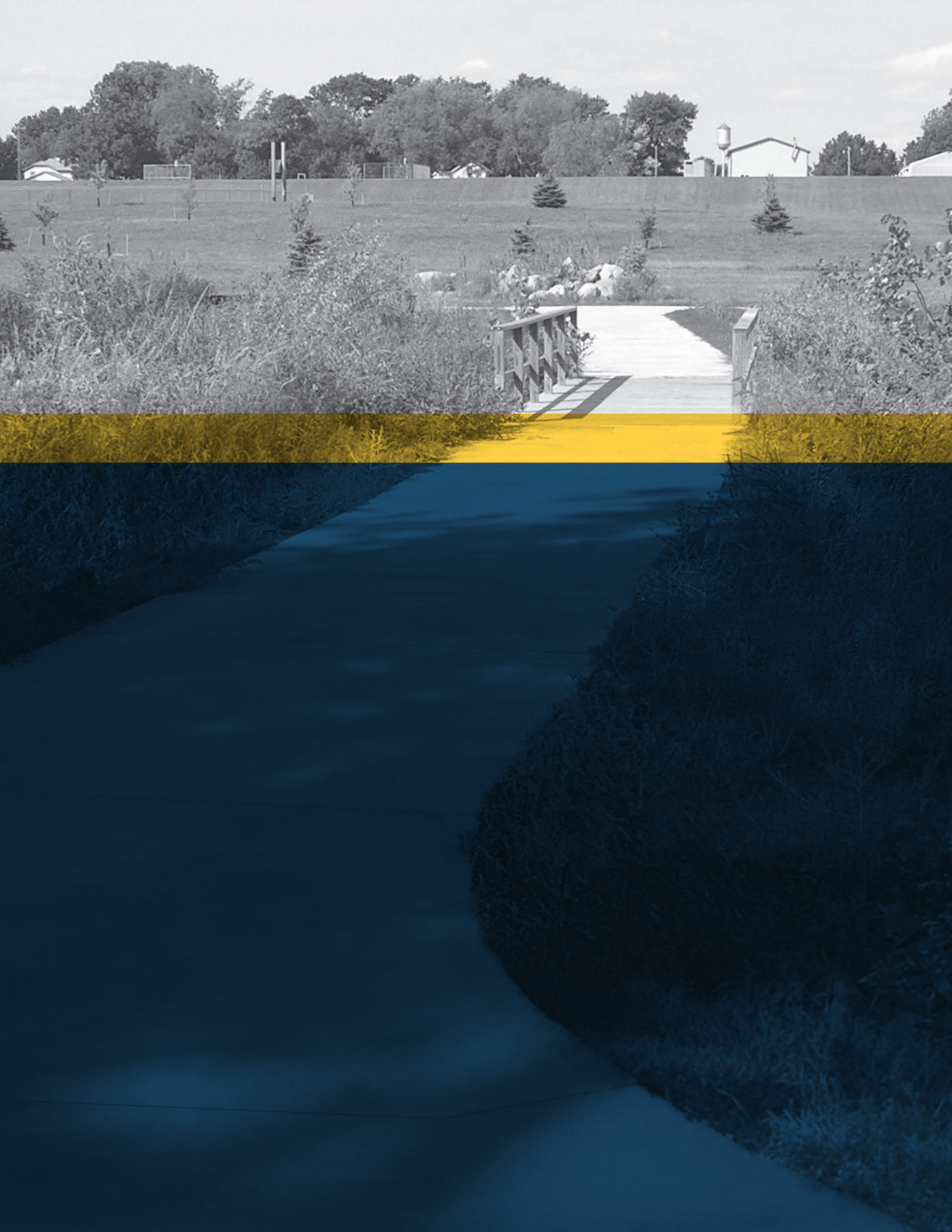
TRAILS SYSTEM PLAN

WRIGHT COUNTY, IA



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ACKNOWLEDGMENTS

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INTRODUCTION

INTRODUCTION

Wright County is located in northwestern Iowa and has a population of 12,773. The County has the natural amenity of having both the Iowa and Boone Rivers run through the western and eastern parts, respectively. The County is rural with agriculture as the primary industry; however, new businesses and industries are moving into the County and sparking economic development and population growth. Wright County is one of the few counties in the State of Iowa with a divided trading area—Fort Dodge to the west and Mason City to the north. The County is strategically located to connect these two trading areas with trail development and associated economic growth.

Currently in the County, there are less than 10 miles of developed trails and greenways. With so few trails available to residents and visitors to Wright County, the groups and individuals within each of the communities have recognized the need for trail network development and expansion. They decided the first step to take was to develop a county-wide trails plan. The Wright County Trail System Plan is a twenty-five year vision for trail development in the County, aimed at improving the quality of life of residents and capitalizing on current economic activity.

The plan identifies eight (8) priority corridors consisting of more than 40 miles of multi-use trails or paved shoulders. The intent of the trail corridor is to connect the most users and work toward creating a connection between the two largest trading centers for Wright County, Mason City and Fort Dodge. Four (4) future trail corridors, totaling over 38 miles, are also identified to connect other communities in Wright County and begin connecting to areas outside of county borders to create a regional trail network.

PLANNING PROCESS

A county trails committee was established with representatives from communities and organizations with assistance from Wright County Economic Development. The representatives offered a variety of different perspectives on the needs and wants of their communities in regard to trails. Additionally, committee members identified tasks geared toward the overall betterment of the County as well as tasks aimed at economic development and growth in areas that will be impacted by trail development and use.

The trails committee along with representatives of ISG Engineering, MIDAS Council of Governments, and Wright County Economic Development met six times over an eight month period of time. During this time, each of the Wright County committee representatives included community members as part of the planning process and incorporated their feedback into outlined recommendations for plan design and phasing as well as economic development opportunities. An inventory was completed of existing trails within the County, community amenities, and trails in surrounding counties. A trails survey of Wright County residents was also conducted during this time to solicit public feedback and gauge county-wide interest for the trail network.

The project used surveys, meetings, and past plans to inspire and lead the Wright County Trails committee in developing the best solution.

GOALS

The Wright County Trails Committee identified several goals to implement the plan's vision:

- ☑ Complement the regional trails plan
- ☑ Improve physical activity and health opportunities
- ☑ Increase trail use as a tool for local economic growth and development
- ☑ Connect existing communities and features
- ☑ Connect to existing trails and neighboring counties

OBJECTIVES

- Complete trail projects within the next 25 years
- Utilize the plan to apply for grant funding
- Promote trail use and tourism as a tool for economic development
- Utilize as much publicly-owned property as possible for the trail
- Promote local community involvement in the planning and implementation process
- Improve the health of the County by providing alternative means for transportation
- Encourage community participation in all aspects of trail development and maintenance
- Create multi-purpose trails for use by all community members
- Construct safe alternative pathways for those already walking, biking, and running on blacktops & highways
- Use the trail as an educational opportunity
- Increase the number of people using the trail system

WRIGHT COUNTY TRAILS VISION

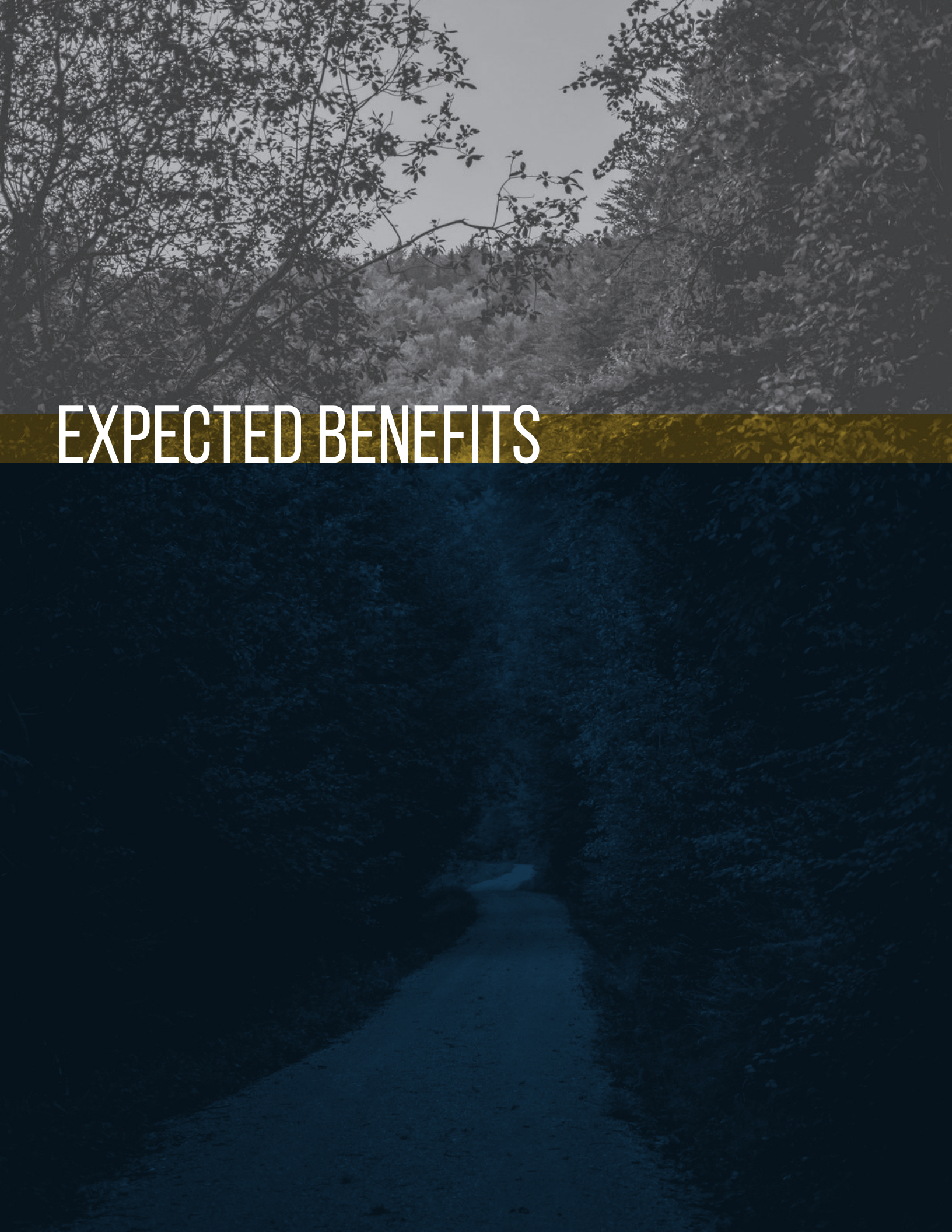
The Wright County Trail System will be an accessible trails network used by people of all ages and abilities for recreation and transportation and will serve as an economic development tool for the County. The system offers connections between developed areas and attractions within the County, provides opportunities for appreciation of nature, increases recreational amenities, encourages economic development, and better connects Wright County to other communities throughout the region.

> "The Wright County Trails System will be a network utilized by various types of trail users while serving as an economic development tool for the entire County. The trails system will improve connectivity to local destinations within and between communities while tying into larger regional trail networks."
>
> WRIGHT COUNTY VISION STATEMENT

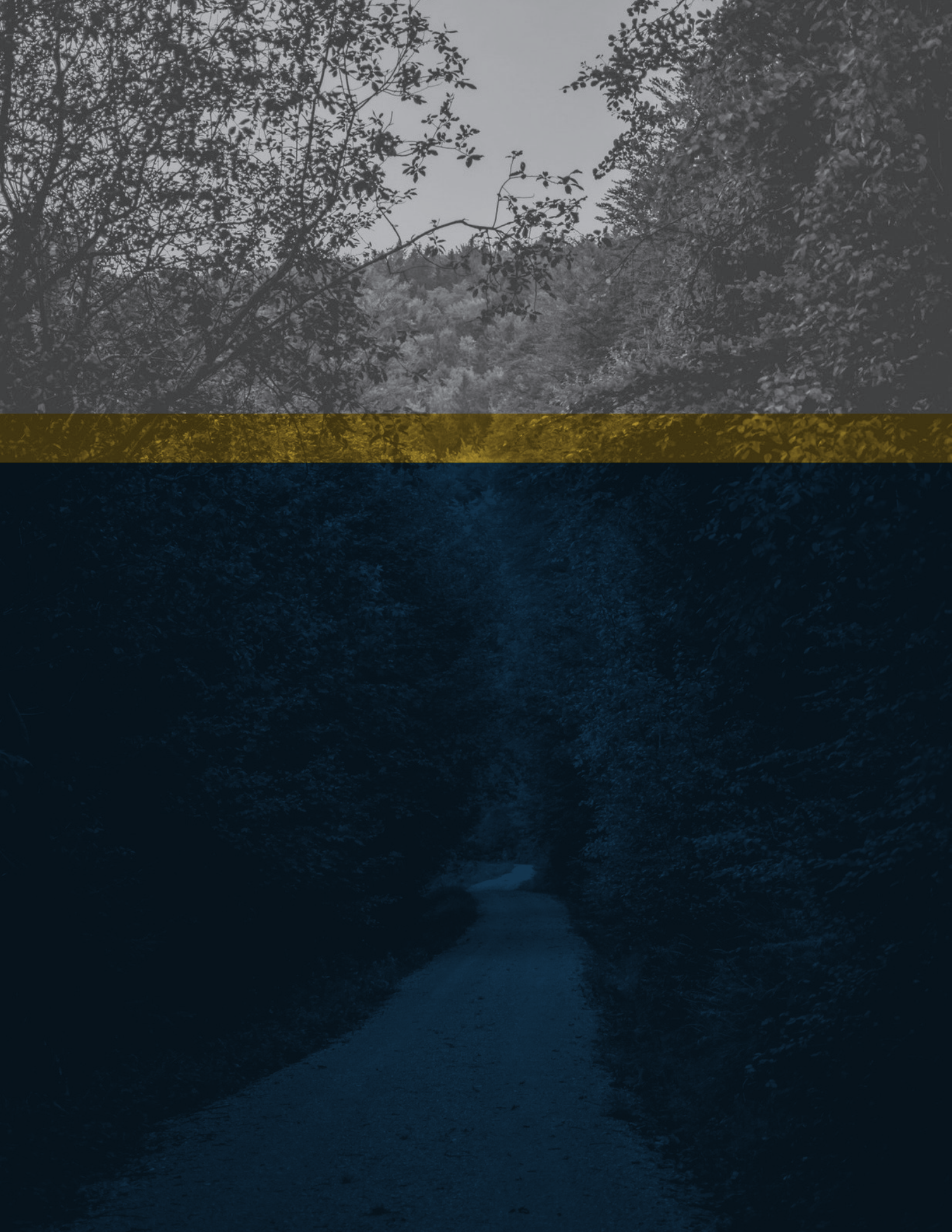
COMMITTEE MEETING ACTIVITIES

The Wright County Trails Committee was comprised of residents of Belmond, Clarion, Eagle Grove, and Rowan, as well as stakeholders from other interested groups and organizations including the Iowa State University Wright County Extension, Iowa Specialty Hospital, Wright County Conservation Board, and Iowa Natural Heritage Foundation. The Committee provided input on important aspects of the plan including crafting a vision statement, establishing goals and objectives, providing input on county amenities and assets, mapping out potential trail corridors, reviewing the public input survey before distribution, and providing feedback and suggestions on the draft version of this report.

The Committee Members and Trail Users drawing up ideas on possible corridors at the second committee meeting



EXPECTED BENEFITS



EXPECTED BENEFITS

As trails have gained popularity throughout the United States, several studies have been conducted on the benefits they provide to a region or community. Though these impacts vary, results consistently show that towns and cities that build trails see improvements to the local economy, quality of life, community identity, health, and sustainability.

The Iowa Department of Transportation found that for every new dollar spent by trail users in the community, local government entities will likely see increased revenues between 30 and 50 cents. This increase is after accounting for all inter-government transactions and all rounds of economic activity.

ECONOMIC IMPACT

Studies have shown that implementation of local 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 boom" that spur development, raise property value, increase tourism, and encourage general economic revitalization of local businesses. Trails improve the value of nearby properties, trail-users increase spending at nearby stores, and may increase local demand for new businesses, housing, and services. Adding trails to a community generally increases tax revenues, influences the location choices made by relocating companies or companies looking to expand, and brings in an influx of trail-traveling visitors to the community and region. Additional studies show that investing in outdoor infrastructure and recreational opportunities attracts new employers and families.

The Outdoor Industry Association published a report that within Iowa, outdoor recreation generates $8.7 billion annually in consumer spending, 83,000 direct jobs, $2.7 billion in wages and salaries, and $649 million in state and local tax revenue. Studies of economic impacts from recreation biking in Iowa have estimated that cyclists alone spend $365 million annually on biking trails, equipment, and other trail goods and services. Trail development and use have seen recent growth within Iowa. Iowa State University Outreach & Extension found that between the years of 2006 and 2011, the mileage of the trail system within the state increased by 29% and ridership and trail usage increased by 36%.

A few studies have been done to assess the economic impact of trails on communities throughout the State of Iowa. It can be expected that additional studies will be done in the future given the increased public interest in trails and associated economic growth and development. A 2010 study completed by an Iowa State University Professor found that the Chichaqua Valley Trail (CVT) contributed an estimated $240,000 in sales and services purchased and a $47,000 increase in tax revenue annually. The study also found the trail contributed an additional three jobs each year to the local economy. Anecdotally, the owner of the Night Hawk Bar + Grill located in Slater, Iowa along the High Trestle Trail estimates that users of the trail make up half of his customer base during the spring and summer months.

CASE STUDY

LANESBORO, MINNESOTA

Lanesboro is home to the Root River State Trail in southeastern Minnesota. The trail was originally unpaved for the first 12 years and drew limited usage. To increase the number of users and types of user groups utilizing the trail, the City decided to pave the Root River State Trail and saw dramatic increases in the number of users, especially in the bicyclists and inline skater user groups. The trail sees year around usage due to its location in a larger trail network of snowmobile trails, scenic drives, and water access points. Economic development and business growth has mirrored the trail's success with a diverse range of businesses choosing to locate in Lanesboro, including an Amish craft store, specialty bookstore, and a number of restaurants.

CASE STUDY

ECONOMIC IMPACTS OF RAIL TRAILS

A 1992 study conducted by the National Park Service examined the economic impact of rail trails nationwide, including the Heritage Trail in Iowa. The study found that the average trail user spent between $4 and $11 per day depending upon location and the services and retail facilities available. Annual economic impacts of the trails surveyed ranged between $1.2 and $1.8 million.

In inflation adjusted dollars, users may spend between $7 and $18 per day with annual economic impacts yielding between $2.0 and $3.1 million.

HEALTH BENEFITS

Trails present a fun and low-cost form of exercise through walking, biking, and jogging. The World Health Organization recommends that adults participate in 150 minutes of moderate to vigorous physical activity each week. Biking and jogging along with other options for recreation along the trail give health benefits to those who use them. Physical activity is proven to reduce stress, help with sleep, and give a more positive mental outlook. Increased physical activity is also known to increase prevention and reduce severity of serious illnesses such as diabetes, asthma, obesity, stroke, some types of cancer, and heart diseases.

The American Association of Retired Persons (AARP) Livability Index found that currently only 83.1% of Wright County residents have access to regular exercise opportunities. Additionally, 33.1% of Wright County residents are considered obese. Increasing the amount of trails available to Wright County residents will encourage residents to live a healthy and active lifestyle.

ENVIRONMENTAL BENEFITS

Trails help to preserve a clean environment for recreation, transportation, and opportunity for improving quality of life and the general welfare of those who can access them. By increasing transportation alternatives, there is a decrease in the need to drive automotive vehicles. The decrease in miles driven reduces the amount of carbon dioxide (CO_2) released into the atmosphere that damages the natural environment as well as associated costs for vehicle use. The Rails to Trails Conservancy estimates the reduction of 28 million tons of CO_2 and possibly more than $8,500 per year for a single vehicle by just walking or biking to your destinations.

EXISTING COUNTY CONDITIONS

EXISTING COUNTY CONDITIONS

WRIGHT COUNTY TRAILS and established greenways currently located in Wright County are the Franklin Grove Heritage Trail, Lake Cornelia Walking Trail, a connection to the Three Rivers Trail, and the Boone River Greenbelt.

FRANKLIN GROVE HERITAGE TRAIL

Franklin Grove Heritage Trail has a trailhead at Pool Park and is a converted rail bed that runs north to south through the City of Belmond. Maintenance along the trail is shared between the Belmond Trees Forever group and the City. The trail is approximately 3.4 miles and the majority of the trail is paved. The intent is to extend the trail north to Prairie Lands Trail and make its way to Mason City. This will create a regional trail network of almost 30 miles.

LAKE CORNELIA WALKING TRAIL

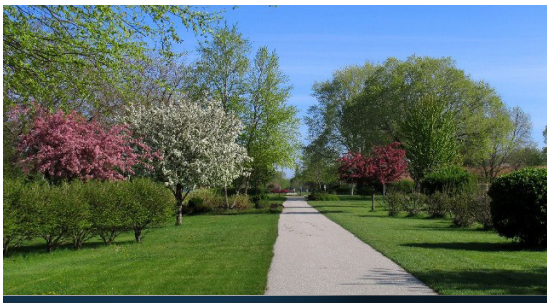
The Lake Cornelia Walking Trail runs along the northwest shore of Lake Cornelia County Park. The trail is a crushed limestone trail and less than two miles in length. A primary goal of this Trail System Plan is to connect the Lake Cornelia Walking Trail south to Clarion.

THREE RIVERS TRAIL

The only existing multi-county trail in Wright County is the Three Rivers Trail which connects to the Western boundary of the County, beginning outside of Eagle Grove. Totaling 33 miles long at a consistent 8 foot width, the trail is surfaced by crushed limestone that supports both pedestrians and bicyclists. A high priority in this Trail System Plan is to connect Eagle Grove to the Three Rivers Trail and to connect Wright County to the existing 30+ miles of trail.

BOONE RIVER GREEN BELT

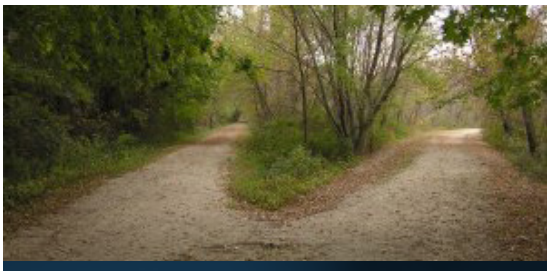
The Boone River Green Belt is a greenway along the Boone River. The Middleton Access Point is southeast of Eagle Grove.



Franklin Grove Heritage Trail

Lake Cornelia Walking Trail

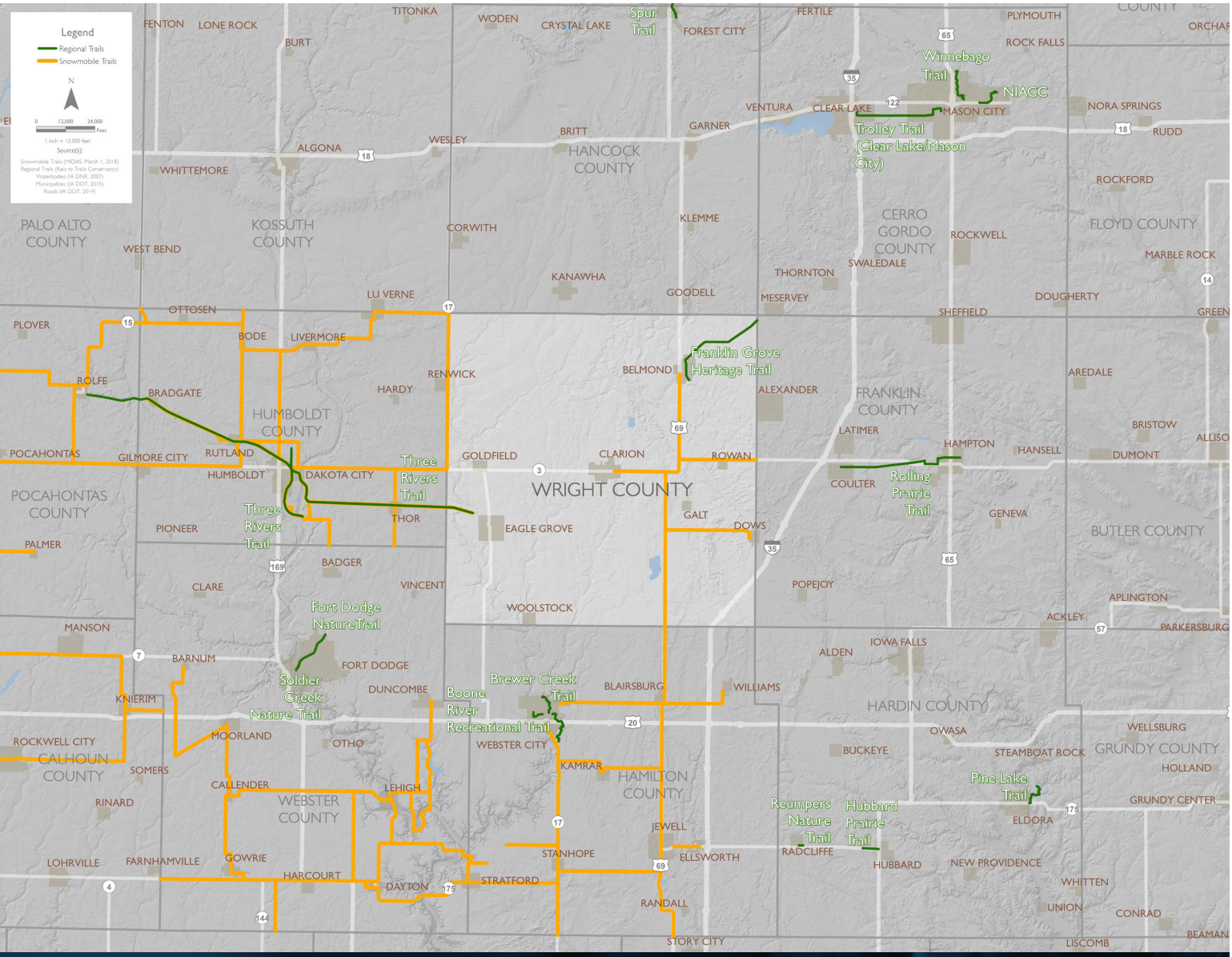
Three Rivers Trail



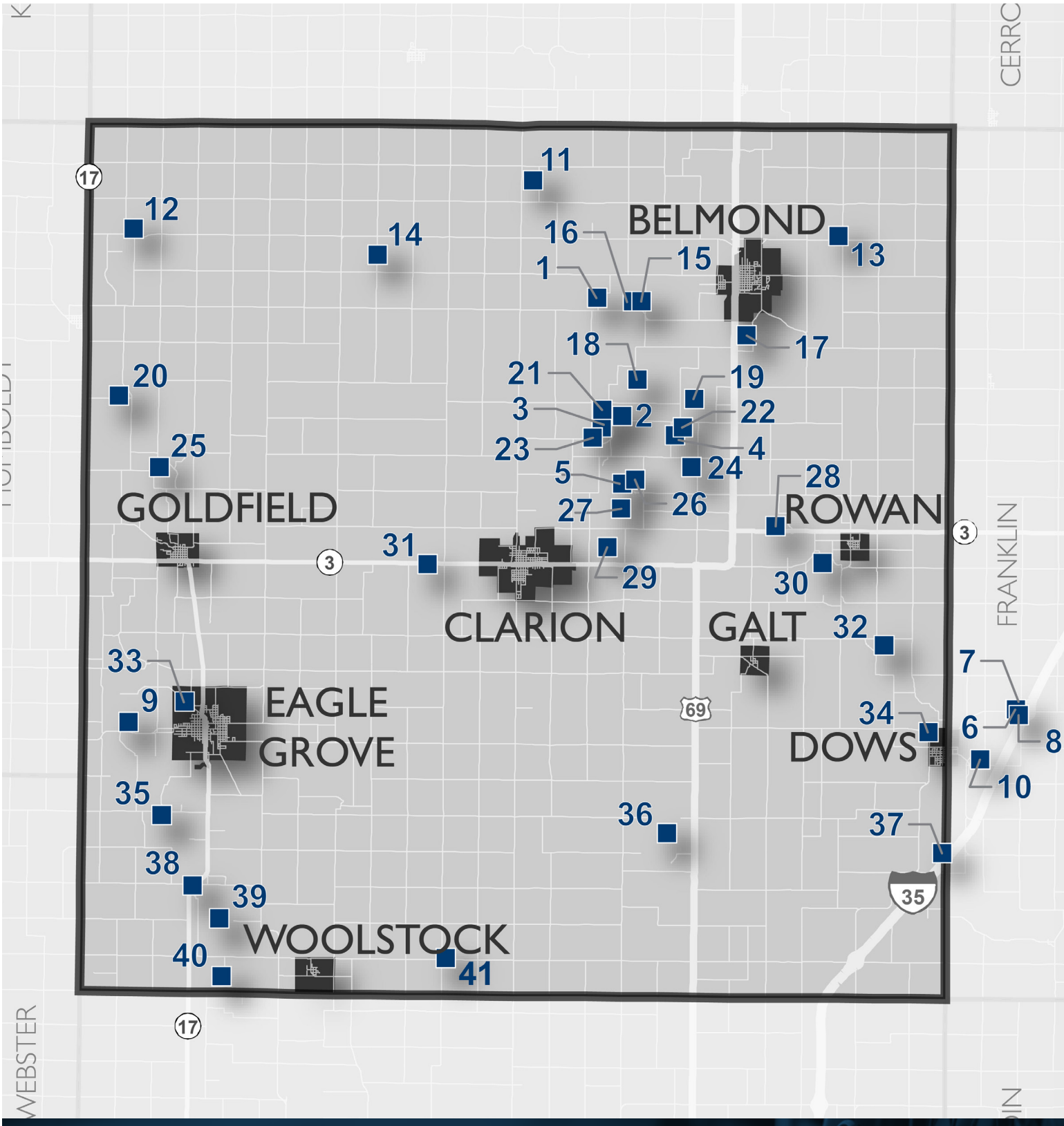
Three Rivers Trail

WRIGHT COUNTY AMENITIES

Wright County has numerous natural and recreational amenities that may attract visitors to the County or provide scenic views for users of the future trail system. Natural amenities within the County include Morse Lake, Lake Cornelia County Park, Pikes Timber, and Elm Lake. Potential recreational activities in Wright County include Clarmond Country Club, Eagle Grove Golf Course, and Dows Golf Course. There are also a number of places available for respite and food and refreshments. Additionally, the Northern Iowa River Greenbelt Drive runs through Wright and Franklin counties featuring oak savannahs, rolling hills, and glacial deposits. Wright County also has several public parks, conservation areas, and Wildlife Management Areas (WMAs). These WMAs include the Lower Morse Lake WMA, Elm Lake WMA, Sportsman WMA, and Whitetail Flats WMA. The County has the natural amenity of having the Iowa River on the eastern border of the County and the Boone River on the western border.



Existing Trail Overview Map



Wright County Amenities

LAKE CORNELIA

Lake Cornelia is a glacial lake left by the Des Moines lobe of the Wisconsin glacier approximately 12,000 years ago. Historically, the Lake had a depth of 6-8 feet, but it was dredged in the late 1940s and now has a depth of 14-18 feet in some areas. Dredge fill was deposited on the north end of the Lake, filling in the natural wetlands. A county recreation area is now built on the dredge fill area.

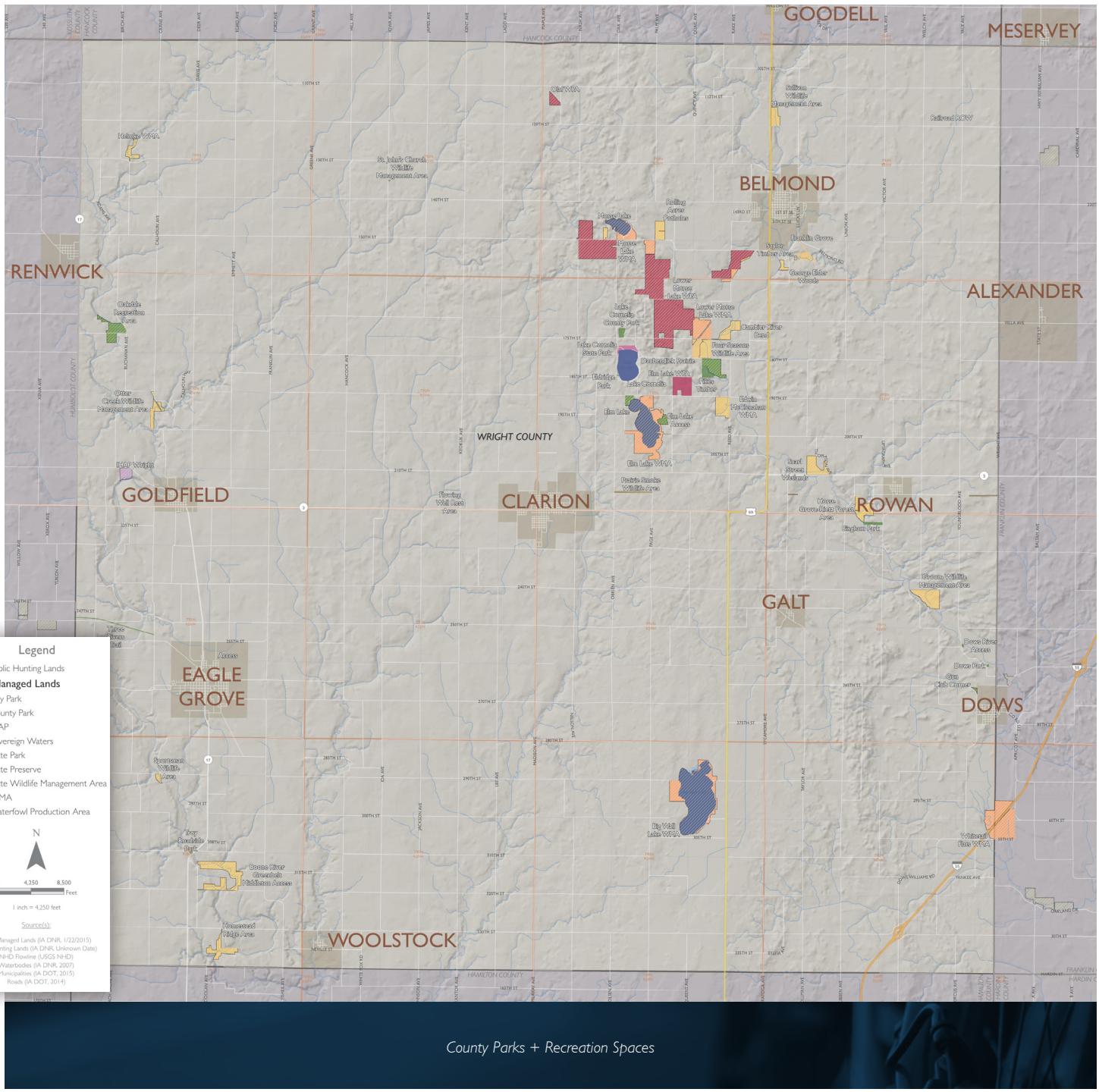
MORSE LAKE STATE WILDLIFE MANAGEMENT AREA

Formerly called the Twin Sisters Lakes, this lake is typical of the many glacial lakes found in the area prior to agricultural and residential development. The Lake is surrounded on several sides by glacial wetlands which serve as filters for the lake and provide wildlife habitat.

PIKES TIMBER:

This small park area contains both upland and flood plain forest areas. A person can easily see the changes in forest as you move from the upland areas with burr oak and hackberry to the slopes containing basswood and walnut to the floodplain with cottonwood, silver maple and willows.

REFERENCE ID	AMENITY TYPE	NAME
1	Recreational	Morse Lake
2	Recreational	Clarmond Country Club
3	Recreational	Lake Cornelia
4	Park	Pikes Timber
5	Recreational	Elm Lake
6	Food & Drink	Arby's
7	Convenience Store	Shells
8	Public	Rest Stop
9	Recreational	Eagle Grove Golf Course
10	Recreational	Dows Golf Course
11	Recreational	Olaf Waterfowl Production Area
12	Recreational	Helmke WMA
13	Recreational	Finn Prairie Wildlife Area
14	Recreational	St. John's WMA
15	Recreational	Lower Morse Lake WMA
16	Recreational	Rolling Acres Potholes
17	Recreational	George Elder Woods
18	Recreational	Lower Morse Lake Waterfowl Production Area
19	Recreational	Cambier River Bend Area
20	Recreational	Oakdale Recreational Area
21	Recreational	Lake Cornelia State Park
22	Recreational	Four Seasons Wildlife Area
23	Recreational	Eldridge Park
24	Recreational	Edwin J McClenahan WMA
25	Recreational	Otter Creek WMA
26	Recreational	Elm Lake Access
27	Recreational	Elm Lake WMA
28	Recreational	Snarl Street Wetlands
29	Recreational	Prairie Smoke Wildlife Area
30	Recreational	Horse Grove-Rietz Forest Area
31	Recreational	Flowing Well Rest Area
32	Recreational	Groom WMA
33	Recreational	Three Rivers Trail Trailhead
34	Recreational	Gun Club Corner
35	Recreational	Sportsman WMA
36	Recreational	Big Wall Lake
37	Recreational	Whitetail Flats WMA
38	Recreational	Troy Roadside Area
39	Recreational	Boone River Greenbelt, Middleton Access
40	Recreational	Homestead Ridge Area
41	Religious	French Church & Cemetery



County Parks + Recreation Spaces

Belmond Iowa Specialty Hospital

Belmond Welcome Sign

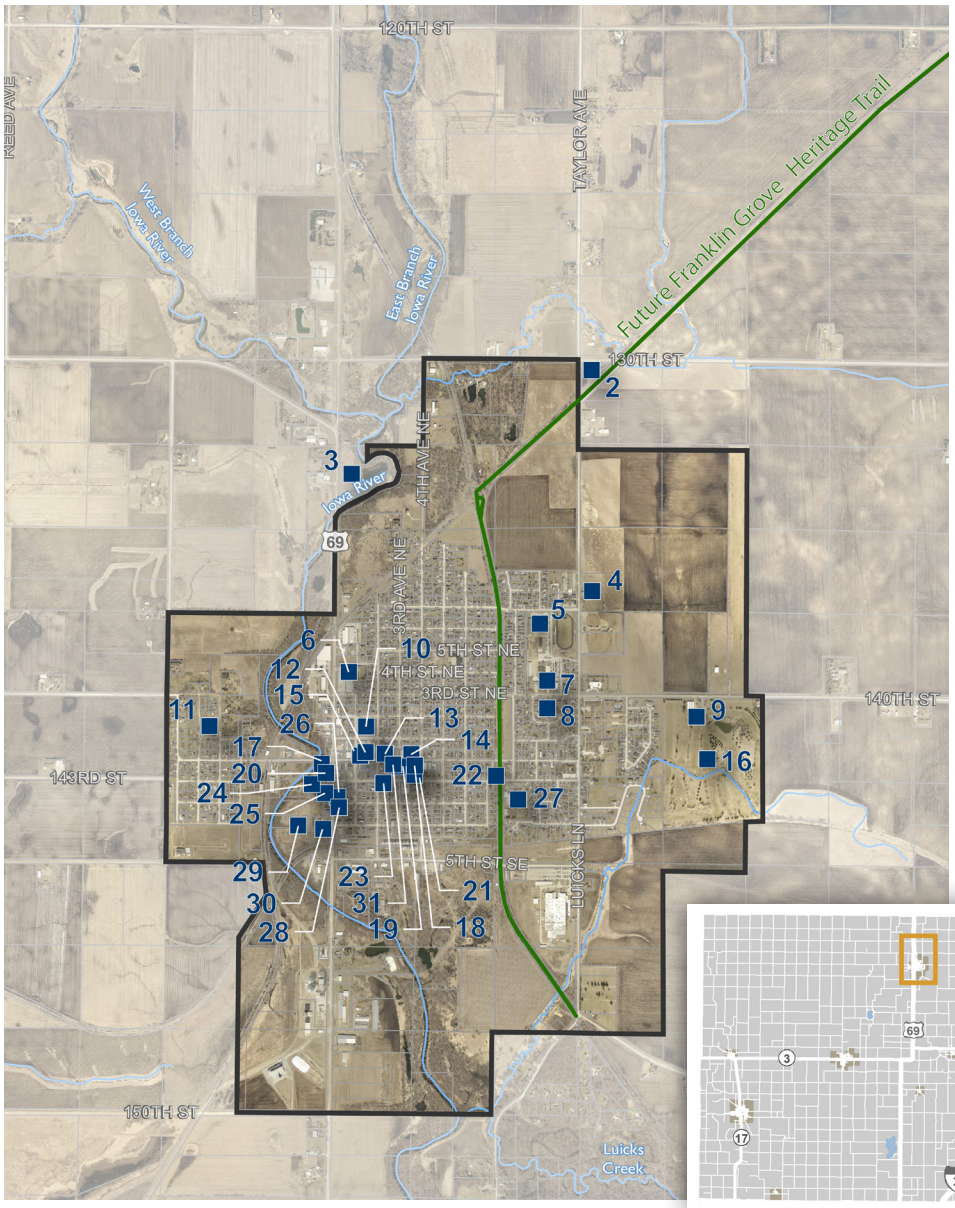
Outdoor Classroom

Spare Lanes Bowling Alley

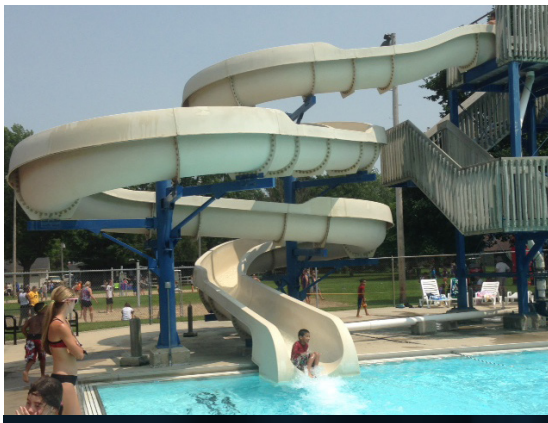
AMENITIES BY COMMUNITY

BELMOND AMENITIES

Belmond offers activities and amenities for residents and visitors of all ages. The City also has seven parks, one disc golf course, and the Franklin Grove Heritage Trail. Additional sites include the Jenison Meacham Memorial Art Museum & Farm, Children's Garden, and Outdoor Classroom. There is also a Country Club and Historical Museum within Belmond. Trail users may enjoy food and refreshments at some of the local convenience stores, Cattleman's at the Club, J.P.'s Pizzeria, and Jerry's Place.



REFERENCE ID	AMENITY TYPE	NAME
1	Museum	Jenison Meacham Memorial Art Museum & Farm
2	Recreational	Future Franklin Grove Heritage Trail Trailhead
3	Education	Outdoor Classroom
4	Recreational	Ball Field Park
5	Education	Belmond-Klemme Elementary School
6	Retail	True Value Farm & Home Center
7	Education	Belmond-Klemme Community School
8	Park	El Mar Park
9	Food & Drink	Cattleman's at the Club
10	Park	City Park
11	Park	Crown Point Park
12	Museum	Belmond Historical Museum
13	Food & Drink	Sugarpie Bakery & Café
14	Entertainment	New Lyric Theatre
15	Food & Drink	The Corner Lounge
16	Recreational	Belmond Country Club
17	Recreational	River Disc Golf Course
18	Community	Belmond Public Library
19	Health Care	Iowa Specialty Hospital-Belmond
20	Convenience Stores	Yesway
21	Health Care	Belmond Clinic
22	Recreational	Children's Garden
23	Food & Drink	Spare Time Lanes
24	Park	River Park
25	Food & Drink	Jerry's Place
26	Food & Drink	Belmond Drive-In
27	Park	Pool Park
28	Convenience Store	Casey's General Store
29	Park	Iowa River RV Park
30	Recreational	Possible Future Trailhead
31	Entertainment	Santa House



Luick Swimming Pool

AMENITY HIGHLIGHTS

BELMOND HISTORICAL MUSEUM

In August 1976, an organizational meeting was held at the Leinbach Center to form the Belmond Historical Society and the grand opening of their museum took place at 212 East Main in June 1984. The display areas are designed and furnished as rooms in the homes of this communities early settlers. Photographs and artifacts related to the history of Belmond may be viewed, as well as tools and equipment - many of which were used before 1900 - by the pioneers who settled in and near Belmond.

Northern Iowa River Greenbelt Association

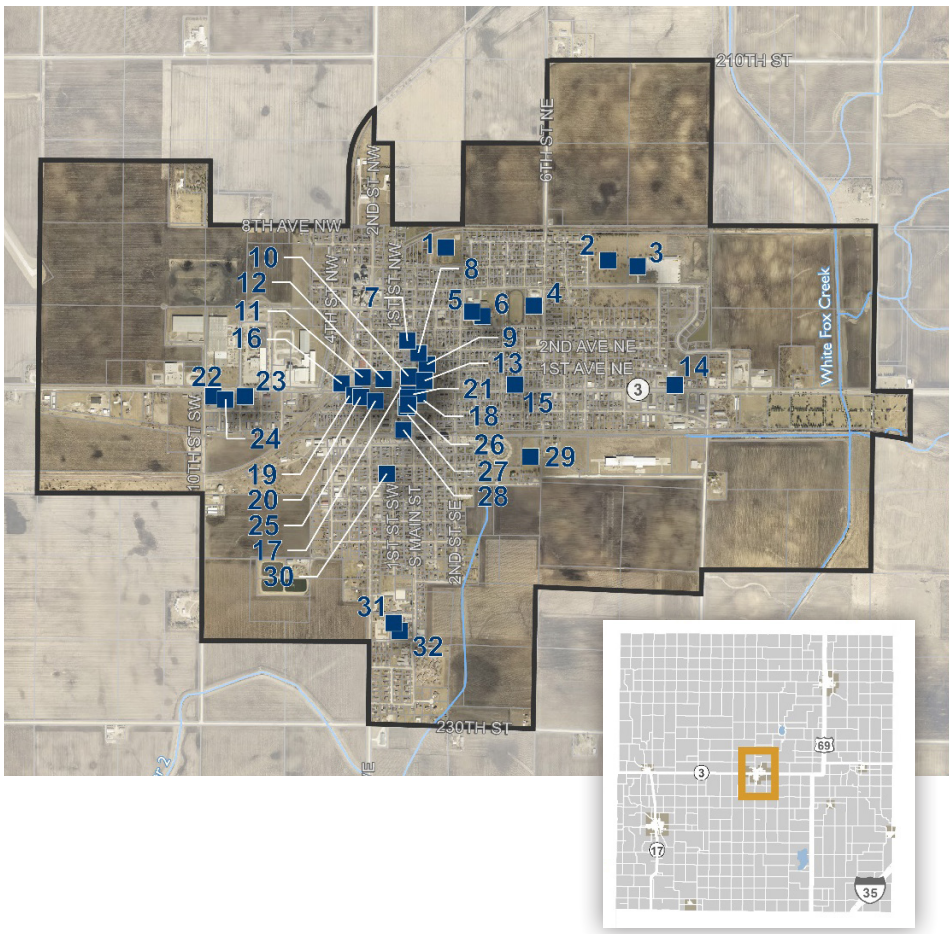
Grounded Coffee Shop

Rock Island Depot

Clarion Theatre

CLARION AMENITIES

Clarion is the county seat of Wright County and houses amenities and activities for residents and visitors of all ages. The City of Clarion has five parks, one disc golf course, and an aquatic center that provides recreational opportunities for the users of the county-wide trail. Cultural amenities include the Clarion Library, the 4H Museum, and Heartland Museum. Trail users may enjoy food and refreshments at some of the local convenience stores, restaurants and cafes including Fuel, Grounded, Sam's Chinese Kitchen, and Pizza Ranch.



REFERENCE ID	AMENITY TYPE	NAME
1	Park	Hansen Park
2	Recreational	C-G-D HS Disc Golf Course (The Swamp Disc Golf Course)
3	Education	Clarion-Goldfield-Dows High School
4	Recreational	Clarion Aquatic Center and Aquatic Center Park
5	Education	Clarion-Goldfield-Dows Middle School
6	Education	Clarion-Goldfield Elementary School
7	Community	Clarion Library
8	Food & Drink	Fuel
9	Entertainment	Clarion Theatre
10	Food & Drink	Grounded
11	Grocery	Clarion Super Foods
12	Park	Gazebo Park
13	Government	Wright County Courthouse
14	Retail	Eagle Building Supply
15	Grocery	That Iowa Girl
16	Food & Drink	Hardee's
17	Food & Drink	Pizza Ranch
18	Food & Drink	Sam's Chinese Kitchen
19	Food & Drink	Subway
20	Convenience Store	Yesway
21	Food & Drink	New Home Café
22	Food & Drink	Snack Village
23	Retail	Do It Best
24	Museum	Heartland Museum/ 4-H Schoolhouse Museum
25	Convenience Store	Casey's General Store
26	Grocery	La Tienda Mexicana
27	Food & Drink	Chappy's On Main
28	Historical	Rock Island Depot
29	Park	Lion's Park
30	Park	Fireman's Park
31	Health Care	Clarion Clinic
32	Health Care	Iowa Specialty Hospital- Clarion

Wright County Courthouse

Wright County Freedom Rock

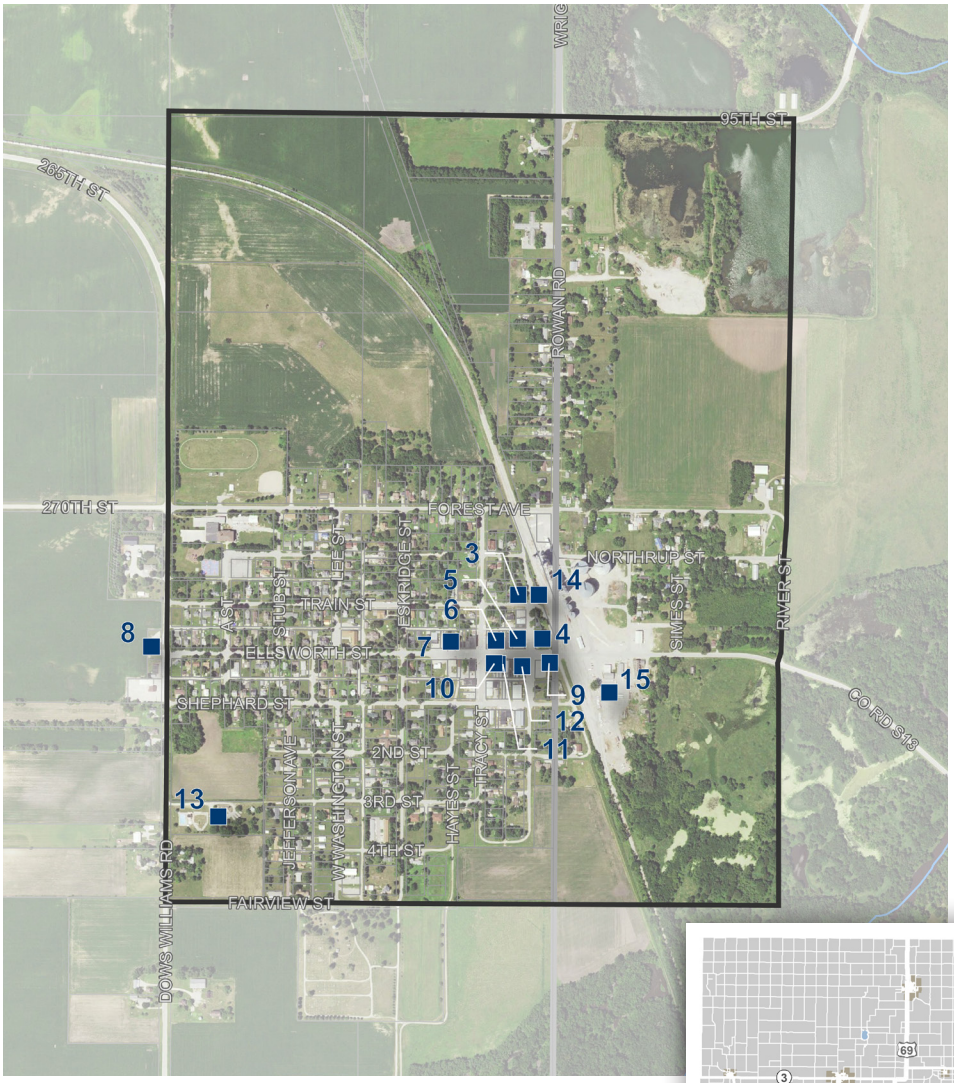
Quasdorf Blacksmith Shop Museum

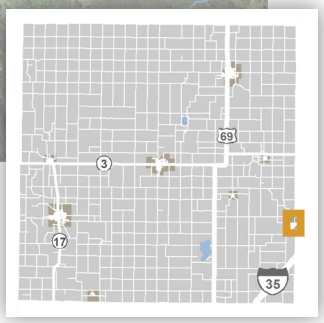
Mercantile Building

Dows Community Library

DOWS AMENITIES

Dows offers a number of memorial, historical, and community amenities for visitors and residents of Wright County. The City is the home of the memorial Wright County Freedom Rock, which honors veterans in Wright County. Historical amenities and activities in Dows include the Quasdorf Blacksmith Shop Museum, Vernon Schoolhouse #5, and the Mercantile Building in the Dows Historic District. Community amenities include the Dows Community Center and the Dows Community Library.





REFERENCE ID	AMENITY TYPE	NAME
3	Historical	Quasdorf Blacksmith Shop Museum
4	Historical	Vernon Schoolhouse #5
5	Community	Dows Community Center
6	Grocery	Dows Grocery
7	Community	Dows Community Library
8	Convenience Store	Casey's General Store
9	Memorial	Wright County Freedom Rock
10	Food & Drink	Down Home Restaurant
11	Food & Drink	River Bar
12	Historical	Mercantile Building-Dows Historic District
13	Recreational	City Pool
14	Historical	Welcome Center & Rock Island Depot
15	Historical	Evan's Little Prairie House

AMENITY HIGHLIGHT

QUASDORF BLACKSMITH & WAGON REPAIR SHOP

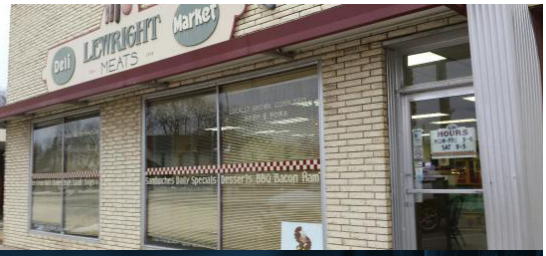
The blacksmith business may have changed throughout the years, but the name associated with it has remained the same in Dows since 1898. That was the year G.F. Quasdorf built his blacksmith and repair shop west of Rock Island railroad depot, and that is where son, Frank Quasdorf continued to work until his death, when he willed the magnificent old building and its contents to the Dows Historical Society. Now the building is being brought back to its original look and operates as a museum.

Northern Iowa River Greenbelt Association

Eagle Grove Elementary School

Fish Pond Park

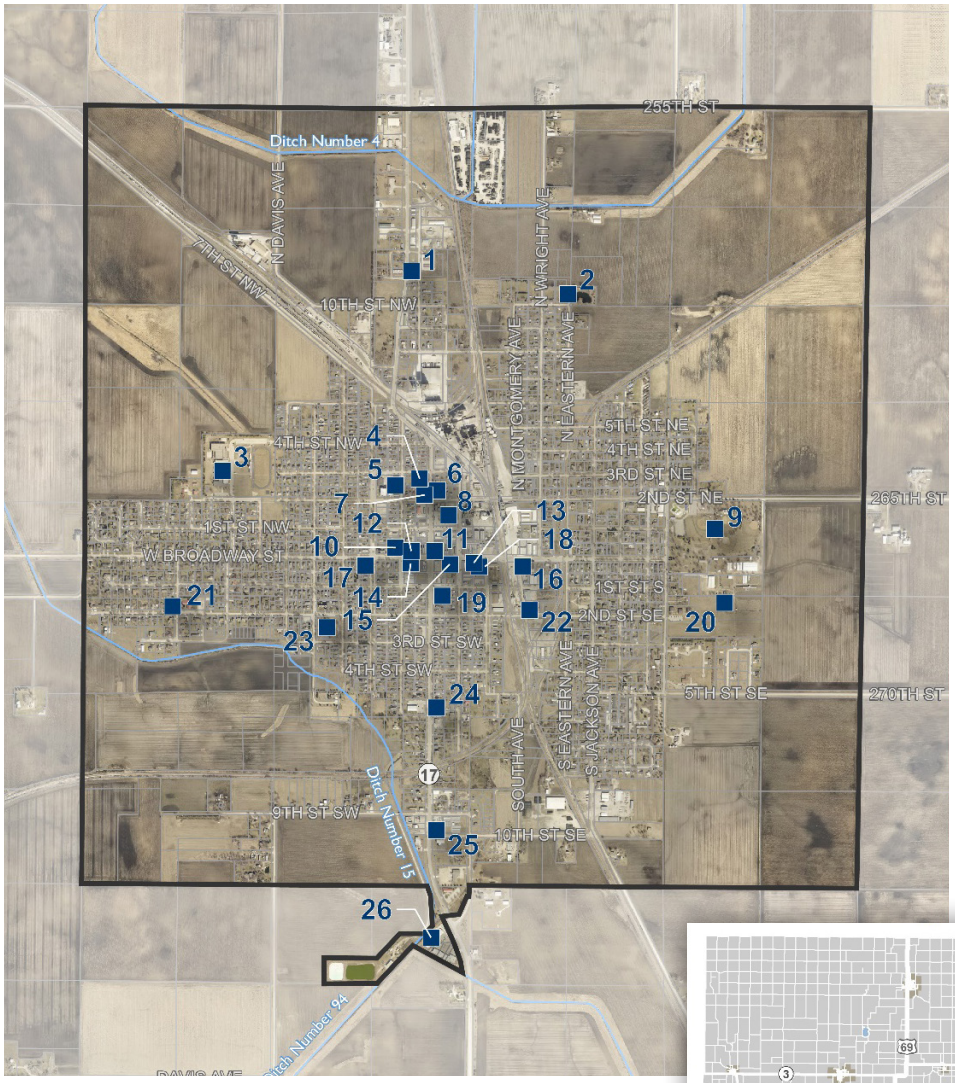
Eagle Grove Historical Museum

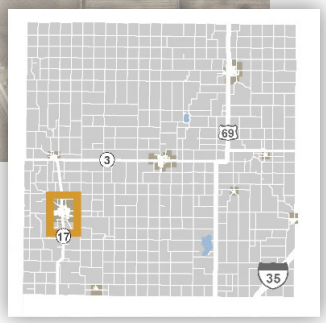


Lewright Meats-Deli & Market

EAGLE GROVE AMENITIES

Eagle Grove is the largest community in Wright County and a connection to the regional Three Rivers Trail is on the northwest outskirts of the City. The City of Eagle Grove has five city parks and an artesian well where visitors can enjoy water that has been flowing non-stop for over 100 years. Trail users can enjoy food and refreshments at some of the local convenience stores, Lewright Meats, Jessica's Country Kitchen, Smoke Shop, Sam's Chinese Kitchen, and Rails Bar & Grill.





REFERENCE ID	AMENITY TYPE	NAME
1	Recreational	Eagle Bowl
2	Park	Fish Pond Park
3	Educational	New Elementary School
4	Educational	Iowa Central Community College
5	Educational	Eagle Grove High School
6	Food & Drink	Subway
7	Food & Drink	Twiins Shoppe
8	Grocery	Fareway Grocery
9	Park	Greenwood Park Aquatic Center & Disc Golf Course
10	Historical	Eagle Grove Historical Museum
11	Food & Drink	The Farm/Jessica's Country Kitchen
12	Grocery	Lewright Meats-Deli & Market
13	Food & Drink	Smoke Shop
14	Food & Drink	B & S Crossing
15	Food & Drink	Sam's Chinese Kitchen
16	Retail	Eagle Grove Building Supply
17	Community	Eagle Grove Memorial Library
18	Park	Veterans Memorial Park
19	Convenience Store	Casey's General Store
20	Community	Wright County Fairgrounds
21	Park	Flowing Well Park
22	Food & Drink	Rails Bar & Grill
23	Park	Hewett Park
24	Food & Drink	The Family Table
25	Convenience Store	Kum & Go
26	Retail	Bomgaars

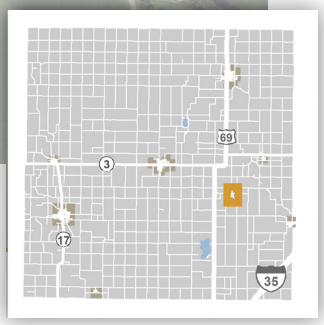
Fareway Grocery

Bird's Eye View of Galt

Galt Post Office

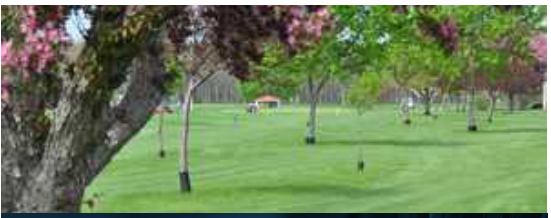
GALT AMENITIES

Galt invites trail users to stop in and visit Town Park as a place to take a break from riding the trails.



REFERENCE ID	AMENITY TYPE	NAME
1	Park	Town Park

Goldfield Welcome Sign

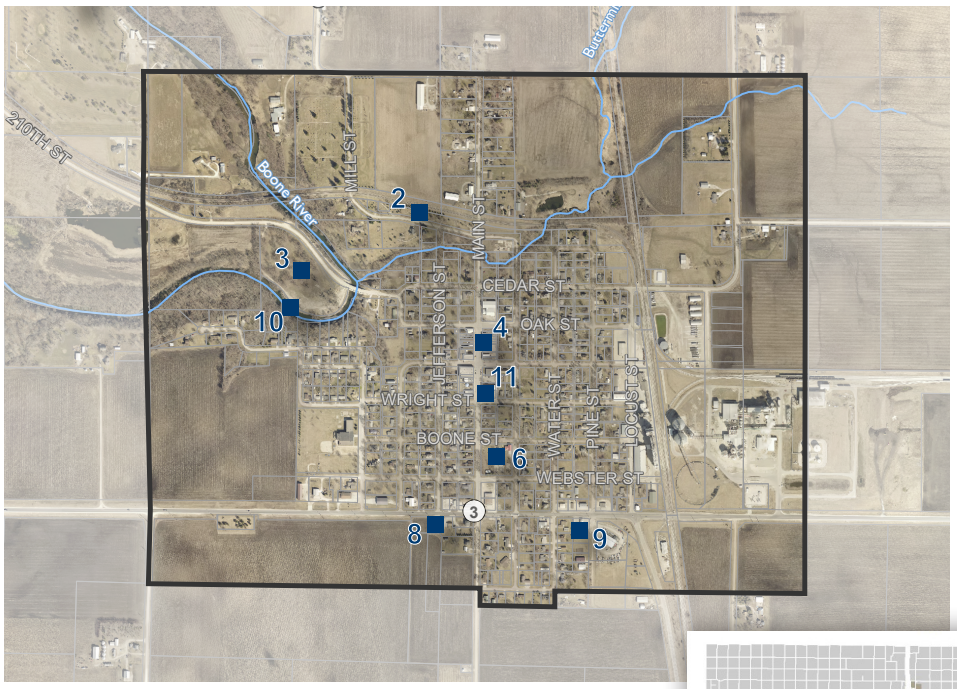


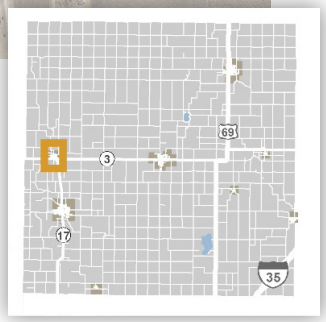
Oakridge Golf Course

Cheese Mart

GOLDFIELD AMENITIES

Goldfield offers amenities that appeal to residents and users alike. For recreation, the City has three parks and Oakridge Recreation and Golf Course. Trail users may enjoy food and refreshments at the local convenience store, the Cheese Mart, and the Well.





REFERENCE ID	AMENITY TYPE	NAME
1	Recreational	Oakridge Golf Course
2	Park	Down Memory Lane
3	Park	River Park
4	Food & Drink	The Well
6	Park	Old School Park
8	Food & Drink	Cheese Mart
9	Convenience Store	Casey's General Store
10	Recreational	Boone River Rapids
11	Historical	Log Cabin

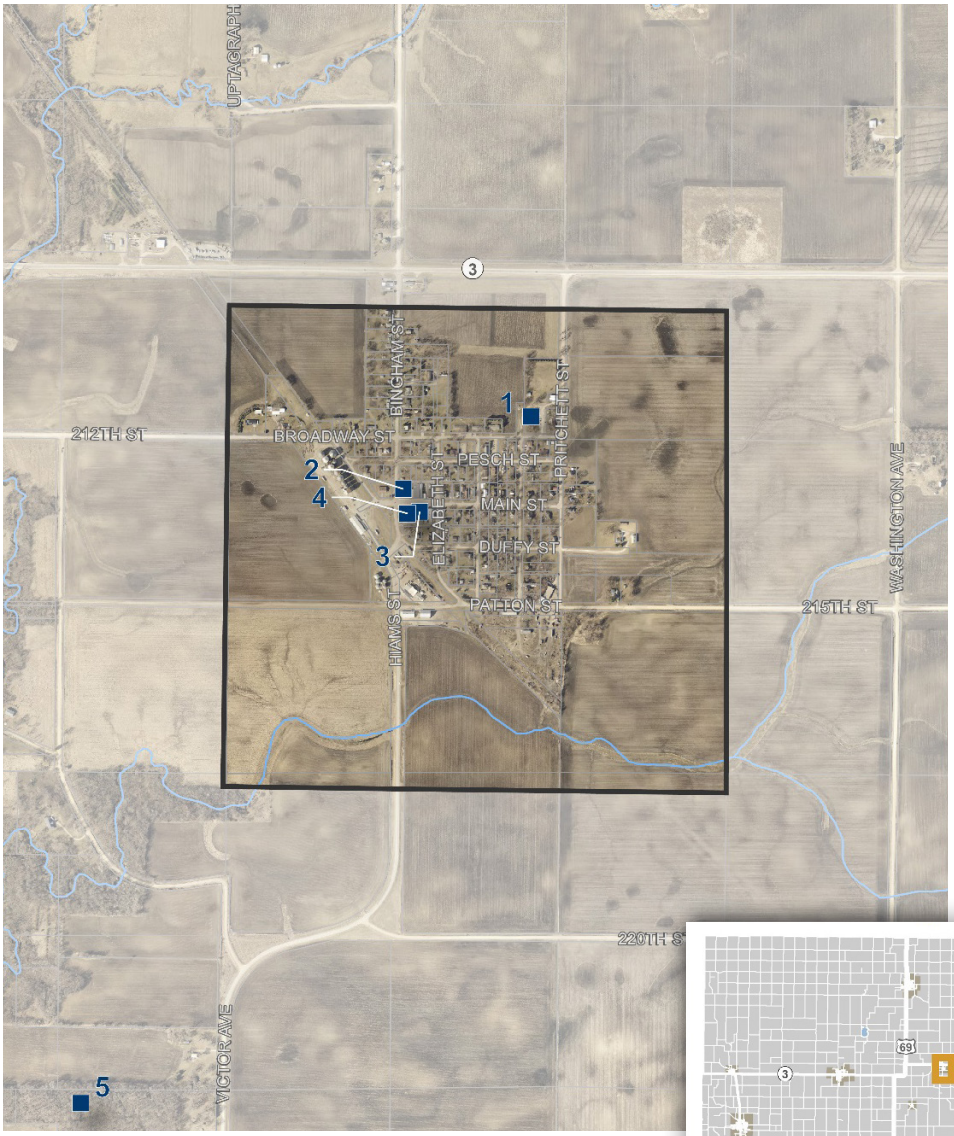
St. Patrick's Parade in Rowan

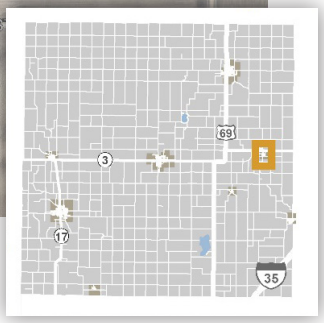
Rowan Post Office

Rowan Coop

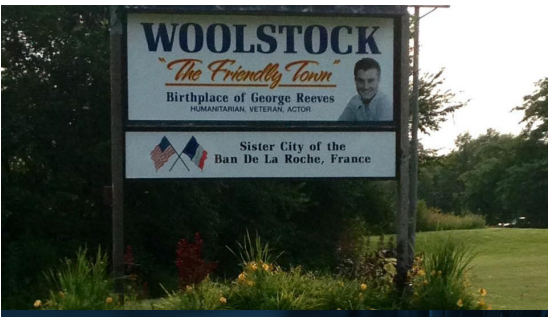
ROWAN AMENITIES

Rowan offers community, recreational, and historical amenities. Community amenities include the Iowa Players Community Theater and the Rowan Library Community Center. The City also has two parks and is home to the Rowan Historical Museum.



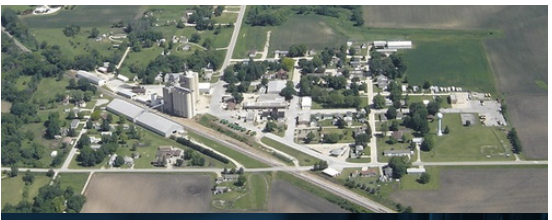


REFERENCE ID	AMENITY TYPE	NAME
1	Community	Iowa River Players Community Theater
2	Park	Playground Park
3	Historical	Rowan Historical Museum
4	Community	Rowan Library Community Center
5	Park	Bingham Park



Woolstock Welcome Sign Honoring George Reeves

George Reeves, the Original Superman

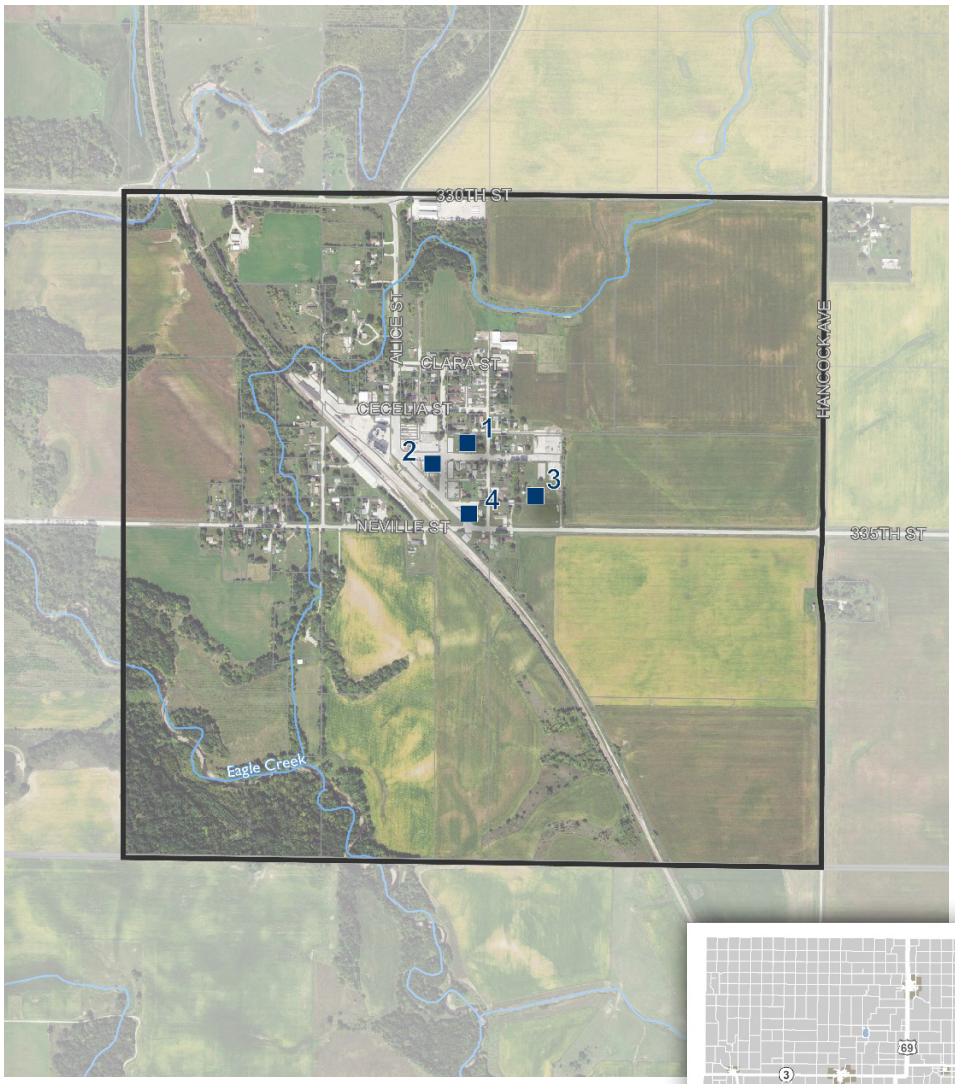


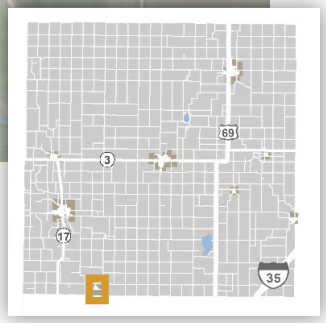
Bird's Eye View of Woolstock

French Church and Cemetery

WOOLSTOCK AMENITIES

Woolstock is the birthplace of George Reeves, the original Superman, and the town welcomes visitors and residents with a welcome sign in his honor. The City is also home to two parks, including an athletic park. Trail users may enjoy food and refreshments at the local convenience store and LL's. Three miles east of Woolstock is the historic French Church and Cemetery.

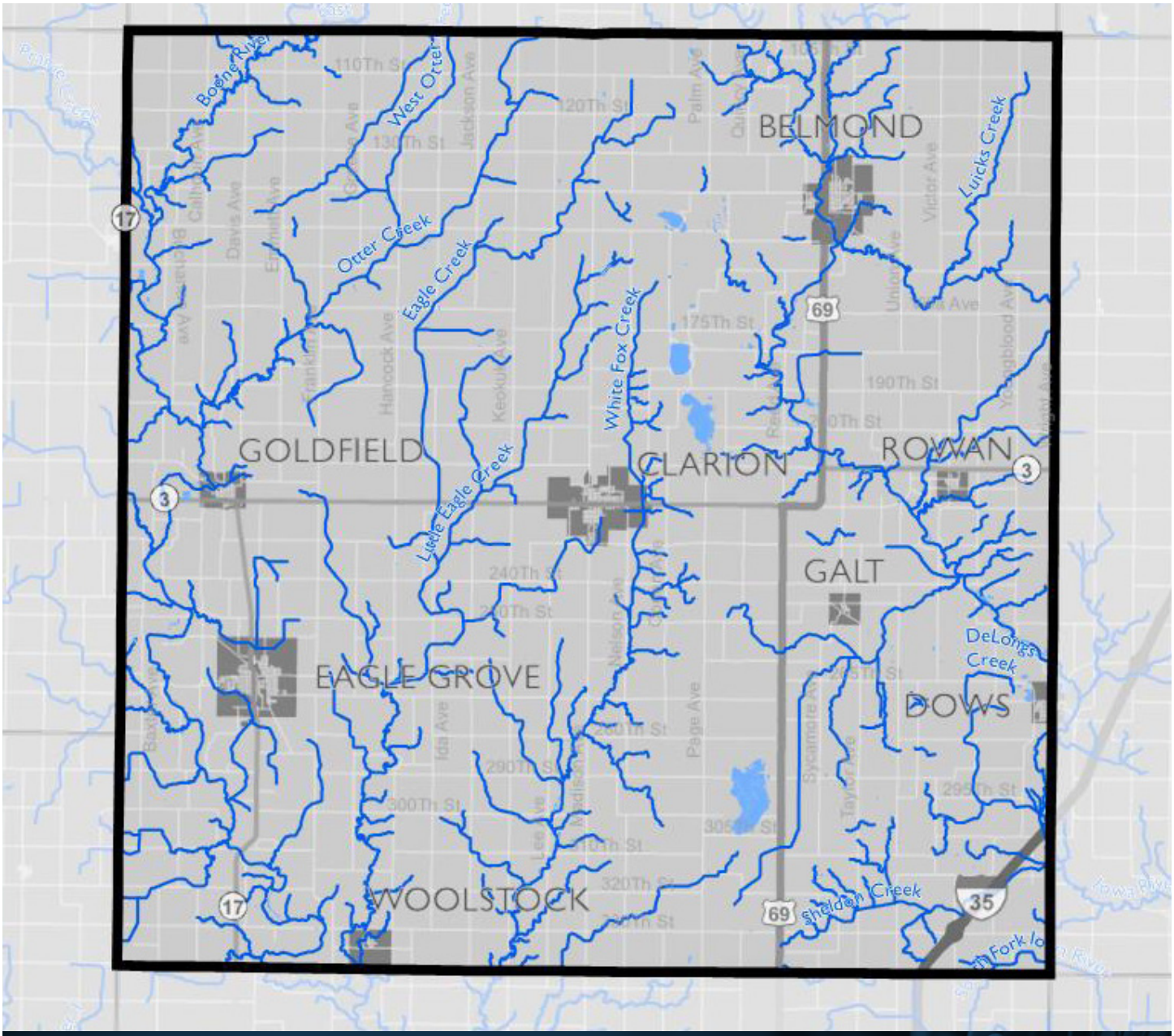




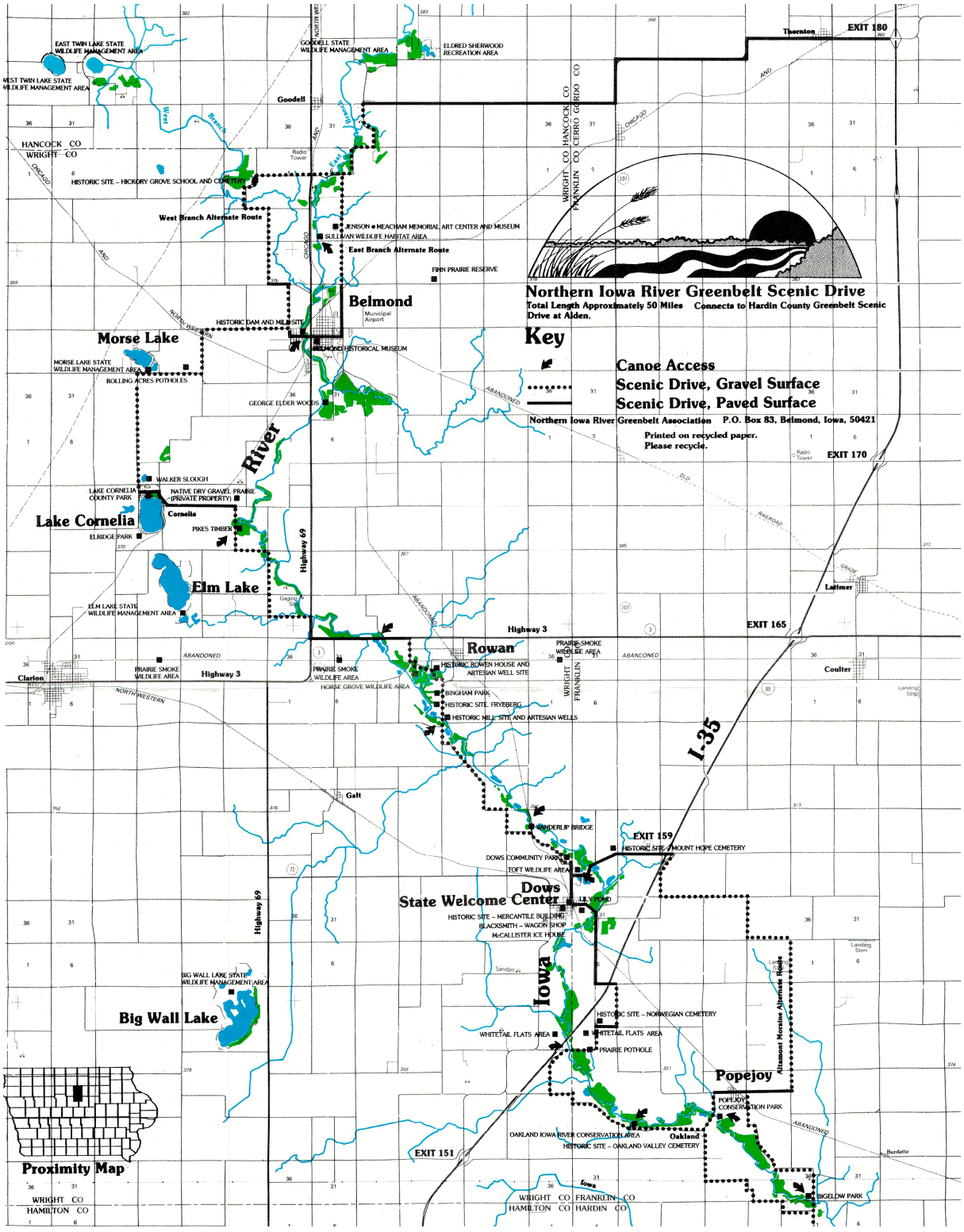
REFERENCE ID	AMENITY TYPE	NAME
1	Park	Woolstock City Park
2	Food & Drink	LL's
3	Park	Woolstock Athletic Park
4	Convenience Store	W & H Coop

WATERWAYS OF WRIGHT COUNTY

This map shows the location of creeks, rivers, and their tributaries throughout Wright County. Eastern and western county borders are formed by the Iowa River and Boone River, respectively. There are no official DNR Water Trails within the County. Troy Park, located three miles south of Eagle Grove on Highway 17, has access to Boone River and can be used for canoeing and fishing. The Boone River Greenbelt, located three miles south of Eagle Grove, is a river corridor with access to the Boone River for fishing, canoeing, and viewing wildlife. The Northern Iowa River Greenbelt Association mapped the canoe access points to the Iowa River along the eastern border of Wright County.



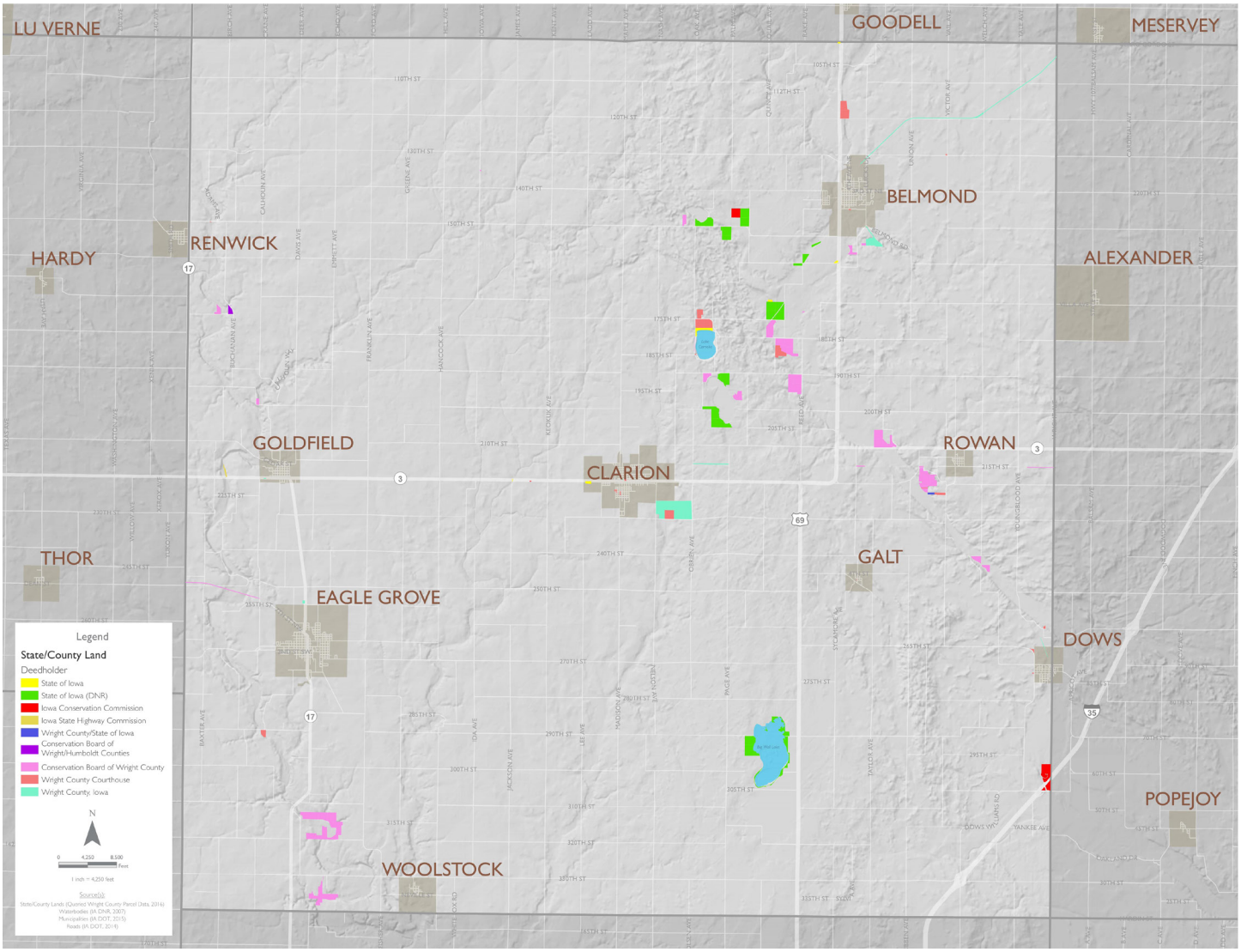
Waterways of Wright County

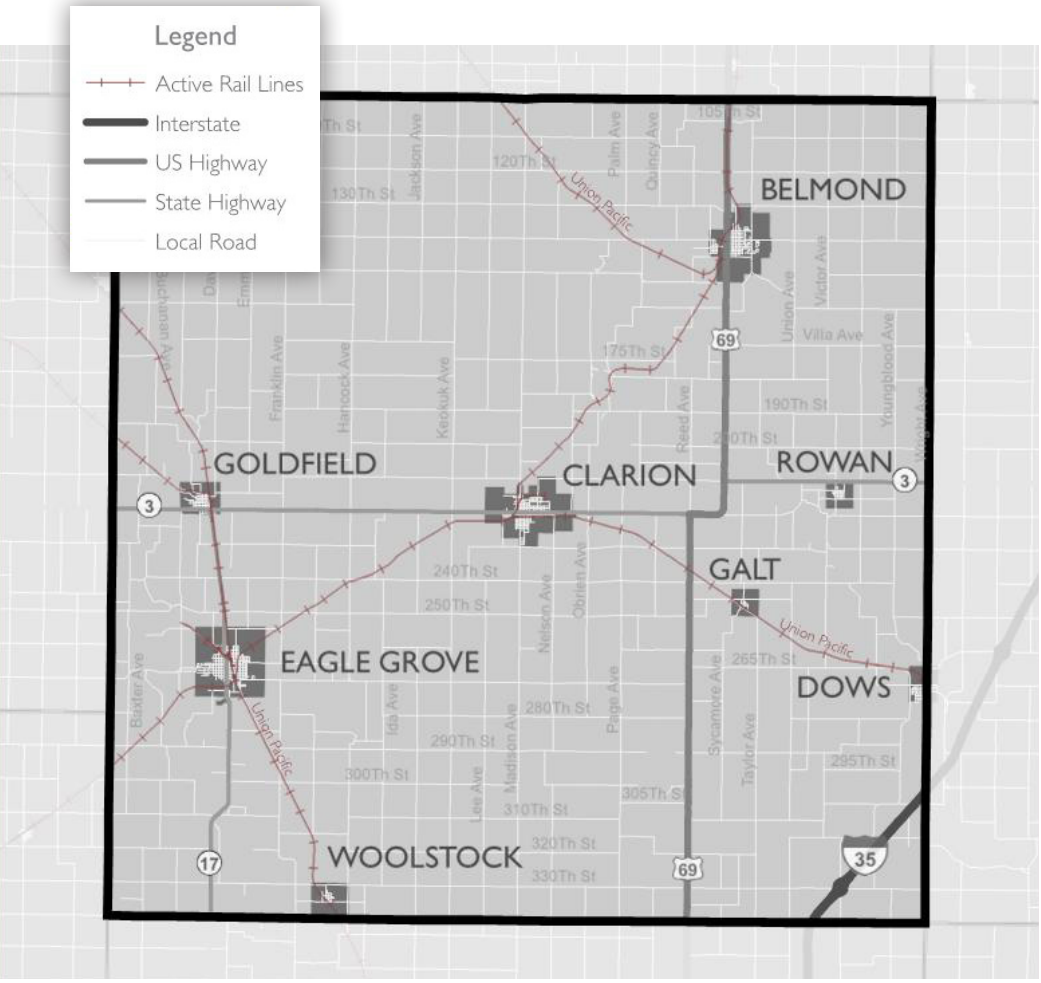


Northern Iowa River Greenbelt

PUBLIC LANDS OF WRIGHT COUNTY

To mitigate the difficulty that may come with acquiring land for the trail system, it is best to utilize land that is already owned by cities, Wright County, the State of Iowa, and other public entities. The following map shows county and state-owned land.





ROADWAY AND TRANSPORTATION OF WRIGHT COUNTY

Trails can benefit from existing transportation networks within the County. Roadways are crucial to the success of the trail system, not only as a way to reach trailheads and amenities within cities, but roadways can also serve as part of a trail by connecting sections. Abandoned railroad beds are also often converted to trails.

NATURAL FEATURES IN WRIGHT COUNTY

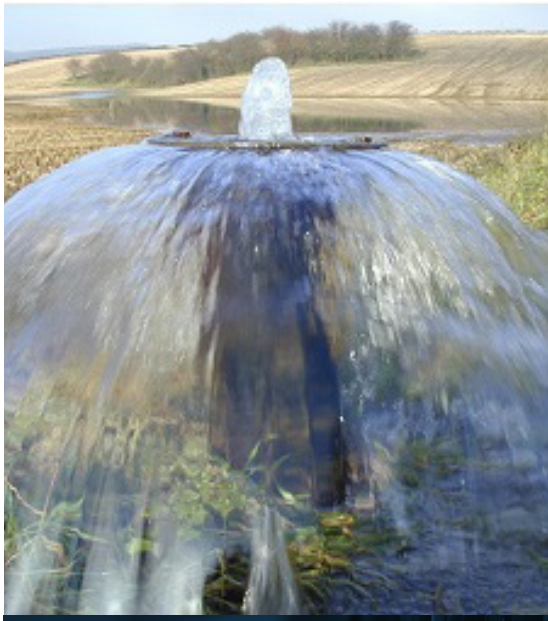
The Northern Iowa River Greenbelt Association described some of the unique natural features that can be found in Wright County. The following text is taken from the Northern Iowa River Greenbelt Scenic Drive pamphlet published in coordination with Iowa Natural Heritage Foundation. Trail users and residents of Wright County can appreciate some of these scenic features while enjoying recreational opportunities throughout the county and region.

ARTESIAN WELLS

Artesian wells are common along the Northern Iowa River. The name "artesian" comes from Artois, France, where many of the flowing wells once occurred. Artesian wells occur when a well drive penetrates an aquifer confined under pressure between horizontal layers of clay, shale and limestone. Over 100 artesian wells can be found throughout Wright County.

DRY GRAVEL PRAIRIES

Dry gravel prairies occur in association with the tops of glacial ridges and knobs. These relatively infertile soils support native plant communities commonly populated with sideoats, blue gama, junegrass, and pasque flower.



Artesian Wells

Dry Gravel Prairies

GLACIAL MORAINES

Abrupt, rounded hills occasionally rise above the otherwise gently rolling landscape as a reminder of the Wisconsin Glacier's retreat some 10,000 years ago. This glacial ice generated incalculable forces on the land—gorging out materials, depositing them nearby, leaving a knob or ridge here, dropping a mass of ice in a depression there, gradually forming the varied landscape destined to become this biologically rich prairie pothole section of Iowa.

These ridges are often dry and gravelly, and have sideoats, blue gama, junegrass and the beloved pasque flower growing on the tops. Less steep moraines are usually entirely cultivated. Many of the cultivated moraines have recently been enrolled in the Conservation Reserve Program (CRP) because of their highly erosive nature. The result has produced a patchwork landscape of grassy hillsides throughout the vast fields of corn and soybeans producing a boom in the local pheasant population. The pheasant is a popular gamebird enjoyed by both local and out-of-state sportsmen.

IOWA RIVER

Idyllic and peaceful are terms descriptive of the Iowa River as it quietly negotiates its course from an open prairie setting near its origin to an increasingly wooded valley south of Belmond. Tranquil waters are cooled and freshened by spring seeps. The quality water and ideal spawning habitat created by the numerous wetlands along the river maintain a healthy population of bullhead and northern pike, a favorite gamefish among area residents.

Glacial Moraines

IOWA RIVER WOODLANDS

Long fingers of riparian forest follow the many streams that drain this prairie pothole region of Iowa. The rivers, such as the Iowa, provide these woodlands a measure of protection from the prairie fires and reduced stress during drought conditions. Today, the floodplain and adjacent terrain continue to protect these streamside woodlands from agricultural encroachment.

PRAIRIE POTHOLES

Vast wetlands, heavily laden with nature's riches, were the footprint of the Wisconsin Glacier. This glacier left millions of acres of mixed prairie and marshland throughout north central Iowa. This mosaic of prairie and wetlands acted as a huge sponge soaking up run-off from winter snows or heavy rains.

Although most all of these wetlands have been drained and are now some of the world's richest farmlands, remaining examples can still be found within the region of the northern Iowa River. These ice age relics often contain white and yellow waterlilies, cattails, river bulrush and occasionally bog cotton, bog bean, mare's tail and wild rice, along with an abundance of wildlife generally associated with marsh habitat. A local favorite is the yellow-headed blackbird commonly seen at Morse Lake.

RIVER OXBOWS

Old river channels, now cut off from the stream itself, are called oxbows and are valuable wetlands for fish and wildlife, serving as nurseries for many species of fish. Rivers periodically inundate low areas and recharge oxbows. Examples of northern Iowa River oxbows can be seen along Highway 3 west of Rowan.

Restored Oxbow on White Fox Creek Outside of Woolstock

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ANALYSIS

ANALYSIS

BENEFITS AND BARRIERS

Part of the process of determining the trail corridor was identifying existing trail benefits, opportunities, and barriers in Wright County. Some items can be both a strength and a barrier at the same time when, for example, one community may have plenty of access to trail amenities like bike parking or water fountains, whereas other communities may not have immediate access to these amenities required by trail users. The common results from the analysis shared between each community of Wright County are listed.

BENEFITS

Wright County provides a wide range of activities and events in which a trails system would be of benefit. One benefit includes strong support from communities and residents for a county-wide trail system promoting economic development and creating a regional trail network and trail-based 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. Additionally, Wright County has an abundance of cultural and historical resources that can provide points of interest along the County-wide trail system.

Abandoned railroad spurs provide an excellent opportunity to build trails. These trails generate tourism that will bring individuals from outside the County to use the County's trails and amenities. The existing Belmond Franklin Grove Heritage Trail is built on an abandoned railroad bed and is expanding north following the abandoned railroad bed. There is also potential to expand trails in Wright County toward Kanawha in neighboring Hancock County following an abandoned railroad bed.

Another potential way to bring people in from outside the County is by incorporating the new trails into the existing and future regional trails. Adding to the length of the current regional trail system will gain users wishing to expand their cross-country runs, long distance biking, or walkers who simply wish to experience the full length of the trail. Local government and communities can rally support for trails through community workshops, fundraisers, clean-ups, and small building projects.

BARRIERS

Some communities in the County do not have trails and others do not have the same level of support, which can make trail implementation more difficult. Acquiring funding for construction could be difficult and may impact public support for trail development. Once built, funding for maintenance can be a challenge if residents are not supportive, as these tasks usually fall to city or county workers to take on and are paid for with local funding. Additionally, land acquisition can create difficulties when developing trails. This barrier can be overcome by using as much city and county-owned land as possible. Potential barriers can include acquiring abandoned rail beds from railroad companies, obtaining easements or land from land owners who may not favor constructing a trail on their property, and funding land acquisition.

STRENGTHS

- Positive visual areas
- Cultural and historical resources
- Natural resources and features
- Festivals, celebrations, and regular community events
- Strong government/public support and economic growth
- Restaurants
- Recreational opportunities

OPPORTUNITIES

- Abandoned railroad beds
- Existing regional trails in surrounding counties
- Funding

BARRIERS

- Limited existing trails
- Limited crossings for bicyclists/ pedestrians
- Poor or missing signage
- Maintenance
- Lack of bike parking and storage
- Land acquisition
- Transportation barriers
- Funding

SURVEY
RESULTS
SNAPSHOT

COMMUNITY INPUT

Input from citizens was gathered from a survey distributed to residents of Wright County. This survey was distributed via Facebook and hard copies of the survey were distributed to all libraries and city halls within Wright County. Wright County residents provided over 106 responses to the public input survey. Results from the public input survey are summarized below.

GENDER OF RESPONDENTS

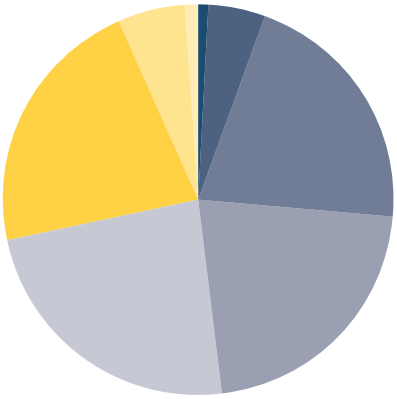
69.81%
Female
RESPONSES: 74

30.19%
Male
RESPONSES: 32

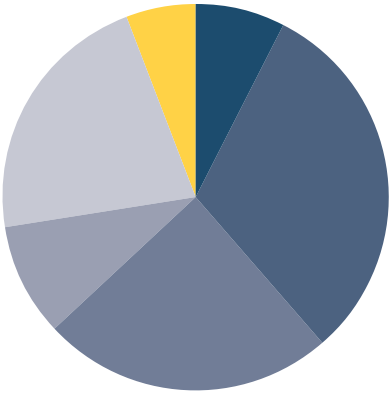
WHAT ACTIVITIES DO YOU PARTICIPATE IN WHILE ON THE AREA'S TRAILS?

1. Walking/Running 75.24%
2. Biking 42.86%
3. Walking the dog 30.48%
4. Not applicable, I don't use trails 20.00%
5. Canoeing/Kayaking 11.43%
6. Fishing 7.62%
7. Cross-Country Skiing 2.86%
8. Off-Highway Vehicles/ATVs 2.86%
9. Horseback Riding 2.86%
10. Other 2.86%
11. Roller blading/ Skateboarding 0.95%

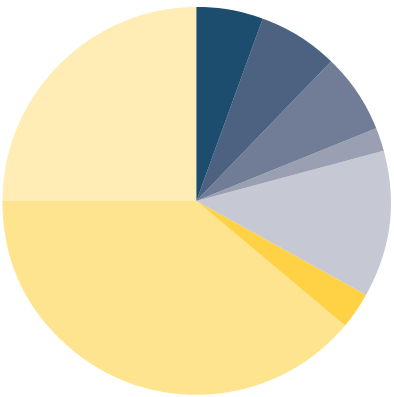
WHAT IS YOUR AGE?



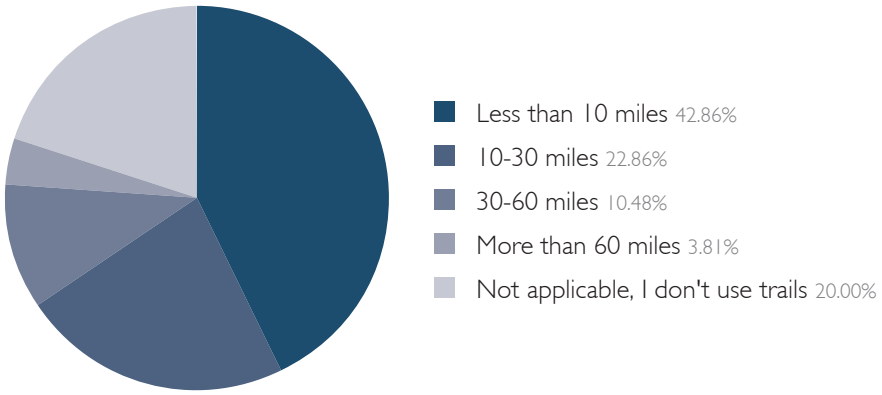
ON AVERAGE, HOW MUCH TIME DO YOU SPEND ON THE TRAIL EACH VISIT?



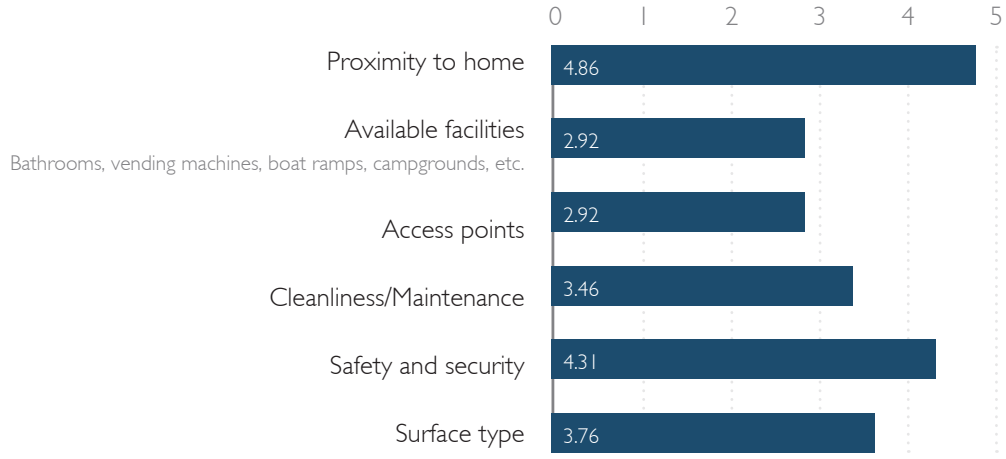
ON AVERAGE, HOW OFTEN DO YOU USE AREA TRAILS?



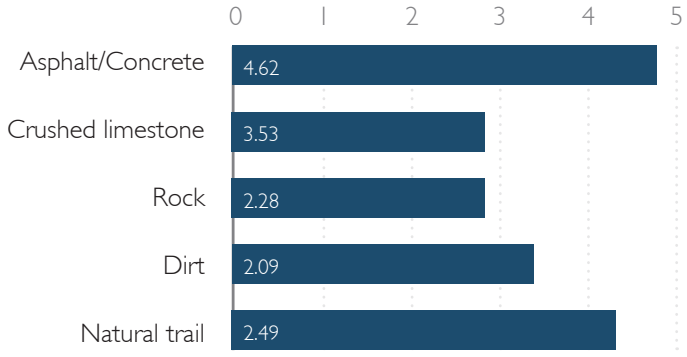
APPROXIMATELY HOW FAR AWAY IS YOUR HOME FROM THE TRAIL YOU USE MOST OFTEN?



PLEASE RANK THE FOLLOWING FACTORS IN ORDER OF IMPORTANCE TO YOU WHEN SELECTING A TRAIL SYSTEM TO USE (1 BEING MOST IMPORTANT, 6 BEING LEAST IMPORTANT)



FOR SURFACE TRAILS, WHAT TYPE OF TRAIL SURFACE DO YOU PREFER TO USE? (1 BEING MOST IMPORTANT, 5 BEING LEAST IMPORTANT)



WHICH TRAIL DO YOU USE MOST FREQUENTLY?

Briggs Woods Trail
Webster City IA

Belmond Heritage Trail
Belmond, IA

Lake Cornelia

Cedar Falls

Cedar Falls State Park

Franklin Grove Heritage Trail-
Belmond IA

River Park
Goldfield, IA

Three Rivers Trail

Bike on road to lake Cornelia from Clarion

Five Island Trail
Emmetsburg, IA

Boone River Valley Trail
Webster City. IA

Walking around town

Rolling Prairie Trail & Boone River Water Trail

Ada Hayden Park
Ames, IA

Three Rivers
Eagle Grove, IA

Clarion-Goldfield-Dows School Track, Clarion City Streets & Sidewalks, Gravel Roads near Dows/Rowan, Dows Track & City Streets

High Trestle Trail
Madrid, IA

New county blacktop

FOR WHAT PURPOSE DO YOU WALK/BIKE?

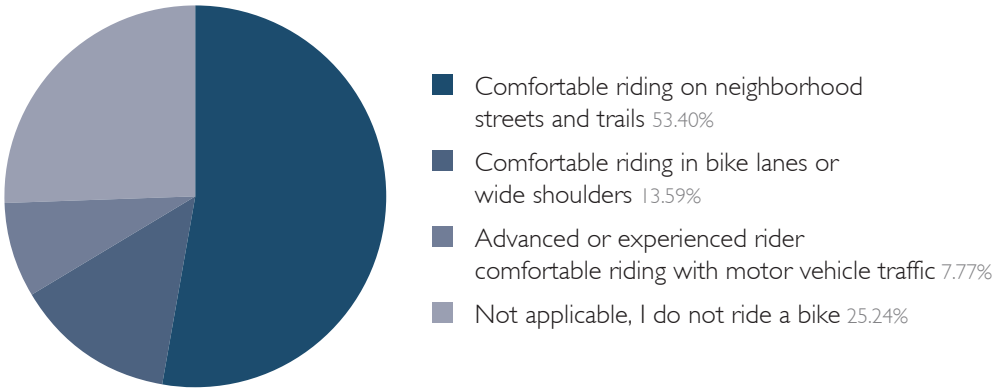
1. For recreation/exercise 91.51%
2. To get to work 18.87%
3. Shopping/errands 18.87%
4. Visit family/friends 18.87%
5. To get to school and/or school related activities 11.32%
6. Church 8.49%
7. Not applicable, I do not walk or bike 5.66%
8. Other 2.83%

WHERE DO YOU WALK/BIKE?

1. City streets 78.30%
2. Sidewalks 66.04%
3. Trails 51.89%
4. County roads 36.79%
5. Recreational facility 21.70%
6. Not applicable, I do not walk or bike 4.72%
7. Other 4.72%

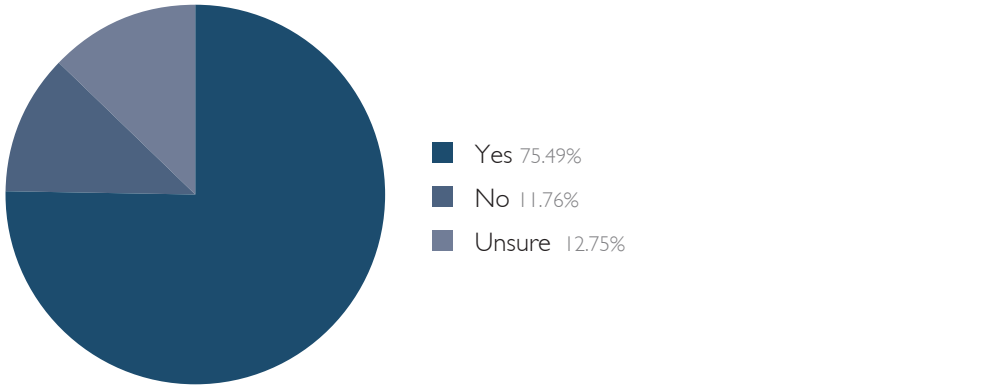
We need snowmobile trails between Eagle, Clarion, and Belmond. Ditch riding is dangerous, but currently the only available option. Snowmobile trails are very important!

IF YOU ARE A BICYCLIST, WHAT TYPE OF BICYCLIST DO YOU CONSIDER YOURSELF?



We go up around Okoboji/ Spirit Lake riding and walking all of their Trails! The trails are well marked and very safe! With an ever growing concern for healthy activities for young and old alike. We truly need this! It would be wonderful if we could get something going here!

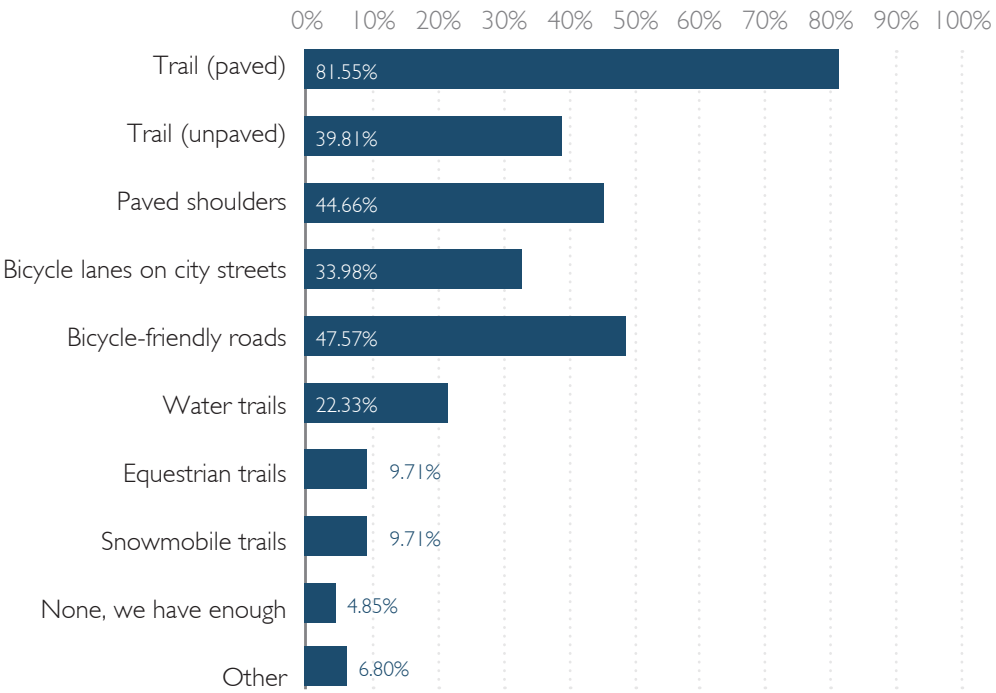
DO YOU FEEL IT IS IMPORTANT THAT TRAILS LINK COMMUNITIES?



I love the trail and the new expansion, too! I love the idea of expanding and connecting to other trails. Seating benches along the trail would also be nice.

Paved bike trails bring in the most amount of people and that helps boost business in small communities especially restaurants and bars

WHAT TYPE(S) OF TRAILS DO YOU FEEL ARE LACKING IN WRIGHT COUNTY?



There are not enough recreation trails in the immediate Clarion area. Even sidewalks aren't consistent through town. I frequently run, walk, and bike outdoors, and I have no option but to use the street, unless I travel out of town. Ideally, a trail from Clarion to Lake Cornelia could exist, outside of simply being a shoulder on the highway.

WHERE SHOULD THE FUNDS TO BUILD/MAINTAIN TRAIL FACILITIES COME FROM?

1. Donations 88.35%
2. Fundraisers 87.38%
3. Taxes 46.60%
4. User fees 36.89%
5. Other 9.71%

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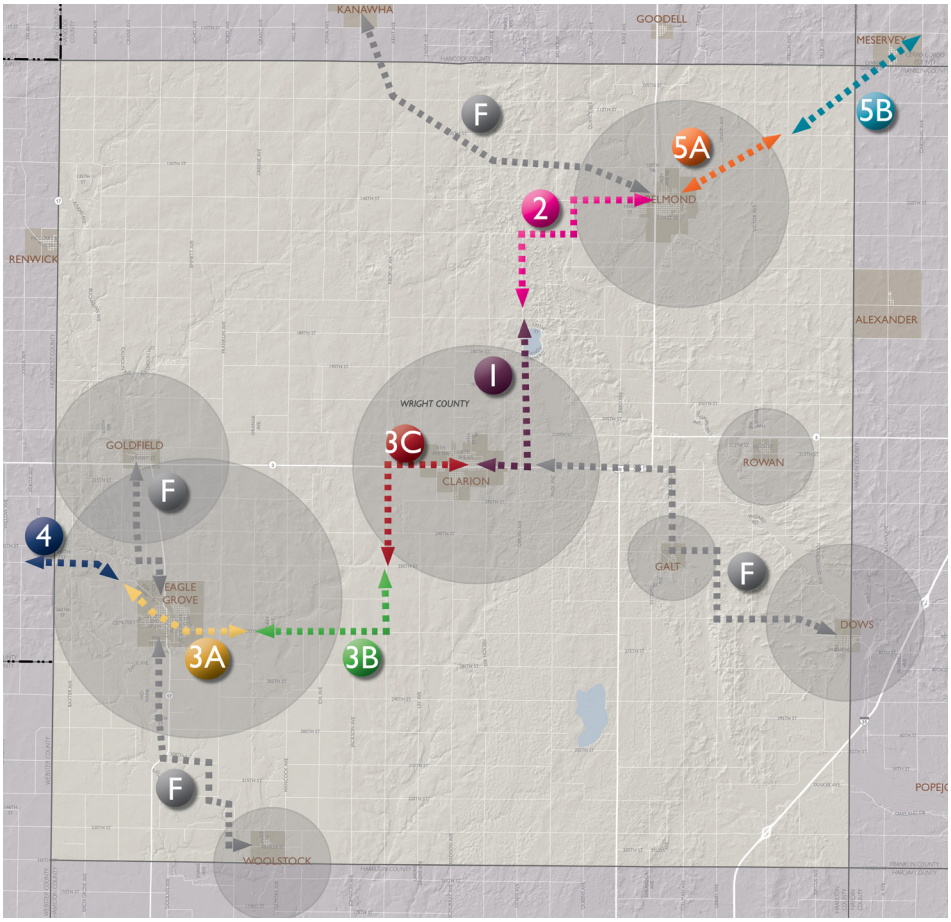
PROPOSED TRAIL CORRIDOR

PROPOSED TRAIL CORRIDOR

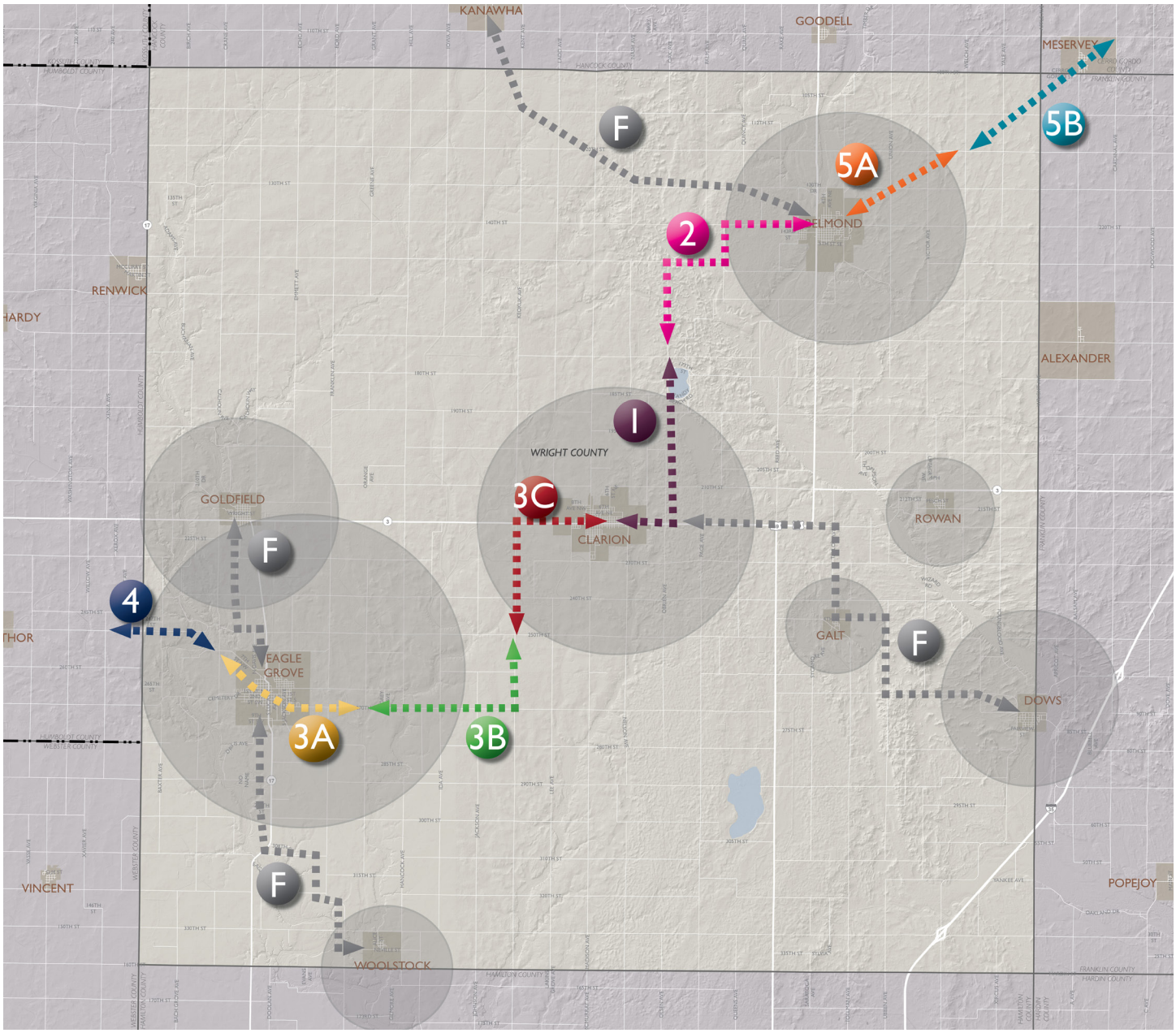
PRIORITY TRAIL PHASES

One of the objectives of this trails plan is to develop trails within the next 25 years. This map identifies trail phases which could be implemented in that time period. A total of eight trail phases were identified as well as four future trail corridors that could be constructed to expand the trail network within Wright County and connect to existing counties. The proposed trail corridor connects the three largest population centers in the County and aims to provide a regional connection between the two central economic trading areas, Fort Dodge and Mason City. The trail corridor is aimed at serving the largest population centers, driving economic development in the County and connecting to other regional trail networks. The prioritization of the proposed corridor phases may change as land is acquired, funding is secured, and momentum drives the construction of the various phases. A corridor is proposed instead of a definitive trail alignment to allow for some flexibility as land is purchased or acquired and right of way is obtained.



MAP KEY

- I — Connect Clarion to Lake Cornelia
- 2 — Connect Belmond to Lake Cornelia
- 3A — Connect to Eagle Grove to Clarion (Phase I)
- 3B — Connect Eagle Grove to Clarion (Phase II)
- 3C — Connect Eagle Grove to Clarion (Phase III)
- 4 — Connect Eagle Grove to the beginning of Three Rivers Trail
- 5A — Connect Belmond to the Mason City trail (Phase I)
- 5B — Connect Belmond to the Mason City trail (Phase II)
- F — Connect Eagle Grove to Goldfield
- F — Connect Clarion to Galt to Dows
- F — Connect Eagle Grove to Woolstock
- F — Connect Belmond to Kanawha
- Indicates City by Population Size



TRAIL PHASE MAP

- Clarion to Lake Cornelia — 6.3 miles
- Belmond to Lake Cornelia — 7.5 miles
- Eagle Grove to Clarion (Phase I) — 4.4 miles
- Eagle Grove to Clarion (Phase II) — 5.9 miles
- Eagle Grove to Clarion (Phase III) — 7.5 miles
- Eagle Grove to Three Rivers Trail — 3.1 miles
- Belmond to Mason City (Phase I) — 4.4 miles
- Belmond to Mason City (Phase II) — 4.9 miles
- Eagle Grove to Goldfield (F) — 4.7 miles
- Clarion to Galt to Dows (F) — 14.3 miles
- Eagle Grove to Woolstock (F) — 8.8 miles
- Belmond to Kanawha (F) — 11.1 miles

OPINION OF PROBABLE COST FOR TRAIL DEVELOPMENT

OPINION OF PROBABLE COST FOR TRAIL DEVELOPMENT

The opinions of probable cost shown include many aspects of trail system development, including trailheads, parking lots, bike lanes, and a typical mile of various trail surfaces. All costs developed are general and to be for planning purposes only and are not definitive construction costs. The costs provided can provide a budgeting baseline and may be used while applying for funding and garnering community support. Final costs will depend on design, current bidding climate, and amount of work being completed.

ASPHALT TRAIL: The cost provided is for one mile of 12' wide asphalt trail. The total opinion of probable costs accounts for design and construction contingencies. The cost provided can be used during the budgeting process. Final costs will be determined during the design and construction phases. The cost per mile does not include land/right-of-way acquisition, bridges, permits, etc.

BIKE LANE: This cost is for one block (500 linear feet) of bike lane improvements and can be used as a reference for budgeting for bike lane improvements in Wright County communities.

CONCRETE TRAIL: The cost provided is for one mile of 12' wide concrete trail. The total opinion of probable costs accounts for design and construction contingencies. The cost provided can be used during the budgeting process. Final costs will be determined during the design and construction phases. The cost per mile does not include land/right-of-way acquisition, bridges, permits, etc.

CRUSHED STONE TRAIL: The cost provided is for one mile of 12' wide crushed stone trail. The total opinion of probable costs accounts for design and construction contingencies. The cost provided can be used during the budgeting process. Final costs will be determined during the design and construction phases. The cost per mile does not include land/right-of-way acquisition, bridges, permits, etc.

GENERAL TRAIL FEATURES: The general features opinion of probable costs includes items or features that may be included during trail development. Some of these features include bike racks, signage, crosswalks, fences, street lighting, pavement markings, benches, and waste receptacles.

TRAILHEAD AND SMALL CONCRETE PARKING AREA: This cost is for a small concrete parking area with nine spaces at a trailhead. The cost includes trailhead amenities like benches, a restroom, bike rack, and bottle fill station. The total opinion of probable cost accounts for design and construction contingencies.

TRAILHEAD AND SMALL GRAVEL PARKING AREA: This cost is for a gravel parking area with ten spaces at a trailhead. The cost includes trailhead amenities like benches, a restroom, bike rack, and bottle fill station. The total opinion of probable cost accounts for design and construction contingencies.

TRAILHEAD AND MEDIUM CONCRETE PARKING AREA: This cost is for a medium-sized concrete parking area with 15 parking spaces. The cost includes trailhead amenities like benches, a restroom, bike rack, and bottle fill station. The total opinion of probable cost accounts for design and construction contingencies.

TRAILHEAD AND LARGE GRAVEL PARKING AREA: This cost is a larger gravel parking area with 16 spaces at a trailhead. The cost includes trailhead amenities like benches, a restroom, bike rack, and bottle fill station. The total opinion of probable cost accounts for design and construction contingencies.

TRAILHEAD AND LARGE CONCRETE PARKING AREA: This cost is for a large concrete parking area with 24 parking spaces. The cost includes trailhead amenities like benches, a restroom, bike rack, and bottle fill station. The total opinion of probable cost accounts for design and construction contingencies.

ASPHALT TRAIL

This cost is for one mile of 12' wide asphalt trail. The total opinion of probable costs accounts for design and construction contingencies. The cost provided can be used during the budgeting process. Final costs will be determined during the design and construction phases. The cost per mile does not include land/right-of-way acquisition, bridges, permits, etc. These opinions of probable cost are for planning and fundraising purposes only and do not reflect actual costs. Ultimate final costs will depend on location, access, time of bidding, and bid climate.

ITEM NO.	CONSTRUCTION ITEM	UNIT	QUANTITY	UNIT PRICE	TOTAL AMOUNT
1	MOBILIZATION	LS	1	$3,000.00	$3,000.00
2	TRAFFIC CONTROL	LS	1	$3,500.00	$3,500.00
3	SURVEYING + STAKING	LS	1	$5,000.00	$5,000.00
4	TESTING	LS	1	$500.00	$500.00
5	EROSION CONTROL	LS	1	$1,000.00	$1,000.00
6	EXCAVATION	CY	2,347	$16.00	$37,552.00
7	REMOVAL + SITE MANAGEMENT	LS	1	$1,500.00	$1,500.00
8	SUBGRADE PREPARATION	SY	7,040	$2.00	$14,080.00
9	SUBBASE, 6", CRUSHED STONE	SY	7,040	$10.00	$70,400.00
10	HMA TRAIL, 6"	TN	2,297	$100.00	$229,700.00
11	CLEAR ZONE FINISHING	STA	52	$150.00	$7,800.00
12	RESTORATION	SY	4,694	$0.15	$704.10
13	PAINTED PAVEMENT MARKINGS	LS	1	$4,500.00	$4,500.00
14	TRAFFIC SIGNS	LS	1	$1,500.00	$1,500.00
15	CROSSING - DETECTABLE WARNING	SF	48	$50.00	$2,400.00
				CONSTRUCTION COSTS	$383,136.10
				10% CONTINGENCY	$38,313.61
				20% NON CONSTRUCTION COST	$76,627.22
				TOTAL PROJECT COST	$498,076.93

BIKE LANE

This cost is for one block (500 linear feet) of bike lane improvements and can be used as a reference for budgeting for bike lane improvements in Wright County communities. These opinions of probable cost are for planning and fundraising purposes only and do not reflect actual costs. Ultimate final costs will depend on location, access, time of bidding, and bid climate.

ITEM NO.	CONSTRUCTION ITEM	UNIT	QUANTITY	UNIT PRICE	TOTAL AMOUNT
1	MOBILIZATION	LS	1	$500.00	$500.00
2	TRAFFIC CONTROL	LS	1	$500.00	$500.00
3	SURVEYING + STAKING	LS	1	$500.00	$500.00
4	TESTING	LS	1	$500.00	$500.00
5	EROSION CONTROL	LS	1	$250.00	$250.00
6	REMOVALS + SITE MANAGEMENT	LS	1	$500.00	$500.00
7	PC CONCRETE, 6" - FULL DEPTH PATCHING	SY	1	$110.00	$110.00
8	PAINTED PAVEMENT MARKINGS	LF	500	$5.00	$2,500.00
9	TRAFFIC SIGNS	LS	1	$5,000.00	$5,000.00
				CONSTRUCTION COSTS	$10,360.00
				10% CONTINGENCY	$1,036.00
				20% NON CONSTRUCTION COST	$2,072.00
				TOTAL PROJECT COST	$13,468.00

CONCRETE TRAIL

The cost provided is for one mile of 12' wide concrete trail. The total opinion of probable costs accounts for design and construction contingencies. The cost provided can be used during the budgeting process. The cost per mile does not include land/right-of-way acquisition, bridges, permits, etc. These opinions of probable cost are for planning and fundraising purposes only and do not reflect actual costs. Ultimate final costs will depend on location, access, time of bidding, and bid climate. Final costs will be determined during the design and construction phases.

ITEM NO.	CONSTRUCTION ITEM	UNIT	QUANTITY	UNIT PRICE	TOTAL AMOUNT
1	MOBILIZATION	LS	1	$3,000.00	$3,000.00
2	TRAFFIC CONTROL	LS	1	$3,500.00	$3,500.00
3	SURVEYING + STAKING	LS	1	$5,000.00	$5,000.00
4	TESTING	LS	1	$500.00	$500.00
5	EROSION CONTROL	LS	1	$1,000.00	$1,000.00
6	EXCAVATION	CY	2,152	$16.00	$34,432.00
7	REMOVAL + SITE MANAGEMENT	LS	1	$1,500.00	$1,500.00
8	SUBGRADE PREPARATION	SY	7,040	$2.00	$14,080.00
9	SUBBASE, 6", CRUSHED STONE	SY	7,040	$10.00	$70,400.00
10	CONCRETE, PCC, 5"	SY	7,040	$55.00	$387,200.00
11	CLEAR ZONE FINISHING	STA	52	$150.00	$7,800.00
12	RESTORATION	SY	4,694	$0.15	$704.10
13	PAINTED PAVEMENT MARKINGS	LS	1	$4,500.00	$4,500.00
14	TRAFFIC SIGNS	LS	1	$1,500.00	$1,500.00
15	CROSSING - DETECTABLE WARNING	SF	48	$50.00	$2,400.00
				CONSTRUCTION COSTS	$537,516.10
				10% CONTINGENCY	$53,751.61
				20% NON CONSTRUCTION COST	$107,503.22
				TOTAL PROJECT COST	$698,770.93

CRUSHED STONE TRAIL

The cost provided is for one mile of 12' wide crushed stone trail. The total opinion of probable costs accounts for design and construction contingencies. The cost provided can be used during the budgeting process. Final costs will be determined during the design and construction phases. The cost per mile does not include land/right-of-way acquisition, bridges, permits, etc. These opinions of probable cost are for planning and fundraising purposes only and do not reflect actual costs. Ultimate final costs will depend on location, access, time of bidding, and bid climate.

ITEM NO.	CONSTRUCTION ITEM	UNIT	QUANTITY	UNIT PRICE	TOTAL AMOUNT
1	MOBILIZATION	LS	1	$3,000.00	$3,000.00
2	TRAFFIC CONTROL	LS	1	$3,500.00	$3,500.00
3	SURVEYING + STAKING	LS	1	$5,000.00	$5,000.00
4	TESTING	LS	1	$500.00	$500.00
5	EROSION CONTROL	LS	1	$1,000.00	$1,000.00
6	EXCAVATION	CY	978	$16.00	$15,648.00
7	REMOVAL + SITE MANAGEMENT	LS	1	$1,500.00	$1,500.00
8	SUBGRADE PREPARATION	SY	7,040	$2.00	$14,080.00
9	CRUSHED STONE SURFACING, 5"	SY	7,040	$9.00	$63,360.00
10	ENGINEERING FABRIC, NON-WOVEN	SY	7,334	$3.50	$25,669.00
11	CLEAR ZONE FINISHING	STA	52	$150.00	$7,800.00
12	RESTORATION	SY	4,694	$0.15	$704.10
13	PAINTED PAVEMENT MARKINGS	LS	1	$4,500.00	$4,500.00
14	TRAFFIC SIGNS	LS	1	$1,500.00	$1,500.00
15	CROSSING - DETECTABLE WARNING	SF	48	$50.00	$2,400.00
				CONSTRUCTION COSTS	$150,161.10
				10% CONTINGENCY	$15,016.11
				20% NON CONSTRUCTION COST	$30,032.22
				TOTAL PROJECT COST	$195,209.43

GENERAL TRAIL FEATURES

The intent of this opinion of probable is not to provide exact number but show the level of detail that may be required during trail development. Some of the features include bike racks, signage, crosswalks, fences, street lighting, pavement markings, benches, waste receptacles, shelters and restrooms, and parking areas. These opinions of probable cost are for planning and fundraising purposes only and do not reflect actual costs. Ultimate final costs will depend on location, access, time of bidding, and bid climate.

ITEM NO.	CONSTRUCTION ITEM	UNIT	QUANTITY	UNIT PRICE	TOTAL AMOUNT
1	BICYCLE RACK	EA	1	$660.00	$660.00
2	BICYCLE LOCKER	EA	1	$2,090.00	$2,090.00
3	BICYCLE LANE	MILE	1	$133,170.00	$133,170.00
4	CONCRETE BICYCLE PATH	MILE	1	$179,340.00	$179,340.00
5	SIGNED BICYCLE ROUTE	MILE	1	$25,250.00	$25,250.00
6	SIGNED BICYCLE ROUTE WITH IMPROVEMENTS	MILE	1	$239,440.00	$239,440.00
7	BOLLARD	EA	1	$600.00	$600.00
8	HIGH VISIBILITY CROSSWALK	EA	1	$2,540.00	$2,540.00
9	STRIPED CROSSWALK	EA	1	$770.00	$770.00
10	STRIPED CROSSWALK	LF	1	$8.50	$8.50
11	STRIPED CROSSWALK	SF	1	$6.50	$6.50
12	CURB	LF	1	$21.00	$21.00
13	CURB AND GUTTER	LF	1	$25.00	$25.00
14	GUTTER	SY	1	$21.00	$21.00
15	CURB EXTENSION/ CHOKER/ BULB-OUT	EA	1	$13,500.00	$13,500.00
16	TRUNCATED DOME/DETECTABLE WARNING	SF	1	$6.50	$6.50
17	WHEELCHAIR RAMP	EA	1	$810.00	$810.00
18	WHEELCHAIR RAMP	SF	1	$12.00	$12.00
19	GATEWAY SIGN	EA	1	$1,500.00	$1,500.00
20	GATEWAY STRUCTURE	EA	1	$15,000.00	$15,000.00
21	PEDESTRIAN HYBRID BEACON	EA	1	$57,850.00	$57,850.00
22	MEDIAN ISLAND	EA	1	$13,520.00	$13,520.00
23	FENCE	LF	1	$130.00	$130.00
24	GATE	EA	1	$500.00	$500.00
25	IN-PAVEMENT LIGHTING	TOTAL	1	$17,500.00	$17,500.00
26	STREETLIGHT	EA	1	$4,850.00	$4,850.00
27	MEDIAN	SF	1	$7.50	$7.50
28	WOODEN BRIDGE	EA	1	$124,000.00	$124,000.00
29	PRE-FAB STEEL BRIDGE	EA	1	$206,000.00	$206,000.00
30	BOARDWALK	MILE	1	$2,219,470.00	$2,219,470.00
31	MULTI-USE TRAIL - PAVED	MILE	1	$481,140.00	$481,140.00
32	MULTI-USE TRAIL - UNPAVED	MILE	1	$121,390.00	$121,390.00
33	ADVANCE STOP/YIELD LINE	EA	1	$320.00	$320.00

ITEM NO.	CONSTRUCTION ITEM	UNIT	QUANTITY	UNIT PRICE	TOTAL AMOUNT
34	ADVANCE STOP/YIELD LINE	SF	1	$10.00	$10.00
35	ISLAND MARKING	SF	1	$1.90	$1.90
36	PAINTED CURB/SIDEWALK	SF	1	$3.50	$3.50
37	PAINTED CURB/SIDEWALK	SF	1	$3.50	$3.50
38	PEDESTRIAN CROSSING	EA	1	$360.00	$360.00
39	SHARED LANE/BICYCLE MARKING	EA	1	$180.00	$180.00
40	SCHOOL CROSSING	EA	1	$470.00	$470.00
41	AUDIBLE PEDESTRIAN SIGNAL	EA	1	$800.00	$800.00
42	COUNTDOWN TIMER MODULE	EA	1	$740.00	$740.00
43	PEDESTRIAN SIGNAL	EA	1	$1,480.00	$1,480.00
44	SIGNAL FACE	EA	1	$130.00	$130.00
45	SIGNAL HEAD	EA	1	$550.00	$550.00
46	SIGNAL PEDESTAL	EA	1	$800.00	$800.00
47	FURNISH AND INSTALL PEDESTRIAN DETECTOR	EA	1	$390.00	$390.00
48	PUSH BUTTON	EA	1	$350.00	$350.00
49	PEDESTRIAN RAIL	LF	1	$100.00	$100.00
50	RAISED CROSSWALK	EA	1	$8,100.00	$8,100.00
51	RAISED INTERSECTION	EA	1	$45,000.00	$45,000.00
52	ROUNDABOUT/ TRAFFIC CIRCLE	EA	1	$65,000.00	$65,000.00
53	ASPHALT PAVED SHOULDER	SF	1	$5.50	$5.50
54	ASPHALT SIDEWALK	LF	1	$35.00	$35.00
55	BRICK SIDEWALK	LF	1	$60.00	$60.00
56	CONCRETE PAVED SHOULDER	SF	1	$7.00	$7.00
57	CONCRETE SIDEWALK	LF	1	$32.00	$32.00
58	CONCRETE SIDEWALK - PATTERNED	LF	1	$36.00	$36.00
59	CONCRETE SIDEWALK - STAMPED	LF	1	$45.00	$45.00
60	CONCRETE SIDEWALK + CURB	LF	1	$150.00	$150.00
61	SIDEWALK	LF	1	$150.00	$150.00
62	SIDEWALK PAVERS	LF	1	$80.00	$80.00
63	STOP/YIELD SIGNS	EA	1	$210.00	$210.00
64	SPEED HUMP	EA	1	$2,640.00	$2,640.00
65	SPEED BUMP	EA	1	$1,550.00	$1,550.00
66	SPEED TABLE	EA	1	$2,400.00	$2,400.00
67	STREET TREES	EA	1	$350.00	$350.00
68	BENCH	EA	1	$850.00	$850.00
69	BUS SHELTER	EA	1	$11,500.00	$11,500.00
70	TRASH/RECYCLING RECEPTACLE	EA	1	$600.00	$600.00

TRAILHEAD AND SMALL CONCRETE PARKING AREA

This cost is for a small concrete parking area with 9 spaces at a trailhead. The cost includes trailhead amenities like benches, a restroom, bike rack, and bottle fill station. The total opinion of probable cost accounts for design and construction contingencies. These opinions of probable cost are for planning and fundraising purposes only and do not reflect actual costs. Ultimate final costs will depend on location, access, time of bidding, and bid climate.

ITEM NO.	CONSTRUCTION ITEM	UNIT	QUANTITY	UNIT PRICE	TOTAL AMOUNT
1	MOBILIZATION	LS	1	$1,500.00	$1,500.00
2	TRAFFIC CONTROL	LS	1	$500.00	$500.00
3	SURVEYING + STAKING	LS	1	$1,000.00	$1,000.00
4	LOT	LS	1	$500.00	$500.00
5	EROSION CONTROL	LS	1	$1,000.00	$1,000.00
6	INLET PROTECTION DEVICE	EA	1	$250.00	$250.00
7	STABILIZED CONSTRUCTION ENTRANCE	EA	1	$1,000.00	$1,000.00
8	REMOVAL + SITE MANAGEMENT	LS	1	$1,000.00	$1,000.00
9	EXCAVATION	CY	100	$15.00	$1,500.00
10	GRADING + EARTHWORK	LS	1	$1,000.00	$1,000.00
11	SUBGRADE PREPARATION	SY	596	$3.00	$1,788.00
12	SUBBASE, 6", CLASS A CRUSHED STONE	SY	596	$11.00	$6,556.00
13	PC CONCRETE, 5"	SY	596	$55.00	$32,780.00
14	PARKING SIGNS	EA	1	$200.00	$200.00
15	PAINTED PAVEMENT MARKINGS	LF	300	$5.00	$1,500.00
16	TRAIL HEAD SIGN - WAYFINDING	EA	1	$2,500.00	$2,500.00
17	BENCH	EA	1	$1,000.00	$1,000.00
18	PICNIC TABLE	EA	1	$1,200.00	$1,200.00
19	LITTER RECEPTACLE	EA	1	$900.00	$900.00
20	BIKE RACK	EA	1	$900.00	$900.00
21	BIKE REPAIR STATION	EA	1	$1,500.00	$1,500.00
22	BOTTLE FILL STATION	EA	1	$4,500.00	$4,500.00
23	RESTROOM	EA	1	$40,000.00	$40,000.00
24	CONCRETE FLATWORK - SIDE WALK AND SITE AMENITIES	SF	250	$8.00	$2,000.00
25	CONCRETE WASHOUT	LS	1	$250.00	$250.00
26	SEEDING, FERTILIZING AND MULCHING (HYDRAULIC)	LS	1	$1,500.00	$1,500.00
				CONSTRUCTION COSTS	$108,324.00
				10% CONTINGENCY	$10,832.40
				20% NON CONSTRUCTION COST	$21,664.80
				TOTAL PROJECT COST	$140,821.20

TRAILHEAD AND SMALL GRAVEL PARKING AREA WITH 10 SPACES

This cost is for a small gravel parking area with 10 spaces at a trailhead. The cost includes trailhead amenities like benches, a restroom, bike rack, and bottle fill station. The total opinion of probable cost accounts for design and construction contingencies. These opinions of probable cost are for planning and fundraising purposes only and do not reflect actual costs. Ultimate final costs will depend on location, access, time of bidding, and bid climate.

ITEM NO.	CONSTRUCTION ITEM	UNIT	QUANTITY	UNIT PRICE	TOTAL AMOUNT
1	MOBILIZATION	LS	1	$1,500.00	$1,500.00
2	TRAFFIC CONTROL	LS	1	$500.00	$500.00
3	SURVEYING + STAKING	LS	1	$1,000.00	$1,000.00
4	TESTING	LS	1	$500.00	$500.00
5	EROSION CONTROL	LS	1	$1,000.00	$1,000.00
6	INLET PROTECTION DEVICE	EA	1	$250.00	$250.00
7	STABILIZED CONSTRUCTION ENTRANCE	EA	1	$1,000.00	$1,000.00
8	REMOVAL + SITE MANAGEMENT	LS	1	$1,000.00	$1,000.00
9	EXCAVATION	CY	100	$15.00	$1,500.00
10	GRADING + EARTHWORK	LS	1	$1,000.00	$1,000.00
11	SUBGRADE PREPARATION	SY	596	$3.00	$1,788.00
12	GRAVEL PARKING LOT, 6", CLASS A CRUSHED STONE	SY	596	$11.00	$6,556.00
13	PARKING SIGNS	EA	1	$200.00	$200.00
14	TRAIL HEAD SIGN - MAP	EA	1	$1,500.00	$1,500.00
15	BENCH	EA	1	$1,000.00	$1,000.00
16	PICNIC TABLE	EA	1	$1,200.00	$1,200.00
17	LITTER RECEPTACLE	EA	1	$900.00	$900.00
18	BIKE RACK	EA	1	$900.00	$900.00
19	BIKE REPAIR STATION	EA	1	$1,500.00	$1,500.00
20	RESTROOM	EA	1	$40,000.00	$40,000.00
21	CONCRETE FLATWORK - SIDE WALK AND SITE AMENITIES	SF	250	$8.00	$2,000.00
22	CONCRETE WASHOUT	LS	1	$250.00	$250.00
23	SEEDING, FERTILIZING AND MULCHING (HYDRAULIC)	LS	1	$1,500.00	$1,500.00
				CONSTRUCTION COSTS	$68,544.00
				10% CONTINGENCY	$6,854.40
				20% NON CONSTRUCTION COST	$13,708.80
				TOTAL PROJECT COST	$89,107.20

TRAILHEAD AND MEDIUM CONCRETE PARKING AREA WITH 15 SPACES

This cost is for a medium-sized concrete parking area with 15 parking spaces. The cost includes trailhead amenities like benches, a restroom, bike rack, and bottle fill station. The total opinion of probable cost accounts for design and construction contingencies. These opinions of probable cost are for planning and fundraising purposes only and do not reflect actual costs. Ultimate final costs will depend on location, access, time of bidding, and bid climate.

ITEM NO.	CONSTRUCTION ITEM	UNIT	QUANTITY	UNIT PRICE	TOTAL AMOUNT
1	MOBILIZATION	LS	1	$3,000.00	$3,000.00
2	TRAFFIC CONTROL	LS	1	$1,000.00	$1,000.00
3	SURVEYING + STAKING	LS	1	$1,500.00	$1,500.00
4	TESTING	LS	1	$1,000.00	$1,000.00
5	EROSION CONTROL	LS	1	$1,500.00	$1,500.00
6	INLET PROTECTION DEVICE	EA	1	$500.00	$500.00
7	STABILIZED CONSTRUCTION ENTRANCE	EA	1	$1,000.00	$1,000.00
8	REMOVAL + SITE MANAGEMENT	LS	1	$1,000.00	$1,000.00
9	EXCAVATION	CY	230	$15.00	$3,450.00
10	GRADING + EARTHWORK	LS	1	$1,000.00	$1,000.00
11	SUBGRADE PREPARATION	SY	832	$3.00	$2,496.00
12	SUBBASE, 6", CLASS A CRUSHED STONE	SY	832	$11.00	$9,152.00
13	PC CONCRETE, 5"	SY	832	$55.00	$45,760.00
14	PARKING SIGNS	EA	1	$200.00	$200.00
15	PAINTED PAVEMENT MARKINGS	LF	500	$5.00	$2,500.00
16	TRAIL HEAD SIGN - WAYFINDING	EA	1	$2,500.00	$2,500.00
17	BENCH	EA	2	$1,000.00	$2,000.00
18	PICNIC TABLE	EA	2	$1,200.00	$2,400.00
19	LITTER RECEPTACLE	EA	2	$900.00	$1,800.00
20	BIKE RACK	EA	2	$900.00	$1,800.00
21	BIKE REPAIR STATION	EA	1	$1,500.00	$1,500.00
22	BOTTLE FILL STATION	EA	1	$4,500.00	$4,500.00
23	RESTROOM	EA	1	$40,000.00	$40,000.00
24	SHELTER	EA	1	$20,000.00	$20,000.00
25	CONCRETE FLATWORK - SIDE WALK AND SITE AMENITIES	SF	500	$8.00	$4,000.00
26	CONCRETE WASHOUT	LS	1	$500.00	$500.00
27	SEEDING, FERTILIZING AND MULCHING (HYDRAULIC)	LS	1	$2,500.00	$2,500.00
				CONSTRUCTION COSTS	$158,558.00
				10% CONTINGENCY	$15,855.80
				20% NON CONSTRUCTION COST	$31,711.60
				TOTAL PROJECT COST	$206,125.40

TRAILHEAD AND LARGE GRAVEL PARKING AREA WITH 16 SPACES

This cost is a larger gravel parking area with 16 spaces at a trailhead. The cost includes trailhead amenities like benches, a restroom, bike rack, and bottle fill station. The total opinion of probable cost accounts for design and construction contingencies. These opinions of probable cost are for planning and fundraising purposes only and do not reflect actual costs. Ultimate final costs will depend on location, access, time of bidding, and bid climate.

ITEM NO.	CONSTRUCTION ITEM	UNIT	QUANTITY	UNIT PRICE	TOTAL AMOUNT
1	MOBILIZATION	LS	1	$1,500.00	$1,500.00
2	TRAFFIC CONTROL	LS	1	$500.00	$500.00
3	SURVEYING + STAKING	LS	1	$1,000.00	$1,000.00
4	TESTING	LS	1	$500.00	$500.00
5	EROSION CONTROL	LS	1	$1,000.00	$1,000.00
6	INLET PROTECTION DEVICE	EA	1	$250.00	$250.00
7	STABILIZED CONSTRUCTION ENTRANCE	EA	1	$1,000.00	$1,000.00
8	REMOVAL + SITE MANAGEMENT	LS	1	$1,000.00	$1,000.00
9	EXCAVATION	CY	139	$15.00	$2,085.00
10	GRADING + EARTHWORK	LS	1	$1,000.00	$1,000.00
11	SUBGRADE PREPARATION	SY	832	$3.00	$2,496.00
12	GRAVEL PARKING LOT, 6", CLASS A CRUSHED STONE	SY	832	$11.00	$9,152.00
13	PARKING SIGNS	EA	1	$200.00	$200.00
14	TRAIL HEAD SIGN - WAYFINDING	EA	1	$2,500.00	$2,500.00
15	BENCH	EA	2	$1,000.00	$2,000.00
16	PICNIC TABLE	EA	2	$1,200.00	$2,400.00
17	LITTER RECEPTACLE	EA	2	$900.00	$1,800.00
18	BIKE RACK	EA	2	$900.00	$1,800.00
19	BIKE REPAIR STATION	EA	1	$1,500.00	$1,500.00
20	BOTTLE FILL STATION	EA	1	$4,500.00	$4,500.00
21	RESTROOM	EA	1	$40,000.00	$40,000.00
22	SHELTER	EA	1	$20,000.00	$20,000.00
23	CONCRETE FLATWORK - SIDE WALK AND SITE AMENITIES	SF	500	$8.00	$4,000.00
24	CONCRETE WASHOUT	LS	1	$250.00	$250.00
25	SEEDING, FERTILIZING AND MULCHING (HYDRAULIC)	LS	1	$2,500.00	$2,500.00
				CONSTRUCTION COSTS	$104,933.00
				10% CONTINGENCY	$10,493.30
				20% NON CONSTRUCTION COST	$20,986.60
				TOTAL PROJECT COST	$136,412.90

TRAILHEAD AND LARGE CONCRETE PARKING AREA WITH 24 SPACES

This cost is for a large concrete parking area with 24 parking spaces. The cost includes trailhead amenities like benches, a restroom, bike rack, and bottle fill station. The total opinion of probable cost accounts for design and construction contingencies. These opinions of probable cost are for planning and fundraising purposes only and do not reflect actual costs. Ultimate final costs will depend on location, access, time of bidding, and bid climate.

ITEM NO.	CONSTRUCTION ITEM	UNIT	QUANTITY	UNIT PRICE	TOTAL AMOUNT
1	MOBILIZATION	LS	1	$3,500.00	$3,500.00
2	TRAFFIC CONTROL	LS	1	$1,500.00	$1,500.00
3	SURVEYING + STAKING	LS	1	$2,000.00	$2,000.00
4	TESTING	LS	1	$1,500.00	$1,500.00
5	EROSION CONTROL	LS	1	$2,000.00	$2,000.00
6	INLET PROTECTION DEVICE	EA	1	$1,000.00	$1,000.00
7	STABILIZED CONSTRUCTION ENTRANCE	EA	1	$1,000.00	$1,000.00
8	REMOVAL + SITE MANAGEMENT	LS	1	$1,000.00	$1,000.00
9	EXCAVATION	CY	301	$15.00	$4,515.00
10	GRADING + EARTHWORK	LS	1	$1,500.00	$1,500.00
11	SUBGRADE PREPARATION	SY	1088	$3.00	$3,264.00
12	SUBBASE, 6", CLASS A CRUSHED STONE	SY	1088	$11.00	$11,968.00
13	PC CONCRETE, 5"	SY	1088	$55.00	$59,840.00
14	PARKING SIGNS	EA	1	$300.00	$300.00
15	PAINTED PAVEMENT MARKINGS	LF	1000	$5.00	$5,000.00
16	TRAIL HEAD SIGN - WAYFINDING	EA	1	$4,000.00	$4,000.00
17	BENCH	EA	4	$1,000.00	$4,000.00
18	STONE BENCH	EA	2	$1,000.00	$2,000.00
19	PICNIC TABLE	EA	4	$1,200.00	$4,800.00
20	LITTER RECEPTACLE	EA	4	$900.00	$3,600.00
21	BIKE RACK	EA	4	$900.00	$3,600.00
22	BIKE REPAIR STATION	EA	2	$1,500.00	$3,000.00
23	BOTTLE FILL STATION	EA	1	$4,500.00	$4,500.00
24	RESTROOM	EA	1	$65,000.00	$65,000.00
25	PAVILION - OPTION TO COMBINE W/ RESTROOM	EA	1	$30,000.00	$30,000.00
26	CONCRETE FLATWORK - SIDE WALK AND SITE AMENITIES	SF	1000	$8.00	$8,000.00
27	CONCRETE WASHOUT	LS	1	$500.00	$500.00
28	SEEDING, FERTILIZING AND MULCHING (HYDRAULIC)	LS	1	$3,500.00	$3,500.00
				CONSTRUCTION COSTS	$236,387.00
				10% CONTINGENCY	$23,638.70
				20% NON CONSTRUCTION COST	$47,277.40
				TOTAL PROJECT COST	$307,303.10

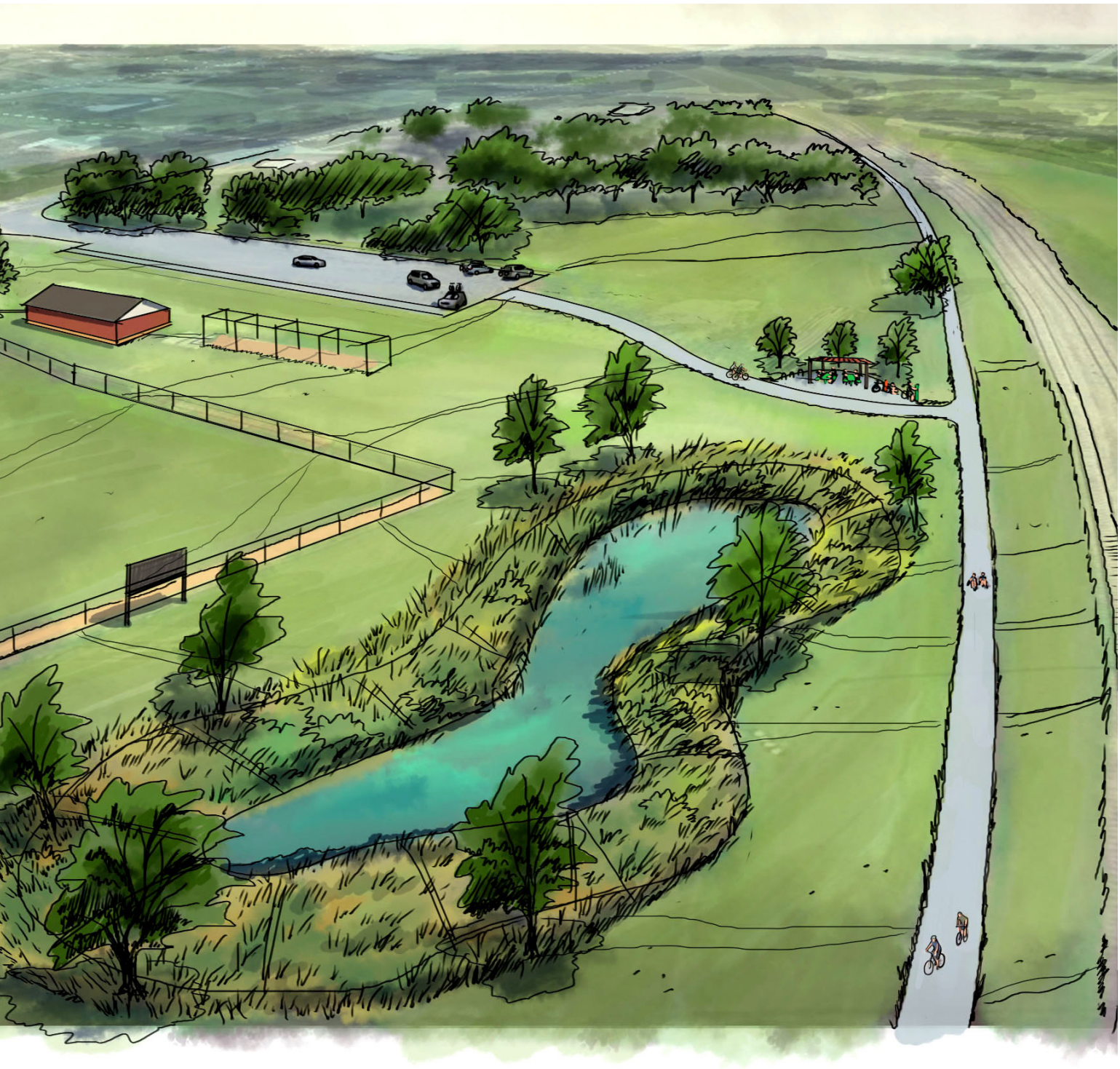
WRIGHT COUNTY TRAIL SYSTEM CONCEPTS

WRIGHT COUNTY TRAIL SYSTEM CONCEPTS

The following concepts select six sites along the proposed trail corridor to create a vision for the Wright County Trails System. The concepts can be used to garner momentum for trail construction and may be used for fundraising, applying for grants, and building broad-based local support for implementation.

BELMOND: REGIONAL TRAILHEAD

This concept for a trailhead north of Belmond provides amenities for trail users while enhancing the natural resources and beauty of the site. It has been previously identified by local officials as a possible trailhead location and can serve as a key connection point between the Mason City trails to the north and the proposed trail network in Wright County. The concept for this trailhead features a parking lot, restroom facility, and bike repair and water filling stations. Pedestrian improvements are also incorporated with a designated crossing and signage. Visitors to the trailhead are encouraged to enjoy the enhanced natural areas, with stormwater management and waterbody restoration on site with a natural park setting.



CLARION: HANSEN PARK TRAIL CONNECTION

The Hansen Park Trail Connection offers amenities and respite areas for trail users in a park-like environment. This concept has a shelter house with picnic tables and respite areas with a bike station and drinking fountain. Additionally, parking facilities and a connection to the proposed trail network is featured. Environmental improvements to control stormwater are incorporated and the use of Hansen Park for baseball is maintained. This concept gives an example of a park and trailhead site that could be developed in one of the communities along the proposed trail corridor.

EAGLE GROVE: THREE RIVERS TRAIL CONNECTION

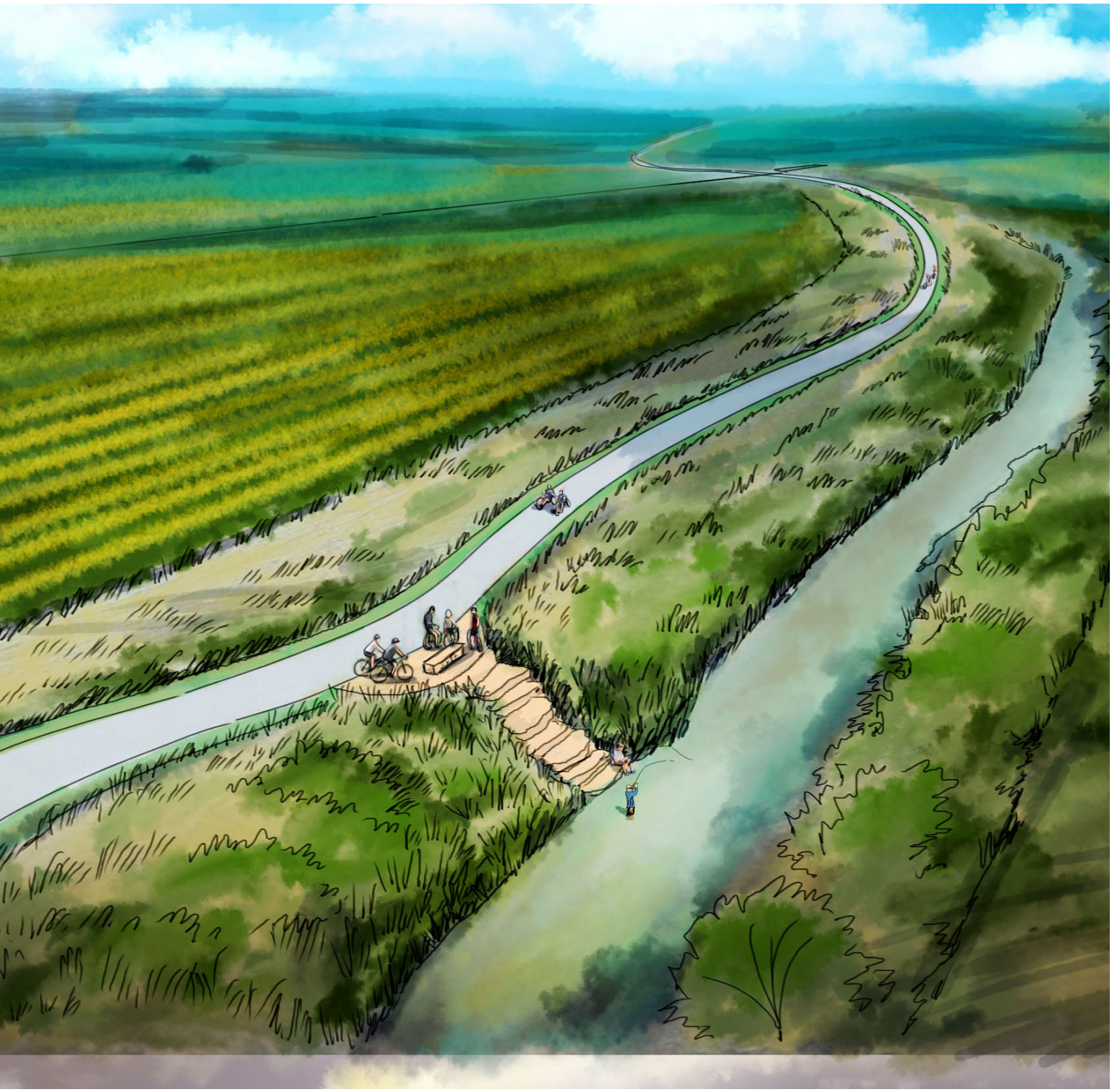
A key priority identified in the proposed trail corridor is to connect Eagle Grove to the existing Three Rivers Trail. This concept depicts the trailhead intersection between the proposed trail from Eagle Grove to the existing 30+ mile crushed limestone trail. The connecting trailhead provides parking for trail users, a respite area with a restroom, and bike and water refill stations. Pedestrian improvements are also featured with a designated crosswalk and applicable signage. This connection is aimed at creating a multi-county trail network that extends into Wright County.

EAGLE GROVE: TRAIL ACCESSIBILITY IN THE COMMUNITY CORE

This concept for the Wright County Trails System depicts trail access through the Eagle Grove community core. The concept features environmental improvements including stormwater management through biofiltration and enhanced streetscaping with sidewalk vegetation. For bicyclists using the trail, a protected bike lane is shown as well as bicycle racks to encourage bicyclists to visit businesses and attractions while using the trail. The concept also shows new construction and uses in the community core to encourage downtown revitalization and promote economic development. This concept shows how smaller communities can integrate pedestrian and bicycle facilities into their downtowns and increase demand for retail shops, services, and restaurants located in the community.

LAKE CORNELIA: WALKING TRAIL ENHANCEMENT

The Lake Cornelia concept builds upon the existing walking trail, while connecting it to the proposed Wright County Trails System. The concept also provides respite, recreational, and tourism opportunities for users of the trails and visitors to Lake Cornelia. A designated pedestrian crossing is provided as well as trail parking at the Lake Cornelia parking lot.



SCENIC NATURAL TRAIL: DRAINAGE DITCH AND WATER ACCESS

This scenic natural trail concept uses a sample straightened creek drainage ditch in Wright County to depict what a trail could look like if it utilized the already established right of way. Utilizing the drainage ditches in the county would allow for miles of trails to connect the various communities and provide recreational opportunities for visitors and residents to the trail system. This concept also provides a respite area, including seating and an access point to the water feature at the site.

COMMUNITY IMPROVEMENT

COMMUNITY IMPROVEMENT

The cost of keeping and improving the trails system is a collaborative effort 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 some suggested ideas for improving trail segments through easily implementable updates that ease and enhance the entirety of the project.

TRAIL SIGNS AND PAVEMENT MARKINGS

Wayfinding along a trail is important in ensuring the safety of trail users and enlightening those who may not know about the trail. Placing signs or markings along the trail provides guidance to users and offers directions to local amenities and areas of interest. 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. Pavement markings can be a low cost way to connect trails to amenities. Supplying and funding trail signage and pavement markings can be an inexpensive investment that goes a long way. A uniform signage design should be developed for the Wright County Trails System to ensure continuity throughout the network and create a cohesive vision.

Signage

BIKE PARKING

Encouraging cyclists to use a specific area can be done easily, instead of through designated bike lanes and paths. However, encouraging cyclists to stop and use trail amenities requires appropriate bike parking. Providing a location for cyclists to stop and lock up their bikes to enjoy amenities can be as easy and inexpensive as providing a bike rack. Implementing bike racks around the city and along the trail encourages residents to bike and make more frequent stops in town. This will increase the economic impact of trails by encouraging local user spending.

Bike Parking

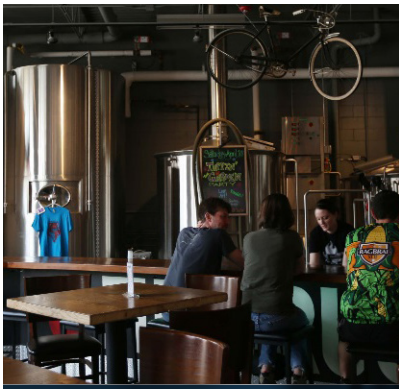
SERVICES

Locating services near the trail helps ensure a positive user experience. Providing a simple bike hang-up with public tools provides cyclists necessary equipment to service their bike if an issue arises. Additional services that benefit the range of trails users include running supply shops, family-friendly restaurants, vehicle rental locations, and 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 a multi-faceted attraction for those wanting to go long distances along the trail system.

TRAILHEADS

Providing a memorable, highly visible location and amenities at the start of a trail can attract a wide variety of users and help create resting points between large sections of trail. Trailheads should stand as a gateway, with appropriate amenities for those who are about to embark on their journey as well as an area of respite. Amenities should include access to resting locations, bathrooms, bike maintenance stations, food and refreshments, bike racks, parking facilities, playgrounds, picnic areas, and other features that may create a sense of place.

The Iowa Department of Transportation described three different types of trailheads for varying trail users; trailheads geared toward non-motorized users in town centers, trailheads intended for multiple users on the edge of downtown, and trailheads aimed at motorized users on the outskirts of town. Concentrating trailheads and services within communities provides direct economic impact, whereas, locating trailheads in isolated areas limits the amount of economic development and may not be as accessible for users.



Services

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IMPLEMENTATION AND FUNDING

IMPLEMENTATION AND FUNDING

Many factors have to be considered when deciding how best to implement this plan. The order in which projects are to be constructed will depend upon factors including, but not limited to, the budget, available grant funding, community support, and land acquisition. To begin implementing this plan it is recommended that the following steps be taken:

- ☑ Adopt the Wright County Trails System Plan
- ☑ Establish a permanent Wright County Trails Committee to oversee the implementation of the plan
- ☑ Raise funds for trail phase development
- ☑ Refine design for trail phases

Strategies that could be utilized for soliciting community funding could include business sponsorships for designated trail segments and plaques along the trail to recognize citizen donations.

FUNDING AND GRANT OPPORTUNITIES

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 the city, businesses within the communities, or residents and trail users. Fundraising can help in the implementation for local areas and lend a hand to other areas of the County. There are also a number of state and federal grants that may be available to partially fund the trail. Grants may provide funds for trail development, repair, and land acquisition. The list of grants is not comprehensive and other funding sources may be available.

STATE GRANTS

ATV Trail Grants

Purpose: 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

Purpose: The Enhance Iowa is a program of four combined funds, being 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 are primarily 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 and may apply for funding.

Contact Information: Iowa Department of Economic Development

http://www.iowaeconomicdevelopment.com/Community/Enhanceiowa

Region V Transportation Alternatives Program (TAP)

Purpose: Funds can be used for construction, planning or design of on-road and off-road trail facilities for pedestrians, bicyclists, other and non-motorized forms of travel; infrastructure-related projects and systems that will provide safe routes for non-drivers. Also conversion and use of abandoned railroad tracks; construction of turnouts, overlooks and viewing areas; community improvement activities; environmental mitigation; or a project under the Recreational Trail Program can be funded. Minimum project cost must be $100,000 with at least a 20% local match commitment.

Contact Information: Mid Iowa Development Association (MIDAS) Council of Government

shelgevold@midascog.net

Resource Enhancement and Protection Program

Purpose: 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. Questions regarding the proposed activities on the trail should be directed to the Iowa Department of Natural Resources.

Contact information: Iowa Department of Natural Resources' Parks, Recreation & Preserves Division

www.state.IA.us/government/dnr

Snowmobile Grants

Purpose: 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

State Recreational Trails Program

Purpose: Used to generally 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

FEDERAL GRANTS

American Greenways Kodak Award Program

Purpose: American Greenways Kodak Awards Program, administered by the Conservation Fund, provides grants of $500 to $2,500 to local greenways 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

Land and Water Conservation Fund

Purpose: Serving multiple purposes, this may be used in the funds for trail development and amenities along the trail, 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 Resource's Parks, Recreation & Preserves Division

www.state.IA.us/government/dnr

National Recreational Trails Fund

Purpose: 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 Plan.

Contact Information: Iowa Department of Natural Resource's Parks, Recreation & Preserves Division

www.state.IA.us/government/dnr

The National Trails Fund

Purpose: The National Trails Fund was established to provide grants to trail organizations working to establish, protect and maintain America's foot trails. Grants will be awarded to trail organizations and other non-profits with a trail-related focus. Grants will typically be limited to amounts ranging from $1,000 to $10,000.

Contact Information: American Hiking Society

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

The Rivers and Trails Conservation Assistance Program

Purpose: 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

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REFERENCES

REFERENCES

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Found at: http://www.railstotrails.org/resource-library/resources/active-transportation-beyond-urban-centers-report/?q=Active%20Transportation%20Beyond%20Urban%20Centers&a=All&t=All&s=All&g=All

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Found at: http://www.wrightcounty.org/Wright_County_2017_2018.pdf

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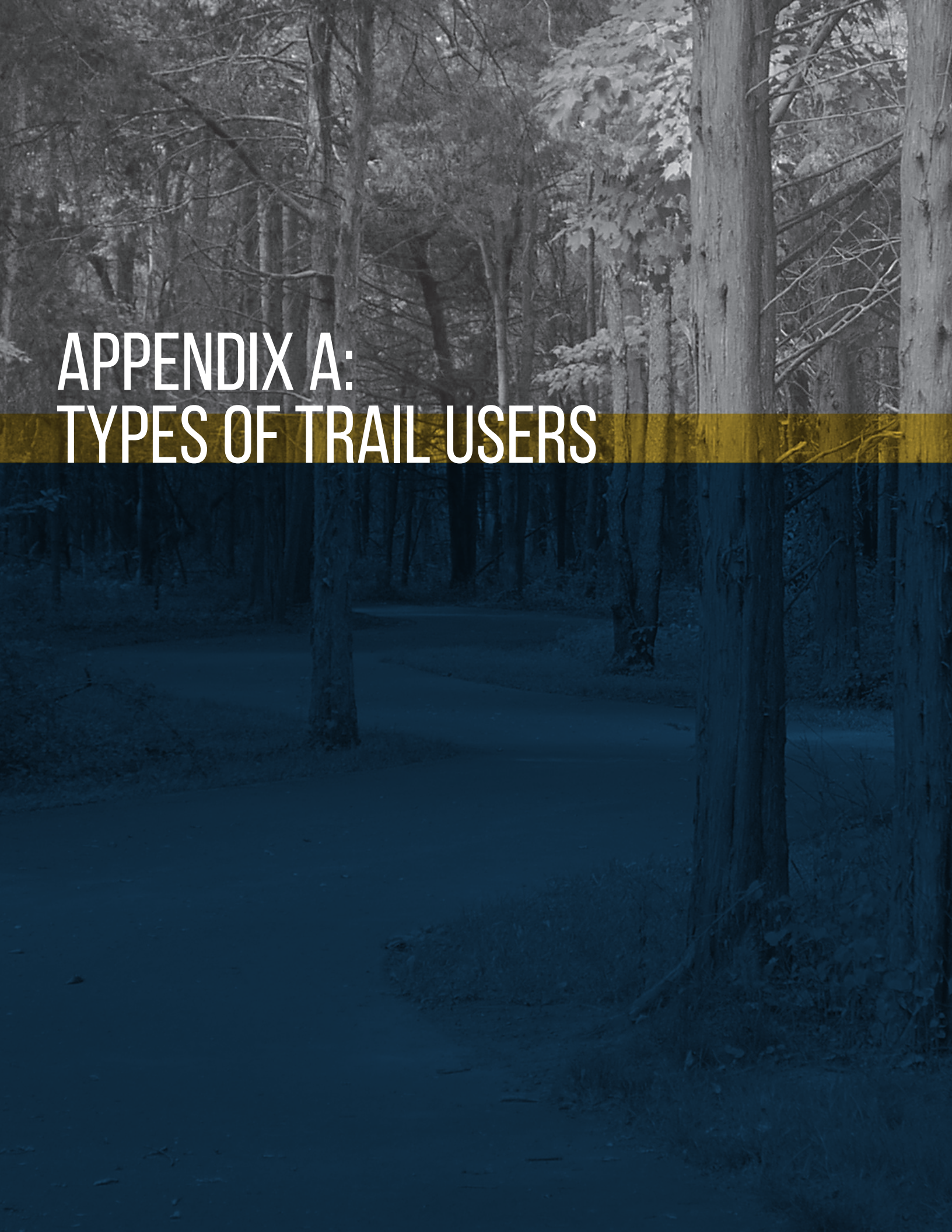

APPENDIX A: TYPES OF TRAIL USERS

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TYPES OF TRAIL USERS

In addition to trail width, accommodating the many users of a multi-use trail requires planning for surface type, vertical clearance, and trail amenities. Some uses may seem incompatible with the desired design and feel of the trail; however, when properly planned, trails can effectively accommodate a variety of users.

PEDESTRIANS

Pedestrians include walkers, hikers, joggers, runners, and dog walkers. These users tend to have fewer design requirements than other users. Most prefer softer surfaces (such as rubber, mulch, or crushed stone) to lessen the impact on their knees, though some users, such as power walkers and those pushing strollers, may prefer more compact surfaces. The minimum recommended vertical clearance for pedestrians is eight feet.

Benches, drinking fountains, shaded rest areas, and restrooms are valuable amenities for pedestrians. Where dogs are permitted, consider providing dog friendly drinking fountains, bag dispensers, and trash bins to encourage people to pick up after their dogs.

BICYCLISTS

Bicyclists fall into a number of subcategories including recreational, commuting, and touring. Bicyclists generally prefer hard surfaces and require a vertical clearance of at least eight feet, with 10 feet needed for overpasses and tunnels. In addition to the amenities suggested for pedestrians, bicycle racks and bicycle lockers located at transit nodes or places of employment are recommended.

The AASHTO's Guide for the Development of Bicycle Facilities is viewed as the national standard for bikeway design. Design of the trail will have to adhere to the AASHTO's guidelines if the trail project receives federal or state transportation funding. Consult the local department of transportation before beginning design.

MOUNTAIN BIKERS

Mountain bikers are considered a separate user group, as they tend to seek out more challenging trails with steeper grades and uneven surfaces. With mountain bikers making up a large segment of the bicycling population, it is wise to accommodate this group with mountain bike parks along the trail corridor. The trail can be used to access these parks, which feature rugged terrain and challenging obstacles. Additional information on mountain bike parks can be found by contacting the local mountain biking organization or the International Mountain Bicycling Association.

EQUESTRIANS

Suitable trails for equestrian users, also known as horseback riders, have become increasingly hard to find, particularly close to urban areas. Many trails prohibit equestrian use, fearing conflicts with other users and damage to the trail surface. However, with proper design, a multi-use trail can accommodate equestrians while minimizing user conflicts. Hard surfaces (asphalt and concrete) and coarse gravel can injure horse hooves, so equestrians prefer loose or compacted dirt trails. If you plan to use a hard surface, consider placing a softer, separate five-foot-wide tread for horses alongside the main path. It is advised to consult local equestrian groups to develop equestrian-friendly facilities. Horses often prefer water crossings instead of bridges. In addition to the standard amenities for human users, parking and staging areas, water for horses and hitching posts at any area where the rider may stop to take a break (rest areas, restrooms, etc.) should be provided.

CROSS-COUNTRY SKIERS

Cross-country skiers are recreational skiers who traverse the countryside rather than make downhill runs. Many multi-use trails that accommodate pedestrians, bicyclists, and equestrians during warmer months are ideal for cross-country skiing during winter months. A minimum of six inches of snow on a trail offers excellent skiing without damaging the trail or ski equipment. If the trail sees other winter use, cross-country skiers will often ski off to the side to avoid having their tracks disturbed.

INLINE SKATERS

Paved multi-use trails that accommodate pedestrians and bicyclists are likely to attract inline skaters as well. Inline skaters require a 10 foot trail width and paved surfaces, similar to the trail specifications required by pedestrians and bicyclists. Consider locating benches at trailheads to facilitate changing in and out of skates.

MOTORIZED USERS

Some trails, especially in rural areas, also accommodate all-terrain vehicles (ATVs) and snowmobiles. Trails that receive federal funding (except through the Recreational Trails Program) may not permit ATV use, though in some instances, snowmobiles are acceptable. For more information contact your state trails administrator. When allowed, snowmobiles can be used on multi-use trails with as little as six inches of snow without causing much damage to the trail surface.

APPENDIX B: TYPES OF TRAILS AND DESIGN STANDARDS

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TRAIL TYPES

The three types of trails that are best for bikes and pedestrians are multi-use trails, paved shoulders, and shared roads. Other possible pedestrian and bike trail types, like bike lanes and separated lanes can be used in city and town settings.

MULTI-USE TRAIL

A multi-use trail is a two-way facility physically separated from vehicular traffic and can be used by pedestrians, cyclists, and other non-motorized users. The minimum width of multi-use trails is generally 10 feet, but eight feet can be acceptable for short distances that are physically constrained to smaller widths. Design.

The Three Rivers Trail is an example of a multi-use trail

PAVED SHOULDER

A paved shoulder is an additional width of pavement added to existing travel lanes. This extra road space is beneficial in numerous ways including reducing automotive-cyclist accidents, decreasing the risk of run-off-road crashes, and providing a safe lane for emergency and maintenance vehicles. Generally, a four foot wide lane accommodates one-way cyclists, but this can narrowed to three feet wide on the outside edge of the shoulder.

Paved Shoulder along a State road

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 comfortably can allow a car to pass three feet from a cyclist should they need to and allow for a cyclist not to be 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

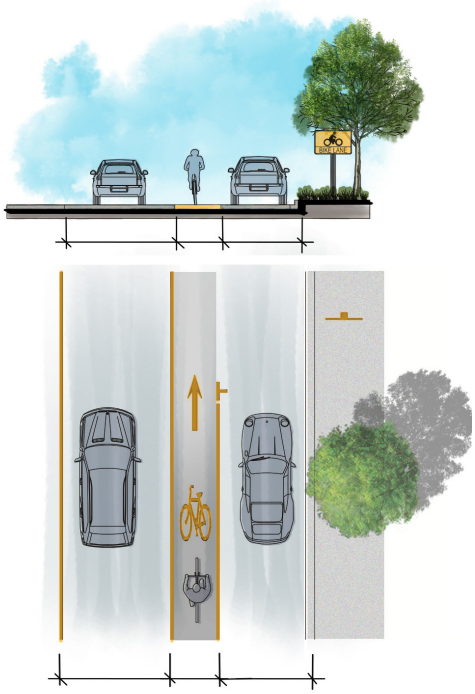
Typically outlined by pavement markings and signs, bike lanes are on-road bikeways only for cyclists. Bike lanes are usually five feet wide. The minimum width recommended is four feet wide, not including the gutter.

PROTECTED BIKE LANE

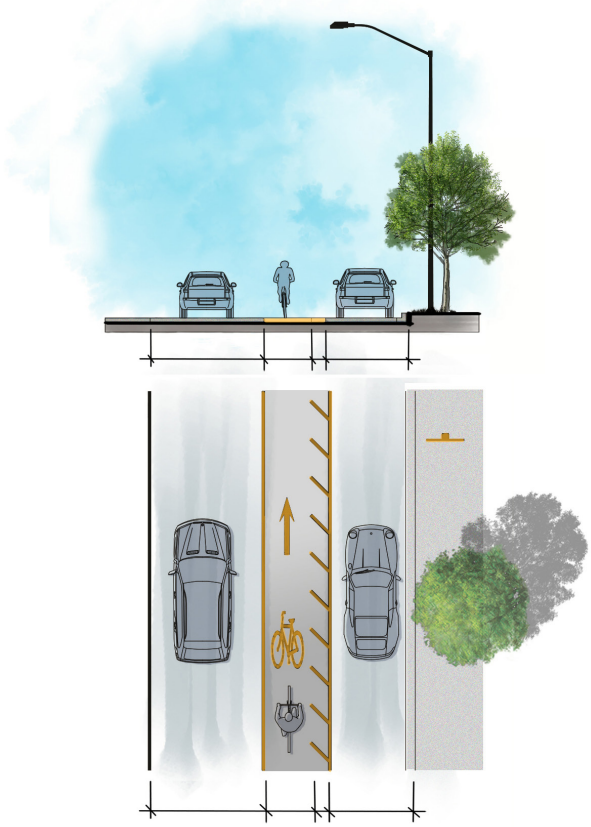
For roads with high density traffic and speeds, a protected bike lane may be preferred. This is a lane separate from both pedestrians and vehicles either by a physical barrier or by a raised road grade. These protected bike lanes can act as a one-way lane (generally five to seven feet wide) or a two-way lane (generally eight to ten feet wide) each designated with their own signage and roadway markings.

Shared road

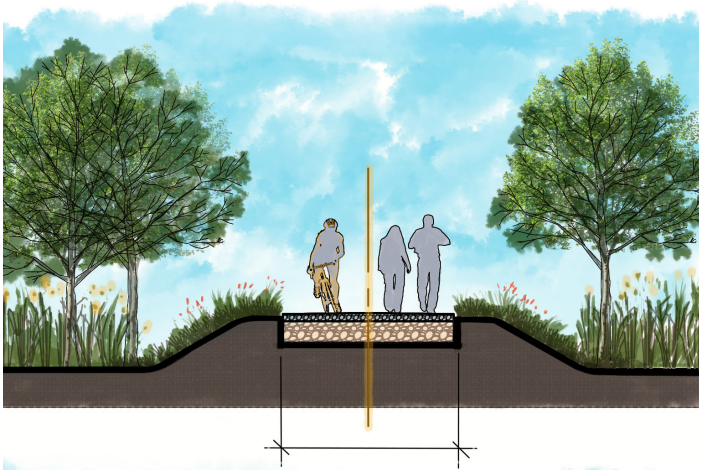
STANDARD BIKE LANE WITH SIGNAGE



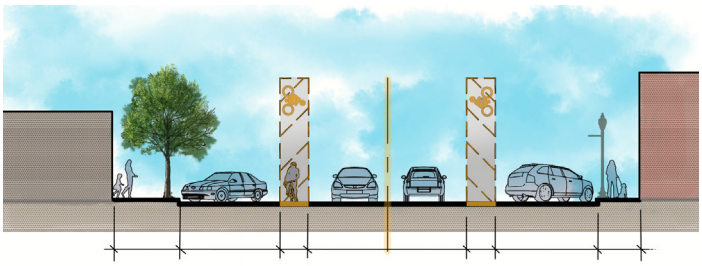
PROTECTED BIKE LANE WITH PYLONS



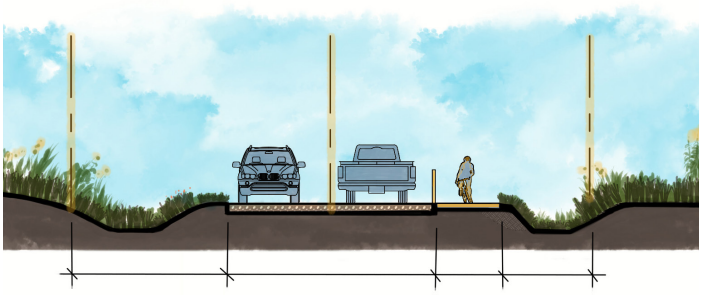
CONVENTIONAL 12' CONCRETE TRAIL THROUGH CITIES, PARKS, CONVERTED RAILBEDS, AND DRAINAGE DISTRICTS



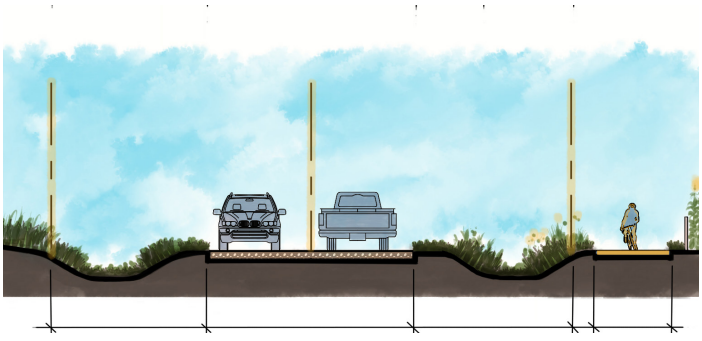
SHARED BIKE LANE THROUGH CITY + TOWN SETTING



12' CONCRETE SHOULDER ADJACENT TO ROADWAY (USE SPARINGLY WHEN UNAVOIDABLE)



12' CONCRETE TRAIL WITH 15-20' SEPARATION FROM ADJACENT ROADWAY (OPTIMAL CONDITION)



DESIGN STANDARDS

The following sources have been considered in design and implementation for the county trails plan. These sources should continue to serve as guide when decisions are made in the design and construction of trails, amenities, and trailheads.

STATE DESIGN STANDARDS

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

AMERICAN ASSOCIATION OF STATE HIGHWAY TRANSPORTATION OFFICIALS (AASHTO)

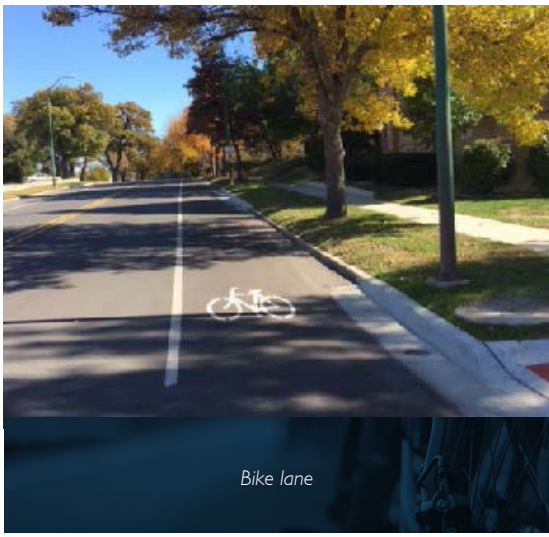
- A Policy on Geometric Design of Highways and Streets
- Guide for the Development of Bicycle Facilities

ACCESSIBILITY REQUIREMENTS

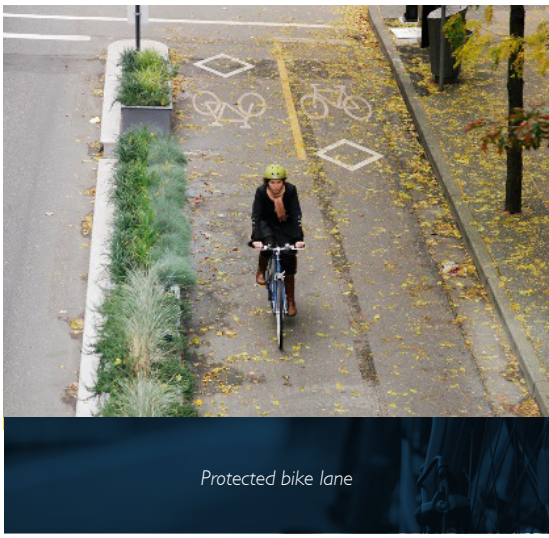
As required for by the ADA's 2010 ADA Standards for Accessible Design and the Uniform Federal Accessibility Standards, all trails, paths, and walkways must meet these standards in order to receive any form of federal supplement or support. The standards can be found at https://www.access-board.gov/guidelines-and-standards/buildings-and-sites/about-the-aba-standards/ufas and https://www.ada.gov/2010ADAstandards_index.htm. 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 different accessibility guidelines.

WIDTH

Trail designers often look to the American Association of State Highway Transportation Officials' (AASHTO) design guidelines as the standard for multi-use trail standards. AASHTO recommends a minimum of 10 feet for multi-use trails; however, where heavy use is anticipated, a 12 to 14-foot width is recommended. Occasionally, providing separate or parallel paths (or treads) may be desirable. For example, a primary, hard-surfaced path can be provided exclusively for bicyclists, with softer shoulders set aside for pedestrians and equestrians. Single shoulders should be at least 5 feet wide, while dual shoulders (one on each side) should be between two and two and a half feet wide.



Bike lane



Protected bike lane

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APPENDIX C: TYPES OF TRAIL SURFACES

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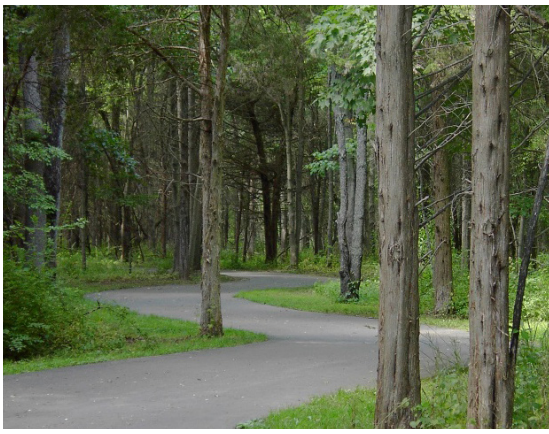

SURFACES

When choosing a surface for your trail, consider the following:

- User acceptance and satisfaction
- Accessibility
- Cost to purchase and install materials
- Cost of maintaining the surface
- Useful life expectancy of trail surface
- Availability of material
- Anticipated levels of use
- Expected user groups

Before you choose a specific trail surface, you should also consider the pros and cons of hard surfaces and soft surfaces. While hard-surface trails are more accommodating, require less maintenance, and can withstand frequent use, they are also more expensive. Conversely, soft-surface trails cost less, but generally do not hold up well under heavy use or varying weather conditions. Soft-surface trails may also not be ideal for some user groups.

HARD SURFACES

Asphalt

Asphalt surfaces work well for bicyclists, pedestrians, runners, and in-line skaters. The initial construction cost for asphalt trails is slightly cheaper compared to other hard surfaces. This surface is most often used in urban areas where trails experience frequent and regular use. Asphalt is a flexible surface that requires regular use and performs well with heavy use. The useful life of asphalt trails is 7-15 years and they require regular maintenance.

Concrete

Concrete surfaces work well for bicyclists, pedestrians, runners, in-line skaters, and other wheeled activities or users (ex. wheelchairs or strollers). Concrete trails have the highest initial construction costs, but also have a useful life of 25 years or longer. Trails made of concrete are appropriate for regions with extreme temperature changes and in areas that are susceptible to flooding.

Crushed Stone

Crushed stone may be accessible for multiple user groups including pedestrians, some bicyclists, and runners. Crushed stone trails are not accessible for in-line skaters or bicyclists who prefer harder surfaces like asphalt or concrete. This trail surface has the lowest initial construction cost, but requires expensive ongoing maintenance. Crushed stone trails may be susceptible to erosion and surface consistency and quality may be difficult to maintain.

SOFT SURFACES

Natural Earth

Trails with a natural earth surface offer inexpensive maintenance costs limited primarily to fixing drainage problems, repairing eroded areas, and removing vegetation. The trail can usually be built and maintained by volunteers. Grant funding may be not available to finance natural earth trails. Additionally, user groups for this type of trail surface are limited.

Wood Chips

Wood chips blend well with the natural environment and can work well as a parallel tread for runners and equestrians next to an asphalt or concrete trail. However, the surface decomposes rapidly, cannot accommodate wheelchair use, and requires constant maintenance to keep the width and surface steady. The entire surface needs replacement every two years, but installation and maintenance can be done by volunteers.

The desired end result, goals and purpose of the trail, available funding sources, targeted user groups, and maintenance budgets should be the principal driving factors in determining trail surface type. It is possible to upgrade from a surface material like crushed stone to a harder surface like asphalt or concrete. For example, the Cannon Valley Trail in Minnesota began as crushed stone and was upgraded to asphalt to increase use, accommodate community cyclists, and attract outside visitors. It should be noted that funding from grants may only be used once for building a segment of trail, meaning if a trail surface type was later converted to an alternative surface material, different funding sources would be need to be secured for that trail segment.

APPENDIX D:
TYPES OF TRAIL AMENITIES

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BENCHES

Benches provide people of all ages and abilities a place to sit and rest along the trail. When designing or purchasing a bench, consider user comfort, simplicity of form and detail, ease of maintenance, durability of finish, and resistance to vandalism. Benches must be positioned on an accessible surface with an accessible walk to the seating area.

BIKE RACKS

Bicycle racks allow recreational users to safely park their bikes if they wish to stop along the way or have arrived at a destination. Three criteria should be considered when choosing bike racks for a multi-use trail: location, type of rack, and bike dimension. Bike racks should be located at trailheads, parking areas, commercial establishments, and other services. Racks should be located as close as possible to destinations and allow for ample room to accommodate locked bicycles. Bike racks should also be placed in well lit and highly visible areas to reduce theft and vandalism.

BOLLARDS

Bollards are short, vertical posts that are used to obstruct, control, and/or direct vehicle traffic from trail traffic. Bollards can be located at trailheads to limit public vehicle traffic, and can be designed to be removable if needed. Bollards should only be used if operational problems demand them; for instance, if there is a need to indicate that particular part of the trail is open only to non-motorized users. Bollards can be internally illuminated and should be well marked and visible at all times.

CURB STOPS

Trailheads and parking areas should have minimum development, yet some control for vehicular roads and parking. For a more sustainable design, where possible, delineation of these edges and parking separation should be accomplished to allow water to drain into natural water quality systems. To assist with this design concept, curb stops can be used to control vehicular movement, while still allowing water to surface drain through the area. The material for the curb stops are premade units of recycled rubber/plastic or concrete and can be colored to add their visibility. The curb stops are usually secured to the pavement with rods and adhesives.

DIRECTIONAL SIGNAGE

Directional and way-finding signs help users find their way to trailheads, destinations, and trail amenities. Signs should provide important safety and location information including intersection warnings, trail and user restrictions, other right-of-way information, and mileage and proximity to other destinations along the trail. These signs should have a consistent design theme as they will be placed throughout the entire trail system. Sign text should be easy to read with contrasting color and universal symbols to indicate the direction of important amenities and services. The location for directional signs should be based on an analysis of circulation routes and decision points. It is also recommended to place signage at trail intersections and turnouts.

DRINKING FOUNTAINS

Fountains should be installed near restrooms to get the most out of utility access. The design of drinking fountains should incorporate the needs of all potential users, including pets. To accommodate all needs, provide both standard and accessible height spigots and install steps to the side of the standard spout to accommodate children. Fountains can also be integrated with buildings to help with winterization.

FENCING

Fencing is used to protect users from potential hazards such as steep slopes or restrict access to and from the trail. The style of fence should reflect the character of the site in addition to functioning as a barrier. Coated, black, or forest green chain-link is less visually impacting, while wood gives the impression of a more natural setting. Materials should be chosen for their durability and maintenance requirements. Landscaping should be considered to soften the appearance of fencing at trailheads and along trails.

INFORMATIONAL SIGNAGE

Informational signage can provide users with objective information about trails, including trail symbols, trail length, trail direction, GPS coordinates, trail rules, trail surface type, and accessibility. Information about trail conditions can help users determine whether the trail meets their own needs and abilities. In cases where more extensive trail information is provided such as maps, the history of the area, or environmental information, a profile of the trail's grade and surface should also be included so that users can identify accessible trail segments.

LIGHTING

Lights provide visibility at night and safety for trail users. Lights should be installed at trailheads and major road crossings or activity areas. Lighting levels should comply with local ordinances and should have cut-offs to shield light form adjacent properties. Solar-powered lighting is a sustainable option that is ultimately less expensive to operate.

RAMPS AND HANDRAILS

An accessible trail gradient should not exceed 5%. If it does, it will be necessary to provide a ramp to accommodate all users. Although Uniform Federal Accessibility Standards require a maximum ramp grade of 8%, a 6% maximum is strongly recommended. Design should include a minimum ramp width of 44" with 32" high hand railings on all ramps.

RESTROOMS

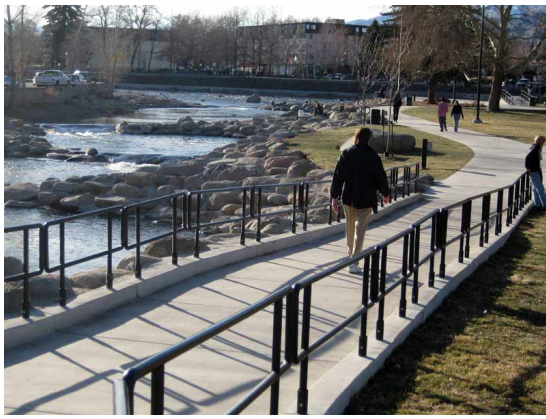
Restroom design and amenities vary depending on local ordinance standards and accessibility codes. The number of stalls required will also vary depending on the predicted number of trail users. These and other requirements should be considered during the early stages of design. Full-service restrooms that include running water and flushing toilets must be located near existing utilities. If existing utilities are inconveniently located, restroom design should include portable toilets with holding, septic, or composting tanks.

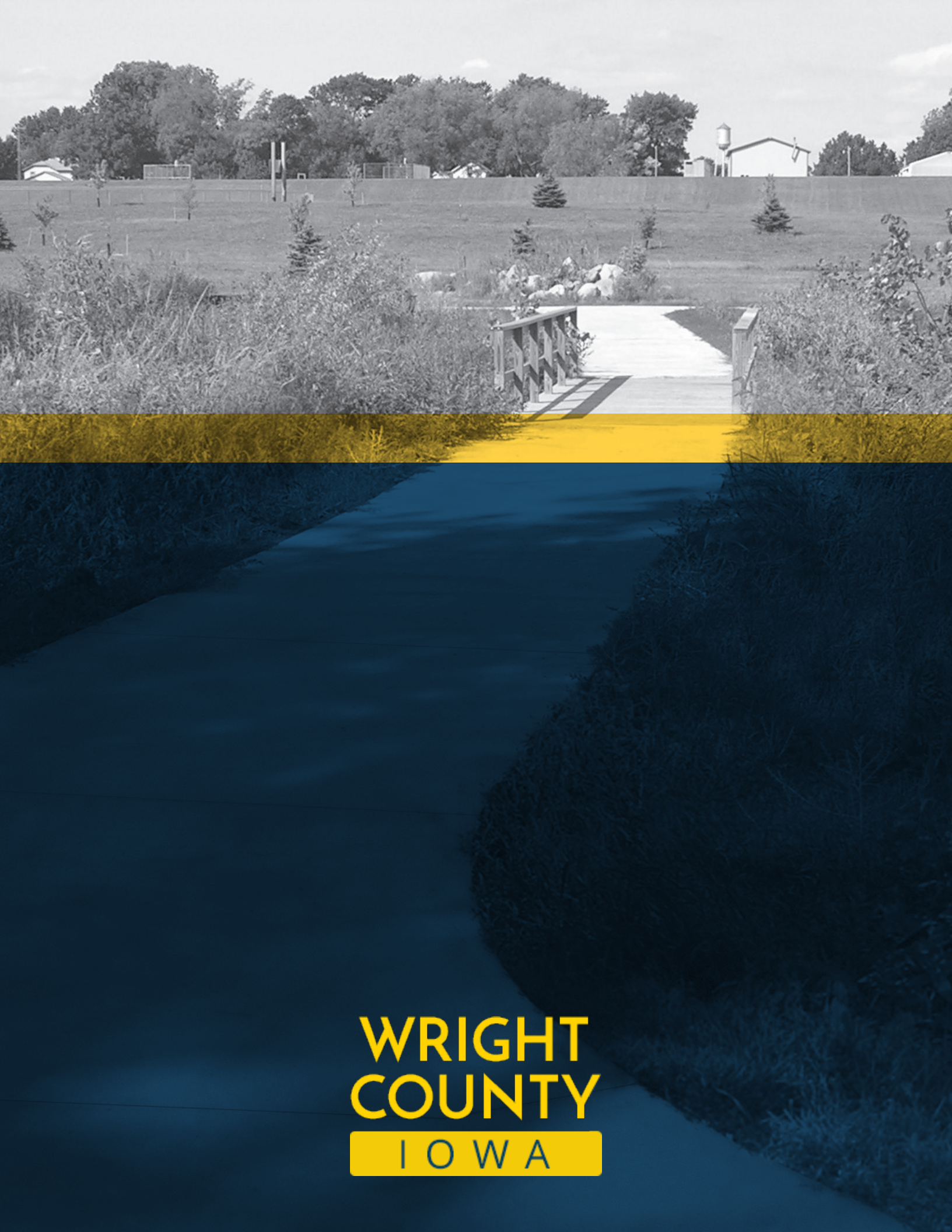
TABLES

Tables should be provided at critical points along the pathways, especially at trailheads. The table should be made of durable materials, such as vinyl coated, expanded metal, or concrete which require minimal maintenance. They should be secured to a paved, accessible surface so they are universally accessible. Table design can be a traditional rectangle to slightly octagonal.

TRASH/RECYCLING RECEPTACLES

Although the County's preferred policy is "pack in it and pack it out" regarding trash, providing trash and recycling receptacles near other trail amenities such as benches, restrooms, water fountains, and bike racks helps keep the trail clean and discourages littering. Interpretative signage should encourage the use of trash and recycling bins.





WRIGHT COUNTY

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