



POCAHONTAS COUNTY, IOWA

TRAILS MASTER PLAN

Accessibility + Connectivity + Opportunity

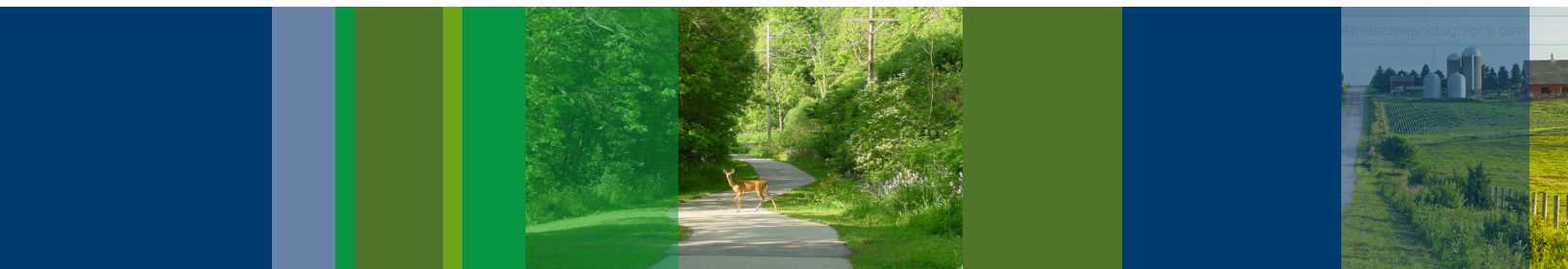


TABLE OF CONTENTS

ACKNOWLEDGMENTS	Page 1
INTRODUCTION	Pages 2
EXPECTED BENEFITS	Page 3
EXISTING CONDITIONS: TRAILS	Page 4-5
EXISTING CONDITIONS	
Parks + Recreational Space	Page 6
Pocahontas County Amenities	Page 7
Fonda Amenities	Page 8
Gilmore City Amenities	Page 9
Havelock Amenities	Page 10
Laurens Amenities	Page 11
Palmer Amenities	Page 12
Plover Amenities	Page 13
Varina Amenities	Page 14
Rolfe Amenities	Page 15
Pocahontas Amenities	Pages 16-17
WATERWAYS OF POCAHONTAS COUNTY	Page 18
ROADWAY + TRANSPORTATION	Page 19
ANALYSIS	
Benefits + Barriers	Pages 20-21
Survey Results	Pages 22-23
TRAIL STRUCTURE	
Design Standards	Page 24
Trail Types	Page 25
PLANNED TRAILS: GRAND VISION	Pages 26-27
PRELIMINARY COST STUDY	Pages 28-29
COMMUNITY IMPROVEMENT	Pages 30-31
FUNDING OPPORTUNITIES	Pages 32-35
REFERENCES + RESOURCES	Page 36

ACKNOWLEDGMENTS

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POCAHONTAS COUNTY TRAILS COMMITTEE

INTRODUCTION

Pocahontas County is located in northwestern Iowa and has a population of 7,310. The County is very rural with the prime industry being agriculture. In the County there are less than six miles of developed trails. With so few trails available, the Pocahontas County Hometown Pride group has identified trail expansion as a need. It was decided that the first step to take was to develop a County-wide trails master plan. The Pocahontas County Trails Master Plan is a twenty-five year vision of trail development. The plan identifies eight priority corridors consisting of more than 35 miles of bike trails or paved shoulders.

PLANNING PROCESS Working with the communities is important to the overall success for the trails master plan's implementation and usage. A County Trails Committee was established with a representative from each community. The representatives offered a variety of different perspectives on trail needs and wants and were able to identify tasks that could be established and reasonably met for the overall betterment of the County as well as economic stability of the affected areas.

The Pocahontas County Trails Committee, along with representatives of ISG and MIDAS Council of Governments, met six times over an eleven month period. During this time, each of the Pocahontas County Trails Committee representatives reached out to communicate with communities, incorporating residents to the planning process of the

Pocahontas County trails system by their comments and concerns, helping shape the vision of the plan's final design and project phasing. While working primarily as liaisons to their own communities, the Pocahontas County Trails Committee functioned democratically under the interests of their own constituents and alongside each other to fuse the many ideas coming together to better benefit the entire County through recreational trails and opportunities. An inventory was completed of existing trails within the County, community amenities, and trails in surrounding counties. A trails

survey of individuals living in Pocahontas County was also conducted during this time. The project used surveys, meetings, and past plans to inspire and lead the Pocahontas County Trails Committee to develop the best solution.

COUNTY TRAILS VISION The Pocahontas County Trails System will be an accessible trails network used by people of all ages and abilities for recreation and transportation and serve as an economic development tool for the County. The system offers connection to developed areas and attractions within the County, providing opportunities for appreciation of nature, increasing recreational opportunities, and connecting the County to the greater region.



Goals

- Complement the regional trails plan
- Improve physical activity and health
- Increase trail use for local economy
- Connect existing communities and features
- Connect to existing trails and neighboring counties

Objectives

- Complete trail projects within the next 25 years
- Increase use of trails
- Promote trail use and tourism
- Give priority to trails located on land already owned by local governments
- Promote local community involvement to provide supplemental services
- Provide a safe, alternative form of transportation
- Increase community involvement in trail development and maintenance
- Provide multi-purpose trails
- Provide educational opportunities by learning about nature along the trails
- Utilize plan to apply for grants

EXPECTED BENEFITS

As trails have gotten more popular throughout the United States, several studies have been conducted on the general results of trails being implemented. These benefits vary in size but affect communities with even the smallest trail. Towns and cities that build trails see the biggest impacts in economics, quality of life, community identity, health, and sustainability. The cost of establishing a trail system goes beyond the walking paths they provide users.

ECONOMIC IMPACT Studies have shown that local implementation trails boost even the smallest communities economically (as seen in the research by the USDA, Rails-to-Trails Conservancy, and American Trails). The USDA states that trails are an “economic boon” to spur development, raising property value, tourism, and general economic revitalization of local businesses. In many cases, trails improve the value of nearby properties, while trail-goers increase spending at nearby stores. New trails can also facilitate demand for housing and new businesses, generally increase tax revenues, influence the location of new and relocating companies, and bring an influx of trail-traveling visitors to the region. Studies of economic impacts from recreation biking in Iowa have estimated that cyclists spend \$365 million annually on biking trails, equipment, and other trail goods and services.

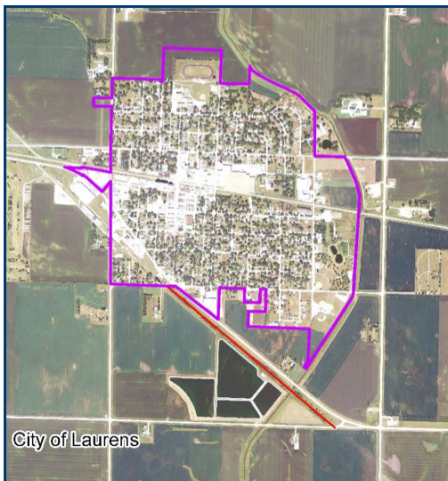
HEALTH BENEFITS The World Health Organization recommends that adults participate in 150 minutes of moderate-vigorous physical activity each week, and trails present a fun, low-cost form of exercising through walking, biking, and jogging. Physical activity is proven to reduce stress, enhance sleep patterns, and promote a more positive mental outlook. Increased physical activity is also known to prevent and reduce the severity of serious illnesses such as diabetes, asthma, obesity, stroke, and a number of cancers and heart diseases. By reducing these illnesses, cities that have promoted trail usage and cycling have seen a great reduction in total cost of health care.

ENVIRONMENTAL BENEFITS Trails help preserve a clean environment for recreation, transportation, and opportunities to improve the quality of life and general welfare of those to which they are accessible. By increasing alternative transportation opportunities, the need to drive vehicles decreases. Less driving means less carbon dioxide (CO₂) is released, which normally damages the natural environment. The reduction can also limit the amount of costly gasoline damaging the lining of citizen wallets. The Rails to Trails conservancy estimates the reduction of 28 million tons of CO₂ and possibly more than \$8,500 per year for a single vehicle by just walking or biking to destinations.

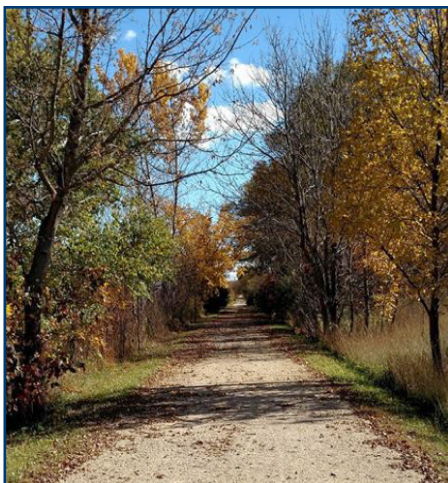
EXISTING CONDITIONS: TRAILS

Laurens Prairie Preservation Trail, Sportsman's Park Trail, Sunset Ridge Trail, Straight Park Trail, and the Three Rivers Trail all currently reside in Pocahontas County.

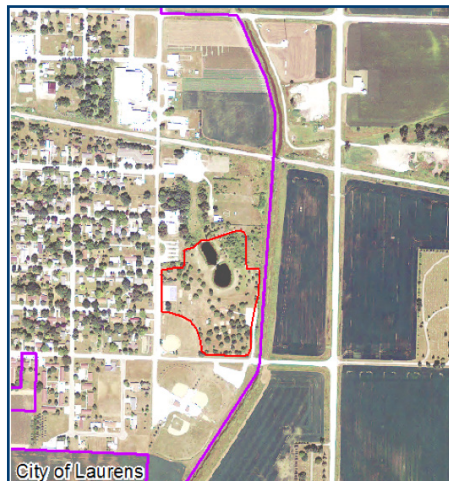
Laurens Prairie Preservation Trail



Laurens Prairie Preservation Trail runs through the southeastern side of the City of Laurens. The City owns and maintains the trail which is approximately .8 of a mile in length with a width of 8-10 feet. The surface of the trail is crushed limestone. The trail's intersection with Highway 10 poses a barrier for trail users.



Sportsman's Park Trail



Sportsman's Park Trail loops around Sportsman Park, giving it its name. The trail is located on the eastern side of Laurens adjacent to South East Street and East Veterans Road. Maintained and owned by the City, the trail measures out to just over half a mile in length with a width of 8-12 feet. The trail is surfaced by crushed limestone.



Sunset Ridge Park Trail



Located in Rolfe near Marcum Avenue and Broad Street, Sunset Ridge Park features a memorable structure and pond. Sunset Ridge Trail loops around its pond for a length about .22 of a mile with a width of 7 feet. The trail surface is crushed limestone.



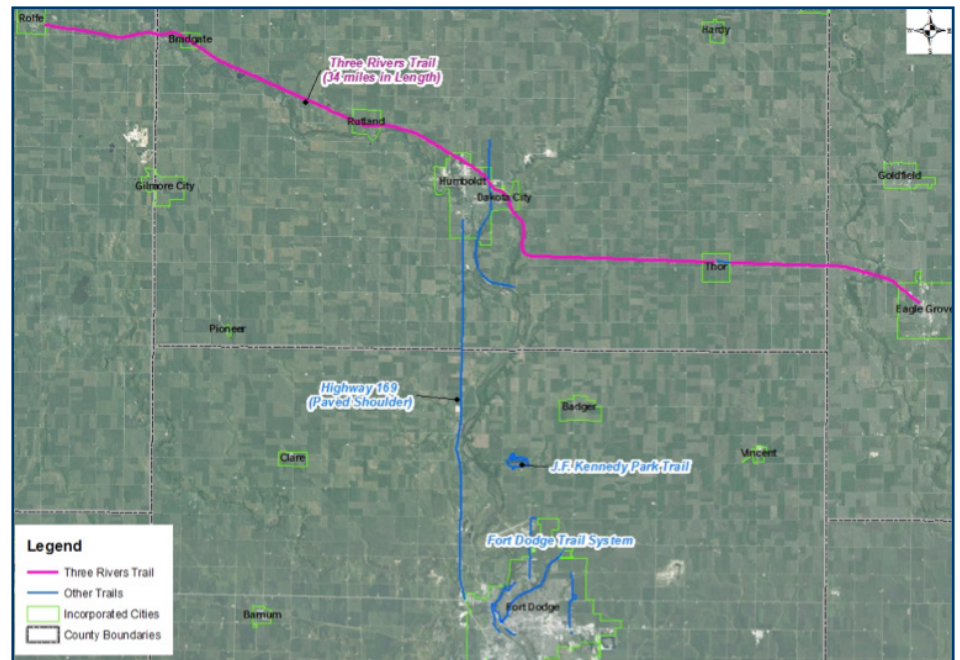
Straight Park Trail



Circling around Lake Marvin in Fonda, Straight Park Trail measures about .23 of a mile in length and 4-5 feet wide with a gravel surface. Located by Lake Street and South Main Street, Straight Park Trail has a fire pit, cabins, campgrounds, and of course, Lake Marvin.



Three Rivers Trail

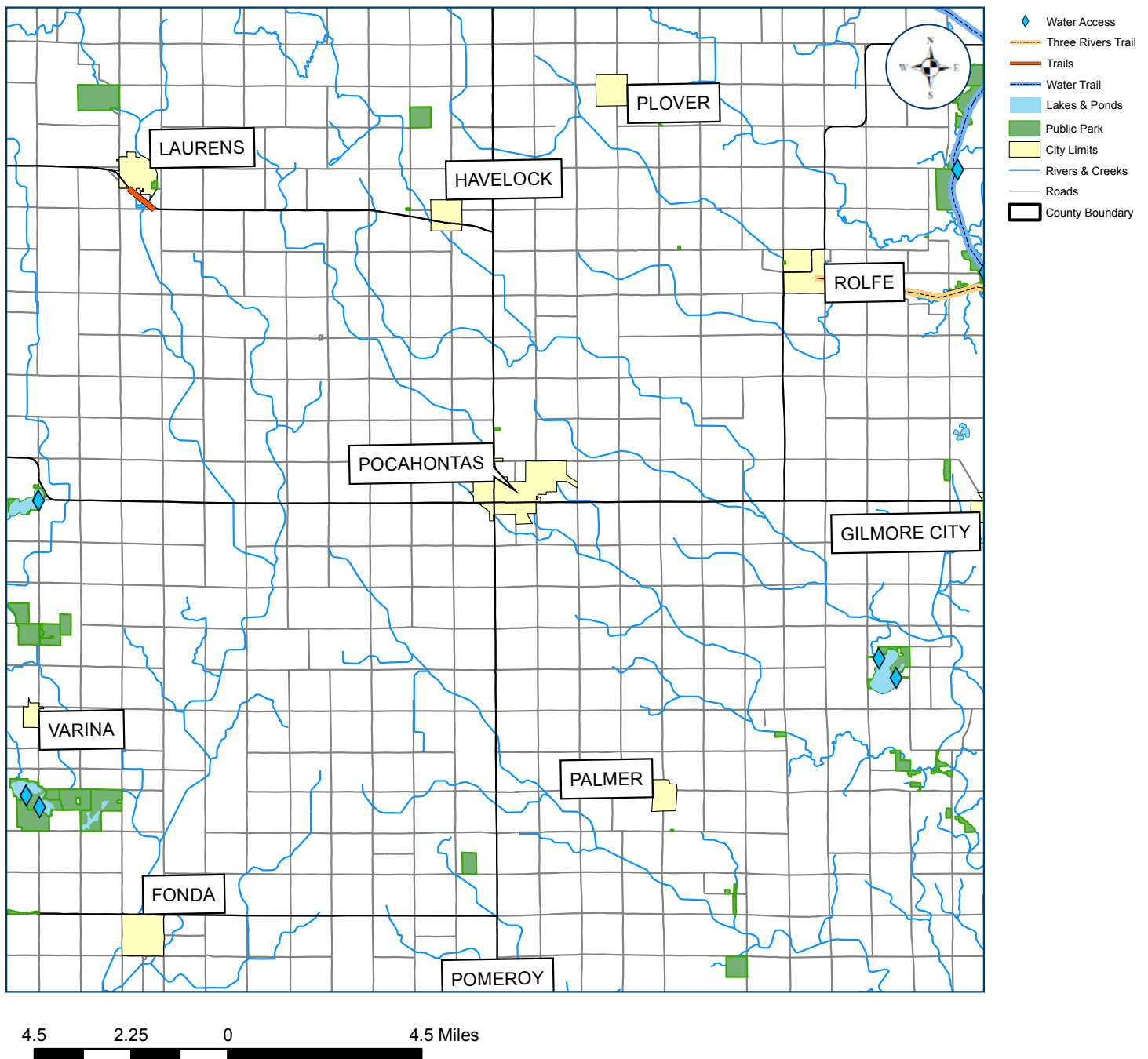


Three Rivers Trails is the only existing Multi-County Trail in Pocahontas County. This trail begins in Wright County, crosses Humboldt County, and ends in Pocahontas County. The trail weaves through the cities of Eagle Grove, Thor, Dakota City, Humboldt, Rutland, Bradgate, and ends on the east side of Rolfe. Totalling 34.33 miles long at a consistent 8 foot width, the Three Rivers Trail faces barriers at each road crossing occurring approximately every mile. The trail is surfaced by crushed limestone and supports both pedestrians and bicyclists.



EXISTING CONDITIONS: PARKS + RECREATIONAL SPACE

Pocahontas County has several public parks, wetlands, and conservation areas.



EXISTING CONDITIONS: POCAHONTAS COUNTY AMENITIES



Meredith Park (3)



Melson County Park (8)



Lizard Lake County Park (10)

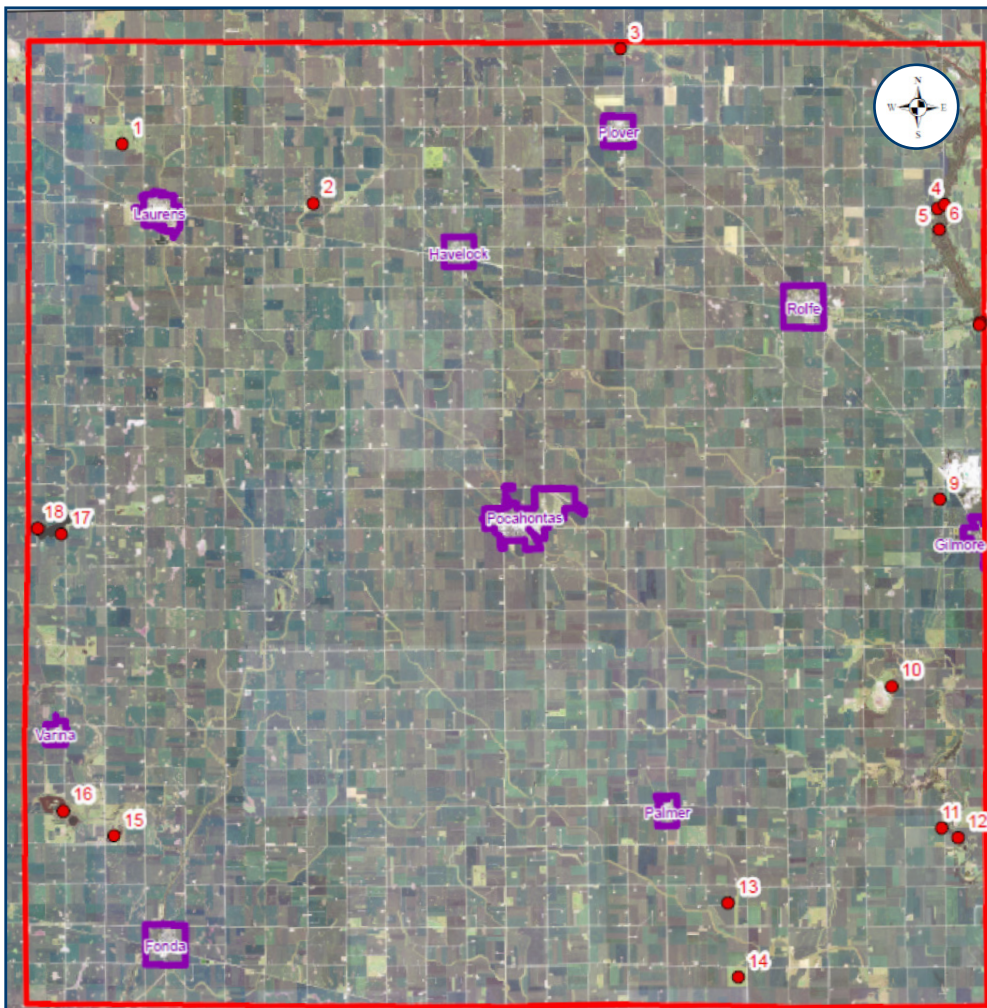


Coopers Cove County Park (11)

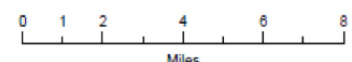


Wiegert Prairie Farmstead (13)

There are various amenities and sites that may be of interest to trail users. Pocahontas County is home to a wide range of preserves, wetlands, parks, and historic sites. Trail goers may wish to enjoy the rich natural environment in locations like Cooper's Cove or the Kalsow Prairie State Preserve. Tourists and education-seeking trail users may wish to enjoy the history behind Old Rolfe and the Wiegert Prairie Farmstead.



1. Swan Lake
2. Deadman's Gulch
3. Meredith Park
4. Hams Wildlife Area
5. Old Rolfe
6. Schlensig Wildlife Area
7. Steam's Woods
8. Melson County Park
9. Moore Recreation Area
10. Lizard Lake County Park
11. Cooper's Cove County Park
12. Whitetail Ridge
13. Wiegert Prairie Farmstead
14. Kalsow Prairie State Preserve
15. Shimon Marsh
16. Sunken Grove Management Area
17. Little Clear Lake Wildlife Area
18. Little Clear Lake Park



EXISTING CONDITIONS: FONDA AMENITIES



North Park's
Playground (3)



Fonda Pool (4)



Fonda Arts Center (8)



Fonda Museum (16)

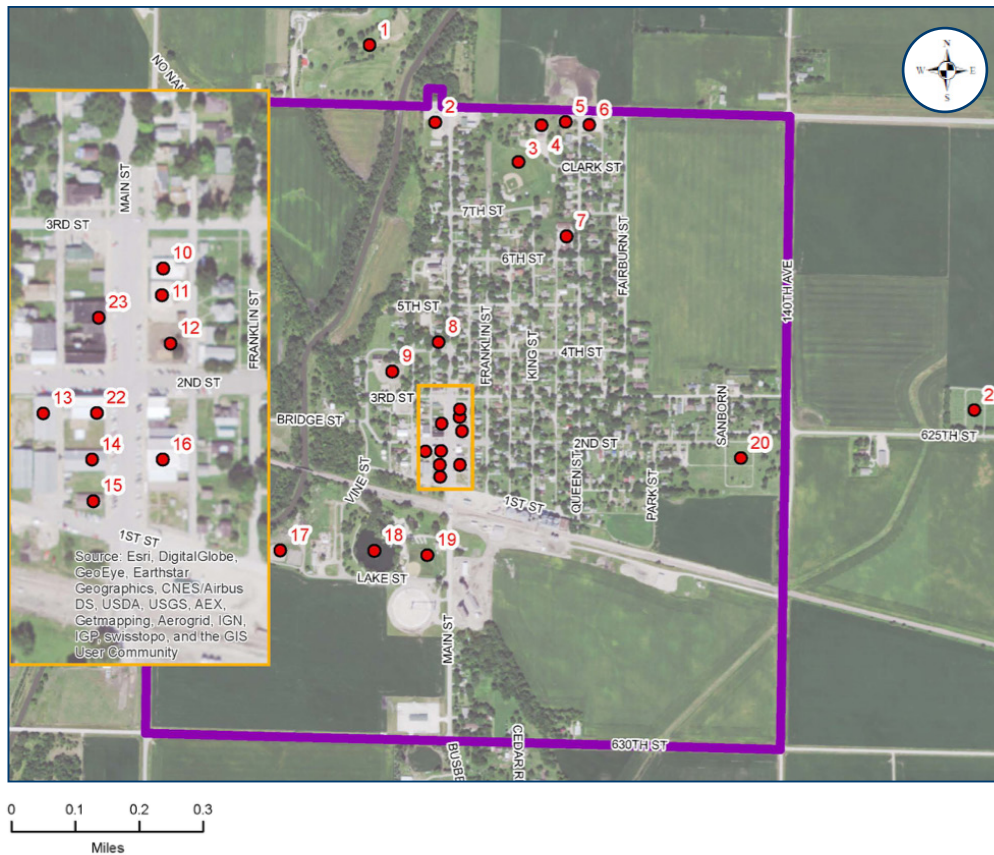


Lake Marvin (18)



Straight Park
Campground (19)

Fonda has something for everyone and all age groups including a peaceful afternoon on the shores of Lake Marvin, swim in the municipal pool, meal at Weinzel's Bar and Grill, cookout at North Park, and step back in time at the Fonda Museum. Trail users may enjoy Fonda's local golf course, play catch at North Park's baseball diamond, and enjoy refreshments at the Highway 7 Café.

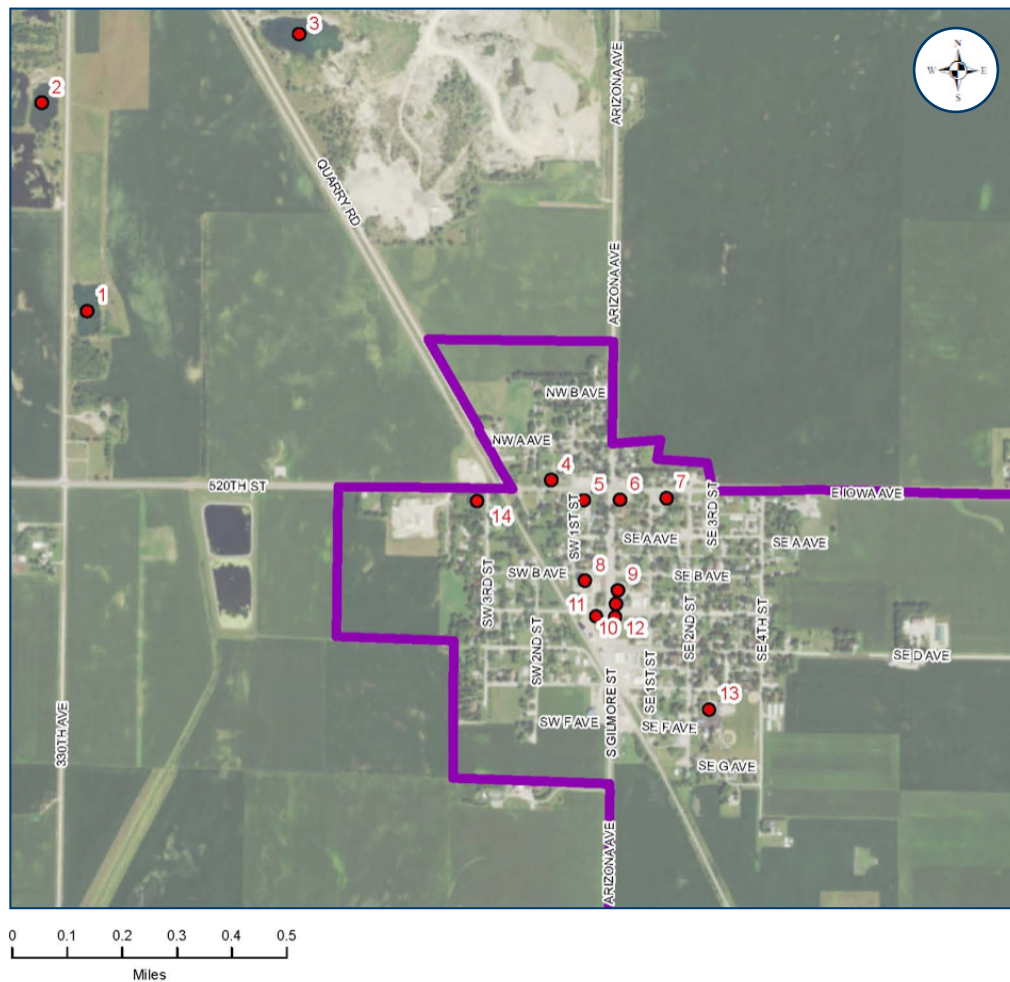


1. Golf Course
2. Casey's
3. North Park
4. Fonda Pool
5. Highway 7 Cafe
6. Fire/EMS Station
7. Fonda Nursing + Rehabilitation
8. Fonda Arts Center
9. School Memorial Park
10. Post Office
11. First Community Bank
12. Central Park
13. Public Library/Community Room/City Hall
14. Knights of Columbus Hall
15. Unity Point Clinic
16. Fonda Museum
17. City Fairgrounds
18. Lake Marvin/Campground
19. Straight Park
20. Cedar Township Cemetery
21. Mt. Zion Cemetery
22. Weinzel Bar + Grill
23. Rube and Son's Consignment Shop

EXISTING CONDITIONS: GILMORE CITY AMENITIES

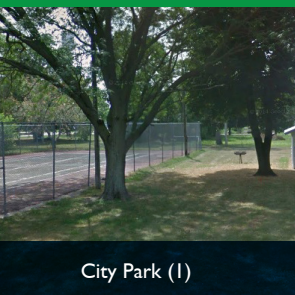


Gilmore City, Iowa's Limestone Capital, is located in Humboldt and Pocahontas County. There are two parks, the Bruce Torkelson Art Barn, several quarry ponds, and scenic locations within and near the City. P&J's Café, the County Line Tap, and Casey's General Store offer food and beverages for trail user looking to take a break.



1. Cemetery Pond
2. Quarry Ponds
3. Main Quarry Pond
4. Bruce Torkelson Art Barn
5. Co-Op Service Station
6. Gilmore City Library
7. Casey's General Store
8. City Park
9. Mural
10. P&J's Cafe
11. Old Library Building
12. County Line Tap
13. Elementary School Park
14. Sunset Park

EXISTING CONDITIONS: HAVELOCK AMENITIES



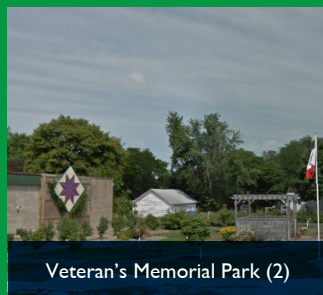
City Park (1)



City Park Playground (1)



City Park Playground (1)

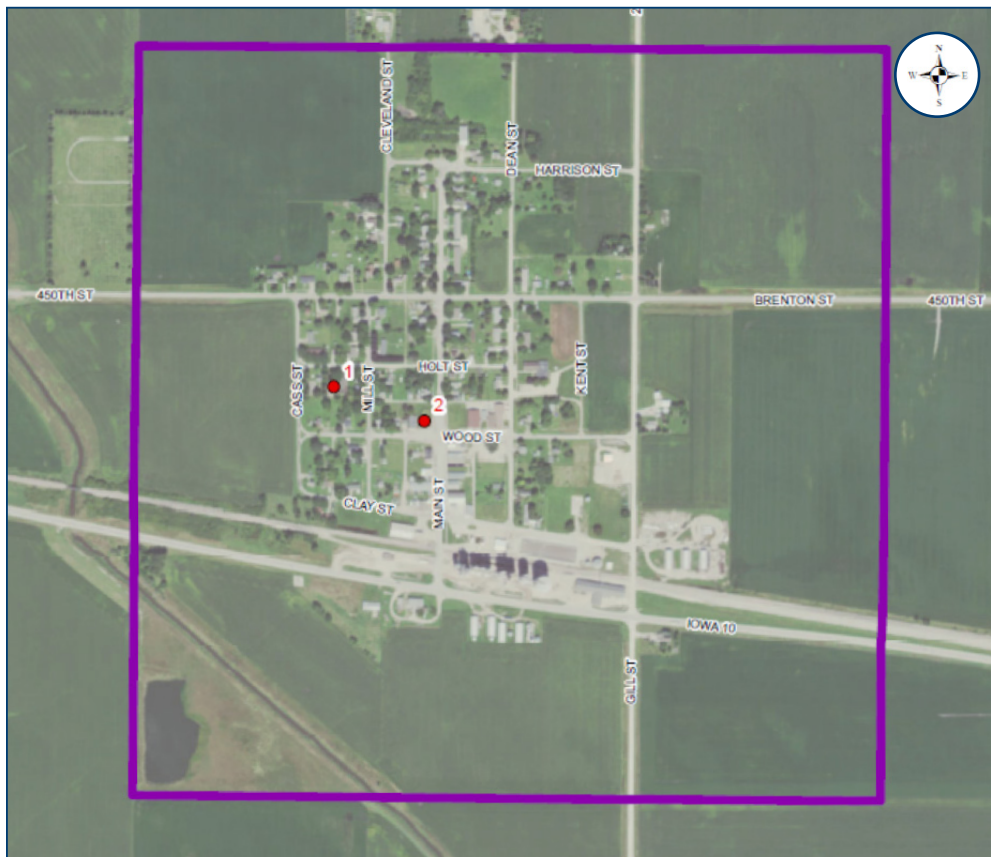


Veteran's Memorial Park (2)

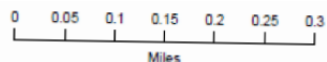


Mural

Named after Sir Henry Havelock, Havelock is a small city with two parks that include playground equipment, tennis courts, and shelter areas. Trail users and visitors may enjoy these kid-friendly, safe parks for recreation, or to stop and enjoy lunch.



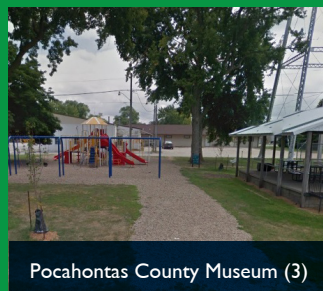
1. City Park
2. Veteran's Memorial Park



EXISTING CONDITIONS: LAURENS AMENITIES



Golf Course (1)



Pocahontas County Museum (3)



Veterans Park (7)

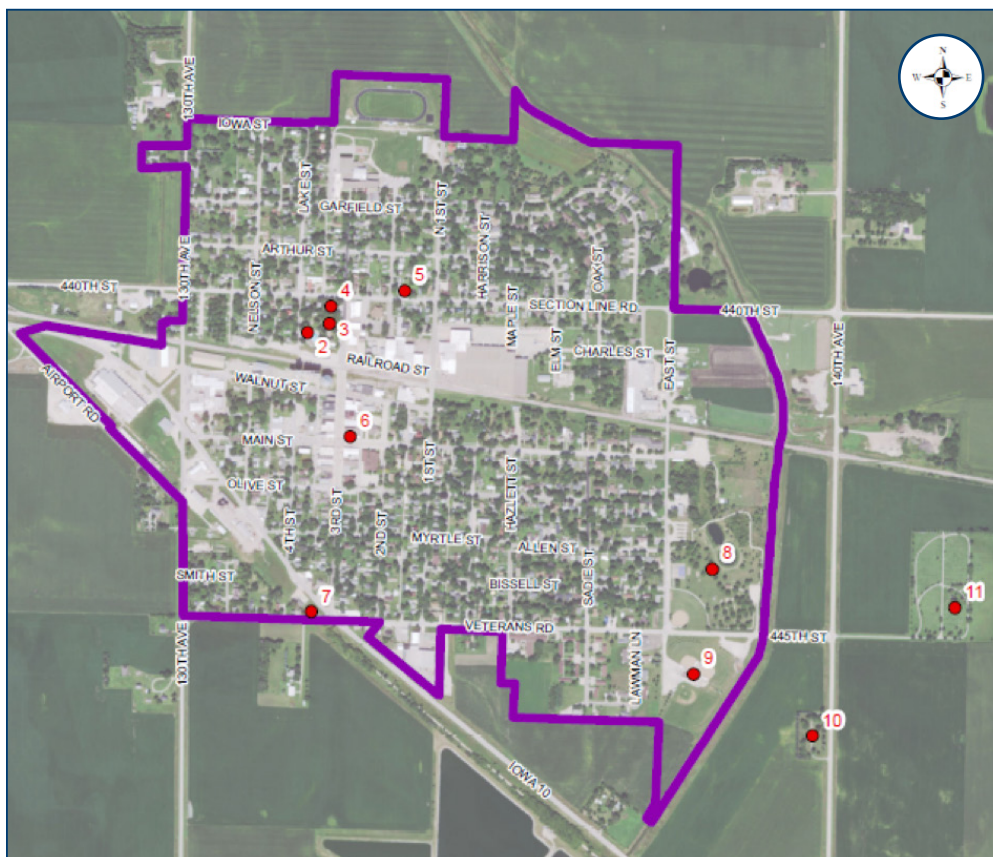


Sportsman's Park (8)



Sportsman's Park (8)

Laurens features many amenities for trail users to explore while they take a break from the day's adventure. Users can visit the City's historic Carnegie Library and City Museum, take a dip in the municipal pool, enjoy time at the local parks, and partake in refreshments from one of the City's restaurants.



1. Golf Course
2. City Park + Pool
3. Pocahontas County Museum
4. Carnegie Library
5. Straight House Historical Marker
6. Lodge Inn
7. Veterans Park
8. Sportsman's Park/Campground
9. Sports Complex
10. Calvary Cemetery
11. Laurens Cemetery

0 0.1 0.2 0.3 0.4 0.5
Miles

EXISTING CONDITIONS: PALMER AMENITIES



Shooting Range (1)



Palmer Library (2)

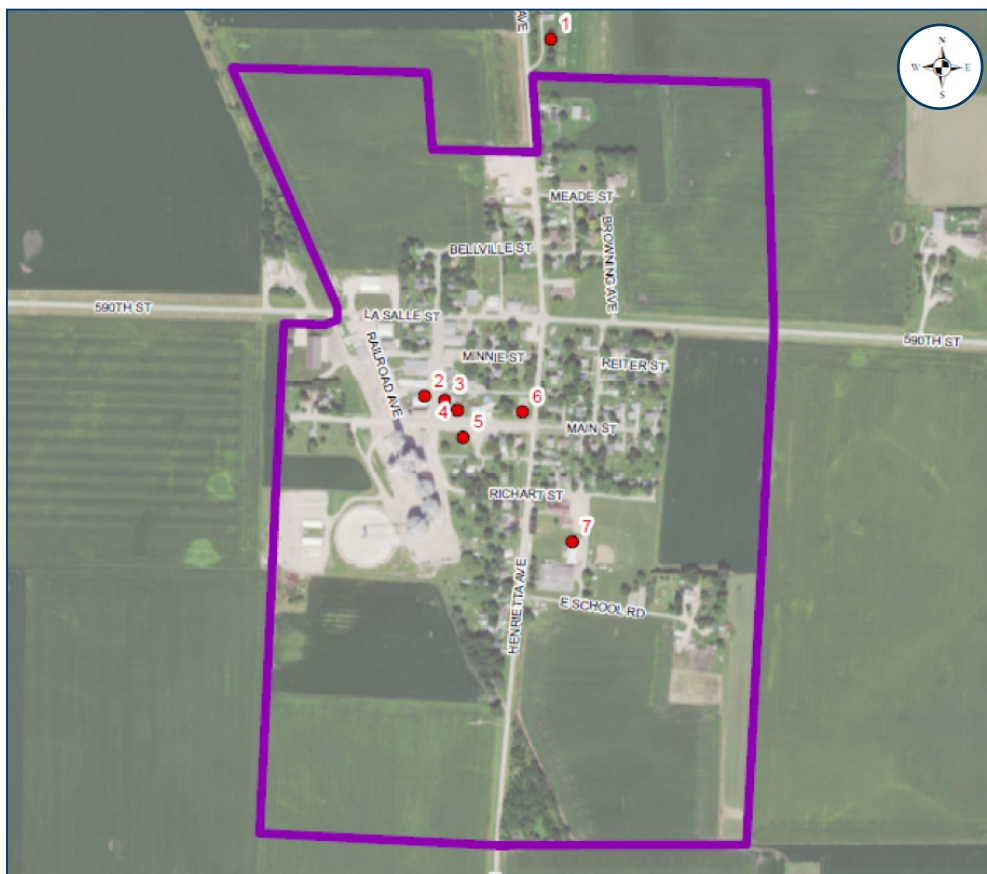


Palmer House (4)

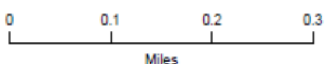


City Park (6)

The City of Palmer offers historical, educational, and recreational opportunities for visitors and trail goers alike. In addition to the City's museum, library, City Park, and local shooting range, trail users may also find a hot meal and break from the sun at the Palmer House.



1. Shooting Range
2. Public Library
3. Dan Stall Museum
4. Palmer House
5. Break In
6. City Park
7. City Hall



EXISTING CONDITIONS: PLOVER AMENITIES



Library (1)



City Park View 1 (2)

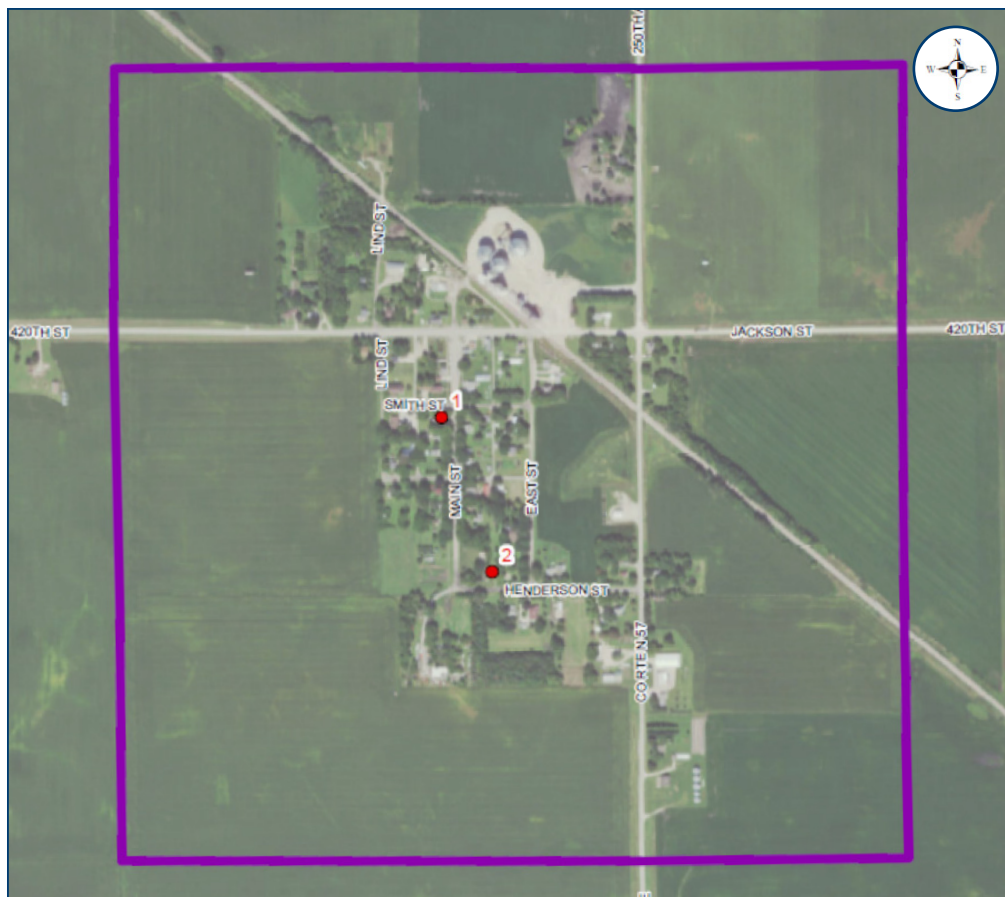


City Park View 2 (2)

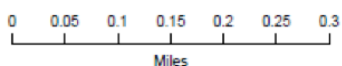


City Park View 3 (2)

Plover invites trail users to stop in and visit its City Park featuring newly installed playground equipment. Here, travelers will find a pleasant place to break from the trail.



1. Public Library
2. City Park



EXISTING CONDITIONS: VARINA AMENITIES



Parish Hall (1)



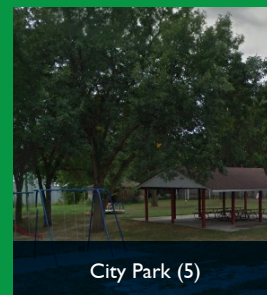
Legion Hall (2)



Fire Station (3)



Public Library (4)

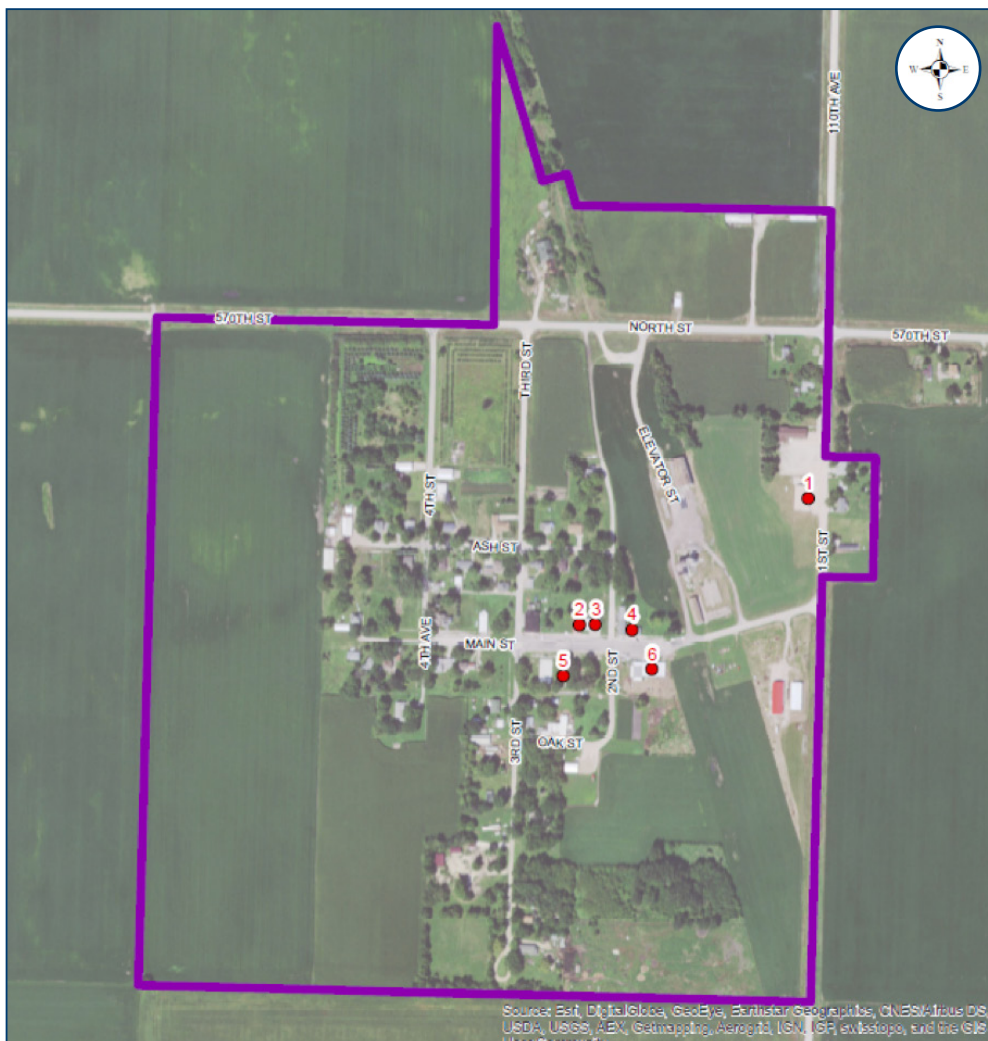


City Park (5)

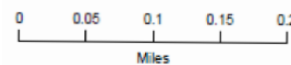


City Park (5)

The City of Varina is Iowa's little town with a big heart. In addition to a public library and City Park, local churches and the Legion Hall warmly welcome trail users to their facilities.



1. Parish Hall
2. Legion Hall
3. Fire Station
4. Public Library
5. City Park
6. Bass Repair



EXISTING CONDITIONS: ROLFE AMENITIES



Swimming Pool (2)



Sunset Ridge Park (3)



Public Library (9)



Wild Faces Art Gallery (14)

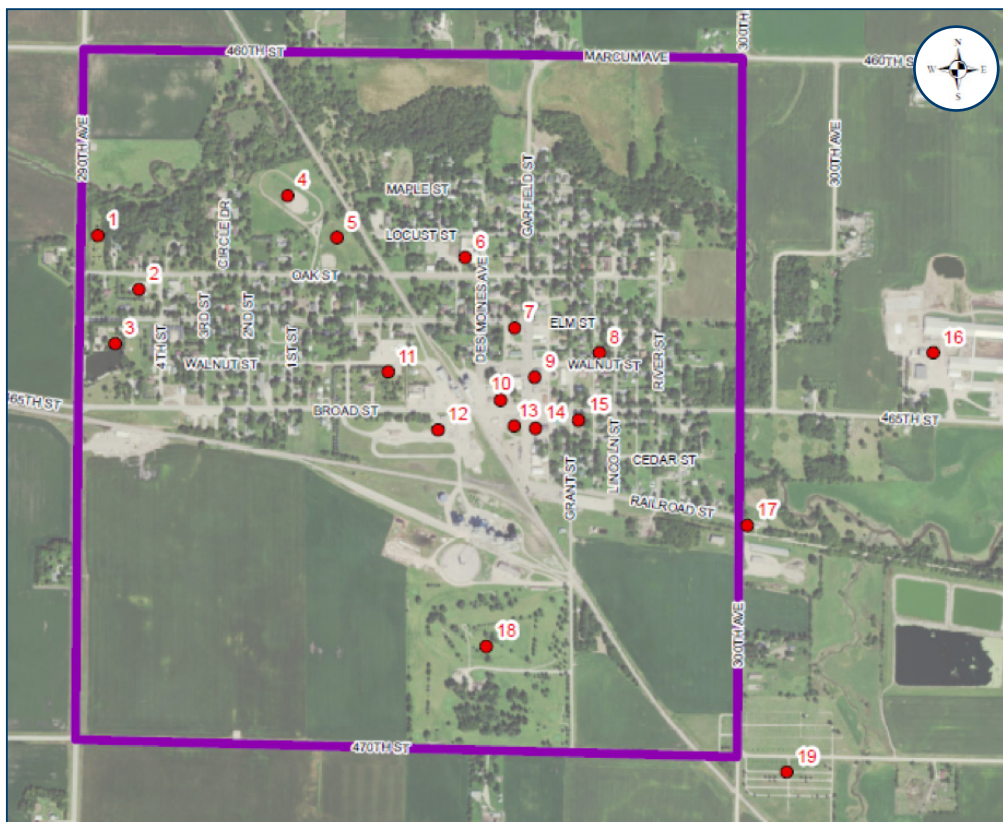


Freedom Rock



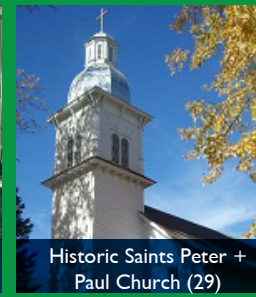
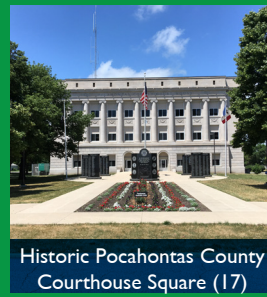
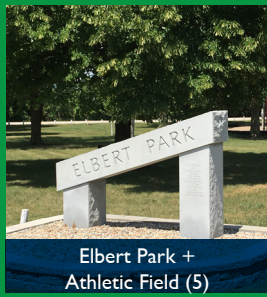
Three Rivers Trail
Trailhead

At the western end of the Three Rivers Trail users will stumble upon the City of Rolfe. Proud home to its own parks and trails, Rolfe offers many amenities that will attract trail users of all ages including a municipal pool, nine-hole golf course, art gallery, and places to eat.



1. Feldman Park
2. Swimming Pool
3. Sunset Ridge Park
4. Rodeo + Saddle Club
5. Bendixen Park
6. Rams Event Center
7. Rolfe Area Market
8. Straight Park
9. City Hall, Public Library, and Community Center
10. Rolfe Veterinary Clinic
11. Bud Barn
12. Heartland Convenience Center
13. Post Office
14. Wild Faces Art Gallery
15. Gazebo Park
16. Dutchland Dairy Corporation
17. Trainhead Park
18. Rolfe Golf Club
19. Clinton-Garfield Cemetery

EXISTING CONDITIONS: POCAHONTAS AMENITIES

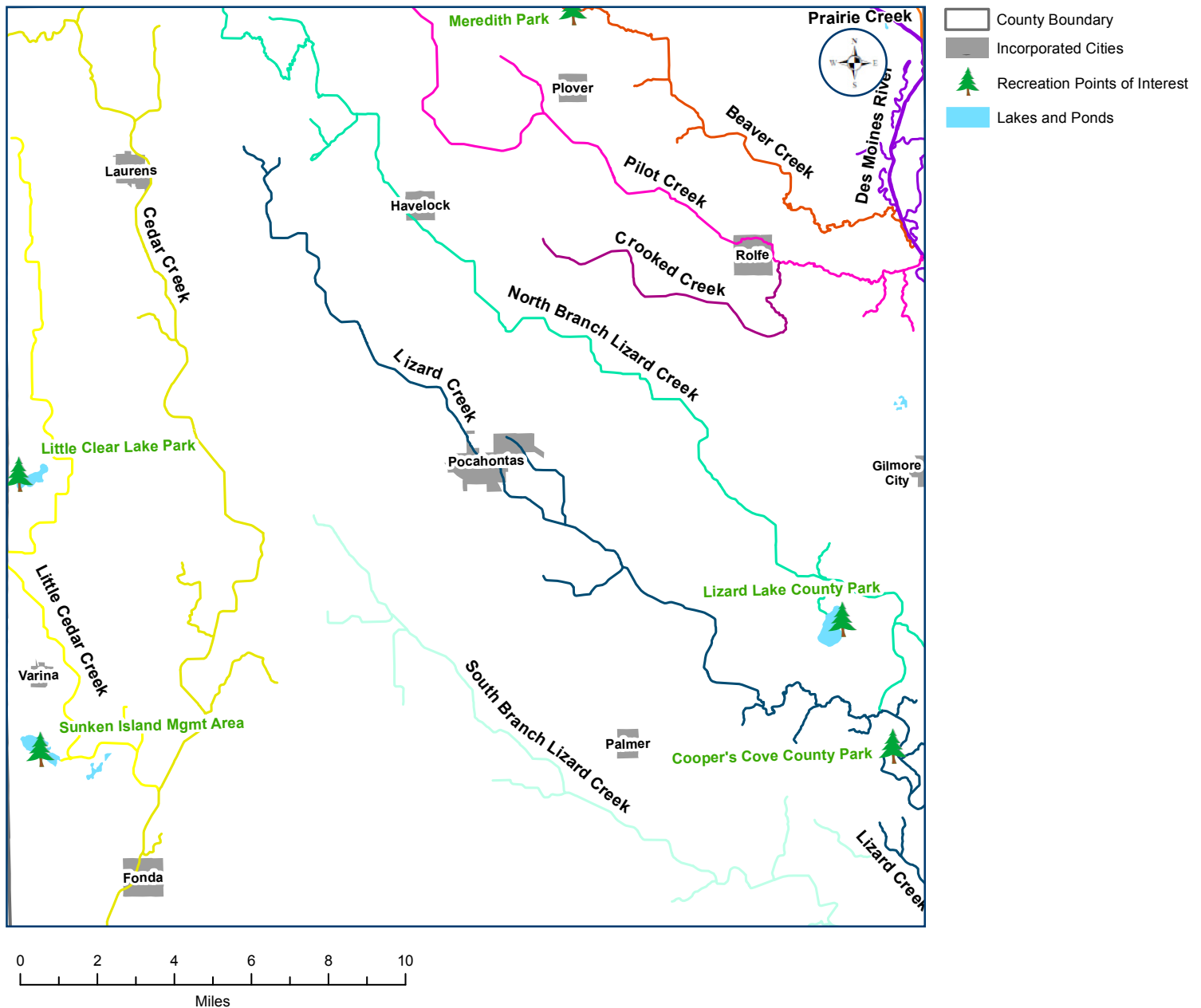


- | | | |
|----------------------------------|---|--------------------------------|
| 1. County Conservation Center | 11. Golf Course | 21. Public Library |
| 2. Rosenberger Park | 12. Calvary Cemetery | 22. Gateway Park |
| 3. Manor Healthcare Center | 13. Princess Park | 23. Dyno's Wine + Spirits |
| 4. Pocahontas Community Hospital | 14. Summit Hill Cemetery | 24. Pocahontas Inn + Suites |
| 5. Elbert Park | 15. Fairgrounds | 25. Pocahontas Pharmacy |
| 6. Tennis Courts | 16. Expo Center | 26. Budget Inn |
| 7. Pool | 17. Historic Pocahontas Courthouse Square | 27. High School Sports Complex |
| 8. Bitner Field | 18. Veteran's Memorial | 28. Kaleidoscope Factory |
| 9. Helicopter Repair Shop | 19. Rialto Theater | 29. Saints Peter + Paul Church |
| 10. Airport | 20. Heritage Park | |

WATERWAYS OF POCAHONTAS COUNTY

The map below depicts the location of creeks, rivers, and their branches throughout Pocahontas County.

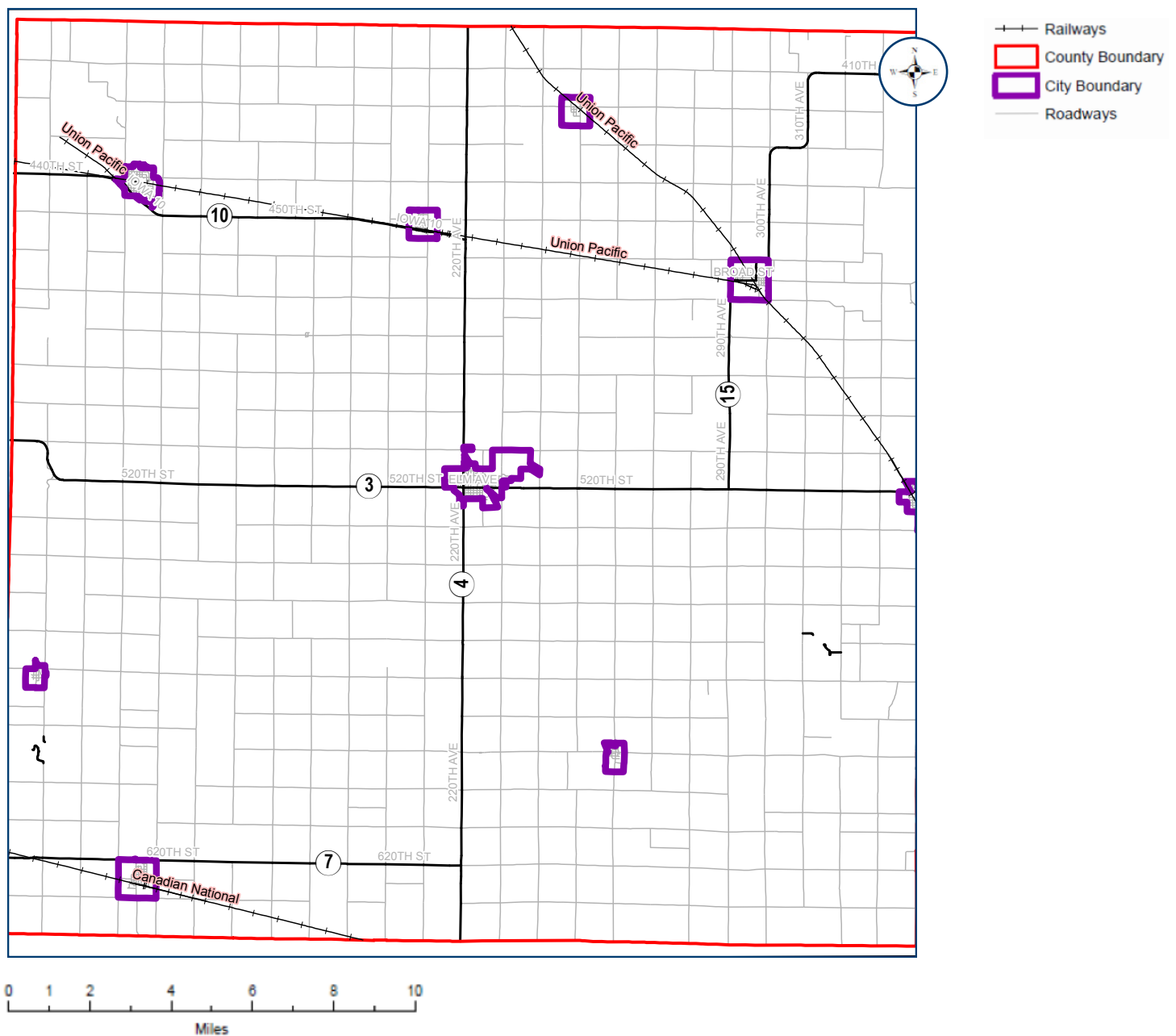
When building trails, waterways can pose challenging project obstacles. The West fork of the Des Moines River, Pilot Creek, and Lizard Creek are used as water trails within the County, but none are DNR official water trails.



ROADWAY + TRANSPORTATION

With proper planning, trails will benefit from existing transportation methods within Pocahontas County.

Roadways will be crucial to the success of the trail system, as they not only provide a means to reach trailheads and amenities within cities, but also serve as connecting sections between trails. In addition, abandoned railroad beds are often converted to trails. Railroad watching has become a passive recreation for interested individuals and may benefit future users of the trail as well.



ANALYSIS: BENEFITS + BARRIERS

The Pocahontas County Trails Committee identified existing trail benefits and opportunities in Pocahontas as well as the barriers and threats through a SWOT analysis. Some items can be both a strength and a weakness at once. For example, one community may have plenty of access to rental bike stations and another has to drive miles to the closest station. The common results from the analysis shared between each community of Pocahontas County are listed.

BENEFITS Pocahontas County provides a wide range of activities and events which would benefit from the incorporation of trails. Some of the greatest existing benefits in the County include the ability to provide amenities to trail users, park goers, and residents whether on foot, bike, or other non-motorized vehicle. The County's connections between existing parks, schools, and the availability of bike storage is also of benefit to the project, as is the strong support from communities for a County trail system. Pocahontas communities have a strong foundation on which to build a trail system, as well as the support to enhance current amenities. Existing festivals and celebrations can be opportunities to encourage future trail use either by incorporating them into existing celebrations or hosting them along the trail itself.

Abandoned railroad spurs provide an excellent opportunity to build trails. These trails can generate tourism bringing individuals from outside the County to use its trails and amenities. Another potential way to bring outside visitors to the County is by incorporating the new trails to existing and future regional trails. Lengthening the current regional trail system will draw an increased number of users wishing to expand cross-country runs, partake in long-distance biking, and walk while experiencing the full length of the trail. Local governments and communities can rally support for trails by hosting community workshops, fundraisers, clean-ups, and small building projects.

Strengths

- Positive visual areas
- Cultural and historical resources
- Natural resources
- Festivals/celebrations
- Strong government/public support
- Lodging
- Restaurants
- Recreational opportunities
- Existing trail connections to parks, schools, and other amenities
- Bike parking/storage

Opportunities

- Railroads - abandoned rail lines
- Existing regional trails
- Funding

BARRIERS A number of communities in the County do not have trails nor the same level of support seen in other communities, each of which can make trail implementation more difficult. Funding may prove a barrier in some communities, also making it challenging to gain support for its development. Once built funding for future trail maintenance can become difficult if local residents do not support continued trail development, as these tasks usually fall to city/county workers and are most frequently paid for with city/county funding. Land acquisition can create difficulties when developing trails, as acquiring abandoned railroad spurs from railroad companies, obtaining easements/land from owners that don't support the trail passing through their land, and the general cost of land may prove difficult to overcome. Roads can also be a barrier to transportation as users of the trails often have to cross busy streets and highways to get to city amenities or sites.

Weaknesses

- Negative visual areas
- Lack of government/public support for trails
- No existing trails
- No crossings for cyclists/pedestrians
- Poor or missing signage
- Maintenance

Threats

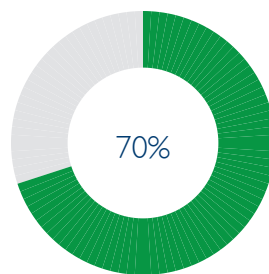
- Railroads - active and abandoned lines
- Transportation barriers
- Funding

ANALYSIS: SURVEY RESULTS

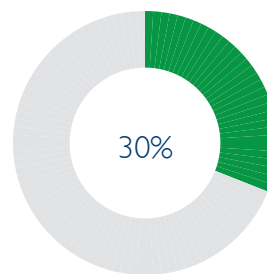
What are the most important factors when selecting a trail to use?

- #1 Proximity to Home
- #2 Safety + Security
- #3 Access Points
- #4 Cleanliness + Maintenance
- #5 Surface Type
- #6 Available Facilities

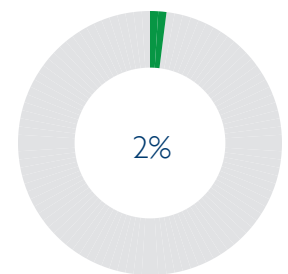
How did you find out about area trails?



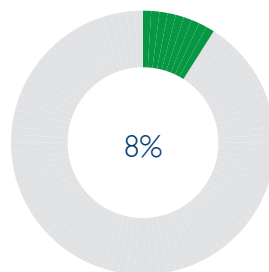
Word of Mouth



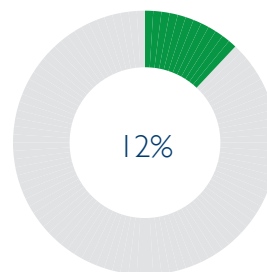
Roadside Signage



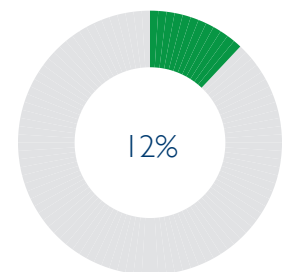
Newspaper



Internet



Parks Department



Other

What activities do you participate in?

4%
of participants
CROSS COUNTRY SKI

4%
of participants
CANOE + KAYAK

4%
of participants use
OFF-HIGHWAY
VEHICLES + ATVS

2%
of participants
HORSEBACK
RIDE

91.8%
of participants
WALK + RUN

61.2%
of participants
BIKE

6.1%
of participants
FISH

4%
of participants
ROLLERBLADE +
SKATEBOARD

Input from citizens was gathered from trails/pedestrian survey conducted across the region. Surveys received specifically for Pocahontas County identify that over half of the population live more than 4 miles away from a trail. This may be one of the reasons why only 32.8% of the survey respondents said they use the area trails 1-4 times a year. The survey indicated the largest recreational interest was walking/running with bicycling coming in second. This is the one of the reasons the committee focused this plan on bike and pedestrian trail development. The most common ways of learning about the trails is word of mouth and signage. Providing better, alternative mediums reaching a broader audience will boost trail usage and build visitor desire to participate in trail activities available. Specific results from the trails survey can be found below.

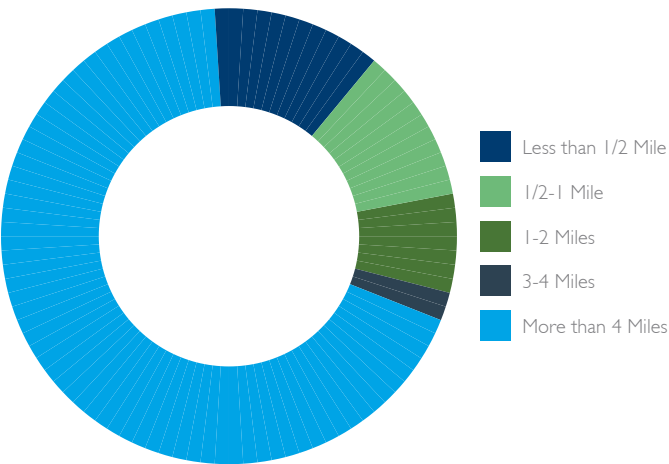
What are the reasons you don't use the trails?

- #1 Lack of Trails
- #2 Lack of Knowledge of Trail Locations
- #3 Too Far to Get Where I Want to Go
- #4 Lack of Access Points
- #5 Lack of Time

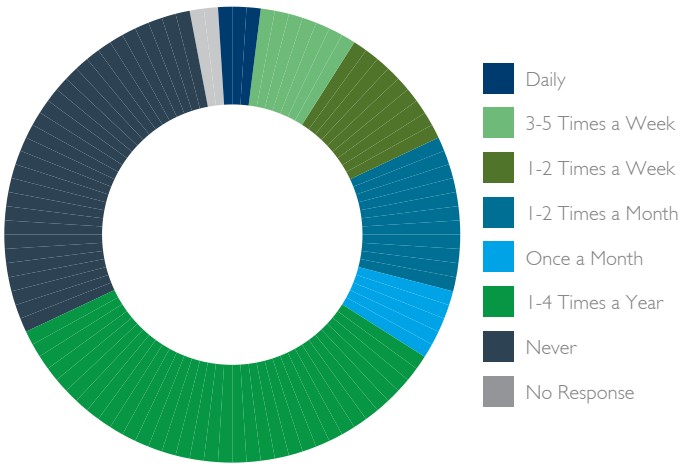
What type of trails are lacking in the community?

- #1 Trails (paved)
- #2 Trails (unpaved)
- #3 Paved Shoulders
- #4 Bicycle Lanes on City Streets
- #5 Bicycle Friendly Roads
- #6 Water Trails
- #7 Equestrian Trails
- #8 Snowmobile Trails
- #9 None, We Have Enough
- #10 Other

How far is your home from the nearest area trail?



How frequently do you use the area trails?



TRAIL STRUCTURE: DESIGN STANDARDS

The following sources have been considered for the Pocahontas County Trails Master Plan design and implementation. These sources should continue to serve as the basis of decisions made in trail, amenity, and trailhead design, construction, and development.

STATE DESIGN STANDARDS

- The Iowa Department of Transportation Design Manual
- Iowa Statewide Urban Design and Specifications

AASHTO

- A Policy on Geometric Design of Highways and Streets
- Guide for the Development of Bicycle Facilities

ACCESSIBILITY REQUIREMENTS

As required for by the ADA's 2010 ADA Standards for Accessible Design and the Uniform Federal Accessibility Standards, all trails, paths, and walkways must meet these standards in order to receive any form of federal supplement or support. The standards can be found at <https://www.access-board.gov/guidelines-and-standards/buildings-and-sites/about-the-aba-standards/ufas> and https://www.ada.gov/2010ADAstandards_index.htm. The accessibility requirements for slope, surface, width, and others may be equal with Iowa's own requirements, making the design easier to conjoin the three sets of requirements. A more detailed listing of Federal requirements may be found at http://www.fhwa.dot.gov/environment/recreational_trails/guidance/manuals.cfm#accessibility along with help hotlines for additional accessibility guidelines.

TRAIL STRUCTURE: TRAIL TYPES

The following sources have been considered for the Pocahontas County Trails Master Plan design and implementation. These sources should continue to stand as the basis of the decisions made in trail, amenity, and trailhead design, construction, and development.



Multi-Use Trail

A multi-use trail is a two-way facility physically separated from vehicular traffic for use by pedestrians, cyclists, and other non-motorized users. Multi-use trails can run parallel to streets and roads and can be high-stress accommodations for bicyclists depending on the type and number of driveway and street crossings per mile. At a minimum, multi-use trails are generally 10 feet wide. However, 8 foot wide trails are acceptable for short distances physically constrained to smaller widths. Design of a multi-use trail should reflect the needs of cyclists while still allowing other non-motorized users to use the trail for recreational and transportation purposes.



Paved Shoulder

Paved shoulders provide an additional width of pavement to existing travel lanes of roads. They are designed with cyclists in mind, but available to pedestrians as well. This extra road space is beneficial in numerous ways, reducing automotive-cyclist accidents, run-off-road crashes, and providing a safe lane for maintenance/emergency/public safety vehicles. Typically, a 4 foot wide lane is sufficient to accommodate one-way cyclists, but can be shortened to as low as 3 feet wide on the shoulder's outside edge.



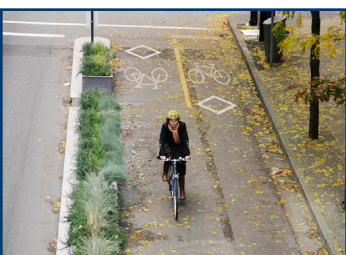
Shared Roads

If traffic volume and speed along a road is low, a shared road or shared lane may be possible. Cyclists and vehicular traffic share a lane of the road which can allow a car to pass 3 feet from a cyclist comfortably. This also allows a safe pathway for cyclists without being threatened by upcoming traffic. Wayfinding aids and pavement markings can indicate preferred cyclist positioning on the road to alert drivers to expect cyclists.



Bike Lane

Typically outlined by pavement markings and signs, bike lanes are on-road bike-ways for cyclists only. Bike lanes are usually about 5 feet wide, or a minimum of 4 feet (not including the gutter). While greatly improving conditions for cyclists, bike lanes do not address the needs of pedestrians.

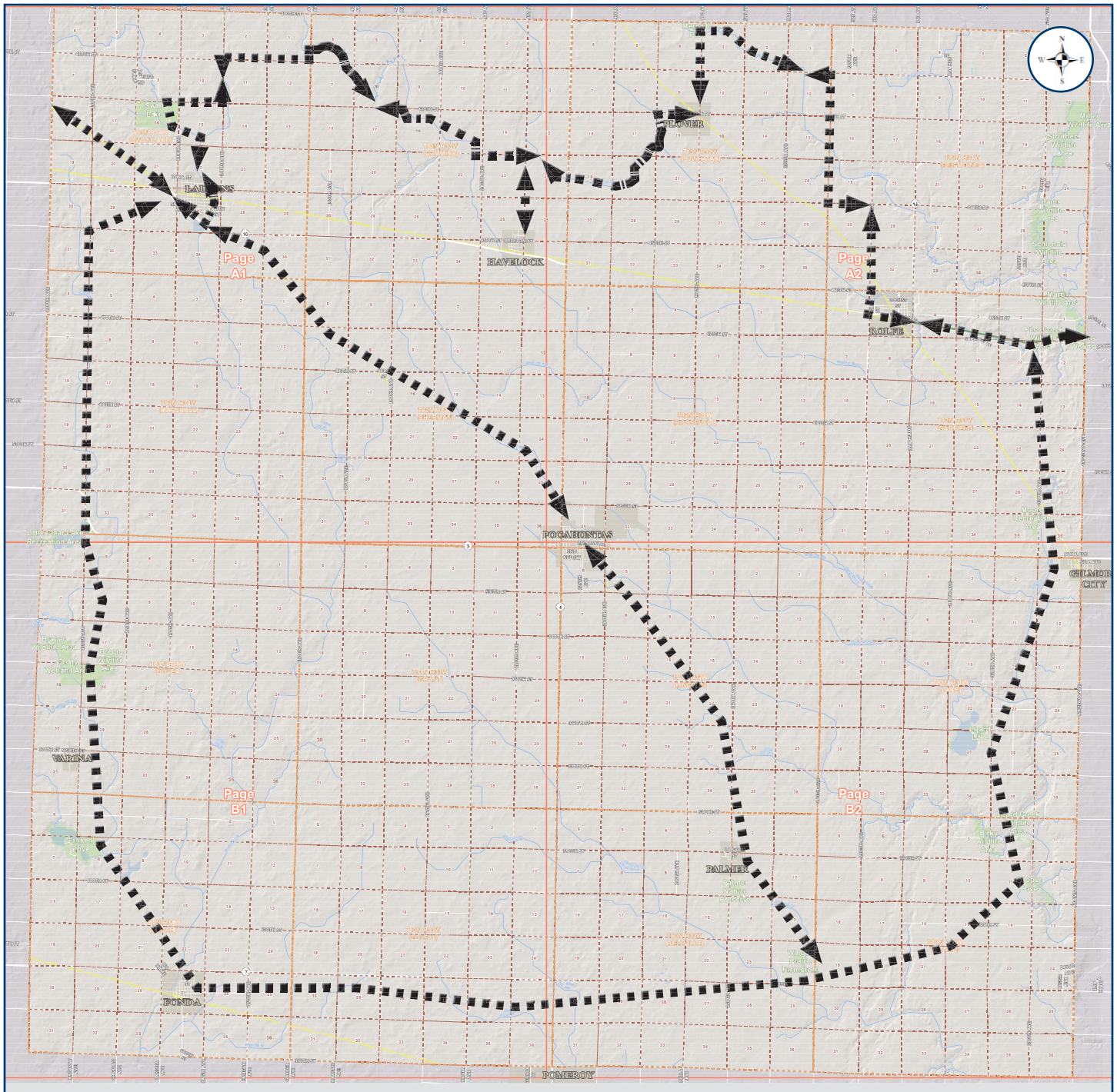


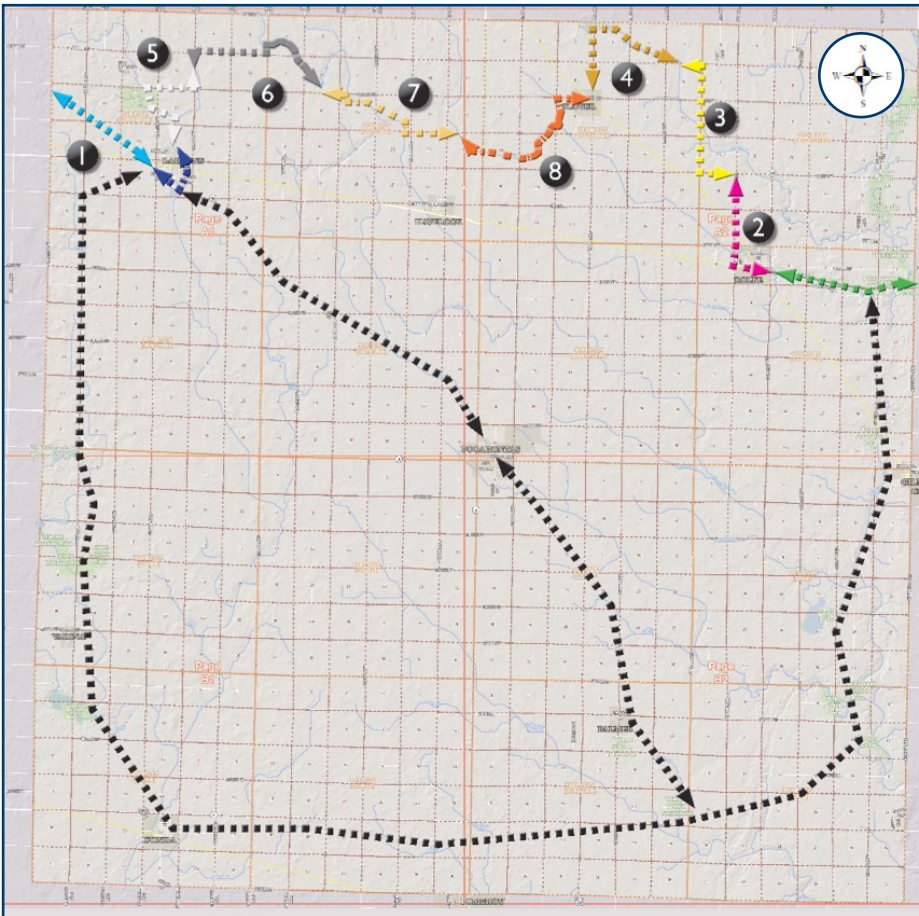
Separated Lanes

For roads with high density traffic and speeds, a separated lane may be preferred. This is a lane separated from both pedestrians and vehicles either by a physical barrier or raised road grade. These separated lanes can act as a one-way lane (generally 5-7 feet wide) or a two-way lane (generally 8-10 feet wide) each designated with their own signage and roadway marking.

PLANNED TRAILS: GRAND VISION

The Pocahontas County Trails Committee was asked to identify a trail vision for the County. Each representative was allowed to mark map locations where they felt trails should be located based on all the input they had received. The committee then reviewed all map markings and combined them into one vision for the County.

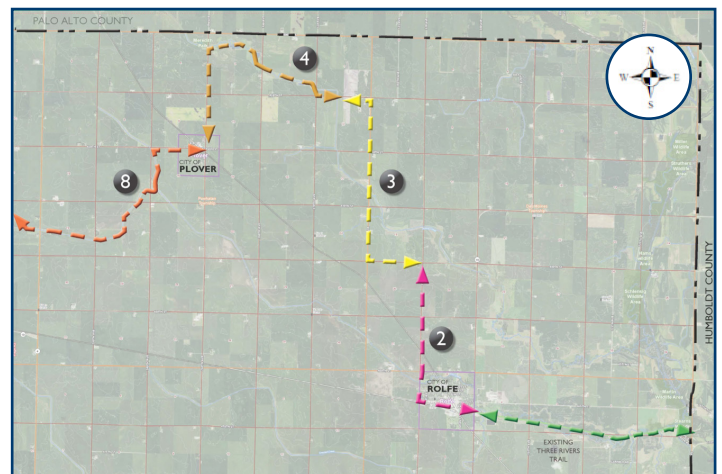
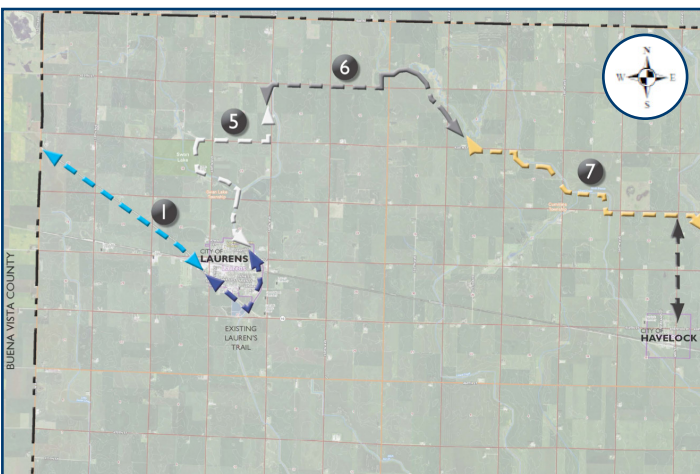




PRIORITY TRAIL

PHASES

One of the trail plan's objectives is to develop trails within the next 25 years. Likewise, the map below identifies trail phases which could be developed in that time period. The Pocahontas County Trails Committee supported the goals of the plan to connect existing communities, features, and existing trails in mind when identifying the priority trail phases. The Three Rivers Trail, which comes in on the eastern side of Pocahontas County from Humboldt, currently ends on the eastern edge of the City of Rolfe. There are two trails located in the City of Laurens, which is located on the western side of Pocahontas County. Therefore the Pocahontas County Trails Committee determined that the priority trail phases should connect existing trails in Rolfe to the existing trails in Laurens while incorporating as many amenities possible along the way.



PRELIMINARY COST STUDY

The Pocahontas County Trails Committee identified existing trail benefits and opportunities in Pocahontas as well as the barriers and threats through a SWOT analysis. Some items can be both a strength and a weakness at once. For example, one community may have plenty of access to rental bike stations and another has to drive miles to the closest station. The common results from the analysis shared between each community of Pocahontas County are listed.

The identified trail phases are different in trail type, length, and surface material, all which affect overall trail costs. All costs developed reflect general costs used for planning purposes only and do not represent construction costs. In order to prepare a preliminary cost summary for each of the priority phases, an average cost per mile by surface type for a 10 foot wide trail was developed. The following items were included when developing a per mile cost:

- Field survey
- Design documents
- Mobilization
- Clearing and grubbing
- Grading and earthwork
- Stone and base paving
- Site features (signs, site furnishing, and other small features)
- Pavement markings

The cost per mile does not include land/right-of-way acquisition, bridges, permits, parking lots, buildings, legal fees, or other costs which may be needed to develop a trail. The costs developed were based on 2016 dollar values. The average per mile cost by surface type is listed in the table below.

Surface Type	Average 2016 Cost Per Mile
10' Paved Concrete	\$265,000
10' Asphalt	\$250,000
10' Granular	\$158,000

When developing an estimated cost for each of the trail phases, the 2016 average per mile cost for a 10 foot wide trail, also accounting for each specific trail surface, was multiplied by the total length of the trail. Phases with mixed surface types used the higher per mile cost. It should be noted that individual trail phase length, width, surface and trail type can change during design development. The cost for trail Phase 3, a share the road phase, is for signage only and based on 2016 signage and installation rates along both sides of each road segment.

Phase	Location	Length	Trail Type	Surface Type	Est. Cost (10' Wide)
1	Western edge of the County to western edge of Laurens	3.2 Miles	Multi-Use	Granular	\$505,600
2	Three Rivers Trail in Rolfe to intersection of 290th and 440th Street	3.5 Miles	Paved Shoulder	Asphalt	\$875,000
3	Intersection of 290th and 440th Street to approximately halfway from 280th Ave to 270th Ave along 470th Street	4.4 Miles	Shared Road	Signage/ Pavement Markings	\$8,000
4	End of Phase 3 through Meredith Park and into the north side of Plover	4.9 Miles	Paved Shoulder/ Multi-Use	Asphalt/Granular	\$1,225,000
5	North end of Sportsman's Park in Laurens through eastern Swan Lake and stretching near the intersection of 140th Avenue and 510th Street	5.1 Miles	Multi-Use	Concrete/ Granular	\$1,351,500
6	End of Phase 5 to about halfway on 410th Street between 160th Avenue and 170th Avenue and along the Creek	4.5 Miles	Multi-Use	Granular	\$711,000
7	End of Phase 6 to the south side of the Plover Waterfowl Production Area to approximately halfway between Highway 4 and 210th Ave on 430th Street	5.1 Miles	Multi-Use	Granular	\$805,800
8	Starting from the northern end of Plover and out the western side down along the creeks until reaching Phase 7	5.1 Miles	Paved Shoulder/ Multi-Use	Asphalt/Granular	\$1,275,000

COMMUNITY IMPROVEMENT

The cost of maintaining and improving the trails system will fall on both Pocahontas County as well as the efforts by all cities within its borders. By enhancing the trail within a city's limits, the trail system as a whole is improved. This section outlines a number of suggested ideas for improving the trail system through smaller, more affordable projects.

TRAIL SIGNS + PAVEMENT MARKINGS Wayfinding along a trail is important to ensuring the safety of trail users and enlightening those who may not know about the trail. Placing signs or markings that guide users along the trail, signs that offer direction to local amenities, and raise overall awareness each provide a silent and immeasurable service to trail users. Moreover, they allow active users the ability to find their way without stopping to view a map. Pavement markings can be as simple as painting the lines for designated lanes, crafting a stencil for the markings, or supplying the paint or equipment to have the markings made. Supplying and funding trail signage and pavement markings can require little investment, making them a low cost way connect trails to amenities.



BIKE PARKING Promoting cyclists to an area can be easily done by providing specially designated bike lanes and paths offering a safe means of traveling. However, encouraging cyclists to stop and use trail amenities will also require appropriate bike parking. Providing a location for cyclists to stop and lock up their bikes can be as easy and inexpensive as installing a bike rack. Implementing bike racks around each city and trail will encourage resident biking and promote more frequent stops in town by trail users.



SERVICES Encouraging services to locate near the trail or providing a service near the trail can make trips better, easier, and more professional. Providing a simple bike hang-up with public tools can give a cyclist just what is needed to tune up an issue and continue on the trail. Services that could be provided to help better the trail going experience for users besides cyclists include running supply shops, family-friendly restaurants, vehicle rental locations, and even smaller services like a public drinking fountain or a pet clean-up station. The smallest convenience can make a trail more desirable to travel and better attraction for those wanting to go long distances along trail systems.

TRAILHEADS Providing a memorable location and amenities at the start of a trail can attract a wide variety of users while also creating strategic resting points between large trail sections. Trailheads should stand as a gateway into trail, providing appropriate amenities to those who are about to embark on their journey, as well as a resting point to those who are already on their way. These points are important, as for many it may be the last stop before many more miles of their trail-going experience. Here, trail-goers should have access to resting locations, bathrooms, maintenance stations, food, attractions, and other amenities for those about to head on the trail such as parking and rental stations.

FUNDING Each community should strive to contribute funds needed to construct and maintain trails, as the cost of the trail system should be shared by all communities. Funding support can be from each city itself, businesses within the communities, or residents and trail users. Fund raising can help in the implementation for local areas and lending a hand to other areas of the County.

Implementation

Many factors have to be taken into account when deciding how to implement this plan. The order in which projects are to be constructed will depend upon budget, available funding, community support, land acquisition to name but a few of the many variables. To begin implementing the plan, it is recommended that the following steps be taken:

- Adopt the Pocahontas County Trails Master Plan
- Establish a Pocahontas County Trails Committee
- Raise funds for trail phase development
- Develop trail phases

FUNDING OPPORTUNITIES

Listed in this section are grants that can assist with the process of trail development, repair, and land attainment. Many more grants are also available and should be considered.

RESOURCE ENHANCEMENT + PROTECTION PROGRAM The Resource Enhancement and Protection Program (REAP) is to be used for Corridor Protection and Greenway Establishment. REAP can provide 100% grants to cities and counties for open space protection and passive outdoor recreation. Passive recreational activities includes activities like walking, jogging, biking, photography, cross country skiing, and canoeing. Active recreational activities can be skeet shooting, archery, mountain biking, off-road vehicle sports, baseball, basketball, and outdoor theatre events. While generally separate, the specific types of an activity can switch from passive to active or vice versa based on context. For example, biking is considered passive, but mountain biking and bike races are active. Likewise, horse riding can be a passive, but racing and obstacle jumping are active recreational activities. Questions regarding whether or not activities on your desired trail qualify for passive outdoor recreation should be addressed to the Iowa Department of Natural Resources.

Contact Information:

Iowa Department of Natural Resources' Parks, Recreation & Preserves Division
Wallace State Office Building
Des Moines, IA 50319
515.281.5814
www.state.ia.us/government/dnr

STATE RECREATIONAL TRAILS PROGRAM Generally used to fund public recreational trails, the State Recreational Trails Program requires a 25% local match and the trail must be maintained as a public facility for a minimum of 20 years. Proposed projects must be part of a statewide, regional, area wide, or local trail plan.

Contact Information:

Iowa Department of Transportation District Planners
www.dot.state.ia.us

LAND + WATER CONSERVATION FUND Serving multiple purposes, this may be used in the funds for trail development and amenities along the Pocahontas County Trail System. The Land and Water Conservation Fund provides 50% grants for acquisition and development of outdoor recreation areas and facilities. Grants are made to the State of Iowa or its political subdivisions.

Contact Information:

Iowa Department of Natural Resources' Parks, Recreation & Preserves Division
Wallace State Office Building
Des Moines, IA 50319
515.281.5814
www.state.ia.us/government/dnr

RECREATION INFRASTRUCTURE GRANT PROGRAM Providing grants to cities, counties, organizations, and associations for repair, renovation, and/or replacement of vertical infrastructure and trails, the Recreation Infrastructure Grant Program can help maintain and ease the cost of repair.

Contact Information:

Iowa Department of Natural Resources' Parks, Recreation & Preserves Division
Wallace State Office Building
Des Moines, IA 50319
515.281.5814
www.state.ia.us/government/dnr

REGION V TRANSPORTATION ALTERNATIVE PROGRAM (TAP) Funds can be used for construction, planning, or design of on and off-road trail facilities for pedestrians, bicyclists, other and non-motorized forms of travel, as well as infrastructure-related projects and systems that will provide safe routes for non-drivers. In addition, the conversion and use of abandoned railroad tracks, community improvement activities, environmental mitigation, projects under the Recreational Trail Program, or construction of turnouts, overlooks, and viewing areas can be funded. Minimum project cost must be \$100,000 with at least a 20% local match contract.

Contact Information:

MIDAS Council of Government
602 1st Avenue S
Fort Dodge, IA 50501
515.576.7183 ext. 212
shelgevold@midascog.net

NATIONAL RECREATIONAL TRAILS FUND The National Recreational Trails Fund is a federal granting program with a 50% local match. It can be used to construct and maintain motorized and non-motorized recreational trail and trail related projects. Proposed projects must be identified in the Statewide Comprehensive Outdoor Recreation Plan or the State Trails Master Plan.

Contact Information:

Iowa Department of Natural Resources Parks, Recreation & Preserves Division
www.state.ia.us/government/dnr

FEDERAL TRANSPORTATION ENHANCEMENTS PROGRAM Fixing America's Surface Transportation, also known as FAST, funds enhancement or preservation activities of transportation related projects. Trail projects may fall into one of three categories: trails and bike-ways, historic preservation, or scenic and natural resources. A 20-30% local match is required, depending on whether the project has regional or statewide significance.

Contact Information:

Iowa Department of Transportation District Planners
www.fws.gov

FUNDING OPPORTUNITIES

THE RIVERS + TRAILS CONSERVATION ASSISTANCE PROGRAM The Rivers and Trails Conservation Assistance Program was established in response to increased public demand to conserve rivers and provide trail opportunities.

Contact Information:

National Park Service

<https://www.nps.gov/orgs/rtca/index.htm>

AMERICAN GREENWAYS KODAK AWARD PROGRAM American Greenways Kodak Awards Program, administered by the Conservation Fund, provides grants of \$500-\$2,500 to local greenway projects. Grants can be used for almost any activity that serves as a catalyst for local greenway planning, design, or development.

Contact Information:

Conservation Fund

<http://www.rlch.org/funding/kodak-american-greenways-grants>

ATV TRAIL GRANTS The DNR ATV Trail grants offer funding for the development of public riding areas, trail maintenance, equipment purchases, trail groomers, insurance, and land acquisition.

Contact Information:

Iowa Department of Natural Resources

<http://www.iowadnr.gov/Things-to-Do/Off-Highway-Vehicles/OHV-Grants>

ENHANCE IOWA Enhance Iowa is a program of four combined funds including Enhance Iowa, Community Attraction and Tourism (CAT), River Enhancement Community Attraction and Tourism (RECAT), and Sports Tourism. The program funds projects available to the general public for public use and primarily involve vertical infrastructure (land acquisition and construction, major renovation and major repair of buildings, all appurtenant structures, utilities, site development, and recreational trails). Some trails may meet the criteria.

Contact Information:

Iowa Department of Economic Development

515.725.3043

<http://www.iowaeconomicdevelopment.com/Community/EnhanceIowa>

THE NATIONAL TRAILS FUND The National Trails Fund was established to provide grants to trail organizations working to establish, protect and maintain America's foot trails. Grants are awarded to trail organizations and other non-profits with a trail-related focus. Grants are typically limited to \$1,000-\$10,000 amounts.

Contact Information:

American Hiking Society

<https://americanhiking.org/national-trails-fund/>

COMMUNITY FACILITIES LOANS Community facilities loans fund the construction, enlargement, extension, or otherwise improvement of community facilities. Trail benefits could include improved access through utilities extensions.

Contact Information:
Community Facilities Loan
www.rurdev.usda.gov

SNOWMOBILES GRANTS The DNR Snowmobile Trail Grants offer funding for the development of riding areas, trail maintenance, equipment purchases, trail groomers, insurance, and land acquisitions.

Contact Information:
Iowa Department of Natural Resources
<http://www.iowadnr.gov/Things-to-Do/Snowmobiles/Snowmobile-Grants>

AMERICORPS AmeriCorps is a national volunteer program in which agencies, communities, and non-profit groups can sponsor personnel to assist in a variety of activities. Funds must be used to operate or plan community service programs. Programs could include trail building, environmental education, and community restoration work.

Contact Information:
AmeriCorps
www.cns.gov/ameriCorps

CHALLENGE COST SHARE PROGRAM The Challenge Cost Share Program funds any partnership which benefits National Park Service projects or programs. This may include historic and archaeological site restoration, resource management, resource inventory and monitoring, scientific research, environmental or heritage education programs, interpretive exhibit enhancements, or summer youth employment for recreation activities. Project applications are accepted between May 2 and July 1.

Contact Information:
The National Park Service
www.nps.gov/ncrc/programs/ccsp/

REFERENCES + RESOURCES

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Laurens: Program Overview by Godbold, Seana; Doll, Eric. (2009)

Rolfe by Iowa's Living Roadways (2010)

Pocahontas: Program Overview by Cross, Jen; Hundley, Anne. (2014)

Pocahontas: Community Visioning Final Report and Feasibility Study by RDG Planning and Design and the Iowa's Living Roadways. (2014)

Rolfe: Community Visioning Final Reports and Feasibility Study by Jeffrey L. Bruce & Company, L.L.C. and Iowa's Living Roadways. (2013)



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