denver: Rocky Mountain.
1991 Historic Resource Study: Mormon Pioneer National Historic Trail, by Stanley B. Kimball. Prepared by the Department of History, Southern Illinois University, Edwardsville, IL. Denver: Rocky Mountain Regional Office.
1992a Comprehensive Management and Use Plan, Trail of Tears National Historic Trail. Denver Service Center.
1992b Study of Alternatives, Environmental Assessment, Wounded Knee, South Dakota. Denver Service Center.
1993a The Wounded Knee Update — Cankpe Opi Wonahun. Issue 3 (August). Denver Service Center.
1993b "The Oregon Trail: An Assessment of Private Ownership Issues along Six Cross-Country Segments." Prepared by the Trust for Public Land as part of a cooperative agreement with the National Park Service. Manuscript on file at the Denver Service Center.
1994 Historic Resource Study: Pony Express National Historic Trail, by Anthony Godfrey. Washington, DC: U.S. Government Printing Office.
- 1995 "Native American Consultations and Ethnographic Assessment: The Paiutes and Shoshones of Owens Valley, California, for Manzanar National Historic Site," by Lawrence F. Van Horn. Denver Service Center.
1996 National Trail Feasibility Study and Environmental Assessment, American Discovery Trail. Washington, DC: U.S. Government Printing Office.
1997a Draft Comprehensive Management and Use Plan / Environmental Impact Statement; Management and Use Plan Update, Oregon and Mormon Pioneer National Historic Trails. Denver Service Center.
1997b Ala Kahakai National Trail Study and Environmental Impact Statement. Denver Service Center.
1997c The Visitor Experience and Resource Protection (VERP) Framework: A Handbook for Planners and Managers. Denver Service Center.
- Oregon-California Trail Association
1990a Crossing the Green River on the Overland Trails. Rock Springs: Oregon-California Trails Association, 10th Annual Convention.
1990b Fort Bridger Tour: Guide Script. Rock Springs: Oregon-California Trails Association, 10th Annual Convention.
1994a Mapping Emigrant Trails: MET Manual. 2nd ed. Independence, MO: Office of National Historic Trails Preservation.
1994b "The Lander Road Preconvention Tour." Oregon-California Trails Association.
1994c "Post-Convention Tour. Floating Island to Donner Spring. National Convention — Salt Lake City, Utah. Oregon-California Trails Association." Roy D. Tea, Guide.
1994d Tour Guide Handbook, Along the Platte River Valley. Grand Island, NE. Oregon-California Trails Association.
1996 "Tour C Record Bluff." Elko: Oregon-California Trails Association.
1995 The 1849 California Trail Diaries of Elijah Preston Howell. Edited by Susan Badger Doyle and Donald E. Buck. Independence, MO: Oregon-California Trails Association.
1998 Graves and Sites on the Oregon and California Trails, by Randy Brown and Reg Duffin. 2nd ed. Independence, MO: Oregon-California Trails Association.
- Oregon-California Trails Association, Utah Crossroads Chapter
1994a "Hastings Cutoff Tour, Donner Spring to Big Springs." Utah Crossroads Chapter: Oregon-California Trails Association.
1994b "Hastings Cutoff, The 'Long Drive' across the Great Salt Lake Desert. Tour booklet prepared by Roy Tea, Rush Spedden, Lyndia Carter. Salt Lake City: Utah Crossroads Chapter, Oregon-California Trails Association.
1997a "The Mormon Trail, Fort Bridger to Salt Lake Valley: Sesquicentennial Field Trip." Utah Crossroads Chapter: Oregon-California Trails Association.
- 1997b "The First Overland Emigrants to California. A Bidwell-Bartleson Party Trail Guide from Soda Springs to Silver Zone Pass," by Roy D. Tea. Pocatello, ID: Utah Crossroads Chapter, Oregon-California Trails Association.
1998 "Hensley's Salt Lake Cutoff (from Salt Lake City to City of Rocks and Granite Pass)," by Roy D. Tea. Utah Crossroads Chapter, Oregon-California Trails Association.
n.d. "The Mormon Trail: Henefer to Salt Lake City." Utah Crossroads Chapter: Oregon-California Trails Association.
- Oregon Trail Coordinating Council and the Oregon-California Trails Association, Northwest Chapter
1995 "An Initiative for Significant Historic Trail Routes in Oregon and Washington." Manuscript on file at the Denver Service Center, National Park Service.
- Palka, Eugene J.
1995 "Coming to Grips with the Concept of Landscape." Landscape Journal 14 (1): 63-73.
- Parkman, Francis, Jr.
1849 The Oregon Trail: Sketches of Prairie and Rocky Mountain Life. New York: George P. Putnam.
- Pinkham, Allen V., Sr.
1996 "A Traditional American Indian Perspective on Land Use Management." Landscape and Urban Planning 36 (November): 93-101.
- Potter, David Morris, ed.
1945 Trail to California: The Overland Journal of Vincent Geiger and Wakeman Bryarly. New Haven: Yale University Press.
- Powers, William K.
1982 Oglala Religion. 1977. Reprint, Lincoln: University of Nebraska Press, Bison Books.
1984 Yuwipi: Vision and Experience in Oglala Ritual. 1982. Reprint, Lincoln: University of Nebraska Press, Bison Books.
- Prucha, Francis Paul
1994 American Indian Treaties: The History of a Political Anomaly. Berkeley: University of California Press.
- Pyne, Stephen J.
1997 Fire in America: A Cultural History of Wildland and Rural Fire. Seattle: University of Washington Press.
- Read, Georgia Willis and Ruth Gaines, eds.
1949 Gold Rush: The Journals, Drawings, and Other Papers of J. Goldsborough Bruff, Captain, Washington City and California Mining Association, April 2, 1849-July 20, 1851. New York: Columbia University Press.

- Salisbury, Neal
1965 "Sauanto (Tisquantum)." In *Encyclopedia of North American Indians*, edited by Frederick E. Hoxie, 605–7. Boston: Houghton Mifflin Company.
- Scamehorn, H. Lee, Edwin P. Banks, and Jamie Lytle-Webb, eds.
1965 *The Buckeye Rovers in the Gold Rush: An Edition of Two Diaries*. Athens: Ohio University Press.
- Simpson, J. H.
1876 *Report of Explorations Across the Great Basin of the Territory of Utah for a Direct Wagon-Route from Camp Floyd, to Genoa, in Carson Valley, in 1859*. Washington, DC: U.S. Government Printing Office.
- Spencer, Robert F. and Jesse D. Jennings with Elden Johnson, Arden R. King, Theodore Stern, Kenneth M. Stewart, and William J. Wallace
1977 *The Native Americans: Ethnology and Backgrounds of the North American Indians*. 2nd ed. New York: Harper and Row, Publishers. First published in 1965.
- Sprague, Roderick and Michael J. Rodeffer
1989 "The Bloody Point Archaeological Investigation." *Overland Journal* 7 (Fall): 26–28.
- Stansbury, Howard
1852 *Exploration and Survey of the Valley of the Great Salt Lake*. Philadelphia: Lippincott, Grambo & Co.
- Stegner, Wallace
1964 *The Gathering of Zion*. New York: McGraw Hill Book Co.
- Stewart, George R.
1962 *The California Trail: An Epic with Many Heroes*. New York: McGraw-Hill.
- Steward, Julian H.
1930 "Irrigation without Agriculture." *Michigan Academy of Sciences, Arts, and Letters Papers* 12:149–156.
1933 "Ethnography of the Owens Valley Paiute." *University of California Publications in American Archaeology and Ethnology* 33 (3): 233–50. Berkeley: University of California Press.
1970 *Basin-Plateau Aboriginal Sociopolitical Groups*. Bureau of American Ethnology Bulletin 120, 1938. Washington, DC: Smithsonian Institution; Salt Lake City: University of Utah Press.
- Stornetta, Susan
1997 "An Archaeological Survey Near Fernley, Nevada on Behalf of the Wade/Fernley Land Exchange." Prepared for Wade Development Company, Inc., Reno, NV. Silver City, NV: Intermountain Research.
- Swagerty, William R.
1988 "Indian Trade in the Trans-Mississippi West to 1870." In *History of Indian-White Relations*, edited by Wilcomb E. Washburn, 351–74. Vol. 4 of *Handbook of North American Indians*, edited by William C. Sturtevant. Washington, DC: Smithsonian Institution.
- Tanner, Helen Hornbeck
1996 "Travel and Transportation Routes." In *Encyclopedia of North American Indians*, edited by Frederick E. Hoxie, 640–43. Boston: Houghton Mifflin Company.
- Thorton, Jessy Quinn
1849 *Oregon and California in 1848*. 2 vols. New York: Harper & Bros.
- Thrapp, Dan L.
1988 *Encyclopedia of Frontier Biography*. 3 vols. Glendale, CA: Arthur H. Clark Co.
1994 *Encyclopedia of Frontier Biography*. 1 vol. Glendale, CA: Arthur H. Clark Co.
- Tiller, Veronica E. Velarde
1996 *Tiller's Guide to Indian Country: Economic Profiles of American Indian Reservations*. Albuquerque, NM: Bow Arrow Publishing Company.
- Townley, John M.
1988 *The Trail West: A Bibliographic-Index to Western Trails, 1841–1869*. Reno: Jamison Station Press.
- Trails West, Inc.
1984 *Emigrant Trails West: A Guide to Trail Markers Placed by Trails West, Inc. Along the California, Applegate, Lassen, and Nobles' Emigrant Trails in Idaho, Nevada, and California*, compiled by Devere Helfrich, Helen Helfeich, and Thomas Hunt. Reno, NV: Trails West.
- Unruh, John D., Jr.
1993 *The Plains Across: The Overland Emigrants and the Trans-Mississippi West, 1840–1860*. 1979. Reprint, Urbana: University of Illinois Press.
- Wagner, William H.
1858 "Lander Cut-off through the Salt River Valley, Survey of 1858." Afton: A Presentation by Jermy B. Wight for The Star Valley Historical Society, Wyoming.
- Watson, Jeanne Hamilton, ed.
1986 *To the Land of Gold and Wickedness: The 1848–59 Diary of Lorena L. Hays*. St. Louis, Missouri: Patrice Press.
- Wehrey, Jane
1993 "Report on Manzanar Pre-Camp Period: Data and Sources and Suggestions and Sources for Further Research on Attitudes of Owens Valley Townspeople During Manzanar Camp." On file at the Eastern California Museum, Independence, CA.
- West, Elliott
1995 *The Way to the West: Essays on the Central Plains*. Albuquerque: University of New Mexico Press.
- Wight, Jermy Benton
1993 "Frederick W. Lander and the Lander Trail." In *The Oregon Trail*, vol. 1. Bedford, WY: Stary Valley Llama.
- Winthrop, Robert H.
1991 *Dictionary of Concepts in Cultural Anthropology*. New York: Greenwood Press.
- Wissler, Clark
1938 *The American Indian*. 1917. Reprint, New York: MacMillan Publishing Company.
- Wyoming State Parks and Historic Sites
1994 *Guernsey State Park Master Plan*, by John F. Mahoney. Cheyenne: Wyoming State Parks and Historic Sites.
- Wyoming Recreation Commission, State of Wyoming
1975 *Development Plan for Independence Rock State Park*. Cheyenne, WY: Wyoming Recreation Commission.
1984 *Wyoming Historic Trails Management Plan*. Cheyenne, WY: Wyoming Recreation Commission.
- Young, James A., and B. Abbott Sparks
1985 *Cattle in the Cold Desert*. Logan: Utah State University Press.

MAPS

The following maps tell a story of American Indian aboriginal locations and transportation routes, Euro-American westward expansion, military forts, emigrant trails, and the establishment of Indian reservations in the 19th and 20th centuries.

Barry, Louise

1972 "Section of a Map Published with House Report Number 474, Dated May 20, 1834, of the 23rd Congress, First Session." In *Beginning of the West, Annals of the Kansas Gateway to the American West, 1540-1854*, 404. Topeka: Kansas State Historical Society.

"Captain Seth Eastman's Map of 1853." Reproduced from Henry R. Schoolcraft's *Archives of Aboriginal Knowledge*. In *Beginning of the West, Annals of the Kansas Gateway to the American West, 1540-1854*, 1019. Topeka: Kansas State Historical Society.

Bier, James A. and Robert L. Berry

1991 *Western Emigrant Trails, 1830-1870: A Map of Major Trails, Cutoffs, and Alternates*. Independence, MO: Oregon-California Trails Association.

Darley, Richard J., Betsey G. Gambrill, Elizabeth E. Osborn, Carolyn H. Anderson, Gene S. Stuart, John F. Dorr, Sherry Wolf, George E. Stuart, and William C. Sturtevant

1972 "Indians of North America: A Map of North America Before Columbus." *Supplement to National Geographic* 142 (December): 739A.

Kehoe, Alice Beck

1992 "The Prairie-Plains." In *North American Indians: A Comprehensive Account*, 288. 2nd ed. 1981. Reprint, Englewood Cliffs, NJ: Prentice Hall.

Swagerty, William R.

1988 "Major Historic Routes and Posts to 1824." In *History of Indian-White Relations*, edited by Wilcomb E. Washburn, 354. Vol. 4 of *Handbook of North American Indians*, edited by William C. Sturtevant. Washington, DC: Smithsonian Institution.

Tanner, Helen Hornbeck

1996 "Major [Indian] Trade Routes [Before European Contact]." In *Encyclopedia of North American Indians*, edited by Frederick E. Hoxie, 461. Boston: Houghton Mifflin Company.

Utley, Robert M.

1984 "The Mountain Wars, 1850-1880." In *Indian Frontier of the American West, 1846-1890*. Albuquerque: University of New Mexico.

U.S. Geological Survey and Bureau of Indian Affairs, U.S. Department of the Interior; Smithsonian Institution

1993 "Indian Land Areas: A Map of [United States] Indian Lands, 1992." Reston, VA: U.S. Geological Survey.

THE GROWTH OF INDIAN RESERVATIONS

Louise Barry (1972: 404, 1019) depicts on two maps mentioned above the growth and configuration of Indian reservations during part of the period of the westward emigration. She cites reservations in 1834 of peoples like the Omaha, Pawnee, and the Kansa along the Platte River (1972:404) and shows reconfiguration in 1853, often seemingly with less land but certainly with more definition of the reservations as boundaries. Veronica Tiller (1996) gives concise descriptions and locations with cultural and historical sketches of modern Indian reservations, state by state, and should be consulted for today's configuration.

Preparers and Consultants

PREPARERS

NPS DENVER SERVICE CENTER

Susan C. Boyle, job captain
Jude Carino, trails Coordinator, State of Wyoming BLM
Brian Carlstrom, GIS / natural resource specialist
Mary Frye, historian
Joan Huff, visual information technician
Larry Van Horn, ethnographer
Dana Kinsey, historian
Mary McVeigh, park planner
Jon Nickolas, writer / editor
Leslie Peterson, editor
Linda Ray, visual information specialist
Sue Scherner, landscape architect
Greg Sorensen, supervisory writer / editor
Dana Supernowicz, historian, Forest Service
Tom Thomas, historian, former job captain

CONSULTANTS

NPS DENVER SERVICE CENTER

Fred Babb, project manager
Mike Duwe, trails program manager
Steve Franklin, cartographic technician
Dave Kreger, natural resources technical expert
Carrie Maldonado, planning technician
Federico Miranda, planning technician
Pat O'Brien, quality leader
Mike Spratt, quality leader
Dick Williams, GIS technical expert
Frank Willis, cultural resources technical expert
Cynthia Young, functional chief

NPS LONG DISTANCE TRAILS OFFICE

Jere Krakow, superintendent
Kay Threlkeld, interpretive planner

NPS WASHINGTON OFFICE

Steve Elkinton, trails coordinator

BUREAU OF LAND MANAGEMENT

Carl Barna, trails coordinator

FOREST SERVICE

Debra Tibbets
Gordon Williams
Jim Miller

OREGON-CALIFORNIA TRAILS ASSOCIATION

Tom Hunt
Jim Renner
Dick Ackerman
Don Buck
Jackie Lewin

NATIONAL PONY EXPRESS ASSOCIATION

Patrick Hearty
Ken and Arleta Martin
Judy Howard

PONY EXPRESS TRAIL ASSOCIATION

Jim Curtis
Maral Kuechler
Joe Nardone

MORMON TRAIL ASSOCIATION

Stanley B. Kimball

Index

A

Access and Transportation, 3, 86, 121
Additional routes, 3-4, 66, 70-71, 80, 133
Administration, 3-4, 26, 47, 49-52, 63, 64-65, 91, 113, 133
Affected Environment, 3, 52, 91, 96
Air Quality, 3, 82, 115, 367
Alternative 1, 3, 47, 49, 51, 53, 64-70, 78-87, 113, 115-117, 119, 121
Alternative 2-3, 47, 63, 65, 67, 69, 71, 73, 75, 78-87, 113, 115-117, 119, 121, 123
American Indians, 3, 25, 29, 31-33, 53, 70, 100, 119, 132
Applegate Trail, 3, 32, 40, 52, 75, 93, 99, 132
Auto-tour routes, 3, 50, 54, 64-65, 70, 86, 121

B

Baker-Davis Road, 3, 38
Barlow Road, 3, 32, 35-36
Beale Road, 3, 75
Beckwourth Trail, 3, 39-40
Bidwell-Bartleson Route, 3, 73
Big Trees Road, 3, 74
Bishop Creek Cutoff, 3, 74
Blue Ridge Cutoff, 3, 71
Budget, 3, 49-50, 63-64, 77-79
Bureau of Land Management, 3, 26, 49-50, 52, 54, 63-66, 69, 103-104, 127
Bureau of Reclamation, 3, 49, 63, 95, 103
Burnett Cutoff, 3, 75

C

California, 3, 4, 25, 29-33, 35-42, 47, 49, 51, 52, 53, 54, 64-75, 77, 91, 93, 98-100, 103-104, 110, 127, 129-133
California National Historic Trail, 3, 25, 33, 36, 66, 71, 99, 104, 133
carrying capacity, 3, 26, 52, 66-67, 70, 80
Carson Route, 3, 39, 74-75
Cascade Range, 3, 36, 97
Central Cutoffs, 3, 37
Central Overland Trail, 3, 75
Certification, 3, 52, 68-69, 81
Challenge cost-share program, 3, 49, 64, 80
Cherokee Trail, 3, 73, 133
Childs Cutoff, 3, 37
Chimney Rock National Historic Site, 3, 53, 130
City of Rocks National Reserve, 130, 362
Climate, 3, 67, 91, 95-98
Colorado, 3, 25, 30, 37-38, 41, 73, 75, 104, 106, 130-132
Columbia Plateau, 3, 32, 91, 97
Comparison of impacts, 3, 82-87, 113
Compliance, 3, 52, 68-69, 84, 113, 116, 127
Consultation and Coordination, 3, 129
Continental Divide, 3, 32, 36-37, 41, 91, 93, 96, 367
Cooke-Graham Wagon Road, 3, 75
Cooperative Management Agreements, 3, 50, 64, 79
Council Bluffs Road, 3, 37, 73

Counties crossed by the trails, 3, 86, 104, 106-107, 110, 121
Cowlitz River Route, 3, 71
Craters of the Moon National Monument, 3, 130
Cultural landscapes, 3, 83, 99, 116
Cultural resources, 3, 70, 91, 99, 113, 127
Cutoff to the Barlow Road, 3, 71

D

Delphi Process, 3, 132
Dempsey-Hockaday Cutoff, 3, 38
Department of Defense, 3, 49, 63, 103

E

Easements, 3, 52, 54, 64, 67
Eastern Feeder Routes, 3, 37
End of the Oregon Trail Interpretive Center, 3, 54
Environmental Consequences, 3, 113
Environmental Impact Statement, 3-4, 42, 127, 132, 133
Ethnographic resources, 3, 84, 91, 99, 117

F

Fauna, 3, 91
Feasibility Study, 3, 4, 36, 41, 103-104
Federal Register, 3, 4, 35-36, 40-41, 131-132
Fee-simple ownership, 3, 52, 67
Final Environmental Impact Statement, 3, 4, 127, 132
Fish and Wildlife Service, 3, 49, 63, 95-96, 103, 113, 127, 130, 131
Flagstaff Hill/National Historic Oregon Trail Interpretive Center, 3, 54
Forest Service, 3, 26, 49-50, 54, 63-67, 69, 91, 103-104, 127
Fort Laramie National Historic Site, 3, 54, 130
Fort Leavenworth-Big Blue River Route, 3, 72
Fort Leavenworth-Kansas River Route, 3, 72
Free Emigrant Road, 3, 71
Funding, 3, 50-51, 53, 64-65, 68, 78-79

G

Georgetown/Dagget Pass Trail, 3, 74
GIS mapping, 3, 42, 51, 66-67, 103
Goodale's Cutoff, 71
Goodale's Cutoff, 3
Great Basin, 3, 25, 30-32, 37, 91, 93, 98, 100-101
Greenhorn Cutoff, 3, 74
Grizzly Flat Cutoff, 3, 74
Gum Springs-Fort Leavenworth Route, 3, 72

H

Hagerman, 3, 71
Hagerman Fossil Beds National Monument, 3, 130
Hastings Cutoff, 3, 38, 41, 73-74, 93
Heritage tourism, 3, 65
High-potential segments, 3, 42-43, 47, 68, 80, 99
High-potential sites, 3-4, 42-43, 47, 51, 53, 64-67, 77, 80, 99, 131-132
Historic Nauvoo, 3, 53

INDEX

Historical Overview, 3, 29, 31, 33, 53
 Hudspeth Cutoff, 3, 39
 Humboldt River route, 3, 75
 Humboldt Sink, 3, 32, 36, 39

I

Idaho, 3, 29-30, 32, 35-38, 53-54, 71, 73, 93, 97, 104, 107, 129
 Illinois, 3-4, 30, 40, 53, 93, 104-105
 impacts, 3-4, 25-26, 47, 53-54, 65, 68, 70, 113, 115-117, 119, 121, 123, 127, 363
 income, 3, 91, 105-107, 110, 367
 Independence Road, 3, 36-37, 71, 72
 Index of vulnerability, 3, 67
 Interagency cooperation, 3, 50, 63-64, 79, 131
 Interpretation, 3, 4, 26, 47, 50, 52, 53, 54, 63-65, 67-69, 78, 81-82, 84-85, 95, 115, 117, 119
 Interpretive facilities, 3, 53-54, 68-70
 Interpretive Media and Outreach Activities, 3, 53, 68, 81
 Interpretive Themes, 3, 29, 31, 53, 68-69, 81, 131
 Iowa, 3, 40, 53, 93, 104, 105
 Irreversible and irretrievable, 3, 87, 113, 123
 Issues and concerns, 3-4, 26, 113, 131

J

Johnson Cutoff, 3, 39, 41, 74
 Julesburg Cutoff, 3, 37

K

Kansas, 3, 30, 35-37, 41, 72, 93, 95, 99, 104, 106
 Kinney Cutoff, 3, 38

L

Lakota, 3, 100-101
 Land use, 3, 49, 68, 104, 121
 Lander Road, 3, 37, 52
 Landownership and use, 3, 70, 86, 91, 103, 121
 Landscapes, 3, 25, 66-67, 70, 91, 95, 98-99, 113, 116, 123, 362
 Laramie Peak, 3, 32, 41
 Lassen Trail, 3, 40, 75
 Lassen Volcanic National Park, 3, 40, 130
 Legislative Authority, 3, 4, 206
 Long Distance Trails Office, 3-4, 42-43, 49-51, 53-54, 63-71, 77-81, 91, 95, 131-132
 Lower Bellevue Route, 3, 73
 Lower Plattsmouth Route, 3, 72
 Luther Pass Trail, 3, 74

M

Main Trail from Independence, 3, 36
 Management corridors, 3, 52, 68, 80, 83, 206
 Management objectives, 3, 50, 52, 68, 131
 Mapping, 3, 51, 66, 70, 134

McAuley Cutoff, 3, 74
 Meek Cutoff, 3, 71
 Memorandum of understanding, 3, 47, 50, 64-65, 79
 Mississippi River, 3, 25, 29, 40, 93
 Missouri, 3, 29-32, 35-37, 40-41, 53, 72-73, 91, 93, 95, 100, 104-105, 130, 132
 Missouri River, 3, 29-32, 37, 40-41, 72-73, 91, 93, 100
 Mojave Road, 3, 75
 Mormon Pioneer National Historic Trail, 3-4, 25, 33, 40, 43, 52, 99, 105, 132
 Mormon Trail associations, 3, 51, 64-66
 Mormon Trail to Southern California, 3, 75

N

Naches Pass Trail, 3, 71
 National Environmental Policy Act, 3-4, 113, 127
 National Frontier Trails Center, 3, 53
 National Oregon/California Trail Center, 3, 54
 National Pony Express Association, 3, 51, 64-66, 131, 133
 National Trails System Act, 3-4, 25-26, 35-36, 40-42, 47, 49-54, 63, 65-66, 68, 77, 80, 132, 206
 Natural resources, 3, 95, 113, 127-128, 130
 Nebraska, 3, 27, 32, 35-37, 41, 53, 72-73, 93, 96, 99, 104, 106, 130-132
 Nebraska City Cutoff, 3, 72
 Nevada, 3, 30, 32, 36-39, 41, 54, 73-75, 93, 98-99, 104, 107, 110, 129, 130, 132
 Nevada City Road, 3, 74-75
 Newsletters, 3, 64, 132
 Nobles Trail, 3, 40
 North Alternate Oregon Trail, 3, 71
 North Platte River, 3, 32, 35-37, 41, 73, 206
 North Side Alternate Route, 3, 71

O

Old Fort Kearny Road (Oxbow Trail), 3, 37
 Oregon, 3-4, 25, 29, 30-33, 35-42, 47, 49, 51-54, 64-68, 70-75, 77, 91, 93, 97, 99, 100, 103-104, 110, 127, 129-133
 Oregon National Historic Trail, 3, 25, 33, 35, 42, 52, 70-71, 99, 132
 Overland Trail, 3, 73, 75

P

Pacific Northwest, 3, 25, 32-33, 70, 97, 98
 Paiute, 3, 39, 100-101
 Patee House, 3, 53
 Physiography and Soils, 95-98
 Placer County Road to Auburn, 3, 75
 Platte River, 3, 32, 35-37, 41, 72-73, 91, 93, 96
 Pony Express Museum, 3, 53
 Pony Express National Historic Trail, 3, 25, 33, 41, 104
 Pony Express Trail Association, 3, 51, 64-66, 131, 133
 population, 3, 30, 47, 63, 65, 91, 96-97, 104-107, 110
 Prime and unique farmlands, 3, 95, 113

Protection Plan, 3, 51, 64, 66, 77-78, 80
 Protection Tools, 3, 52, 67
 Public Awareness, 3, 50, 54, 64-65, 79, 83-84, 116-117
 Public Meetings, 3-4, 132
 Purpose and significance, 3-4, 25, 131-132

R

Raft River, 3, 32, 37-39, 74, 97
 Recreation, 3-4, 42, 47, 49, 51-52, 63, 65, 68, 130
 Regional Landscapes, 3, 95
 Regulatory processes, 3, 52, 67
 Research needs, 3, 26, 52, 64, 67, 80, 85, 119
 Resource inventory, 3, 47, 51, 66, 80, 83, 116, 131
 Resource monitoring, 3, 47, 53, 68, 80, 82, 115
 Resource protection, 3-4, 26, 47, 50-52, 63-67, 131
 Road from Lower Independence Landing, 3, 71
 Road from Minersville to Nebraska City, 3, 72
 Road from Old Wyoming to the Nebraska City Cutoff, 3, 72
 Road to Amazonia, 3, 72
 Rocky Mountains, 3, 30, 32, 73, 91, 93, 96, 106
 Roller Pass, 3, 39
 Routes from Atchison and Independence Creek, 3, 72

S

Sacramento-Coloma Emigrant/Wagon Road, 3, 74
 Salt Lake Cutoff, 3, 38-39
 Santa Fe Trail, 3, 30, 35-36, 72-73, 75
 Secret Pass, 3, 74
 Seminoe Cutoff, 3, 37
 Servicewide memorandum of understanding, 3, 47, 50, 64-65, 79
 Sierra Nevada, 3, 29-30, 32-33, 37, 39-41, 73-75, 91, 93, 98
 Significant resources, 3, 35, 37, 42, 50, 66-67, 77
 Site development, 3, 27, 113
 Slate Creek Cutoff, 3, 38, 206
 Snake River, 3, 32, 35-37, 71, 91, 93, 97, 129-130, 206
 Socioeconomic conditions, 3, 86, 91, 103, 105, 107, 109, 121
 South Pass, 3, 30-32, 35-36, 38-39, 41, 52, 206
 South Platte River, 3, 37, 93, 96
 Southern Road to Oregon, 3, 40
 Southern Routes, 3, 75
 St. Joe Road, 3, 36, 37, 41, 72
 St. Joseph, 3, 31-32, 37, 41, 53, 93, 104
 Sublette Cutoff, 3, 38-39
 Sweetwater River, 3, 36-37, 41, 93, 96

T

Tamastlikt Cultural Institute, 3, 54
 Threatened and endangered species, 3, 113, 131
 Trail marking, 3, 47, 50, 53, 64-66, 116, 121
 Trail organizations, 3, 26, 42, 51, 53, 66, 68
 Trail promotion, 3, 50, 65-66, 79, 82, 86, 115, 121
 Truckee Route, 3, 39, 74-75

U

Unavoidable Adverse Effects, 87, 123
 Union Ferry Route, 3, 72
 United States Army, 3, 70
 Upper Bellevue Route, 3, 73
 Upper Columbia River Route, 3, 71
 Upper Plattsmouth Route, 3, 72
 Utah, 3-4, 30, 37-38, 41, 49, 54, 63, 73, 93, 98, 104, 107, 129-130, 132

V

Vegetation, 3, 26, 67, 83, 87, 91, 95-99, 116, 123
 Visitor experience, 3-4, 26, 47, 53-54, 67-70, 113, 119, 123, 131, 364
 Visitor use, 3-4, 26, 47, 54, 63, 65, 67, 70, 82-87, 113, 115, 116, 119, 121, 206

Visitor Use Monitoring Program, 3, 70
 Volcano Road, 3, 74
 Volunteers and Liability, 3, 51, 65

W

Walker River–Sonora Trail, 3, 39
 Washington, 3, 29, 31, 71, 75, 129-130
 Water Quality, 3, 82, 115-116
 Water Resources and Floodplains, 3, 95-98, 206
 Wayside Exhibits, 3, 53, 68-69, 81, 83, 86, 116, 121
 Weber Canyon Route, 3, 73
 Western Historic Trails Center, 3, 53, 130
 Western Routes, 3, 39
 Westport Landing Road, 3, 72
 Westport Road, 3, 36, 72

Westport-Lawrence Road, 3, 36, 72
 Wetlands, 3, 95, 113, 127
 Whiskeytown-Shasta-Trinity National Recreation Area, 3, 130
 Whitman Mission National Historic Site, 3, 130
 Whitman Mission Route, 3, 71
 Wildlife, 3, 49, 63, 83, 95-99, 103, 113, 116, 127, 130-131, 367
 Winter Quarters, 3, 41, 53
 Woodbury Cutoff, 3, 73
 Workshops, 3, 25, 131, 132
 Wyoming, 3, 27, 29-30, 32, 35, 37-38, 41, 52-54, 72-73, 93, 96-98, 104-107, 129, 131-132, 361

Y

Yreka Trail, 3, 75