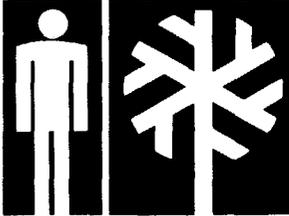


national trail feasibility study  
and environmental assessment

ILLINOIS TRAIL



ILLINOIS

NATIONAL TRAIL FEASIBILITY STUDY  
AND ENVIRONMENTAL ASSESSMENT

ILLINOIS TRAIL

September 1987

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

**ADDENDUM - SUMMARY OF COSTS AND ALLOCATION FOR THE PROPOSAL 1/**

	<u>NPS</u>	<u>STATE OF ILLINOIS</u>	<u>ILLINOIS AND MICHIGAN NH CORRIDOR</u>
NPS Administration	\$26,000 PA		
State of Illinois		\$30,000 PA	
Acquisition and development of five recreational access sites		\$ 62,000	
Acquisition and development of land trail			\$411,000
Development of interpretive markers	\$200,000 2/		
Operation and maintenance of five recreational access sites		\$ 25,000 PA	
Operation and maintenance of land trail		\$362,000 PA	
TOTAL ANNUAL COST	\$ 26,000	\$417,000	
TOTAL ONE TIME COST	\$200,000 2/	\$ 62,000	\$411,000

1/ This addendum has been prepared to clarify the allocation presented in the costs of the proposed report tables on pages 35 and 38 of the Illinois Trail.

2/ This cost may be shared with other entities participating in the project including the State and local units of government.

## SUMMARY

This study for the Illinois Trail examines the feasibility and desirability of establishing, as a component of the national trails system, a trail "extending from the Lewis and Clark Trail at Wood River, Illinois, to the Chicago Portage National Historic Site, generally following the Illinois River and the Illinois and Michigan Canal." A proposed trail could be authorized as either a national scenic trail or as a national historic trail. An evaluation of the significance of the scenic, recreational, natural, and cultural resources along the study route and the historic use of the Illinois Waterway concluded that the route meets the criteria for both national scenic and national historic trails.

Five alternatives plus a "no federal action" alternative were formulated, evaluated, and presented for public review. Two alternatives explored authorizing development of a national scenic trail: a trail extending from Summit to Peoria, and a trail from Summit to Wood River. Three alternatives explored authorizing development of a national historic trail between Summit and Grafton as a water route following the Illinois and Michigan Canal, the Des Plaines River, and the Illinois River; a motor route following existing highways as close as possible to the canal and rivers; and a land-based trail adjacent to the canal and rivers for foot travel, bicycles, small motorized bikes (mopeds and trail bikes), snowmobiles, and cross-country skis.

The proposal presented in this report is based on public comment on the draft alternatives and further study team evaluation as a result of public input. It envisions a national historic trail consisting of the historic water route between Lake Michigan and the Mississippi River at Grafton (portions of the Illinois, Des Plaines, South Branch of the Chicago, and Chicago rivers, and the Illinois and Michigan Canal and Chicago Sanitary and Ship Canal) and a parallel land trail extending from the westernmost point of the Illinois and Michigan Canal at LaSalle and Peru to the Chicago Portage in Summit, and extending eastward to Lake Michigan, if possible. (See Vicinity map.)

If authorized by Congress, a plan would be prepared and implemented to provide for development and management of river access areas and facilities to enhance recreational boating on the historic waterway, as well as interpretive facilities at appropriate sites along and near the waterway to explain historical use as a route of exploration, trade and commerce, transportation and communication, and migration and settlement. The plan would also provide for development and management of a parallel trail for walking and other uses that might be compatible. Facilities for picnicking, camping, and nature and historic interpretation would be provided at appropriate locations. Development of the water route and land trail portions within the Illinois and Michigan Canal National Heritage Corridor would coincide or be compatible with the concept plan for the corridor.



The National Park Service, acting on behalf of the secretary of the interior, would be responsible for overall administration of the national historic trail. The state of Illinois would coordinate trail and facility development by local jurisdictions and develop and manage its own areas that lie along the trail. Other participants would be the U.S. Army Corps of Engineers (who operates and maintains the Illinois Waterway), the Illinois and Michigan Canal National Heritage Corridor Commission, local agencies, and private organizations.

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## INTRODUCTION

### PURPOSE OF THE STUDY

In March 1983 Congress authorized the secretary of the interior to study the feasibility and desirability of establishing an Illinois Trail as a component of the national trails system. The legislation described the Illinois Trail as "extending from the Lewis and Clark Trail at Wood River, Illinois, to the Chicago Portage National Historic site, generally following the Illinois River and the Illinois and Michigan Canal."

This study examines the feasibility and desirability of various alternatives for authorization of either a national historic trail following the historic Illinois Waterway or a national scenic trail traversing the surrounding scenic, natural, recreational, and cultural resources. Various criteria and guidelines described in this report were used to evaluate the trail route's eligibility as a national trail.

An analysis and evaluation, together with public input, led to the formulation of a feasible and desirable proposal for establishing a national historic trail. This proposal is presented after the "Alternatives Considered" section.

### THE NATIONAL TRAILS SYSTEM

In response to the growing need for increased outdoor recreational opportunities, Congress passed the National Trails System Act in 1968 (16 USC 1241 et seq.). The purpose of the act is to promote development of trails in urban and rural settings for people of all ages, interests, and abilities. The act designated the Appalachian and Pacific Crest national scenic trails as the initial components of the national trails system. It also prescribed guidelines by which additional trails could be added to the system.

Originally, the national trails system consisted of three categories of trails: national scenic trails, national recreation trails, and connecting and side trails. In 1978 the National Trails System Act was amended to include an additional category--national historic trails. These categories reflect different types of trails that are established for the following purposes:

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

National historic trails are nationally significant historic routes of travel, the purpose of which is to identify and protect the historic route, remnants, and artifacts for public use and enjoyment.

National recreation trails provide for a variety of outdoor recreational uses and must be reasonably accessible to urban areas.

Connecting or side trails provide additional public access or links between scenic, historic, or recreation trails.

National scenic and national historic trails can only be designated by Congress. National recreation trails, however, may be designated by the secretary of the interior, or by the secretary of agriculture where lands administered by that department are involved, with the consent of the federal agency, state, or political subdivision having jurisdiction over the lands.

### THE STUDY PROCESS

Work on the feasibility study began in 1984 when study team members from the NPS Midwest Regional Office and the Denver Service Center researched the historical use of the Illinois Trail route to determine if it possessed the national significance required for possible authorization as a national historic trail. (A summary of the findings of that research is included in appendix A.) Based on this information, the National Park System Advisory Board has determined that the route does, in fact, possess national historical significance and therefore is eligible for authorization as a national historic trail. (A copy of the board's determination letter is included in appendix B.)

Early in 1985 the study team began gathering maps, reports, and other relevant information that would be needed to evaluate the route's potential as a national trail. In April, the study team and a representative of the Illinois Department of Conservation traveled along the potential trail route to examine the natural and cultural resources that could contribute to the feasibility of such a trail. Four public information meetings were held in Alton, Beardstown, East Peoria, and Joliet. The team also met with state officials in Springfield. Based on public comments and the information gathered during the trip, the study team developed six alternatives, including a no federal action alternative, for further consideration.

In September 1985, a brief report describing the six alternatives was distributed to those who had attended the April meetings and to other interests for the purpose of informing them of the study's progress and to solicit comments on the alternatives. After comments were received, the study team considered the information and public input and began preparing a draft report.

The report evaluated the eligibility of the study route for authorization as a national scenic or national historic trail, described five alternative approaches to creating such a trail along all or part of the study route, discussed the feasibility and desirability of these alternatives (plus a no-action alternative), and identified alternative C as the preferred alternative. In doing so, the report presented information on the natural, cultural, and recreational resources along the route and such

planning considerations as land use and landownership. Possible environmental impacts of the alternatives were examined at the end of the report.

The report was distributed for public review and comment in early June 1986. Near the end of the month, four public information meetings were again held in Joliet, East Peoria, Beardstown, and Alton to discuss the report, answer questions, and receive public comments. More than 60 letters commenting on the draft report were received subsequent to the meetings.

The majority of comments generally expressed agreement with the selection of the preferred alternative--C (national historic trail, water route, Summit to Grafton). However, a significant number of public officials and private individuals recommended that consideration be given to proposals that combined features of other alternatives with alternative C. The proposal presented in this final report resulted from those comments and further staff evaluation. Additional detailed information on public input can be found in "The Proposal" section and in appendix C.

The final study report will be submitted by the director of the National Park Service to the secretary of the interior. The secretary will subsequently transmit the report to Congress, with a recommendation as to the suitability of authorizing the trail as a component of the national trails system.

## EVALUATION OF THE TRAIL'S CHARACTERISTICS

This section examines definitions and eligibility criteria found in the National Trails System Act for national scenic and national historic trails.

### NATIONAL SCENIC TRAILS

National scenic trails are extended trails (100-mile minimum length) that provide for maximum outdoor recreation potential and for conservation and enjoyment of the nationally significant scenic, historic, natural, and cultural qualities of the areas through which they pass. They may traverse such landforms as desert, marsh, grassland, mountain, canyon, river, and forest, as well as landforms that exhibit characteristics of the physiographic regions of the nation. National scenic trails are intended for travel on foot and by other nonmotorized means that may be deemed appropriate.

The following discussion presents the eligibility criteria for national scenic trails and evaluates the study route's potential for meeting this criteria.

#### Outdoor Recreation Potential

Development of a national scenic trail along the study route presents an outstanding opportunity to connect the St. Louis and Chicago metropolitan areas. Such a trail would inherently possess a high level of outdoor recreation potential. In addition to the trail's high recreation potential, the statewide comprehensive outdoor recreation plan, Outdoor Recreation in Illinois: The 1983 Policy Plan, has identified the need for long-distance trails in Illinois.

A large and diverse number of natural, historic, and cultural resources are along the route. A portion of the study route includes the Illinois and Michigan Canal National Heritage Corridor, which contains a partially developed 60-mile trail maintained and administered by the Illinois Department of Conservation. Interest in rediscovering the Illinois River is apparent in the redevelopment of canal and rivertown waterfronts and the increase in river-related festivals along the river corridor.

#### Nationally Significant Scenic Qualities

The Illinois River valley and Illinois and Michigan Canal corridor contains pleasant river and pastoral scenery. Overall, the scenic quality of this corridor is not nationally significant, although some individual features may be worthy of such designation.

### Nationally Significant Historic/Cultural Qualities

The National Park System Advisory Board has determined that the study route possesses nationally significant historic qualities. In addition to those significant historic/cultural qualities already listed, other significant sites contribute to the route's eligibility as a national scenic trail. The old Beardstown Courthouse, for instance, contains the only remaining active courtroom in which Abraham Lincoln practiced.

### Nationally Significant Natural Qualities

The Illinois River valley is a portion of the Mississippi Flyway. The slow-moving water below Hennepin combined with the unusual backwater lakes provide a haven for migrating waterfowl. Unique hill prairies are along the river bluffs, and Goose Lake Prairie State Park harbors a significant section of undisturbed prairie.

### Conclusion

The Illinois Trail route would qualify as a national scenic trail. The objective of a national scenic trail would be to provide at least a 100-mile continuous walking trail along all or part of the Illinois River corridor, including part of the Des Plaines River and all of the Illinois and Michigan Canal. This trail would offer trail users an appreciation and understanding of the natural and cultural significance of the rivers and their immediate surroundings. Potentially compatible activities would include bicycling and cross-country skiing, but the use of motorized vehicles would be prohibited.

### NATIONAL HISTORIC TRAILS

National historic trails are extended trails that follow as closely as possible and practicable the original trails or routes of national historical significance. Designation of such trails or routes will be continuous, but the established or developed trail need not be continuous on site. The purpose of a national historic trail is to identify and protect the historic route and its historic remnants and artifacts for public use and enjoyment. To qualify as a national historic trail, a route must meet the following criteria:

It must be a trail or route established by historic use and must be historically significant as a result of that use.

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. Trails significant in the history of native Americans may be included.

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.

The following discussion presents national historic trail criteria and evaluates the study route's potential for meeting the criteria.

### Historic Use and Significance

Use of the Illinois River for commerce and transportation spans from prehistory to present day. Evidence clearly shows that prehistoric Indians of the Woodland (1000 B.C.-A.D. 700) and Mississippian (A.D. 700-1600) periods used the river as a main route of communication.

The Frenchmen, Father Jacques Marquette and Louis Joliet, as the first Europeans to the Illinois River valley, were directed there by Indians who recognized the value of the river as a main thoroughfare in connecting the Mississippi River to the Great Lakes. For a time the French centered their western administrative headquarters, called Fort St. Louis, along the river at Starved Rock and then later at Lake Peoria. Although the French dominated the area until 1763, they never undertook the extensive effort to build a canal envisioned by Louis Joliet at the Chicago Portage. The British, who won the battle for the North American empire against the French in 1763, did not extend settlements into the Illinois country.

For the first half of the 19th century navigational improvements on the Illinois River focused on construction of a canal between the south branch of the Chicago River and the head of navigation on the Illinois River at LaSalle. As a state legislator from 1834 to 1842, Abraham Lincoln gave wholehearted support for building the canal. Completion of the Illinois and Michigan Canal moved Chicago into a position of national economic importance.

After the Civil War, the state of Illinois and the federal government began work to complete a slack water system of four locks and dams to overcome a seasonally low water problem on portions of the river. Despite improvements in navigation on the Illinois River, commerce still suffered, for now the small, obsolete Illinois and Michigan Canal hindered traffic. In addition, by the 1890s railroads began to win the freight-hauling competition. Convenience, year-round availability, and speed of railroads proved too great an obstacle for the waterway to overcome.

The Chicago Sanitary and Ship Canal was completed to Joliet in 1901. In response to low water problems between Joliet and LaSalle, a series of five locks and dams was constructed. They opened the Illinois waterway system to navigation in 1933 and the old Illinois and Michigan Canal closed permanently.

Almost immediately the Illinois Waterway system began to win back freight taken by the railroads. Each year since the Second World War it has seen increased growth in barge traffic. As a result, the water route from the Mississippi River to Lake Michigan has outstripped its own importance of any previous time as one of the nation's leading waterways.

A more detailed account of the history of the Illinois River valley can be found in appendix A.

### National Significance

The national significance of the Illinois River/Illinois and Michigan Canal water route is evidenced by its relative importance during the prehistoric and historic periods of use. The concentration of Woodland and Mississippian Indian village sites and burial mounds in the lower Illinois River valley and the location of Cahokia Mounds (capital of the Mississippian culture) a few miles south of the study route exhibit the great importance of the river and its valley to these cultures. Cahokia Mounds is internationally recognized. It was designated a World Heritage Trust site in 1982 by the World Heritage Committee, consisting of representatives from those nations that participated in the World Heritage Convention. Dickson Mounds (state) Museum near Lewistown and the Koster archeological site near Kampsville are two other outstanding evidences of the culture that once flourished along the Illinois River.

The importance of the Illinois River as a water route for transportation and communication between the Mississippi River and the Great Lakes led the French to establish the administrative headquarters of their western colonial empire along it. Significant sites associated with the French period of the river's use include Kaskaskia Village and Fort St. Louis, both of which are national historic landmarks.

The reason for the Illinois River's prominence, during the French and subsequent periods, is that it afforded the shortest and most easily manipulated portage between the Mississippi River watershed and the lower Great Lakes. This aspect of the Illinois waterway's importance is commemorated and interpreted at the Chicago Portage National Historic Site.

Father Jacques Marquette and Louis Joliet recognized the value of this nearly all water link between the Mississippi and the Great Lakes. Joliet saw the potential for constructing a canal through the Chicago Portage. Such a canal was eventually built in the mid-19th century--the Illinois and Michigan Canal, completed in 1848. Other canals, such as the Ohio and Erie, the Miami and Erie, and the Wabash and Erie, were built between the Mississippi or its major tributaries and the Great Lakes, but because of its importance and economic value, only the linkage made by the Illinois and Michigan Canal remains in use today by means of its modern day successor--the Chicago Sanitary and Ship Canal. In time, both of these canals were supplemented by locks and dams to overcome seasonal low water problems on the remainder of the Illinois Waterway.

Today, the original linkage is being commemorated and preserved as the Illinois and Michigan Canal National Heritage Corridor.

#### Significant Potential for Recreational Use and Historical Interest

Because of its historic use over many centuries and its abundant water and land resources, the Illinois Trail route possesses outstanding potential for public recreational use and historical interest. Some of that potential has been realized (see discussion below), but authorization of a national historic trail could provide the focus and link of continuity to more completely develop that potential.

The Illinois Waterway renders the entire route navigable, providing for retracement of the historic route by recreational boaters. The history of the waterway itself is presented to the public at the U.S. Army Corps of Engineers' Illinois Waterway visitor center near Utica. In addition to boating opportunities on the navigable waterway, the Forest Preserve District of Cook County maintains a 14.4-mile canoe route on the Des Plaines River from just above the Chicago Portage site downstream to Lemont, including parking and access to adjacent forest preserves. Canoeing opportunities continue downstream on the Des Plaines River and on some sections of the Illinois and Michigan Canal maintained as part of the Illinois and Michigan Canal State Trail by the Illinois Department of Conservation.

Potential for approximate retracement of the historic route lies in the system of federal, state, and local highways that follow the course of the rivers and canals. Along much of the route, improved highways are on both sides of the river. State legislation enacted in 1975 designated this system of roadways as the "Joliet-Marquette Trail--Route of the Voyageurs" (between Chicago and Joliet) and the "Illinois River Road--Route of the Voyageurs" (from Joliet to Grafton). Lack of funding to date has prevented the Illinois Department of Transportation from implementing the legislation and marking the designated highways. Driving for pleasure is a popular leisure activity, and potential travelers could closely follow the historic route.

Adjacent to the rivers and canals are numerous federal, state, local, and private recreation and historic sites that facilitate recreational use of the waterways and provide interpretation of their historic use and other related and nonrelated local history. Many of these sites are adjacent to or easily accessible from the parallel highway system.

The Mark Twain and Chautauqua national wildlife refuges are the only federally owned sites along the study route. The degree to which they could be involved in development of a national historic trail is limited because of legal restrictions on the uses of these lands. They do, however, help preserve the natural, and perhaps historic, appearance of sections of the river.

The Illinois and Michigan Canal National Heritage Corridor, extending from the Chicago Portage National Historic Site to the lower end of the canal in the vicinity of LaSalle and Peru, Illinois, was created by federal legislation in 1984. The corridor is administered by a 19-member commission and its staff. The purposes of the corridor designation include historic preservation and interpretation, provision of recreational opportunities, and economic development. The national heritage corridor essentially comprises the upper 90 miles of the study route and incorporates the existing state trail.

Development plans for the corridor are completely harmonious with the concept of a national historic trail. Proposed recreation and historic interpretation would also implement the concept of an Illinois National Historic Trail, if authorized. Corridor plans call for establishment of a near-continuous, 90-mile trail along the historic towpath of the canal.

A total of 23 state-administered areas are along the study route, most of them adjacent to the water route. These areas, listed below, provide or have the potential to provide such opportunities as recreational access to the waterway, picnicking, camping, hiking, nature appreciation, historic interpretation, living history displays, and historic exhibits.

<u>State Parks</u> Buffalo Rock Channahon Gebhard Woods Goose Lake Prairie Hennepin Canal Parkway Illini Illinois and Michigan Canal Lewis and Clark Matthiesson Pere Marquette Starved Rock William G. Stratton	<u>Conservation Areas</u> Anderson Lake Des Plaines Marshall County Pike County Rice Lake Sanganois Spring Lake Woodford County  <u>State Forests</u> Sand Ridge
<u>State Museums</u> Dickson Mounds	<u>Fish and Wildlife Areas</u> Donnelley Lake DePue

Numerous local parks, recreation areas, trails, and historic sites are also along the study route. Forest preserve districts in Cook, DuPage, and Will counties administer sites that have potential as part of a national historic trail. The Metropolitan Sanitary District of Greater Chicago owns and administers lands along the Des Plaines River and the canals. The district has plans to develop a museum and visitor center relating to the canals at the junction of the Illinois and Michigan Canal, Chicago Sanitary and Ship Canal, and Cal-Sag Channel. Many communities have riverfront parks that hold potential for recreation and historic interpretation.

Private resources and activities that contribute to the potential of the route as a national historic trail include county historic museums and efforts of organizations such as the Tri-County Riverfront Action Forum, Inc., in Peoria.

Many communities are rediscovering the unique characters of the river and its environs and are sponsoring river-related festivals to promote public awareness and enjoyment of its values. In 1985, 35 communities cooperated to sponsor the First Annual Illinois River Road Scenic Drive and Boat-in during the first two weekends in June. Other festivals include Peru's Taste of the Illinois Valley, Utica's Montreal Canoe Weekends, Lockport's Old Canal Days, and Peoria's Steamboat Days. The re-created stern-wheel steamboat, the Julia Belle Swain, based in Peoria, regularly carries tourists along the Illinois River.

### Conclusion

The proposed Illinois Trail route would qualify as a national historic trail. The objective of such a trail would be to identify and preserve for public use and enjoyment the major historic transportation link between two of the nation's great waterway systems--the Mississippi River and the Great Lakes/St. Lawrence River. The Illinois Waterway, along with the Erie Canal, afforded an all-water transportation link between New York and New Orleans. Successors to the Erie and the Illinois and Michigan canals have continued to provide that linkage to the present day. A national historic trail would give people an opportunity to understand and appreciate the significance of this transportation system and the evolution of uses to the present day. The interpretive theme would be the importance and impact of the Illinois River and the Illinois and Michigan Canal as a route of transportation, migration, and commerce in the development of our nation.

## ALTERNATIVES

### EXISTING CONDITIONS

Established, continuous off-road hiking opportunities of the magnitude provided by a national scenic trail (minimum of 100 miles) are not available in Illinois. The longest hiking opportunity is provided by the 75-mile towpath of the Hennepin Canal Parkway (a state park) in northwestern Illinois, which intersects the Illinois Trail study route at Bureau Junction near the city of Hennepin. The entire 105-mile, T-shaped corridor of the canal and its feeder are open to horseback riding. Portions of the canal right-of-way are also open to bicycling and snowmobiling.

The Illinois Prairie Path, a cooperative public/private venture, is a 40-mile trail in the suburban Chicago area open to hiking, bicycling, and horseback riding. It is one of the major trails in the state providing moderately long-distance opportunities close to several million residents of the Chicago metropolitan area.

Extending westward from Joliet to LaSalle, Illinois, is the Illinois and Michigan Canal State Trail. The Illinois Department of Conservation is developing a 60-mile hiking and bicycling trail on the old towpath. In winter, portions of the towpath are open to cross-country skiing and snowmobiling.

The Shawnee National Forest, in southern Illinois, boasts one of the longest trails in the state--the 56-mile River-to-River Trail for hiking and horseback riding. Other significant trails in the state include a few hiking trails from 15 to 20 miles long and several equestrian trails from 25 to 40 miles long in the larger state parks, state forests, and conservation areas.

Some of the above trails and a number of shorter trails, administered by state, local, and private interests, are along the study route. No coordinated effort to connect them and thereby create longer trail opportunities has been initiated. The position of the state trails coordinator for the Illinois Department of Conservation, the agency that could most likely undertake such an effort, is currently vacant.

Other existing resources and conditions relevant to consideration of a national trail include the navigable Illinois Waterway, the state-designated Illinois River Road, the Illinois and Michigan Canal National Heritage Corridor, and numerous federal, state, local, and private recreation areas, historic sites, and river/canal special events. The Cook County Forest Preserve District has developed 5 miles of trail in the Palos area. In addition, canoeists are encouraged to use the 14-mile Chicago Portage National Historic Site canoe trail on the Des Plaines River. Lockport Township Park District has built 2 miles of trail. However, the few other trails along the river corridor are usually loops within boundaries of public management areas, such as the trails within Pere Marquette State Park and Starved Rock State Park.

ALTERNATIVE A - AUTHORIZE DEVELOPMENT OF A NATIONAL SCENIC TRAIL BETWEEN SUMMIT AND PEORIA

The trail would link Peoria and suburban Chicago, creating a recreational opportunity not currently available in Illinois. Other existing or developing trails systems (Hennepin Canal Trail and the developing components of the northeastern Illinois trail network) could be tied into the trail. It would likely stimulate establishment of additional public and private recreation-related services. Interpretation could draw attention to the cultural and natural resources along the route.

Implementation Factors

Administration. A national scenic trail would be the responsibility of the National Park Service, acting on behalf of the secretary of the interior. Development and management of the trail would be a cooperative effort involving federal, state, county, and local governments, and private organizations. The Illinois Department of Conservation would play a leading role in coordinating and promoting development of the trail by involved public and private interests, and in developing and maintaining the trail on its own properties.

The National Park Service, in its role as overall administrator of the trail, would prepare a comprehensive management plan for the trail in consultation with agencies and organizations involved in developing and managing segments of the trail. After the plan was completed, the National Park Service would enter into cooperative agreements with the Illinois Department of Conservation and other appropriate public and private interests, promote development of new trail segments, maintain records of the trail, and provide official markers for completed trail segments (uniform markers would be designed, procured, and distributed to cooperating nonfederal interests). A trail advisory council would be established and the Park Service would consult with and provide staff support to the council. A general information brochure would be prepared and technical assistance would be provided, as needed, to the Illinois Department of Conservation and other cooperating interests. NPS staff of 0.5 person years would be required annually, plus travel and other expenses as detailed below.

NPS administration costs	
0.5 trail coordinator	\$15,000
travel and overhead	5,000
advisory council expense	5,000
trail markers	600
Total	<u>\$25,600</u>

The Illinois Department of Conservation, as the state agency with primary responsibility for providing outdoor recreational opportunities, would play a pivotal role in developing and managing the trail. The department's Illinois and Michigan Canal State Trail would constitute a major portion of

the national scenic trail. Other properties along the Illinois River would anchor the remainder of the trail and serve as nodes offering support facilities such as overnight camping. The Illinois Department of Conservation would be in a position to work closely with the many local jurisdictions whose involvement would be essential to completing the trail. The department would promote and coordinate the involvement of these jurisdictions, as well as private interests, and provide technical assistance on trail design, acquisition, development, and funding. This coordination effort would require about one-fourth of an employee's time at a cost of approximately \$12,000, including clerical support services and travel expenses.

Acquisition. From Peoria to LaSalle, 18 areas are in public ownership, but those existing areas provide the opportunity for developing only short links in a continuous linear trail. When this alternative was first developed, the Rock Island Railroad line from Peoria paralleling the river northward was to be abandoned. This represented an outstanding opportunity for trail development. However, the Rock Island Railroad has chosen not to abandon the right-of-way at this time.

A continuous land-based foot trail would be feasible because several existing trails could be used. The Illinois Department of Conservation is developing a 61.6-mile Illinois and Michigan Canal State Trail from LaSalle to Channahon. In addition, 2 miles of trail have been completed in the Lockport area, and 5.3 miles have been completed by the Forest Preserve District of Cook County on the canal towpath in the Palos Preserve. Commonwealth Edison is willing to lease their 15-mile right-of-way from Romeoville to Hodgkins if an agency or organization is willing to negotiate approval from adjacent landowners.

The approximate trail mileage from Peoria to Summit would be 145 miles. Deducting 62 miles for the Illinois and Michigan Canal State Trail would leave approximately 83 miles of trail for which land must be purchased or an easement acquired. Looking at an average corridor width of 100 feet, this would require 1,006 acres. Easement costs average about \$400 per acre, while fee simple purchase would range between \$350 to \$1,600 per acre, depending on location. An average of \$800 will be used for this study.

Acquisition costs for 83 miles of 100-foot trail corridor	\$804,800
Easement costs for 83 miles of 100-foot trail corridor	\$402,400

It is unlikely that the trail corridor would be acquired exclusively in fee simple or easement, but instead would probably be a combination of the two, and the actual cost of the trail right-of-way would be between the two figures. It should be noted, however, that there has been only limited success in negotiating easements for trail purposes in Illinois. Therefore, the estimate for full acquisition may be more realistic.

Most of the national scenic and historic trails created by Congress in the past nine years have been authorized with a prohibition against land acquisition for the trails by federal agencies outside existing federal areas (national parks, national forests, etc.). It is possible that a similar restriction would be included in any legislation that would authorize the Illinois Trail route as a component of the national trails system. In that case, all efforts to secure a right-of-way for the trail would have to be carried out by cooperating state, local, and private interests. Associated costs would have to be borne by these interests.

Development. The trail would be developed as a single-lane foot trail. The design would be coordinated by the National Park Service and the Illinois Department of Conservation to ensure consistency along the entire route. (Cost estimates for this study do not include development of any support facilities such as overnight camping areas.)

Cost estimates for developing a trail vary considerably, depending on the site condition, amount of clearing required, amount of treadwork, bridges, culverts, water diversion, etc. Costs range from \$5,000 to \$15,000 per mile; for this study an average of \$10,000 will be used. Assuming construction of 83 miles of trail, the development cost of the trail would be \$830,000. These costs would be borne by the public agencies and private organizations responsible for particular segments of the trail right-of-way.

Operation and Maintenance. Trail operation and maintenance expenses would vary, based on factors such as type and quantity of use, type of terrain, weather conditions over the past year, and need for major repairs. Most portions of the trail would require some annual maintenance. Every five to 10 years, various parts might require major renovations, depending on nature's influences and trail user impacts. Because of this irregularity in maintenance needs, costs for operating and maintaining a trail are difficult to calculate. The cost of operating and maintaining the 62 miles of the Illinois and Michigan Canal State Trail, including the canal itself, the towpath trails, and four major access sites, averages \$2,500 per mile. The annual operation and maintenance cost of the 83 miles of new trail is estimated to be \$1,000 per mile. This figure could be reduced by involving volunteers in trail maintenance, which has proven successful in many federal and state park and forest areas.

Annual operation and maintenance costs for a foot trail  
between Peoria and Summit

62 miles at \$2,500 per mile	\$155,000
83 miles at \$1,000 per mile	83,000
Total	\$238,000

These costs would be borne by the public agencies and private organizations responsible for particular segments of the trail right-of-way.

Table 1: Cost Summary for Alternative A

	<u>Annual</u>	<u>One Time</u>
NPS administration	\$ 25,600	
IDOC coordination	12,000	
Corridor acquisition*		\$ 804,800
Corridor easement*		402,400
Development		830,000
Operations and maintenance	<u>238,000</u>	<u>          </u>
Total	\$275,600	\$1,232,400* to \$1,634,800

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\*It is unlikely that the trail corridor would be acquired exclusively in fee simple or easement; instead, it would probably be a combination of the two. The actual cost of the trail right-of-way would be between the two figures. Land acquisition costs are estimates only and illustrate the relative land costs among the alternatives. No detailed appraisals were prepared for this conceptual level of planning. If the Illinois Trail is authorized, detailed land cost estimates will be prepared as part of the planning process.

### Feasibility

The 62-mile Illinois and Michigan Canal State Trail and several other short trails, combined with the potential of other public lands and utility corridors, make this alternative feasible. Should the railroad right-of-way extending northward from Peoria be abandoned in the future, the feasibility of establishing the trail would be even greater because crossing private lands would be less difficult.

The cost of this alternative would be moderate. Again, because the Illinois and Michigan Canal State Trail is a major component of this alternative, the cost of completing such a trail would be significantly reduced. The cost of trail acquisition and development would be \$1.2 million or perhaps lower. Since it is possible that Congress would restrict federal land acquisition, as it has for most other trails in the national trails system, this cost and annual maintenance costs would be shared among jurisdictions along the route and private organizations. The annual costs to the National Park Service and the Illinois Department of Conservation for administration and coordination would be minimal.

### Desirability

A national scenic trail between Peoria and suburban Chicago would provide outstanding recreational opportunities and incorporate significant

natural and cultural resources. The trail would meet needs for long-distance trails identified in Outdoor Recreation in Illinois: The 1983 Policy Plan. It is in accord with the policy directions identified in that plan for long-distance trails and would connect with other developing trails in northern Illinois.

The need to locate perhaps as much as half the route across private lands would be a major concern to landowners. Recent efforts to establish such trails in Illinois have generated strong opposition from affected and/or adjacent landowners.

The state of Illinois, which would play a major role in coordinating the development and management of such a trail, has indicated that it has reservations about establishment of a national scenic trail. However, the state strongly supports establishment of a national historic trail. Among the considerations that form the basis for the state's position is the fact that the Illinois and Michigan Canal State Trail, a major component of all alternatives, is open to snowmobile use in the winter. Because motorized use is prohibited by law on national scenic trails, a legislative exception would be necessary to permit the canal trail to become part of an authorized national scenic trail. Other concerns of the Illinois Departments of Transportation and Agriculture are also reflected in this position.

Public support for this alternative is summarized in appendix C.

#### ALTERNATIVE B - AUTHORIZE DEVELOPMENT OF A NATIONAL SCENIC TRAIL BETWEEN SUMMIT AND WOOD RIVER

A major trail linking the Chicago and St. Louis metropolitan areas would be created. The trail below Peoria would cover the least developed section of the river and would take potential users through pleasant rural/pastoral landscapes. Bottomland forests, floodplains, and river bluffs could provide varying scenery and trail locations.

A diverse and interesting range of interpretive themes could be developed. Of special interest in the section between Peoria and Wood River are archeological resources (such as Dickson Mounds), sites associated with Abraham Lincoln (such as the Beardstown Courthouse), the story of historical commercial activities (such as exporting of freshwater clamshells to Japan and the clamshell button industry), and unique ecological features (such as hill prairies and sand dunes).

#### Implementation Factors

Administration. A national scenic trail from Summit to Wood River would be the responsibility of the National Park Service acting on behalf of the secretary of the interior. The NPS administrative functions would be the same as described under alternative A. Although the length of the trail would be longer, these functions could be carried out with essentially the

same level of staff and resource commitment as described under alternative A. The administration costs would be slightly higher than alternative A, as shown below.

NPS administration costs		
0.5 trail coordinator		\$15,000
travel and overhead		5,000
advisory council expense		5,000
trail markers		1,500
	Total	<u>\$26,500</u>

A continuous foot trail, running approximately 330 miles from Summit to Wood River, would need more coordination among participating agencies and organizations than was required under alternative A. Again, the Illinois Department of Conservation would be best suited to play this role. A coordinator working a minimum of half time on the trail project would be needed to perform the same functions described under alternative A. The cost of this coordination effort would be approximately \$25,000, including clerical support services and travel expenses.

Acquisition. Between Peoria and Wood River (the portion of route not included under alternative A), there are only a few areas of public ownership along the Illinois River. Although some of them would serve as nodes of supportive recreational facilities (water, restrooms, overnight camping, etc.), they would make no significant contribution to development of a long-distance trail. These few areas of public ownership are separated by long stretches of privately owned lands used primarily for agriculture.

The only federal lands are national wildlife refuges that are not available for development of recreational trails. If a trail was on the same side of the river as the refuges, it would have to skirt the refuge lands.

Under this alternative, it would be necessary to secure a trail right-of-way across many miles of private lands. Deducting 62 miles for the Illinois and Michigan Canal State Trail, 268 miles of trail remain to acquire in fee or to obtain through easements. A 100-foot trail corridor would require 3,248 acres. Acquisition costs are based on an average of \$800 per acre, while easement estimates are \$400 per acre.

Acquisition costs for 268 miles of 100-foot trail corridor	\$2,598,400
Easement costs for 268 miles of 100-foot trail corridor	\$1,299,200

As stated under alternative A, a mix of acquisition methods would be used, resulting in a cost somewhere between these two figures. It is

possible that direct federal land acquisition would be prohibited, as it has for most trails in the national trails system. In that case, all acquisition costs would have to be assumed by cooperating public and private interests.

Development. The same basis for development cost estimates described under alternative A would apply to this alternative.

Development costs for 268 miles of trail at \$10,000 per mile	\$2,680,000
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These costs would be assumed by the public agencies and private organizations responsible for segments of the trail right-of-way.

Operation and Maintenance. Estimates are based on the same rationale used in determining the operation and maintenance costs for alternative A.

Annual operation and maintenance costs	
62 miles at \$2,500 per mile	\$155,000
268 miles at \$1,000 per mile	<u>268,000</u>
Total	<u>\$423,000</u>

These costs would be borne by the public agencies and private organizations responsible for segments of the trail right-of-way. Costs could be reduced by involving volunteers in trail maintenance.

Table 2: Cost Summary for Alternative B

	<u>Annual</u>	<u>One Time</u>
NPS administration	\$26,500	
IDOC coordination	25,000	
Corridor acquisition*		\$2,598,400
Corridor easement*		1,299,200
Development		2,680,000
Operation and maintenance	<u>423,000</u>	
Total	\$474,500	\$3,979,200* to \$5,278,400

\*It is unlikely that the trail corridor would be acquired exclusively in fee simple or easement; instead, it would probably be a combination of the two. The actual cost of the trail right-of-way would be between the two figures. Land acquisition costs are estimates only and illustrate the relative land costs among the alternatives. No detailed appraisals were prepared for this conceptual level of planning. If the Illinois Trail is authorized, detailed land cost estimates will be prepared as part of the planning process.

### Feasibility

The same resources that contributed to the feasibility of alternative A would contribute to the feasibility of that segment of this alternative. From Peoria to Wood River, public land resources are sparse. It would be possible to locate and develop a national scenic trail along this portion of the study area--taking advantage of bottomland forests, scenic river bluffs, and perhaps levees, and skirting developed areas, but it would be difficult in the absence of more areas of public ownership to anchor the trail and stimulate interest in completing it. Perhaps 95 percent or more of this portion of the route is in private ownership. The Illinois agricultural community has been very effective in opposing similar proposals elsewhere.

The cost of establishing a national scenic trail from Summit to Wood River would range between \$4 million and \$5.3 million. This cost is considerably higher than alternative A, yet much smaller than costs for other national scenic trails already authorized by Congress (i.e., the 2,100-mile Appalachian Trail and the 3,200-mile North County Trail). The estimated costs could be reduced by involving trail users as volunteers in development of the trail and in working with landowners to secure trail rights-of-way.

As stated under alternative A, it is possible that Congress would restrict federal land acquisition if Congress authorized the trail described under

this alternative. All acquisition, development, and maintenance costs would have to be shared among the various public jurisdictions and involved private organizations along the route. It is not possible to accurately determine the financial feasibility of their participation in such a trail project. Annual costs for NPS administration and Illinois Department of Conservation coordination would be minimal.

### Desirability

A trail between the Chicago and St. Louis metropolitan areas would meet significant levels of recreational needs.

Support for this trail among those jurisdictions that would need to be involved in developing and managing segments of such a trail is unknown. Certainly the financial impact of this alternative would be a concern to many.

The amount of private land required for the trail in this alternative would be a major concern to landowners. In the past, they have successfully opposed such trail projects. Without their cooperation, establishing the Peoria-Wood River segment would be extremely difficult.

As stated under alternative A, the state of Illinois has indicated preference for a national historic trail.

Public support for this alternative is summarized in appendix C.

### ALTERNATIVE C - AUTHORIZE A NATIONAL HISTORIC TRAIL FOLLOWING THE HISTORIC WATER ROUTE OF THE RIVER AND CANAL FROM SUMMIT TO GRAFTON

This national historic trail alternative would focus on the historic route of the river and canal. Travel on the national historic trail would be by watercraft, and necessary support facilities for recreational boating would be developed. Boating opportunities would include the use of canoes, sailboats, powerboats, and houseboats.

Interpretation would focus on navigation methods, including the portage between Lake Michigan and the Des Plaines River, the canal, the late 1800s dredging and dam system, and the lock and dam system completed in 1933, which is still in use. Another theme would be the use of the river system by the French for communication and transportation to hold the western part of their empire during the 1600s. Still another theme would be the use of the route by prehistoric Indian cultures that inhabited the valley.

Many of the interpretive sites established along the route to interpret its history would also be accessible by automobile. Existing land-based trails adjacent to the historic route (such as the Illinois and Michigan Canal State Trail) and other land-based trails that might be established along

portions of the route to provide historic interpretation and appreciation would be included.

There is considerable development along the river, and use is encouraged on the Illinois and Michigan Canal from Channahon to Morris and from North Utica to LaSalle. The Chicago Portage canoe trail on the Des Plaines River extends from Lyons to Lemont. Opportunities would be created for development of camping and boating facilities and establishment of boat tour companies.

### Implementation Factors

Administration. A national historic trail would be the responsibility of the National Park Service acting on behalf of the secretary of the interior. Actual development and management of the trail would be a cooperative effort involving federal, state, and local governments and private organizations. The U.S. Army Corps of Engineers, the Illinois Department of Conservation, the Illinois Historic Preservation Agency, and the Illinois Department of Transportation would play key roles.

The National Park Service would serve as administrator of the trail, and its role would be similar to those described under alternative A. The administration costs would be \$25,600 (see alternative A for a breakdown of costs).

The Illinois Department of Conservation and the Illinois Historic Preservation Agency, as the state agencies with primary responsibilities for outdoor recreation and historic preservation, would play pivotal roles in coordinating development and management of the trail. Through one or both of these agencies, the state of Illinois would work closely with the river and canal towns, government agencies, businesses, and organized groups in developing the interpretive story and how it would be told along the trail. The Illinois and Michigan Canal State Trail and other Illinois Department of Conservation properties would be state-administered components of the trail, providing recreational access to the historic water route and historic interpretation. The combined efforts of state agency coordination of trail development would require about half a person's time at a cost of approximately \$25,000, including clerical support services and travel expenses.

Acquisition and Development. Service for powerboats should be about every 60 miles. Using this as a standard, service facilities should be available at the Grafton/Pere Marquette State Park areas, Meridosia/Beardstown, Peoria, LaSalle/Peru, and Joliet. Facilities currently exist in these areas. If a national historic trail is authorized, the adequacy of these facilities would be analyzed in the trail management plan and recommendations made.

The Illinois Department of Conservation has a boat access program that would provide 100 percent of the development costs for powerboat access areas in exchange for an agreement from a local agency to provide

maintenance for the area. If this program continued to be funded from the motorboat fuel tax, this could greatly enhance the feasibility of the trail by providing for development of any additional powerboating facilities that might be needed.

Canoe and fishing boat access should be approximately every 15 miles. Using this standard, the facilities might be located at Pere Marquette State Park, Hardin, Kampsville, Hillview/Pearl, Florence, Meridosia, Beardstown, Havana, Spring Lake Conservation Area, Pekin, Spring Branch Conservation Area (Peoria), Sparland/Lacon, Hennepin, LaSalle/Peru, Utica/Starved Rock State Park, Marselles, Gebhard Woods State Park/Morris, Channahon, Joliet/Lockport, and Summit.

Some of the areas have existing facilities, others would have to be developed. Exact locations of boater access would be addressed in the trail management plan if a national historic trail is authorized by Congress.

For the purposes of this study, it will be assumed that five additional canoe and fishing boat access sites would be developed. The cost would be as follows:

Boater access development costs	
acquire 3 acres at \$800 per acre	\$ 2,400
access road and gravel parking lot	10,000
Total per access	<u>\$12,400</u>
Develop five access points at \$12,400 each	\$62,000

To interpret the historic use of the Illinois Waterway, an estimated 50 new historical markers or interpretive exhibits would be needed along the route. These would be in existing and proposed public park and access sites along the river and at sites related to the waterway's historic use. Most, if not all, of these sites would also be accessible by automobile.

The interpretive markers/exhibits would undoubtedly take many forms. One common type of marker is the large cast aluminum/raised letter signs frequently used as state historical markers. The cost of producing and installing these individually cast signs is approximately \$2,000. Using this as an estimate of the cost of each interpretive marker/exhibit, the cost of 50 new facilities would be \$100,000.

Section 7(g) of the National Trails System Act limits federal land acquisition for national historic trails to those areas identified as high potential route segments (applies particularly to land trails) and high potential historic sites. If Congress authorizes an Illinois National Historic Trail, the comprehensive management plan would identify sites falling into this category. However, as described under the national scenic trail alternatives, it is possible that Congress would remove federal land acquisition authority for such sites as part of legislation authorizing

the Illinois Trail. In this case, all efforts to acquire and develop recreational access and historic interpretation sites would have to be carried out by cooperating state, local, and private interests. Associated costs would have to be borne by these interests.

Operation and Maintenance. The cost of operating and maintaining the recreational access and historic interpretation sites would be borne by public agencies and private organizations responsible for the sites. The annual cost of operating and maintaining the five new recreational access sites is estimated to be \$5,000 per site or a total of \$25,000.

The cost of maintaining historical interpretive markers/exhibits could vary from a small amount for cast aluminum markers to significant amounts for elaborate exhibits. No attempt to estimate these costs will be made in this study.

Table 3: Cost Summary for Alternative C

	<u>Annual</u>	<u>One Time</u>
NPS administration	\$25,600	
State of Illinois coordination	25,000	
Acquisition and development of five recreational access sites		\$ 62,000
Development of interpretive markers		100,000
Operation and maintenance of five recreational access sites	<u>25,000</u>	<u>          </u>
Total	\$75,600	\$162,000

Feasibility

The feasibility of this alternative is very high. The historic route is today largely an existing navigable waterway with numerous points of public access at such places as bridge crossings, municipal waterfronts, state parks, and conservation areas. A significant number of the historic sites associated with historic use of the route are in public ownership or are identifiable. Thus, it would be relatively easy to establish a national historic trail based on or following the historic water route.

Public retracement of the historic water route is already possible. As noted above, a few additional access sites might be needed. Most of the interpretive markers or similar facilities could be located at existing public sites along the river. Most of these sites would also be accessible by automobile. Several existing major interpretive centers, such as the Dickson Mounds (State) Museum and the U.S. Army Corps of Engineers

Illinois Waterway visitor center, would contribute to the network of sites that would interpret the historic trail.

If a national historic trail as described in this alternative were authorized by Congress, it would be important for the trail management plan to carefully address the issue of safety and potential use conflicts between various types of recreational watercraft (from canoes to powerboats) and between recreational and commercial traffic on the waterway.

The financial feasibility of this trail alternative is also very high. The relatively low costs would be shared by a number of potential cooperating interests, public and private.

### Desirability

This alternative would provide opportunities whereby users could retrace the actual historic route of the Illinois Trail. The National Trails System Act describes national historic trails as "extended trails which follow as closely as possible and practicable the original trails or routes of travel of national historical significance." It also states, "A designated trail should generally accurately follow the historic route . . ." Among the three national historic trail alternatives (C, D, and E), this alternative most closely follows the historic route.

The state of Illinois has indicated a strong preference for establishment of a national historic trail along the study route.

Significant support has also been shown along the Illinois River for a mechanism to unify and coordinate interest in the role the river played in the heritage of its adjacent communities. A national historic trail would fill that role. There would likely be little concern on the part of private landowners because almost no land would need to be acquired.

Public support for this alternative is summarized in appendix C.

### ALTERNATIVE D - AUTHORIZE A NATIONAL HISTORIC TRAIL FOLLOWING PUBLIC HIGHWAYS THAT PARALLEL THE RIVER AND CANAL FROM SUMMIT TO GRAFTON

This alternative would establish the national historic trail on highways that follow as closely as possible the historic water route. Although the water route could still be retraced by boaters, this alternative would focus on providing recreation and historic interpretation opportunities and facilities for the motoring public along highways. Interpretive sites would tend to be designed as highway waysides. Access to specific historic sites along the river itself would be identified with markers along side roads.

The intent of this alternative would be to follow the highway network authorized in 1975 by the Illinois State legislature as the "Jolliet-Marquette Trail--Route of the Voyageurs" and "Illinois River Road--Route of the Voyageurs."

Implementation Factors

Administration. A national historic trail would be the responsibility of the National Park Service, acting on behalf of the secretary of the interior. Actual development would be a cooperative effort, as described under alternative C. The Illinois Department of Transportation would play a much more prominent role in this alternative. The U.S. Army Corps of Engineers would play a lesser role. The administrative functions performed by the Park Service and the staff and resource commitments would be the same as described under alternative C. However, in addition to providing official trail markers for interpretive sites along the trail, the Park Service would also be responsible for providing historic route markers along approximately 500 miles of highways.

NPS administration costs		
0.5 trail coordinator		\$15,000
travel and overhead		5,000
advisory council expense		5,000
trail markers		4,000
	Total	<u>\$29,000</u>

The Illinois Historic Preservation Agency and Illinois Department of Conservation would play pivotal roles in coordinating development and management of the trail, as described under alternative C. In addition, the Illinois Department of Transportation would play a major role in installing and maintaining historic route markers along highways. The combined efforts of those state agencies to coordinate trail development is estimated to cost \$35,000.

Acquisition and Development. Land acquisition would not be required under this alternative, except possibly for some high potential historic sites that might be identified during planning for the trail, if authorized. In this case, the same restrictions discussed under alternative C would apply, and costs would likely be borne by cooperating state, local, and private interests.

To interpret the trail, 75 new markers and exhibits would be needed along the 500 miles of designated roadways. These are estimated to cost \$2,000 each, or \$150,000 total.

Placement of the initial set of markers along the road network by the Illinois Department of Transportation is estimated to cost \$50,000.

Operation and Maintenance. The principal operation and maintenance function related to this alternative would be carried out by the Illinois Department of Transportation. Annual maintenance and replacement of official trail markers are estimated to cost \$5,000. Replacement signs would be provided by the Park Service as part of its administrative functions.

Table 4: Cost Summary for Alternative D

	<u>Annual</u>	<u>One Time</u>
NPS administration	\$29,000	
State of Illinois coordination	35,000	
Development of interpretive markers		\$150,000
Marking highway route		50,000
Maintenance of highway markers	<u>5,000</u>	<u>          </u>
Total	\$69,000	\$200,000

Feasibility

Because the highways that would comprise the trail route of this alternative already exist, the feasibility of this alternative is extremely high. The only requirements would be marking the routes and establishing appropriate historic interpretation sites. Most of these could be established at existing state and local parks along the road system or at turnouts within the highway rights-of-way. The authorization for the Illinois Department of Transportation to participate in this alternative is essentially provided by the 1975 state legislation.

Although the cost of this alternative is somewhat higher than alternative C, a number of participants would share the cost. The motor vehicle trail would appear to be financially feasible.

Desirability

This alternative would provide opportunities to appreciate the historic use of the Illinois River/Canal Waterway by automobile. The opportunity to understand and appreciate the historic role of this route in the development of our nation is, however, somewhat reduced when experienced by automobile. This is true not only because of the speed of driving, but because some of the roadways are significantly removed from the river and canal. Although the National Trails System Act permits a public road approximating or paralleling the historic route to be marked as the national historic trail, it states that, "the potential for such use (public recreational use or historical interest based on historic

interpretation and appreciation) is generally greater along roadless segments developed as historic trails and at historic sites associated with the trail."

The state of Illinois has indicated its strong support for establishment of a national historic trail along the study route.

Public support for this alternative is summarized in appendix C.

ALTERNATIVE E - AUTHORIZE A NATIONAL HISTORIC TRAIL THAT WOULD BE DEVELOPED AS A CONVENTIONAL TRAIL PARALLELING THE RIVER AND CANAL FROM SUMMIT TO GRAFTON

This alternative is very similar to alternative B, but the basis for establishing the trail would be the historic use of the Illinois waterway rather than the broader categories of scenic and historic resources in the Illinois River valley. This trail would differ from the one under alternative B as follows:

It would be about 20 miles shorter, or 310 miles total.

All or parts of it could be open to motorized trail activities, such as snowmobiling and trail bike riding, as well as nonmotorized activities, such as hiking, bicycling, horseback riding, and cross-country skiing. Designated portions of the trail (all or parts of it) for certain activities would be determined during preparation of the comprehensive management plan, should the trail be authorized.

Federal land acquisition authority would be limited to those areas identified in the trail management plan as high potential route segments and high potential historic sites. However, as mentioned under all alternatives, Congress could delete all federal land acquisition authority when authorizing such a trail.

The focus of interpretation along the trail would be much narrower, concentrating on historic use of the waterway.

Implementation Factors

Administration. A national historic trail would be the responsibility of the National Park Service acting on behalf of the secretary of the interior. The administrative functions performed by the Park Service would be similar to those described under alternative A. The necessary staff and resource commitments would be as follows:

NPS administration cost	
0.5 trail coordinator	\$15,000
travel and overhead	5,000
advisory council expense	5,000
trail markers	<u>2,000</u>
Total	\$27,000

The Illinois Department of Conservation would play a key role in the development and management of this trail, as described under alternatives A and C. The Illinois Historic Preservation Agency would also be involved. The estimated cost of state agency coordination efforts would be \$30,000.

Acquisition and Development. Some major components of this trail exist, such as the Illinois and Michigan Canal State Trail. Much of the remaining 248 miles would have to be acquired in fee or by easement. The basis for estimating the costs of these two methods is the same as described under alternative A. A 100-foot corridor would require 3,006 acres.

Acquisition costs for 248 miles of 100-foot trail corridor	\$2,404,800
Easement costs for 248 miles of 100-foot trail corridor	\$1,202,400

A mix of acquisition methods would likely be used, resulting in a cost of somewhere between these two figures. Because federal land acquisition for a national historic trail is already limited, and because Congress could further limit such authority when authorizing such a trail, most if not all acquisition costs would have to be borne by cooperating public agencies and private interests.

The same basis for development cost estimates described under alternative A is applicable to this alternative.

Development costs of 248 miles of trail at \$10,000 per mile	\$2,480,000
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Interpretive signs and exhibits describing the historical use and significance of the river and canal would be needed. Although the signs would not have to be as elaborate or expensive as those described under alternative C, more frequent markers would be needed. Therefore, the estimated cost is the same as alternative C--\$100,000.

Development costs would have to be borne by the public or private interests responsible for particular sites and segments.

Operation and Maintenance. Estimated annual operation and maintenance costs of \$403,000 are based on the same rationale used in determining the costs under alternative A.

Table 5: Cost Summary for Alternative E

	<u>Annual</u>	<u>One Time</u>
NPS administration	\$ 27,000	
State of Illinois coordination	30,000	
Corridor acquisition*		\$2,404,800
Corridor easement*		1,202,400
Trail development		2,480,000
Development of interpretive signs		100,000
Maintenance	<u>403,000</u>	<u>                    </u>
Total	\$460,000	\$3,782,400* to \$4,984,800

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\*It is unlikely that the trail corridor would be acquired exclusively in fee simple or easement; instead it would probably be a combination of the two. The actual cost of the trail right-of-way would be between the two figures. Land acquisition costs are estimates only and illustrate the relative land costs among the alternatives. No detailed appraisals were prepared for this conceptual level of planning. If the Illinois Trail is authorized, detailed land cost estimates will be prepared as part of the planning process.

Feasibility

The feasibility of this alternative would essentially be the same as alternative B.

Desirability

The desirability of this alternative would essentially be the same as alternative B.

In contrast to alternative B, this alternative would meet needs for long-distance trails identified in the state's outdoor recreation plan while satisfying the Illinois Department of Conservation's concerns about current snowmobile use on the Illinois and Michigan Canal State Trail.

Public support for this alternative is summarized in appendix C.

## ALTERNATIVE F - NO FEDERAL ACTION

Under this alternative, the Illinois Trail route would not be authorized as a scenic or historic component of the national trails system. Congress would take no action to authorize it, and consequently, neither the Park Service nor any other federal agency would take any action to create the trail. However, federal action already authorized as part of the Illinois and Michigan Canal National Heritage Corridor in the upper 90 miles of this study route would continue as planned.

### Opportunities Other than Federal Action

The lack of federal action would not preclude the state of Illinois, local governments, and/or private organizations from establishing all or any portions of the route as a recreational or historic trail. Even under federal designation, most of the actual work and financial support to establish and maintain the trail would be carried out by these interests.

Examples of actions that might be taken are as follows:

State and local agencies and private organizations, in concert or independently, could establish interpretive facilities along the river and canal to relate the story of their historical use. Working independently, however, there might be a lack of consistency in the message and methods used to present it.

State and local agencies and private organizations, in concert or independently, could establish recreational trails along all or parts of the route. Once established, these trails could be included in the national trails system as national recreation trails through application to the secretary of the interior. Working independently, there could be a lack of consistency among the trails or trail segments. Currently, the Illinois Department of Conservation does not have a trails coordinator to coordinate local activities.

The Illinois Department of Transportation could implement the 1975 Illinois River Road legislation, marking the route and supplementing it with appropriate historical markers.

Specific isolated opportunities could be targeted and implemented. For example, the Illinois Department of Conservation could work to establish a 15-mile trail between the western end of the Illinois and Michigan Canal State Trail and the Hennepin Canal Parkway. Establishing this connecting link would create a continuous 150-mile trail. Other isolated opportunities along the study route also merit state, local, and private attention.

Without federal involvement, the impetus to undertake these actions may not be as great. State, local, and private actions also would not have the national recognition and national promotion which would accompany designation as a national scenic or national historic trail. The potential tourist appeal of federal designation could be of measurable economic value to local communities.

## THE PROPOSAL

Public comments on the draft feasibility study (detailed in appendix C) showed clear support for alternative C (national historic trail--water route), which was identified as the preferred alternative. However, more than half of those supporting alternative C also expressed a desire to have the final proposal combine all or some of the features of other national historic trail alternatives (D and E) with alternative C. They stated that authorization of the Illinois Waterway alone as a national historic trail would provide little in the way of new opportunities for historic appreciation and related outdoor recreation.

In addition, a number of people argued strongly for extension of any final trail proposal to the mouth of the Chicago River at Lake Michigan. They reasoned that if the purpose of a national historic trail would be to preserve and interpret for public use and enjoyment appropriate portions of the historic water route between the Mississippi River and the Great Lakes, then the authorized trail should extend to Lake Michigan. Including only the portion of the route southwest of the Chicago Portage National Historic Site would be an incomplete proposal.

Along with additional staff analysis, these comments had a significant influence on the formulation of this proposal.

## DESCRIPTION

It appears to be both feasible and desirable to establish a national historic trail consisting of the historic water route between Lake Michigan and the Mississippi River (portions of the Illinois, Des Plaines, South Branch of the Chicago, and Chicago rivers and the Illinois and Michigan Canal and Chicago Sanitary and Ship Canal) and a parallel land trail extending from the westernmost point of the Illinois and Michigan Canal to the Chicago Portage National Historic Site, with extension eastward to Lake Michigan, if possible.

This proposal includes the historic and contemporary components of the Illinois Waterway system, from the mouth of the Illinois River near Grafton to the mouth of the Chicago River in Chicago. It also includes existing and proposed land trails adjacent to this waterway, such as the Illinois and Michigan Canal State Trail and potential trails on utility corridors and Metropolitan Sanitary District of Greater Chicago lands along the waterway.

If authorized by Congress, a plan would be prepared and implemented to provide for the development and management of river access areas and facilities to enhance safe recreational boating on the historic waterway system, plus interpretive facilities at appropriate sites along and near the waterway to explain historic use as a route of exploration, trade and commerce, transportation and communication, and migration and settlement. The plan would also provide for the development and

management of a parallel trail for walking and other uses that might be compatible on its various segments, together with facilities for picnicking, camping, and nature and historic interpretation at appropriate locations.

National historic trails are intended to preserve and interpret for public use and enjoyment any remnants of the historic route. It is not intended that the proposed national historic trail would create a management or preservation corridor surrounding the water route and land trail. If authorized, the focus of the management plan and federal efforts to implement the plan would be on specific sites where such remnants exist and on the development of facilities to permit retracement of the route and to tell the story of its historic use. Related efforts beyond this scope would be the responsibility of other jurisdictions or private organizations.

This proposal would not change or restrict current patterns of land use, development, commerce, or business, nor would it create or impose any new rules, regulations, or standards. No management corridor would be created. The inclusion of any nonfederal lands and waters in a national historic trail is completely voluntary.

A strong interest in an automobile driving route has been evident throughout the study process. It should be noted that authorization of this proposal would not preclude establishment of a complementary highway route through state or local action. This study recognizes that people would want to travel along the route by automobile and that most, if not all, of the recreational and historic sites associated with the trail would also be accessible by road. Therefore, if the trail is authorized by Congress, any federal planning documents and information brochures about the trail should show the Illinois River Road. It is also recommended that any legislation to authorize a national historic trail as described in this proposal should contain a provision whereby the state of Illinois would be encouraged to implement state legislation (PA 79-820, approved and effective September 5, 1975) designating the "Illinois River Road--Route of the Voyageurs" and to mark the routes for automobile driving.

While a continuous land trail below LaSalle-Peru did not appear to be feasible, nothing in this proposal would preclude the development of trails along the river through state, local, and private efforts. The appropriateness of including any such trails as part of the national historic trail would be evaluated through the certification process prescribed in the National Trails System Act for including nonfederal lands and waters in the trail.

This proposal is essentially a combination of alternative C (extended beyond the Chicago Portage National Historic Site to Lake Michigan) and the portion from LaSalle and Peru to Summit described under alternative E, with possible extension to Lake Michigan. Other details about this proposal, which may not have been fully explained here, may be better understood by referencing those sections of this report.

## IMPLEMENTATION FACTORS

### Administration

A national historic trail would be the responsibility of the National Park Service acting on behalf of the secretary of the interior. Actual development and management of the trail would be a cooperative effort involving federal, state, and local governments and private organizations. The U.S. Army Corps of Engineers, the Illinois Department of Conservation, the Illinois Historic Preservation Agency, and the Illinois Department of Transportation would play key roles.

The National Park Service, in its role as overall administrator of the trail, would prepare a comprehensive trail management plan in consultation with agencies and organizations involved in developing and managing segments of the trail. After the plan is completed, the National Park Service would enter into cooperative agreements with the Illinois Department of Conservation and other appropriate public and private interests, promote development of new trail segments, certify segments and sites as part of the trail, maintain records of the trail, and provide official markers for completed trail segments (uniform markers would be designed, procured, and distributed to cooperating nonfederal interests). A trail advisory council would be established, and the Park Service would consult with and provide staff support to the council. A general information brochure would be prepared, and technical assistance provided, as needed, to the Illinois Department of Conservation and other cooperating interests. An NPS staff of 0.5 person years would be required annually, plus travel and other expenses as detailed below.

NPS administration costs	
0.5 trail coordinator	\$15,000
travel and overhead	5,000
advisory council expense	5,000
trail markers	<u>1,000</u>
Total	\$26,000

The Illinois Department of Conservation and the Illinois Historic Protection Agency, as the state agencies with primary responsibility for outdoor recreation and historic preservation, would play pivotal roles in coordinating development and management of the trail. Through one or both of these agencies, the state of Illinois would work closely with the river and canal towns, government agencies, businesses, and organized groups in developing the interpretive story and how it would be told along the trail. The Illinois and Michigan Canal State Trail and other Illinois Department of Conservation properties would be state-administered components of the trail, providing recreational access to the historic water route, historic interpretation, and segments of the land trail. The combined efforts of state agency coordination of trail development would require about half a person's time at a cost of approximately \$30,000, including clerical support services and travel expenses.

## Acquisition and Development

The analysis of existing service for powerboats along the waterway and public access sites for canoes and fishing boats, described under alternative C, indicated that perhaps five additional canoe and fishing boat access sites would need to be developed. The cost would be as follows:

Boater access development costs	
acquire 3 acres at \$800 per acre	\$ 2,400
access road and gravel parking lot	<u>10,000</u>
Total per access	\$12,400
Develop five access points at \$12,400 each	\$62,000

To interpret the historic use of the Illinois Trail Waterway, an estimated 50 new historical markers or interpretive exhibits would be needed along the route. These would be in existing and proposed public park and access sites along the river and at sites related to the waterway's historic use. Most, if not all, of these sites would also be accessible by automobile.

The interpretive markers/exhibits would undoubtedly take many forms. One common type of marker is the large cast aluminum/raised letter signs frequently used as state historical markers. The cost of producing and installing these signs would be approximately \$2,000. Using this as an estimate of the cost of each interpretive marker/exhibit, the cost of 50 new facilities would be \$100,000.

The parallel land trail feature of this proposal would be fulfilled by establishment of the 90-mile trail envisioned in the concept plan for the Illinois and Michigan Canal National Heritage Corridor. Because the plan contains rather detailed cost estimates for establishing the trail, those figures will be used instead of the broad estimates used under alternatives A, B, and E.

Approximately 62 miles of the proposed trail are already administered by the Illinois Department of Conservation as the Illinois and Michigan Canal State Trail. The estimated cost of completing the state trail as a foot trail and establishing the remainder of the 90-mile trail for similar use would be \$411,000.

The concept plan contains estimated costs for additional development of the trail beyond its establishment merely as a walking trail:

Enhancing existing segments and surfacing the entire trail for bicycle use	\$2,095,000
Expanding and upgrading existing state parks along the trail	917,000

For the purposes of this study, only the cost of \$411,000 for establishing the trail would be used.

Interpretive signs and exhibits describing the historic use and significance of the river and canal would be needed along the land trails. Although the signs would not have to be as elaborate or expensive as those described above for the entire water route, more frequent markers would be needed. Therefore, the estimated cost is the same--\$100,000.

No estimated costs will be offered for the possible extension of the land trail eastward to Lake Michigan. This study did not include an evaluation of the resources available for such a trail. The available resources might be extremely limited, and major portions of the trail might have to be established on public street rights-of-way located as near as practicable to the canal and river. The Friends of the Chicago River, a special program of the Open Lands Project, is already working on such a walking route. The extension of the trail to Lake Michigan would be fully investigated during preparation of a plan for a national historic trail, if authorized by Congress.

Section 7(g) of the National Trails System Act limits federal land acquisition for national historic trails to those areas identified as high potential route segments and high potential historic sites. If Congress authorizes an Illinois National Historic Trail, the comprehensive management plan would identify sites under this category. However, it is possible that Congress would remove federal land acquisition authority for such sites as part of legislation authorizing the Illinois Trail. In this case, all efforts to acquire and develop recreation and historic interpretation sites would have to be carried out by cooperating state, local, and private interests. Associated costs would have to be borne by these interests.

#### Operation and Maintenance

The cost of operating and maintaining the recreation and historic interpretation features of the trail would be borne by public agencies and private organizations responsible for the areas. The annual cost of operating and maintaining the five new recreational access sites is estimated to be \$5,000 per site or a total of \$25,000.

The cost of maintaining historical interpretive markers/exhibits along the entire waterway could vary from a small amount for cast aluminum markers to significant amounts for elaborate exhibits. No attempt to estimate these costs will be made in this study.

The concept plan for the national heritage corridor contains a detailed cost estimate for operating the proposed 90-mile trail. The annual operation and maintenance cost would be \$362,000. Because this is a more detailed cost estimate than those developed for alternatives A, B, and E, it is not strictly comparable to those estimates.

Table 6: Cost Summary for the Proposal

	<u>Annual</u>	<u>One Time</u>
NPS administration	\$ 26,000	
State of Illinois coordination	30,000	
Acquisition and development of five recreational access sites		\$ 62,000
Acquisition and development of land trail		411,000
Development of interpretive markers		200,000
Operation and maintenance of five recreational access sites	25,000	
Operation and maintenance of land trail	<u>362,000</u>	<u>          </u>
Total	\$443,000	\$673,000

#### FEASIBILITY

The proposal is highly feasible because the majority of the historic route is an existing navigable waterway with numerous points of public access at such places as bridge crossings, municipal waterfronts, state parks, and conservation areas. Public retracement of much of the historic water route is therefore already possible. As suggested above, establishment of a few additional access sites might be needed.

A significant number of the historic sites associated with the historic use of the route are in public ownership or are identifiable. Most of the interpretive markers or similar features envisioned in this proposal could be located at these sites or other publicly owned areas along the waterway. Most of these sites would also be accessible by automobile. Several major interpretive centers, such as the Dickson Mounds (State) Museum and the U.S. Army Corps of Engineers' Illinois Waterway visitor center, would contribute to the network of sites that would interpret the historic trail.

The parallel land trail from LaSalle and Peru to Summit is the same trail that was proposed in the Illinois and Michigan Canal National Heritage Corridor Concept Plan. Much of the trail is already developed as the Illinois and Michigan Canal State Trail. Other portions are under development or soon will be under the direction of the National Heritage Corridor Commission and through the cooperative efforts of state and local governments, private organizations, and the business community.

From this perspective, the feasibility of actually accomplishing the development of the national historic trail is extremely high. The financial feasibility is also high. The relatively low costs would be shared by a number of potential cooperating interests, public and private.

If the proposed national historic trail is authorized by Congress, it would be important for the management plan to carefully address the issue of safety and potential use conflicts between various types of recreational watercraft (from canoes to powerboats) and between recreational and commercial traffic on the waterway.

#### DESIRABILITY

Public response to the draft feasibility study showed a high level of support for authorization of the Illinois Waterway as a national historic trail (see appendix C). Many also expressed strong support for a companion land trail feature. This proposal is responsive to those expressed desires.

The proposal would enhance opportunities for people to retrace the actual historic route of the Illinois Trail. From the standpoint of the National Trails System Act, this is extremely desirable. It describes national historic trails as "extended trails which follow as closely as possible and practicable the original trails or routes of travel of national historical significance." The water trail portion of this proposal clearly meets that objective. The land trail portion, because it largely follows the canal towpath, an integral feature of the historic waterway, also meets that objective.

The state of Illinois has indicated its support for authorization of a national historic trail. The proposal is harmonious with the current management direction for state lands along the trail route and would help meet recreational needs identified in the statewide comprehensive outdoor recreation plan.

Significant support has also been shown along the Illinois River for a mechanism to unify and coordinate interest in the role the river played in the heritage of its adjacent communities. A national historic trail would fill that role. There would likely be little concern on the part of private landowners because almost no land would need to be acquired.

Table 7: Summary of Cost Estimates by Alternative

	Alternative A		Alternative B		Alternative C		Alternative D		Alternative E		Alternative F		Proposal NHT- Chicago to Grafton-Waterway/ Land Based Trail	
	NST-Summit to Peoria		NST-Summit to Wood River		NHT-CPNHS to Grafton-Waterway		NHT-CPNHS to Grafton-Roadway		NHT-CPNHS to Grafton- Land Based Trail		No Federal Action		Land Based Trail	
	Annual	One time	Annual	One time	Annual	One time	Annual	One time	Annual	One time	Annual	One time	Annual	One time
NPS administration cost	\$ 25,600		\$ 26,500		\$25,600		\$29,000		\$ 27,000				\$ 26,000	
State of Illinois coordination cost	12,000		25,000		25,000		35,000		30,000				30,000	
Corridor acquisition cost*		\$804,800		\$2,598,400					\$2,404,800					
Corridor easement cost*		402,400		1,299,200					1,202,400					
Development cost		830,000		2,680,000					2,480,000					\$411,000
Maintenance cost	238,000		423,000		25,000		5,000		403,000				387,000	
Boater access acquisition and development							\$ 62,000							62,000
Interpretive markers							100,000		\$150,000			100,000		200,000
Marking highway route									50,000					

\*It is unlikely that the trail corridor would be acquired exclusively in fee simple or easement; instead, it would probably be a combination of the two. The actual cost of the trail right-of-way would be between the two figures. Land acquisition costs are estimates only and illustrate the relative land costs among the alternatives. No detailed appraisals were prepared for this conceptual level of planning. If the Illinois Trail is authorized, detailed land cost estimates will be prepared as part of the planning process.

## AFFECTED ENVIRONMENT

### NATURAL RESOURCES

#### Geology/Topography

The 272.4-mile Illinois River is formed by the confluence of the Des Plaines and Kankakee rivers southwest of Chicago. The entire 327-mile waterway, which includes the Illinois and Michigan Canal, runs from Lake Michigan to Grafton, Illinois, where it empties into the Mississippi River.

The topographic features of the Illinois River and its tributary watershed are the direct result of the huge ice sheets that covered most of the state during the glacial ages. The combined effects of four successive glacial advances and retreats was to plane off prominent relief features and deposit a thick blanket of unconsolidated drift material and windblown silt material called loess over most of the state. The glacial advances over Illinois also radically realigned drainage patterns. Geologic evidence indicates that at one time the Illinois River channel downstream of Hennepin served as an outlet for both the Rock River and much of the flow from the upper Mississippi River basin. The great volumes of flow resulting from glacial meltwater from this enlarged drainage area is largely accountable for the deep, wide valley of the Illinois River below Hennepin. Subsequent glacial advances and retreats served to divert both the Rock and Mississippi rivers to their present-day channels.

The present Illinois River flows over an alluvial bottomland plain, of varying width, bordered by high bluffs and steep cliffs. The upper valley, above Hennepin, has an average width of 1.5 miles while the lower valley, below Hennepin, varies greatly in width. From about 4 miles wide in the Lake Peoria area, the lower valley narrows to about 1.3 miles in the vicinity of Peoria, flaring to a width of nearly 19 miles at Havana, and then gradually narrowing below Beardstown to a width of 2 miles at the mouth of the river near Grafton.

The Illinois River, because of its extremely flat gradient, has been referred to as one of the most unusual streams in the United States. From its junction with the Mississippi River near Grafton and extending upstream to Starved Rock, a distance of about 236 miles, the fall is only 28 feet, giving an average gradient of 0.12 foot per mile. Upstream from Starved Rock the channel gradient rises 47.3 feet over a distance of 41.5 miles with an average gradient of 1.14 feet per mile to the head of the river. At normal river stages, water velocity is less than 1 mile per hour. The low rate of flow compounds the problem of sedimentation.

The upland topography varies from flat to rolling in the plains area to generally rugged, alternating ridges and valleys in Calhoun County. The principal tributary stream valleys are cut into the plains with normally well defined subtributary streams except in the extreme upper basin where lakes, marshes, bogs, and undrained depressions are common unless drained artificially. The backwaters and marshes along the river

are important staging areas for waterfowl during their annual migration. The greater part of the basin comprises some of the most valuable agricultural lands in the state, while large areas are underlain with rich deposits of sand, gravel, silica sand, coal, and limestone.

The natural levees, which border the river proper and many of the connecting channels and sloughs, are the direct result of accretion from silt deposited by overbank flows from the Illinois River. These formations have served to isolate large areas of the bottoms from the main channel, thus forming shallow backwater lakes connected to the river only at their outlets, except during periods of high flow when the bottomlands are submerged.

The Illinois River has been significantly impacted by man. In response to increased flow from Lake Michigan water diversion, drainage and levee districts were formed between 1909 and 1922, and large sections of the valley were converted into farmland. By encroaching on the floodplain, the drainage and levee districts reduced the space available for flow and for storage which had the effect of increasing flood stages. Many of the levees have since been destroyed by floods or abandoned. The remaining levees could potentially be used for routing trails.

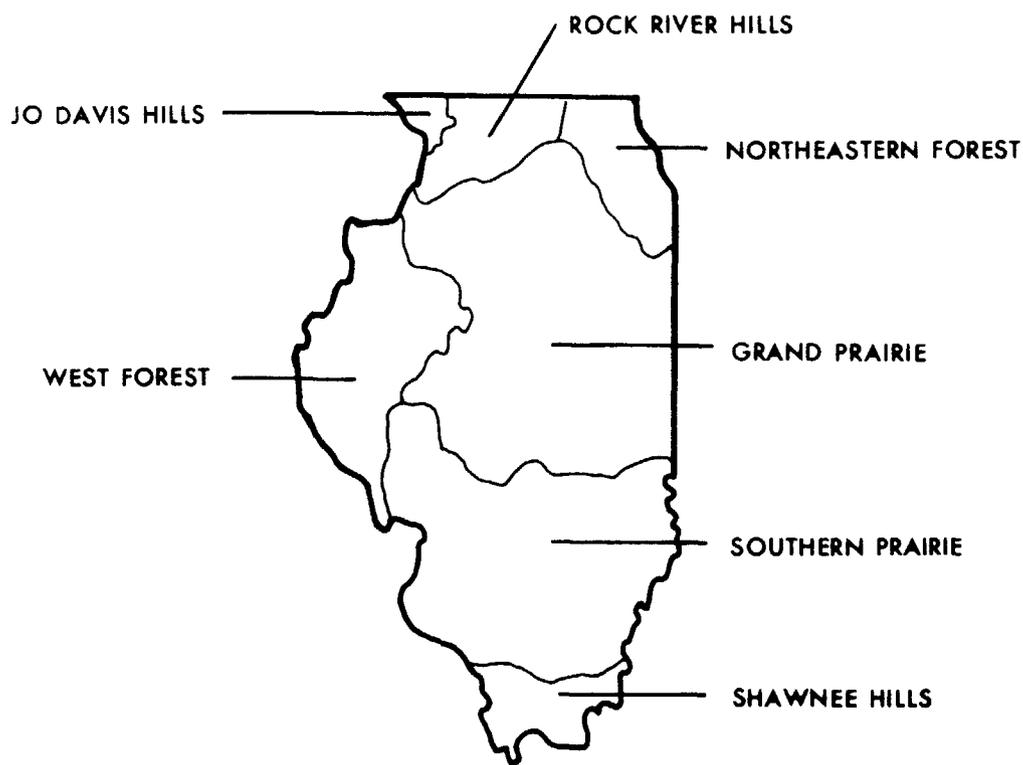
Six dams constructed and operated by the U.S. Army Corps of Engineers, separate the river into long narrow navigational pools: Dresden Island, Marseilles, Starved Rock, Peoria, La Grange, and Alton. The locks and dams at Starved Rock and above were completed in 1933, those at Peoria and La Grange in 1939, and at Alton in 1938. Each navigation pool is maintained at a minimum depth of 9 feet, with depths increasing during periods of flooding.

Many Illinois communities owe much of their early growth and stability to their proximity to water and its variety of uses. With the advent of and increasing dependency on railroad and truck transportation, many urban waterfronts began to decline. Today, buildings and lands along many waterways are seen as nostalgic ties with the past, prime areas for urban renewal, cornerstones for new commercial and residential activity, and as important public assets for recreation.

### Vegetation

The Illinois River flows through four of the six natural resource sections identified in the 1978 Illinois State Comprehensive Outdoor Recreation Plan (see map on following page).

Northeastern Forest. The Northeastern Forest borders Lake Michigan and is characterized by forested, hilly land composed mainly of glacial moraines. The forest consists of burr oak and white oak with a scattering of hickory. Some sand ridges near Lake Michigan support scrubby black oak woods.



Grand Prairie. The Grand Prairie is the largest of the natural resource sections in Illinois. It is characterized by an expanse of nearly level land that was formerly occupied by prairie vegetation but which is now almost completely converted to agricultural and urban uses. Oak-hickory forest and steep valley slopes are typical of the waterways, and bedrock outcrops are notable along the Fox, Kankakee, and Illinois rivers. Significant sand areas are along the Green, Kankakee, and Illinois rivers. The sandy soils support large acreages of scrub oak woodlands.

Western Forest. The Western Forest is characterized by broken topography and an abundance of forest vegetation. Most of the steep slopes in this section remain in oak-hickory timber.

Southern Prairie. The floodplains, valley slopes, and some level uplands supported hardwood forests at the time of settlement. Much of the floodplain land has been cleared for agriculture, but large acreages of timber remain on ravine and valley slopes.

Endangered or Threatened Plants. Only one endangered plant on the federal list, the small whorled pagonia (*Isotria medeoloides*), is within Illinois. The only known population is outside the study area in a small

area on a wooded slope above a sandstone cliff in Randolph County. A list of 364 endangered and threatened plants has been approved by the Illinois Endangered Species Protection Board, but these species are not currently protected by the Illinois Endangered Species Act. Copies of the list of endangered and threatened plants are available from the Illinois Department of Conservation.

### Fish and Wildlife

The land and water uses in Illinois have greatly influenced the diversity and viability of the state's fish and wildlife resources, primarily by limiting the amount of suitable habitat. Currently, 60 species of mammals live in Illinois, two of which, the Indiana bat (Myotis sodalis) and the gray bat (Myotis grisescens), are on the federal endangered species list. Eighty-five percent of the Indiana bat population hibernate in one mine and three caves in Kentucky, Indiana, and Missouri. The remaining 15 percent are found over the rest of their range, eastern Oklahoma northward to southern Wisconsin, eastward to central Vermont, and south to northern Florida. Their spring and summer nursery colonies are in riparian forest under loose bark of dead trees. In the winter they hibernate in caves and mines. No nursery colonies have been reported in Illinois, and only one definite winter colony in the abandoned Blackball Mine in LaSalle County has been found. Small numbers of the Indiana bat have been found in Madison, Pike, Morgan, LaSalle, and DuPage counties.

The gray bat uses several large caves in Pike and Adams counties, largely during spring and fall as assembly areas and transient roosts, while migrating to and from their winter caves in southern Missouri. A small colony was found in Rock Ledge Cave in Jersey County. The gray bat is not known to winter in Illinois.

Illinois has a variety of bird species, ranging from an estimated 100 species wintering in the state to approximately 170 species nesting in Illinois. Located along the Mississippi flyway, Illinois hosts hundreds of thousands of waterfowl each year as they rest and feed during their annual migrations.

The endangered American bald eagle (Haliaeetus leucocephalus) is a fairly common migrant and winter resident along the Illinois and Mississippi rivers and in southern Illinois on wildlife refuges. Winter habitat includes large bodies of water, especially the larger rivers. The American bald eagle nests only in extreme southwest and northwest counties in Illinois.

Illinois is in the range of three other birds on the federal endangered species list: peregrine falcon (Falco peregrinus), Eskimo curlew (Numenius borealis), and Bachman's warbler (Vermivora bachmanii). The peregrine falcon occurs in Illinois as an occasional migrant along Lake Michigan (with some regularity) and as a rare migrant elsewhere. Suitable habitat for the species occurs on bluffs along the Illinois and Mississippi rivers. The Eskimo curlew may occur in Illinois during

migration. It has only been reported in the wet prairies in Cook County. The Bachman's warbler does not nest in Illinois. Its habitat of mature hardwood swamp forest containing patches of thick undergrowth is only outside the study area in the southern tip of Illinois.

Illinois lakes, ponds, rivers, and streams are home to 189 species of fish, 13 of which have been introduced. The only federally endangered fish for Illinois is the longjaw cisco (Coregonus alpenae). It has never been reported in Illinois; however, it could live in deep water of Lake Michigan.

The state endangered species program lists the following as threatened or endangered in Illinois.

	<u>Endangered</u>	<u>Threatened</u>
Fish	5	8
Mammals	4	4
Birds	33	7
Plants	312	52

#### LANDOWNERSHIP AND USE

Establishment of a land-based trail along the study route would utilize lands in private ownership for the majority of its length. The public lands in the Illinois River valley consist of conservation areas, state parks and forests, historic sites, and federal facilities. Sixteen of the Illinois River valley's state and federal outdoor recreation facilities are above the city of Peoria. Numerous other facilities are scattered along the corridor, with a second concentration in the extreme southern portion of the river valley. This second concentration consists of seven state conservation areas in the counties of Calhoun and Jersey. The Chicago metropolitan area, as well as other portions of the valley, contain county forest preserves that provide 3,989 acres of recreational opportunities for the Cook County region and 3,348 acres for other downstate areas.

The public lands in the Illinois River corridor are largely either state or county owned. Isolated islands and small pieces of shoreline, prone to annual flooding, are federally owned and maintained by the U.S. Army Corps of Engineers or the U.S. Fish and Wildlife Service. Trail development is prohibited through national wildlife refuges managed by the Fish and Wildlife Service. The valley contains 41 of the state's 97 outdoor recreation facilities. This represents 42 percent of the statewide distribution. The Illinois River forms a natural corridor by which the 40 facilities that encompass 82,361 acres may be linked. The state's remaining recreational areas are scattered.

The proposed trail route would connect two of the Midwest's major metropolitan areas, Chicago and St. Louis. Along the trail's route are cities and towns of varying size and population. The urban experience of

Chicago may be contrasted to the smaller city of Peoria and further contrasted to the rural lifestyle of Canton or Beardstown. The 23 county area may best be examined by comparing the land use patterns in segments between Chicago and Peoria, and Peoria and St. Louis.

The Chicago metropolitan area's land use pattern may be described as concentric, with high-rent commercial and industrial uses at the core adjacent to Lake Michigan. High-density residential uses line the lakeshore and ring the central business district. Farther from the commercial/retail center, the residential density changes to single-family dwellings in the suburbs. Blocks of commercial and open space uses are interspersed with residential areas to serve the residing population. Industrial uses tend to follow major transportation arteries as traffic moves from the suburbs to the city.

Outside the urban center of Chicago and its surrounding suburbs, housing density decreases and agricultural use becomes increasingly prominent. The portion of the trail route from Joliet to LaSalle offers perhaps the best recreational opportunities. This 80-mile stretch contains state parks, conservation areas, and nature preserves, as well as the Illinois and Michigan Canal National Heritage Corridor which features the Illinois and Michigan Canal State Trail. Forestlands and wetlands line the river corridor in this northern section of the valley, with residential, commercial, and industrial uses prominent in the larger population centers of Morris, Ottawa, LaSalle, and Peru.

Below Peoria, the major land uses are agriculture and silviculture. An area southwest of Peoria, in Fulton County, exhibits the effects of strip mining by coal companies. Small towns dot the landscape, sharing the land with agricultural and forested areas. The extreme southern portion of the proposed trail route, at the convergence of the Mississippi and Illinois rivers, has large areas of wetlands and woodlands where the two rivers' floodplains meet to form lowlands and the Illinois River empties into the Mississippi River.

The St. Louis metropolitan area displays a concentric land use pattern similar to that of the Chicago area. Industrial and commercial uses lie near the Mississippi River, with lower-density residential areas as distance increases from the downtown area. The Illinois portion of the St. Louis metropolitan area, East St. Louis, maintains high-density residential uses with scattered commercial areas.

Agriculture is the most widespread and important land use in the Illinois Trail area. A land-based trail would cross few public lands and affect hundreds of private landowners.

### CULTURAL RESOURCES

Cultural sites along the Illinois Trail route range from local to national significance in all the prehistoric and historic periods. These locations are in public and private ownership. Interpretation and condition of

those areas in public ownership are generally excellent, while those sites in private possession tend not to be open to the public and vary in their state of preservation. Approximately 70 structures and districts are listed on the National Register of Historic Places, and five areas are recorded as national historic landmarks, and Cahokia Mounds State Park is a World Heritage site.

Some of the sites of national significance are state or county parks. These include the Cahokia Mounds and Dickson Mounds of the prehistoric period. Chicago Portage National Historic Site, which is managed by Cook County Forest Preserve District, ranges across all periods as a key that linked the Mississippi and St. Lawrence river systems. Starved Rock represents the French Colonial period. The Illinois and Michigan Canal National Heritage Corridor commemorates navigational improvements that occurred in the American era along with settlement and industrialization promoted by this undertaking.

Buffalo Rock and Pere Marquette state parks, while not on the National Register, reflect or symbolize French Colonial exploration and occupancy of the area.

Several sites on the National Register not affiliated with a park system and not interpreted, but which are significant to the pre-Civil War period, include the home of abolitionist John Hossack in Ottawa and the site of the first Lincoln-Douglas debate in Washington Square also in Ottawa. The Alton residence of Lyman Trumbull, a prominent U.S. senator in the antebellum period, is a national historic landmark.

Across the river from Starved Rock, the site of the Kaskaskia village, a 17th century Illinois Indian habitation, has achieved national historic landmark status. It, however, remains in private ownership and receives no interpretation.

An Illinois Historic Landmarks Survey has identified a number of sites along the Illinois Trail route. Most have only local significance and remain in private ownership. Four of these structures, however, should be placed on the National Register of Historic Places with a rank of national importance. These include the Beardstown Courthouse that contains the courtroom in which Abraham Lincoln practiced and where his famous "almanac trial" occurred. The old rock house in Alton was the location of antebellum antislavery meetings and later served as an underground railway station. Stephen H. Long, whose house is located in Alton, deserves recognition. An army engineer, he led an early military expedition to explore the country between the Missouri River and the Rocky Mountains. Long's Peak in Colorado bears his name. Finally, the home of Everett M. Dirksen, who served in the U.S. Senate from 1951-69, is found in Pekin.

## ENVIRONMENTAL AND ECONOMIC CONSEQUENCES

The alternatives examined for the Illinois Trail in this report included overland routes and water-based routes following the Illinois River valley and the Illinois and Michigan Canal.

The purpose of this environmental assessment is to provide an analysis of the alternatives for trail authorization to ensure that all reasonable options have been considered and that the positive and negative aspects of each strategy have been identified. Furthermore, the analysis is intended to facilitate compliance with the National Environmental Policy Act, the National Historic Preservation Act, the Endangered Species Act, and various other laws, executive orders, regulations, and policies.

Extensive acquisition or development would not result from implementing study recommendations. The contents of this environmental assessment should provide sufficient information for responsible officials to determine the need for an environmental impact statement on actions proposed by the study.

This environmental assessment was prepared and issued in conjunction with the draft feasibility study in June 1986. The draft study identified alternative C as the preferred alternative and thus the environmental assessment focuses on the impacts of alternative C. Based upon public comments, the proposal in the final report is a combination of alternative C (the preferred alternative in the draft) and portions of alternative E.

### IMPACTS OF ALTERNATIVE C

#### Impacts on Natural Resources

Environmental impacts would be caused by land acquisition and development of a trail and by recreational use of the trail once it is developed. Because alternative C would follow the waterways, very little acquisition and development would be required for boater access sites and interpretive markers. The Illinois Department of Transportation would be encouraged to implement state legislation (PA 79-820, approved and effective September 5, 1975) designating the "Illinois River Road--Route of the Voyageurs" and to mark the routes for automobile touring. Initially, upon authorization of the trail and signing, a minor increase in visitor travel along these routes could be expected. No adverse impacts to natural resources along the route would be expected. However, significant increases in use at existing interpretive facilities along the route could result in minor pressure on the vegetation and/or wildlife in these existing areas. Careful operation of the facilities and monitoring of resources would ensure that visitor use is adequately managed without degradation of natural resources.

It appears that alternative C would not affect species included on the federal list of endangered and threatened species. If Congress should

authorize development of the Illinois Trail as a component of the national trails system, the National Park Service would consider effects of the management proposals on endangered or threatened species while preparing the comprehensive management and use plan. Consultation with the Fish and Wildlife Service following designation would ensure protection of threatened and endangered species.

Increasing littering and solid waste disposal problems could occur along the route as a result of increased visitation but could be adequately planned for in the comprehensive management and use plan if authorized.

#### Impacts on Cultural Resources

Trail impacts could potentially affect cultural resources because of the cultural/historic nature of the Illinois Trail. A systematic inventory and evaluation of all archeological and historical resources has not been done along the study route. Preparation of the comprehensive plan for management, following authorization, would include planning for the protection of all identified sites.

Compliance with section 106 of the National Historic Preservation Act is considered to be premature before congressional authorization of the trail and preparation of a comprehensive management plan. If the trail is authorized, the resulting comprehensive plan for management would be submitted for section 106 compliance review. The plan would comply with all the requirements of section 106. National historic trail designation should not adversely affect cultural resources listed on or eligible for listing on the National Register.

#### Impacts on Management

The effects on management would be most significant at interpretive and boating support facilities because more staff would be needed to accommodate increased use. Management policies and procedures currently in use would probably not change. However, additional funds would be required to pay for the increase in personnel and equipment needed to maintain facilities experiencing increased visitation.

#### Socioeconomic Impacts

Development of a trail and the associated visitor use is not expected to contribute significantly to the economic base of local communities along a designated route. An increase in recreational use will not have a major effect on local public services such as road maintenance, law enforcement, medical services, or health facilities.

Alternative C suggests development of five additional boater access points as needed. Each access point would require approximately 3 acres or 15 acres spread out over the study route. The loss of tax revenue because

of private lands being removed from the local tax base would be minimal. Land acquisition or restrictions on current land uses along the trail route would probably not be authorized; therefore, no adverse impacts would occur on the local economy from lost agricultural or industrial revenues.

The overall socioeconomic impacts would be considered minimal.

### Visitor Use Impacts

Visitor use would increase as a result of recreational and interpretive development under all the alternatives. Under alternative C, recreational use of the Illinois Waterway system would increase because of additional publicity coupled with an increase in support and interpretive facilities.

### IMPACTS OF OTHER ALTERNATIVES

Alternatives A and B propose authorization of a national scenic trail. Establishment of a scenic trail would result in large-scale land acquisition and/or easement purchases. Land would be removed from the tax roles if acquired, and the tax revenue would be lost to the county. Easements would have the effect of lowering the value of property and therefore reducing the tax revenues it currently generates. The present use of the land is primarily agriculture. The amount of land that would be affected by each of the alternatives is shown in table 8.

Development of a land-based trail would cause localized impacts on the soils and vegetation during construction. Runoff would increase minimally because of the vegetation being removed for trail construction. The trail would be designed with erosion control measures such as water bars and maximum slope standards. Flexibility in locating the trail within the trail corridor would allow for skirting sensitive natural or cultural areas.

The impacts of alternative E, a land-based national historic trail, would be very similar to the impacts of a land-based national scenic trail (alternative B), except that potential motorized use would create additional impacts on natural resources and adjacent landowners.

Alternatives A, B, and E would provide long-distance trail opportunities that are not currently available, but in great demand, in Illinois.

Alternative D, a national historic trail following the roadways, would have little impact on the natural resources. The primary impact would be felt on visitor use. Interpretive markers would be provided along the route, which would foster a greater understanding of the historic significance of the river for visitors.

Alternative F, no federal action, would encourage state and local governments to work closely with private business, landowners, and organizations in coordinating the development of the Illinois Trail without

federal involvement. The impacts on state and local budgets to coordinate the development and maintenance of the trail could be significant. Without federal impetus to develop the trail, the trail and support facilities would be developed at a slower rate, and the great demand for trail opportunities would not be met.

Strong citizen and government support combined with the trail resources already available, make development of a trail highly probable regardless of federal involvement. Therefore, a total no-action alternative indicating complete abandonment of the route has not been proposed.

The matrix on the following page summarizes the environmental consequences that might be expected from implementation of alternatives considered.

Table 8: Summary of Impacts

	Alternative A NST-Summit to Peoria	Alternative B NST-Summit to Wood River	Alternative C NHT-CPNHS to Grafton (Waterway)	Alternative D NHT-CPNHS to Grafton (Roadway)	Alternative E NHT-CPNHS to Grafton (Land-Based Trail)	Alternnative F No Federal Action
Natural Resources	Substantial in-crease due to ac-quisition and development of major foot path	Same as A	Minimum increase in protection due to development of a comprehensive management and use plan	Minimum impact-- most of visitor use on paved roadways	Same as A	Same as A
Cultural Resources	Increased protec-tion and additional inventory of resources	Same as A	Same as A but less effect	Same as A	Same as A	Same as A
Socioeconomics	Substantial local effect due to major federal acquisition and development project	Same as A	Minimal effect	Minimal effect	Same as A	Minimal effect
Visitor Use	Available trails would increase to meet demand for long-distance trails, resulting in increased visitor use	Same as A	Increase in visitor use as a result of increased inter-pretation and recreational oppor-tunities on the riverway	Same as C	Same as A	Trails developed at slower rate
Management	Substantial costs in terms of per-sonnel and equip-ment; increase in federal/state and local management responsibilities	Same as A	Increase in federal/state/ local management responsibilities	Same as C	Same as A	Increase in state/ local management responsibilities
Costs*	Major federal, state, and local management costs; acquisition (ease-ment), develop-ment, and mainten-ance costs	Same as A	Federal, state, and local manage-ment costs--some cost for boater access development, maintenance, and interpretive markers	Federal, state, and local manage-ment costs--some cost for interpre-tive markers and marking route	Same as A	Unknown
Acres Affected	1,006	3,248	15	No acquisition or easements proposed	3,006	No federal involvement

\*For more detailed explanation of costs, please refer to table 7.

NST - National Scenic Trail  
 NHT - National Historic Trail  
 CPNHS - Chicago Portage National Historic Site

LIST OF AGENCIES, ORGANIZATIONS, AND PERSONS TO WHOM  
COPIES OF THE STUDY WERE SENT

Federal

Environmental Protection Agency  
U.S. Fish and Wildlife Service  
Soil Conservation Service  
U.S. Army Corps of Engineers  
    North Central Division  
        Chicago District  
        Rock Island District  
        Lower Mississippi Valley Division  
        St. Louis District  
        Illinois Waterway Visitor Center  
Federal Highway Administration  
Mark Twain National Wildlife Refuge  
Chautauqua National Wildlife Refuge

State of Illinois

Governor  
Department of Agriculture  
Department of Conservation  
Illinois State Geological Survey  
Illinois Natural History Survey  
Department of Transportation  
Department of Commerce and Community Affairs  
    Office of Tourism  
Illinois State Museum  
Department of Historic Preservation  
Illinois AML Reclamation  
Illinois Nature Preserves Commission

Mayors

Lemont  
Romeoville  
Lockport  
Joliet  
Channahon  
Morris  
Marseilles  
Ottawa  
La Salle  
Peru  
Spring Valley  
Henry

Mayors (cont.)

Crest Hill  
Peoria  
Peoria Heights  
East Peoria  
Creve Coeur  
Bartonville  
Pekin  
Havana  
Beardstown  
Alton  
East Alton  
Wood River  
Willow Springs  
Hodgkins  
Summit  
McCook  
Lyons  
Chillicothe

County Boards of Commissioners and County Planning Directors

Calhoun  
Jersey  
Madison  
Cook  
DuPage  
Will  
Grundy  
La Salle  
Beurea  
Putnam  
Marshall  
Peoria  
Woodford  
Tazewell  
Fulton  
Mason  
Schuyler  
Cass  
Brown  
Morgan  
Pike  
Scott  
Greene

Miscellaneous

Illinois Wildlife Federation  
Illinois Association of Soil and Water Conservation Districts  
Illinois and Michigan Canal National Heritage Corridor Commission  
Grundy County Historical Society  
Forest Park Foundation  
Illinois Association of Snowmobile Clubs  
Tri-County Riverfront Action Forum  
Northeastern Illinois Trails Association  
Joliet Herald News  
Three Rivers Manufacturers' Association  
Will-Joliet Bicentennial Park, Inc.  
East-West Gateway Coordinating Council  
North Central Illinois Council of Governments  
Joliet Regional Port District  
Will County Regional Planning Commission  
Forest Preserve District of Cook County  
Forest Preserve District of DuPage County  
Northwestern University  
Sierra Club  
American Horse Council  
American Recreation Coalition  
American Youth Hostels, Inc.  
National Parks and Conservation Association  
American Hiking Society  
International Snowmobile Industry Association  
Forest Preserve District of Will County  
The Metropolitan Sanitary District of Greater Chicago  
Putnam County Conservation District  
Illinois Audubon Society  
Illinois Environmental Council  
Illinois Prairie Path  
National Campers and Hikers Association  
Natural Land Institute  
Open Lands Project  
Illinois Association of Park Districts  
Northeastern Illinois Planning Commission  
Tri-County Regional Planning Commission  
Heart of Illinois Sierra Club  
Joliet Planning and Economic Development  
Will County Development Department  
Commonwealth-Edison  
Dow Chemical  
Olin Corporation  
Johns-Manville Sales Corporation  
Stauffer Chemical Company  
Werden Buck Company  
Amoco Chemical Corporation  
Will County Board of Realtors  
Beling Consultants, Inc.  
Northern Illinois Gas

Werco Industries, Inc.  
Joliet Region Chamber of Commerce and Industry  
Illinois Bell Telephone Company  
Northern Petrochemical Company  
Peoria Park District  
Summit Area Historical Society  
Alton Park and Recreation Commission  
St. Louis Post-Dispatch  
Community and Economic Development Association of Cook County  
Wood River Schools  
Beardstown Chamber of Commerce  
Jacksonville Journal Courier  
Woodford County Zoning Department  
Peoria Journal Star  
Peoria City Council  
WCBW News  
DuPage County Development Department  
United Motorcyclists of Illinois  
WCCQ Radio  
Lemont Area Historical Society  
Upper Illinois Valley Association  
Lockport Township Park District  
U.S. Steel Realty Development  
I&M Trailblazers Snowmobile Club  
Joliet Ramblers Motorcycle Club  
Blackberry Township Highway Commission  
Northern Illinois Motorcycle Safety Project  
United Motorcyclists of Illinois  
Lockport Historic Preservation Council  
Wood River Journal  
Lake County Mounted Posse  
Des Plaines Valley Horseman's Association  
Wood River City Manager  
Pride, Inc.  
Greater Alton/Twin Rivers Growth Association  
Lewis University  
Kane County Forest Preserve District  
Lemont Chamber of Commerce  
Willow Springs Historical Society  
Will County Historical Society  
Grundy County Historical Society  
Banner Country  
Center for American Archeology  
Illinois Natural History Survey  
Sierra Club-Great Lakes Chapter  
Goose Lake Prairie State Park  
The Morton Arboretum  
Harland, Bartholomew, and Associates, Inc.  
Scruggs & Hammond, Inc.  
Perkins & Will Assn.

## APPENDIX A: ILLINOIS TRAIL STUDY - HISTORICAL SIGNIFICANCE

Throughout time, from the first appearance of man along the Illinois River, the waterway has served as a major route of transportation, communication, and settlement. Other water courses with portages between the Great Lakes and the Mississippi River were the Fox River from Green Bay of Lake Michigan in Wisconsin with a portage to the Wisconsin River which connected to the Mississippi; the St. Joseph River at the southeast corner of Lake Michigan with a portage to the Kankakee River in Indiana via the Illinois River to the Mississippi; and the Maumee River from the southwest corner of Lake Erie with a portage to the Wabash River via the Ohio River to the Mississippi. None, however, could compare to the Illinois/Des Plaines River route because the short land passage through the Chicago Portage facilitated its use over other routes. Ultimately, canals (Illinois and Michigan, Ohio and Erie, and Wabash and Erie) were developed over some of these travel corridors to expedite navigation, but only the Illinois/Des Plaines River area, with its attendant canals, has survived as a major national water route to this day.

Thousands of prehistoric Indians of the Woodland (1000 B.C.-A.D. 700) and Mississippian (A.D. 700-1600) periods used the river as a main route of communication. The Interim Illinois Archaeological Preservation Plan stated "there is clear evidence of well established long-distance trade between Hopewell and non-Hopewell cultures (Middle Woodland 200 B.C.-A.D. 400)." In discussing the later Mississippian period in the lower Illinois River valley where trade played a large role, the plan also noted that this region "represents one of only a few prehistoric cultural 'hearth' areas worldwide where native urban settlements developed in situ." This concentration of ancient peoples developed extensive trade with areas throughout what became the Midwest and southeastern United States. As a result, these prehistoric tribes were able to interchange goods and ideas that allowed them to develop more technologically sophisticated societies over time. Several items were first developed by the Illinois River inhabitants and spread to other areas. These objects, known as the conch columella beads that were made by early Woodland man from shells obtained in trade with the Gulf of Mexico, spread throughout the area. Also in the Woodland period, the Illinois River people developed a distinctive cord-impressed pottery which, through trade, came into use as far away as present-day New England.

The Frenchmen Jacques Marquette and Louis Joliet, as the first Europeans in the area, were originally directed there by Indians who recognized the value of the river as a major thoroughfare in connecting the Mississippi River to the Great Lakes. Robert Cavellier, Sieur de LaSalle, envisioned a chain of trading posts from the Great Lakes, through the Illinois country, and down the Mississippi as a means to hold Indian alliances to France and hem in the British against whom the French were locked in contest for a North American empire. The Illinois River figured large as a major communication and trade route in LaSalle's scheme to develop the western colonial empire. For a time in the 1680s and 1690s the French

did center their western administrative headquarters, called Fort St. Louis, along the river at Starved Rock and then at Lake Peoria. The National Park Service theme study identified Fort St. Louis as "an important center of French influence in the Illinois country."

Some Frenchmen such as Louis Joliet saw the potential to improve this interconnecting waterway by constructing a short canal through the Chicago Portage. Although the French dominated the area until 1763, they never undertook the extensive effort to build a canal from the south branch of the Chicago River, along the Des Plaines, to the head of navigation on the Illinois River. A canal was really not necessary, for by timing the delivery of furs to Montreal in the spring of the year, the water of this route would be sufficiently high to allow passage for their canoes.

The British, who won the battle for the North American empire against the French in 1763, did not extend settlements into the Illinois country. Instead, they preferred to keep the area for an Indian reservation. The French, who chose to remain under English rule in Illinois, continued to engage in the fur trade. They made yearly trips to Montreal, often via the Illinois River, where they sold their pelts and returned with supplies and trade goods.

The American Revolution caused the British to worry that American forces might use the Illinois River route to attack their northern posts. Although Captain Eugene Pourcee did lead a force of Spanish, French, and Indians from St. Louis up the Illinois River and then across land to capture the British post of St. Joseph in southwest Michigan, little use was made of that water route for military activity.

After the Revolution the area became a quiet backwater of American territory. This situation, however, did not mean that the river was ignored. The Treaty of Greenville in 1795, among other things, recognized the importance of the water route from the Chicago River to the Mississippi. By this compact the Indians ceded three, 6-square-mile tracts of land along that passage for sites of posts which would facilitate the fur trade.

In the early 19th century the water route from Chicago to the Mississippi River came under scrutiny by the United States Congress. At the behest of the U.S. Senate, Secretary of the Treasury Albert Gallatin reported that the Illinois River was a prime area for navigational improvements. In 1810 Peter Porter of New York told the U.S. House of Representatives that a canal through the Chicago Portage would provide the nation with a great inland waterway which would connect the Great Lakes to New Orleans via the Illinois and Mississippi rivers.

For the remainder of the first half of the 19th century, navigational improvement in Illinois focused on construction of a canal between the south branch of the Chicago River and the head of navigation on the Illinois River at LaSalle. As a state legislator from 1834 to 1842, Abraham Lincoln gave his wholehearted support for building the canal.

With the completion of the Illinois and Michigan Canal in 1848, change came in the course of northern commerce. No longer did the bulk of area products flow downstream to St. Louis and New Orleans. In fact the Illinois and Michigan Canal, along with such other canals as the Ohio and Erie, caused New Orleans to go into decline as a major port. Instead, the Illinois and Michigan Canal began the propulsion of Chicago into a position of national importance. In addition to that city, population centers such as Peoria, LaSalle/Peru, Ottawa, and Joliet developed along the waterway as manufacturing points. The hope of economic reward also brought farmers in large numbers to settle along the river.

The growing division in the country between North and South was reflected in the use of the Illinois River by Senator Stephen A. Douglas and Abraham Lincoln to travel to towns in the 1850s, bringing their separate views of slavery and the expansion of that institution into the territories. The political skill that Lincoln demonstrated in his talks gained him the Republican nomination and election to the presidency in 1860.

Although the opening of the Illinois and Michigan Canal proved of great benefit to the development of an interregional waterway, it was soon found that the Illinois River proved unequal to the canal as a water route. Often, in late summer, the river's water level between LaSalle and Peoria would not permit steamboats to traverse that length. As a result, commerce suffered during those periods of low water. The canal's board of trustees caused a survey of the Illinois River to be made in 1858 with suggested improvements, but nothing came of it.

During the early part of the Civil War, navigation was suspended on the lower Mississippi River. This situation made northern waterways very important as naval vessel routes and for shipping war materials. The Illinois River and the Illinois and Michigan Canal comprised one of the important water systems. This route, however, had its limitations because of the narrowness of the canal and seasonal low water on a portion of the river. As a result, several efforts were made in and outside the United States Congress to have the federal government make navigational improvements to the waterway. Although Lincoln, as president, requested such action in his annual addresses to Congress in 1862 and 1863, all attempts failed.

After the Civil War, the state of Illinois and the federal government finally began work independently to create a slack water system for improved navigation on the Illinois River between LaSalle and the river's mouth at Grafton. This was done despite the rising prominence of railroads as vehicles of transport. The state completed a lock and dam at Henry in 1871. In the meantime, the U.S. Army Corps of Engineers finished three more locks and dams (Copperas Creek 1875, LaGrange 1888, and Kampsville 1893).

Despite improvements in navigation on the Illinois River, commerce still suffered, for now the small, obsolete Illinois and Michigan Canal hindered

traffic. In addition, by the 1890s railroads began to win the freight-hauling competition. Convenience, year-round availability, and speed of railroads proved too great an obstacle for the waterway to overcome.

As an answer to its growing sewage disposal problem, the Chicago Sanitary District began work on a new canal in 1890. The Chicago Sanitary and Ship Canal paralleled the Illinois and Michigan Canal on the north. It was completed at Joliet in 1901 where it entered the Des Plaines River. Although it was deeper and wider than the Illinois and Michigan Canal, large boats and barges could not use it because the Des Plaines and Illinois rivers were not navigable between Joliet and LaSalle.

In 1920 the state of Illinois set about to improve the Joliet to LaSalle stretch of the Des Plaines and Illinois rivers. With War Department approval, a plan for five locks and dams was devised which would raise the water level to 8 feet in that portion of the two rivers. Construction began in 1921. Six years later the federal government began to develop a 9-foot-deep channel, 200 feet wide from Utica to Grafton. By 1930 the Corps of Engineers gained control of the nearly complete five locks and dams on which the state had worked since 1921 as well as the Chicago Sanitary and Ship Canal. When the Corps completed the work between Joliet and LaSalle in 1933, the Illinois waterway was opened to navigation, and the old Illinois and Michigan Canal closed permanently. Almost immediately, the Illinois waterway system began to win back freight taken by the railroads. Since World War II, barge traffic has increased. As a result, the water route from the Mississippi River to Lake Michigan has outstripped its own importance of any previous time as one of the nation's leading waterways.

APPENDIX B: NATIONAL PARK SYSTEM ADVISORY BOARD  
DETERMINATION OF NATIONAL HISTORICAL SIGNIFICANCE



IN REPLY REFER TO:

United States Department of the Interior

NATIONAL PARK SERVICE

P.O. BOX 37127

WASHINGTON, D.C. 20013-7127

November 18, 1986

Honorable Donald Paul Hodel  
Secretary of the Interior  
Washington, D.C. 20240

Dear Mr. Secretary:

I am pleased to inform you that the National Park System Advisory Board has reviewed the National Park Service's proposed study report on the Illinois Trail at the Board meeting of September 17 and 18, 1986. Based on criteria under the Historic Sites Act of 1935, the Board found that the Illinois Trail is of national historic significance and is eligible for addition to the National Trails System as a national historic trail. By unanimous vote, the Board also endorsed the NPS-preferred Alternative C.

This letter constitutes the Board's recommendation and should be included in the study report when it is transmitted to the Congress for its consideration.

Sincerely,

D. Fred Wendorf, Jr. PhD.  
Chairman, National Park  
System Advisory Board  
Department of Anthropology  
Southern Methodist University  
Dallas, Texas 75275

## APPENDIX C: SUMMARY OF PUBLIC INPUT

Public involvement in the Illinois Trail Study was initiated through an announcement of the beginning of the study and a series of public information meetings along the study route during April 8-11, 1985. The locations of the meetings and the attendance were as follows:

Alton	8
Beardstown	9
Springfield (state agency officials)	18
East Peoria	23
Joliet	42

Discussions at the meetings reflected a high degree of interest in the study. Attendees at the Beardstown and East Peoria meetings saw a relationship between the study and renewed citizen interest in the Illinois River, as evidenced by the many river festivals held each year in adjacent communities. Attendees at the Joliet meeting were keenly interested in the relationship between potential national trail designation and the recently established Illinois and Michigan Canal National Heritage Corridor. They also expressed concern about possible negative effects of an additional national designation of the canal.

In September 1985 a progress report on the study was distributed along with brief descriptions of six possible alternatives that correspond to the six alternatives in this report. Recipients were asked to comment on their preferences among the alternatives. A total of 65 responses were received.

A total of 56 responses indicated preference for one of the national scenic trail (NST) or national historic trail (NHT) alternatives or for the no federal action alternative. The preferences were as follows:

Alternative A (NST - Summit to Peoria)	4
Alternative B (NST - Summit to Wood River)	18
Alternative C (NHT - CPNHS to Grafton (Waterway))	6
Alternative D (NHT - CPNHS to Grafton (Roadway))	16
Alternative E (NHT - CPNHS to Grafton (Land-Based Trail))	8
Alternative F (No Federal Action)	3

Four other responses indicated preference for any of the NHT alternatives (C, D, or E). Two other responses indicated preference for any of the land trail alternatives (A, B, or E).

Based on this input and staff analysis of factors influencing the feasibility and desirability of each alternative, alternative C was selected as the preferred alternative for the purpose of preparing the draft feasibility study. The national scenic trail alternatives and alternative E were not selected because of their higher costs and the fact that it may not be possible to secure a trail right-of-way across the many miles of private lands. Alternative C was selected over alternative D because it is

the clear intent of the National Trails System Act that a national historic trail should follow as accurately as possible the historic route. Implementation of alternative C also would not preclude state implementation of the marked highway driving route described under alternative D.

The draft study report was distributed for public review and comment in early June 1986. A series of public information meetings were scheduled and conducted along the study route during June 23-26. Locations of the meetings and attendance were as follows:

Joliet	29
East Peoria	20
Springfield (state agency officials)	8
Beardstown	15
Alton	4

Discussions at the meetings reflected a continuing public interest in the study and the proposal that might result from the study. Attendees at the Joliet meeting generally expressed disappointment that the preferred alternative C did not include a land-based trail element, particularly along the portion of the study route in northeastern Illinois. They stated that designation of an existing waterway as a national historic trail would accomplish little in the way of providing new recreation and historic interpretation opportunities. Attendees at the East Peoria meeting were very supportive of alternative C, but many expressed a strong desire for a proposal that combined alternative D (a federally designated and marked highway route) with alternative C (development of the historic water route). Attendees at the Beardstown and Alton meetings also supported alternative C.

Subsequent to the meetings, 60 letters containing views and comments on the draft study were received. Seven letters expressed support for or no objection to creation of a national trail, but did not indicate any preference among the 6 alternatives. Of the 53 letters that expressed a preference among the alternatives, the preferences were as follows:

Alternative A (NST - Summit to Peoria)	0
Alternative B (NST - Summit to Wood River)	2
Alternative C (NHT - CPNHS to Grafton (Waterway))	20
Alternative D (NHT - CPNHS to Grafton (Roadway))	1
Alternative E (NHT - CPNHS to Grafton (Land-Based Trail))	3
Alternative F (No Federal Action)	1
Alternative B plus E	1
Alternative C plus D	13
Alternative C plus E	12

Nine letters also contained a strong plea to extend the final trail proposal to Lake Michigan, thereby including the entire historic waterway linkage between the Mississippi River and the Great Lakes.

These preferences and other information provided in public comments on the draft study were used to prepare the final study and to formulate the proposal presented in it.

## APPENDIX D: FINDING OF NO SIGNIFICANT IMPACT

### ENVIRONMENTAL ASSESSMENT NATIONAL TRAIL FEASIBILITY STUDY

#### Illinois Trail Illinois

The National Park Service has prepared an environmental assessment (EA) addressing the impacts of establishing, as a component of the national trails system, a national historic trail extending from the Lewis and Clark Trail at Wood River, Illinois, to the Chicago Portage National Historic Site, generally following the Illinois River and the Illinois and Michigan Canal. The proposed trail is a combination of the environmental assessment's alternative C, extended to Lake Michigan, and the northeastern part of alternative E, with possible extension to Lake Michigan. This trail is described in detail in this document.

#### Impacts on Cultural Resources

Trail impacts could potentially affect cultural resources because of the cultural/historic nature of the Illinois Trail. A systematic inventory and evaluation of all archeological and historical resources has not been done along the study route. Preparation of the comprehensive plan for management, following authorization, would include planning for the protection of all identified sites.

Compliance with section 106 of the National Historic Preservation Act is considered to be premature before selection of a final alternative and subsequent congressional authorization and preparation of a comprehensive management plan. If the trail is authorized, the resulting comprehensive plan for management would be submitted for section 106 compliance review. National historic trail designation should not adversely affect cultural resources listed on or eligible for listing on the National Register.

The assessment has been reviewed, resulting in the following conclusions:

1. The Department of the Interior [516 DM 6, Appendix 7.3 A. (3)] includes national trail proposals among listed actions that normally require preparation of an environmental impact statement (40 CFR 1502.3). A preliminary evaluation of potential impacts, however, resulted in the conclusion that an environmental assessment was appropriate to determine if significant (40 CFR 1508.27) impacts were present.
2. The proposed actions will not have a significant (40 CFR 1508.27) effect on the human environment. Negative environmental impacts that could occur are minor and temporary in effect. There are no adverse impacts on public health, public safety, rare or endangered species, or other unique characteristics of the region. No highly uncertain or

controversial impacts, unique or unknown risks, cumulative effects, or elements of precedence were identified. Implementation of the actions will not violate any federal, state, or local law.

Based on the foregoing, it has been determined that implementation of the proposal will not constitute a major federal action that will significantly affect the quality of the human environment, and that an environmental impact statement is not required and will not be prepared. Since the proposed action is one that normally requires preparation of an environmental impact statement, this finding of no significant impact has been made available for public review for 30 days in accordance with 40 CFR 1501.4(e)(2), prior to its approval.

  
\_\_\_\_\_  
Acting Regional Director, Midwest Region

4/30/87  
Date

## BIBLIOGRAPHY

### AMERICAN CANAL AND TRANSPORTATION CENTER

n.d. Towpaths to Tugboats: A History of American Canal Engineering. York, Pennsylvania.

### ILLINOIS DEPARTMENT OF CONSERVATION

1980a The Illinois and Michigan Canal. Springfield, Illinois.

1980b The Illinois and Natural Areas Plan. Springfield, Illinois.

1981 Endangered and Threatened Vertebrate Animals and Vascular Plants of Illinois. Springfield, Illinois.

1983a Hennepin Canal State Trail Master Management Plan. Springfield, Illinois.

1983b Outdoor Recreation in Illinois: The 1983 Policy Plan. Springfield, Illinois.

### ILLINOIS DEPARTMENT OF ENERGY AND NATURAL RESOURCES, NATURAL HISTORY SURVEY DIVISION

1983 The Fate of Lakes in the Illinois River Valley. Champaign, Illinois.

### ILLINOIS DEPARTMENT OF PUBLIC WORKS AND BUILDINGS

1969 Report of Recreational Development, Illinois River Backwater Areas. Springfield, Illinois.

### NATIONAL PARK SERVICE, U.S. DEPARTMENT OF THE INTERIOR

1981 Illinois and Michigan Canal Corridor: A Concept Plan. Ann Arbor, Michigan.

1985 Illinois and Michigan Canal National Heritage Corridor, Illinois Historical Inventory, History and Significance. Denver Service Center. Denver, Colorado.

### WILLIAM E. ROSE AND ASSOCIATES, INC.

1975 "Design Study: The Chicago Portage and Laughton Trading Post Area." The Waterway West. Hinsdale, Illinois.

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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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