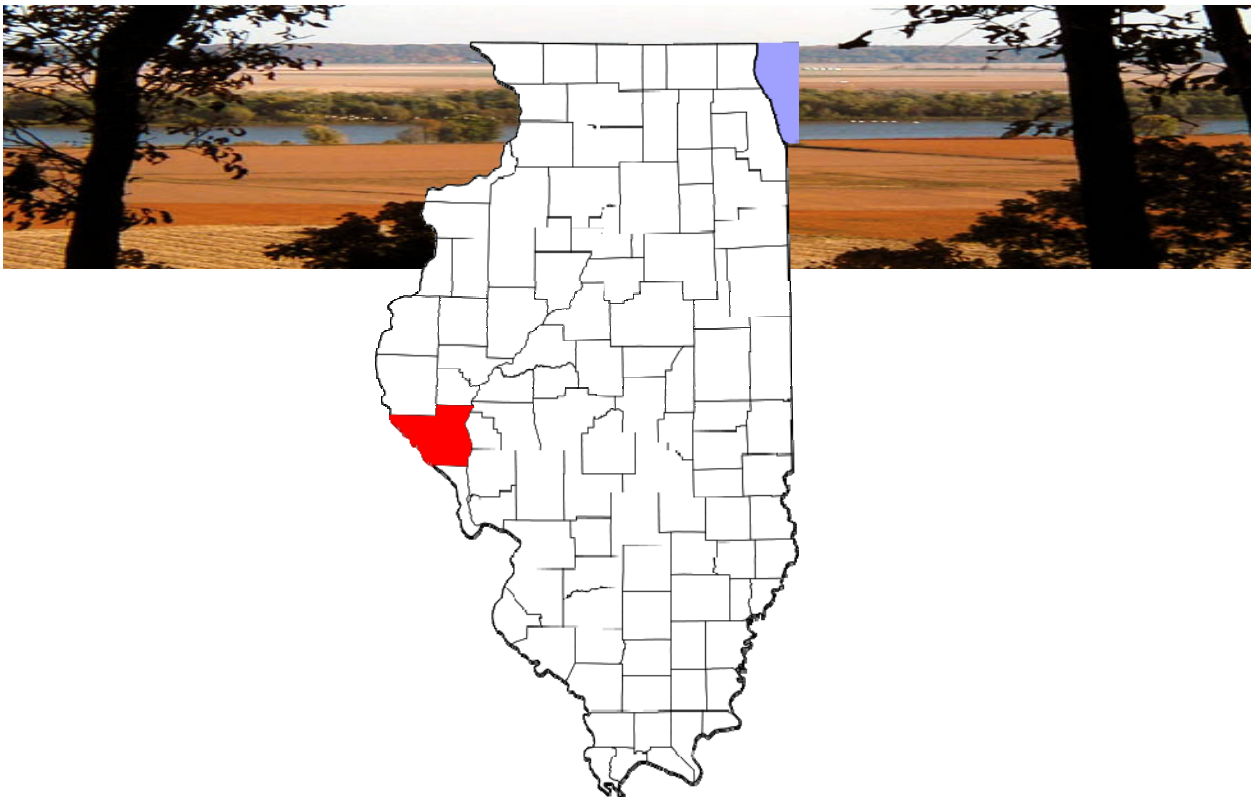

PIKE COUNTY GREENWAYS AND BIKEWAYS PLAN

February 8, 2008

Pike County Trail Task Force

Pike County, Illinois

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EXECUTIVE SUMMARY

The Pike County Greenways & Bikeways Plan is part of an effort to preserve green space and promote recreational bikeways within Pike County for both county residents and visitors. The Pike County Trails Task Force is producing this trails plan to guide the development and expansion of a countywide system of trails to be used for recreation and transportation throughout Pike County. This plan takes into consideration types of trail related activities gaining popularity for their mental, physical and spiritual health benefits. It also takes into consideration that people value trails for a variety of reasons.

The plan's coordinated and strategic approach for creating a system of trails in Pike County is intended to motivate all levels of government, private trail groups and other vital organizations into action. The Pike County Trails Task Force envisions linking public lands, natural and scenic areas, tourist attractions and communities with a countywide trail system. The plan emphasizes trails already recognized by the Illinois Department of Transportation (IDOT) Bicycle Maps and the Illinois Mississippi River Trail (MRT), as well as those identified by locals as being used regularly by bicyclists. The plan will work to incorporate local linkages into IDOT's statewide bicycle plan and neighboring counties' bike trails.

The planning process included several steps: 1) identification of existing natural resources such as green spaces and floodplains within Pike County; 2) identification of cultural and historic points of interest; 3) identification of major attractors and generators for biking and walking routes as well as potential safety problems; 4) development of goals, policies and objectives, including public input and four public open houses; 5) development of design criteria for trail development; 6) development of a route rating system and rating of proposed segments/routes; and 7) development of a Greenway & Bikeway Master Plan for Pike County. The proposed bikeway system is a combination of County roads, paved shoulders and separate multi-use trails.

The master plan recommends thirteen (13) primary routes, many with spur routes to specific points of interest or to provide smaller sub-loops. The routes provide access to the many attractors in Pike County, such as: Lake Pittsfield (and adjacent camping facilities), Pittsfield historic courthouse building and

square, various Lincoln sites, Collver Family Winery in Barry, various museums, Mississippi River, Illinois River, and most of the rural towns and villages, are linked.

Implementation is recommended in the form of an ongoing plan, constructing the highest priority routes first; or as local funding/grants allow. As County roads are developed, upgraded or maintained, routes identified in this plan should be upgraded as needed to accommodate bicycles and alternative modes of transportation. For instance, this plan identifies some roads that need to have paved shoulders added to allow for safe usage by bicyclists and some roads that would require paving thus allowing bicyclists to avoid major highways or high traffic roads. To that end, this plan will serve as a guide for allocating resources from such programs as the Illinois Department of Natural Resource's Bicycle Path Grant Program, the Illinois Transportation Enhancement Program (ITEP), IDOT's Multi-Year Highway Improvement Program and other financial assistance programs used for trail acquisition and development.

I INTRODUCTION

❑ Purpose and Vision

Pike County Greenways and Bikeways Plan is a tool for improving existing routes used by bicyclists and developing future trail routes through sound planning and design. This plan identifies issues impacting trails and recommends strategies for addressing these issues. It also serves as a source of information on recreational trail participation in Pike County. An evolving inventory of potential county bike trail routes is included to form the basis for an interconnected countywide network of trails. This plan is intent on stimulating and supporting coordinated approaches to creating and enhancing a countywide network of trails. It will serve as a resource for trail planners, builders, managers and advocates.

Figure 1 – Twin Culverts in Pearl

The plan, in accordance with IDNR requirements, includes the following:

- Prioritization of proposed bikeway routes and implementation;
- Identification of priority greenways and bikeways in the planning area that are feasible and have apparent support;
- Identification of priority activities or projects within the identified greenways (trails, paved shoulders, roads needing pavement, land acquisition, etc.), some of which may be eligible for funding through the IDNR's existing grant programs or other road funding sources;

- Consideration of greenway & bikeway linkages to attractions and designations, including IDNR sites, other state sites, existing or planned bikeways, within and near the immediate planning area, as applicable.

Public participation was critical in developing the Pike County Greenways and Bikeways Plan. Public comment was solicited through surveys, feedback from trails interest groups, and meetings with the general public. The Pike County Trails Task Force made up of county and local officials, local health officials, trails groups and the general public guided development of the document. The Pike County Greenways and Bikeways Plan is a fluid document, changing with time as new trails are developed and additional opportunities become available.

❑ Benefits of Trails

"Trails have multiple values and their benefits reach far beyond recreation. Trails can enrich the quality of life for individuals, make communities more livable, and protect, nurture, and showcase America's grandeur by traversing areas of natural beauty, distinctive geography, historic significance, and ecological diversity. Trails are important for the nations' health, economy, resource protection and education."

- *The National Park Service report "Trails for All Americans"*

Health/Fitness/Wellness

Promoting trails promotes active living. Recent studies and reports document the obesity epidemic in America and increased sedentary lifestyles of Americans. Walking, running and bicycling are aerobic exercises that benefit physical health when done regularly. Regular exercise has been proven to reduce heart disease, hypertension (high blood pressure), and cholesterol, and is believed to slow the aging process, reduce symptoms of osteoporosis, prevent and control diabetes, strengthen the immune systems, improve arthritis, and relieve pain. Trails, especially close-to-home systems, provide opportunities to integrate physical activity into daily living by offering settings to walk, run and bike during leisure time or for commuting. In short, bike trails encourage physical fitness and healthy lifestyles.

Recreation Benefits of Trails

Everyone needs to have fun. Many trails have multiple recreation benefits such as providing access to fishing, vista points for photography, picnic areas for socializing, and camping areas. They also provide access to areas for enjoying solitude, observing wildlife and experiencing the natural environment.

Economic

Trails can contribute to Pike County's economy in many ways, but particularly by increasing tourist opportunities. Studies show property values near trails often increase. In addition, trail users support businesses near trails, including lodging, food, supplies and equipment rentals. According to research conducted on the Katy Trail, in Missouri, visitors to the trail spent an average of $230 with half being spent on food and lodging; almost half (49%) of those visitors were from states other than Missouri.

The property value issue traditionally has been a point of debate and disagreement, especially concerning crime and other potentially negative impacts. While these can be valid concerns, more often they are not. Therefore, providing accessible and accurate information about property values, crime mitigation, and other trail and greenway concerns is an important way to help landowners and their communities more fully understand the many benefits of trails.

And finally, the health care system can further benefit economically from increased use of trails and greenways. People who use trails to exercise are generally healthier – thereby reducing both the personal out-of-pocket expenses and claims.

Educational Benefits of Trails

Trail users can learn about the natural, historical and cultural resources of Pike County, many examples of which can be found along trails or accessed by trails. Interpretive displays can assist trail users in developing appreciation for Pike County's rich history.

II ANALYTICAL APPROACH

The planning process involved the following processes:

1) Identification of existing natural resources such as green spaces and floodplains within Pike County,
2) Identification of cultural and historic points of interest,
3) Identification of major attractors and generators for biking and walking routes as well as potential safety problems,
4) Development of goals, policies and objectives, based in part on input by plan participants and public meeting/questionnaires,
5) Design criteria,
6) Development of a route rating system and rating of proposed segments/corridors,
7) Summarization of planning results and recommendations in a Greenway & Bikeways Master Plan for Pike County.

❑ Greenways/Natural Resources

The identification of natural resources, both woodland and floodplain, were developed by reviewing FEMA floodplain data, Pike County Geographic Information Systems (GIS) digital ortho photography, and State of Illinois Department of Natural Resources information (See Appendix A). Some of the major linear greenways and natural resources identified within Pike County include: First, two major rivers border Pike County – the Mississippi River on the west; and the Illinois River on the east. Both of these rivers provide opportunities for recreation and points of interest. Some of these include Lock and Dam 22, the John Hay Recreation Area, the Ray Norbert State Fish and Wildlife area, and various riverfront parks. Second, the Sny Levee and Drainage District traverses along the Mississippi River on Pike County's western edge. The proposed bikeway route along this elevated levee would provide many viewing opportunities of the scenic Mississippi River. Figure 2 shows an example of what an elevated trail on a levee could look like. Third, Lake Pittsfield is a

Figure 2
Elevated levee trail example

200-acre lake located three miles northeast of Pittsfield and five miles south of Griggsville. The lake was constructed in 1961 to serve as both a flood control structure and a public water supply for the city of Pittsfield and the immediate surrounding area. Today this area offers fishing, camping, picnic and other recreation opportunities.

❑ Cultural & Historic Resources

Cultural and historic points of interest have been identified throughout Pike County. This data was assembled from county and local officials, Visitors Bureau brochures and local knowledge. Figure 3 is a photograph of the historic Pike County courthouse located in Pittsfield, Illinois. Detailed Points of Interest are described in Appendix B.

Figure 3
Historic Pike County Courthouse – Pittsfield

❑ Major Attractors & Generators

Major attractors were identified, including Cultural and Historic points of interest, cities & villages, parks, schools, and residential areas. Generators include cities and villages around the county. These include: Pittsfield, Griggsville, Pleasant Hill, Barry, Baylis, El Dara, Hull, Kinderhook, Milton, Nebo, New Canton, New Salem, Pearl, and Perry, among others. Other major attractors include natural resources, parks, golf courses, landmarks, and historical points of interest, among others. Figure 4 is a photograph of the 562-purple martin apartment high rise located in Griggsville, Illinois. The structure was constructed in 1962 and is 70-feet high.

Figure 4
Purple Martin Capital - Griggsville

❑ Project Safety and Legal Issues

Bicycling continues to be one of the most popular outdoor pursuits nationally. The National Survey on Recreation and the Environment found that bicycling grew by more than 50 percent from the mid-1990s to 2000. Improvements in and the variety of bicycles now on the market have undoubtedly contributed to the popularity of bicycling. Aside from the initial investment, bicycling is a relatively low-cost activity that can be enjoyed solo or in a group. It is an activity that people of all ages and socio-demographic backgrounds can enjoy.

The American Association of State Highway and Transportation Officials reports the majority of bicycling takes place on ordinary roads with no dedicated space for bicycles. However, due to safety issues, designated bicycle paths are becoming more popular (see Appendix E). Below are some of the major issues concerning dedicated bicycle trails.

- Bicycle safety continues to be an issue for recreational bicyclists. Thousands of bicycle-motor vehicle accidents occur every year in addition to a large number of accidents with fixed objects, pedestrians, or other cyclists. Bicyclists have the same rights and responsibilities as automobile drivers and must ride with the traffic and generally obey all traffic laws. Many bicyclists do not, while many motorists do not know the rights of the bicyclist and/or fail to recognize the bicycle as a vehicle under the law. Educational safety awareness programs and skills test for bicyclists and motorists alike should be offered in communities.

- Support facilities such as parking, potable water, bicycle racks, and restrooms are often lacking. Such support facilities should be included in the planning and design of bicycle trails.

- Bicycle trail maintenance is often a problem. Bike paths especially need constant maintenance to provide safe and enjoyable opportunities.

- Where public involvement supports it, highways, except those where bicycles are legally prohibited, should be designed and constructed under the assumption that bicyclists will use them.

❑ Goals, Policies & Objectives

The Pike County Greenways and Bikeways Plan is relatively general in scope, identifying only today's ideal goals for specific aspects of the countywide trails plan. The unpredictability of funding and changing political priorities, preclude including specific and nonflexible actions that are designed as the only avenues for reaching each of the general goals listed.

While the ideal solution is for the goals and action guidelines to be implemented immediately, funding availability will control the timeliness of their realization. Many of these goals and objectives are dependent, at least in some part, on needed funding and actions by local government. Continued cooperation and communication between the Pike County Trails Task Force, local government, county government, trail advocates and with special interest groups will be greatly beneficial in helping reach the goals included in this plan.

The Pike County Greenways and Bikeways Plan's goals, policies and objectives can be divided into five (5) goal/planning elements:

1. Funding/Acquisition
2. Government Policies and Regulations
3. Recreation & Trail Advocacy
4. Economic Development – Tourism & Business Development
5. Transportation Coordination

1. Goal for Funding/Acquisition

The degree of public interest and involvement in trails establishment will greatly determine the extent to which trails are developed. Given financial limitations, public participation in all stages of trails establishment is important. Although the physical, social, and environmental benefits of

recreational and transportational trails use have been well documented, funding to provide for such facilities is extremely limited. Therefore, a successful countywide trails and greenways program will require broad-based and expanding sources of funding in order to establish and maintain a balanced program for planning, acquisition, development, maintenance, and management of trails.

Action Guidelines:

- Partnering local governments with trail user groups and organizations, businesses, public/private funding entities, community groups and citizens to connect Pike County communities through a countywide network of greenways and trails system.
- Identify public funding sources for acquisition and development of trail routes and apply for funding as opportunities arise.
- Identify potential private sector funds including foundation grants, business/corporate contributions, special events and fundraisers, and individual donations.
- Available funding priority should be placed on those project features which cannot be provided through public volunteerism or donation.

2. Goal to Direct Government Policies & Regulations

The Pike County Trail Task Force will continue its guidance and leadership role in promoting the development of trails throughout Pike County. The Task Force responsibilities will be to coordinate trail planning and development among the cities, villages and communities within Pike County; advising them on the routes identified in this plan and on opportunities for trails.

Action Guidelines:

- Work with federal, state, and private grant sources to guide the implementation of the Pike County Greenways and Bikeway Plan
- Include amenities for bicyclists in all County road improvement projects that are completed on designated routes.

- Use stormwater management practice to create greenways.
- Preserve greenways in new development.

3. Goal for Recreation & Trail Advocacy

An ongoing public information program is essential to assuring a successful trail plan. Information about trail locations, access points and conditions should be readily available to the public

Action Guidelines:

- Continue intergovernmental cooperation in acquisition and management of bikeways throughout the region.
- Provide County trailheads to promote access to the proposed routes and points of interest.
- Promote alternative modes of transportation throughout the County and region.
- Highlight links to neighboring county, local and regional trails systems and places of interest.
- Use trails to create a healthier and more livable county for the benefit of all citizens.
- Encourage support for the development and use of trails that are “close to home.”
- Educate the public and private sectors about the benefits a greenways and bikeways system will bring their communities in terms of health, fitness, tourism, infrastructure and economic advantages.
- Develop and maintain a trail map on a GIS (Geographic Information System). Create maps of the trail routes in Pike County. These GIS maps could also serve as an overlay in developing and updating land use plans in Pike County.

4. Goal for Economic Development & Tourism

As new trails are developed throughout Pike County, many more people will benefit from additional outdoor recreation opportunities. The benefits of trails extend well beyond fitness and leisure pastimes. Trails hold tremendous potential for economic and community development.

Action Guidelines:

- Complete maps and brochures of bikeway system as part of tourism development.
- Use bikeways to promote increased tourism.
- Measure key indicators of economic contribution of bikeways such as: new businesses, increased property values, bikeway related tourism, etc.

5. Goal for Transportation Coordination

Ultimately shared efforts and resources will maximize the potential for trail development and decrease construction costs. Strengthening bonds and communication between federal and state agencies ensures participation in the planning process and support in the development and maintenance of trails.

Action Guidelines:

- Bikeways should be an important part of the County transportation network. Adopt Greenway and Bikeway Master Plan as part of the County Highway Master Plan.
- County improvements along the proposed routes should be planned for both pedestrian and bike traffic.
- Paved shoulders should be provided on both sides of all new roads in conjunction with major improvements
- Sidewalks should be constructed where practical and connecting the more densely populated areas and subdivisions.

❑ Design Criteria

As part of the policy review, desired design criteria were developed. The American Association of State Highway and Transportation Officials (AASHTO) Guide for the Development of Bicycle Facilities was reviewed for successful strategies. Existing roadways, often with relatively inexpensive improvements, must serve as the base system to provide for the travel needs of bicyclists. Bicycle paths and lanes can augment this existing system in natural, scenic corridors, or places where access is limited. In general, separation of bicycles and pedestrian use is desired.

Planning for bicycle facilities must be conducted in conjunction with planning for other transportation needs. Often an improvement, which enhances bicycle travel, will also benefit other modes of travel. County highway improvements, through appropriate planning and design, can enhance bicycle travel (see figure 5). Plans for implementing bicycle projects must be in harmony with the community's overall goal for transportation improvements, which in turn, should be consistent with overall community goals.

Figure 5
Example of Needed Paved Shoulder

In general, bicycle trip purposes can be divided into two broad types - utilitarian and recreational. For a bicyclist on a utilitarian trip, the primary objective is reaching a specific destination quickly with few interruptions. The bicycle is simply the chosen mode of transportation. On the other hand, a bicyclist on a recreational trip is riding for pleasure. The destination is of less importance. Local promotion of tourism and historical/cultural points of interest may increase recreational trips in our community. For many trips, these purposes are not absolute or mutually exclusive. That is, most trips will have some utilitarian and some recreational purposes. New bicycle facilities, therefore, should be designed to accommodate the needs of the anticipated mix of bicyclists, as well as pedestrian and other alternate transportation needs, such as equestrians and horse drawn buggies.

Bicycle lanes, wide curb lanes or shared roadways may be the best way to accommodate bicycle traffic along highway corridors, depending on traffic conditions and available rights-of-way (see figures 6 and 7).

Figure 6
Typical Paved Shoulder on Highway Should Be Striped As a Bike Lane

Figure 7
Typical County Road Shared Roadway

On separate bike baths, the American Association of State Highway & Transportation Officials (AASHTO) recommends a width of 10 feet, or a minimum of 8 feet paved with 2 feet stone shoulders on each side (See Figure 8). A one directional lane should be 5 feet wide. A clearance of 8 feet and a minimum design speed of 20 mph are recommended. Grades are generally recommended to be less than 5% on paved surfaces, and less than 3% for crushed stone surfaces. Signage and markings are required. Lighting between 0.5 to 2 foot candles is desirable at roadway intersections.

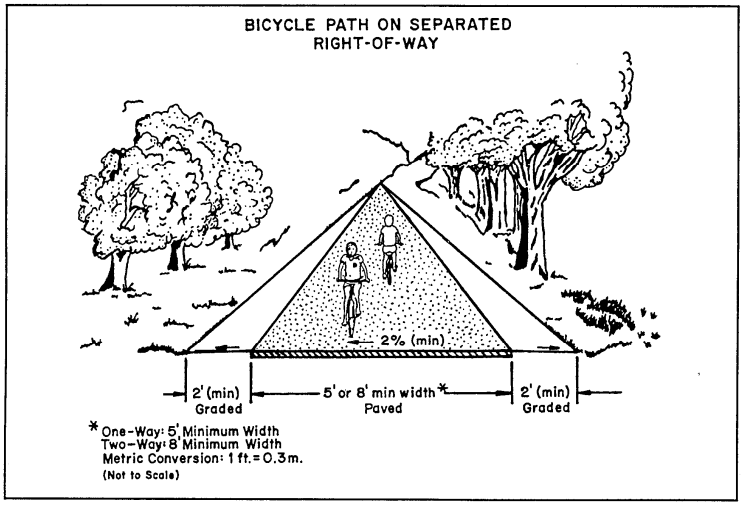


Figure 8

- ***Multi-Use***:

  According to AASHTO, multi-use paths are generally undesirable; bicycles and pedestrians do not mix well. Wherever possible, separate bicycle and pedestrian paths should be provided. If not feasible, additional width, signage and stripping should be used to minimize conflicts. Bicycle parking facilities are an essential element, both at trip origin and trip destinations (see Appendix F).

- ***Trailheads:***

  Ten (10) trailheads are proposed in several key locations throughout the County. These locations are listed below:

1) Lake Pittsfield
2) Griggsville (I-72 & US 54 interchange)
3) Lock & Dam 22
4) Barry
5) Pleasant Hill
6) Milton
7) Pearl
8) Nebo
9) Perry
10) Atlas

Some of the benefits of these proposed locations include security (located within cities, villages, publicly managed properties, or highly visible areas), existing available parking, and county distribution. Each proposed trailhead should include at a minimum a kiosk, large trail map, brochure/small map holder, bench and access to adjacent vehicular parking to allow for park and ride opportunities. Other optional amenities could include a bicycle rack, pay phone, lighting, and landscaping.

- ***Maps:***

  Maps showing the designated County routes, rules of the road and bicycle safety tips would be provided at each trailhead and made available for distribution throughout the county. The maps could also identify the route lengths and points of interest along each route.

- ***Operation & Maintenance:***

  Assignment of responsibilities for control, maintenance, and policies of bicycle facilities should be established prior to construction. A central contact person, for purposes of maintenance, should be identified. Responsibilities include coordination of regular sweeping, vegetation control, lane painting and signage maintenance.

❑ Proposed Routes

Thirteen (13) primary routes have been identified (see Appendix C). The proposed routes provide connections to Pike County's 25 communities as well as points of interest along the routes. Of the thirteen main routes currently proposed eleven (11) are on existing roadway right-of-ways including shared roadway, striped bicycle lanes and paved shoulders. One (1) route is proposed as a separate multi-use trail. And the last route proposed is a 100-mile route utilizing segments of the other twelve (12) routes. The routes, listed by type, are as follows:

PROPOSED ROUTE TYPES

Existing Road Right-of-Way:

1. Lake Pittsfield Route
2. Pittsfield-Griggsville Route
3. Mississippi River Trail
4. Illinois 106 Route
5. Illinois River Route
6. Griggsville-Perry Route
7. Pittsfield-Milton Route
8. New Canton-Barry Route
9. Vin Fiz Route
10. New Salem-Nebo Route
11. El Dara-Atlas Route

Separate Multi-Use Trail:

1. Levee Route

"Century" Route:

1. 100-Mile "Century" Route

EXISTING ROAD RIGHT-OF-WAY ROUTES:

1. **Lake Pittsfield Route**

This 6-mile trail will connect the city of Pittsfield and Lake Pittsfield. Various options to access the lake have been explored with no clear decision on the best alternative with regard to safety, access and right-of-way. The options explored are as follows: From Pittsfield (1) travel north on 390th Avenue and east on 270th Avenue to access the lake; (2) Travel north on US-54 and then east on 260th Avenue; (3) Use gravel road past the Little League park; and (4) IL Route 106 to 415th Avenue (see Appendix D).

Figure 9
Lake Pittsfield

2. **Pittsfield-Griggsville Route**

This 9-mile route would connect the Pittsfield Lake Route and the Griggsville-Perry Route between Pittsfield and Griggsville. This route follows US 54 for 4-miles from Pittsfield to Interstate 72 and continues on Illinois Route 107 for 5-miles from Interstate 72 into the city of Griggsville. Its access from the interstate makes it appealing as well as the fact that it connects two of the largest cities within Pike County. A trailhead could be included at the Interstate 72 and US 54/Illinois Route 107 interchange.

Figure 10
Illinois Historic Marker
Illinois Route 106 – West of Hull

3. **Mississippi River Trail Route**

This route connects the existing Hannibal Bridge bicycle lane along Illinois Route 106 through Hull and Kinderhook, then along Illinois Route 96 through New Canton, Rockport, Atlas, and Pleasant Hill to Calhoun County. Along this route there is opportunity for a spur to the John Hay Recreation Area. Also, along Route

106 west of Hull there is an historic marker describing Illinois history including the exploration by Joliet and Marquette. Points of interest along this route include the Hull Museum, Kinderhook Museum, Harmon House Museum in Pleasant Hill, and Pleasant Hill Community Park. Picnic facilities exist at the Illinois Historic Marker on Route 106, at the John Ray Recreation Area, and in Pleasant Hill's Community Park.

This route includes spurs to the Mississippi River accessing Lock and Dam #22, John Hay Recreation Area, and Ralph's Landing east of Louisiana Missouri. This route is designated on the Illinois' Mississippi River Trail (MRT) User Guide. The MRT is a 10-state bicycling route in the process of development. Its travels over 2,000 continuous miles, on each side of the river, between the headwaters at Lake Itasca, Minnesota and the Gulf of Mexico. When complete, the route will consist of trails and bike-friendly roads, with "MRT" signs identifying the way. Check www.mississippirivertrail.org - MRT Inc.'s website – for information about routes and activities. Paved shoulders should be considered along this route to accommodate bicyclists. The length of this route is approximately 28 miles.

Figure 11
John Hay Recreation Area
East Hannibal

4. **<u>Illinois 106 Route</u>**

This route will connect Kinderhook to Florence. Communities along this route include Kinderhook, Barry, Pittsfield, Detroit, New Philadelphia and Florence. Points of interest along this route include the Barry Museum, Kinderhook

Figure 12
Kinderhook Museum

Museum, Pike County Visitors Center, two-story brick school house at Detroit, and the Florence three lift span bridge. This route would require paved shoulders at many locations to accommodate bicyclists. Additional amenities would be required through Pittsfield if this route remains on Route 106. Options should be explored for an alternate route through Pittsfield or bicycle safe facilities should be implemented on US Route 54 through Pittsfield. This route would be approximately 45 miles.

5. **Illinois River Route**

The Illinois River Route would extend from Chambersburg south to Valley City, Detroit, Milton, and Pearl. The route would utilize county highway 21 between Chambersburg and Valley City. Between Valley City and Detroit county highway 14 is a paved route that could be utilized. South of Detroit Illinois Route 100 would be utilized south to Pearl and Calhoun County. The southeastern portion of the county is hilly and the routes in this area would be more difficult for bicyclists. This route would be approximately 42 miles.

6. **Griggsville-Perry Route**

The Griggsville Perry route would be a loop connecting Griggsville, Perry, Fishhook, Baylis, and New Salem. This is a 36-mile route (including the spur east of Perry). Points of interest include Potawatomi Trail of Death historic marker at Perry, Robert Earl Hughes hometown - Fishhook, Skinner House Visitors Center and Museum in the Purple Martin Capital of Griggsville, New Salem Park and Bandstand, and the Baylis Guide Printery. A spur to Adams County and Siloam Springs State Park could be included north of Baylis.

Figure 13
Potawatomi Trail of Death
Historic Marker

7. **Pittsfield-Milton Route**

This route would traverse south from Pittsfield on county highway 7 then east on 225th, south on 415th, and east on 210th to Time then east on county highway 8 to Milton. This route would be approximately 12-miles. Points of interest include two story bandstands at Milton and Time, community parks and the Pike County Visitors Center in Pittsfield.

Figure 14
Two-Story Bandstands at Milton and Time

8. **New Canton-Barry Route**

This route would connect New Canton, Barry, and El Dara. Points of interest along this route would include Hadley Creek Outfitters, 1854 and 1876 church buildings in El Dara, Collver Family Winery in Barry, and the New Canton Park. This route would be approximately 12 miles.

9. **Vin-Fiz Route**

This 13-mile route connects Pleasant Hill, Nebo, and Pearl. This hilly area of the county would require caution when used by bicyclists due to steep gradients along county highway 10. Points of interest include the Pleasant Hill Museum, the Vin-Fiz stopping point and Heartland Lodge in Nebo, and the twin culverts in Pearl.

Figure 15
Vin Fiz Highway Marker

10. **New Salem-Nebo Route**

This 20-mile route connects New Salem, Pittsfield, and Nebo utilizing county highways 7 and 3. This route could utilize shared roadway or paved shoulder to accommodate bicyclists.

11. **El Dara-Atlas Route**

This route connects El Dara, Summer Hill, and Atlas via county highway 13. This 16-mile route would include the community of Atlas, which served as the county seat for Pike Country from 1824-1833 and is oldest town in the county. Other points of interest include the Civil War Statue/Monument in Summer Hill and the El Dara community center.

SEPARATE MULTI-USE TRAIL:

1. **Levee Route**

This route would be a separate multi-use trail. The trail could be constructed on the Sny Levee and Drainage District levee connecting Lock and Dam #22 to Kinderhook and Lock and Dam #22 to East Hannibal and Adams County. This separate multi-use trail could provide approximately 21.8 miles of separate trail along the scenic Mississippi River providing views from the elevated levee.

Figure 16
Existing Levee Route

"CENTURY" ROUTE:

1. **100-Mile "Century" Route**

This would be a 100-mile route utilizing segments of the Griggsville-Perry, New Salem-Nebo, Pittsfield-Milton, Illinois River, Vin-Fiz, Mississippi River, and Illinois 106 Routes. This route would connect the communities of Kinderhook, Barry, Pittsfield, New Salem, Griggsville, Detroit, Milton, Time, Nebo, Pleasant Hill, Atlas, Rockport, and New Canton.

❑ Development of a Route Rating System

Upon identification of the proposed routes, we chose to rate the routes by using a system to identify each corridor as “high”, “medium”, or “low” priority. It is assumed that property easements would become more difficult and expensive to acquire over time. A higher priority was assigned to routes requiring easements or land acquisition. Therefore, a high priority designation does not necessarily reflect importance but identifies the need for more work to implement. A lower priority route may be implemented ahead of a higher priority route if funding and/or road improvements occur on that specific route. Each category was rated using a 10, 5, 0 point system. A high priority item was assigned 10, medium priority 5, and low priority 0. Therefore, the routes yielding the greatest number of points should be considered a higher priority than lower scoring routes. The following characteristics were included in the rating system:

1) Acquisition Factors

- Type of Ownership – Three (3) types of ownership were considered – Private, Public, and Semi-Public. A corridor owned by the Public or within public right-of-way was assigned a low priority, as the possibility of the corridor experiencing a property transfer would be unlikely. Likewise, semi-public was assigned a medium priority and private ownership assigned a high priority, as privately owned land may be sold or transferred frequently.
- Number of Owners – The number of owners was considered because the more owners involved along a corridor, the more difficult it could be to acquire land and/or right-of-way. Therefore, single ownership was assigned a low priority, 2 to 4 owners – medium priority, and 5 or more owners – high priority.
- Likelihood of Corridor Loss – This considered the potential time frame within which the proposed corridor ownership could change. Within 1 year was assigned a high priority, 2 to 5 years – medium priority, and more than 5 years-low priority.

2) Physical Factors

- Route Length – Longer routes can be associated with broader recreational experiences and opportunities. Long routes would also provide connections to more communities and points of interest within the county. Therefore, long routes of more than 25 miles were given a high priority, 5 to 25 mile routes were given medium priority, and less than 5-mile routes were given low priority.
- Unique Characteristics – Since few greenways (separate from streets and roads) are found within the county, potential linear parks and greenways were given a high priority. Separate bike lanes (parallel to existing streets or roads) were given a medium priority and shared pavements were given a low priority.
- Ease of Accessibility – If a route is currently accessible, there would be no urgent need to address accessibility. Therefore, easily accessible routes were given a low priority, semi-accessible corridors a medium priority, and non-accessible routes a high priority.
- Gradient/Vertical Alignment (see Appendix A)- – Gradient or vertical alignment of bike routes greatly affects the corridor difficulty. Since 0% to 5% slopes are the most desirable for the average bicyclist, proposed bikeway routes having gradients of 0% to 5% were assigned a high priority. Routes having gradients of 6% to 10% were assigned a medium priority and routes having gradients exceeding 10% were assigned a low priority.
- Surface (Paved vs. Gravel) – Paved surfaces are the most desirable for bicyclists utilizing on-road bicycles, although some bicyclists using off-road bicycles may prefer a non-paved surface. For the purpose of this study, it is anticipated that most users will be on-road bicyclists. Therefore, if a proposed route is already paved, it was assigned a low priority. Proposed routes that are gravel were assigned a medium priority, as the road would need to be paved before it could accommodate the majority of users.

- Curvature/Horizontal Alignment – Horizontal alignment of proposed routes is important. Some curvature is desirable to add interest to the bikeway. However, excessive curvature can cause safety problems resulting from decreased visibility. Therefore, proposed bikeway routes having minimal curvature or a straight alignment were assigned a medium priority and routes with excessive curvature and low visibility were assigned a low priority.

3) Route Use

- Rural vs. Urban – Urban routes (within the village, town, or city limits) would be at the most risk to be altered due to development. Rural routes (outside of village, town, or city limits) would have a lesser risk resulting from development. Therefore, urban routes were given a high priority and rural routes a low priority.
- Traffic Count – Traffic count is a very important safety factor for bicyclists, especially on shared roadways. Since the majority of the proposed bikeway corridors will be shared roadways, traffic count was used in the priority process. Routes having a traffic count of 25 to 1150 vehicles per day were assigned a high priority and routes with traffic counts of 1151 to 2650 were assigned a medium priority. Finally, routes with traffic counts greater than 2650 were assigned a low priority.
- Speed Limit – Speed limit is another safety factor affecting bicyclists sharing roads with motor vehicles. Highways with speed limits in excess of 55 mph are less desirable for bicycle use than 55 mph and less roadways. Therefore, proposed routes utilizing roadways with speed limits less than 55 mph were assigned a high priority and routes utilizing roads with 55 mph speed limits were assigned a medium priority. It should be noted that Adams County roads that do not have a posted speed limit are enforced at 55 mph according to the Adams County Sheriffs Department. Routes utilizing State and U.S. highways with posted speed limits of 65 mph were assigned a low priority.

- Connections/Proximity to Cultural/Historical Points of Interest – This category was rated as follows:

  High Priority – National Register Sites, Historic Districts, and Regional Parks or sites.

  Medium Priority – Community Parks, Neighborhood Parks, or Wildlife Areas.

  Low Priority – Minimal Points of Interest

- Connection to Existing Trails –

  Yes - High Priority

  No – Low Priority

- Public Input – A questionnaire was provided at each of the public input meetings for this project. Respondents were asked to rank the proposed routes as high, medium, or low priority. If the majority of respondents ranked a routes as high priority, it was assigned a high priority. Likewise medium and low priorities were assigned based upon the majority of respondents.

CHARACTERISTIC	POINTS AVAILABLE	1 Mississippi River Corridor	2 **Levee Corridor**	3 Illinois 106 Corridor	4 Illinois River Corridor	5 100- Mile "Century" Route	6 New Canton Barry Corridor	7 Pittsfield Milton Corridor	8 Griggsville Perry Corridor	9 Vin-Fiz Corridor	10 El Dara Atlas Corridor	11 **Pittsfield Lake Corridor**	12 New Salem Nebo Corridor	13 Pittsfield-Griggsville Corridor
		CORRIDOR NAME AND NUMBER												
ACQUISITION														
Type of Ownership														
Private	10		10									10		
Semi-Public	5													
Public	0	0		0	0	0	0	0	0	0	0		0	0
# of Owners														
5 or more	10		10									10		
2 to 4	5					5								
one	0	0		0	0		0	0	0	0	0		0	0
Liklihood of Corridor Loss														
within 1 year	10													
2 to 5 years	5													
more than 5 years	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHYSICAL														
Corridor Length														
> 25 miles	10	10		10	10	10			10					
5 to 25 miles	5		5				5	5		5	5	5	5	5
< five miles	0													
Unique Characteristics														
Greenway	10		10											
Bike Lane or Paved Shoulder	5	5		5	5	5				5	5	5	5	5
Shared Pavement	0						0	0	0					
Ease of Accessibility														
Low Accessibility	10		10									10		
Medium Accessiblity	5						5	5	5	5	5		5	5
High Accessiblity	0	0		0	0	0								
Gradient/Vertical Alignment														
0% to 5% Slope	10		10					10	10			10		10
5% to 10% Slope	5	5		5									5	
Greater than 10%	0				0	0	0			0	0			
Surface														
Unpaved	10		10									10		
Gravel	5													
Paved	0	0		0	0	0	0	0	0	0	0		0	0
Curvature/Horizontal Alignment														
Minimal Curvature to Straight	5	5	5	5			5	5	5		5	5		5
Excessive Curvature/Low Visibility	0				0	0				0			0	

CHARACTERISTIC	POINTS AVAILABLE	1 Mississippi River Corridor	2 **Levee Corridor**	3 Illinois 106 Corridor	4 Illinois River Corridor	5 100- Mile "Century" Route	6 New Canton Barry Corridor	7 Pittsfield Milton Corridor	8 Griggsville Perry Corridor	9 Vin-Fiz Corridor	10 El Dara Atlas Corridor	11 **Pittsfield Lake Corridor**	12 New Salem Nebo Corridor	13 Pittsfield-Griggsville Corridor
		CORRIDOR NAME AND NUMBER												
CORRIDOR USE														
Rural vs. Urban														
Urban	5			5					5			5	5	5
Rural	0	0	0		0	0	0	0		0	0			
Traffic Count														
25 to 1150	10		10		10		10	10		10			10	
1151 to 2650	5	5							5		5			
2651 to 8900	0			0		0						0		0
Speed Limit														
Less than 55 mph	10		10									10		
55 mph	5	5		5	5	5	5	5	5	5	5		5	5
65 mph	0													
Connection/Proximity to Cultural/Historical Points of Interest														
National Register Sites, Historic Districts,	10	10				10		10	10			10	10	10
Regional Parks or Sites														
Community or Neighborhood Parks or Wildlife Areas	5		5	5	5		5			5	5			
Minimal Points of Interest	0													
Connection to Existing Trails														
Yes	5	5		5		5								
No	0		0		0		0	0	0	0	0	0	0	0
Public Input														
High Priority	10	10		10								10		10
Medium Priority	5		5		5			5						
Low Priority	0					0	0		0	0	0		0	
Task Force Input														
High Priority	10	10	10	10								10		
Medium Priority	5				5			5	5				5	5
Low Priority	0					0	0			0	0			
	TOTAL	70	**110**	65	45	40	35	60	60	35	35	**110**	55	65
	RANKING	3	T1	T4	9	10	T11	T6	T6	T11	T11	T1	8	T4

PIKE COUNTY GREENWAY/BIKEWAY PLANNING

Public Comment/Question Sheet Summary

Public Meetings:
Pike County Farm Bureau – April 5, 2007
PCEDC Pike County Business Expo – April 28, 2007
Barry City Hall – May 5, 2007
Griggsville City Hall – May 9, 2007

1. RANKING OF ROUTES:

Assigned Priority	Route	Rank (from public input sheets)		
		High	Medium	Low
H (1)	Pittsfield Lake Route	6	0	0
H (2)	Pittsfield-Griggsville Route	3	3	0
H (3)	Mississippi River Trail	3	2	0
M (4)	Levee Route	0	5	1
M (5)	Illinois 106 Route	1	2	3
M (6)	Illinois River Route	0	3	3
M (7)	Griggsville-Perry Route	0	3	3
M (8)	Pittsfield-Milton Route	1	1	4
L (9)	New Canton-Barry Route	0	2	4
L (10)	Vin Fiz Route	0	2	4
L (11)	100-Mile "Century" Route	0	1	5
L (12)	New Salem-Nebo Route	0	1	5
L (13)	El Dara-Atlas Route	0	0	6

OTHER SUGGESTED CORRIDORS:

- River Route – go east out of Milton and follow Montezuma to Bedford to Pearl. (Safety concern for bikes on Hwy 100 between Pearl and Milton.)
- Alternative route to Pittsfield Lake using gravel road past Little League park. Some bicyclists are currently using this route.

2. GOALS

a. Safety
b. Commuter connections (i.e., Griggsville-Pittsfield "Bike to Work")
c. Wellness – opportunities for exercise and fitness
d. Opportunities for tourism
e. Economic development
f. Recreation
g. Provide bikeways as roadway shoulders – making an overall safer roadway
h. Greenway development
i. Improve Quality of Life
j. Youth safety corridors in Pittsfield and other communities ("Bike to School")
k. Connection to hunting lodges – "no-frills"

3. USE

	Rank		
	High	**Medium**	**Low**
Multi-use corridors (separated from roadways) are desired	4	1	1
Shared roadway corridors are desired	0	3	3
Where bike/walking paths are separated from streets and roadways	4	1	1
Where adequate pavement widths are available, bike paths should be designated by pavement striping and signage	5	1	0
Paved shoulders with striped bike lanes should be added where feasible	4	1	1

4. COMMENTS

- Great plan-needs more exposure. Good start would be Pittsfield Lake …benefits could bring others on board.
- Pittsfield Lake road is closed 5 to 6 months of the year. Would this road be open year round?
- Who will maintain the paths and clean-up debris?
- Who will pay for the new trails? Increased taxes?
- Will isolated trails invite crime?
- Do you anticipate having parking places?
- New trails should be connected to trails in neighboring counties.

4) Based upon the above described rating system, the proposed routes rate as follows (high priority 70-110 points, medium priority 50-69 points, low priority 0-49 points):

- <u>High Priority</u>

  Lake Pittsfield Route
  Levee Route
  Mississippi River Trail Route

- <u>Medium Priority</u>

  Illinois 106 Route
  Pittsfield-Griggsville Route
  Griggsville-Perry Route
  Pittsfield-Milton Route
  New Salem-Nebo Route
  Illinois River Route

- <u>Low Priority</u>

  Vin Fiz Route
  New Canton-Barry Route
  El Dara-Atlas Route
  100-Mile "Century" Route

Land/Easement acquisition for high priority routes should be addressed within the next couple of years due to potential routes loss to development. A lower priority bikeway may be implemented ahead of a higher priority bikeway if funding and/or road improvements occur on that specific route.

III. CONCLUSIONS

Based upon the informal public survey and the rating system, the following conclusions should be considered:

1) The Lake Pittsfield Route and Levee Route are a high priority and should be addressed first. The Lake Pittsfield Route will involve some land/easement acquisition and multiple landowners depending on the specific route chosen.
2) Detailed trailhead locations should be identified and approved. If land acquisition or easements are required, they should be obtained as soon as possible with trailhead locations for high priority corridors receiving the highest priority. Medium and low priority corridor trailhead corridors should follow.
3) Medium and low priority corridors should be developed as soon as funding is available.

IV. RECOMMENDATIONS

The plan recommends thirteen (13) corridors, along with spur routes to specific points of interest, to be developed as part of a 10-Year Implementation Schedule. The High Priority bikeways should proceed as soon as land easements and/or contributions can be coordinated. The medium and Low Priority Bikeways are primarily on public right-of-way and can proceed when County/State funding is allocated. Work on medium and low priority bikeways consists mainly of signage, pavement markings, completion of sidewalks (pedestrian access on existing right-of-way) and public safety improvements at intersections and highway crossings. Final trailhead locations should be identified and approved to allow for installation when the specific route is developed. Potential funding sources should be identified and pursued.

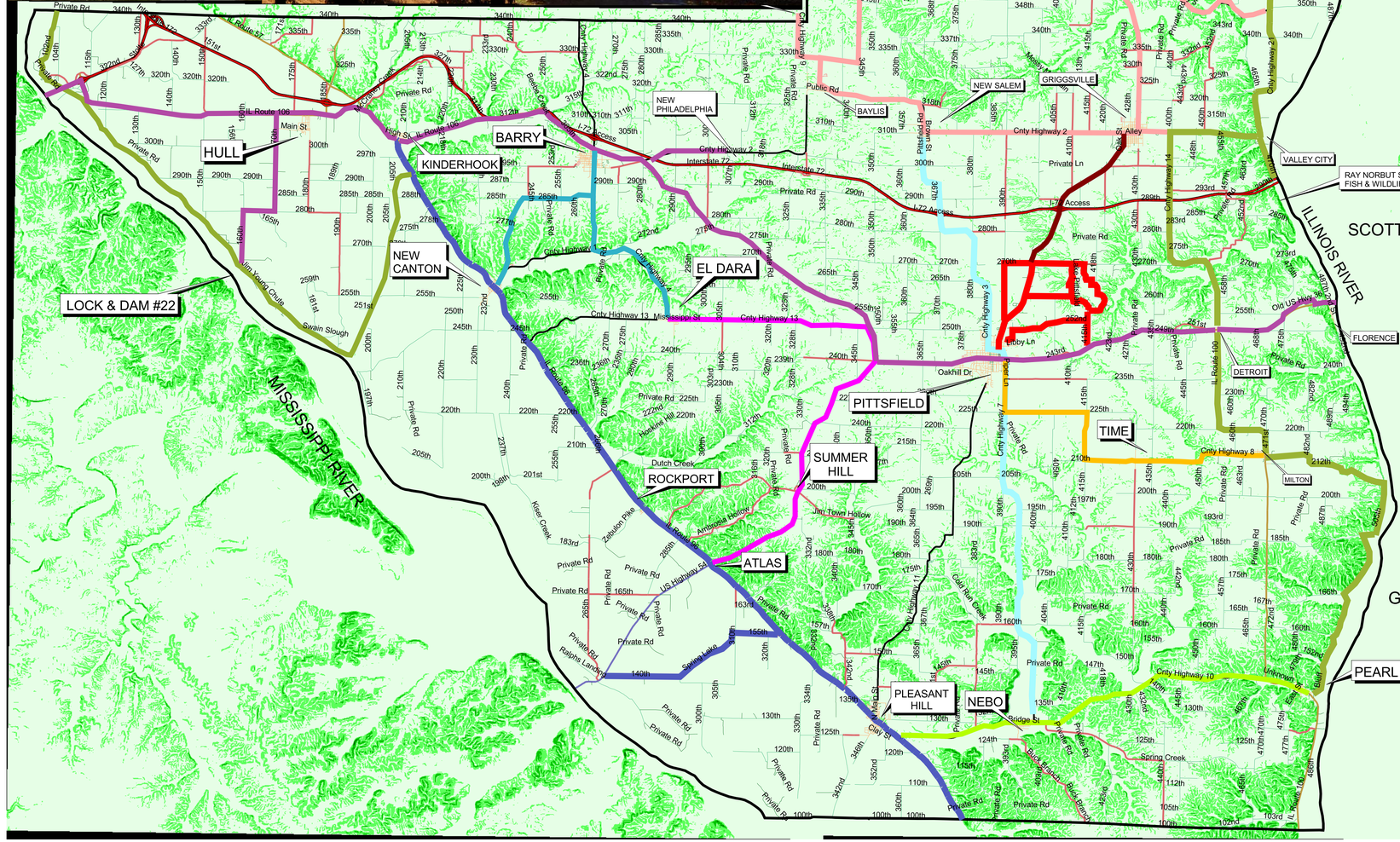
V. IMPLEMENTATION

Implementation is proposed over a 20-year period. The implementation schedule would be subject to available funding. A recommended timeline for implementation is as follows:

DATES	ACTIVITY
2008-2010	Easement/Land Acquisition for high priority corridors and trailhead locations
2011-2020	Pursue funding and implementation for high and medium priority corridors
2021-2028	Pursue funding and implementation for low priority corridors

Appendix A

Slope Plan



LEGEND

- PITTSFIELD-GRIGGSVILLE-ROUTE
- NEW CANTON-BARRY-ROUTE
- PITTSFIELD-MILTON-ROUTE
- IL-106-ROUTE
- GRIGGSVILLE-PERRY-ROUTE
- VIN-FIZ-ROUTE
- EL DARA-ATLAS-ROUTE
- LEVEE-ROUTE
- PITTSFIELD-LAKE-ROUTE
- NEW SALEM-NEBO-ROUTE
- MISSISSIPPI-RIVER-ROUTE
- ILLINOIS-RIVER-ROUTE

SLOPES

- 0 - 2
- 2 - 5
- 5 - 10
- 10 - 50
- No Data

N

2 0 2 Miles

PIKE COUNTY TRAILS TASK FORCE
PROPOSED TRAIL ROUTES SLOPE MAP

KLINGNER & ASSOCIATES, P.C.
Engineers • Architects • Surveyors

Appendix B

Points of Interest

JOHN HAY RECREATION AREA

ILLINOIS HISTORIC MARKER

LEVEE

HULL CAFE

HULL JAIL

HULL MOTEL

HULL MUSEUM

ICE HOUSE INN BARRY

JIM TOWN HOLLOW ROAD

KINDERHOOK MUSEUM

NEW PHILADELPHIA

POTAWATOMI TRAIL OF DEATH MARKER

RAY NORBUT STATE FISH & WILDLIFE AREA

SUMMER HILL

PITTSFIELD WINDMILL

FLORENCE BRIDGE

FLORENCE GUEST HOUSE

ILLINOIS RIVER

MILTON BANDSTAND

TIME BANDSTAND

PLEASANT HILL AMPHITHEATER

PLEASANT HILL CAMPGROUND

PLEASANT HILL PARK

ATLAS

BARRY MUSEUM

BAYLIS

CHAMBERSBURG SPRING

EL DARA COMMUNITY BUILDING

FISHHOOK MARKET

KINDERHOOK POST OFFICE

NEW CANTON PARK

NEW HARTFORD

NEW SALEM

PIKE COUNTY VISITORS CENTER

PEARL TWIN CULVERTS

PIKE COUNTY TRAILS TASK FORCE
POINTS OF INTEREST

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& ASSOCIATES, P.C.
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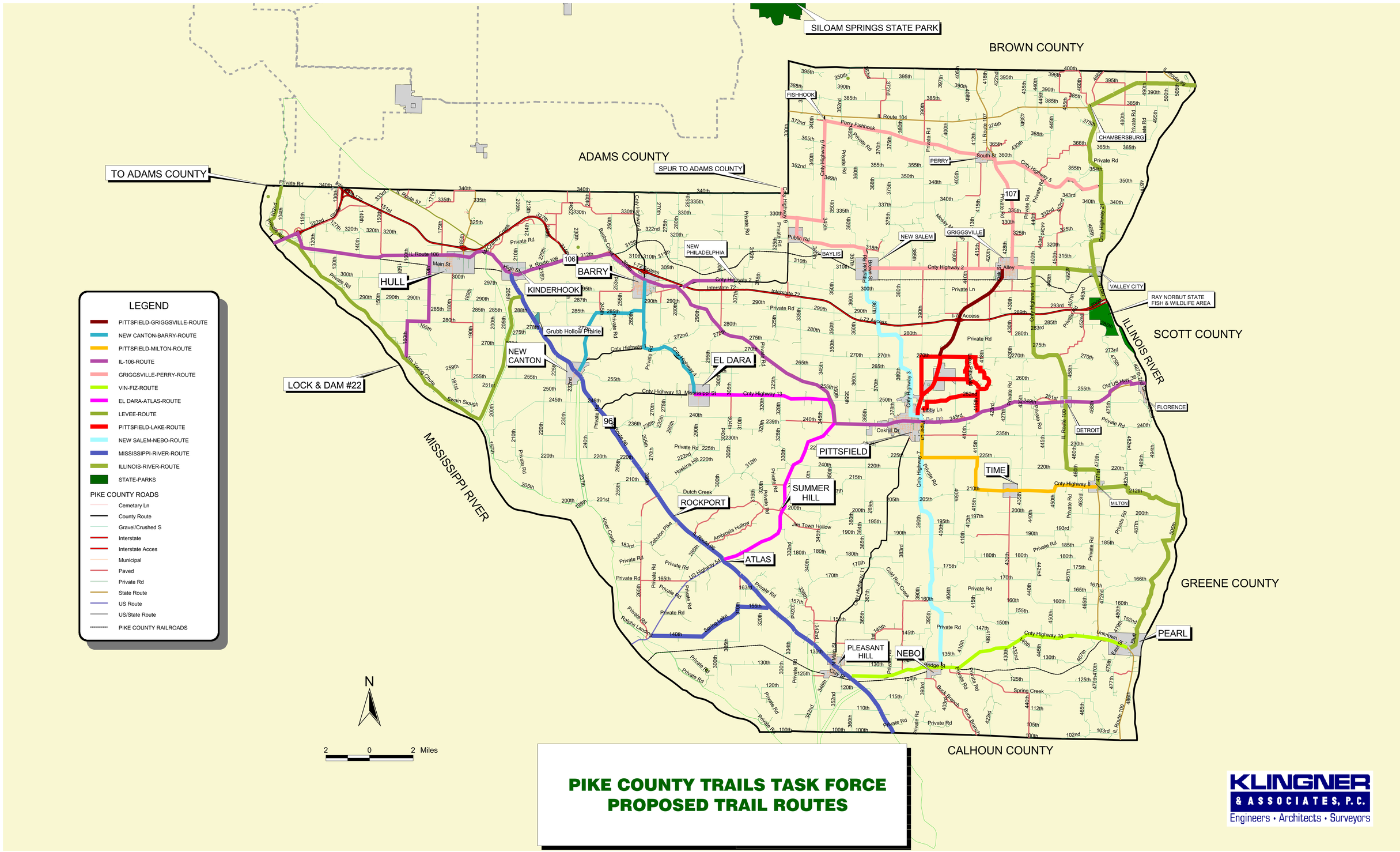
Appendix C

Route Plan


SILOAM SPRINGS STATE PARK
BROWN COUNTY
ADAMS COUNTY
TO ADAMS COUNTY
SPUR TO ADAMS COUNTY
SCOTT COUNTY
GREENE COUNTY
CALHOUN COUNTY
MISSISSIPPI RIVER
ILLINOIS RIVER
LOCK & DAM #22
RAY NORBUT STATE FISH & WILDLIFE AREA
FISHHOOK
CHAMBERSBURG
PERRY
NEW SALEM
GRIGGSVILLE
BAYLIS
NEW PHILADELPHIA
HULL
BARRY
KINDERHOOK
Grubb Hollow Prairie
NEW CANTON
EL DARA
VALLEY CITY
FLORENCE
DETROIT
PITTSFIELD
TIME
MILTON
SUMMER HILL
ROCKPORT
ATLAS
PEARL
PLEASANT HILL
NEBO
106
107
96
LEGEND
PITTSFIELD-GRIGGSVILLE-ROUTE
NEW CANTON-BARRY-ROUTE
PITTSFIELD-MILTON-ROUTE
IL-106-ROUTE
GRIGGSVILLE-PERRY-ROUTE
VIN-FIZ-ROUTE
EL DARA-ATLAS-ROUTE
LEVEE-ROUTE
PITTSFIELD-LAKE-ROUTE
NEW SALEM-NEBO-ROUTE
MISSISSIPPI-RIVER-ROUTE
ILLINOIS-RIVER-ROUTE
STATE-PARKS
PIKE COUNTY ROADS
Cemetary Ln
County Route
Gravel/Crushed S
Interstate
Interstate Acces
Municipal
Paved
Private Rd
State Route
US Route
US/State Route
PIKE COUNTY RAILROADS
N
2 0 2 Miles
PIKE COUNTY TRAILS TASK FORCE
PROPOSED TRAIL ROUTES
KLINGNER & ASSOCIATES, P.C.
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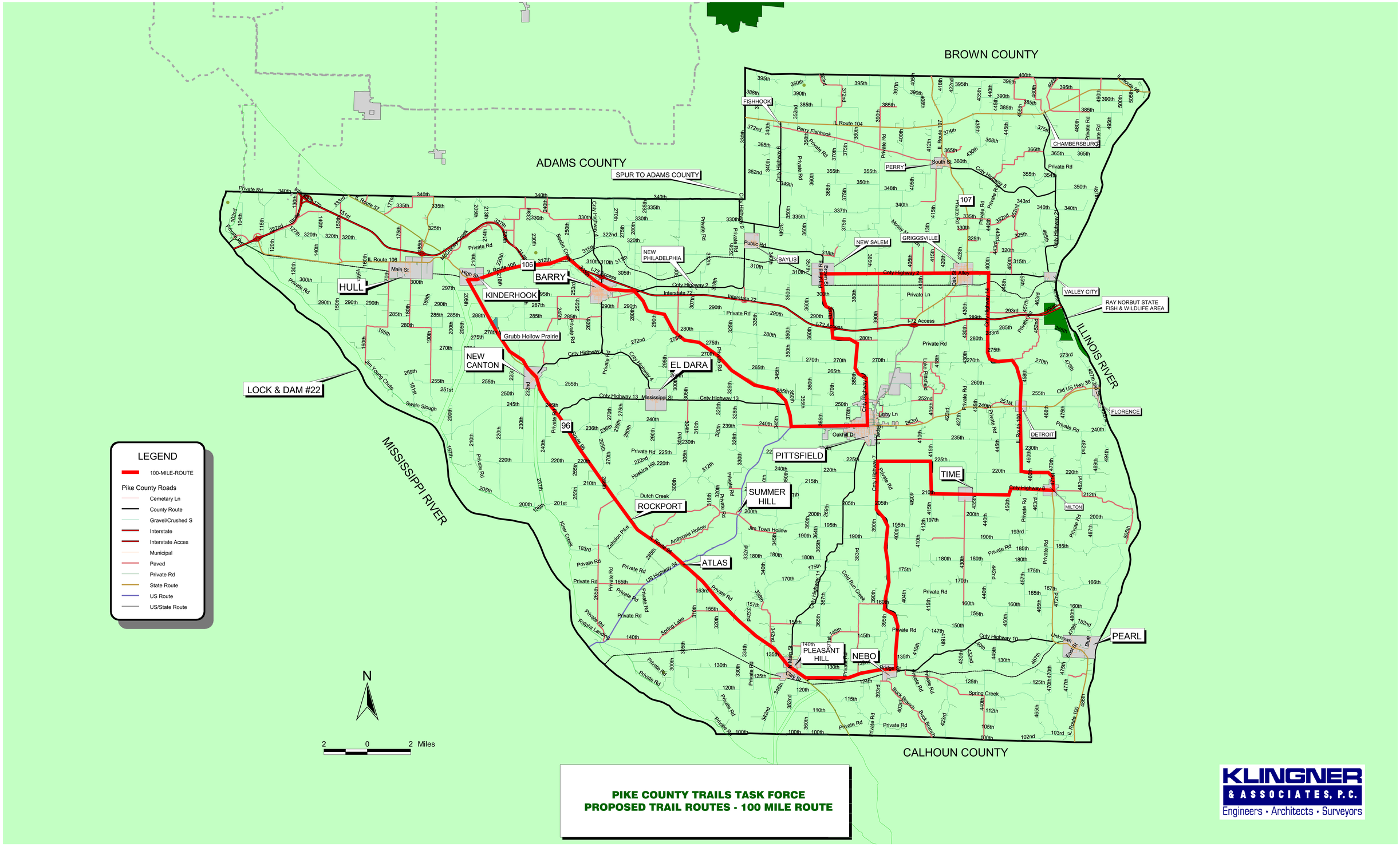

PIKE COUNTY TRAILS TASK FORCE
PROPOSED TRAIL ROUTES - 100 MILE ROUTE

KLINGNER & ASSOCIATES, P.C.
Engineers • Architects • Surveyors

Appendix D

Lake Pittsfield Route &

Estimated Cost Options

PITTSFIELD LAKE

FULL SIZED PLANS HAVE BEEN PREPARED USING STANDARD SCALES. REDUCED SIZED PLANS MAY NOT CONFORM TO STANDARD SCALES. USE GRAPHIC SCALES WHEN MAKING MEASUREMENTS ON REDUCED PLANS.

KLINGNER & ASSOCIATES, P.C.
Engineers • Architects • Surveyors
616 North 24th Street, Quincy, IL Ph: (217)223-3670 - Fax: (217)223-3803
4510 Potts Gravel Road, Hannibal, MO Ph: (573)221-0020 - Fax: (573)221-0012
610 N. 4th Street, Suite 100, Burlington, IA Ph: (319)753-1608 - Fax: (319)753-2605
49 North Prairie Street, Galesburg, IL Ph: (309)342-4042 - Fax: (309)341-3781
Internet Address: www.klingner.com

NO.	APPR.	REVISION DESCRIPTION	DATE
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DESIGNED DCD	DRAWN MKT	CHECK DATE	FILE NAME .
FIELD .	FIELD BOOK .	CHECKED	PROJECT NO. 06-0197

SCALE: 1" = 800'

FULL SCALE DRAWING: 24" x 36"

PIKE COUNTY TRAIL PLAN

PIKE COUNTY TRAIL TASK FORCE
PITTSFIELD, ILLINOIS

DRAWING DATE
8/1/07

SHEET TITLE
PITTSFIELD LAKE CORRIDOR PLAN

SHEET
1 OF 1

KLINGNER & ASSOCIATES, P.C.
Engineers • Architects • Surveyors

Opinion of Project/Construction Costs

Date January 30, 2008 Estimate by DCD

Eng Proj # 06-0197 Checked by

Client	Project
PIKE COUNTY TRAILS TASK FORCE	PITTSFIELD LAKE CORRIDOR

NO	ITEM DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
	PITTSFIELD LAKE CORRIDOR				
1	**260th Avenue Resurface (A-2 oil and chip) Min. 28' Width**				
	Aggregate Base Course (3")	4,177	TON	$ 22.00	$ 91,894.00
	Prime MC-30	6,440	GALLONS	$ 2.75	$ 17,710.00
	PG 52-28	15,280	GALLONS	$ 1.90	$ 29,032.00
	CA-16 Chips	610	TON	$ 40.00	$ 24,400.00
	Traffic Control	2	MILE	$ 3,000.00	$ 4,500.00
				SUBTOTAL	$ 167,536.00
2	**Signs (MUTCD Standards)**				
	Bicycle Warning Sign (W11-1)	13	Each	$ 50.00	$ 650.00
	Share the Road (W16-1)	13	Each	$ 50.00	$ 650.00
	Bike Route Sign (D11-1)	11	Each	$ 50.00	$ 550.00
	Arrow Sign (M7-1)	7	Each	$ 40.00	$ 280.00
	Arrow Sign (M7-2)	5	Each	$ 40.00	$ 200.00
	Type A Sign Post	20	Each	$ 40.00	$ 800.00
				SUBTOTAL	$ 3,130.00
			CONSTRUCTION SUBTOTAL		$ 170,666.00
			CONTINGENCY		$ 17,066.60
			CONSTRUCTION TOTAL		$ 187,732.60
	Includes 3" of aggreate base course on 260th Ave. and requires a minimum of 28' road width for shared				
	roadway. Does not include paved shoulder or drainage appurtenances that may be necessary on				
	US Route 54				

( ) 616 N. 24th Street Quincy, IL Phone (217) 223-3670 Fax (217) 223-3603
( ) 4510 Paris Gravel Road , Hannibal, MO Phone (573) 221-0020 Fax (573) 221-0012

Form 450 Updated 11/13/06

Appendix E

Safety Issues

SAFETY ISSUES

SAFETY WAS ONE OF THE MAIN FACTORS UTILIZED IN THE IDENTIFICATION OF PROPOSED BIKEWAY ROUTES THROUGHOUT THE COUNTY. THE FOLLOWING SAFETY CONCERNS WERE CONSIDERED IN THE ROUTE PLAN:

1. VEHICULAR TRAFFIC COUNT– LOW TRAFFIC COUNT ROADS ARE MORE DESIRABLE FOR THE BIKEWAY SYSTEM THAN HIGH TRAFFIC COUNT ROADS AND HIGHWAYS.
2. SPEED– ROADS WITH SPEED LIMITS OF 55 MPH AND LESS WERE GIVEN PREFERENCE OVER HIGHER SPEED ROADS.
3. GRADIENT & VISIBILITY– STEEP ROADS AND ROADS WITH EXCESSIVE CURVATURE OR LOW VISIBILITY WERE GIVEN A LOWER PRIORITY.
4. DEAD END ROADS WERE AVOIDED.
5. TRAIL HEADS ARE PROPOSED WITHIN COMMUNITIES WITH PUBLIC FACILITIES AVAILABLE.
6. SIGNS– SHARE THE ROAD SIGNS AND BIKE ROUTE SIGNS WOULD REMIND DRIVERS TO SHARE THE ROAD. ADEQUATE PAVEMENT WIDTH SHOULD BE PROVIDED BEFORE SIGNING ROADS AS SHARED ROADWAYS.
7. PAVED SHOULDERS AND STRIPED BIKE LANES ARE PROPOSED WHERE POSSIBLE TO PROVIDE FOR TRAFFIC SEPARATION.
8. NEW DRAINAGE INLET GRATES ON DESIGNATED ROUTES SHOULD BE BICYCLE FRIENDLY.
9. NEW BRIDGES OR BRIDGE REPLACEMENTS ON DESIGNATED ROUTES SHOULD INCLUDE A BIKE LANE.
10. INTERSECTIONS AND HIGHWAY CROSSINGS SHOULD BE PROPERLY SIGNED, MARKED AND/OR SIGNALED AT PROPOSED BIKEWAY CROSSINGS.

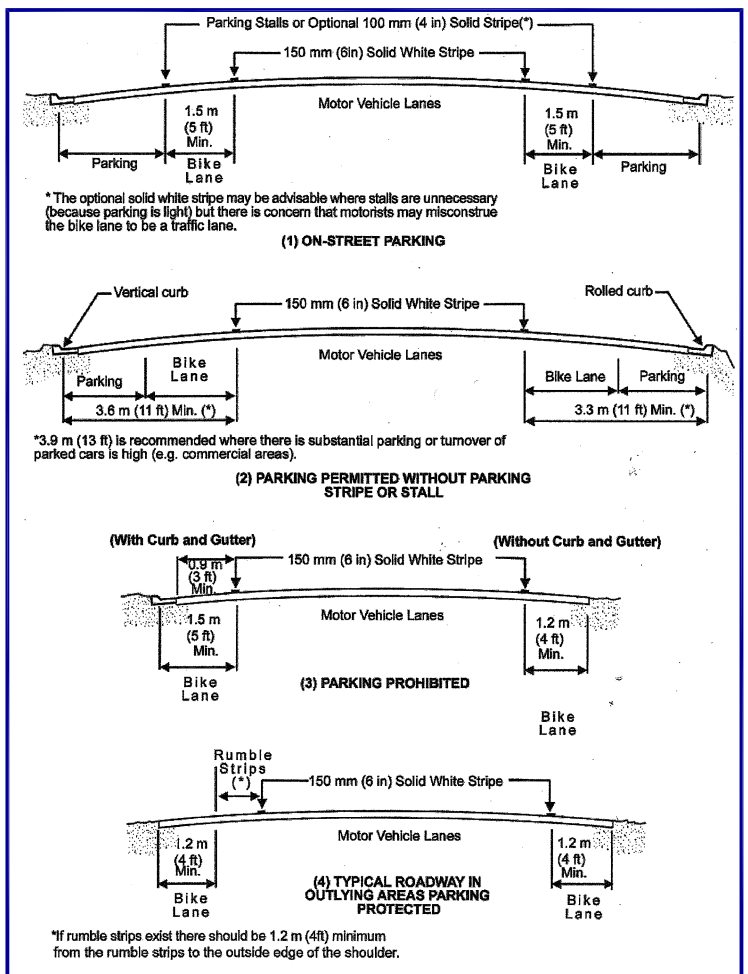
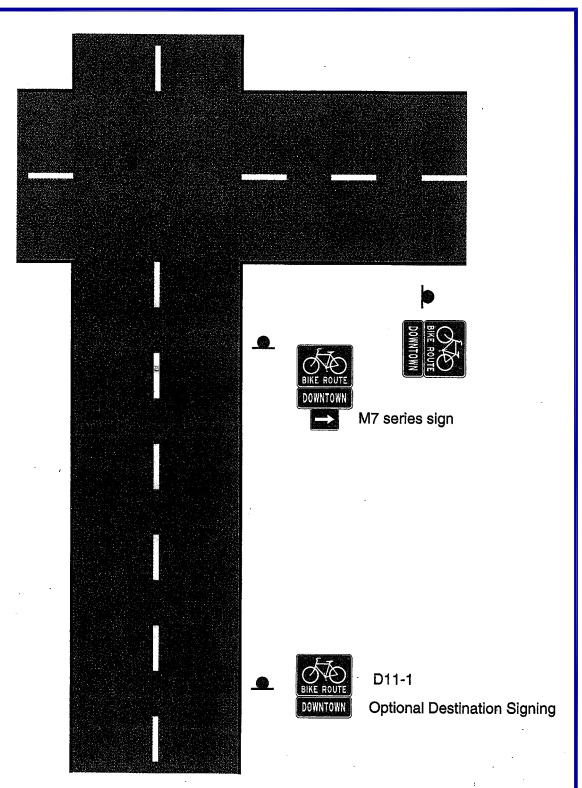


Figure 6. Typical Bike Lane Cross Sections



In urban areas, signs should be placed every 500 m (approx. 1/4 mile), at every turn, and at all signalized intersections.

Figure 4. Typical Signed Shared Route Signing

Pike County
Illinois

KLINGNER & ASSOCIATES, P.C.
Engineers / Architects

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Appendix F

Types of Bikeways/Trails & Construction Cost Estimates

TYPES OF BIKEWAYS & TRAILS

PROPOSED LEVEE TRAIL

TYPICAL MULTI-USE TRAILS

SEPARATE MULTI-USE TRAIL

TYPICAL SHARED ROADWAY

TYPICAL SHARED ROADWAY W/PEDESTRIAN SIDEWALK

SHARED ROADWAY

TYPICAL PAVED SHOULDER

TYPICAL STRIPED BIKE LANE

STRIPED BICYCLE LANE

Pike County
Illinois

KLINGNER
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KLINGNER & ASSOCIATES, P.C.
Engineers • Architects • Surveyors

Opinion of
Project/Construction Costs

Date *March 21, 2007* Estimate by *DCD*

Eng Proj # *06-0197* Checked by

Client	Project
PIKE COUNTY TRAILS TASK FORCE	PIKE COUNTY TRAIL PLAN

NO	ITEM DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
1	**PAVED SHOULDER**				
	Earth Excavation for Widening	1,623	CU. YDS.	$ 35.00	$ 56,805.00
	Paved Shoulder Including Aggregate Base Course	5,867	SQ. YDS	$ 35.00	$ 205,345.00
	Pavement Striping	1	MILE	$13,200.00	$ 13,200.00
	Traffic Control	1	MILE	$ 3,000.00	$ 3,000.00
				COST PER MILE	$ 278,350.00
2	**SEPARATE MULTI-USE TRAIL**				
	10-Foot Wide Multi-Use Trail (including trail heads,	1	FOOT	$ 130.00	$ 130.00
	shoulders, signs, and bridges)				
				COST PER MILE	$ 686,400.00
3	**STRIPED BIKE LANES ON EXISTING PAVEMENT**				
	Striped both sides with "Bike Lane" Verbiage	1	MILE	$20,000.00	$ 20,000.00
				COST PER MILE	$ 20,000.00
4	**SIGNED SHARED ROADWAY**				
	Signs at 1/4 Mile Intervals	1	MILE	$ 1,600.00	$ 1,600.00
				COST PER MILE	$ 1,600.00
	Cost Opinions Do NOT Include Right-of-Way Purchase, Earthwork, or Drainage Items				

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Form 450 Updated 11/13/06