draft eligibility/feasibility study
environmental assessment
for national historic trail authorization
This planning study has not yet been approved. It is a public review draft to provide information for further consideration and discussion, and it may undergo considerable revision.
DRAFT ELIGIBILITY/FEASIBILITY STUDY
and
ENVIRONMENTAL ASSESSMENT
for
NATIONAL HISTORIC TRAIL AUTHORIZATION

CALIFORNIA AND PONY EXPRESS TRAILS
Missouri, Iowa, Nebraska, Kansas, Colorado,
Wyoming, Utah, Idaho, Nevada, California, Oregon

U.S. Department of the Interior / National Park Service
CALIFORNIA TRAIL

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>HISTORICAL BACKGROUND</td>
<td>25</td>
</tr>
<tr>
<td>Early Routes--1841 to 1844</td>
<td>25</td>
</tr>
<tr>
<td>Trail Development between 1844 and 1849</td>
<td>30</td>
</tr>
<tr>
<td>Eastern Feeder Routes</td>
<td>30</td>
</tr>
<tr>
<td>Central Cutoffs</td>
<td>30</td>
</tr>
<tr>
<td>Sublette Cutoff</td>
<td>30</td>
</tr>
<tr>
<td>Hastings Cutoff</td>
<td>30</td>
</tr>
<tr>
<td>Salt Lake Cutoff</td>
<td>32</td>
</tr>
<tr>
<td>Western Routes</td>
<td>32</td>
</tr>
<tr>
<td>Carson Route</td>
<td>32</td>
</tr>
<tr>
<td>Applegate Trail</td>
<td>33</td>
</tr>
<tr>
<td>Lassen Trail</td>
<td>33</td>
</tr>
<tr>
<td>The Years of the Gold Rush</td>
<td>34</td>
</tr>
<tr>
<td>Use of the Early Routes</td>
<td>35</td>
</tr>
<tr>
<td>Hudspeth Cutoff</td>
<td>35</td>
</tr>
<tr>
<td>Trail Modifications after the Gold Rush</td>
<td>36</td>
</tr>
<tr>
<td>Eastern Feeder Routes</td>
<td>36</td>
</tr>
<tr>
<td>Central Cutoffs</td>
<td>36</td>
</tr>
<tr>
<td>Childs Cutoff</td>
<td>36</td>
</tr>
<tr>
<td>Seminole Cutoff</td>
<td>36</td>
</tr>
<tr>
<td>Other Cutoffs</td>
<td>36</td>
</tr>
<tr>
<td>Western Routes</td>
<td>37</td>
</tr>
<tr>
<td>Beckwourth Trail</td>
<td>37</td>
</tr>
<tr>
<td>Nobles Road</td>
<td>37</td>
</tr>
<tr>
<td>Sonora Road</td>
<td>38</td>
</tr>
<tr>
<td>Other Routes</td>
<td>38</td>
</tr>
<tr>
<td>ESTABLISHMENT AND MANAGEMENT ALTERNATIVES</td>
<td>39</td>
</tr>
<tr>
<td>Alternative A: No Authorization (No Action)</td>
<td>39</td>
</tr>
<tr>
<td>Management Philosophy</td>
<td>39</td>
</tr>
<tr>
<td>Administration</td>
<td>39</td>
</tr>
<tr>
<td>Resource Protection</td>
<td>39</td>
</tr>
<tr>
<td>Within Federal Areas</td>
<td>39</td>
</tr>
<tr>
<td>Outside Federal Areas</td>
<td>39</td>
</tr>
<tr>
<td>Marking the Route</td>
<td>39</td>
</tr>
<tr>
<td>Physical Development, Interpretation, Public Access, and Use</td>
<td>40</td>
</tr>
<tr>
<td>Alternative B: Authorization of All California Trail Routes</td>
<td>40</td>
</tr>
<tr>
<td>Management Philosophy</td>
<td>40</td>
</tr>
<tr>
<td>Proposed Routes</td>
<td>40</td>
</tr>
<tr>
<td>Administration</td>
<td>43</td>
</tr>
<tr>
<td>Resource Protection</td>
<td>43</td>
</tr>
<tr>
<td>Within Federal Areas</td>
<td>43</td>
</tr>
<tr>
<td>Outside Federal Areas</td>
<td>44</td>
</tr>
<tr>
<td>Marking the Trail</td>
<td>44</td>
</tr>
<tr>
<td>Physical Development, Interpretation, Public Access, and Use</td>
<td>45</td>
</tr>
<tr>
<td>Cost Estimates</td>
<td>45</td>
</tr>
</tbody>
</table>
Alternative C (Preferred): Authorization of a Continuous, High-Value Route 49
Management Philosophy 49
Proposed Routes 49
Administration 50
Resource Protection 53
Within Federal Areas 53
Outside Federal Areas 53
Marking the Trail 53
Physical Development, Interpretation, Public Access, and Use 53
Cost Estimates 54
Alternative D: Authorization of a Continuous Route, with Development Limited to High-Value Segments and Sites within Federal Areas 57
Management Philosophy 57
Proposed Routes 57
Administration 58
Resource Protection 58
Within Federal Areas 58
Outside Federal Areas 58
Marking the Trail 58
Physical Development, Interpretation, Public Access, and Use 61
Cost Estimates 61

PONY EXPRESS TRAIL

HISTORICAL BACKGROUND 65
Overview 65
Establishment of the Pony Express 66
Start of Service 67
Financial Problems and End of Operations 68
Significance of the Pony Express 69
The Pony Express Route 69
Missouri 70
Kansas 70
Nebraska/Colorado 70
Wyoming 73
Utah 73
Nevada 74
California 74

ESTABLISHMENT AND MANAGEMENT ALTERNATIVES 76
Alternative A: No Authorization (No Action) 76
Management Philosophy 76
Administration 76
Resource Protection 76
Within Federal Areas 76
Outside Federal Areas 76
Marking the Route 76
Physical Development, Interpretation, Public Access, and Use 76
Alternative B: Authorization of All Routes Used by the Pony Express 77
Management Philosophy 77
Proposed Routes 77
Administration 77
Resource Protection 77
Within Federal Areas 77
Outside Federal Areas 78
Marking the Trail 78
Physical Development, Interpretation, Public Access, and Use 81
Cost Estimates 81
Alternative C (Preferred): Authorization of the Original Pony Express Route 85
Management Philosophy 85
Proposed Route 85
Administration 85
Resource Protection 86
Within Federal Areas 86
Outside Federal Areas 86
Marking the Trail 86
Physical Development, Interpretation, Public Access, and Use 86
Cost Estimates 89
Alternative D: Authorization of a Continuous Route, with Development Limited to High-Value Segments and Sites within Federal Areas 91
Management Philosophy 91
Proposed Route 91
Administration 91
Resource Protection 91
Within Federal Areas 91
Outside Federal Areas 92
Marking the Trail 92
Physical Development, Interpretation, Public Access, and Use 92
Cost Estimates 92

ENVIRONMENTAL ASSESSMENT

REGIONAL SETTING 99
Physical Environment 99
Population and Economy 100
Transportation and Access 100
Mineral and Energy Resources 101
Current Recreation Resources 101

EXISTING CONDITIONS 103
Landownership and Land Uses 103
California Trail 103
Pony Express Trail 104
Threats to Trail Resources 108
Current Public Use, Development, and Access 108
California Trail 108
Present and Projected Uses 108
National Trails System 4
Preferred Alternative: California National Historic Trail 17
Preferred Alternative: Pony Express National Historic Trail 19
California Trail System 27
California National Historic Trail Alternatives
  Alternative B: Authorization of All Routes 41
  Alternative C: Authorization of a Continuous, High-Value Route 51
  Alternative D: Authorization of a Continuous Route, with
  Development Limited to Federal Areas 59
Pony Express Trail 71
Pony Express National Historic Trail Alternatives
  Alternative B: Authorization of All Routes 79
  Alternative C: Authorization of the Original Route 87
  Alternative D: Authorization of a Continuous Route, with
  Development Limited to Federal Areas 93
Landownership along California and Pony Express Trails 105

1. Summary of Western Emigration, California and Oregon Trails, 1840-1860 35
2. Cost Estimates, Alternative B, California Trail 47
5. Cost Estimates, Alternative B, Pony Express Trail 83
6. Cost Estimates, Alternative C, Pony Express Trail 89
7. Cost Estimates, Alternative D, Pony Express Trail 95
8. Landownership along the California Trail System 103
9. Major Land Uses along the California Trail System 104
10. Landownership along the Pony Express Trail 107
11. Major Land Uses along the Pony Express Trail 107
12. Effects on Historic Resources 115
13. Effects on Natural Resources 116
14. Effects on Public Access and Recreational Use 117
15. Effects on Landownership and Land Uses 118
16. Effects on Local Economies 119
17. Summary of Cost Estimates 120
INTRODUCTION

PURPOSE OF THE STUDY

In August 1984 Congress directed the Department of the Interior to study the feasibility and desirability of adding two trails—the California (Emigrant) Trail and the Pony Express Trail—to the national trails system (Public Law 98-405). The National Park Service, as the agency charged with completing the study, has compiled available information on the national significance of the trails, historical background, and the potential for public use. This report examines the eligibility of the trails for national trail authorization, and it presents feasible management alternatives. Actual authorization of the trails as components of the national trails system and determination of the most desirable management alternative will require passage of legislation by Congress. In authorizing a trail Congress may set forth special conditions that apply only to a particular trail.

BACKGROUND INFORMATION

The National Trails System

In recognition of a growing need for outdoor recreational opportunities, and as an adjunct to recreational needs being served by national parks, wildlife refuges, and forests, Congress passed the National Trails System Act (PL 90-543) in 1968. The purpose of the act was to develop a system of trails in both urban and rural settings for use by persons of a variety of ages, abilities, interests, and backgrounds.

Originally the act specified three categories of national trails: scenic trails, recreation trails, and connecting or side trails. In 1978, however, historic trails were added as another category. These various trails are defined as follows:

National scenic trails are extended trails that are located to maximize outdoor recreation potential while providing for the conservation and enjoyment of nationally significant scenic, historical, natural, or cultural qualities of areas through which the trails pass.

National recreation trails emphasize the recreational aspects of trail use more than scenic quality, and they must be reasonably accessible to urban areas.

National historic trails are extended trails that follow original trails or routes of travel of national historical significance. They are established to identify and protect a historic route, plus its historic remnants and artifacts, for public use and enjoyment.

National scenic and historic trails can only be designated by Congress, through amendment of the National Trails System Act. Recreation and
connecting or side trails may be designated and established by the secretary of the interior, or the secretary of agriculture, as appropriate.

The amendment of the National Trails System Act authorizing studies of the California and Pony Express trails did not specify which of the three trail categories would be most appropriate. However, it is apparent that these trails do not meet the basic criteria for either the scenic or recreation category, so the study has only considered their qualifications as historic trails.

In its general provisions the National Trails System Act authorizes the use of federal funds for land acquisition for national scenic or historic trails. For example, such expenditures have been authorized for the Appalachian Trail. However, Congress has generally prohibited the use of federal funds for such acquisition in the specific legislative language authorizing most other trails in the system.

Criteria for National Historic Trail Designation

The National Trails System Act, as amended by PL 95-625, establishes the following criteria for a national historic trail:

(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. . . .

(B) It must be of national significance with respect to any of several broad facets of American history, such as trade and commerce, 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. . . .

(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.

These criteria were evaluated for both the California and Pony Express trails, and the factors that would qualify these trails as national historic trails are described in more detail below.
ELIGIBILITY OF TRAILS

For this report the value of a particular trail route, segment, or historic site in terms of qualifying for authorization as a national historic trail depends on its significance, integrity, and potential for public use and enjoyment. National historical significance is the major consideration, for without significance the resource would not be eligible for consideration. Integrity refers to how much of the original historic resource remains identifiable and visible for the public, and can also be interpreted or used. Potential for public use is rated as the least important factor in determining historic trail value because the lack of such potential (for example, lack of access) does not diminish the resource's significance or integrity, nor does it lessen the federal mandate to protect such resources as a part of the nation's cultural heritage and for the benefit of future generations.

California Trail

National Significance. The California Trail, particularly those portions that were pioneered and developed before the 1849 California gold rush, has substantial national significance. The trail was the route of the greatest mass migration in American history, and today the remnants of the trail are reminders of the sacrifices, struggles, and triumphs of early American travelers and settlers. This emigration contributed directly to the occupation, settlement, and development of the western part of the United States, from the western plains to the Pacific coast.

The California Trail system was developed over a period of years, and numerous cutoffs and alternative routes were tried to find the "best" in terms of terrain, length, and sufficient water and grass for livestock. But when dealing with a trail system that includes so many routes and cutoffs, the question is whether some portions are historically more significant than others. Given the varying regional perspectives of both the general public and professional historians, there are some genuine differences of opinion. Because of these differences, the process of choosing which segments are significant enough to be established as part of a historic trail becomes, as Congress intended, a public process.

Resource Integrity. The integrity of trail resources—that is, actual trail ruts or other obvious traces that may be considered for protection, management, and use—is easily described in general terms. The entire trail system, including all cutoffs and alternative routes, is approximately 5,665 miles.* Based on surveys from 1979 through 1985 for various trail

* Some 1,873 miles of the total 5,665 miles of the California Trail system have already been designated as part of the Oregon and Mormon Pioneer national historic trails. All three of these emigrant trails follow virtually the same route for 500 miles, from Independence, Missouri, to the Raft River in Idaho.
segments (including those for the Oregon Trail), and on figures provided by state and federal land-managing agencies, approximately 20 percent of the complete California Trail system, or about 1,100 miles of trail ruts and traces, can be seen. Most of these ruts and traces are west of Casper, Wyoming, where large tracts of public or private land are still undeveloped. East of Wyoming few traces of the route exist.

An estimated 320 historic sites along the entire California Trail system could be used in public interpretive programs. These include forts, trading posts, natural landmarks that guided emigrants, river crossing sites, campsites, trail junctions, and gravesites. Of these sites, 100 are already associated with the Oregon and Mormon Pioneer national historic trails. Of the 320 sites, 74 (23%) are in federal ownership, 70 (22%) are owned by states, 48 (15%) are under the jurisdiction of cities or counties, and 128 (40%) are privately owned.

Potential for Public Use. The potential for public use of various segments and historic sites is difficult to determine at this time. The greatest potential appears to be generally west of Casper, Wyoming, because so much of this land is publicly owned. Some 1,400 miles and 192 sites on public lands (federal, state, county, or city) are theoretically accessible to the public. But in many cases a management policy, or the lack of a commitment of financial resources by the appropriate agency, are preventing the identification of trail resources on public lands and the development of physical facilities such as access roads, trailheads, or exhibits to allow use. In some situations an agency may simply have failed to take steps to identify resources under its jurisdiction, but in others there are legitimate reasons for not identifying such resources. For example, without funding to provide physical protection of a site from vandalism, it is perhaps wiser to avoid encouraging visitor use. For trail resources on private inholdings within the boundaries of publicly managed lands, it has been difficult to negotiate permanent public access because an agency may not be able to assure landowners that their legitimate rights will not be inadvertently compromised.

The feasibility of marking an automobile route that retraces the approximate route of any of the historic trails is very high because many nearby hard-surfaced public roads already exist. Public roads connecting to the trail itself would be less easy to guarantee because many such roads would have to cross private lands.

The potential for public use of existing historic sites on private land cannot be easily predicted. Some private owners may think that public access is completely incompatible with their own land uses, others may be willing to grant access on a case-by-case basis, and still others may be willing to consider providing permanent public access.
Pony Express Trail

National Significance. The trail ridden by the Pony Express from April 1860 through October 1861 represents an episode in the development of the West that has justly captured a place in American history. Organized by private entrepreneurs, the horse-and-rider relay system became the nation's most direct and practical means of east-west communications before the telegraph. The trail proved the feasibility of a central overland transportation route and demonstrated that such a route could be used year-round, thus showing that a cross-country railroad could be built. During its 18 months of operation, the Pony Express carried mail between St. Joseph, Missouri, and Sacramento, California, in the unprecedented time of only 10 days. By providing a link between the eastern states and California just before the Civil War, the Pony Express played a vital role in aligning California with the Union. Perhaps just as important was the individual and collective heroism and determination of Pony Express riders and station masters, which has left generations of Americans with remarkable examples of courage, endurance, and spirit of which the nation can be proud.

Resource Integrity. There are few historic remains of the actual Pony Express Trail because the solitary riders left little physical trace of their passage. Also the trail often changed from week to week because of weather, passability of streams, or danger of Indian attacks. But numerous historic sites are associated with the trail. Apparently the Pony Express used more than 150 stations, of which only about a third still show identifiable remains. There are also many other associated forts, trading posts, and stage stations, as well as dozens of reliably known river crossings and natural landmarks, that could be used in a public interpretation program.

Potential for Public Use. Portions of the Pony Express Trail and historic sites already on public land (some 60% of the route and many of the historic sites) are theoretically accessible to the public. But few sites have been precisely identified or marked, and access is not readily available to the general public. The absence of adequate funding to provide even minimum protection for historic sites, and difficulties associated with private inholdings within blocks of public land, have caused some managing agencies to avoid actively encouraging additional public use.

Marking an automobile route that retraced the approximate historic route of the Pony Express would be feasible in most states. But marking would be more difficult in western Wyoming and eastern Nevada, where relatively few public roads are near the trail. Routes connecting public roads to several long historic trail segments in these two states would be difficult to provide. The potential for public use of existing historic sites on private lands cannot be easily predicted.
Conclusion

On the basis of national significance, integrity of resources, and potential for public use, this study concludes that both the California and Pony Express trails are eligible to be authorized as national historic trails. Once this document has been reviewed by state and local governments and the public, the National Park System Advisory Board will make its judgment whether the California and Pony Express trails are in fact eligible for authorization as national historic trails.

FEASIBILITY AND DESIRABILITY

In addition to reaching a conclusion about the eligibility of both trails as national historic trails, this study also considers the feasibility of various management alternatives. The alternatives calling for authorization of a national historic trail would meet the protection and public use mandates of the National Trails System Act.

A preferred alternative (alternative C) has been selected for each trail. This preliminary selection indicates the course of action that appears to be most desirable and realistic in terms of federal funding. It also outlines cooperative working relationships with state and local agencies and the private sector to protect and manage trail resources. The preferred alternatives would also be the most cost-effective.

The next step in the review process will be for the public and appropriate agencies to comment on the alternatives that they think are the most desirable. On the basis of this information the draft report may be revised. It will then be forwarded to Congress, together with the eligibility determination of the National Park System Advisory Board and the secretary of the interior's recommendation. Congress will make the final decisions about trail authorization and establishment.

FUTURE PLANNING REQUIREMENTS

If the California and the Pony Express trails were authorized, the next step would be the preparation of a comprehensive management plan for each trail. Prepared under the leadership of the National Park Service, the plans would contain much greater detail on the specific management, development, and use of each trail. They would also define the roles and responsibilities for federal, state, and county agencies, and for private citizens or groups, for particular segments, sites, or functions. After the comprehensive management plans were approved, area-specific operational plans would be prepared to define what each agency would undertake in terms of operations, staffing, and development. For nonfederal lands along the authorized trail, the owners would have to apply for certification of trail segments before those segments could be formally considered part of the national trail. According to the National Trails System Act, certification would be granted if the segments met the criteria for a national historic trail and any further criteria listed in the comprehensive plan.
OVERVIEW OF ALTERNATIVES

ISSUES ADDRESSED

The following broad issues have been identified during the course of the feasibility and desirability studies for the California and Pony Express trails:

Basic management philosophy--The most important management issue is the extent to which the public and private sectors are to be involved in the initial financing and development of trail resources and support facilities, and in their future protection and operation. A related issue is the scope of authorization itself--whether all possible routes, sites, and structures would be included, and what standards should be set for protecting identified resources.

Routes to be designated--For both the California Trail and Pony Express Trail there must be a specific determination about which of the many well-known routes and cutoffs are worthy of designation from the perspective of national significance, historical integrity, and potential for public use.

Extent of trail resource protection within federal areas--For the trail resources on federal lands, standards need to be established for research, protection, stabilization, or reconstruction of trail traces, station sites, or associated structures. Standards could be uniformly high for all identified resources, or a priority system could be established that would focus attention on the more significant resources.

Extent of trail resource protection outside federal areas--One major concern is the effect of historic trail designation on trail resources on private lands. Options for protection include federal acquisition of the most significant and threatened resources, and nonacquisition methods, like negotiated cooperative agreements and other cooperative ventures that would link federal agencies with local governments and the private sector. Authorization could actually decrease federal responsibility for resources outside federal lands because the states, counties, and the private sector could assume this responsibility. Some public concern has been expressed as to what extent trail traces should be made passable to four-wheel-drive vehicles and how to protect the legitimate rights of private landowners who do not choose to provide public access to trail segments.

Marking the route--Options for route marking include marking only the designated trails themselves, marking automobile routes that generally follow the historic route, or providing more-or-less detailed maps of automobile and connecting routes.
Physical development, interpretation, public access, and use—For authorized trails, the appropriate level of facility development (for example, trailheads, information centers, and smaller information/interpretive facilities) must be identified, as well as funding sources. Decisions are also needed about the level of public access and whether additional public use should be encouraged.

These issues are addressed in various ways by the alternatives described below.

ALTERNATIVE APPROACHES AND ENVIRONMENTAL CONSEQUENCES

As previously stated, only historic trail authorization is being considered for the California and Pony Express trails, and either or both of them could be authorized. The alternatives for establishment and management, and the consequences of their implementation, are summarized below. These alternatives relate generally to both the California and Pony Express trails; specific alternatives and routes for each trail are presented in later sections of this report.

Alternative A: No Authorization

This alternative would not recommend authorization for either trail. The national significance of the trails is not disputed, and it is clearly important to protect whatever remains of them. However, under this alternative the present level of protection afforded the many resources already on federal lands, coupled with current or anticipated state and private initiatives, would be expected to be adequate.

An administrative consequence of this approach would be to eliminate any NPS role in coordinating the trail management effort. Federal involvement would continue primarily through the Bureau of Land Management and the Forest Service, which already have historic resources under their jurisdiction. Federal support and encouragement of private or state efforts would continue to be minimal.

Alternative B: Authorization of All Routes and Cutoffs, with Substantial Federal Involvement

All routes and cutoffs of the California Trail, regardless of whether they were constructed before or after the gold rush, would be authorized as a national historic trail. For the Pony Express, the original route and subsequent route changes, plus all station sites with associated structures, would be authorized. Authorization would extend to all routes on federal and nonfederal lands. All legitimate trail resources would be identified, researched, protected, and stabilized. To ensure the protection of nonfederal resources on private inholdings within federal areas, some private properties that contain critical or especially threatened resources could be acquired by the federal government. As
the law requires, state and local governments would be encouraged to protect trail resources and to obtain a right-of-way on lands outside federal areas. If, however, the state or local governments failed to act, the approach under alternative B would be for the appropriate federal administrator to actively pursue cooperative agreements for trail use, or to acquire lands if necessary.

Visitor centers at trail starting and ending points and at several regional locations, along with additional interpretive exhibits and trailheads, would be developed. Significant federal contributions would be made to activities and programs, such as planning, design, and exhibits. Additional access routes would also be developed, and a wide range of recreational activities would be promoted, consistent with the protection of trail resources. The secretary of the interior would be charged with overall administration of both trails, and the National Park Service would be the responsible agency.

The consequences of this approach would include high levels of protection for the largest number of historic trail resources. Natural resources (wildlife, vegetation, and soils) could indirectly benefit because of increased protection of historic resources on both federal and nonfederal lands.

Coordinated marking of all routes would enhance public recognition of the historic trail alignments, and it would make it easier for people to retrace the route, either on the actual trail or on nearby public roads. The inclusion of all possible routes could lead to public confusion about whether all routes were equally significant, and the effect of national historic trail status could be diminished. The development of extensive visitor facilities would maximize interpretive opportunities and encourage greater recreational use and enjoyment of the trails. Communities where visitor centers were developed could benefit through increased civic pride and prestige, and increased tourism could have a positive economic benefit.

This alternative represents the most active federal role that could be pursued under the National Trails System Act. Consequently, federal funding contributions would be substantially greater than they are now. Federal costs for initial physical development would be greater than for any other alternative considered. Federal costs for cooperative management agreements or for the acquisition of private lands could be substantial if state and local governments failed to provide the needed level of protection for trail resources.

Alternative C (Preferred): Authorization of Continuous High-Value Routes, with Shared Federal, State, and Private Responsibilities

Under this alternative a judgment would be made about the historical significance of various routes, and the most significant segments would be authorized as a continuous national historic trail. Responsibilities for
management outside federal areas would rest primarily with states, local governments, and private authorities, with technical assistance and coordination being provided by the National Park Service. A priority system for resource protection would be established to ensure that the most significant or threatened historic resources were protected, regardless of the funding source. The protection of trail resources on private lands (inholdings) within federal areas would be principally by cooperative agreement, and acquisition would be used only where this approach failed or where high-value resources were severely threatened.

Private lands outside federal areas would not be acquired by the federal government, even where state or local governments failed to protect resources or acquire them. The preferred method of protection would be for the federal managing agency to negotiate cooperative agreements with private landowners, states or counties, or private societies. These agreements could cover protection, public access, or public facilities, with necessary federal financial support being made available to accomplish any or all of these goals.

This alternative would propose visitor centers as described under alternative B. The centers would provide information and interpretation about the complete trails, and all would be roughly equivalent in size and scope. However, under alternative C the federal contribution would be limited to technical assistance in planning and design, but it would not extend to exhibits or other direct aid. Additional small-scale interpretive sites would be developed at easily accessible points along the trail. For those interpretive sites outside federal areas, technical assistance in planning and design could be provided by the National Park Service. A limited increase in the number of public access roads and trailheads would be proposed, some of which would be developed on nonfederal lands through cooperative agreements.

Consistent marking of the actual route would take place, and appropriate automobile retracement roads along the route would be signed. However, detailed automobile tour maps would have to be produced through private enterprise. The Park Service would produce a general information brochure for each trail.

The environmental consequences of this alternative would include the protection of the most important historic trail resources within the boundaries of federal lands, with less important federal resources receiving little or no additional protection. For resources outside federal areas the levels of protection would depend on actions by state and local governments or, if no action was taken, on the success of federal negotiations for cooperative agreements. Some indirect natural resource benefits could result from these historic site protection strategies.

Coordinated marking of the relatively few high-value routes would make it easier for visitors to retrace the most important segments of the actual trail, and it might eliminate confusion about the less significant subsidiary routes. However, following the routes in vehicles would be facilitated only if a suitable map and guide were produced by private enterprise.
Visitor facilities would offer more opportunities for interpretation than at present. The communities where visitor centers were developed could receive economic and social benefits. Improving access to resources on nonfederal lands (through negotiated agreements) would increase recreational opportunities for visitors without raising federal costs or dislocating private landowners.

Alternative D: Authorization of Continuous Routes, with Development Limited to High-Value Segments and Sites within Federal Areas

Under this alternative historic trail authorization would be extended to a full and continuous route for each trail, as required by the National Trails System Act, but federal attention would be focused only on high-value segments or sites within the established boundaries of federally owned land management units. The first priority for federal involvement would be the protection of trail resources within federal areas, and the second priority would be the development of access or interpretive facilities. Resources on nonfederal lands would continue to be the responsibility of their respective private, state, or county owners, and there would be little administrative encouragement for these owners to have their lands officially certified as part of the historic trail.

Trail marking would be confined to federally owned portions, and neither an automobile route retracing the historic trail nor a guide would be federally sponsored.

No new visitor centers devoted to trail interpretation would be developed, although the Bureau of Land Management and Forest Service would be encouraged to devote additional space for trail-related exhibits in various existing facilities. Few new developed interpretive sites or trailheads would be established, but a coordinated plan for the interpretation of trail segments on federal lands would be developed to guide the normal upgrading or replacement of exhibits and other facilities.

The consequences of this alternative would be to focus whatever additional federal funding became available on the protection of a relatively small number of historic trail resources. This would result in a generally higher standard of protection for federally owned trail traces, stations, and other sites, but it would provide little or no protection for resources on private lands. Interpretation would probably be provided by state agencies and the private sector. Individual citizens or private groups in particular would be given little or no federal incentive to increase their efforts to provide access to and protection of such trail resources.

The marking only of federal segments and the absence of an automobile route along the historic trail might make it difficult for visitors to appreciate the continuity of the actual trail, and it would probably make locating trail traces or particular sites more difficult.
Although trail routes on federal lands could be better protected, access and use would not be correspondingly expanded under this alternative. Therefore, public appreciation for improved resource protection could increase little or not at all. If state or private entities were discouraged from protecting resources because they perceived a low level of federal interest and they failed to continue existing protection/interpretive activities, then the protection and public use or appreciation of the trails on nonfederal lands might actually decrease.
PREFERRED ALTERNATIVE

This study concludes that both the California and Pony Express trails are suitable for authorization by Congress as national historic trails. If authorized, the California Trail should include certain high-value routes and cutoffs along a continuous corridor from St. Joseph, Missouri, to terminal points in California and Oregon (see map).* For the Pony Express Trail the original route ridden in April 1860 should be authorized (see map). (All routes of both trails have been located on USGS topographic maps [scale 1:250,000]. A limited number of map sets have been made available to state agencies and private organizations for their review.)

Essential features of the preferred alternative that could apply to both trails are described below. The approach is that of alternative C for both trails. Details of the preferred and other alternatives considered for each trail are found in later sections. It is believed that this approach would provide adequate protection and commemoration of the trails and would be most realistic in terms of present federal administrative policies and funding availability. If properly implemented, such an alternative would meet all basic intentions of the National Trails System Act. The specific details of management, administration, protection, and use of the trails would be further refined in comprehensive management plans prepared after authorization.

GENERAL PHILOSOPHY OF MANAGEMENT

The responsibility for managing trail resources would be shared in specified ways between the federal, state, and local governments and the private sector. Federal involvement would continue to be focused on the management and protection of trail resources on federal lands, but various cooperative programs would provide for the protection and use of historic resources on nonfederal lands. Where such programs could be negotiated without cost to the federal government, that approach would be favored. However, the use of federal funds would be recommended to help protect important nonfederal trail resources and to provide for their use and interpretation by the general public. In these cases federal funds could be made available under negotiated cooperative agreements.

*PL 98-405, which authorized this eligibility/feasibility study, says that the scope of the California Trail study should be the trail from "Omaha, Nebraska, and Saint Joseph, Missouri, to various points in California." Strictly interpreted, this would exclude consideration of the Applegate trail, a portion of the California Trail system that passes through northern California and terminates in Oregon City, Oregon. The governor of Oregon formally requested the National Park Service to include the Applegate trail within the scope of the study. This was considered a reasonable request since it would avoid a separate future study that would require congressional authorization.
ADMINISTRATION

Overall administrative responsibility for both trails would be delegated to the National Park Service by the secretary of the interior, who would be charged with overall administration. The Park Service would provide staffing and administrative support needed to properly coordinate the activities of the cooperating managing authorities and to meet the obligations implied in the sections below.

RESOURCE PROTECTION

Within Federal Areas

Agencies already managing federal lands containing trail resources would be encouraged to amend land classification or use plans to formally recognize the authorized trails as nationally significant historic resources. After approval of a comprehensive management plan, each agency would develop operational plans, including a system for investigating, inventorying, and assigning priorities to historic trail resources for continued or upgraded protection, stabilization, additional research, or no further action.

Outside Federal Areas

State and local governments would be expected to assume major responsibilities for the protection of trail resources outside federal areas, as suggested by the National Trails System Act. Such protection could be either through cooperative agreements or acquisition. If the states failed to assume these responsibilities, then for resources identified as being of high value, the federal administrator would actively seek to negotiate with willing landowners (including private individuals, state or local governments, or private groups) to protect trail resources on their lands without acquiring either full or partial title (i.e., without buying either the land or some protective easement). Providing such protection or public access might involve some cost to the landowner; therefore, the negotiated agreement could carry with it appropriate federal funding assistance to accomplish these goals. Such agreements might be particularly appropriate where a state or local governmental agency or nonprofit organization owned land or facilities at some distance from federal lands and where it would be desirable to provide for public use.

MARKING THE TRAIL

A coordinated, uniform marking system would be implemented along the entire length of each trail. On federal lands, marker placement and maintenance would be the responsibility of the respective federal management agency. On nonfederal lands, and where cooperative agreements with landowners had been obtained, markers would be provided by the National Park Service. Installation and maintenance
would be the responsibilities of the cooperating state or local government or private entity.

Nearby public roads and connecting roads would be identified as automobile routes that could be used to retrace the approximate historic route. These roads would be marked with distinctive signs provided by the National Park Service. The private sector would be encouraged to produce a road map and guide for this automobile route.

PHYSICAL DEVELOPMENT, INTERPRETATION, PUBLIC ACCESS, AND USE

Visitor center facilities would be needed not only at the trail starting and ending points, but also at various points along the trail where a broad interpretive overview of these two trails--and other westward expansion--could be presented. The development of such centers, which may have other community benefits besides serving visitors, would be primarily the responsibility of local governments. When agreement was reached on appropriate locations in the comprehensive plan, the National Park Service would provide technical assistance, such as in site selection, landscape planning, and planning of physical facilities. Land acquisition, construction, staffing, and operation would generally remain the responsibilities of local governments. Materials produced by the National Park Service for use and distribution at the visitor centers would also be made available for use in conjunction with interpretive programs at other trail-related historic sites, whether they were operated by federal, state, or local agencies, or private nonprofit historic trail groups.

Managing agencies should be able to document an increased demand for access and use resulting from additional trail interpretive information and marking. Each federal agency's operation plan would identify additional access roads and trailheads that could be developed, consistent with resource protection needs, if justified by increased demands. The comprehensive plan should identify important nonfederal resources (high-potential route segments and historic sites) both inside and outside federal areas where there is now or might soon be a demand for access or use, or where trail resources were threatened. For those areas the appropriate federal or nonfederal agencies should begin negotiating agreements with willing landowners to provide for protection, access, and use.
HISTORICAL BACKGROUND

The California Trail has been aptly described as a great rope stretching from the Missouri River to the California goldfields. But it is a rope considerably frayed at both ends, as well as in the middle (see California Trail System map). Although often associated only with the California gold rush of 1849, the main part of the trail was actually developed during the preceding decade by land-seeking emigrants, the same type of pioneers who also helped open the Oregon Trail. Indeed, some historians argue that if earlier explorers and emigrants had not proved there was a viable wagon route to California prior to the gold rush, the great overland rush in 1849 and the early 1850s might have been impossible. There is little doubt that without the presence of established wagon routes, overland travel during that period would have exacted a terribly high price in terms of human lives.

The California Trail is commonly thought of as a single trail stretching across the western United States, from the Missouri River to Sacramento. But this is misleading, for the trail was actually a collection of competing routes that evolved during the late 1840s. The specific route that emigrants or forty-niners used depended on their starting point in Missouri, their final destination in California, the condition of their livestock and wagons, and yearly changes in water and forage along the different routes.

The California Trail is often confused with the older Oregon Trail and the later Mormon Pioneer Trail, because the three shared a common corridor for much of their lengths, and wagon trains leaving Missouri were often composed of both Oregon-bound and California-bound emigrants. The distinction was probably less important to the emigrants than it now seems to historians. For the traveler it was easily resolved: those heading for Oregon were on the Oregon Trail; those traveling to California were on the California Trail.

The following sections briefly summarize how the California Trail system was developed. The system was opened and gradually improved by numerous parties over the span of a decade, making it possible for new residents to settle the country's farthest western frontier and opening the way for the California gold rush. For this reason, George Stewart, who has written an excellent one-volume synopsis of the California Trail, aptly subtitled his work An Epic with Many Heroes (1962).

EARLY ROUTES--1841 TO 1844

The first pioneers were the members of the Bidwell-Bartleson party, a group of 35 men, women, and children who left Independence, Missouri, in spring 1841, hoping to travel by wagon to California. In Independence they accidentally met a party of Jesuit priests who were heading towards the Hudson's Bay Company trading post at Fort Hall (Idaho), traveling by way of the American Fur Company trading post known commonly as
Fort Laramie. The party was to be guided by the experienced mountain man Thomas Fitzpatrick.

The route to Fort Hall had already been fairly well established by fur trappers and traders, but it was not known whether families and wagons could make it through. The Bidwell-Bartleson party did, however, reach Soda Springs (Idaho), 1,200 miles from Independence, on August 3, 1841. Along the way, the party had actually grown as a few other late-starting emigrants caught up with them. At Soda Springs the party split. Fitzpatrick, the missionaries, and some emigrants headed northwest towards Fort Hall. The emigrants who continued to Oregon arrived there late in 1841, marking the official opening of the Oregon Trail.

The other party, consisting of 31 men, one woman, and one baby girl, headed resolutely toward California. Without a guide, and with only the western lore they had gained from Fitzpatrick, they had little idea of how to proceed except to keep moving west. After much wandering through present-day northwest Utah and northeast Nevada, they managed to find the Humboldt River, and followed it to its "sink," where it disappeared into the desert floor. From there they headed southwest, found a crossing of the Sierra Nevada near Sonora Pass, and finally stumbled to safety in early October. The trip, however, was a disaster. All the wagons and goods had long been abandoned, and most of the horses and mules either had been slaughtered for food or had died from starvation and thirst. The emigrants arrived in California with nothing but what they carried on their backs.

The following year only indirect progress was made in opening the California Trail, but 125 emigrants made their way into Oregon following the route opened in 1841. Their wagons helped to mark the trail for future California-bound emigrants at least as far as Fort Hall. In addition, Joseph Chiles, a member of the 1841 Bidwell-Bartleson party, returned east in 1842, searching for a better route. Chiles wandered for much of his journey, but he did follow the Humboldt River from its sink up towards Fort Hall, verifying the validity of that portion of the trail. Chiles arrived in Missouri in September, convinced that wagons could be taken all the way into California.

In spring 1843 Chiles left Independence with approximately 30 California-bound emigrants in eight wagons, trailing a party of 100-plus wagons bound for Oregon, some of whom switched over to the Chiles train. At Fort Laramie, Chiles met Joe Walker, another of the famed mountain men who agreed for $300 to guide the emigrants to California. Pushing west by way of the newly established trading post of Fort Bridger, the train reached Fort Hall in early September. Then, due to the lateness of the season, the party split.

Chiles took a group of men on horseback to explore for a northern pass over the Sierra Nevada into California, where they arrived in November 1843. The route he pioneered across the Sierra south of Mt. Shasta proved too circuitous for later emigrant travel. In the meantime Walker led the rest of the train southwest, following the Humboldt River to its
sink, and then turned south, finally crossing the south end of the Sierra in early December 1843 by way of Walker Pass. Again wagons had to be abandoned east of the mountains, food supplies were exhausted, and starvation threatened the group.

By the end of 1843 a stretch of 500 miles of the primary route had been defined from Fort Hall to Humboldt Sink. This, together with the established wagon route from Independence to Fort Hall, left only a 250-mile stretch to be opened between the sink and Sutter's Fort.

In 1844 the final piece was put in place. The Stevens party, as it became known, started from Kanesville (better known in later years as Council Bluffs), another jumping-off spot upriver from Independence. A group of 46 emigrants headed for Oregon, but a few planned to split off the Oregon Trail at Fort Hall and head for California.

From Council Bluffs to Fort Laramie, the party kept to the north side of the Platte River, along what was later to be known as the Council Bluffs Road, and still later as the Mormon Trail. West of South Pass in southwestern Wyoming the party tried a new cutoff that eliminated the dip down towards Fort Bridger. This was the first of many such variations later collectively called the Sublette cutoff. Just west of Fort Hall, the train swung off the Oregon Trail in the vicinity of the Raft River and headed toward the Humboldt. The trail of Walker's party, broken the year before, was easy to follow.

At the Humboldt Sink, the Stevens party met an Indian named Truckee, who told them by means of sign language of a river that flowed easterly out of the Sierra. This river was only 50 to 60 miles straight west, and along its banks were good grass and trees, but in-between there was desert. Provided with cooked rations and filled water casks, the emigrants made a forced march for two days and a night to become the first to cross the dreaded Forty Mile Desert. In later years that stretch was to become littered with dead stock and abandoned wagons.

After reaching the river, which they named the Truckee, the emigrants followed it straight west through present-day Reno and upwards into Truckee Canyon through the foothills of the Sierra. But as the canyon narrowed, progress became increasingly difficult. Finally, a beautiful lake was reached (later named Donner), beyond which rose the nearly vertical mountain walls. After several days of exploring, the group decided to forge straight ahead. Leaving half their wagons, they worked the remaining wagons around the north shore of the lake and then almost literally carried them up a thousand feet of steep granite slope.

Once the crest was reached, it was relatively easy to work out their descent down the gentler west-side canyons towards Sutter's Fort, where the first group of wagons arrived in mid-December 1844. With the limited success of the Truckee route, the California Trail could be declared open.
TRAIL DEVELOPMENT BETWEEN 1844 AND 1849

Certain portions of the early routes were improved over several years of trial and error, as more and more emigrants headed toward California. But other portions like the Platte River valley were such natural corridors that they were never really changed. Major improvements to the basic route were made each year from 1845 to 1848, leaving the basic California Trail system fairly well established before the start of the great gold rush years. These improvements are best discussed in geographical order, east to west, rather than chronological order.

Eastern Feeder Routes

In the east, the new Missouri River towns continued to rival Independence as the favored starting points. Primary among these was St. Joseph, beginning with the opening of the St. Joe Road in 1845. Connecting with the main Oregon-California Trail in northeast Kansas, the St. Joe Road eliminated 90 miles of travel. Both prior to and during the gold rush years, the three river towns of Independence, St. Joseph, and Council Bluffs competed bitterly for the lucrative outfitting trade.

Regardless of their starting point, once the emigrants reached the Platte River in the vicinity of Fort Kearny (established by the U.S. Army in 1848), they were on a stretch of trail that remained essentially unchanged throughout its use. This part of the trail was aptly called the Great Platte River Road. Likewise, the route from Fort Laramie to South Pass was never significantly improved; this route was the gentlest possible crossing of the Continental Divide, and it made wagon travel across the West feasible.

Central Cutoffs

Sublette Cutoff. On the other side of South Pass numerous cutoffs and alternatives were developed during the late 1840s. The Sublette cutoff, first used in 1844, gradually gained favor over the older Fort Bridger route because it saved emigrants 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 lack of good water, including one 50-mile stretch of dry desert known as Sublette Flats. Emigrants continued to use both the Sublette and the Fort Bridger routes, depending on the amount of time, reported water and grass conditions along the two routes, and their need for rest and refitting at Fort Bridger. Later the forty-niners, who generally traveled faster than emigrants, showed a preference for the Sublette cutoff.

Hastings Cutoff. In 1846 the ill-fated Hastings cutoff was opened by Lansford W. Hastings, an adventurer who acted "with negligence that was not short of criminal" in leading emigrants astray (Stewart 1862). Based on his travels to Oregon and California and back between 1842 and 1846, Hastings became convinced that the best route to California lay directly
through the Great Salt Desert. He hoped to open that route and lead emigrants to California, apparently believing he would then be able to lead a California rebellion against the Mexican government and thereby find fame and fortune. (It was unfortunate for him that John C. Fremont did exactly that while Hastings was on the trail.)

In 1846 Hastings began meeting emigrants along the trail between Independence Rock and Fort Bridger and tried to recruit some followers. Most of the early emigrants in the 1846 migration rejected the alternative, since they were making good time and had no reason to risk an unknown route. As the summer wore on, however, late-starting emigrants began to consider a route that was promised to save 150 to 500 miles of travel (Hastings was a little vague on this point). Finally, about 80 wagons decided to try Hastings's new route. The last of them was the Donner-Reed party.

On July 20 Hastings led the first group of 40 wagons southwest out of Fort Bridger, along a nonexistent trail that he had never traveled. With untold labor and much wandering, a trail was cut over the Wasatch Mountains, finally breaking out into the Salt Lake Valley. Hastings then led the group around the south shore of the lake and headed west across the salt flats. Instead of the 40-mile desert predicted by Hastings, the waterless crossing turned out to be 83 miles, inflicting horrible casualties on both emigrants and stock.

Pushing farther west, Hastings hit the Ruby Mountains. At this point, he was only one day's good journey from the Humboldt River and the main trail, to the northwest. Ignorant of the geography, however, Hastings turned south, skirting the foot of the mountains, and searching for a pass. Finally finding one (now named Overland Pass), Hastings crossed and headed almost due north, desperately seeking the California Trail. When he finally reached it (just west of present-day Elko, Nevada), he discovered that wagon trains that had been far behind him at South Pass were now a week ahead. The Hastings cutoff, which had actually added miles to the journey, was a failure.

The story might have ended there, had not failure turned into disaster, resulting in the most famous tragedy of the entire California Trail story. The Donner-Reed party, already lagging far behind the majority of the 1846 emigration, and already plagued by illness, death, and plain bad luck, followed the Hastings cutoff in a desperate attempt to make up lost time. The party left Fort Bridger on July 31, but they were delayed by the necessity of cutting yet another trail through the Wasatch Mountains, since the wandering route pioneered by Hastings was unusable. They were further delayed by dying oxen and broken wagons on the salt flats, and they were in serious trouble before they even reached the junction with the main trail. By this time the vanguard of the 1846 emigration had already crossed the Sierra. Subsequently caught by early October blizzards below the crest of the mountains, the remnants of the Donner-Reed party slowly succumbed to starvation and cannibalism throughout the winter of 1846-47. Forty of the 87 members of the party died that winter in the vicinity of Donner Pass.
As news of the disaster spread, the Hastings cutoff was thoroughly discredited. Except for a few foolhardy gold-rushers in 1849, whose lust for gold outweighed their common sense, the Hastings cutoff was never used again.

Salt Lake Cutoff. The only positive outcome of this disaster was the 40-mile stretch across the Wasatch Mountains cut by the Donner party. Once opened, this proved to be the best route to the Salt Lake Valley. In 1847 it was used by the vanguard of the Mormon pioneers heading toward their new home, and it subsequently became an integral portion of the Mormon Trail.

The Wasatch Mountains cutoff became even more important in 1848, when a chance meeting between some mountain men and a group of Mormons traveling east from California to Salt Lake resulted in the blazing of a trail from the Raft River route of the California Trail down to Salt Lake City. The completion of this loop, from Fort Bridger to Salt Lake and back up to the main trail (soon known as the Salt Lake cutoff) made it feasible for emigrants in need of assistance or supplies to stop at that fast-growing Mormon community after 1848. In later years, particularly during the height of the gold rush, the Salt Lake cutoff was increasingly used, and some gold rushers who jumped off too late in the season even wintered in the Salt Lake Valley.

Western Routes

The Humboldt River valley, like the Platte River valley, was a safe and natural travel corridor. Emigrants could use either the north or south bank of the river, but essentially the route was never improved. West of Humboldt Sink, however, several alternative routes were developed in order to avoid the Truckee route and its exhausting climb over the Sierra, and to provide for a wider choice of settlement areas in central and northern California, as well as southern Oregon.

Carson Route. The most significant of the new routes was the Carson route, between Humboldt Sink and Sutter's Fort. It was opened in summer 1848 by a group of Mormons who were returning from California to the Salt Lake Valley. Having heard of the difficulties of the Truckee route, they decided to try a different way back over the mountains. Building a road as they went, and sending scouts out ahead, they discovered an easier pass south of the Truckee route, and reached the summit of the Sierra Nevada. From this point, they moved down to a valley they named Hope, found the west fork of the Carson River, followed it down out of the mountains south of Lake Tahoe, and then turned northeast, hitting the Truckee route along the Truckee River. They had accomplished one of the most significant feats of trail opening in the history of the west. Although still not avoiding a crossing of the Forty Mile Desert, the Carson route offered a considerably easier ascent of the eastern side of the Sierra and a much better descent on the western side. Once the Carson route was opened, it quickly eclipsed the rougher Truckee route as the main gateway to California.
Applegate Trail. Like the Carson route, the Applegate trail was opened from west to east. In the spring of 1846, Jessie Applegate, who had emigrated to Oregon in 1843, and a dozen men on horseback left Oregon and headed south and then east, in an attempt to work out a southern wagon route into Oregon. Working carefully, they slowly marked a trail through the forests, and then across the northwest (Nevada) desert, locating waterholes and leaving behind notices to future emigrants describing directions and distances. A daring expedition, it resulted in success when they struck the main California Trail just below the big bend of the Humboldt River. Some of the party then followed the trail east to Fort Hall to publicize the new route and the settlement potential of southern Oregon.

Although never heavily used as a southern emigration route into Oregon, the Applegate trail did have a significant impact on California emigration. The carefully marked portion across the Nevada desert was incorporated two years later by Peter Lassen (see below) as part of his new trail. The upper portion, intended to feed settlers into southern Oregon from the California Trail, actually worked in reverse: When news of the California gold strikes reached Oregon, a small rush ensued, with eager gold-rushers pouring down the Applegate and Lassen trails into northern California.

Lassen Trail. The Lassen trail was the final alternative route to be established before the gold rush of 1849. Like the ill-fated Hastings cutoff, it was opened as a private speculative venture. In 1848 Peter Lassen, who held a land grant about 100 miles north of Sutter's Fort, decided to try to capitalize on the growing California emigration, as Sutter had done, and open a trail to his ranch. In the spring of 1848 Lassen rode east from California, following the main trail to Fort Hall. There he recruited 10 wagons to follow him back to his ranch. As an inducement, he promised to show them a more northern route into California, which would avoid the troublesome ascent of the Sierra necessitated by both the Truckee and Carson routes. He did not tell them that his route was largely imaginary.

About September 1, 1848, Lassen's party came to the junction of the main California route and the new Applegate trail, at a location now known as Lassen's Meadows. Since the Applegate trail was already broken and well marked, Lassen followed it northwest across the desert to Black Rock.

At this point, he was directly east of his ranch, and he could have easily made straight for it. But due to his ignorance of the geography, and the fact that he had never seriously explored his new route, he knew nothing better than to continue to follow the Applegate trail to the northwest through High Rock Canyon, and to a lake which Lassen thought was the headwaters of the Sacramento River.

Here Lassen left the Applegate trail and turned south, through rough, forested, and untracked terrain. At this point the journey turned into a nightmare when the emigrants, with exhausted animals and broken-down wagons, attempted to take advantage of an unknown shortcut. Dead-end canyons seemed to constantly block the way, requiring miles of
backtracking and days of scouting, while food supplies grew ever shorter. Wagons were cut down to two-wheel carts, and starving cattle slaughtered for meat. By October, with no visible progress being made, the emigrants threatened to hang Lassen. Finally, at the end of October, they reached Lassen's ranch. His trail had proved to be no shortcut, having taken a month of extra travel to cover the additional 135 miles of journey caused by the long northern swing. But Lassen had opened a third route into California, which would be heavily used in 1849 by some gold-rushers who were unaware of its disadvantages.

THE YEARS OF THE GOLD RUSH

On January 24, 1848, a laborer employed at Sutter's Mill recorded the discovery of "some kind of metal that looks like gold" in the mill's tail race. Although this discovery was made early in 1848, it had no effect on overland emigration until the following year, for it took several months for the significance of the discovery to be realized in California, and several more months for the news to travel back east. Although an internal California gold rush ensued in 1848, and many Oregon settlers used the northern end of the Applegate trail and the western portion of the Lassen trail to rush to the goldfields, by the time the significance of the California strikes had been verified and publicized in the eastern press, it was too late in the year for overland travel.

Use of the Early Routes

By the late spring of 1849, while waiting for the rivers to subside and the prairie grass to grow, thousands of eager gold-seekers were cramming the riverbanks at the three principal starting points--Independence, St. Joseph, and Council Bluffs. In 1849 alone approximately 25,000 overland gold-rushers entered California--almost twice the combined number of overland emigrants who had traveled to Oregon and California between 1841 and 1848. (Only 450 emigrants went to Oregon in 1849). The number nearly doubled again in 1850, when 44,000 gold-rushers took the overland routes to California (see table 1).

Without the backbone of the California Trail in place, the rush of thousands of ill-prepared forty-niners attempting to travel overland would have been unimaginable, and at worst would have spelled disaster. As it was, spring grass on the prairies came out earlier than usual in 1849, providing good stock forage for the first part of the journey, and summer rains in the west were heavier than normal, again providing better forage along the western trails than had been experienced in previous years.

Even with these good forage conditions, and the benefit of relief expeditions launched from California in the fall, the suffering was often intense. The worst calamities befell those who had the misfortune to follow the Lassen trail. Crossing in September 1849, during the height of the emigration, J. Goldsborough Bruff recorded seeing 511 dead oxen, 10 horses, nine mules, a cow and a calf, and the graves of a three-year-old girl and a 50-year-old man, in just the 52 miles between Lassen's Meadow and Black Rock.
Hudspeth Cutoff

In 1849 another important cutoff was opened along the trail. On July 19 Benoni Hudspeth, leading a large train of rushers to California, came to Soda Springs (Idaho) along the main trail. Like many other travelers, Hudspeth was annoyed at the repeated meanderings of the trail. At Soda Springs he decided to cut out the northern swing up to Fort Hall, and he struck out directly west, aiming for the main trail as it came back down the Raft River.
Unlike most others who tried uncharted shortcuts, Hudspeth was lucky. On July 24 his party intersected the main trail near City of Rocks. Although the Hudspeth cutoff saved only a few miles, and at best two days, it became the preferred route almost immediately. Emigrants and gold-rushers heading for California in subsequent years also used the new cutoff almost exclusively, leaving the road to Fort Hall for use by Oregon-bound emigrants.

TRAIL MODIFICATIONS AFTER THE GOLD RUSH

Continued refinements were made to the California Trail system throughout the 1850s, as thousands of overland emigrants made their way to the goldfields. More and more alternative routes and cutoffs were developed by both emigrants and commercial promoters. The new routes, as before, were developed at all three areas where cutoffs had been previously developed.

Eastern Feeder Routes

In the east, the old Fort Kearny Road, sometimes called the Nebraska City Road, was used by emigrants too impatient to wait in line to jump off at Independence, St. Joseph, or Council Bluffs. Opened in 1847 by the U.S. Army as a supply road to the new Fort Kearny, this road left the Missouri River at Nebraska City, about halfway between St. Joseph and Council Bluffs, and ran almost directly northwest to meet the Platte River just east of Fort Kearny.

Central Cutoffs

Childs Cutoff. At Fort Laramie, where the Mormon Trail 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 between Fort Laramie and Casper. It was tougher going than the main route, but it did attract some use by those in later years who wished to avoid the crush of wagon trains on the south bank, or who wished to avoid two river crossings.

Seminoe Cutoff. In 1850 a fur trapper named Seminoe pioneered an alternative route in central Wyoming between Ice Slough and Burnt Ranch. This route stayed on the south side of the Sweetwater River, thereby avoiding three crossings of the river. The Seminoe cutoff, as it became known, was never much of a favorite with emigrants or gold-rushers, who liked to stay near water, but it was used by freighters and others wishing to bypass the slower-moving emigrant wagons.

Other Cutoffs. In 1852 numerous alternatives were pioneered from the Sublette cutoff, as emigrants and gold-rushers sought to take advantage of this shortcut, but wanted to avoid the 50-mile crossing of the
waterless Sublette Flats. Two of these were the Slate Creek cutoff between the Green River and Rocky Gap and the Kinney cutoff east of the Green River. These cutoffs were heavily used as soon as they were opened, as was the Baker-Davis road, a later alternative to the Kinney cutoff east of the Green River. In 1856 the Dempsey-Hockaday cutoff was opened just west of Rocky Gap, which saved several miles of travel on the western end of the Sublette. Most of the trail alternatives in this maze between South Pass and the Bear River divide could be used interchangeably.

Western Routes

The California Trail was never improved along the Humboldt River basin, but as soon as the trail passed the Humboldt Sink, additional routes were developed. In 1851 and 1852 alone, no fewer than seven new routes were opened into California, to compete with the pre-gold rush choices of the Truckee, Carson, and Lassen cutoffs. Most of these roads were opened from the California side of the mountains to the east, and all were opened as commercial ventures by either towns or private businessmen eager to attract settlers, laborers, and consumers. As George Stewart has said, "All of them [were] passable and not one of them [was] good."

Beckwourth Trail. The first of the alternative routes was the Beckwourth trail, opened in 1851 by Jim Beckwourth, a mulatto trapper. Beckwourth found an easier pass through the Sierra in the spring of that year, and 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 near present-day downtown Reno, angled northwest and over Beckwourth Pass, and then back down to the southwest through Bidwell Bar to Marysville. It was a shorter route for gold-rushers headed to Bidwell Bar, but a somewhat longer route for those going to Marysville. Although no statistics are readily available to substantiate the use of the Beckwourth trail in succeeding years, it is safe to say that it was occasionally used, but never became a favorite with emigrants or gold-rushers.

Nobles Road. In 1852 the Nobles road was opened in the north, through the efforts of William H. Nobles and with the financial backing of merchants in Shasta City. Nobles had completed local explorations the previous year and had succeeded, where Peter Lassen had failed, in establishing a shortcut from the big bend of the Humboldt River into California. His route followed the Applegate and Lassen trails as far as Rabbit Hole Springs, and then headed due west, by way of Honey Lake and Badger Pass, down toward Shasta City (near present-day Redding). Because Shasta City was located north of Lassen's ranch, and because the Lassen trail made a wide detour to the north before heading back south, Nobles used a 20-mile section of Lassen's trail in reverse. This route was used in subsequent years by most gold-rushers heading to the Shasta City area mines, and it later became a great favorite for livestock drivers bringing herds of sheep and cattle into California.
Sonora Road. The Sonora road was backed by the merchants and promoters of Sonora, who subscribed funds in July 1852 for a relief expedition for the benefit of stranded and starving gold-rushers. Anyone taking advantage of the relief was expected to head towards Sonora in gratitude. The Sonora road left the Carson route in the vicinity of Fort Churchill, headed south and southwest through Antelope Valley, and then west across the mountains, crossing the summit just south of present-day Sonora Pass in the vicinity of Granite Dome. Unfortunately, the high, rough road of the pass (elevation 10,000 feet) and the unbroken trail caused more hardships and suffering for those emigrants induced to try it than if they had been left alone. It never became very popular.

Other Routes. Three other route variations that were opened in 1852 were actually improvements of the Truckee and Carson routes rather than new routes. The Henness Pass route was developed as a more direct route from the Truckee route to Marysville. The Placerville County emigrant road was opened off the Truckee route, using Squaw Pass as an alternative crossing of the summit and ending in Auburn. Johnson's cutoff from the Carson route skirted the southern shore of Lake Tahoe and then headed down into Placerville. Use of these new routes varied from year to year, according to the destination the gold-rushers and emigrants had in mind (if any), and the salesmanship of the various promoters sent east to intercept the wagon trains.

The last major cutoff considered a part of the California Trail system was not only a much later route, but was also backed by quite a different promoter, the U.S. government. Spurred by constant complaints of the lack of a really adequate overland route, Congress appropriated $300,000 in 1857 for the survey and construction of a proposed Fort Kearny, South Pass, and Honey Lake wagon road. Survey work began that year under the primary direction of Frederick W. Lander.

Concentrating on the area west of South Pass, Lander surveyed two potential routes in 1857, both of which avoided as many river and desert crossings as possible. In 1858 he returned to build the road, including the clearing of forests, construction of a level roadbed, and building of bridges across small streams. When opened to travel in 1859, the Lander road saved travelers five days between Burnt Ranch, where it left the main trail, and Fort Hall, where it rejoined. Lander estimated that 13,000 emigrants used the road in 1859, which may be questionable, since only 19,000 emigrants traveled to Oregon and California that year.

The construction of the Lander road, which was the only portion of the proposed Fort Kearny, South Pass, and Honey Lake wagon road that was actually developed, marked the end of one era of travel to the west and the beginning of another. Surveyed, engineered, and constructed roads were destined to begin to replace the wandering wagon trails opened by fur trappers, emigrants, and gold-rushers. However, to a remarkable extent the modern roadways follow these pioneering routes we have come to know as part of the California Trail.
ESTABLISHMENT AND MANAGEMENT ALTERNATIVES

ALTERNATIVE A: NO AUTHORIZATION (NO ACTION)

Management Philosophy

No routes or segments of the California Trail would be designated as a national historic trail, nor would any further role be pursued by the National Park Service for the coordinated management and protection of trail resources. Any management and protection provided independently by other agencies--federal, state, or local--would continue to be a function of their own internal policies, priorities, and financial resources.

Administration

Without authorization of a trail, neither the National Park Service nor any other federal agency would be assigned overall administrative responsibility.

Resource Protection

Within Federal Areas. Each federal land management agency would continue to set its own standards and priorities for identification, protection, stabilization, and research of trail resources. Without authorization, there is no reason to believe that resource protection of known trail segments would receive more or less intensive or coordinated attention than at present.

Outside Federal Areas. No efforts other than those routinely undertaken by each federal agency under its existing mandate and existing priorities would be made to ensure the protection of trail resources outside federal areas. In general, these agencies are required to monitor threats to trail resources immediately outside their administrative boundaries, but responses would be limited to addressing threats that would directly affect resources inside their administrative boundaries, or resources that have been identified as nationally significant for some other reason (e.g., national historic landmarks).

Marking the Route

No consistent, coordinated marking program for the historic trail would be developed. Each agency--even each administrative region or district--could develop a marker type as well as its own specific route maps (if any) for public distribution.
Physical Development, Interpretation, Public Access, and Use

No changes in existing development, interpretation, access, or use of the historic trail would be made under the authority of the National Trails System Act. Each federal agency—as well as state or local groups—would propose, fund, and implement public use proposals according to its own priorities and policies. No attempt would be made to coordinate interpretive activities relating to the whole trail.

ALTERNATIVE B: AUTHORIZATION OF ALL CALIFORNIA TRAIL ROUTES

Management Philosophy

Under this alternative all routes and cutoffs as described in the "Historical Background" section would be authorized as part of the national historic trail. This approach essentially accepts all parts of the California Trail system as equally significant, and their degree of integrity or potential for public use and development is not considered in terms of qualification. The goal would be the establishment of a continuous trail system on federal and nonfederal lands, with the maximum degree of protection, development, and public use allowable under the enabling National Trails System Act. The historic trail system would be protected to the highest possible standards by undertaking extensive efforts to protect federal trail resources, as well as resources outside federal areas.

Proposed Routes

Alternative B would include the following routes:

Main trail from Independence, Missouri, to Humboldt Sink, Nevada

Eastern Feeder Routes
- Council Bluffs Road - 1844
- St. Joe Road - 1845
- Old Fort Kearny Road - 1850

Central Cutoffs and Alternative Routes
- Sublette Cutoff - 1844
- Hastings Cutoff - 1846
- Salt Lake Cutoff - 1848
- Hudspeth Cutoff - 1849
- Childs Cutoff - 1850
- Kinney Cutoff - 1850
- Seminole Cutoff - 1850
- Slate Creek Cutoff - 1850
- Baker-Davis Road - 1852
- Dempsey-Hockaday Cutoff - 1856
- Lander Road - 1858
Designation of the entire California Trail system would result in a new national historic trail of approximately 5,665 total miles. Of this, approximately 1,100 miles of trail still exists on the ground as trail ruts, traces, and other obvious remnants. About 2,171 miles of this system cross public lands, where most of the physical evidence that exists today is contained. Some 1,873 miles of the system proposed under this alternative are already designated as a part of the Oregon and Mormon Pioneer national historic trails.

This alternative would include the greatest possible number of existing and potential historic sites, which could be used for interpretation of the trail story to the general public. Although detailed planning for individual historic sites would take place at a later date, it is estimated that approximately 320 historic sites would eventually be available for public use, including sites in both federal and nonfederal ownership. Of these sites, 100 are already associated with the Oregon and Mormon Pioneer national historic trails.

Administration

The secretary of the interior would be charged with the overall administration of the trail, and the National Park Service would be responsible for consultation and coordination with the heads of all other affected state and federal agencies. Details of this administrative role would be developed in the comprehensive management plan. Basically the Park Service would coordinate management of the extensive, authorized trail system, including certification of nonfederal segments, cooperative agreements to protect nonfederal resources, and acquisition of resources, if necessary.

Resource Protection

Within Federal Areas. A full range of protection activities would be undertaken by the federal land-managing agencies on federal lands. This includes setting high standards for physical protection, stabilization, and research of all routes and sites along the routes. Specifically, existing trail traces and associated historic sites would be fully protected from threats posed by development on adjacent lands, road building, utility pipelines and corridors, mining and minerals exploration and development, and excessive stock grazing.
No changes in the basic mandates of federal agencies would be involved (e.g., the multiple-use mandates of the Bureau of Land Management and Forest Service). These agencies, however, would be required to apply the strictest preservation/protection strategies that their existing policies allow so as to ensure the protection of trail-related resources.

Outside Federal Areas. Under alternative B the responsible federal administering agency (the National Park Service) would have a variety of options available to extend the protection and preservation of historic resources to areas outside federal boundaries. In accordance with the National Trails System Act, state and local governments would be encouraged to take steps to protect and provide access to high-value trail resources. If the state and local governments failed to take these steps, then under this alternative the National Park Service would actively seek to protect resources and provide access through cooperative agreements, the acquisition of easements, or fee acquisition by various means, including purchases or exchanges. Although federal implementation of these land protection options would have high priority under this alternative, it would always be executed on a willing-landowner basis.

Marking the Trail

A full trail marking program would be undertaken. This would include the marking of existing portions of the actual historic trail route across both public and private lands. The type and appearance of markers would be consistent all along the trail, and they would be similar to those already in use on other national historic trails. Where physical evidence of a trail no longer exists, its apparent location would be marked in such a way as not to disturb current land uses. Trail routes through developed areas such as cities would be marked in a similar manner.

To provide opportunities for the motoring public to retrace the approximate trail route, public roads near the historic route would be marked. This would be done by placing signs along the federal, state, and county roads that most closely follow the actual route of the trail. This retracement route would be related to the actual trail by means of signs and identified connecting routes so that visitors would be able to easily locate major interpretive sites or portions of the trail where they could take short walks.

Trail maps, guides, and brochures that fully show the route of the historic trail, as well as the automobile tour route, would be produced by the federal government and would be readily available to the general public. In addition to an overall trail brochure listing interpretive sites and information centers, more detailed maps would be produced at state or regional levels to show local trail conditions, access routes, and trailhead locations. Trail information would be keyed both to long-distance hikers who wanted to follow the actual trail, and to motorists who wanted to drive along parallel highways and visit selected historic sites.
Physical Development, Interpretation, Public Access, and Use

A coordinated program would be undertaken for physical development and interpretation along the California Trail system. This would include five interpretive visitor centers, whose functions would be to relate the California Trail story to the general public and to supply information to all types of potential trail users. These visitor centers would also be able to supply some regional interpretation and information about localized travel and trail conditions. A series of new roadside interpretive sites (providing both full and minimum visitor services) would be developed between the visitor centers, and existing interpretive facilities would be improved. A systemwide interpretive plan would be developed to prevent redundant interpretive messages and to ensure that the most appropriate sites were chosen to illustrate particular interpretive points.

Numerous additional trailheads would be established at sites along the trail that would be appropriate for hiking, horseback-riding, or off-road vehicle driving. Such trailheads would have parking areas, dispensers for trail brochures, and possibly water and restroom facilities. A maximum number of historical interpretive sites would be developed under this alternative, including stabilized or reconstructed remains, guided and self-guided trails, and other staffed or unstaffed interpretive programs.

The federal share in the cost of facility construction and land acquisition would be substantial, but some of these costs would be borne by state and private agencies.

Cost Estimates

At the present level of planning and detail it is extremely difficult to give accurate cost estimates. The following estimates are not based on detailed projections or plans about the type and quality of physical facilities, or on any specific appraised land values. The estimates are meant to be used for comparing the various alternatives, and they have been prepared with the same unit costs to facilitate these comparisons. Many factors could affect actual costs, including the use of existing facilities for the Oregon and Mormon Pioneer trails, the construction of new visitor centers, or the adaptive use of existing centers. In future comprehensive planning, if the trail was authorized, detailed site and facility specifications would be developed, as well as recommendations for new facilities or the consolidation of functions with other existing or planned facilities.

Under alternative B the development of cooperative agreements between federal, state, and local governments would be essential. It is therefore very difficult to predict what proportion of the total cost of facility development or land acquisition might ultimately be provided by all these managing authorities. In table 2 the total cost of a specified item is given, followed by a figure for the federal share considered likely under the basic assumptions of alternative B. For example, the federal share in visitor centers would provide for planning, design, supervision, and
exhibits, but actual construction and site preparation costs would be the responsibility of others.

If both the California and Pony Express trails were authorized, then certain new interpretive facilities that relate to both trails could be shared, thus reducing the total cost for development of both trails. (Table 2 has been developed on this assumption.) Shared facilities are denoted by an asterisk in the table. If only the California Trail was authorized, then these costs would have to be increased, unless functions were consolidated with some other facilities.
Table 2: Cost Estimates, Alternative B
California Trail

<table>
<thead>
<tr>
<th>Construction/New Development</th>
<th>Units</th>
<th>Cost</th>
<th>Federal Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>New visitor centers (3,000 sq ft; one at each end and three in-between; cost shared equally with Pony Express Trail)</td>
<td>5</td>
<td>$2,500,000*</td>
<td>$900,000*</td>
</tr>
<tr>
<td>Additional interpretive roadside stations (for each type costs for 5 shared equally with Pony Express Trail, and 5 for California Trail alone):</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full roadside station--unstaffed exhibit area, ½ mi nature trail, restrooms, 4 picnic facilities, and 15-car parking area</td>
<td>10</td>
<td>1,900,000*</td>
<td>700,000*</td>
</tr>
<tr>
<td>Minimum roadside station--unstaffed exhibits, 5-car parking area</td>
<td>10</td>
<td>290,000*</td>
<td>110,000*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$2,190,000*</td>
<td>$810,000*</td>
</tr>
<tr>
<td>Improvements to existing interpretive facilities (costs for 5 shared equally with Pony Express Trail, and 5 for California Trail alone)</td>
<td>10</td>
<td>150,000*</td>
<td>38,000*</td>
</tr>
<tr>
<td>Additional trailheads (signing and 10-car parking area; excludes cost of access roads)</td>
<td>30</td>
<td>350,000</td>
<td>232,000</td>
</tr>
<tr>
<td>Historic resource protection (for the 220 sites not included along the Oregon or Mormon Pioneer Trail):</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research/excavation</td>
<td>30 sites</td>
<td>200,000</td>
<td>150,000</td>
</tr>
<tr>
<td>Stabilization</td>
<td>50 sites</td>
<td>50,000</td>
<td>37,000</td>
</tr>
<tr>
<td>Fencing</td>
<td>50 sites</td>
<td>125,000</td>
<td>94,000</td>
</tr>
<tr>
<td>Erosion control on trails</td>
<td>10 mi</td>
<td>20,000</td>
<td>15,000</td>
</tr>
<tr>
<td>Preventing vehicle trespass</td>
<td>50 places</td>
<td>12,500</td>
<td>9,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>407,500</td>
<td>305,000</td>
</tr>
<tr>
<td>Trail markers (initial capital cost and installation of markers where none now exist; signs at 5-, 1-, or ½-mi intervals, as needed)</td>
<td>2,850 mi</td>
<td>95,000</td>
<td>80,000</td>
</tr>
<tr>
<td>Auto retracement route signs (initial capital cost and installation at intersections and 5-mi intervals)</td>
<td>1,500 mi</td>
<td>60,000</td>
<td>60,000</td>
</tr>
<tr>
<td>Subtotal Construction/New Development</td>
<td></td>
<td>$5,752,500*</td>
<td>$2,425,000*</td>
</tr>
</tbody>
</table>
### Land Acquisition and Cooperative Agreements

<table>
<thead>
<tr>
<th>Description</th>
<th>Units</th>
<th>Cost</th>
<th>Federal Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquisition of high-value inholdings in federal areas (assumes 10% of 2,171 mi in federally owned units [220 mi] are inholdings, of which 22 mi would be acquired):</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acquisition by exchange</td>
<td>15 mi</td>
<td>(no cost)</td>
<td>$2,240,000</td>
</tr>
<tr>
<td>Acquisition by purchase</td>
<td>7 mi</td>
<td>$2,240,000</td>
<td>$2,240,000</td>
</tr>
<tr>
<td>Acquisition of high-value segments outside federal areas</td>
<td>5 mi</td>
<td>1,600,000</td>
<td>**</td>
</tr>
<tr>
<td>Costs of negotiated agreements</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negotiations</td>
<td>50,000</td>
<td>40,000</td>
<td></td>
</tr>
<tr>
<td>Implementation of delegated activities</td>
<td>50,000</td>
<td>50,000</td>
<td></td>
</tr>
<tr>
<td>Subtotal Land Acquisition/Cooperative Agreements</td>
<td></td>
<td>$100,000</td>
<td>$90,000</td>
</tr>
<tr>
<td>Total Capital Costs</td>
<td></td>
<td>$3,940,000</td>
<td>$2,330,000</td>
</tr>
</tbody>
</table>

### Annual Operating Expenses

<table>
<thead>
<tr>
<th>Description</th>
<th>Units</th>
<th>Cost</th>
<th>Federal Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operation of visitor centers (cost shared equally with Pony Express)</td>
<td>5</td>
<td>$125,000*</td>
<td>$125,000*</td>
</tr>
<tr>
<td>Additional federal employees and travel (costs shared equally with Pony Express):</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bureau of Land Management</td>
<td>52,000*</td>
<td>52,000*</td>
<td></td>
</tr>
<tr>
<td>U.S. Forest Service</td>
<td>22,000*</td>
<td>22,000*</td>
<td></td>
</tr>
<tr>
<td>National Park Service</td>
<td>50,000*</td>
<td>50,000*</td>
<td></td>
</tr>
<tr>
<td>Travel, vehicles, supplies</td>
<td>25,000*</td>
<td>25,000*</td>
<td></td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td>$149,000*</td>
<td>$149,000*</td>
</tr>
<tr>
<td>Maintenance of facilities and historic sites</td>
<td>160,000</td>
<td>80,000</td>
<td></td>
</tr>
<tr>
<td>Markers</td>
<td>replace 10%</td>
<td>10,000</td>
<td></td>
</tr>
<tr>
<td>Retracement signs</td>
<td>replace 20%</td>
<td>12,000</td>
<td></td>
</tr>
<tr>
<td>Total Annual Operating Expenses</td>
<td></td>
<td>$456,000*</td>
<td>$251,000*</td>
</tr>
</tbody>
</table>

* Cost if shared with Pony Express Trail; if that trail was not authorized, then this figure would have to be increased.

**Federal share only if state and local governments failed to take actions to protect historic resources.
ALTERNATIVE C (PREFERRED): AUTHORIZATION OF A CONTINUOUS, HIGH-VALUE ROUTE

Management Philosophy

This alternative would propose authorization of a continuous route that included only those components of the California Trail system with the highest value, based on historical significance, integrity, and potential for public use, development, and interpretation. The trail would be authorized on both federal and nonfederal land.

Including only the highest value routes and cutoffs as part of the authorized historic trail would allow for the most effective management and protection, and it would still adequately commemorate the California Trail. Because the historic integrity and potential for public use of all the trail routes and alternatives appear to be relatively equal, the question of comparative value hinges on judgments of historical significance. Under this alternative those routes and cutoffs pioneered before the gold rush of 1849 have been determined to have the highest historical significance, because it was the existence of the pre-1849 trail system that made the 1849 gold rush possible.

Alternative C would emphasize shared responsibility for the management and protection of trail resources by private landowners, state and federal agencies, and trail user groups having ownership, management, or user interests in the proposed trail system. The intent of this alternative would be to create and encourage an environment for federal agencies to work closely with state, local, and private interests in the protection, interpretation, marking, and public use of trail resources on federal as well as nonfederal lands.

There would be less federal involvement under this alternative than under alternative B, although a similar range of management, protection, and development actions would be proposed. Priorities would be established to concentrate action on the resources with the highest values.

Because of this alternative's narrowed federal scope, uniformly high management standards would not be set for all trail resources. Alternative C would set a variety of standards for providing resource protection, public access, interpretation, use, and development on federal lands, all of which would be based on a priority ranking of historical value. Private sector and state agency involvement would be emphasized to extend protection, development, or use to high-value resources on nonfederal lands.

Proposed Routes

Because they were established before the gold rush, the following portions of the California Trail system appear to have the highest historic value and are proposed for authorization under alternative C:
Main trail from Independence, Missouri, to Humboldt Sink, Nevada

Eastern Feeder Routes
Council Bluffs Road - 1844
St. Joe Road - 1845

Central Cutoffs
Sublette Cutoff - 1844
Salt Lake Cutoff - 1848

Western Routes
Truckee Route - 1844
Applegate Trail - 1846
Carson Route - 1848
Lassen Trail - 1848

The Hastings cutoff is excluded from alternative C, even though it was a pre-1849 route, because it was almost never used following the nationwide publicity about the fate of the Donner-Reed party.

Under alternative C approximately 3,821 total miles would be authorized as part of the California National Historic Trail, with 1,114 miles lying within federally managed units. Approximately 764 of the 3,821 miles of trail still exist on the ground, the remainder having been lost because of previous development activities. As in alternative B, the great majority of existing physical trail evidence is on federally managed lands. Of the total mileage proposed under alternative C, 1,873 miles of trail are already established as part of the Oregon and Mormon Pioneer national historic trails.

Alternative C would include fewer historic sites than would eventually be interpreted to the general public, reflecting the lower number of trail miles proposed for the system. It is estimated that approximately 224 historic sites would be included under this alternative, of which 100 are already established as part of the Oregon and Mormon Pioneer national historic trails.

Administration

The administration of the historic trail would be similar to alternative B, with the National Park Service being responsible for consulting and coordinating with other agencies. The scope of administrative activities, however, would be somewhat less than under alternative B because fewer miles would be authorized as part of the trail. A specific administrative structure capable of meeting the management and development needs, as described below, would be proposed in the comprehensive management plan.
Resource Protection

Within Federal Areas. The protection by federal agencies of existing trail traces and historic sites within federal areas would continue to be important. However, standards set for physical protection, preservation, stabilization, and research would be somewhat less than under alternative B, and priorities would be established so that the areas of highest value would receive the greatest care. All existing trail traces and associated historic sites on federal land would be fully protected from external threats, mineral exploration, and grazing, like alternative B. However, impacts from these competing interests would be less because fewer acres would be involved. Overall, federal managing agencies would not be required to apply their strictest strategies for preservation/protection.

Outside Federal Areas. The trail would be designated on both federal and nonfederal lands, and this alternative would carry some obligation for cooperating agencies to extend protection to trail resources on nonfederal lands. However, the strategy would emphasize a moderate course that would generally rely on negotiated cooperative agreements with state and private landowners, rather than full fee acquisition, to ensure the necessary protection.

Marking the Trail

Trail identification would be similar to alternative B, except the total trail length would be shorter. Consistent, coordinated marking of the actual trail would be undertaken, as well as the identification and marking of automobile roads retracing historic routes, as well as associated roads connecting with the trail route. Private enterprise would be encouraged to produce guides or maps for people wanting to retrace the trail route along the nearest hard-surfaced roads. A general information brochure about the California National Historic Trail would be prepared and published by the National Park Service.

Physical Development, Interpretation, Public Access, and Use

Alternative C would propose a smaller federal role in interpretive development than that outlined for alternative B. Broad interpretive themes relating to the trail system would still be presented at visitor centers at each end of the trail and at three points along the trail, and a systemwide interpretive plan would be formulated. However, only modest interpretive development would occur at the more easily accessible historic sites along the trail, principally on state or federal lands. The federal contribution would be limited to technical assistance, such as plan and design reviews and other consultant services that could be provided by the National Park Service. Similar technical assistance would be given in the development of six additional, small-scale interpretive sites along the trail, and some improvements would be made at existing sites.
Compared to alternative B, less emphasis would be placed on increasing public access to the trail and on trailhead development for long-distance hiking, horse use, or vehicle travel over the actual trail. However, the goal would still be to provide the public with reasonable access to as many high-value segments as possible. Negotiated agreements would be required to some extent to ensure this access. Maximum efforts, including some financial support, would be extended to encourage private landowners, private historical groups, and state or county agencies to provide reliable access outside federal lands, and to provide for the management and development of nonfederal trail resources.

Cost Estimates

Cost estimates for development, land acquisition or cooperative agreements, and annual operations under alternative C are shown in table 3. The same assumptions and cautions as described for alternative B would apply. The federal share in the major construction items would be much more limited than under alternative B.
Table 3: Cost Estimates, Alternative C  
California Trail

<table>
<thead>
<tr>
<th>Construction/New Development</th>
<th>Units</th>
<th>Cost</th>
<th>Federal Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>New visitor centers (3,000 sq ft, one at each end and three in-between; cost shared equally with Pony Express Trail)</td>
<td>5</td>
<td>$2,500,000*</td>
<td>$ 63,000*</td>
</tr>
<tr>
<td>Additional interpretive roadside stations--minimum roadside station (costs for 3 shared equally with Pony Express Trail, 3 for California Trail alone)</td>
<td>6</td>
<td>175,000*</td>
<td>15,000*</td>
</tr>
<tr>
<td>Improvements to existing interpretive facilities (3 shared equally with Pony Express Trail)</td>
<td>6</td>
<td>90,000*</td>
<td>23,000*</td>
</tr>
<tr>
<td>Additional trailheads (signing and 10-car parking areas; excludes cost of access roads)</td>
<td>15</td>
<td>175,000</td>
<td>58,000</td>
</tr>
<tr>
<td>Historic resource protection (for the 124 sites not included in the Oregon and Mormon Pioneer trails)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research/excavation</td>
<td>35 sites</td>
<td>140,000</td>
<td>106,000</td>
</tr>
<tr>
<td>Stabilization</td>
<td>35 sites</td>
<td>35,000</td>
<td>26,000</td>
</tr>
<tr>
<td>Fencing</td>
<td>35 sites</td>
<td>87,500</td>
<td>66,000</td>
</tr>
<tr>
<td>Erosion control on trails</td>
<td>10 mi</td>
<td>20,000</td>
<td>15,000</td>
</tr>
<tr>
<td>Preventing vehicle trespass</td>
<td>35 places</td>
<td>9,000</td>
<td>7,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$ 291,500</td>
<td>$ 220,000</td>
</tr>
<tr>
<td>Trail markers (initial capital cost and installation of markers where none exist)</td>
<td>1,000 mi</td>
<td>34,000</td>
<td>28,000</td>
</tr>
<tr>
<td>Auto retracement route signs (initial capital cost and installation at intersections and 5-mi intervals)</td>
<td>800 mi</td>
<td>32,000</td>
<td>32,000</td>
</tr>
<tr>
<td>Subtotal Construction/New Development</td>
<td></td>
<td>$3,297,500*</td>
<td>$ 439,000*</td>
</tr>
</tbody>
</table>
Land Acquisition and Cooperative Agreements

Acquisition of critical inholdings within federal areas (assumes 10% of 1,400 mi in federally owned areas [140 mi] are inholdings, of which 7 mi would be acquired to ensure both access and protection):

- Acquisition by exchange: 10 mi, no cost
- Acquisition by purchase: 4 mi, $640,000, $640,000

Acquisition of segments outside inholdings (all by state or local governments): unknown, unknown

Costs of negotiated agreements on federal and nonfederal lands:

- Negotiations: 75,000, 37,500
- Implementation of delegated activities: 100,000, 50,000
  - Subtotal Land Acquisition/Cooperative Agreements: $815,000, $727,500

Subtotal Land Acquisition/Cooperative Agreements: $815,000, $727,500

Total Capital Costs: $4,112,500*, $1,166,500*

Annual Operating Expenses

Operation of visitor centers (cost shared equally with Pony Express):

- 5, $125,000*

Additional protection and interpretive employees, and travel (costs shared equally with Pony Express Trail):

- Bureau of Land Management: 15,000*, 15,000*
- U.S. Forest Service: 5,000*, 5,000*
- National Park Service: 20,000*, 20,000*
- Travel, vehicles, supplies: 12,000*, 12,000*
  - Subtotal: $52,000*, $52,000*

Maintenance of facilities and historic sites:

- 80, 50,000, 25,000

Markers:

- replace 10%: 4,000, 4,000

Retracement signs:

- replace 10%: 6,000, 6,000

Total Annual Operating Expenses: $237,000*, $87,000*

*Cost if shared with Pony Express Trail; if that trail was not authorized, then this figure would have to be increased.
ALTERNATIVE D: AUTHORIZATION OF A CONTINUOUS ROUTE, WITH DEVELOPMENT LIMITED TO HIGH-VALUE SEGMENTS AND SITES WITHIN FEDERAL AREAS

Management Philosophy

Under alternative D a continuous route would be authorized as a national historic trail, as required by the National Trails System Act, but federal protection and development would be limited to high-value segments and sites already within the boundaries of established, federally owned land management units. Alternative D would emphasize protection as the first priority, and development for interpretation and recreation as the second priority. This approach would result in scattered, federally developed trail segments and historic sites. Almost no federal involvement would occur along the eastern half of the trail, and developed segments in the western half would be disjunct. Options under this alternative would be to designate all routes and cutoffs within federal areas or to designate only the highest value segments (defined in alternative C as those existing before 1849).

There would be no federal encouragement for trail protection and development outside the boundaries of federal units. Therefore, minimum cooperation would be needed with private landowners and state or local governments to manage trail properties unless they were inholdings within federal areas or there were direct connections and interactions with resources on federal lands.

Proposed Routes

All routes that are on federal and nonfederal lands and that were used before 1849 would be recommended for authorization, but as a matter of policy only those segments lying within the boundaries of existing federally owned units would be provided federal protection and would be developed. Specifically, this would include trail segments and historic sites on inholdings inside BLM, NPS, or USFS management boundaries.

Routes that would be authorized would be identical to those in alternative C (3,821 miles). But only the main trail west of Casper, Wyoming, the Sublette cutoff, the Salt Lake cutoff, and the western terminus routes (the Truckee and Carson routes and the Applegate and Lassen trails) would actually be protected and have visitor facilities. Most portions of these segments are within federally managed areas.

The protected portion of this system would consist of approximately 2,171 miles of trail that are either already federally owned or are on inholdings within federal boundaries. Exact trail mileage to be protected under this alternative would not be determined until field surveys were completed, but protected segments would consist principally of visible traces and tracks. Of the 2,171 miles that would be actively protected under this alternative, 246 miles are already authorized as part of the Oregon and Mormon Pioneer national historic trails.
Fewer historic sites would be protected under this alternative than under alternatives B and C. Based on current data, approximately 128 historic sites would eventually be included in the system, 13 of which are already protected as part of the Oregon and Mormon Pioneer trails.

No trail segments or historic sites on state and county lands would be actively protected or developed under federal authorities, although these segments could be developed by state and local governments.

Administration

The administration of the trail by the National Park Service would be similar to alternative C, but the scope of administrative activities would be considerably reduced compared to alternatives B and C because trail segments outside federal areas would not be actively managed.

Resource Protection

Within Federal Areas. Trail support facilities would only be developed on federal lands, and protection would be exclusively directed to those resources on federal lands. As described for alternative C, priorities would be established to protect trail resources. The highest standards of protection would be applied to the most significant, threatened, and vulnerable resources (trail traces, historic buildings, or other physical remains), and lower standards would be applied to the remaining resources.

As described under alternative C, federal acquisition of inholdings would occur only if resources were severely threatened. The preferred method of protection would be cooperative agreements.

Outside Federal Areas. Trail resources outside federal areas would not be protected under the National Trails System Act. Consistent with the restricted scope of this alternative, the National Park Service would not actively encourage private owners or states and counties to preserve, protect, or provide public access to trail resources on private lands. No additional federally supported trail research or archeological investigation would be undertaken for resources outside federal boundaries.

Marking the Trail

Alternative D would propose the least extensive program of trail marking, concentrating exclusively on the placement of consistent markers along trail segments within federal land units. No portions of the California Trail that have been lost to development would be marked. An automobile route would not be marked, nor would trail guides or maps be produced.
Physical Development, Interpretation, Public Access, and Use

No federally supported visitor centers would be developed. Agencies responsible for managing long portions of the designated trail would be encouraged to devote additional space to trail interpretation in existing visitor contact facilities, or to develop at their discretion new facilities to interpret regional themes. Interpretive activities and facilities at existing developed sites on federal lands would continue, but few new sites would be developed. An interagency interpretive plan (effective only for the five western states) would be developed to provide guidelines for the routine replacement or upgrading of existing interpretive exhibits.

Public access to the trail on federal lands would continue essentially as at present. No extraordinary attempts would be made to provide access to currently inaccessible trail segments on private inholdings, except where negotiated agreements to protect resources could also include public access provisions.

Cost Estimates

Cost estimates, including the federal share, are shown in table 4.

Table 4: Cost Estimates, Alternative D
California Trail

<table>
<thead>
<tr>
<th>Units</th>
<th>Cost</th>
<th>Federal Share</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td><strong>Construction/New Development</strong></td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>Improvements to existing visitor facilities (cost of two facilities shared equally with Pony Express Trail)</td>
<td>10</td>
<td>$150,000*</td>
</tr>
<tr>
<td>Historic resource protection (for the 115 sites not included in the Oregon or Mormon Pioneer trails; assume federal responsibility for 25% of all sites):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research/excavation</td>
<td>50 sites</td>
<td>200,000</td>
</tr>
<tr>
<td>Stabilization</td>
<td>50 sites</td>
<td>50,000</td>
</tr>
<tr>
<td>Fencing</td>
<td>50 sites</td>
<td>125,000</td>
</tr>
<tr>
<td>Erosion control on trails</td>
<td>10 mi</td>
<td>20,000</td>
</tr>
<tr>
<td>Preventing vehicle trespass</td>
<td>50 places</td>
<td>12,500</td>
</tr>
<tr>
<td><strong>Subtotal Construction/New Development</strong></td>
<td>500 mi</td>
<td>$574,500*</td>
</tr>
</tbody>
</table>
Cost shared with Pony Express Trail; if that trail was not authorized, then this figure would have to be increased.

**Federal funds that would have to come from within existing BLM or USFS budgets, not from NPS appropriations under the National Trails System Act.**

<table>
<thead>
<tr>
<th>Land Acquisition and Cooperative Agreements</th>
<th>Units</th>
<th>Cost</th>
<th>Federal Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquisition of critical inholdings within federal areas (assumes 10% of 1,400 mi in federally owned areas [140 mi] are inholdings, of which 1.4 mi are critical and would be acquired to ensure protection):</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acquisition by exchange</td>
<td>1.0 mi</td>
<td>no cost</td>
<td></td>
</tr>
<tr>
<td>Acquisition by purchase</td>
<td>0.4 mi</td>
<td>128,000</td>
<td>128,000</td>
</tr>
<tr>
<td>Acquisition of segments outside inholdings</td>
<td>unknown</td>
<td>unknown</td>
<td></td>
</tr>
<tr>
<td>Costs of negotiated agreements within federal areas:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negotiations</td>
<td>20,000</td>
<td>20,000</td>
<td></td>
</tr>
<tr>
<td>Implementation of delegated activities</td>
<td>20,000</td>
<td>20,000</td>
<td></td>
</tr>
<tr>
<td>Subtotal Land Acquisition/Cooperative Development</td>
<td>$40,000</td>
<td>$40,000</td>
<td></td>
</tr>
<tr>
<td>Total Capital Costs</td>
<td>$168,000</td>
<td>$168,000</td>
<td></td>
</tr>
</tbody>
</table>

| Annual Operating Expenses                   |       |      |               |
| Additional protection employees and travel (costs shared equally with Pony Express Trail): |       |      |               |
| Bureau of Land Management                   | 15,000*| 15,000*|               |
| U.S. Forest Service                         | 5,000*| 5,000*|               |
| National Park Service                       | 5,000*| 5,000*|               |
| Vehicles, travel, and supply                | 10,000*| 10,000*|               |
| Subtotal Annual Operating Expenses          | $35,000*| $35,000*|               |
| Maintenance of facilities and historic sites (on federal land) | 80 | 50,000 | 50,000 |
| Markers (on federal land)                   | replace 10% | 2,000 | 2,000 |
| Total Annual Operating Expenses             | $87,000*| $87,000*|               |

* Cost shared with Pony Express Trail; if that trail was not authorized, then this figure would have to be increased.

**Federal funds that would have to come from within existing BLM or USFS budgets, not from NPS appropriations under the National Trails System Act.**
HISTORICAL BACKGROUND

OVERVIEW

Two years after the discovery of gold in California in 1848, California was admitted to the Union as the 31st state, and three years later the Gadsden Purchase made the states and territories of the United States contiguous from the Atlantic Ocean to the Pacific Ocean. But although over a half million emigrants had populated the vast wilderness west of the Rocky Mountains by 1860, major differences in lifestyles and perspectives between the East and West—and painfully slow communications—had created a nation of two separate parts.

As events led to the Civil War, pressure increased on Congress to establish better linkages between East and West. Westerners urged Washington to provide transcontinental mail service and to open roads across unsettled stretches of the country. But for more than a decade the development of communication and transportation facilities by the government was mired in political struggle. The selection of an overland mail route turned into an issue of partisan controversy among advocates favoring a southern passage as opposed to a central overland trail.

In 1855 Sen. William M. Gwin of California introduced a bill in Congress proposing a weekly mail line from St. Louis to San Francisco and the construction of military posts along the central route, but the bill met with southern opposition. Two years later Congress authorized letting a contract to provide overland mail service to California. A 2,700-mile southern route was selected by the contractor. In the east the route started at Memphis, Tennessee, and another route headed south from St. Louis, meeting the eastern route in Arkansas. The route then continued southwestward across Texas, New Mexico, and Arizona. At Yuma, the route forked—one branch led to southern California while the other swung north to San Francisco.

The adoption of this southern route brought protests from supporters of the central route, who maintained the southern trail was too indirect and dubbed it an oxbow route. Although the route was well organized and provided regular service, the journey was slower than what some felt was possible, and the route failed to directly satisfy the needs of Californians. Still, for various reasons the federal government remained convinced that the southern route was the only practical way to carry mail from coast to coast.

To prove the practicability and superiority of a central overland route, and to compete for the overland mail contract, the Central Overland California and Pike's Peak Express Company was started by William R. Russell, in partnership with Alexander Majors and William B. Waddell. Previously, the firm of Majors and Russell had a successful freighting monopoly for transporting military supplies and other goods across the plains to army troops and settlements in the west. Under this new enterprise the firm added stagecoach service to their existing freight
line. When the stagecoach operation failed to show a profit, Russell impetuously committed the company to establishing a 10-day horse relay mail express—the birth of the Pony Express. However, financial support was not forthcoming from the federal government.

Establishment of the Pony Express

The Central Overland California and Pike's Peak Express Company moved its headquarters from Leavenworth, Kansas, to the Patee House in St. Joseph, Missouri. This became the eastern terminus of the Pony Express, and the B.F. Hastings Building in Sacramento, California, was designated as the western terminus. From there, the mail was to be carried by boat down the Sacramento River to San Francisco. The distance between the termini was over 1,800 miles. Mail was to be carried around the clock in both directions, with departures once each week from either end.

In just over two months the necessary arrangements were made, a remarkable logistic accomplishment. The line had five divisions, with a superintendent assigned to each, as well as a general superintendent. Efficient local operations were the responsibility of each division's station agents, who depended heavily on their superintendents to maintain and supply the line.

Accounts differ as to the actual number of stations built or used, but it seems safe to assume that over 150 were connected with the Pony Express. Beyond Salt Lake City, where the route departed from existing tracks, new stations had to be constructed. Because of a shortage of timber in parts of the Great Basin, particularly western Utah and Nevada, stations were made of adobe brick or stone and had no roofs. In some instances, dugouts and tents served as temporary shelters. On the eastern segment of the trail, many of the stations were originally part of the company's overland stage stops and were spaced 20 to 25 miles apart. Later, additional stations had to be built in-between at 10- to 15-mile intervals. The distance between stations was based on how far a horse could travel at the fastest sustainable speed over a given terrain before a change was needed. For the entire distance, the average speed was 250 miles in a 24-hour period, or 10.7 miles per hour. Individual riders would change horses at relay (remount) stations, and cover from 75 to 100 miles before reaching a home station where they would be relieved by another rider.

Over 500 of the best horses available were selected for their speed and endurance and cost $150 to $200 each, three or four times the going rate for an ordinary saddle horse. Specially designed saddles were also made; they were in the form of a unique jockey-type saddle and weighed less than 13 pounds. The leather seat with saddle horn and cantle provided a soft cushion for comfort in riding long distances. Thrown over the saddle, with openings for the horn and cantle, was a rectangular leather blanket called a "mochila" (mail pouch). Four locking "cantinas" (hard leather pockets) were sewn to the mochila and lined with oilskin to
protect the mail from the sweat of the horse and rain or snow. During
the journey the mochila was switched from horse to horse. Three of the
cantina pockets contained "through mail" and were kept locked the entire
trip. "Way mail" was placed in the fourth pocket and deliveries were
made enroute. Upon arriving at relay stations, Pony Express riders were
allowed only two minutes to switch the mochila from one horse to another.
In practice the exchange was often made in even less time, in an
unbroken stride or without the rider's feet ever touching the ground.

Initially 80 riders were recruited by division superintendents. Upon
qualifying, each rider took an oath and was issued a small Bible. In
addition to receiving a monthly salary averaging $50, plus bonuses, each
rider was housed and fed at company expense. With some 400 station
keepers and stock tenders already employed, operations were ready to
begin.

While preparations were being made in the field, administrative offices
were being established in New York, Washington, Chicago, and St. Louis
to gather mail for forwarding to St. Joseph. Mail rates were initially $5
an ounce (later reduced to $1 per ounce), with an additional charge of
10¢ for U.S. postage. Letters were generally written on thin tissue
paper. Telegraph messages arriving at each terminus were forwarded at
a cost of $2.45 per communique. Total weight of the dispatches, both
letters and telegraph messages, was not to exceed 20 pounds. Heavier
mail items, such as magazines and newspapers, were shipped by
stagecoach. In total, 34,753 pieces of mail were carried over the 18-month
period the Pony Express was in existence--23,356 eastward and 11,397
westward.

Start of Service

Just two months after the enterprise was formed, the inaugural run of
the Pony Express began on April 3, 1860. The scheduled starts from
both Missouri and California were slightly delayed through no fault of the
company. In the east the mail coming from Detroit on the Hannibal-St.
Joseph railroad was two hours late, and in the west the steamer from San
Francisco which carried the company's messenger to Sacramento was late.
It is reported that this delay made the actual start from the western
terminus on April 4, 1860. Following this initial delay, all future
dispatches eastward from Sacramento were on schedule.

With the mail off in both directions, the first riders raced across the
grueling route. Often the weather was disagreeable, and in many places
roads were virtually nonexistent and trails nearly impassable. Yet the
chain of intrepid young riders and their hard-pressed mounts made all
haste to make up for lost time. The riders passed each other somewhere
east of Salt Lake City on April 8, 1860; after nine days and 23 hours the
first westbound rider rode into Sacramento, one hour ahead of schedule.
The eastbound rider arrived in St. Joseph just minutes short of exactly
10 days.
Financial Problems and End of Operations

In May and June 1860, just a month after the historic first run, the Pony Express bore the brunt of the Pyramid Lake Indian War. This Paiute uprising was costly in both lives and money. Among the casualties were dozens of station keepers and their assistants, but only one express rider, a young Mexican, is known to have died. In an attempt to stop the Indian raids, several military/civilian expeditions were launched. In one, Maj. William Ormsby of Carson City led a group of 105 volunteers who were ambushed on the morning of May 12, with 76 being lost.

During these two months, and intermittently for weeks to come, 250 miles of the Pony Express trail lay in a virtual state of siege as bands of aggressive warriors burned and destroyed station after station. With the resulting loss of revenue, and the subsequent expense of resupplying stations and equipment, the company's losses were estimated as high as $75,000.

By July service resumed, although conditions remained tense. To appease public demands, the Pony Express was extended to a twice-weekly schedule, leaving Sacramento every Wednesday and Saturday. The company, already in deep financial trouble, still hoped to impress Washington officials of the need to grant a contract subsidy. The strain upon the riders as well as field staff under this new schedule increased proportionately. Yet despite the strains, records for speed and endurance of the express carriers kept mounting, as did accounts of the perseverance and devotion to duty of station keepers.

Of all the company's problems and difficulties, the overwhelming trouble remained one of finances. Even though the Pony Express proved the practicability of the central route, no monetary assistance was ever provided by the U.S. government, and every effort to secure financial support through a government subsidy failed. The Central Overland California and Pike's Peak Express Company was on the verge of bankruptcy, and it had been that way since before the Pony Express was started. To further complicate matters, in December 1860 Russell became involved in an $870,000 bond scandal. Yet the Pony Express continued to run on schedule, although no one is sure how or why. It is believed that only some crucial missing records of the company and of co-owner Alexander Majors might ever have answered that question.

During late spring and early summer of 1861, telegraph lines were being built from both the east and the west and were coming closer together at a rate of six miles a day. The Pony Express continued carrying mail over its full route, but telegrams were only carried between the narrowing gap between telegraph termini. Thus, during very critical times the Pony Express riders continued to tie the country together.

On October 26, 1861, coinciding with the completion of the telegraph link, the Pony Express was officially terminated. Riders had made more than 150 round trips, covering over 600,000 miles. In the 18 months that the Pony Express was in operation, nearly 35,000 pieces of mail were
transported, the mail was lost only once, one horse died of exhaustion, and one rider was killed.

Significance of the Pony Express

The Central Overland California and Pike's Peak Express Company not only accomplished its objective of rapidly delivering mail but also set a precedent for transportation and communication in the development of the West. The central overland trail popularized by the Pony Express did become the route followed by the telegraph, and nine years later by the transcontinental railroad. The Pony Express successfully crossed the Great Plains, the Rocky Mountains, the Great Basin, and the Sierra Nevada at unprecedented speeds and provided regular, year-round mail service from the Atlantic to the Pacific. Finally, the Pony Express appeased the demands of the people on the west coast for rapid communication and a sense of contact with events and governmental activities in the east.

Before its demise, the Pony Express had achieved national prominence and carried some of the century's most urgent news dispatches to the West Coast. President Buchanan's message to Congress in December of 1860 was dispatched in 8 days; in March 1861 President Lincoln's inaugural address was carried in 7 days 17 hours; and during April 1861 the West Coast learned of the attack on Fort Sumter and kept abreast of the imminent outbreak of the Civil War.

Overseas, French and German publications produced articles and pictures showing Pony Express riders being chased by Indians. A representative from the London Illustrated News was sent to St. Joseph to do a cover story on these fascinating mail couriers. Many European investors found it speedier to receive business reports by sending them across country on the Pony Express rather than by ship. While England and China were at war, the Pony Express carried official war documents.

THE PONY EXPRESS ROUTE

The Pony Express Trail is generally defined as the route followed by the Pony Express riders for over 1,800 miles from St. Joseph, Missouri, to Sacramento, California (see Pony Express Trail map). Most of the original trail has been obliterated either by time or human activities, and along many segments the trail's actual route and exact length are matters of conjecture. At only a few places, such as where a narrow mountain pass limits the passageway, can historians be sure of the exact route.

For the most part the eastern segment of the route follows the Oregon, California, and Mormon Pioneer trails through Kansas, Nebraska, and Wyoming. It then follows the Mormon Trail and the Salt Lake cutoff of the California Trail from Fort Bridger to Salt Lake City. The western segment, starting from Salt Lake City, departs from the more well-known routes and cuts across central Utah, crossing the Great Basin through
central Nevada, then following the Carson River and scaling the Sierra Nevada at Echo Summit. From the summit the trail generally follows what is now old US Highway 50 through Placerville to Sacramento.

There are no visible trail ruts definitely attributable to the Pony Express along the eastern portion of the route. In the western states, the majority of the trail has been converted over the years to double track dirt roads typically used by private working ranches, or on federal lands to public jeep trails. Short pristine segments believed to be traces of the original trail can be seen only in Utah and California. However, some tangible evidence of original Pony Express Trail stations and related features can still be identified in each of the states.

**Missouri**

As the eastern terminus and headquarters of the Pony Express, St. Joseph has long been known as the "Home of the Pony Express." Both the headquarters building (Patee House) and stable still exist and have been developed as interpretive facilities open to the public.

Although all traces of the actual route through St. Joseph have been covered by development, the route is known and can be retraced for 4 miles to its crossing (originally by ferry) of the Missouri River into Kansas.

**Kansas**

The Pony Express route in Kansas covered some 131 miles in the northeastern corner of the state. Initially avoiding the emigrant routes (that is, the St. Joe Road portion of the California Trail), the Pony Express followed a network of established roads and trails until meeting the St. Joe Road and, slightly farther west, the main Oregon Trail.

No original traces of the route exist in Kansas, but some four segments are well documented and are accessible from, or are actually covered by, public roads. A river crossing, a barn, and a station site are considered to be historic resources.

**Nebraska/Colorado**

With few exceptions, the Pony Express trail followed the south bank of the Platte River (and the Oregon/California trails) through Nebraska to the junction of the South Platte. Again staying on the south side, the Pony Express followed the South Platte in its short jog into Colorado to Julesburg. Turning northwest, the trail reentered Nebraska and continued back up to the North Platte to rejoin the main emigrant trails through Scottsbluff and on up the North Platte into Wyoming.
Much of the Platte River corridor in Nebraska and Colorado is privately owned, intensively developed agricultural land. This, combined with the development of Interstate 80 and other highways on both the north and south banks, has effectively eliminated original traces of the Pony Express Trail (as well as the emigrant trails). However, some five segments, including the portion in Colorado and sections crossing rangeland in the Nebraska panhandle, are still reasonably accessible for public use. Although only three of the 37 original Pony Express stations along this stretch are standing, nearly a dozen other station remains and associated historic sites are already developed or are likely candidates for public use.

Wyoming

Across southern Wyoming the Pony Express followed the Oregon, California, and Mormon trails for almost 470 miles. This route paralleled 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 and main California trails just west of the divide and followed the Mormon Trail and the Salt Lake cutoff down the Bear River to Fort Bridger and southwestward into Utah. Just west of Casper the route is on BLM lands, and it remains on or adjacent to BLM lands across the rest of the state.

Over the tremendous expanses of sage-covered high plains and along the rolling and sometimes spectacular course of the Sweetwater, the various trails are visible as double-track dirt roads that are generally passable by four-wheel-drive vehicle. Faint wagon traces alongside the existing tracks show where wagons spread out to avoid one another's dust or to find a slightly better grade.

A total of 289 miles of trail (over half the mileage in Wyoming) show evidence of historic resources. Although 39 stations were originally in operation, only a few faint traces of foundations remain today. A total of 12 sites, including the location of some important stations and landmarks, could be used for Pony Express Trail interpretation in Wyoming.

Utah

The mountainous, winding route through the Wasatch Mountains of northeastern Utah eventually followed the Mormon Pioneer Trail down Emigration Canyon into Salt Lake City. From Salt Lake City the route left the Salt Lake cutoff of the California Trail--which looped back northward--and after a short south leg to avoid the lake turned due west. From this point the trail crossed some of the most barren and desolate desert country in the state until it reached the Nevada border in the present-day Goshute Indian reservation.

Of the 238 miles of trail in Utah, about 206 miles in five segments are considered to be the historic route. Of special concern is a privately
owned 10-mile stretch from Needle Rock to Cache Cave; the segment is believed to contain some 5 miles of original single-track trail and 5 miles of primitive double-track. Another stretch believed to be pristine is also on private property in western Utah. Nearly 60 percent of the Utah Pony Express route is still visible as double-track primitive road, but much of the remainder is known to have disappeared under improved and hard-surfaced roads.

Of the 26 station sites in the state, 25 have been located, but few original remains are standing. Three original stations have been restored, and two more sites have been developed as wayside interpretive facilities. These and two more station sites for a total of seven could be used.

**Nevada**

As it entered present-day Nevada (in 1860 it was part of Utah Territory), the Pony Express Trail began its most dangerous, desolate, and lonesome stretch. Through the 456 miles of mostly high desert, the trail made its way due west from water hole to water hole. (Modern US 50 follows the general route, but usually some miles to the south.) The route traversed several mountain ranges and made its way across the rugged and challenging country.

Reaching the relatively easier country around Carson City, the original route dropped south to Genoa and crossed the Sierra Nevada at Echo Summit (along modern-day US 50). A permanent route change after only a few months put the trail slightly north, but still south of Lake Tahoe, to go over Daggers and eventually Johnson Pass, a shorter distance (by 12 miles) and less snowy.

Some 80 percent of the Pony Express Trail in Nevada is on public lands, and the majority of trail is considered double-track jeep trail. Ten route segments (totaling 347 of the 456 miles) are considered to be part of the historic route. These segments can generally be traversed only with horse, motorcycle, or four-wheel-drive vehicle, and they are so remote that extensive planning and effort are needed to retrace them.

Although 28 stations were believed to have been operated in Nevada, only 10 or 11 locations can definitely be located, and only three of these are substantially intact. Considering these stations and several other less-evident stations and some associated historic sites, only nine or ten areas could be considered for continued or future public use and interpretation.

**California**

Because of the route change in Nevada, two Pony Express routes existed in California. The original Carson River route crossed Echo Summit, descended the South Fork of the American River to Placerville, and ended
in Sacramento. The later Kingsbury-McDonald route over Johnson Pass also eventually reached the South Fork and descended to Placerville, cutting out about 11 miles. Slight route variations occurred west of Placerville because the original terminus in Sacramento was moved to Folsom, and then to Placerville when the telegraph was completed to those cities.

About 144 miles of the original trail and 122 miles of the final route are in California. Some 36 miles cross Eldorado National Forest, where a 10-mile segment, one of perhaps only two or three original single-track sections remaining along the entire route, has already been designated as a national recreation trail. Although roads parallel or even overlay the trail along much of the nonfederal portions, there are many points where there are still visible trail remains. The route also passes through several small rustic mining towns and historic communities that predate the Pony Express.

Eight segments in California (totaling 88 of the 144-mile original trail or 79 of the 122-mile final route) have been tentatively identified as following the historic routes. All 15 station sites in California have been marked and designated as historic landmarks. Nine of the 15 station sites and nine additional historic sites might be developed and used as Pony Express interpretive sites. Because public and private agencies in California have been active for years in locating and marking historic sites in the general area, much interpretive development has already occurred.

The original terminus building in Sacramento, the B.F. Hastings Building, still stands and has been restored. Together with nearby Old Sacramento State Historic Park these structures and restored surroundings still present a fitting and genuinely historic scene for the end of an 1,800-mile route that helped change the face of the West.
ESTABLISHMENT AND MANAGEMENT ALTERNATIVES

ALTERNATIVE A: NO AUTHORIZATION (NO ACTION)

Management Philosophy

No portions of the Pony Express trail would be authorized as a national historic trail, and there would be no further NPS involvement in overall administrative activities. However, trail resources already administered by the Bureau of Land Management, U.S. Forest Service, or National Park Service would continue under present management strategies, subject to these agencies' respective internal policies, priorities, and financial resources.

Administration

Without authorization of a national historic trail, no federal agency would be assigned overall administrative responsibility for the trail.

Resource Protection

Within Federal Areas. Each federal land management agency would continue to set its own standards and priorities for protection, stabilization, and research of trail resources. Trail resources not yet identified or protected under current policies would probably not receive federal protection in the future.

Outside Federal Areas. Other than routine actions taken by each federal agency under its existing mandate and priorities, no efforts would be made to ensure the protection of trail resources outside federal areas. In general, federal agencies are required to monitor threats to trail resources immediately outside their administrative boundaries, but responses would be limited to addressing threats that would directly affect resources inside their boundaries, or resources that have some other national significance (e.g., national historic landmarks).

Marking the Route

No consistent, coordinated marking program for the Pony Express Trail would be developed. Each agency—even each administrative region or district—would continue to develop a marker type as well as its own specific route maps (if any) for public distribution.

Physical Development, Interpretation, Public Access, and Use

No changes in existing development, interpretation, access, or use would be made under the authority of the National Trails System Act. Each
federal agency—as well as state or local groups—would propose, fund, and implement public use proposals according to its own priorities and policies. No attempt would be made to coordinate interpretive activities relating to the whole trail.

**ALTERNATIVE B: AUTHORIZATION OF ALL ROUTES USED BY THE PONY EXPRESS**

**Management Philosophy**

Under this alternative, all components of the Pony Express Trail (both the original route and later changes) would be authorized as a national historic trail. The entire Pony Express Trail system, on both federal and nonfederal lands, would thus receive the maximum degree of protection, development, and public use allowable under the National Trails System Act.

**Proposed Routes**

Routes proposed for authorization would include the original Pony Express Trail route of April 1860 from St. Joseph, Missouri, to Sacramento, California, and all subsequent changes used through October 26, 1861. Specifically, the two route changes to be included with the original route would be the Kingsbury-McDonald road (Nevada-California border) and the Green Valley road (California). Authorization would include over 1,855 miles of trail route and about 120 sites, including 50 existing Pony Express stations or station ruins, related structures, and a dozen or so historic sites associated with the trail.

**Administration**

The secretary of the interior would be charged with the overall administration of the national historic trail, and the National Park Service as the administering agency would be responsible for consulting and coordinating with the heads of all other affected state and federal agencies. Details of this administrative role would be developed in the comprehensive management plan for the trail. Basically the Park Service would coordinate management of the authorized trail system, including certification of nonfederal segments, cooperative agreements to protect nonfederal resources, and acquisition of resources, if necessary.

**Resource Protection**

Within Federal Areas. This alternative would propose a full range of protection activities to be undertaken by federal land-managing agencies within federal areas. This would include setting high standards for the physical protection of existing trail traces and for protection, stabilization, and research at all stations and associated historic sites,
regardless of the historical value of the segment along which they are located. All confirmed station sites where visible remains are known would be preserved and appropriately developed. Any threats to resources posed by development on adjacent lands, road building, utility pipelines and corridors, mining and minerals exploration, excessive stock grazing, or other situations would be addressed.

This alternative would not propose changes in the basic mandates of federal agencies involved (e.g., the multiple-use mandates of the Bureau of Land Management or U.S. Forest Service). However, these agencies would be encouraged to apply the strictest preservation/protection strategies allowed by their existing policies so as to ensure the protection of trail-related resources.

Outside Federal Areas. The National Park Service, as the responsible administering agency, would extend protection and preservation to as much of the designated trail system outside federal areas as feasible. As stipulated in the National Trails System Act, the first actions would be to encourage state and local governments to provide protection and access to high-value trail resources. If state and local governments failed to take these steps, the Park Service would actively seek such protection through either cooperative agreements, fee-simple acquisition (by exchange or purchase), or acquisition of easements to ensure the preservation and availability for public use of all significant trail resources now on nonfederal lands.

Under alternative B the acquisition of private lands with federal funds would be allowed, unlike most other historic trail authorizations. Authority to use federal funds to acquire lands outside existing federal areas would allow the National Park Service maximum flexibility in the management and protection of trail resources wherever they are. Although federal implementation of these land protection options would have a high priority under this alternative, it would always be executed on a willing-landowner basis.

This alternative would extend protection to all nonfederal historic resources, including the few miles of allegedly original single-track trail not on federal lands.

Marking the Trail

Under this alternative the entire authorized Pony Express Trail, as well as routes that parallel and provide access to the trail, would be identified with a series of permanent markers consistent in type and appearance along the entire length of the trail, and also similar to markers already in use on other national historic trails. This approach would include the marking of all trail segments on federal lands and, with permission, private lands. Where physical constraints prohibit or limit passage, markers would be placed at strategic locations to visually show the route. Uniform directional signs along highways and roads would be provided to identify access points to the trail corridor, station sites, historic
resources, and other associated points of interest. An automobile route that closely parallels the Pony Express Trail would be marked to afford a recreational experience for automobile tourists. Signs would also be posted to mark connecting routes, points where the trail actually crosses a road or where it is covered by the roadway, directions to access points and station sites, interpretive displays, historic sites, and associated points of interest.

Pony Express Trail maps, road maps, and brochures would be produced by the federal government for public information and use. These guides would provide information pertaining to all types of uses, identify station sites and historic sites, and include other pertinent information to enhance users' safety and enjoyment.

Physical Development, Interpretation, Public Access, and Use

This alternative would propose the development of a systemwide, coordinated interpretive program for the Pony Express Trail and all station sites. The public would be told about the history of the site and area, cultural values, and events that took place at the site or along the immediate trail segment. An interpretive plan would be prepared to outline themes and ensure that programs were not redundant. The plan would also propose appropriate sites to interpret specific themes.

To provide complete information and an integrated interpretive view of the entire trail, this alternative would propose the development of visitor centers in St. Joseph, Missouri, and Sacramento, California, which would be complemented by centers focusing on regional themes at three intermediate locations. Each center would be equipped to fully interpret the Pony Express story through visual aids and written materials. An assortment of literature would be provided to benefit all types of trail users, and regional information, travel and trail conditions, and localized assistance would be available. Interpretive sites along the roads following the historic trail alignment would also be developed, and existing interpretive facilities would be improved. Additional road access and trailheads would be developed at intervals along the entire route, and interpretive information and maps would be provided at trailheads for that trail segment. Parking areas and restroom facilities would generally be provided at each trailhead. Trailhead facilities would be located so as not to adversely affect station sites.

Cost Estimates

At the present level of planning and detail it is extremely difficult to give accurate cost estimates. The following estimates are not based on detailed projections or plans about the type and quality of physical facilities, or on any specific appraised land values. The estimates are meant to be a means for comparing the various alternatives, and they have been prepared with the same unit costs to facilitate these comparisons. Many factors could affect actual costs, including the use of existing facilities.
for the Oregon and Mormon Pioneer trails, the construction of new visitor centers, or the adaptive use of existing centers. In future comprehensive planning, if the trail was authorized, detailed site and facility specifications would be developed as well as recommendations for new facilities or the consolidation of functions with other existing or planned facilities.

Under alternative B the development of cooperative agreements between federal, state, and local governments would be essential. It is, therefore, very difficult to predict what proportion of the total cost of facility development or land acquisition might ultimately be provided by all these managing authorities. In table 5 the total costs of specific items are given, followed by a figure for the federal share considered likely under the basic assumptions of this alternative. For example, the federal share in visitor centers would be to provide planning, design, supervision, and exhibits, while leaving the actual construction and site preparation to others.

If both the California and Pony Express trails were authorized, then certain interpretive facilities that relate to both trails could be shared, thus reducing the total cost for development of both trails. Shared facilities are noted with a asterisk in the following table. However, if the California Trail was not authorized, then these costs would have to be increased.
Table 5: Cost Estimates, Alternative B
Pony Express Trail

<table>
<thead>
<tr>
<th>Construction/New Development</th>
<th>Units</th>
<th>Cost</th>
<th>Federal Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visitor centers (3,000 sq ft; one at each end and three in-between; costs shared equally with California Trail)</td>
<td>5</td>
<td>$2,500,000*</td>
<td>$900,000*</td>
</tr>
<tr>
<td>Additional interpretive roadside stations (for each type, costs for 5 shared equally with California Trail, 5 for Pony Express Trail alone):</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full roadside station--unstaffed exhibit area, ½ mi nature trail, restrooms, 4 picnic facilities, and 15-car parking area</td>
<td>10</td>
<td>1,900,000*</td>
<td>700,000*</td>
</tr>
<tr>
<td>Minimum roadside station--unstaffed exhibit area, 5-car parking area</td>
<td>10</td>
<td>290,000*</td>
<td>110,000*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$2,190,000*</td>
<td>$810,000*</td>
</tr>
<tr>
<td>Improvements to existing interpretive facilities (costs for 5 shared with California Trail, 5 for Pony Express Trail alone)</td>
<td>10</td>
<td>150,000*</td>
<td>38,000*</td>
</tr>
<tr>
<td>Additional trailheads (signing and 10-car parking area; excludes cost of access roads)</td>
<td>20</td>
<td>232,000</td>
<td>155,000</td>
</tr>
<tr>
<td>Historic resource protection (for all 120 stations and associated historic sites):</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research/excavation</td>
<td>30 sites</td>
<td>120,000</td>
<td>90,000</td>
</tr>
<tr>
<td>Stabilization</td>
<td>10 sites</td>
<td>10,000</td>
<td>7,500</td>
</tr>
<tr>
<td>Fencing</td>
<td>10 sites</td>
<td>25,000</td>
<td>19,000</td>
</tr>
<tr>
<td>Erosion control on trails</td>
<td>10 miles</td>
<td>20,000</td>
<td>15,000</td>
</tr>
<tr>
<td>Preventing vehicle trespass</td>
<td>10 places</td>
<td>2,500</td>
<td>2,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$177,500</td>
<td>$133,500</td>
</tr>
<tr>
<td>Trail markers (initial capital cost and installation of markers where none now exist)</td>
<td>640 mi</td>
<td>22,000</td>
<td>18,000</td>
</tr>
<tr>
<td>Auto retracement route signs (initial capital cost and installation at intersections and 5-mi intervals)</td>
<td>1,000 mi</td>
<td>40,000</td>
<td>40,000</td>
</tr>
<tr>
<td>Subtotal Construction/New Development</td>
<td></td>
<td>$5,311,500*</td>
<td>$2,094,500*</td>
</tr>
</tbody>
</table>
**Federal share only if state and local governments failed to take actions to protect historic resources.**
ALTERNATIVE C (PREFERRED): AUTHORIZATION OF THE ORIGINAL PONY EXPRESS ROUTE

Management Philosophy

It is recognized that the entire route of the Pony Express is significant, regardless of any remaining physical evidence. Management and interpretation would emphasize this continuity, but as a practical matter, protection, development, and use would be focused on those high-value segments on both federal and nonfederal lands where physical remains can be seen or routes can be clearly identified.

Alternative C would emphasize shared responsibility for the management and protection of trail resources by private landowners, state and federal agencies, and trail user groups having ownership, management, or user interests in the proposed trail system. The intent of this alternative would be to create and encourage an environment for federal agencies to work closely with state, local, and private interests in the protection, interpretation, marking, and public use of trail resources on federal as well as nonfederal lands.

There would be less federal involvement under this alternative than under alternative B, although a similar range of management, protection, and development actions would be proposed. Priorities would be established to concentrate action on the resources with the highest values.

Proposed Route

Based on the rationale that the original route of April 1860 has more symbolic significance than later route changes, the authorized historic trail would follow only the original route from St. Joseph, Missouri, to Sacramento, California. This action would designate roughly 1,833 continuous miles of national historic trail. Some 50 existing Pony Express station sites and related structures, plus other historic sites, would be included in the designation. The authorizing legislation would recognize the existence of high-value segments, but they would not be specifically identified until the comprehensive management plan determined appropriate protection levels.

Administration

The administration of the national historic trail would be similar to that described under alternative B, with the National Park Service as the administering agency being responsible for consulting with the heads of all other affected state and federal agencies.
Resource Protection

Within Federal Areas. Alternative C would not propose as great a federal role as alternative B in the protection of trail resources. This approach would result in somewhat lower standards for protection, stabilization, and research for segments or sites within federal areas. It would also concentrate these efforts on high-value segments, according to a priority ranking of significant sites. Even though low-value segments within federal areas would receive less attention, as part of the designated historic trail they would always receive a minimum level of protection.

Outside Federal Areas. Under this alternative all high-value segments and sites or stations outside federal areas would be protected, but the strategy would favor negotiated cooperative agreements with state and private landowners rather than reliance on full or partial acquisition by the federal government (as under alternative B).

Marking the Trail

Alternative C would propose a program of trail identification similar to that described in alternative B, except that the total trail length would be shorter. Consistent, coordinated marking along the continuous length of the Pony Express Trail would be undertaken, as well as identification and marking of an automobile route paralleling the trail, as well as associated connecting routes. Also, guides or maps would be produced through public or private funding to assist those who wanted to retrace the approximate route of the trail along nearby hard-surfaced roads. The National Park Service would produce a general information brochure about the trail.

Physical Development, Interpretation, Public Access, and Use

Under alternative C broad interpretive themes relating to the significance of the entire trail would be offered only at major interpretive centers at each end of the trail and probably at three points along the trail. The federal contribution would be limited to technical assistance, such as the review of plans and designs or other consultant services that could be provided by NPS staff. Similar technical assistance would be given in the development of perhaps six small-scale interpretive facilities, which would be placed at easily accessible sites along high-value segments. Existing interpretive sites would be improved.

Less emphasis than under alternative B would be placed on increasing public access to the trail and on trailhead development for hiking, horse use, or off-road vehicle travel over the trail. The goal would be to provide reasonable access to all high-value segments of the authorized trail on both federal and nonfederal lands. Negotiated agreements would be used to secure access on nonfederal lands. Private landowners, private historical groups, and state or county agencies would be encouraged to provide access outside federal lands and to develop and manage trail resources on nonfederal lands.
Cost Estimates

Cost estimates for alternative C, including the anticipated federal share, are shown in table 6. See alternative B cost estimates for cautions and assumptions.

| Table 6: Cost Estimates, Alternative C |  |
| --- | --- | --- |
| **Pony Express Trail** | **Units** | **Cost** | **Federal Share** |
| **Construction/New Development** |  |
| Visitor centers (3,000 sq ft each; one at each end and three in-between; costs shared with California Trail) | 5 | $2,500,000* | 63,000* |
| Additional interpretive roadside stations--minimum roadside station (costs for 3 shared with California Trail, 3 for Pony Express Trail alone) | 6 | 175,000* | 15,000* |
| Improvements to existing interpretive facilities (3 shared with California Trail) | 6 | 90,000* | 23,000* |
| Additional trailheads (signing and 10-car parking area; excludes cost of access roads) | 15 | 175,000 | 58,000 |
| Historic resource protection (for 60 stations and sites tentatively identified as significant resources): |  |
| Research/excavation | 15 sites | 60,000 | 45,000 |
| Stabilization | 5 sites | 5,000 | 4,000 |
| Fencing | 5 sites | 12,500 | 9,000 |
| Erosion control on trails | 10 mi | 20,000 | 15,000 |
| Preventing vehicle trespass | 10 places | 2,500 | 2,000 |
| **Subtotal Construction/New Development** | **$100,000** | **$75,000** |
| Trail markers (initial capital cost and installation of markers where none exist) | 620 mi | 21,000 | 17,000 |
| Auto retracement route signs (initial capital cost and installation at intersections and 5-mi intervals) | 900 mi | 36,000 | 36,000 |
| **Subtotal Construction/New Development** | **$3,097,000*** | **$287,000*** |
Cost if shared with California Trail; if that trail was not authorized, then this figure would have to be increased.

<table>
<thead>
<tr>
<th>Land Acquisition and Cooperative Agreements</th>
<th>Units</th>
<th>Cost</th>
<th>Federal Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquisition of critical inholdings (assumes 10% of 707 mi in federally owned areas [71 mi] are inholdings, of which 7.1 mi would be acquired to ensure both access and protection):</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acquisition by exchange</td>
<td>5 mi</td>
<td>none</td>
<td>$ 672,000</td>
</tr>
<tr>
<td>Acquisition by purchase</td>
<td>2.1 mi</td>
<td>$ 672,000</td>
<td>$ 672,000</td>
</tr>
<tr>
<td>Acquisition of segments outside inholdings (all by states or local governments)</td>
<td>unknown</td>
<td>unknown</td>
<td></td>
</tr>
<tr>
<td>Costs of negotiated agreements on federal and nonfederal lands:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negotiations</td>
<td>75,000</td>
<td>37,500</td>
<td></td>
</tr>
<tr>
<td>Implementation of delegated activities</td>
<td>125,000</td>
<td>62,500</td>
<td></td>
</tr>
<tr>
<td>Subtotal Land Acquisition/Cooperative Agreements</td>
<td>$ 872,000</td>
<td>$ 772,000</td>
<td></td>
</tr>
<tr>
<td>Total Capital Costs</td>
<td>$3,969,000*</td>
<td>$1,059,000*</td>
<td></td>
</tr>
</tbody>
</table>

Annual Operating Expenses

Operation of visitor centers (cost shared equally with California Trail) | 5 | $ 125,000* |

Additional protection and interpretive employees, and travel (costs shared equally with California Trail): |
| Bureau of Land Management | 15,000* | 15,000* |
| U.S. Forest Service | 5,000* | 5,000* |
| National Park Service | 20,000* | 20,000* |
| Travel, vehicles, supplies | 12,000* | 12,000* |
| Maintenance of facilities and historic sites | 80 | 50,000 | 25,000 |
| Markers | replace 10% | 2,000 | 2,000 |
| Retracement signs | replace 20% | 7,000 | 7,000 |
| Total Annual Operating Expenses | $ 236,000* | $ 86,000* |

*Cost if shared with California Trail; if that trail was not authorized, then this figure would have to be increased.
ALTERNATIVE D: AUTHORIZATION OF A CONTINUOUS ROUTE, WITH DEVELOPMENT LIMITED TO HIGH-VALUE SEGMENTS AND SITES WITHIN FEDERAL AREAS

Management Philosophy

Alternative D would propose the authorization of a continuous route as a national historic trail, as required by the National Trails System Act, but federal protection and development would be limited to those trail portions already on or within the boundaries of federal land management units. That is, federal efforts would be confined essentially to those segments already under federal jurisdiction. This alternative would emphasize protection as the first priority, and development for interpretation and recreation as the second priority. Responsibility for the management and development of intervening segments on state, county, or private lands would remain in the hands of those owners.

Proposed Route

The original trail from St. Joseph, Missouri, to Sacramento, California, including the Kingsbury-MacDonald and Green Valley route changes in California, would be authorized as the national historic trail. Under this alternative, 1,855 miles of trail route would be designated, and about 105 sites, including 50 stations or station ruins, related structures, and a dozen or so other historic sites, would be protected. However, alternative D would effectively limit protection and development to the 729 miles of trail on BLM and USFS lands and inholdings west of Casper, Wyoming, and to the NPS historic sites at Fort Laramie, Wyoming, and Scottsbluff, Nebraska.

Administration

The administration of the national historic trail would be similar to alternative C. But the scope of administrative activities would be considerably reduced compared to alternatives B and C because trail segments outside federal areas would not be federally protected or developed.

Resource Protection

Within Federal Areas. Only those trail resources within federal areas would be protected under the authority of the National Trails System Act. As described under alternative C, a priority system for protecting resources would be established. This would identify the most significant, threatened, and vulnerable federal trail resources (trail traces, historic station buildings, or other physical remains) and ensure their protection, while lower protection standards would be applied to the remaining resources. No comprehensive additional trail research or archeological investigation would be undertaken with federal support.
The federal acquisition of inholdings would only occur in situations of extreme resource threat. The preferred protection method would be through cooperative agreements.

Outside Federal Areas. No protection under the National Trails System Act would be extended to trail resources outside federal areas, including those visible segments of remaining single-track traces on private lands. Consistent with the restricted scope of this alternative, the National Park Service, as the trail administrator, would not expend significant efforts to encourage private owners, or state or county governments, to preserve, protect, or provide public access to trail resources on their lands. No additional, federally supported trail research or archeological investigation would be undertaken for resources outside federal boundaries.

Marking the Trail

Trail markers of consistent design would be placed along existing trail segments only within federal areas. Portions of the Pony Express Trail that have been lost to development would not be marked. Alternative D would not propose either the development of an automobile route retracing the trail or the production of trail guides and maps.

Physical Development, Interpretation, Public Access, and Use

No new visitor centers for the Pony Express Trail would be developed by the federal government. Agencies that already manage long portions of the designated trail would be encouraged to devote additional space in existing visitor contact facilities to trail interpretation, or to develop new regional facilities at their discretion. Interpretive activities and facilities at specific existing developed sites on federal lands would continue, but few new sites would be developed. An interagency interpretive plan for the four western states would be developed to provide guidelines for the normal replacement or upgrading of existing interpretive exhibits so that eventually there would be some continuity and integration of interpretation along the designated trail.

Public access to the trail on federal lands would continue essentially as at present. No extraordinary attempts would be made to provide access to currently inaccessible trail segments on private inholdings, except where negotiated agreements to protect resources could also include public access provisions.

Cost Estimates

Cost estimates for alternative D, including the anticipated federal share, are shown in table 7.
Table 7: Cost Estimates, Alternative D
Pony Express

<table>
<thead>
<tr>
<th>Construction/New Development</th>
<th>Units</th>
<th>Total Cost</th>
<th>Federal Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improvements to existing visitor facilities (2 each WY, ID, UT, NV, CA; cost shared equally with California Trail)</td>
<td>10</td>
<td>$150,000*</td>
<td>$100,000**</td>
</tr>
</tbody>
</table>

Historic resource protection (for the 105 sites not included in the Oregon or Mormon Pioneer Trails; assume federal responsibility for 25% of all sites):

| Research/excavation | 50 sites | 200,000 | 50,000 |
| Stabilization       | 50 sites | 50,000  | 12,500 |
| Fencing             | 50 sites | 125,000 | 31,000 |
| Erosion control on trails | 10 mi   | 20,000  | 5,000  |
| Preventing vehicle trespass | 50 places | 12,500 | 3,000 |

$407,500 $101,500

Trail markers (initial capital cost and installation of markers only on federal land):

| Trail markers | 387 mi | 13,000 | 13,000 |

Subtotal Construction/New Development $570,500* $214,500*

Land Acquisition and Cooperative Agreements

| Acquisition of critical inholdings (assumes 10% of 729 mi in federal ownership [73 mi] are inholdings, of which 3.7 mi are critical and would be acquired to ensure protection): |
|---------------------------------|--------|--------|
| Acquisition by exchange | 2 mi    | no cost |
| Acquisition by purchase       | 1.7 mi | $544,000 | $544,000 |

Acquisition of segments outside inholdings none

Costs of negotiated agreements within federal lands:

| Negotiations | 20,000 | 20,000 |
| Implementation of delegated activities | 20,000 | 20,000 |

$40,000 $40,000

Subtotal Land Acquisition/Cooperative Agreements $584,000 $584,000

Total Capital Costs $1,154,500* $798,500*
Cost if shared with California Trail; if that trail was not authorized, then this figure would have to be increased.

Federal funds that would have to come from existing BLM or USFS budgets, not from NPS appropriations under the National Trails System Act.

<table>
<thead>
<tr>
<th>Annual Operating Expenses</th>
<th>Units</th>
<th>Cost</th>
<th>Federal Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional protection employees and travel (costs shared equally with California Trail):</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bureau of Land Management</td>
<td></td>
<td>15,000*</td>
<td>15,000*</td>
</tr>
<tr>
<td>U.S. Forest Service</td>
<td></td>
<td>5,000*</td>
<td>5,000*</td>
</tr>
<tr>
<td>Administration</td>
<td></td>
<td>5,000*</td>
<td>5,000*</td>
</tr>
<tr>
<td>Vehicles, travel, and supply</td>
<td></td>
<td>10,000*</td>
<td>10,000*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$35,000*</td>
<td>$35,000*</td>
</tr>
<tr>
<td>Maintenance of facilities and historic sites</td>
<td>80</td>
<td>25,000</td>
<td>25,000</td>
</tr>
<tr>
<td>Markers replace 10%</td>
<td></td>
<td>1,500</td>
<td>1,500</td>
</tr>
<tr>
<td>Total Annual Operating Expenses</td>
<td></td>
<td>$61,500*</td>
<td>$61,500*</td>
</tr>
</tbody>
</table>

* Cost if shared with California Trail; if that trail was not authorized, then this figure would have to be increased.

**Federal funds that would have to come from existing BLM or USFS budgets, not from NPS appropriations under the National Trails System Act.
REGIONAL SETTING

The conceptual nature of this suitability/feasibility study for national historic trail authorization does not require a lengthy description of the regional environment. The following sections provide only an overview to provide a context for considering the major alternative approaches.

PHYSICAL ENVIRONMENT

The California and Pony Express trails cross over 1,800 miles of the western United States, from roughly the center of the country to practically the Pacific Ocean. Where these routes begin, the geography consists of broad, flat, low elevation river corridors in Kansas, Nebraska, and eastern Wyoming and high plains and grasslands in western Wyoming. After crossing the Continental Divide at South Pass (7,500 feet elevation) in western Wyoming, the routes enter the diverse Great Basin terrain in northern Utah and Nevada. Along this section rugged mountains alternate with progressively drier sage and scrub desert and alkali flats. Leaving the high deserts of western Nevada, the various routes must climb 6,000 to 8,000 feet over the steep, eastern face of the Sierra Nevada before descending the more gentle western slopes into California's central valley.

The trails enter or cross three of the nation's major river drainages: East of the Rocky Mountains, waters flow down the Platte, the Missouri, and the Mississippi to the Gulf of Mexico. The waters of the Great Basin drainage, including the Green River and the Colorado River, flow south into the Gulf of California. And west of the Sierra Nevada all rivers flow into the Pacific Ocean.

Vegetation along the route is as varied as the topography, from woodlands, prairies, and farmlands on the eastern flatlands to the high sagebrush plains of Wyoming and the eastern Great Basin. Although the valley bottomlands of the Great Basin are dotted by deciduous trees, the deserts are dominated by creosote bush and other drought-tolerant species. Coniferous trees (pinyon, juniper, and various pines) are common at higher elevations around the rim of the Great Basin and where the trails cross the Sierra.

As suggested by the diverse topography and vegetation, this broad section of the western United States also exhibits climatic extremes. On the eastern plains the relatively long summers are hot and dry; winters can be severe, with substantial snows and occasional blizzards. The Rocky Mountains, the edges of the Great Basin, and the Sierra Nevada all have relatively cooler and shorter summer seasons, a mild spring and fall, and winters with zero and subzero temperatures. Within the Great Basin itself summers are long, hot, and very dry, and winters are relatively mild.
In general, recreational activity along the trail routes occurs in the spring, early summer, and fall. Winter weather may or may not be suitable for activities such as retracing long sections of the trails by car, or making long cross-country hikes or rides.

POPULATION AND ECONOMY

From Missouri to the Wyoming border the landscape is dominated by intensively managed agricultural operations, and the population is distributed among small and medium-sized towns along the Platte and North Platte rivers. Highly developed east-west transportation corridors along these rivers (including I-80) and secondary roads provide easy access from all directions.

In Wyoming the population is widely scattered along the trail route. The small towns and settlements depend principally on ranching and grazing activities for their livelihood, and to a lesser extent on forestry and mineral resources. Western Wyoming in particular is very sparsely populated.

Northern Utah, in the vicinity of Salt Lake City, is relatively densely populated. But west central Utah consists of sparsely populated lands with very little agricultural or other economic base. Across Nevada the network of trail routes and cutoffs crosses some of the least populated areas of the United States, although small service-oriented communities occur near highways. Western Nevada, near the California border, has far more productive lands for dry farming and grazing, and it has a relatively dense urban population, where incomes and living standards are higher than the rest of the state.

Eastern California is dominated by government-owned forestlands or private ranchlands, where either commercial timber operations or grazing and ranching operations predominate. Where the trails end in California's northern central valley, the economies are dominated by intensive agriculture, and the population is centered in cities and towns of modest size whose economies originally focused on farming but are now generally diversified.

TRANSPORTATION AND ACCESS

It is not coincidental that the routes followed by the California and Pony Express trails have become major interstate transportation corridors. In fact, Interstate 80 follows the main California Trail route, with minor deviations, for almost its entire length, in many cases taking advantage of the same passes and the gentlest grades once traversed by the emigrant wagon trains.

Where historic and modern travel routes diverge, access to historic trail traces is still relatively easy from the interstate system by way of paved, well-maintained federal, state, and county roads. However, segments of
The Pony Express route across northern Nevada, and the Nobles and Applegate trails in northern Nevada, are not readily accessible. Where historic routes are not paralleled by good roads, there is at least access to particular points along the trail. Often in those circumstances the trail remnants are two-track roads that may be (depending on landownership and other factors) open to four-wheel-drive or high-clearance vehicles. Certain portions of the routes that pass through undeveloped BLM or USFS lands may not be accessible to vehicles because of prior decisions by those agencies to designate certain lands as roadless or wilderness areas.

The towns and cities along the present-day paved roads provide minimum services and overnight accommodations.

**MINERAL AND ENERGY RESOURCES**

There are oil and gas resources along trail routes in southern and southwestern Wyoming. Lower grade coal deposits are extensive but only marginally economic, but oil shale deposits may have considerable future value. Hard-rock minerals and important metals (gold, silver, and iron) are still produced in north central Nevada and eastern California. Otherwise, there are relatively few major energy or mineral resources along the routes.

Crude or refined oil product pipelines and natural gas pipelines parallel or cross the trail routes at several locations. Most such crossings are in Wyoming or western Nebraska.

Hydroelectric power generation is relatively undeveloped along the routes. Several generating facilities along the Platte River supply power eastward; facilities have also been constructed on many rivers on the west slope of the Sierra. Transmission lines cross the trail routes at perhaps a dozen points.

**CURRENT RECREATION RESOURCES**

Along the eastern half of the trails public recreation focuses on fishing and boating on rivers and river impoundments. Agricultural lands and mixed agricultural lands and woodlands along the rivers provide good bird-watching areas and opportunities for waterfowl and grassland bird shooting, plus some deer hunting. Antelope, elk, and deer hunting are popular in open areas from central Wyoming into Utah.

On national forest and BLM lands recreational activities range from off-road or rough-road vehicle use to horseback riding, hiking and backpacking, rock hounding, camping, photography, and exploration. Specific trail-related recreational use is described in the "Existing Conditions" chapter.
Federal lands available for recreational activities include some eight national forests that are crossed by main or cutoff routes. The National Park Service administers two sites immediately on or near the routes: Scotts Bluff National Monument on the North Platte in western Nebraska, and Fort Laramie National Historic Site in eastern Wyoming.
EXISTING CONDITIONS

LANDOWNERSHIP AND LAND USES

California Trail

Approximately 2,170 miles (38%) of the 5,665-mile California Trail network are on federal lands. The Bureau of Land Management administers 1,479 miles (26%) of the trail system, which represents the majority of the federal lands. The Forest Service administers 541 miles (9.5%), 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 (20.5%) of the trail system. The majority of this mileage is within rights-of-way of state- and county-owned roads and highways.

Private ownership totals 2,336 miles (41%). The routes also cross Indian reservations for 71 miles.

Table 8 summarizes landownership along the California Trail, including all cutoff routes. (Ownership reflects present administration, which in a few cases, such as public lands under lease or withdrawal, may differ from the legal owner). The Landownership map depicts federal and nonfederal landownership along the trail.

Table 8: Landownership along the California Trail System (in miles)

<table>
<thead>
<tr>
<th>State Region</th>
<th>Federal BLM</th>
<th>Federal USFS</th>
<th>Other</th>
<th>Nonfederal Indian</th>
<th>Nonfederal State</th>
<th>Nonfederal Private</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iowa and Nebraska</td>
<td>--</td>
<td>--</td>
<td>327</td>
<td>740</td>
<td></td>
<td></td>
<td>1,067</td>
</tr>
<tr>
<td>Missouri and Kansas</td>
<td>--</td>
<td>--</td>
<td>5</td>
<td>128</td>
<td></td>
<td></td>
<td>133</td>
</tr>
<tr>
<td>Wyoming</td>
<td>556</td>
<td>31</td>
<td>94</td>
<td>407</td>
<td></td>
<td></td>
<td>1,088</td>
</tr>
<tr>
<td>Idaho</td>
<td>58</td>
<td>35</td>
<td>65</td>
<td>217</td>
<td></td>
<td></td>
<td>457</td>
</tr>
<tr>
<td>Utah</td>
<td>111</td>
<td>4</td>
<td>124</td>
<td>110</td>
<td></td>
<td></td>
<td>349</td>
</tr>
<tr>
<td>Nevada</td>
<td>691</td>
<td>--</td>
<td>177</td>
<td>288</td>
<td></td>
<td></td>
<td>1,136</td>
</tr>
<tr>
<td>California</td>
<td>63</td>
<td>416</td>
<td>6</td>
<td>155</td>
<td></td>
<td></td>
<td>994</td>
</tr>
<tr>
<td>Oregon</td>
<td>--</td>
<td>55</td>
<td>--</td>
<td>194</td>
<td></td>
<td></td>
<td>361</td>
</tr>
<tr>
<td>Total</td>
<td>1,479</td>
<td>541</td>
<td>80*</td>
<td>71</td>
<td>1,158</td>
<td>2,336</td>
<td>5,665</td>
</tr>
</tbody>
</table>

Percentage of Total 26.1 9.5 1.4 1.4 20.4 41.2 100

Source: BLM land status maps; NPS 1975 and 1978.

*Includes Bureau of Reclamation and other miscellaneous federal lands.
Major land uses along the trail route include grazing, agriculture, forestry, and urban development. Table 9 categorizes land 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 forestland. Urban areas, a relatively small proportion of the route, include St. Joseph, Omaha, Salt Lake City, Reno, Sacramento, Eugene, and Salem.

Table 9: Major Land Uses along the California Trail (in miles)

<table>
<thead>
<tr>
<th></th>
<th>Agriculture</th>
<th>Forestland</th>
<th>Rangeland</th>
<th>Urban Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iowa and Nebraska</td>
<td>648</td>
<td>16</td>
<td>193</td>
<td>90</td>
</tr>
<tr>
<td>Missouri and Kansas</td>
<td>122</td>
<td>--</td>
<td>--</td>
<td>10</td>
</tr>
<tr>
<td>Wyoming</td>
<td>220</td>
<td>72</td>
<td>730</td>
<td>62</td>
</tr>
<tr>
<td>Idaho</td>
<td>148</td>
<td>62</td>
<td>210</td>
<td>34</td>
</tr>
<tr>
<td>Utah</td>
<td>103</td>
<td>25</td>
<td>107</td>
<td>65</td>
</tr>
<tr>
<td>Nevada</td>
<td>95</td>
<td>28</td>
<td>750</td>
<td>85</td>
</tr>
<tr>
<td>California</td>
<td>303</td>
<td>425</td>
<td>100</td>
<td>128</td>
</tr>
<tr>
<td>Oregon</td>
<td>123</td>
<td>135</td>
<td>40</td>
<td>64</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>1,762</strong></td>
<td><strong>763</strong></td>
<td><strong>2,130</strong></td>
<td><strong>538</strong></td>
</tr>
</tbody>
</table>


Pony Express Trail

For 698 miles (37%), the Pony Express Trail is in private ownership. The route crosses Indian lands for 12 miles (0.5%) in eastern Nevada. The remaining 1,145 miles (61.5%) are on land owned either by federal, state, or local governments (see table 10 and Landownership map).

Of the 729 miles (39%) that are federally owned, the Bureau of Land Management administers 650 miles (35%). The Forest Service administers lands along 75 miles (4%), most of which are in California. The Bureau of Reclamation and other miscellaneous federal agencies account for about 4 miles. States and their political subdivisions administer 416 miles (22 percent) of the Pony Express Trail, the majority being where the trail lies within rights-of-way of state- and county-owned roads and highways.
Table 10: Landownership along the Pony Express Trail (in miles)

<table>
<thead>
<tr>
<th></th>
<th>Federal</th>
<th></th>
<th>Nonfederal</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BLM</td>
<td>USFS</td>
<td>Other</td>
<td>Indian &amp; City</td>
</tr>
<tr>
<td>Missouri</td>
<td>-</td>
<td>-</td>
<td>5</td>
<td>127</td>
</tr>
<tr>
<td>and Kansas</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nebraska</td>
<td>-</td>
<td>-</td>
<td>131</td>
<td>313</td>
</tr>
<tr>
<td>Colorado</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>16</td>
</tr>
<tr>
<td>Wyoming</td>
<td>213</td>
<td>-</td>
<td>70</td>
<td>170</td>
</tr>
<tr>
<td>Utah</td>
<td>132</td>
<td>1</td>
<td>71</td>
<td>36</td>
</tr>
<tr>
<td>Nevada</td>
<td>305</td>
<td>18</td>
<td>58</td>
<td>16</td>
</tr>
<tr>
<td>California</td>
<td></td>
<td>56</td>
<td>81</td>
<td>20</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>650</td>
<td>75</td>
<td>12</td>
<td>416</td>
</tr>
<tr>
<td><strong>Percentage</strong></td>
<td>35</td>
<td>4.0</td>
<td>0.2</td>
<td>6.0</td>
</tr>
</tbody>
</table>

Source: BLM land status maps; NPS 1975 and 1978.

*Includes Bureau of Reclamation and other miscellaneous federal lands.

Major land uses along the trail include rangeland, agriculture, forests, urban development, and desert (see table 11). Rangeland is the dominant use (49%) along the route, followed by agriculture (29%), and combinations of other land uses.

Table 11: Major Land Uses along the Pony Express Trail (in miles)

<table>
<thead>
<tr>
<th></th>
<th>Agriculture</th>
<th>Forestland</th>
<th>Rangeland</th>
<th>Urban Development</th>
<th>Desert Shrubland (mostly ungrazed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Missouri</td>
<td>122</td>
<td>-</td>
<td>-</td>
<td>10</td>
<td>-</td>
</tr>
<tr>
<td>and Kansas</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nebraska</td>
<td>314</td>
<td>8</td>
<td>88</td>
<td>34</td>
<td>-</td>
</tr>
<tr>
<td>Colorado</td>
<td>16</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Wyoming</td>
<td>68</td>
<td>6</td>
<td>357</td>
<td>22</td>
<td>64</td>
</tr>
<tr>
<td>Utah</td>
<td>15</td>
<td>34</td>
<td>93</td>
<td>38</td>
<td>20</td>
</tr>
<tr>
<td>Nevada</td>
<td>-</td>
<td>8</td>
<td>357</td>
<td>24</td>
<td>20</td>
</tr>
<tr>
<td>California</td>
<td>-</td>
<td>77</td>
<td>10</td>
<td>70</td>
<td>-</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>535</td>
<td>133</td>
<td>905</td>
<td>198</td>
<td>84</td>
</tr>
</tbody>
</table>

THREATS TO TRAIL RESOURCES

Existing and potential threats to historic trail resources are considered in two categories: discrete sites related to the trails and the linear trails themselves. Threats to specific historic sites, such as gravesites, historic buildings and ruins, and natural feature landmarks, are generally the same as threats to historic resources elsewhere. Specific sites on public lands are protected under existing federal and state historic preservation laws. Unless the owners of private lands with historic resources have a covenant with the federal government to protect such resources, sites on private lands are not protected under federal legislation. Such sites may be subject to threats from the gradual encroachment of urban development, new transportation corridors, and industrial and agricultural activities. In such cases a public education process may be needed to convince the private owner of the value of a specific historic resource.

Threats to "linear" historic resources, such as long stretches of original trail traces, are relatively new challenges for historical preservationists and land managers. Because the boundaries of these resources are difficult to define, they are hard to designate as historic resources.

Without this designation such resources are not protected under federal legislation, and they are still subject to threats from agriculture, industry, transportation, and urban growth. These threats are most significant along western portions of the trails, where most of the existing physical trail traces are located. The problem is intensified by the "linear" nature of these resources. It is considerably more difficult, for example, to protect a 35-mile stretch of trail ruts that may have several landowners than it is to protect an isolated gravesite or historic structure that has one owner.

CURRENT PUBLIC USE, DEVELOPMENT, AND ACCESS

California Trail

Present and Projected Uses. Detailed estimates of current public uses or accurate projections of future uses are difficult to obtain because there are thousands of miles of trail and hundreds of historic sites in 10 states on lands owned or managed by various federal, state, local, and private agencies, as well as individuals. Also the level and nature of public use of resources associated with the trail differ considerably. Some visitors simply stop at major historic sites, while others actually ride or hike along the trail. As an example, visitation figures for major sites such as Fort Laramie National Historic Site and Sutter's Fort State Park have averaged around 300,000 per year over the last decade. Visitation at less known sites, such as the Susan Hail grave or Lassen's Meadow, is much lower, although collectively visitor use at all these sites is substantial.

Cross-country use of the trail system is exceedingly difficult to calculate. Based on very limited data and some estimates obtained from federal and
state agencies and trail user groups, it is estimated that between 150,000 and 200,000 visitors use cross-country portions of the trail each year. If this rough estimate is combined with actual and estimated visitation at all the historic sites associated with the California Trail system, total public use could be several million per year. As with the Oregon and Mormon Pioneer trails, use could rise appreciably with publication of the trail study and if the California Trail was authorized as a national historic trail, followed by some facility developments and the publication of maps and brochures.

Recreational Activities. Recreational uses vary according to the nature of the historic resources. For example, Sutter's Fort, a major historic site in Sacramento, attracts both history-oriented tourists and trail buffs, plus large numbers of school groups. Historic sites in more rural areas are visited primarily by vacationing families and occasional tour groups. The typical activities include visiting museums, looking at interpretive exhibits, and walking along short self-guided trails.

Cross-country trail users constitute a special category of visitors who are willing to take the time and effort to retrace the actual wagon routes. Whether as individuals or as groups, these visitors are the most consistent users of the cross-country portions of the trail system, returning year after year to hike or ride along different portions of the trail. A surprisingly large number of these visitors have the ultimate goal of retracing the entire Oregon and California trail systems, from one end to the other. A small percentage of them hike cross-country, some ride horseback, but most use four-wheel-drive vehicles. Some motorcycles are undoubtedly used, as are an increasing number of nonmotorized "mountain" bicycles.

Interpretive Programs. The development of interpretive centers, historic sites, access points, and trailheads along the California Trail system, including those portions already established as part of the Oregon and Mormon Pioneer trails, has been inconsistent and uncoordinated. No major visitor interpretive centers along the California Trail currently relate the story of the historic emigrant trails. However, the cities of Independence and Council Bluffs have plans to develop such centers, and Oregon City (at the terminus of the Applegate) has opened a small "end-of-the-trail" center. The National Park Service operates several major historic sites along the trail, but none interprets the entire spectrum of westward migration. That function is, however, the specific objective of the Jefferson National Expansion Memorial in St. Louis. Each of the states crossed by the California Trail has some historic sites and parks associated with the trail, but none focuses on the overall history of the trail, and interpretive themes and plans vary widely. Federal agencies such as the Bureau of Land Management and the U.S. Forest Service maintain a few interpretive sites, most of which date from the Bicentennial, but the interpretive stories are locally oriented. In summary, there is no overall effort along the trail to provide a coordinated interpretive story of westward migration.
Access to Trail Segments. There are no developed trailheads or marked access points to help the public find and follow portions of the California Trail that still exist. Individuals or groups must locate and follow the trail segments on their own. This may not be a serious drawback for the dedicated and highly motivated groups of trail buffs who already know the trail well, and who often assist state and federal personnel in locating and surveying portions of the trail. But it is a serious obstacle for the potentially much larger numbers of interested visitors who do not have the information needed to find the trail.

Pony Express Trail

Present and Projected Uses. Most current public use along the Pony Express Trail occurs at existing historic sites with interpretive development, such as staffed interpretive centers and reconstructed historic structures, or at unstaffed roadside exhibits. These sites are administered by public and private agencies, including the National Park Service, Bureau of Land Management, U.S. Forest Service, and various state, county, municipal, or private entities. Fort Laramie National Historic Site in Wyoming was visited by 89,700 during 1984. Other historic sites (and 1984 visitation) along the trail include the Patee House and Pony Express stable at St. Joseph, Missouri (75,000); Fort Bridger, Wyoming (87,115); Fort Casper, Wyoming (19,000); Camp Floyd State Historic Monument, Utah (19,232); and Fort Churchill, Nevada (85,988). In 1984 combined visitation at these sites was over 375,000.

As part of the 1976 Bicentennial, the Bureau of Land Management marked the Pony Express Trail and developed permanent interpretive roadside facilities in Wyoming, Utah, and Nevada. No total figures are available, but 1982 total recreational use probably amounted to 28,000 visits on BLM lands in Utah. The annual visitation estimate at the Cold Springs, Sand Springs, and Shell Creek roadside displays in Nevada is 24,500. A segment in Eldorado National Forest is designated as a national recreation trail, but no separate use figures are available.

Recreational Activities and Interpretive Programs. Much of the existing use involves multipurpose sites such as highway rest areas, state parks, and historic sites, which may commemorate several historic events. No information is available to accurately determine the percentage of total use attributable only to the Pony Express Trail or its interpretation.

The National Pony Express Association has organized Pony Express rerides along various segments since 1966. The first reride along the entire Pony Express route took place in 1980. In 1985 the route was retraced in both directions. Over 500 members have participated in these activities. Local riding clubs also organize rides along the trail. No accurate estimates are available for these other groups, or for individual horseback riders, those in four-wheel-drive vehicles, motorcyclists, or hikers who are known to use various portions of the actual route.
Cross-country segments of the route that are near urban areas or in scenic areas and that are already marked as interpretive trails attract the largest number of hikers and horseback riders. Cross-country segments covering large distances in remote rangeland areas are more appealing for horseback travel than for hiking. Travel by four-wheel-drive vehicles and snowmobiles occurs along segments where permitted.

Access to Trail Segments. In remote sections access is possible only by foot, horse, or four-wheel-drive vehicle, but in other areas the trail closely parallels hard-surfaced road systems. Most visitors use standard, two-wheel-drive passenger automobiles to retrace the trail segments, and usually the approximate route on nearby public roads is followed rather than the unpaved two-track road.

PUBLIC INTEREST AND ATTITUDES

The record of public interest in both the California and Pony Express trails on the part of special interest groups is long, vocal, and widespread. Associations such as the Oregon-California Trails Association, the National Pony Express Association, and numerous state and private historical societies have long been on record as active trail users, enthusiasts of trail history, and educators of public opinion.

Interest by individuals in existing known trail resources is evident from the public use reports compiled by both federal and state land-managing agencies. Roadside exhibits, as well as state and private museums that focus on trail-related themes, are popular. Increasing numbers of people or small groups are retracing the routes either by automobile or even by horse or wagon. Substantial interest in bicycling, horseback riding, and four-wheel-drive vehicle use on some segments has been reported.

Public involvement as part of the present trail study has indicated a high degree of interest in some level of national trail authorization. Over 850 individuals, private historical groups, societies, and user organizations, along with federal and state agencies and academic institutions, have made specific requests to be on the mailing list for this study.

Some public concern has been expressed as to what extent trail traces should be made passable to four-wheel-drive vehicles, how to protect the legitimate rights of private landowners who do not choose to provide public access to trail segments, and to what extent the federal government should be involved in protecting nonfederal trail resources.

The most visible expressions of public interest in the California Trail have come from the 900+ member Oregon-California Trails Association, which has been an active user-group as well as a proponent of trail protection for several years. Historical societies in virtually all the states crossed by the trail, along with some special interests or concerns, have expressed support for historic trail designation. User-group organizations such as horseback riders, hiking clubs, or four-wheel-drive groups have so far shown considerable interest in and support for the concept of creating a national historic trail.
The record of public interest in the Pony Express Trail is largely parallel to that for the California Trail. The single most active and vocal group is the National Pony Express Association, which has a total of 400 or 500 members in the eight states crossed by the trail. The group's activities and related events have done more to increase public awareness than any other private or federal program. The association in particular has long been a proponent of formal trail designation, and it has promoted model legislation and called for national trail studies.

It is harder to sample individual users, but roughly 40% (or 350) of the entries on the study's mailing list are individuals. It is assumed that the current lack of public information about the trail, and the relatively few access points, contribute to a general lack of knowledge about trail resources and recreational opportunities.

To date the relationships between private landowners along the trail and individual users and groups have been generally positive. Most landowners are both aware and proud of the piece of American history which they own, but they may well draw a distinction between physically protecting trail resources on their own and providing public access so that others may visit the resources. In some cases a positive attitude towards public use could change if some thoughtless visitor cut a fence or left a gate open.

Landowner attitudes are also influenced by the sensitivity and concern of those with whom they deal. Private trail constituency groups, such as the Oregon-California Trails Association, have tried to seek and coordinate case-by-case permission to cross private lands, and they have had a great deal of success. It appears that most private landowners and ranchers have few reservations concerning granting specific permission to private individuals and groups seeking access.

Federal agencies have had less success in dealing with private landowners, apparently because the owners dislike working with bureaucracies. State agencies, who are perceived as being closer to the citizens of their states, have generally had more success. Both federal and state agencies have had few problems in obtaining specific permission for short-term access rights, but to date very few private landowners have been willing to enter negotiations for permanent public access agreements or easements. Some reluctance may be attributed to the lack of a consistent nationwide effort by a federal agency to pursue such an objective.
ENVIRONMENTAL CONSEQUENCES

Tables 12 through 17 summarize the environmental consequences of the various alternative approaches—including the preferred alternative—to designating and managing the two trails. Both the California and the Pony Express trails are treated in the same tables because the alternative approaches are very similar. Where impacts differ, they are identified. The environmental factors that are analyzed are described briefly below.

HISTORIC RESOURCES

Two kinds of resources are considered. First are physical remains of the trails themselves (that is, traces of single or double tracks that have been reliably identified as original, alternative, or cutoff trails or routes). Second are associated historic sites, including station buildings, roadhouses, and adjacent structures (regardless of the state of their research, stabilization, or reconstruction), as well as associated natural landmarks of special significance to the original trail users. Impacts are presented in table 12.

NATURAL RESOURCES

The effects on natural resources include those on wildlife, vegetation, soils, and air and water quality. The effects of activities on the trails themselves (e.g., hiking, horseback riding, driving), plus the anticipated effects of the development of adjacent interpretive or service facilities and of new or improved access roads, must also be considered (see table 13).

PUBLIC ACCESS AND RECREATIONAL USE

The access and recreational use category describes how alternative actions would affect public efforts to obtain information about the trails and to locate and gain access to sites and segments (see table 14). The effects on visitors of having various activities, services, and facilities provided for recreational use along the trails are also analyzed.

LANDOWNERSHIP AND LAND USES

This category deals with the effects each approach would have on landownership along the trail corridor or on influencing land uses in the immediate area of the authorized trail (see table 15).
LOCAL ECONOMIES

Any of the alternatives authorizing national historic trails would likely have an effect on local economies, including construction, food service, accommodations, and other tourist-related sectors. These effects are described in table 16. The impacts of authorization on established, economically productive practices, such as grazing and the use of forest, mineral, and energy resources are also discussed.

ESTIMATED COSTS

Table 17 summarizes the more detailed development and management cost estimates appearing in earlier sections for each alternative.
Table 12: Effects on Historic Resources

Alternative A
No trail authorization

There would be no coordinated research, protection, stabilization, or management of trail traces or associated historic sites and landmarks. All such resources within federal areas would continue to receive their present degree of protection from the managing agency. Protection priorities currently range from high in actively managed areas to zero in areas where trail resources have never been identified. Overall management on federal lands would probably continue to reflect the multiple use mandates of both BLM and USFS. Although federal agencies already have obligations to protect historic resources, the level and priority of treatment is unavoidably linked to the public’s perception of how significant, threatened, and attractive those resources are. Failure to authorize any trail resources as nationally significant would likely be interpreted as lack of public interest, therefore removing incentives to encourage protection. Trail resources on private and nonfederal lands would be protected at the discretion of individual landowners, whose interest in resource protection and financial backing could be limited.

Alternative B
Authorization of all routes, cutoffs, and changes

The uniformly high priority given to research, protection, stabilization, and even reconstruction of trail resources would give maximum protection to the largest number of segments and sites. Poorly known sites would be better defined and examined, vandalism and artifact removal controlled, and more accurate historical information collected so that the significance of trail resources could be more properly determined. Realistically, however, this broad protection approach might result in unacceptably low levels of protection because public funds for both acquisition and protection would likely be too limited to meet the high protection standards on all sites.

Alternative C (Preferred)
Authorization of original Pony Express route and continuous high-value California Trail routes

The establishment of a priority system to identify and protect only the most valuable and significant trail resources and historic sites would probably result in more cost-effective protection of sites all along the trails. However, some lower value segments or sites, especially those on nonfederal lands that were not designated, could suffer abuse and damage and ultimately be lost. The protection of some segments on nonfederal lands as a result of negotiated agreements and shared management would stretch public funds and could stimulate private initiatives to protect resources. Negotiated agreements could stimulate good rapport between federal agencies and private owners, who might otherwise resent federal acquisition as a solution to protection problems.

Alternative D
Authorization of continuous routes, with development limited to federal areas

This alternative would effectively limit attention and available financial resources to the western half of the trails, where most high-value trail resources not yet protected by previous designations are located. This concentration of resources on federal lands would probably result in a relatively high level of protection for these sites. Where high-value resources exist outside federal ownership, lack of authorization would leave fewer mechanisms available to the federal government to influence resource preservation. If state or county authorities did not provide protection, nonfederal trail resources could be harmed or destroyed. This latter situation might be even more likely if the limited federal involvement was interpreted as a lack of overall public interest in the trail, resulting in less local support for private or state initiatives.
Table 13: Effects on Natural Resources

Alternative A
No trail authorization

Effects on natural resources (wildlife, vegetation, soils, air, and water) along the trails would continue as at present. On federal lands the extent of effects would depend on the overall mandate of the responsible agency and more specifically on the local units' land classification strategies and permitted uses in particular land classes. Without formal authorization as national historic trails, trails on BLM or USFS land could be discounted in local land use classification; therefore, other factors (e.g., suitability for grazing, logging, and minimally restricted vehicular-based recreation) could influence land use decisions, rather than the protection of historic trail resources.

Alternative B
Authorization of all routes, cutoffs, and changes

By identifying all routes, segments, and sites as suitable for historic trail authorization, this alternative could indirectly benefit natural resources all along the various trail corridors. Federal agencies would be expected to protect historic resources even at the expense of the multiple-use options in their mandates, and this would indirectly provide additional protection of natural resources along the trail routes. Protection would be extended to nonfederal historic trail resources (through acquisition or cooperative agreements), and therefore some protection of natural resources would also follow. However, depending on the extent of recreational activities and support development, some natural resource impacts could be accelerated, such as wildlife displacement due to increased human presence, soil erosion due to vehicular use, and vegetation disturbance accompanying new access, trailhead, and interpretive facility construction.

Alternative C (Preferred)
Authorization of original Express route and continuous high-value California Trail routes

Effects on natural resources would be similar to those under alternative B Pony except that authorization of only the highest value segments and sites would limit the impacts to fewer areas. By allowing certain private activities to continue on federal land (e.g., grazing and mining), except where such activities would directly threaten historic trail resources, less indirect beneficial impacts on soils, vegetation, and erosion control could be expected. Little or no acquisition to protect nonfederal resources would also mean fewer indirect benefits on natural resources. However, fewer recreational activities and support facilities might lead to fewer negative impacts, such as wildlife disturbance, soil erosion, and vegetation removal.

Alternative D
Authorization of continuous trails, with development limited to federal areas

Negative or positive impacts on natural resources would generally be limited to federal lands and would be similar to those described above for B and C. Federal opportunities to influence land use on private lands would be limited, and both historic and natural trail resources outside federal areas could suffer.
<table>
<thead>
<tr>
<th>Alternative A</th>
<th>No trail authorization</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Without national historic trail authorization there would be few initiatives to alter or improve current access, trailheads, or the extent and quality of interpretive services or recreation facilities, either on federal or nonfederal lands. This alternative could be interpreted as lack of public support for new access points and additional recreational uses, resulting in less incentive for federal and nonfederal owners to provide access.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Alternative B</th>
<th>Authorization of all routes, cutoffs, and changes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>This alternative would result in the greatest emphasis on access and recreational use. On federal lands this would mean additional or improved access roads from nearby highways to existing, expanded, or new trailhead parking and interpretive sites. On nonfederal lands it would mean negotiated public access agreements, purchased easements, and even acquisition of lands to ensure public access. Development of new visitor centers and trailheads would reflect a strong national commitment to historic trail use, would extend interpretive and recreational opportunities to the maximum number of users, and would encourage additional use.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Alternative C (Preferred)</th>
<th>Authorization of original Pony Express route and continuous high-value California Trail routes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The effects would be similar to those under alternative B, but there would be fewer access and use opportunities because only the highest value resources would be developed. Using cooperative agreements rather than fee acquisition to provide access might not ensure unrestricted or long-term public access. Fewer large- or small-scale visitor facilities might result in fewer visitor contacts, fewer new recreational opportunities, and only modest increases in overall use.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Alternative D</th>
<th>Authorization of continuous trails, with development limited to federal areas</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>This alternative would place low priorities on improving access or additional recreation and interpretive facilities. Little encouragement and no financial incentives would be provided to states, private historical groups, or private landowners, so their commitment to ensuring public access or interpretive opportunities would not be guaranteed, and few increases would be anticipated.</td>
</tr>
</tbody>
</table>
Table 15: Effects on Landownership and Land Uses

Alternative A
No trail authorization

No additional impact on present federal agency policies for land acquisition would occur. Without national historic trail authorization it might be difficult for federal agencies to justify the acquisition of private inholdings to protect trail resources.

Alternative B
Authorization of all routes, cutoffs, and changes

Because this alternative would authorize the maximum number of historic segments and sites on nonfederal lands, and because some land acquisition would be permitted outside the boundaries of federal areas, there would be potential for decreased private landownership along the trail corridors. Landowners thus involved would lose opportunities for land uses they might feel were more appropriate or profitable, but they would be compensated for this loss. Land uses on private lands for which easements had been acquired could change without outright purchase. Land uses even on federally owned lands might also be changed to afford more protection to historic resources.

Alternative C (Preferred)
Authorization of original Pony Express route and continuous high-value California Trail routes

Impacts on private landowners would be much less than those described under alternative B because the approach would favor negotiated cooperative agreements over the acquisition of full or partial interests. However, some land use changes would result from the implementation of these agreements. In a few cases where real and specific threats to authorized resources occurred on inholdings within federal areas, agencies would proceed to negotiate acquisition (primarily through exchange), and some landowners would thus be prevented from undertaking land uses they might consider more appropriate or profitable.

Alternative D
Authorization of continuous trails, with development limited to federal areas

Impacts on private landowners would be limited to the acquisition of inholdings within the boundaries of federal units or lands immediately adjacent to them (in the BLM checkerboard land areas) if negotiated agreements could not be used or failed to provide adequate protection to trail resources. Because designation would not extend beyond the boundaries of existing federal areas, there would be no changes in land uses along trail corridors outside federal boundaries.
Table 16: Effects on Local Economies

Alternative A
No trail authorization

Without national historic trail authorization, the local economies of towns and villages along trail routes would presumably continue their present trends. Any expectation of economic changes that could have been raised by the study process would not be realized.

Alternative B
Authorization of all routes, cutoffs, and changes

To the extent that new facilities and increased information drew additional recreational visitors, local economies would be stimulated in service sectors (e.g., food and overnight accommodations). If specific activities such as horseback riding and four-wheel-drive vehicle touring became more popular, sectors serving these users—including guided trips and rental horses or vehicles—would benefit. Trail authorization could be capitalized on by some communities as a special focus to draw tourism and therefore increase general revenues. Because trails are linear and visitors would generally not focus their interest and activities at one point, no one area or community would be expected to see dramatic economic benefits, but the collective benefits could be considerable. The development of facilities would be maximized under this alternative, and there would be both short-term construction economic spin-offs in labor and equipment sales, plus long-term operation spin-offs (staffing) in those communities where visitor centers were developed. Land acquisition (and other protection methods) could adversely affect some specific economic activities, for example, grazing or mineral/energy development, where these activities may be commercially viable uses.

Alternative C (Preferred)
Authorization of original Pony Express route and continuous high-value California Trail routes

Impacts on tourism would be similar to those described for alternative B, except fewer communities would be affected. Fewer new facilities and information services would mean fewer short- and long-term spin-offs related to construction and staffing. Less acquisition would remove less land from commercial grazing or mineral/energy development, but some use restrictions could accompany negotiated cooperative agreements. Realistically, the extent of such adverse effects would be small because uses would be restricted only in areas immediately around a particular historic site rather than along a whole corridor.

Alternative D
Authorization of continuous trails, with development limited to federal areas

Because the priority would be protection rather than development, trail-related facilities on federal lands would probably not stimulate local tourism. If such benefits occurred, they would be limited to communities and areas near federal lands. Little restriction on economic use of nonfederal lands would be expected except on those inholdings that might be acquired or be subject to negotiated agreements for specific protection objectives under the present authority of federal agencies.
Table 17: Summary of Cost Estimates

<table>
<thead>
<tr>
<th>Trail</th>
<th>Miles Authorized</th>
<th>Construction/ New Development*</th>
<th>Land Acquisition</th>
<th>Total Capital Cost (construction plus acquisition)*</th>
<th>Capital Cost per Authorized Mile*</th>
<th>Annual Operation*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>California Trail</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alternative A</td>
<td>None</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>N/A</td>
</tr>
<tr>
<td>Alternative B</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>5,665</td>
<td>$5,752,500</td>
<td>$3,940,000</td>
<td>$9,692,500</td>
<td>$1,710</td>
<td>$456,000</td>
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<tr>
<td>Federal Portion</td>
<td>2,171</td>
<td>2,425,000</td>
<td>2,330,000</td>
<td>4,755,000</td>
<td>2,190</td>
<td>251,000</td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3,821</td>
<td>3,297,500</td>
<td>815,000</td>
<td>4,112,500</td>
<td>1,075</td>
<td>237,000</td>
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<tr>
<td>Federal Portion</td>
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<td>439,000</td>
<td>727,500</td>
<td>1,166,500</td>
<td>1,045</td>
<td>87,000</td>
</tr>
<tr>
<td>Alternative D</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Total</td>
<td>3,821</td>
<td>574,500</td>
<td>168,000</td>
<td>742,500</td>
<td>195</td>
<td>87,000</td>
</tr>
<tr>
<td>Federal Portion</td>
<td>2,171</td>
<td>218,500</td>
<td>168,000</td>
<td>386,000</td>
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<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Alternative A</td>
<td>None</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>N/A</td>
</tr>
<tr>
<td>Alternative B</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1,855</td>
<td>5,311,500</td>
<td>2,436,000</td>
<td>7,747,500</td>
<td>4,175</td>
<td>436,000</td>
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<tr>
<td>Federal Portion</td>
<td>729</td>
<td>2,094,500</td>
<td>2,426,000</td>
<td>4,520,500</td>
<td>6,200</td>
<td>235,000</td>
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<tr>
<td>Alternative C (Preferred)</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1,833</td>
<td>3,097,000</td>
<td>872,000</td>
<td>3,969,000</td>
<td>2,165</td>
<td>236,000</td>
</tr>
<tr>
<td>Federal Portion</td>
<td>729</td>
<td>287,000</td>
<td>772,000</td>
<td>1,059,000</td>
<td>1,455</td>
<td>86,000</td>
</tr>
<tr>
<td>Alternative D</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1,855</td>
<td>570,500</td>
<td>584,000</td>
<td>1,154,500</td>
<td>620</td>
<td>61,500</td>
</tr>
<tr>
<td>Federal Portion</td>
<td>729</td>
<td>214,500</td>
<td>584,000</td>
<td>798,500</td>
<td>1,100</td>
<td>61,500</td>
</tr>
</tbody>
</table>

*Some costs would be shared between the two trails; if one of the trails was not authorized, then the costs for the other trail would have to be increased.
The following agencies and organizations were contacted during the studies of the California and Pony Express trails.

Federal Agencies

Bureau of Land Management, U.S. Department of the Interior
  California State Office
    Folsom District
    Susanville District
    Redding Resource Area
    Ukiah District
  Idaho State Office
    Burley District
    Idaho Falls District
  Nevada State Office
    Battle Mountain District
    Elko District
    Ely District
    Winnemucca District
  Utah State Office
    Salt Lake City District
  Wyoming State Office
    Casper District
    Lander District
    Rock Springs District

Bureau of Reclamation, U.S. Department of the Interior
  Upper Colorado Region, Salt Lake City

Forest Service, U.S. Department of Agriculture
  California
    El Dorado National Forest
    Modoc National Forest
    Plumas National Forest
    Stanislaus National Forest
    Shasta-Trinity National Forest
  Nevada
    Humboldt National Forest
    Tahoe National Forest
    Toiyabe National Forest
  Utah
    Wasatch National Forest
  Wyoming
    Bridger-Teton National Forest
    Shoshone National Forest
State and Local Agencies

California
    Department of Parks and Recreation
    State Historic Preservation Officer
Idaho
    Department of Parks and Recreation
    State Historical Society
Kansas
    Department of Transportation
    State Historical Society
Missouri
    Landmarks Commission
Nebraska
    Game and Parks Commission
    State Historical Society
Nevada
    Department of Conservation and Natural Resources
    Division of State Parks
    Commission on Tourism
    Department of Mines
    Department of Wildlife
    Division of State Lands
    Division of Water Resources
    Office of Community Services
    State Historic Preservation Officer
Oregon
    Douglas County Museum
    Lane County Historical Society
    Oregon Historical Society
    Oregon State Parks Department
    State Historic Preservation Officer
Utah
    Department of Transportation
    Division of Parks and Recreation
    Division of State Lands and Forestry
    State Historical Society
    State Historic Preservation Officer
Wyoming
    Archives, Museums, and Historical Department
    Planning Coordinator's Office
    Recreation Commission
    State Highway Department

Private Organizations and Societies

National Pony Express Association
Oregon-California Trails Association

As of January 1987 approximately 850 individuals, agencies, and private organizations are on the active mailing list for this study. These are tabulated as follows:
<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
<th>Percentage of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Congressional contacts</td>
<td>42</td>
<td>5</td>
</tr>
<tr>
<td>Federal agencies</td>
<td>103</td>
<td>12</td>
</tr>
<tr>
<td>State agencies, universities, societies, officials</td>
<td>110</td>
<td>13</td>
</tr>
<tr>
<td>Local governments</td>
<td>103</td>
<td>12</td>
</tr>
<tr>
<td>Private organizations, businesses, societies, museums</td>
<td>148</td>
<td>17</td>
</tr>
<tr>
<td>Private citizens</td>
<td>334</td>
<td>39</td>
</tr>
<tr>
<td>Media contacts</td>
<td>14</td>
<td>2</td>
</tr>
</tbody>
</table>
AMESBURY, ROBERT

BLOSS, ROY S.

BRADLEY, GLENN D.

BUREAU OF LAND MANAGEMENT, U.S. DEPARTMENT OF THE INTERIOR

CHAPMAN, ARTHUR

CURRAN, HAROLD

DAVIS, RICHARD M.

DRIGGS, HOWARD R.
FLEMING, L.A., and A.R. STANDING

GEOLOGICAL SURVEY, U.S. DEPARTMENT OF THE INTERIOR

HARSTAD, PETER T.

HOWARD, ROBERT WEST, ROY E. COY, FRANK C. ROBERTSON, and AGNES WRIGHT SPRING

HELFRICHT, DEVERE


HELFRICHT, DEVERE, HELEN HELFRICH, and THOMAS HUNT

LAVENDER, DAVID

MATTES, MERRILL J.

MATTES, MERRILL, and PAUL HERNERSON

NATIONAL PARK SERVICE, U.S. DEPARTMENT OF THE INTERIOR
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PIERSON, JAMES R.

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1966 Pony Express. Lincoln: University of Nebraska Press.

SETTLE, RAYMOND W., and MARY LUND SETTLE


SMITH, WADDELL F.

STEWART, GEORGE R.

UNRUH, JOHN D., JR.

WINTHER, OSCAR OSBURN
STUDY TEAM

STUDY TEAM

Denis Davis, Denver Service Center
Park Planner (Team Captain)

John Latschar, Denver Service Center
Historian (California Trail)

Alan Robinson, Denver Service Center
Park Planner (Team Captain)

Carole A. Madison, Rocky Mountain Region
Outdoor Recreation Planner (Pony Express Trail)

P. Kay Salazar, Rocky Mountain Region
Outdoor Recreation Planner (Graphics/Analysis)

CONSULTANTS (Regional Office Trail Coordinators)

Tom Gilbert, Midwest
David Olsen, Western
Gordon Atkins, Pacific Northwest
As the nation's principal conservation agency, the Department of the Interior has basic responsibilities to protect and conserve our land and water, energy and minerals, fish and wildlife, parks and recreation areas, and to ensure the wise use of all these resources. The department also has major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

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