

Final Report and Feasibility Study Riverside, Iowa



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Trees Forever
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About Martin Gardner Architecture, P.C.

Martin Gardner Architecture has been providing excellent in architecture, design, master planning, needs assessment, creative placemaking, and other consulting services in eastern Iowa for over 35 years.



Kyle Martin, AIA, LEED AP – Kyle is MGA’s Principal Architect and has a passion for looking at things holistically but with a unique perspective. He enjoys examining the goals and values of a project that need to be met to be successful. He then pushes beyond those goals to see what else can be achieved through the same kits of parts, the same funds, and the same expenditures of effort by reducing waste and exploring alternatives. Kyle is actively engaged in the community. Kyle is also highly involved during the design process, creating beautiful places where he lives, works and plays.



Zahra Salahshoor is a Landscape Architecture graduate student at Iowa State University since 2020. She gained a Bachelor degree of Arts and Architecture and Master degree Landscape Architecture, from Technical University of Shariaty in Tehran, Iran. She believes that it’s the best to utilize technology as a tool to empower the design idea to create spaces that can impact people’s emotions and feelings.



About Flenker Land Architecture



Flenker Land Architecture Consultants, L.L.C. (FLAC), aka Flenker Land Architects, is a full service professional environmental, planning and landscape architectural firm which was founded in 1997 by Meg Flenker. Professionally licensed FLAC works with both public and private sector clients throughout all phases of their projects - from the conceptual stages of assessing project feasibility, evaluating alternatives, researching funding and performing site analysis and creating schematic designs, to the preparation of final design and construction documents, including project administration and construction observation.

FLAC's personnel are trained and committed to consider aesthetics, detail, scale, pedestrian and vehicular circulation and interaction, project context, environmental impact, user safety, functionality, and how humans interact with their surroundings - all things that FLAC considers inherent to the success and value of each project and essential to creating a "sense of place". With FLAC, you get the persons with the knowledge and experience working on your project. Our "real world" knowledge and understanding of the planning, design, permitting and construction process, coupled with our understanding of the natural and built landscape is an asset to the services that we provide.

We are certified as an Iowa Targeted Small Business (TSB) and a Disadvantaged Business Enterprise (DBE) with the Iowa, Illinois and Wisconsin Department of Transportation.

Flenker Land Architecture Consultants, LLC, continually strive to create individualized and quality projects that create value - a guiding principle that has resulted in our involvement in the planning and design of various award winning projects, both at the state and national level.



Site Design: Dubuque, Ia.



Streetscape Design: Parkersburg, Ia.



Bike Path Design: Great River Trail



LID Design: Coralville, Ia.



Sport Field & Park Design: Eldridge, Ia.



Native Habitat Design: Clinton, Ia.

Program Overview

Riverside is one of 10 communities selected to participate in the 2021 Iowa's Living Roadways Community Visioning Program. The program, which selects communities through a competitive application process, provides professional planning and design assistance along transportation corridors to small Iowa communities (populations of fewer than 10,000).

Goals for the Visioning Program include:

- Developing a conceptual plan and implementation strategies with local communities
- Enhancing the natural, cultural, and visual resources of communities
- Assisting local communities in using external funds as leverage for transportation corridor enhancement

Each visioning community works through a planning process consisting of four phases of concept development:

1. Program initiation
2. Needs assessment and goal setting
3. Development of a concept plan
4. Implementation and sustained action

Each visioning community is represented by a steering committee of local residents and stakeholders who take part in a series of meetings that are facilitated by field coordinators from Trees Forever. Iowa State University organizes design teams of professional landscape architects, design interns, and ISU faculty and staff. The program is sponsored by the Iowa Department of Transportation.

Community Goals

The Riverside visioning committee identified a number of goals and priority areas during the visioning process, which are included below:

- Strengthen connectivity with Riverside with accessible trails and sidewalks.
- Expand the existing trail system to nearby communities and become part of a regional trail system.
- Enhance vehicular and pedestrian circulation at key intersections.
- Improve access to the English River and incorporate site improvements and amenities to enrich the user experience and attract visitors.
- Incorporate traffic-calming measures, as well as modifications to circulation patterns to increase the comfort of users and improve their experience.
- Enhance the downtown streetscape to improve pedestrian accessibility and aesthetics.

Program Overview

Capturing the Riverside Vision

Based on the needs and desires of the local residents, as well as a detailed inventory of community resources, the design team developed a conceptual transportation enhancement plan. This plan, as well as the inventory information, is illustrated in the following set of presentation boards. These boards include the Program Overview, Bioregional Assessment, Transportation Assets and Barriers Assessment, Transportation Behavior and Needs Assessment, Hispanic Interview, Transportation Inventory and Analysis, Concept Overview, and Community Design Boards.

Program Overview

The city of Riverside is one of 10 communities selected to participate in the 2022 Iowa's Living Roadways Community Visioning Program. The program, which selects communities through a competitive application process, provides professional planning and design assistance along transportation corridors to small Iowa communities (populations of fewer than 10,000).

Visioning Program Goals

- Development of a conceptual plan and implementation strategies with local communities
- Enhancement of the bioregional, cultural, and visual resources of communities
- Assisting local communities in using external funds as leverage for transportation corridor enhancement

Each visioning community works through a planning process consisting of four phases of concept development:

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Community Goals

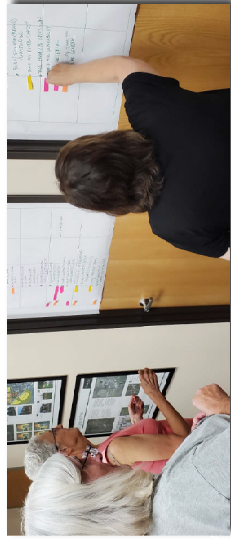
The Riverside visioning committee identified a number of goals and priority areas during the visioning process. These goals and priorities are reflective of what the community members expressed during their participation in the Transportation Assets and Barriers workshop (see boards 3a-3c).

- Strengthen connectivity within Riverside with accessible trails and sidewalks
- Expand the existing trail system to nearby communities and become part of a regional trail system
- Enhance vehicular and pedestrian circulation at key intersections
- Improve access to the English River and incorporate site improvements and amenities to enrich the user experience and attract visitors
- Incorporate traffic-calming measures, as well as modifications to circulation patterns to increase the comfort of users and improve their experience
- Enhance the downtown streetscape to improve pedestrian accessibility and aesthetics

The Riverside Vision

Based on needs and desires of the local residents, as well as a detailed inventory of community resources, the design team developed a conceptual transportation enhancement, which is illustrated in the following set of presentation boards:

1. Program Overview
2. Bioregional Assessments
3. Transportation Assets and Barriers
4. Transportation Inventory
5. Programming Objectives
6. Concept Overview
7. Community Connectivity
- 8a. Downtown Enhancements
- 8b. School Parking Reconfiguration
- 8c. Ella Street Five-Way Intersection
9. English River Access



The Riverside steering committee reviewed previously gathered data and, together with the design team, developed common themes that shaped the goals.



In July 2022, the design team and members of the steering committee toured various transportation assets and barriers to gain a better understanding of the community and their priority areas.



The designers reviewed the preliminary designs with the steering committee in August 2022.

Riverside Program Overview

Martin Gardner Architecture

Designer: Kyle Martin, Landscape Architect; Meg Flenker
Intern: Zahra Salahshoor
Iowa State University | Trees Forever | Iowa Department of Transportation



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Bioregional Assessment

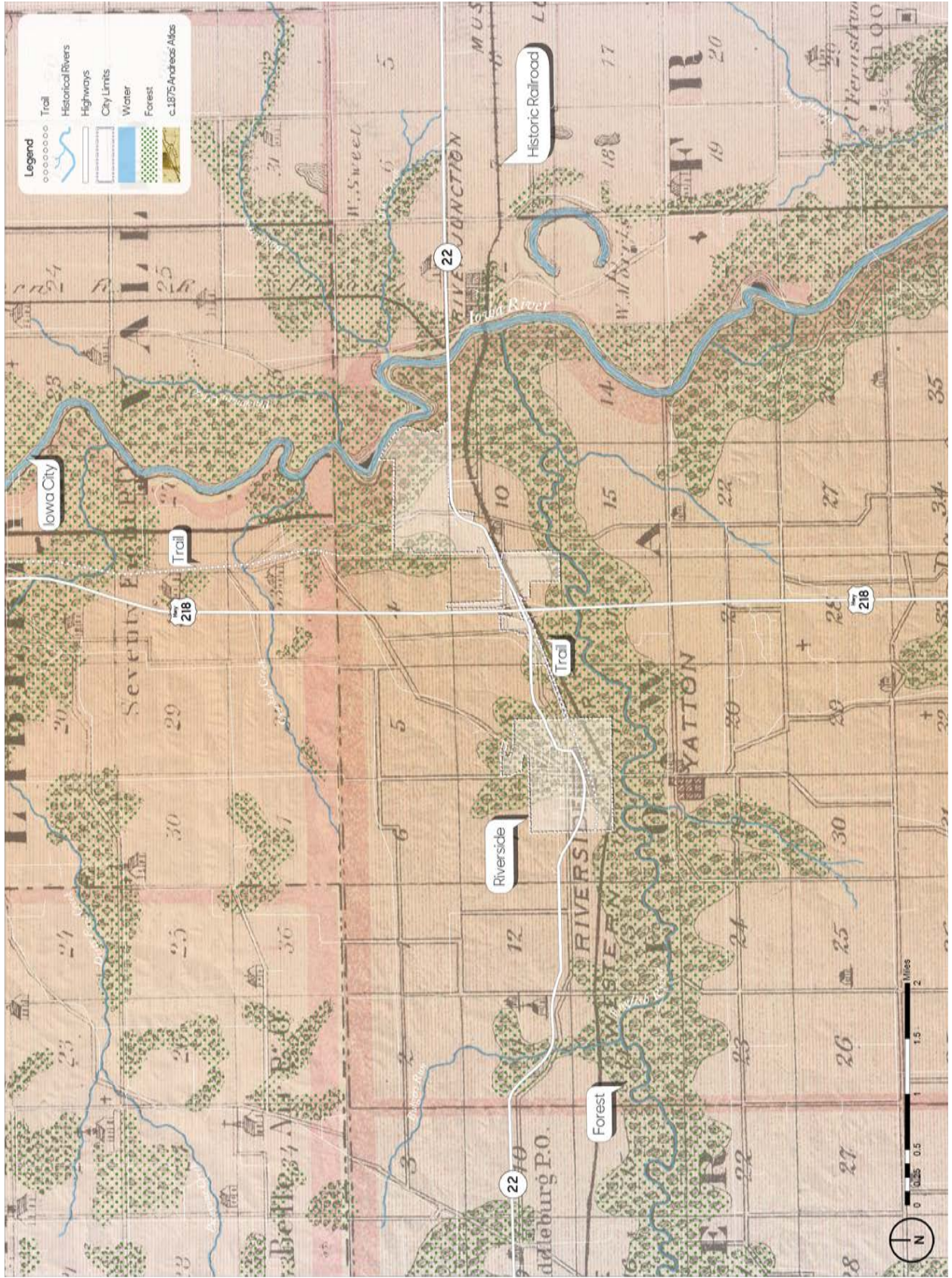
Historical Settlement Patterns

This board uses a map from *A.T. Andreas' Illustrated Historical Atlas of the State of Iowa, 1875* overlaid with present-day town boundaries and water bodies. Published in 1875, Andreas' Atlas is an extraordinary resource showing the post-Civil War landscape of Iowa, including settlement features (towns and villages, churches, schools, roads, railroads, etc.) and landscape features (water bodies, vegetated patches such as timber and swamp, and major topographic features). A high-quality scan of the Atlas has been arranged to correspond closely with present-day map, revealing major landscape changes as well as features that have persisted, such as railroad rights-of-way and in some cases remnant vegetation patches.

Riverside in Context

Compare the 1875 boundaries of your town to the current boundaries. How much has your town grown?

Compare the course of the rivers in 1875 to their current course. Are there major changes in alignment or location? Are there vegetation patches shown in the 1875 map still in existence?



Map Source: Iowa Department of Natural Resources, "Natural Resources Geographic Information Systems Library," <http://www.igsb.uiowa.edu/nrgislib/>.

Historical Vegetation

The vegetation information shown here is derived from township maps made by the General Land Office (GLO) surveys beginning in 1836 through 1859. This information was digitized in 1996 as a resource for natural resource management and is useful "...for the study of long term ecological processes and as baseline data for the study of present day communities."¹

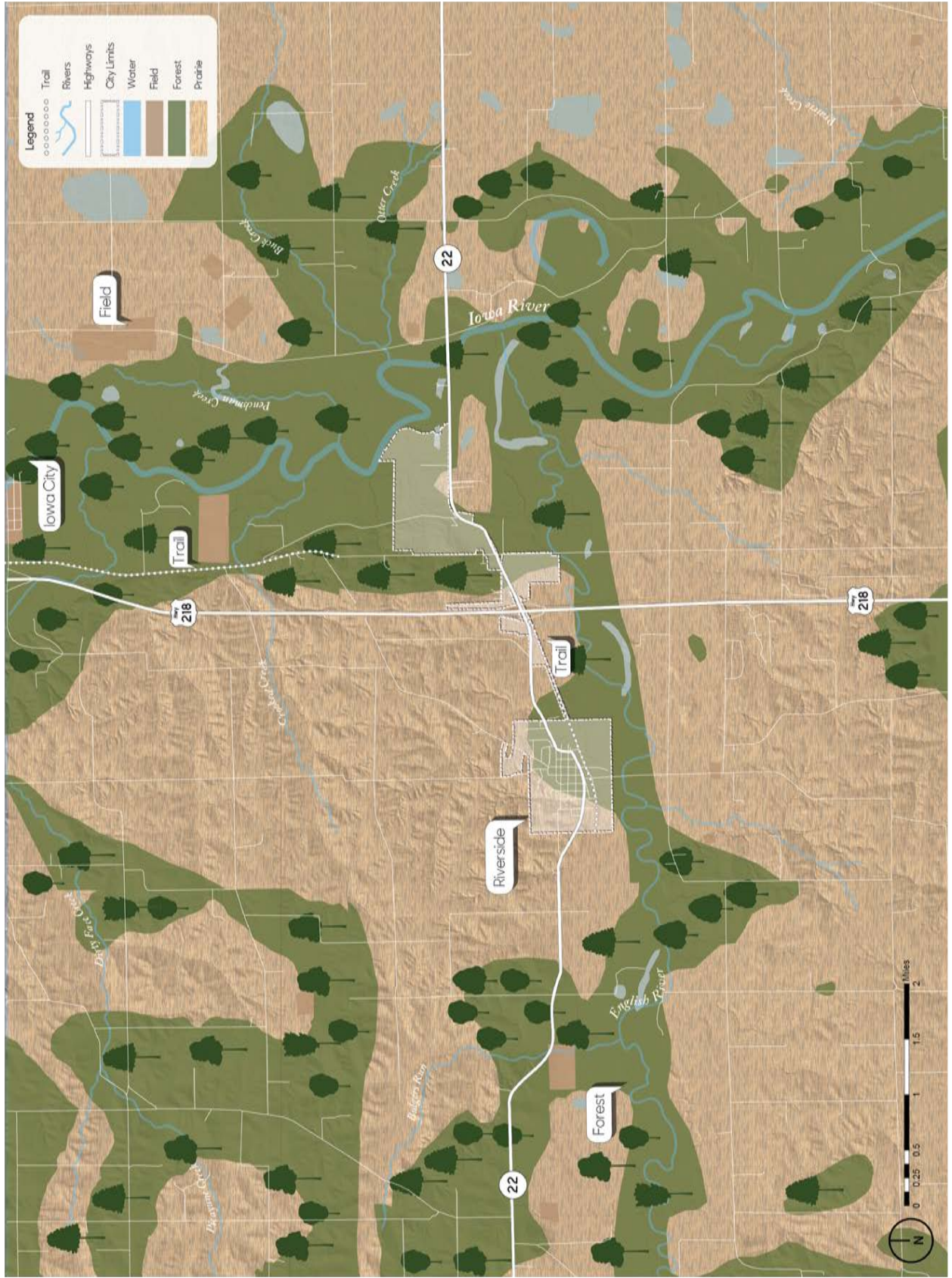
The plant community names mapped by the GLO surveyors varied. The original terminology they used has been preserved in the original data, but we have renamed them on this map to reflect names used to describe contemporary vegetation communities.

Not all communities will have all vegetation types, because various conditions that affect vegetation—such as geology, wind exposure, seasonally high water or groundwater, and frequency of fire—differ from place to place. Early land surveyors mapped the following vegetation types, some of which may not be present in the vicinity of your community:

The vegetation types are defined¹:

1. Forest: Tree dominated, with a mostly closed canopy. Ground vegetation shade tolerant. developed under infrequent fire.
2. Prairie: Perennial non-woody plants; fire dominated.

¹ J.E. Ebinger, "Presettlement Vegetation of Coles County, Illinois," Transactions of the Illinois Academy of Science (1987): 15-24, quoted in Michael Charles Miller, "Analysis of historic vegetation patterns in Iowa using Government Land Office surveys and a Geographic Information System" (master's thesis, Iowa State University, 1995), 8.



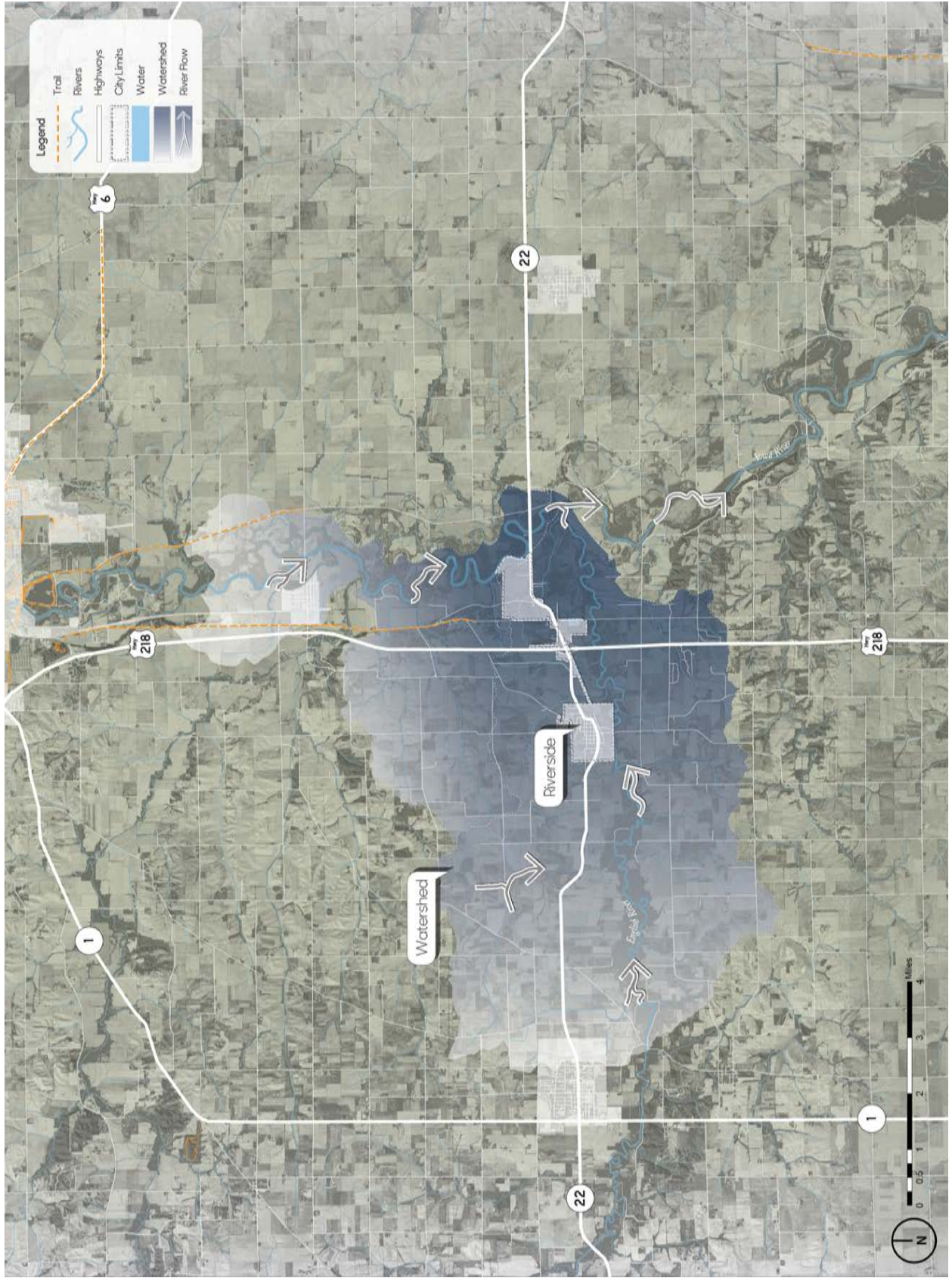
Map Source: Iowa Department of Natural Resources, "Natural Resources Geographic Information Systems Library," <http://www.igsb.uiowa.edu/nrgislib/>.

Regional Watersheds

A watershed is a defined area or ridge of land with a boundary that separates waters flowing to different rivers, creeks, or basins. Watershed boundaries show the extent of a drainage area flowing to a single outlet point and determine whether precipitation is directed into one watershed or an adjacent watershed.

It is important to note that there are multiple levels of watersheds; for instance, the Iowa River watershed is composed of a dozen smaller watersheds, and the Iowa River watershed is a sub-basin of the Mississippi River watershed.

Where a community is located in relation to its surrounding watershed(s) determines its capacity to manage regional watershed issues such as flooding. For example, a community located near the end of a watershed (close to the outlet point) will have little capacity to reduce the amount of water draining toward it from upland areas.



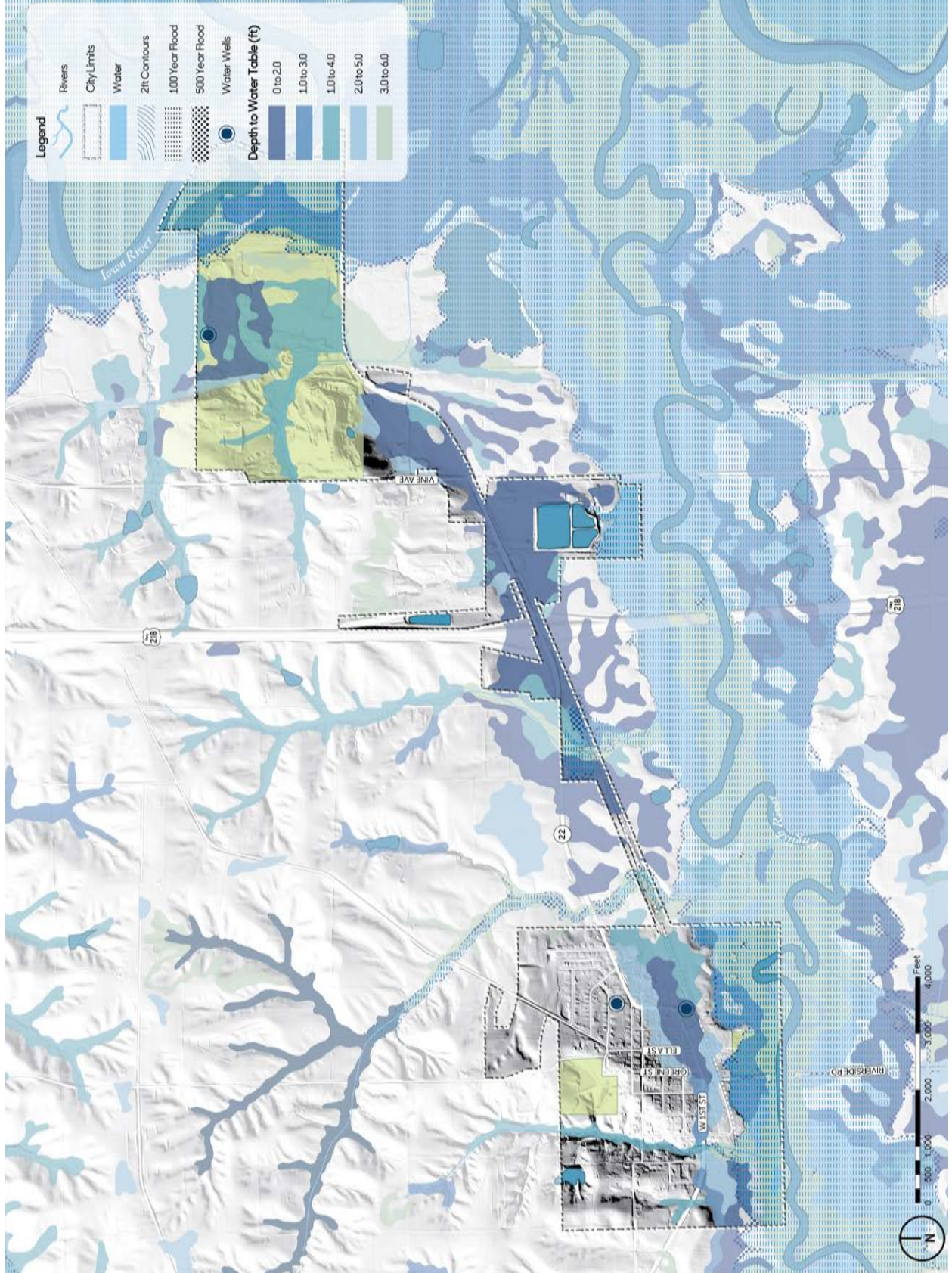
Map Source: Iowa Department of Natural Resources, "Natural Resources Geographic Information Systems Library," <http://www.igsb.uiowa.edu/nrgislib/>.

Depth to Water Table

The water table is defined as the distance below the surface at which the ground is saturated with water. Depth to water table is represented as a range because it varies due to seasonal changes and precipitation volumes. For example, following spring snowmelt, an area with a depth to water table ranging from one foot to three feet is likely to be at or near one-foot depth.

The map shows how close to the surface groundwater can be. Pavement and foundations are affected by groundwater near the surface. Freezing and thawing and upward pressure of rising groundwater can cause cracks or "frost boils" in pavement. Foundations can be wet and require "dewatering," which can be expensive.

Where the value is less than zero feet, water can well up out of the ground. This causes localized flooding, even if there is no surface water draining to the area.



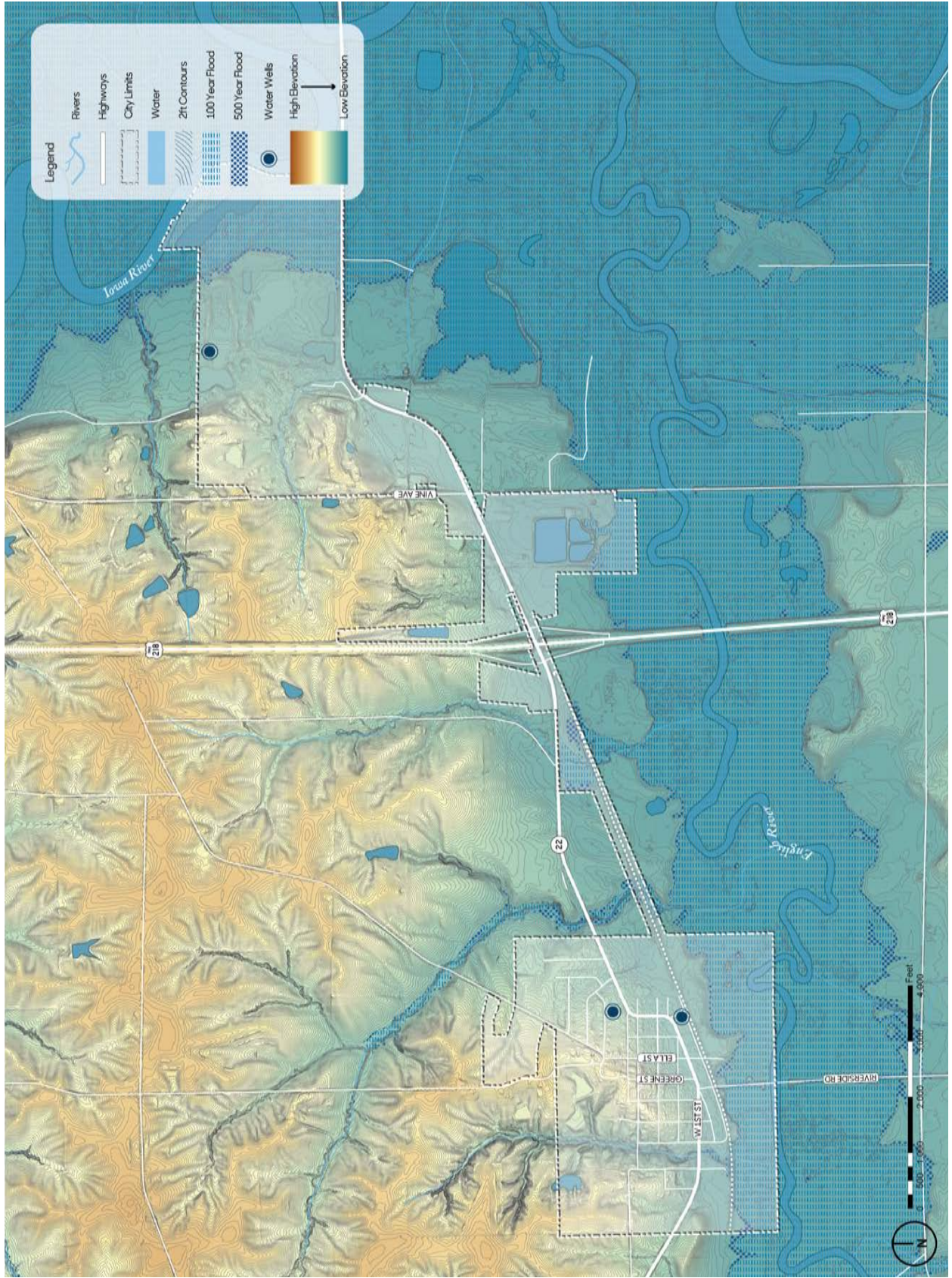
Map Source: Iowa Department of Natural Resources, "Natural Resources Geographic Information Systems Library," <http://www.igsb.uiowa.edu/nrgislib/>.

Elevation and Flow

This map displays topographic differences in elevation using a combination of contour lines and the color gradient depicted in the legend. The high and low points have also been located. Note the relationship of your community to the surrounding elevation. Is it located in a valley or on high ground, or is it split between the two?

If your community lies within or near a floodplain or floodway, the map reflects these features. Not all communities will have these elements; if they are absent on this map, none are present.

Flood risk is correlated to low-lying land. This map shows your community's flood risk as defined by the Federal Emergency Management Agency (FEMA) Flood Map Service Center. The map shows the two most important flood zones if present: the Base Flood and the Regulatory Floodway (consult legend). Base Flood is the zone having a 1% chance of being equaled or exceeded in any given year, also referred to as the "100-year floodplain." The Regulatory Floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% flood discharge can be accommodated without increasing the base flood elevation.



Map Source: Iowa Department of Natural Resources, "Natural Resources Geographic Information Systems Library," <http://www.igsb.uiowa.edu/nrgislib/>.

Present-day Land Cover

The land-cover map depicts both natural and man-made land cover types with aerial imagery. The Iowa DNR created 15 unique classes for this dataset to differentiate land covers. Refer to the legend for a breakdown of land-cover types within your community boundaries.

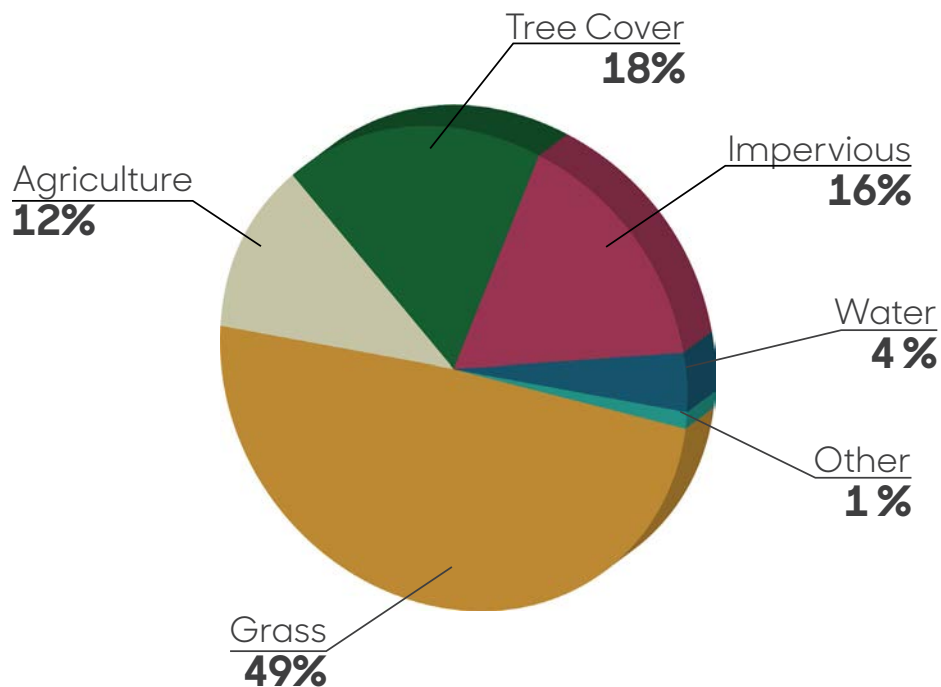
What do you observe about the dominant landcover types in your community?

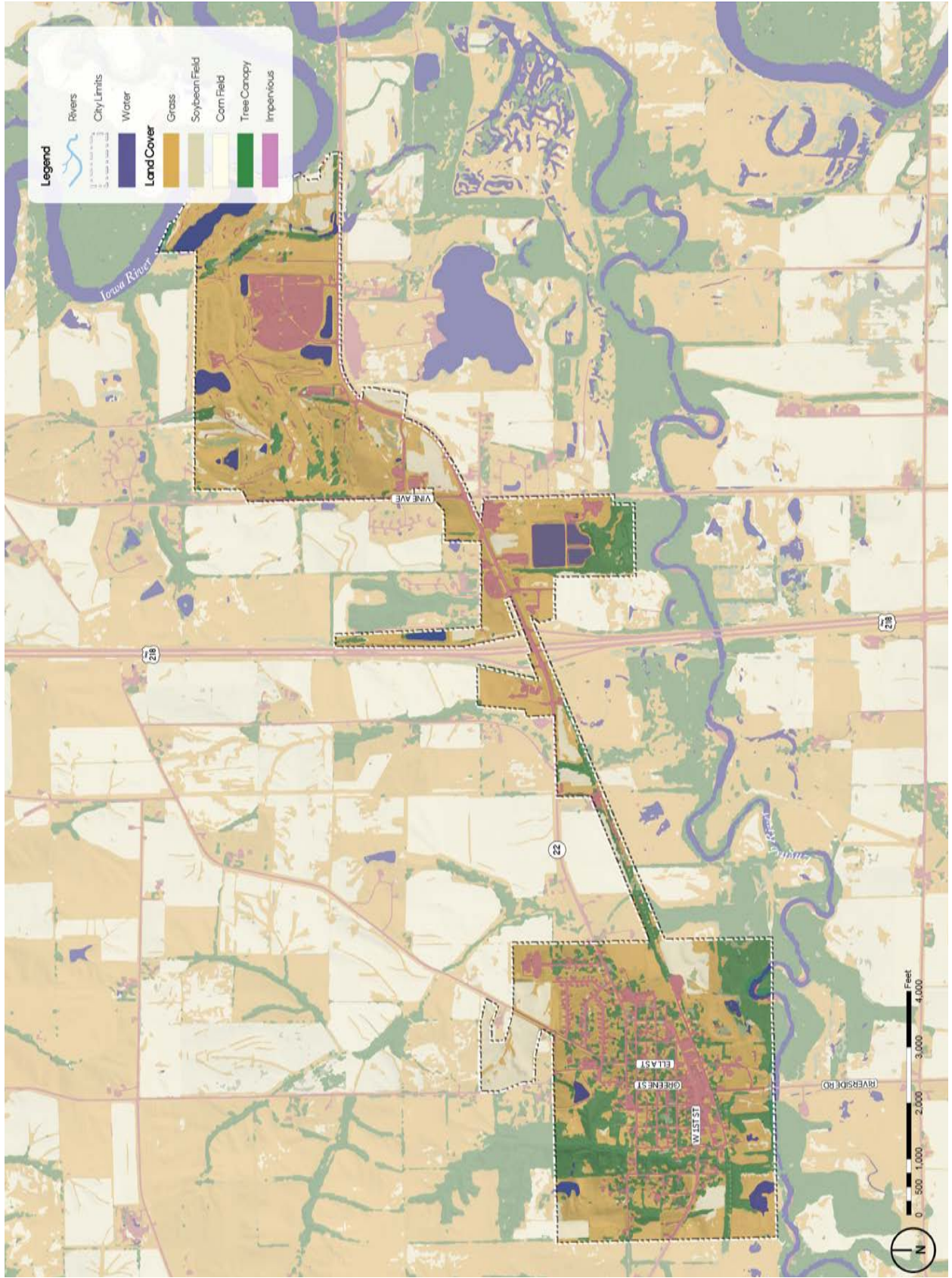
Where is the tree canopy most concentrated?

Look at how much of your community consists of impervious surfaces (e.g., parking lots, roads, buildings) compared to the other surfaces (e.g, water, grass, and agriculture). What does this mean for surface-water movement?

Tree cover affects microclimate. Are places surrounded by canopy more pleasant in the summer? How do these places feel in the winter?

Percent Land Cover Type





Map Source: Iowa Department of Natural Resources, "Natural Resources Geographic Information Systems Library," <http://www.igsb.uiowa.edu/nrgislib/>.

Landscape Change Over Time

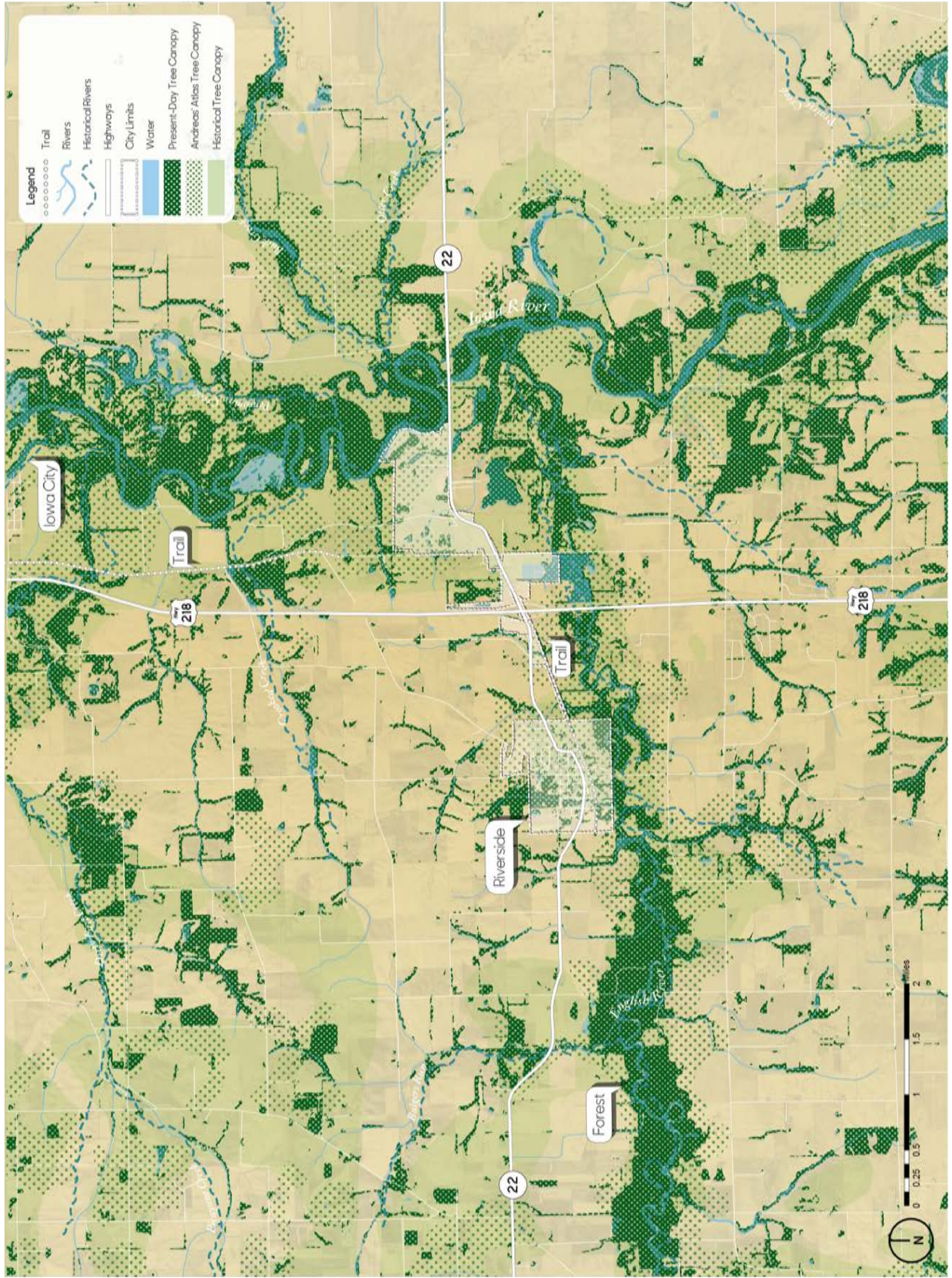
The map on this page shows how the landscape has changed over time, with an emphasis on vegetation and drainageways. The map is helpful for understanding how landscapes change and considering how these changes might affect how well the landscape works to support human and ecological needs.

Trees are invaluable. They clean the air, create shade, and cool the atmosphere. They intercept rainfall and consume groundwater, which helps mitigate stormwater runoff. Carefully chosen and placed trees provide communities identity and residents with a sense of home. In Iowa, a prairie state, we increased tree cover to create shade and a sense of enclosure within rural towns. Lack of natural fires and burning has also generally increased tree cover along rivers and floodplains. Other areas of trees have diminished due to clearing for roads, agriculture, or other purposes.

What changes do you see to the tree canopy surrounding your community? Where has the tree canopy decreased? Where might the tree canopy have increased? Consider what changes to the landscape might have led to the increase or decrease of trees in the region (e.g., farming practices, community development, establishing homesteads and windbreaks, preservation of natural resources).

This map also shows current and historical stream and river corridors. Alterations to waterways such as channelization have been made to increase drainage, but can lead to increased erosion, sediment movement, and flooding where the straightened portion ends. Storm sewers also affect streams and waterways where outfalls drop urban runoff into the corridor, which can dramatically decrease water quality. How have streams and rivers changed? Do these changes appear to be man-made or natural?

The following map shows the difference between the present day tree canopy gathered from the DNR's Land Cover data and past landscape cover, as defined in the General Land Office (GLO) surveys from 1836 through 1859 and the A.T. Andreas' Illustrated Historical Atlas of the State of Iowa from 1875.



Map Source: Iowa Department of Natural Resources, "Natural Resources Geographic Information Systems Library," <http://www.igsb.uiowa.edu/nrgislib/>.

Transportation Assets and Barriers

Overview

Transportation is integral to small-town life and a vibrant economy. In the context of the Community Visioning Program, we recognize walking, biking, and driving as quintessential modes of travel to various destinations important to residents and visitors. Access to these destinations is crucial for many everyday activities—getting to work and school, participating in community events, and providing for basic needs such as food, health care, and healthy activity.

In this participatory assessment, we want to find out which factors and conditions affect transportation use in Riverside, where these factors and conditions are most prevalent, and how they influence route and transportation choices locally. Because residents have the best knowledge of how Riverside's transportation system works, we use focused, small-group conversations, mapping, and photos of the best and worst places taken by residents to understand local transportation.

Different Users = Different Needs

To capture insights about transportation from a variety of perspectives, we invited Riverside residents with different transportation needs to participate in focus groups. A total of 47 residents attended Riverside's workshop. Participants were separated into five user groups and the Riverside steering committee.



Actives

This user group represents those in the community who engage in outdoor recreation, including cycling, walking, running, swimming, skiing, etc. The availability of multiple venues for outdoor recreation matters to this group.



Mobility
Challenged

This user group is directly affected by accessibility barriers such as high curbing and uneven sidewalks that make it difficult to operate mobility-aiding equipment effectively. Handicapped parking, curb ramps, and smooth surfaces are critical transportation features.



Older Adults

Accessibility—both in terms of physical access and proximity—is a major concern for this user group. Because some people in this user group do not or are unable to drive, having goods and services within walking distance is important.



Youth

This group uses primarily non-motorized modes of transportation, so pedestrian- and bike-friendly streets and sidewalks are important. These users value the ability to get to destinations on foot or via bicycle and having goods and services within walking distance.



Parents

Safety of their children is a primary concern of this user group. Access to safe and easy routes to school activities is another significant factor to this group. Parents of young children desire smooth, wide surfaces for strollers.



Steering
Committee

The common denominator for this user group is that their observations are influenced by special knowledge of the transportation system acquired during the Community Visioning assessment process. As a result, this group is more representative of decision makers.



Safe sidewalks, wide streets, and enjoyable businesses make downtown a prime destination for Riverside residents.



The five-way intersection of Ella, Elm, Blackberry, Palm and Ash Streets is disorienting for drivers, and it is difficult to see oncoming traffic.



Ella Street's new, wide sidewalks provide a safe route for groups of children to access the school and Hall Park.



The intersection at Highways 22 and 218 is problematic and the site of multiple accidents due to lack of signage, no turn lanes, and high-speed traffic.



The River Street Trail provides smooth surfaces for biking and walking. It's a great place to meet people and stay connected to nature.



There is no safe pedestrian crossing at Highway 22, limiting children from walking to the park and accessing the old railroad trail.

What People Said

"...something else that would be nice...[is] if we could somehow connect Riverside to the bike trails even up to Hills...if you were to come out Tupelo [Blvd to Observatory Ave SW], [it] goes to the overpass up at Hills."

"The highway cutting through the middle of town I think has to be an issue. It is for us, trying to get to the walking trail or anything south of the highway—that would be Casey's, Hall Park."

"I really do like the itchy-bitsy little part of the trail we have where it's that bridge [southeast of] Boies [Street]. It's beautiful..."



Actives

"[The trail] is reasonably safe when you get there...it's flat; you can take your five-year-old; you can pull your bike trailer. It's easy to use."

"At minimum I would like to see reduced speed [along Highway 22]...between the casino at least and the [east] edge of town."

"I think it would be nice if from the school...there was just a straight kind of trail road to get to the Purple [Railroad] Park."

"I think this Ella Street was redone recently. That's a really good way for people to get around. The sidewalks are wide. Everything's nice there."

"...you can ride your scooter...and bike, and it's just really fun because [the trail is] a smooth road...What I don't like about it though is where it stops...my parent [and I] want it to go farther."

"I would say crossing [Highway 22] to get to the parks... is kind of a safety issue for kids."



Youth

"The intersection of Schnoebelen and [Highway 22] has a really bad sidewalk...It's uneven. There [are]'s cracks in it and there's...almost like tiny potholes..."

"Old 218 [Vine Avenue] is a really nice biking trail, but to get to [it from the trail], you have to take your life into your hands for a few moments [along Highway 22]."

"The sidewalks I think in this town need to be re-vamped and re-cemented. Most people [who] do walking—it depends on what part of the town you're in—they walk in the street because the sidewalks [have] a lot of cracks."

"[The river access area] definitely could be improved upon I feel like. There could be a shelter and there could be a sidewalk or a trail that you could drive down, park, watch the river..."



Older Adults

"It would be nice on the walking/bike path to circle the whole city...we need more walking and bike paths in the middle of town, around town, the whole town..."

"I would change the downtown parking from parallel to diagonal... There's not enough parking, and I actually think it's much harder to park parallel than it is diagonal[ly]."



Parents

- "If there was a way we could find to extend that trail safely under, around, over the interstate and get it out to [the casino area], I know we would pull more people in to use our businesses..."
- "When we walk that trail, we always stop at the creek and...do some of the nature stuff out there."
- "There [are] five streets literally meeting in one place [at the north end of Ella Street]. No one really knows...who does what...the signage is not very clear."
- "There's no good way to cross [Highway] 22 to go to that trail."
- "That speed bump on Schnoebelen almost needs to be closer to the school...because after that speed bump, you have quite a ways yet until you get to the school and people do pick up speed."



Mobility Challenged

- "[The trail is] wide, it's in good condition, it's scenic...it gives people in Riverside [who] don't have accessibility or don't want to try to manage the hills or the sidewalks a nice, smooth, long path to take."
- "...I would much rather walk to the post office, and I can't do that. I can't even take my scooter because it would have to go out in the street...[the sidewalk is] very narrow and it's got cars...parked on it."
- "...if they want to bring in more restaurants or businesses, they're going to have to find a place [where] people can park [downtown]."
- "...there [are] only two handicap[ped] parking] spots, one going east and one going west on 1st [Street] between La Chiva Loka and Casey's."
- "[The school playground is an asset because] they put a wheelchair-accessible surface so it's not mulch, it's not sand. There is wheelchair-accessible play equipment. There's a wheelchair-accessible swing."



Steering Committee

- "Ella [Street] needs a stop sign [at the five-street intersection] because you can't see people coming... You're at a stop sign and then you're pulling out and you can't see people coming up that hill."
- "[Highway 22 west of the interchange has] such quick traffic through there that even if [there were] slower speed limits or something...maybe that would prevent some [accidents near Kum & Go]."
- "I don't know if that's feasible to have the wider sidewalks, but when I have a stroller and then my [child] is riding a bike, it's nice to be side by side."
- "...I really like the idea of connecting and making a larger area of trail, and I like the idea of doing something with the pond that we have [at Conservation Park] that's underutilized..."
- "[Highway 22 west of the interchange has] such quick traffic through there that even if [there were] slower speed limits or something...maybe that would prevent some [accidents near Kum & Go]."

Emerging Themes

Discovering themes and consistencies among user groups helps the steering committee to identify solutions to address the needs of all. The chart on the opposite page displays each user group's collective thoughts on particular issues in comparison with the other user groups in the community.

Actives walk, bike, and run regularly for exercise and getting around town. They enjoy the pond at Conservation Park but think that the park in general is not user friendly. This group would like a trail connection to Hills so they can more easily access the trail system in Iowa City.

Mobility-challenged individuals rely on driving, walking, and motorized scooters to get around town. Smooth, wide surfaces are important. This group would like more wheelchair access in Railroad and Hall Parks, as well as accessible play equipment similar to what is at the school.

Older adults walk, bike, and drive cars or motorcycles. They feel that the trail is disconnected because of the absence of a sidewalk on River Street from Washington to the trailhead. This group would like the wooded trail behind the cemetery to be fixed up.

Youth are walking, biking, and running. Older youth also drive. Teens want a pedestrian crossing at Highway 22 and Rose Street for safer access to the parks, and younger kids would like a bridge over the creek south of 2nd Street for better access to the trail.

Parents drive and walk, and go horseback riding. They are concerned about their children's safety. They noted that people use the school parking lot as a street to access the development just east of the school. Parents think the speed bump on Schnoebelen would be more effective if it were closer to the school.

Steering committee members walk, bike, and drive cars to get around town. This group enjoys snowmobiling. The steering committee suggested interpretive signage to identify natural and historical elements in town, as well as way-finding signage to the trail.

User Types	Destinations and Activities			Desirable Qualities and Features				Undesirable Qualities and Features				Most Desired Improvements and Activities			
	Walking/Biking Trail	Local Parks	School Playground	Outdoor Recreation Opportunities	Access to Natural Areas	Wide Walking/Biking Surfaces	Poor Sidewalk Infrastructure	Traffic on Highway 22	Limited Visibility	Insufficient Parking	Seasonal Flooding	Pedestrian/Cyclist Crossing on Highway 22	Trail Connections	Complete & Accessible Sidewalks	Additional Parking
 Actives	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
 Mobility Challenged	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
 Older Adults	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
 Youth	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
 Parents	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
 Steering Committee	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

All user groups request the walking/biking trail on the beautiful area near the bridge. Youth fish at the pond in the park and enjoy the view. Mobility-challenged people of all ability levels. Adult participants identified several places where they can experience nature and natural beauty, such as the bridge area along the trail and Conservation Park. All demographic groups value wide walking and biking surfaces because they allow people to walk and stroll. Examples cited included the safe route to school, the trail and the road at the cemetery. Participants in all focus groups consider uneven, narrow, steep, high-speed traffic on Highway 22 through the area to be a barrier, especially in the older report on Road Park, Hall Park and trail residents. Go caused by traffic exiting U.S. 218 onto Highway 22. Bicyclists and youth users offered concerns about limited visibility, some parked along Highway 22 make it hard to see traffic pulling out into the street. The intersection of Highway 22 and Vine offers other examples where visibility is a problem. Focus-group participants talked about insufficient parking at several locations, including downtown, at Hall Park, especially during the mobility-challenged group pointed out that handicapped parking is extremely limited. Second flooding occurs in Riverside especially in the paved, making it difficult to navigate after a heavy rain. Participants in all but one focus group identified places where they want a pedestrian crossing on Highway 22, including near Casey's on Veterans Park at Mills and Kono. Desired in-town connectors such as a loop around town, a segment to the casino, golf course and trails within Hall Park. Residents would like better sidewalks throughout town. Both adults and youth cited the wide sidewalks along the surfaces that occurred as a benefit for improvements. The mobility-challenged group wants curbs and ramps, All groups identified group work on benches and wheelchairs and walkers. Part Old adults and active suggested additional parking group wants more handicapped parking throughout town. Memorial Park is a beautiful place to sit and relax. The playground at the elementary school is a popular destination because it is safe place for kids to play. The wheelchair access is a safe place for kids to play. Recreation available to them. Parents and active like making on the English trail. Parents and active like headsets appreciate the many venues for outdoor people of all ability levels. Adult participants identified several places where they can experience nature and natural beauty, such as the bridge area along the trail and Conservation Park. All demographic groups value wide walking and biking surfaces because they allow people to walk and stroll. Examples cited included the safe route to school, the trail and the road at the cemetery. Participants in all focus groups consider uneven, narrow, steep, high-speed traffic on Highway 22 through the area to be a barrier, especially in the older report on Road Park, Hall Park and trail residents. Go caused by traffic exiting U.S. 218 onto Highway 22. Bicyclists and youth users offered concerns about limited visibility, some parked along Highway 22 make it hard to see traffic pulling out into the street. The intersection of Highway 22 and Vine offers other examples where visibility is a problem. Focus-group participants talked about insufficient parking at several locations, including downtown, at Hall Park, especially during the mobility-challenged group pointed out that handicapped parking is extremely limited. Second flooding occurs in Riverside especially in the paved, making it difficult to navigate after a heavy rain. Participants in all but one focus group identified places where they want a pedestrian crossing on Highway 22, including near Casey's on Veterans Park at Mills and Kono. Desired in-town connectors such as a loop around town, a segment to the casino, golf course and trails within Hall Park. Residents would like better sidewalks throughout town. Both adults and youth cited the wide sidewalks along the surfaces that occurred as a benefit for improvements. The mobility-challenged group wants curbs and ramps, All groups identified group work on benches and wheelchairs and walkers. Part Old adults and active suggested additional parking group wants more handicapped parking throughout town.

Transportation Inventory and Analysis

Knowledge of the transportation systems in and around a community is critical for sustainable transportation enhancement planning. Riverside's transportation system includes roadways, sidewalks, and an active railroad.

The Riverside visioning design team met with the local officials to identify existing, past, and future transportation system capital improvements, maintenance activities and issues, and other transportation-related constraints and opportunities in the area.

The transportation system for Riverside consists primarily of a network of roadways, sidewalks, and a recreational trail. The old railroad line was transformed into a multi-use recreational trail that runs from the western city limits to just west of US 218.

US 218, also known as Avenue of the Saints, is a multi-lane expressway that is part of the route linking St. Louis with the Twin Cities in Minnesota. It is also the major north-south road to Riverside. Based on the Iowa Department of Transportation's Average Daily Traffic Count in 2018 there was an average of 14,700 – 20,000 vehicles traveling past the US 218/ Highway 22 interchange.

Highway 22 is the dominate east-west roadway through Riverside, including the downtown, and one of the most traveled two-lane highways in Iowa. The east-west streets that lie south of the highway were part of the original settlement and are slightly angled because they were constructed when the railroad was active. Visibility issues for both pedestrians and motorists attempting to cross or turn onto Highway 22 exist where these angled streets intersect it. High traffic speed is of concern along Highway 22 within the city limits, as well as the small turning radii that result in eroded shoulders.

The English River borders the south edge of the original platted city. This river is difficult to access due to a combination of siltation and the disrepair of the city's boat ramp. The Iowa River borders the eastern city limits, but presently, the city does not have public access to it.

Although the city has been embarking on sidewalk and street improvement projects, there are still areas within Riverside where sidewalk accessibility, walkability, and connectivity need to be addressed. There are also streets and intersections where visibility, circulation, and traffic-calming measures and enhancements are needed, such as at intersections along Ella Street and Schnoebelen Street. The downtown area also lacks sufficient parking, especially in higher traffic areas.

Transportation Inventory and Analysis

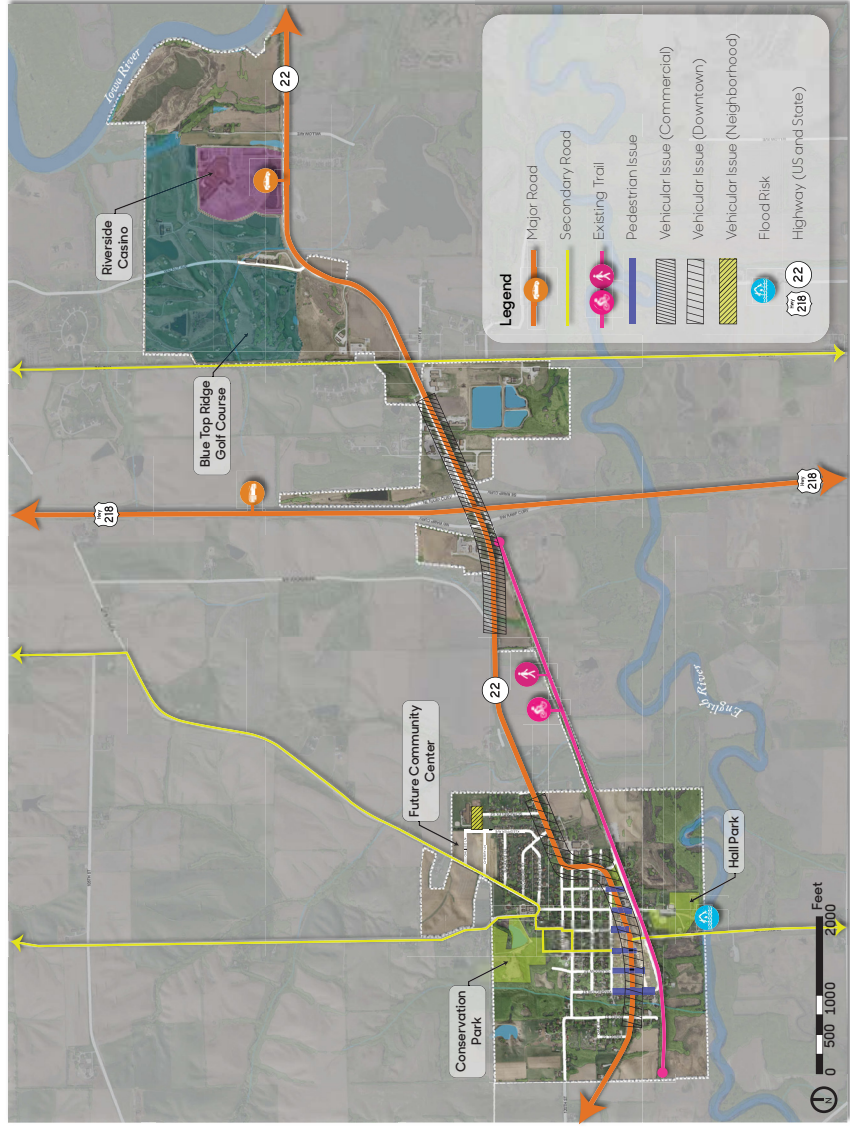
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Overview Map of Riverside Highlighting Existing Transportation Related Features

Riverside
Transportation Inventory

Martin Gardner Architecture
Designer: Kyle Martin, Landscape Architect; Meg Flenker
Intern: Zahra Salahshoor
Iowa State University | Tree Forever | Iowa Department of Transportation







Programming Objectives

The Programming Objectives meeting is a critical component in the development of a successful project. Setting and prioritizing goals allows us to focus our efforts and resources more effectively to help the community develop a vision for Riverside based on its goals.

We met with the Riverside visioning committee to discuss their goals. The steering committee presented its takeaways from previous discussions about the transportation assets and barriers, transportation analysis, and bioregional information.

Using the nominal group method to organize the meeting and discussion, the committee identified goals and values based on information from the assessments. Each committee member also included reasoning for improvements around town and highlighted specific programming needs for areas of improvement. These objectives and desired improvements were recorded during an open discussion, followed by a vote to prioritize the major themes presented during the meeting.

The landscape architecture team organized programming themes for the city of Riverside using the goals and desired improvements identified by the steering committee during the discussion, giving greater weight to those goals receiving more votes and common ideas presented multiple times. The following chart reflects a representation of the outcomes of the goal-setting process.

Community Values	Broad-based Outcomes/Goals	Why Change Anything?	What Exactly & Where?
Safety 	<ul style="list-style-type: none"> Create improvements for multi-modal transportation around town and at specific cross-ings Improve sidewalks and provide additional street lighting in established neighborhoods 	<ul style="list-style-type: none"> The ability to travel to destinations and public services - recreation, commerce and will enhance usership and increase quality of life Additional lighting increases the hours for multi-modal transportation Improved sidewalks will allow additional connectivity throughout the established neighborhoods 	<ul style="list-style-type: none"> There are several crossings of Highway 22, particularly near downtown and developing commercial areas east of downtown, where increasing visibility and slowing traffic speed will create a safer walking and biking environment. Sidewalk installation, updating to ADA and SUBAS standards, lighting in established neighborhoods including the five-way intersection at Elm Street and the elementary school Several downtown street intersections at along Highway 22
Streets 	<ul style="list-style-type: none"> Connect Riverside to other towns with multi-modal transportation options Reduce congestion with variable speeds on the existing trail Provide more connection within Riverside 	<ul style="list-style-type: none"> Connecting to other communities with trails will increase visitors and commerce to Riverside Increase cohesion of the town with more connection between amenities, services and areas of Riverside 	<ul style="list-style-type: none"> Connect new trails to the communities of Hills, Kabona and Washington Connect existing trail to new commercial areas east of downtown Connect the trails to popular amenities such as the Iowa River, Riverside Casino and the golf course
Trails 	<ul style="list-style-type: none"> Increase the use of Star Trek branching and identity Create more visual connection between Riverside Casino and downtown Improve signage to parks 	<ul style="list-style-type: none"> Making Riverside 'easier to use' is more appealing for new and existing residents The Star Trek brand is an attraction for tourism Connecting the casino and downtown visually will bring more visitors to downtown 	<ul style="list-style-type: none"> Conservation Park and Hall Park Boat Ramp Entry to downtown
Way-finding 	<ul style="list-style-type: none"> Provide places for activities in the community Create more design standards Support downtown building improvements and commercial occupancy rather than residential usage for downtown storefronts Create parks and amenities on the north side of town to complement new housing Increase usage of the English River access 	<ul style="list-style-type: none"> Good amenities contribute to overall quality of life for residents by increasing opportunities for social interaction and physical activity 	<ul style="list-style-type: none"> New community center is planned for the north side of town The existing boat ramp often has silt problems and is difficult to find. Overall function could be improved.
Amenities 			

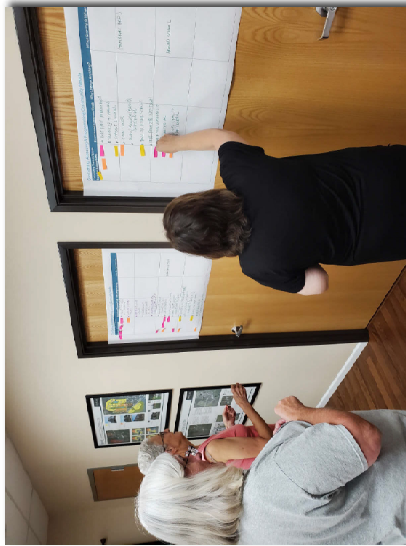
Goal Setting

The Riverside steering committee presented what it learned from the transportation inventory and bioregional assessment, and the community focus group input to the design team. The committee also provided additional anecdotal examples from members' experiences.

The committee then identified goals and values. The goals are based on information from the assessments. Each committee member also provided reasoning for improvements around the community and highlighted specific needs for the identified areas of concern and opportunity.

The design team organized programming themes for Riverside using the goals made by the steering committee. The goals were then prioritized through a voting system and additional discussion.

The results of this work are summarized in the matrix to the right.



After discussing and categorizing goals, the steering committee worked to prioritize possible projects

Riverside Program Objectives

Martin Gardner Architecture
 Designer: Kyle Martin; Landscape Architect: Meg Flancker
 Intern: Zahra Salaschoor
 Iowa State University | Trees Forever | Iowa Department of Transportation



Community Concept Plan

The concept plan on this board and the concepts on the following boards are based on input received from Riverside residents and bring together their ideas, goals, and visions for community enhancements. The goal of the concept plan is to integrate the conceptual designs for the various priority areas into a cohesive plan that can be implemented over time as funding and other resources become available.

After reviewing the results of the inventory and analysis of community resources and focus groups (refer to boards 2a through 2g and boards 3a through 3c), the Riverside steering committee members set goals to help realize their community visioning. Following the goal-setting process, the design team facilitated a conceptual design workshop to provide community members with concept visualizations and the opportunity to interact with, and provide feedback to, the design team and steering committee in developing the proposed enhancement concepts. Based on the comments received, the design team refined and prepared additional concepts, which are illustrated in this board set, and address the primary goals set by the steering committee.

Connectivity: Extend the existing recreational trail within Riverside to various community amenities and public destinations including the Riverside Casino, as well as to other nearby communities. This trail expansion will enhance the quality of life of residents as well as attract visitors. See board 7.

Safety: Complete missing sidewalk segments, replace sidewalks that are in disrepair and/or are inaccessible, and provide sufficient and accessible downtown parking. Address vehicular circulation patterns and intersection layouts in key areas, such as at Riverside Elementary School and at the Ella Street five-way intersection, and implement traffic-calming measures in areas where needed. All of these projects will aid in enhancing the experience of the motorists and pedestrians. (See boards 8a, 8b, and 8c).

River Access: Remove overgrown vegetation, construct adequate and accessible vehicular parking and pedestrian access, and improve identity signage to make the access point known to visitors. Enhance the usability and aesthetics of the site by renovating the boat ramp, dredging the area to accommodate boat launching, and adding amenities such as terraced seating, shade trees, interactive play areas, and a universally accessible pavilion with picnic tables. These enhancements will not only provide more recreational opportunities for the residents but will also help attract visitors and will improve the users' experience and comfort. (See board 9)

Concept Plan Overview

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Concept Master Plan Overview

Riverside
Concept Overview

Martin Gardner Architecture
Designer: Kyle Martin, Landscape Architect; Meg Fleinker
Intern: Zahra Salahshoor
Iowa State University | Trees Forever | Iowa Department of Transportation



Community Connectivity

Community connectivity addresses improved pedestrian accessibility and connectivity via trails and sidewalks. The proposed concepts focus on closing gaps and creating new opportunities to travel within and outside of Riverside.

Connecting to Other Communities – Riverside is connected socially and geographically to surrounding communities through collaborative local government, consolidated school districts, and commerce. Residents have a strong desire to extend their existing trail to the adjacent communities of Kalona, Washington, Lone Tree, and Hills, further strengthening their connectivity.

Future Development – Riverside, for the foreseeable future, is growing its residential footprint to the north and its commercial footprint between downtown and Riverside Casino. The goal of the community is to ensure the new developments include accessible sidewalks that are linked to the existing sidewalk network and that the streets meet the requirements of intended users and follow a well defined circulation pattern conducive to the needs of the impacted areas.

Downtown Connections – As commercial amenities develop between downtown and Riverside Casino there is an increased need for pedestrian access from residential areas to those amenities. Currently a trail exists partway.

Sidewalks – Within the established neighborhoods there are several blocks with missing sidewalks, sidewalks in disrepair, and pedestrian crossings that are not conducive to those with differing physical abilities.

Community Connectivity Costs

Riverside Cost Opinion	Estimated Quantity	Unit	Estimated Unit Cost	Opinion of Cost
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Community Connectivity (See Board #7 for Visual)

Separated Trail to Hills along Vine Street to City Limits (.9 Miles, 10' Wide with 2' Grass Shoulders)				
10' Wide Trail, Pave (5" PCC) on Grade	5,333	SY	\$61.20	\$326,400.00
Engineering Fabric	5,333	SY	\$7.92	\$42,240.00
Aggregate Base Course, 4" and Excavation	5,333	SY	\$8.40	\$44,800.00
Site Preparation and Grading Allowance	5,333	SY	\$4.56	\$24,320.00
ADA Compliant Detectable Warning Panel	60	SF	\$72.00	\$4,320.00
Painted Pavement Markings (Centerline)	1,600	LF	\$2.10	\$3,360.00
Trail Signage Allowance	1	AL	\$6,000.00	\$6,000.00
Site Amenities (Benches, trash Receptacles, Bike Racks) Allowance	1	AL	\$8,000.00	\$8,000.00
Final Grading and Seeding Allowance	19,200	SF	\$1.92	\$36,864.00
Mobilization Allowance	1	AL	\$29,778.24	\$29,778.24
Section Subtotal				\$526,082.24
20% Contingency				\$105,216.45
Design & Engineering Allowance				\$94,694.80
Total probable Construction Cost				\$725,993.49
Trail from west end of River Street Trail to City Limits toward Kalona (1,000 ft, 10' Wide with 2' Grass Shoulders)				
10' Wide Trail, Pave (5" PCC) on Grade	1,111	SY	\$61.20	\$68,000.00
Engineering Fabric	1,111	SY	\$7.92	\$8,800.00
Aggregate Base Course, 4" and Excavation	1,111	SY	\$8.40	\$9,333.33
Site Preparation and Grading Allowance	1,111	SY	\$4.56	\$5,066.67
ADA Compliant Detectable Warning Panel	100	SF	\$72.00	\$7,200.00
Painted Pavement Markings (Centerline)	333	LF	\$2.10	\$700.00
Trail Signage Allowance	1	AL	\$2,000.00	\$2,000.00
Site Amenities (Benches, trash Receptacles, Bike Racks) Allowance	1	AL	\$8,000.00	\$8,000.00
Final Grading and Seeding Allowance	2,000	SF	\$1.92	\$3,840.00
Mobilization Allowance	1	AL	\$6,776.40	\$6,776.40
Section Subtotal				\$119,716.40
20% Contingency				\$23,943.28
Design & Engineering Allowance				\$21,548.95
Total probable Construction Cost				\$165,208.63
Trail From River Street Trail to Vine Street (1.2 miles, 10' Wide with 2' Grass Shoulders)				
10' Wide Trail, Pave (5" PCC) on Grade	7,111	SY	\$61.20	\$435,200.00
Engineering Fabric	7,111	SF	\$7.92	\$56,320.00
Aggregate Base Course, 4" and Excavation	7,111	CY	\$8.40	\$59,733.33
Site Preparation and Grading Allowance	7,111	CY	\$4.56	\$32,426.67
Culvert Underpass under Hwy 22	120	AL	\$10,000.00	\$1,200,000.00
ADA Compliant Detectable Warning Panel	160	SF	\$72.00	\$11,520.00
Painted Pavement Markings (Centerline)	333	LF	\$2.10	\$700.00
Trail Signage Allowance	1	AL	\$2,000.00	\$2,000.00
Site Amenities (Benches, trash Receptacles, Bike Racks) Allowance	1	AL	\$3,000.00	\$3,000.00
Final Grading and Seeding Allowance	6,400	SF	\$1.92	\$12,288.00
Mobilization Allowance	1	AL	\$108,791.28	\$108,791.28
Section Subtotal				\$1,921,979.28
20% Contingency				\$384,395.86
Design & Engineering Allowance				\$345,956.27
Total probable Construction Cost				\$2,652,331.41

Community Connectivity Costs

Riverside Cost Opinion	Estimated Quantity	Unit	Estimated Unit Cost	Opinion of Cost
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Community Connectivity (See Board #7 for Visual)

Trail From Vine Street to City Limits toward Lone Tree (1.3 miles, 10' Wide with 2' Grass Shoulders)				
10' Wide Trail, Pave (5" PCC) on Grade	7,667	SY	\$61.20	\$469,200.00
Engineering Fabric	7,667	SY	\$7.92	\$60,720.00
Aggregate Base Course, 4" and Excavation	7,667	SY	\$8.40	\$64,400.00
Site Preparation and Grading Allowance	7,667	SY	\$4.56	\$34,960.00
Pedestrian Bridge over Pond	120	AL	\$2,000.00	\$240,000.00
ADA Compliant Detectable Warning Panel	120	SF	\$72.00	\$8,640.00
Painted Pavement Markings (Centerline)	2,300	LF	\$2.10	\$4,830.00
Trail Signage Allowance	1	AL	\$2,000.00	\$2,000.00
Site Amenities (Benches, trash Receptacles, Bike Racks) Allowance	1	AL	\$8,000.00	\$8,000.00
Final Grading and Seeding Allowance	13,800	SF	\$1.92	\$26,496.00
Mobilization Allowance	1	AL	\$55,154.76	\$55,154.76
Section Subtotal				\$974,400.76
20% Contingency				\$194,880.15
Design & Engineering Allowance				\$175,392.14
Total probable Construction Cost				\$1,344,673.05

Sidewalks in Existing Areas				
BOIES COURT/STREET				
5' Wide Sidewalks, Pave (4" PCC) on Grade	1,889	SY	\$61.20	\$115,600.00
Aggregate Base Course, 4" and Excavation	1,889	SY	\$8.40	\$15,866.67
ADA Compliant Detectable Warning Panel	20	SF	\$72.00	\$1,440.00
Final Grading and Seeding Allowance	3,400	SF	\$1.92	\$6,528.00
Mobilization Allowance	1	AL	\$8,366.08	\$8,366.08
KINSET/OAK STREETS				
5' Wide Sidewalks, Pave (4" PCC) on Grade	893	SY	\$61.20	\$54,672.00
Aggregate Base Course, 4" and Excavation	893	SY	\$8.40	\$7,504.00
ADA Compliant Detectable Warning Panel	0	SF	\$72.00	\$0.00
Final Grading and Seeding Allowance	1,608	SF	\$1.92	\$3,087.36
Mobilization Allowance	1	AL	\$3,915.80	\$3,915.80
WASHINGTON STREET				
5' Wide Sidewalks, Pave (4" PCC) on Grade	1,222	SY	\$61.20	\$74,800.00
Aggregate Base Course, 4" and Excavation	1,222	SY	\$8.40	\$10,266.67
ADA Compliant Detectable Warning Panel	50	SF	\$72.00	\$3,600.00
Final Grading and Seeding Allowance	2,200	SF	\$1.92	\$4,224.00
Mobilization Allowance	1	AL	\$5,573.44	\$5,573.44
GLASGOW STREET				
5' Wide Sidewalks, Pave (4" PCC) on Grade	756	SY	\$61.20	\$46,240.00
Aggregate Base Course, 4" and Excavation	756	SY	\$8.40	\$6,346.67
ADA Compliant Detectable Warning Panel	60	SF	\$72.00	\$4,320.00
Final Grading and Seeding Allowance	1,360	SF	\$1.92	\$2,611.20
Mobilization Allowance	1	AL	\$3,571.07	\$3,571.07
WASHBURN STREET				
5' Wide Sidewalks, Pave (4" PCC) on Grade	167	SY	\$61.20	\$10,200.00
Aggregate Base Course, 4" and Excavation	167	SY	\$8.40	\$1,400.00
ADA Compliant Detectable Warning Panel	20	SF	\$72.00	\$1,440.00
Final Grading and Seeding Allowance	300	SF	\$1.92	\$576.00
Mobilization Allowance	1	AL	\$816.96	\$816.96

Community Connectivity Costs

Riverside Cost Opinion	Estimated Quantity	Unit	Estimated Unit Cost	Opinion of Cost
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Community Connectivity (See Board #7 for Visual)

GREENE STREET				\$20,884.49
5' Wide Sidewalks, Pave (4" PCC) on Grade	211	SY	\$61.20	\$12,886.00
Aggregate Base Course, 4" and Excavation	211	SY	\$8.40	\$1,768.67
ADA Compliant Detectable Warning Panel	60	SF	\$72.00	\$4,320.00
Final Grading and Seeding Allowance	379	SF	\$1.92	\$727.68
Mobilization Allowance	1	AL	\$1,182.14	\$1,182.14
ROSE STREET				\$19,756.48
5' Wide Sidewalks, Pave (4" PCC) on Grade	226	SY	\$61.20	\$13,804.00
Aggregate Base Course, 4" and Excavation	226	SY	\$8.40	\$1,894.67
ADA Compliant Detectable Warning Panel	30	SF	\$72.00	\$2,160.00
Final Grading and Seeding Allowance	406	SF	\$1.92	\$779.52
Mobilization Allowance	1	AL	\$1,118.29	\$1,118.29
ST MARYS STREET				\$71,506.19
5' Wide Sidewalks, Pave (4" PCC) on Grade	889	SY	\$61.20	\$54,400.00
Aggregate Base Course, 4" and Excavation	889	SY	\$8.40	\$7,466.67
ADA Compliant Detectable Warning Panel	35	SF	\$72.00	\$2,520.00
Final Grading and Seeding Allowance	1,600	SF	\$1.92	\$3,072.00
Mobilization Allowance	1	AL	\$4,047.52	\$4,047.52
4TH STREET				\$99,227.31
5' Wide Sidewalks, Pave (4" PCC) on Grade	1,222	SY	\$61.20	\$74,800.00
Aggregate Base Course, 4" and Excavation	1,222	SY	\$8.40	\$10,266.67
ADA Compliant Detectable Warning Panel	60	SF	\$72.00	\$4,320.00
Final Grading and Seeding Allowance	2,200	SF	\$1.92	\$4,224.00
Mobilization Allowance	1	AL	\$5,616.64	\$5,616.64
3RD STREET				\$13,718.38
5' Wide Sidewalks, Pave (4" PCC) on Grade	172	SY	\$61.20	\$10,540.00
Aggregate Base Course, 4" and Excavation	172	SY	\$8.40	\$1,446.67
ADA Compliant Detectable Warning Panel	5	SF	\$72.00	\$360.00
Final Grading and Seeding Allowance	310	SF	\$1.92	\$595.20
Mobilization Allowance	1	AL	\$776.51	\$776.51
2ND STREET				\$14,578.82
5' Wide Sidewalks, Pave (4" PCC) on Grade	183	SY	\$61.20	\$11,220.00
Aggregate Base Course, 4" and Excavation	183	SY	\$8.40	\$1,540.00
ADA Compliant Detectable Warning Panel	5	SF	\$72.00	\$360.00
Final Grading and Seeding Allowance	330	SF	\$1.92	\$633.60
Mobilization Allowance	1	AL	\$825.22	\$825.22
RAILROAD STREET				\$68,371.19
5' Wide Sidewalks, Pave (4" PCC) on Grade	853	SY	\$61.20	\$52,224.00
Aggregate Base Course, 4" and Excavation	853	SY	\$8.40	\$7,168.00
ADA Compliant Detectable Warning Panel	30	SF	\$72.00	\$2,160.00
Final Grading and Seeding Allowance	1,536	SF	\$1.92	\$2,949.12
Mobilization Allowance	1	AL	\$3,870.07	\$3,870.07

Section Subtotal				\$701,008.75
20% Contingency				\$140,201.75
Design & Engineering Allowance				\$126,181.58
Total probable Construction Cost				\$967,392.08
Opinion of Probable Construction Cost				\$5,855,598.66

Community Connectivity
Community connectivity addresses improved pedestrian accessibility and connectivity via trails and sidewalks. The proposed concepts focus on closing gaps and creating new opportunities to travel within and outside of Riverside.

Connecting to Other Communities – Riverside is connected socially and geographically to surrounding communities through collaborative local government, consolidated school districts, and commerce. Residents have a strong desire to extend their existing trail to the adjacent communities of Kalona, Washington, Lone Tree, and Hills, further strengthening their connectivity.

“... something else that would be nice... [is] if we could somehow connect Riverside to the bike trails even up to Hills... if you were to come out Tupelo [Blvd to Observatory Ave SW] [it] goes to the overpass up at Hills.”



Actives

Future Development – Riverside, for the foreseeable future, is growing its residential footprint to the north and its commercial footprint between downtown and Riverside Casino. The goal of the community is to ensure the new developments include accessible sidewalks that are linked to the existing sidewalk network and that the streets meet the requirements of intended users and follow a well defined circulation pattern conducive to the needs of the impacted areas.

Downtown Connections – As commercial amenities develop between downtown and Riverside Casino there is an increased need for pedestrian access from residential areas to those amenities. Currently a trail exists partway.

“If there was a way we could find to extend that trail safely under, around over the interstate and get it out to [the casino area] I know we would pull more people in to use our businesses...”



Parents

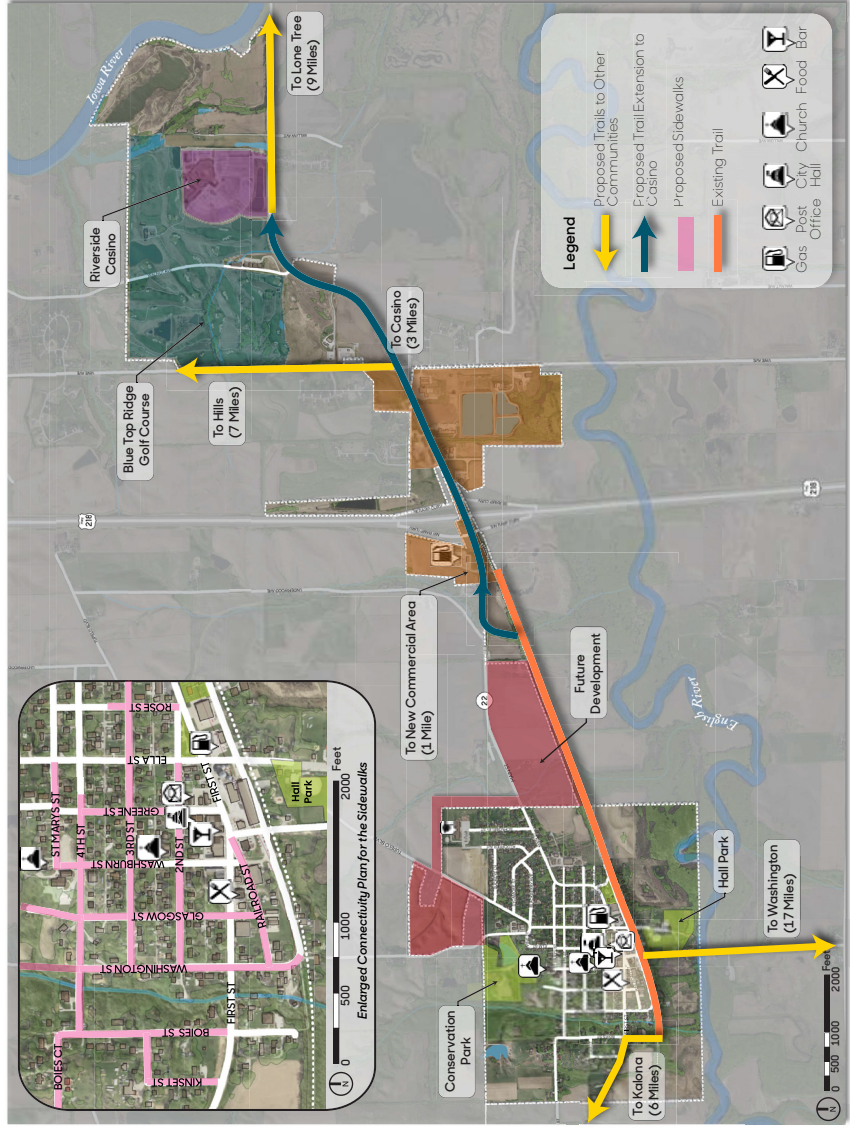
“At minimum I would like to see reduced speed [along Highway 22]...between the casino at least and the [east] edge of town.”

Sidewalks – Within the established neighborhoods there are several blocks with missing sidewalks, sidewalks in disrepair, and pedestrian crossings that are not conducive to those with differing physical abilities.

“It would be nice on the walking/bike path to circle the whole city...we need more walking and bike paths in the middle of town, around town, the whole town...”



Older Adults



Proposed Community Connectivity Plan

Riverside Community Connectivity

Martin Gardner Architecture
Designer: Kyle Martin, Landscape Architect: Meg Flancker
Intern: Zahra Salahshoor
Iowa State University | Trees Forever | Iowa Department of Transportation



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Downtown Enhancements

In recent years, Riverside has invested in street and sidewalk improvements. However, challenges still remain with pedestrian and vehicular circulation in the downtown area. This board illustrates some of the strategies proposed to help address the various issues while enhancing the aesthetics of the downtown area and enriching the users' experience and comfort. Concepts shown include measures for traffic-calming, delineating pedestrian and vehicular areas, and defining and strengthening preferred circulation patterns. The strategies proposed here may be adopted elsewhere along the Highway 22 corridor, where applicable and appropriate.

Many intersections do not have curbs, allowing vehicles to take wide turns, which erodes the edges of yards and makes the delineation between pedestrian and vehicular paths ambiguous. Curbs and bump-outs are proposed at the intersections to better define vehicular and pedestrian circulation as well as enhance the safety of users by reducing the distance they need to cross the road, and to serve as a method of traffic-calming. Bump-outs also allow for integration of low plantings and decorative pavement, which aids in delineating vehicular and pedestrian areas while enhancing aesthetics of the downtown.

The current angled parking along Railroad Street creates an awkward connection to Highway 22. The concepts developed show the relocation of the parking and closing the section of Railroad Street adjacent to the existing angled parking area to eliminate pass-through traffic. The resulting space would be turned into a public plaza. The elements proposed for the plaza include decorative paving, seating, shade trees, planting beds, and other pedestrian amenities. The plaza would be flanked on east and west ends with prominent community signage. See illustration C on this board.

The proposed closure at Railroad Street will necessitate the redirection of the traffic utilizing the existing bank's drive-through.

As measures outlined in above start to be implemented, the applicable strategies, such as curbs and bump-outs, can be expanded to parking areas. Additional parking can be identified throughout the southern part of the downtown to better serve adjacent businesses and nearby Hall Park.

Downtown Enhancements Costs

Riverside Cost Opinion	Estimated Quantity	Unit	Estimated Unit Cost	Opinion of Cost
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Downtown (See Board #8a for Visual)

Pedestrian Bump-Outs				\$30,833.28
Existing Paving Removal	80	SY	\$60.00	\$4,800.00
Traffic Control	1	AL	\$3,000	\$3,000.00
PCC Curb	750	LF	\$20.00	\$15,000.00
5' Wide Sidewalks, Pave (4" PCC) on Grade	13	SY	\$61.20	\$816.00
Final Grading and Seeding Allowance	600	SF	\$1.92	\$1,152.00
Detectable Warning Panels	60	SF	\$72.00	\$4,320.00
Mobilization Allowance	1	AL	\$1,745.28	\$1,745.28
Plaza Construction				\$146,288.83
Removal of Existing Paving	667	SY	\$45	\$30,000.00
Aggregate Base Course, 4" and Excavation	667	SY	\$8.40	\$5,600.00
Decorative PCC	667	SY	\$108	\$72,000.00
Perennial Flowers	50	EA	\$35	\$1,750.00
Trees	7	EA	\$425	\$2,975.00
Traffic Control Allowance	1	AL	\$2,000.00	\$2,000.00
Ornamental Grasses	50	EA	\$35.00	\$1,750.00
Planting Prep, Soil Amendment Allowance	667	SF	\$5.00	\$3,333.33
Festoon Lighting and Poles	1	AL	\$3,000	\$3,000.00
Benches	6	EA	\$600	\$3,600.00
Mulch	667	SF	\$3.00	\$2,000.00
Signage Allowance	2	EA	\$5,000.00	\$10,000.00
Mobilization Allowance	1	AL	\$8,280.50	\$8,280.50
Parking Construction				\$523,451.56
Railroad Street between Glasgow and Washburn (8" PCC) on Grade	300	SY	\$100	\$30,000.00
River Street west of Pioneer Street (8" PCC) on Grade	420	SY	\$100.00	\$42,000.00
River Street east of Pioneer Street (8" PCC) on Grade	200	SY	\$100.00	\$20,000.00
Plaza Hwy 22 Parking (8" PCC) on Grade	140	SY	\$100.00	\$14,000.00
West First Street west of Washburn (8" PCC) on Grade	400	SY	\$100	\$40,000.00
South Washburn Street Construction (8" PCC) on Grade	622	SY	\$100	\$62,222.22
South Washburn Parking (8" PCC) on Grade	140	SY	\$2,040	\$285,600.00
Mobilization Allowance	1	AL	\$29,629.33	\$29,629.33
Section Subtotal				\$700,573.67
20% Contingency				\$140,114.73
Design & Engineering Allowance				\$126,103.26
Total probable Construction Cost				\$966,791.66
Opinion of Probable Construction Cost				\$966,791.66

Downtown Enhancements

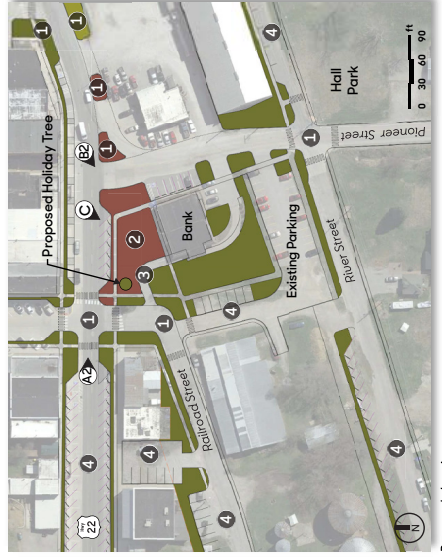
In recent years, Riverside has invested in street and sidewalk improvements. However, challenges still remain with pedestrian and vehicular circulation in the downtown area. This board illustrates some of the strategies proposed to help address the various issues while enhancing the aesthetics of the downtown area and enriching the users' experience and comfort. Concepts shown include measures for traffic-calming, delineating pedestrian and vehicular areas, and defining and strengthening preferred circulation patterns. The strategies proposed here may be adapted elsewhere along the Highway 22 corridor, where applicable and appropriate.

- 1 Many intersections do not have curbs, allowing vehicles to take wide turns, which erodes the edges of yards and muddles the delineation between pedestrian and vehicular paths. Curbs and bump-outs are proposed at the intersections to better define vehicular and pedestrian circulation as well as enhance the safety of users by reducing the distance they need to cross the road, and to serve as a method of traffic-calming. Bump-outs also allow for integration of low plantings and decorative pavement, which aids in delineating vehicular and pedestrian areas while enhancing aesthetics of the downtown.
- 2 The current angled parking along Railroad Street creates an awkward connection to Highway 22. The concepts developed show the relocation of the parking and closing the section of Railroad Street adjacent to the existing angled parking area to eliminate pass-through traffic. The resulting space would be turned into a public plaza. The elements proposed for the plaza include decorative paving, seating, shade trees, planter beds, and other pedestrian amenities. The plaza would be flanked on east and west ends with prominent community signage. See illustration C on this board.
- 3 The proposed closure at Railroad Street will necessitate the redirection of the traffic utilizing the existing bank's drive-through.
- 4 As strategies outlined in 1 above start to be implemented, the applicable strategies, such as curbs and bump-outs, can be expanded to parking areas. Additional parking can be identified throughout the southern part of the downtown to better serve adjacent businesses and nearby Hall Park.

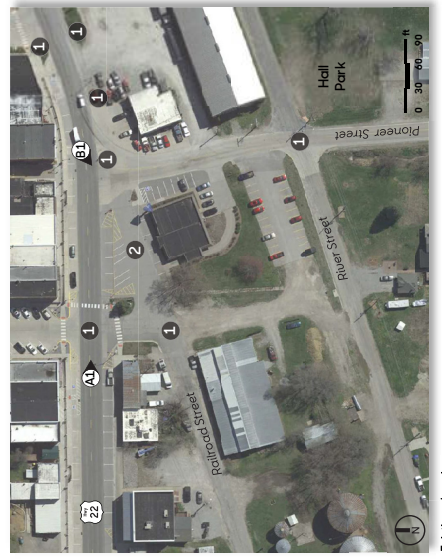
"The highway cutting through the middle of town I think has to be an issue. It is for us, trying to get to the walking trail or anything south of the highway—that would be Casey's, Hall Park."

"I would say crossing [Highway 22] to get to the parks is kind of a safety issue for kids."

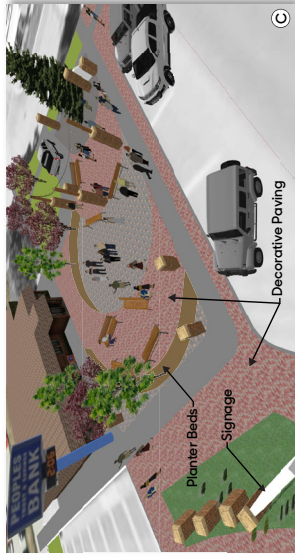
"...if they want to bring in more restaurants or businesses, they're going to have to find a place [where] people can park [downtown]."



Proposed plan view



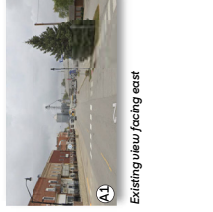
Existing plan view



Bird's-eye view of proposed plaza



Proposed view facing east



Existing view facing east



Proposed view facing west



Existing view facing west



Martin Gardner Architecture
 Designer: Kyle Martin, Landscape Architect: Meg Flenker
 Intern: Zahra Salahshoor
 Iowa State University | Trees Forever | Iowa Department of Transportation



Riverside
 Downtown Enhancements

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School Parking Reconfiguration

With new development occurring to the north of the existing Riverside Elementary School, the school's parking lot has become a shortcut for motorists traveling from Schnoebelen Street to Kleopfer Avenue.

Community members desire creating a network of new streets to the north and east of the school to support new development and thus eliminate the need for motorists to use Schnoebelen Street as a primary thoroughfare. While this will alleviate the shortcut issue in the long term, there needs to be an interim solution to prevent the integration of school-related vehicular and pedestrian traffic with non-school related motorists.

The interim solution proposed includes construction of a new street south of the existing elementary school parking lot in the green space. This street will allow non-school related vehicular traffic to bypass the school traffic, and will provide the opportunity to create improved dedicated drop-off lanes for the school. Coordination between the city and school district will be required as the proposed street is on school property. The exact path and cross-section of this new street will need to be engineered and, as part of that process, drainage and other design requirements will be addressed.

School Parking Reconfiguration Costs

Riverside Cost Opinion	Estimated Quantity	Unit	Estimated Unit Cost	Opinion of Cost
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School Driveway Reconfiguration (See Board #8b for Visual)

Demolition, New Street, and Reconfigured Parking Area				
Tree Removal	5	EA	\$500.00	\$2,500.00
Removal of Existing Paving	178	SY	\$45	\$8,000.00
Excavation/Backfill	696	CY	\$35.00	\$24,360.00
Aggregate Base Course, 6" and Excavation	803	SY	\$10.00	\$8,026.67
PCC Curb	602	LF	\$20.00	\$12,040.00
Street Repaving (8" PCC) on Grade	696	SY	\$100.00	\$69,600.00
5' Wide Sidewalks, Pave (4" PCC) on Grade	1,111	SY	\$61.20	\$68,000.00
Aggregate Base Course, 4" and Excavation	1,111	SY	\$8.40	\$9,333.33
ADA Compliant Detectable Warning Panel	30	SF	\$72.00	\$2,160.00
Final Grading and Seeding Allowance	2,000	SF	\$1.92	\$3,840.00
Painted Pavement Markings	1	AL	\$3,000.00	\$3,000.00
Signage Allowance	1	AL	\$5,000.00	\$5,000.00
Deciduous Overstory Trees	3	EA	\$350.00	\$1,050.00
Mobilization Allowance	1	AL	\$13,014.60	\$13,014.60
				\$216,910.00
				\$43,382.00
				\$39,043.80
				\$299,335.80
Opinion of Probable Construction Cost				\$299,335.80

8b
2022



Existing plan view of Riverside Elementary School site



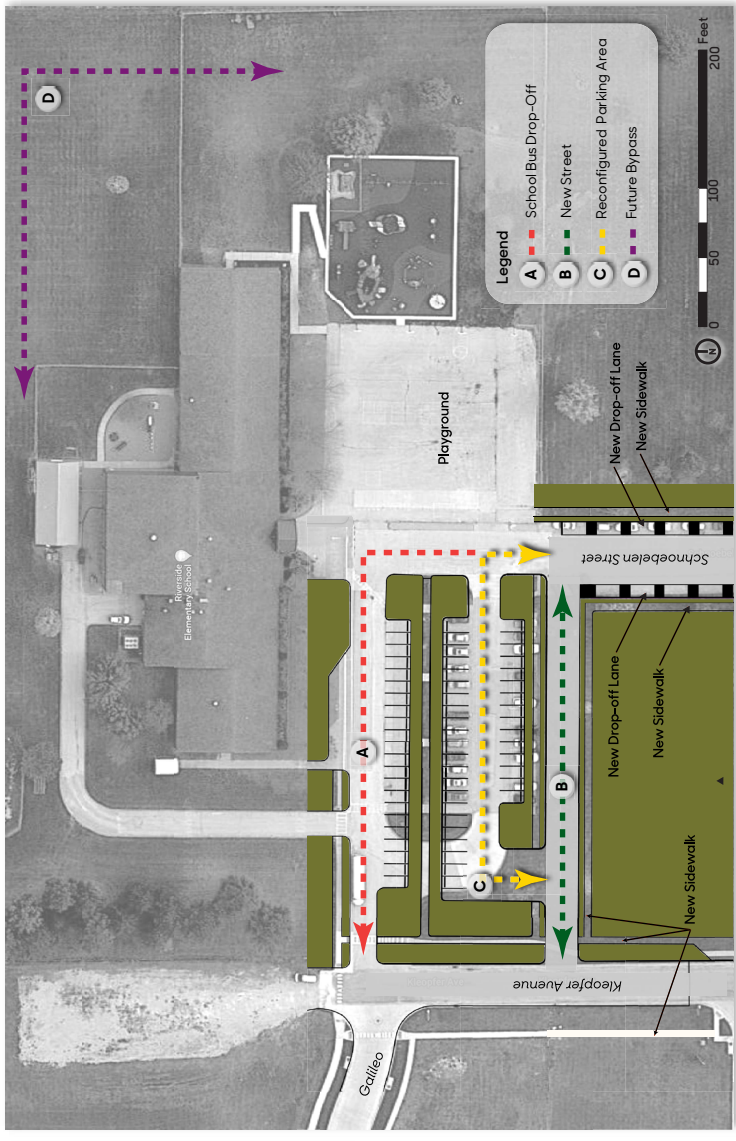
"That speed bump on Schnoebelen almost needs to be closer to the school...because after that speed bump, you have quite a ways yet until you get to the school and people do pick up speed."

School Parking Reconfiguration

With new development occurring to the north of the existing Riverside Elementary School, the school's parking lot has become a shortcut for motorists traveling from Schnoebelen Street to Kleopfer Avenue.

Community members desire creating a network of new streets to the north and east of the school to support new development and thus eliminate the need for motorists to use Schnoebelen Street as a primary thoroughfare. While this will alleviate the shortcut issue in the long term, there needs to be an interim solution to prevent the integration of school-related vehicular and pedestrian traffic with non-school related motorists.

The interim solution proposed includes construction of a new street **B** south of the existing elementary school parking lot in the green space. This street will allow non-school related vehicular traffic to bypass the school traffic, and will provide the opportunity to create improved dedicated drop-off lanes for the school. Coordination between the city and school district will be required as the proposed street is on school property. The exact path and cross-section of this new street will need to be engineered and, as part of that, process, drainage and other design requirements will be addressed.



Proposed plan view of Riverside Elementary School vehicular circulation reconfiguration

Legend

- A** School Bus Drop-Off
- B** New Street
- C** Reconfigured Parking Area
- D** Future Bypass



Riverside
School Parking Reconfiguration



Martin Gardner Architecture
Designer: Kyle Martin, Landscape Architect: Mag Flenker
Intern: Zahra Salahshoor
Iowa State University | Trees Forever | Iowa Department of Transportation

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Ella Street Five-way Intersection

This five-way intersection poses circulation and visibility challenges for its users due to its layout and the terrain. Further complicating this intersection is the city parking lot that is adjacent to the intersection and which has no controlled access, allowing cars to back out directly into the intersection.

The proposed concept for enhancing this intersection is illustrated in the proposed site plan found on this board and includes the following:

- Realignment of Blackberry Avenue to meet the intersection at a right angle versus at a slant, as it currently exists
- Relocating the city parking lot from the intersection to the south side of Vine Street (near the intersection)
- Adding designated, accessible pedestrian crosswalks at the following intersections
 - Blackberry Avenue and Ash Street
 - Ella Street and Vine Street
 - Palm Street and Vine Street
- Replacing and adding additional sidewalk sections to improve accessibility and strengthen connectivity in areas that include:
 - West side of Ash Street
 - Both sides of realigned portion of Blackberry Avenue
 - South side of the intersection between Ella Street and Vine Street
 - Along the south side of Vine Street by the new city parking lot to the east side of Elm Street

Ella Street Five-way Intersection Costs

Riverside Cost Opinion	Estimated Quantity	Unit	Estimated Unit Cost	Opinion of Cost
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Ella Street Five-Way Intersection (See Board #8c for Visual)

Street Repaving (8" PCC) on Grade				
Property Acquisition	NA	NA	TBD	Not Included
Removal of Existing Paving	876	SY	\$45	\$39,420.00
PCC Curb	700	LF	\$20.00	\$14,000.00
Street Repaving (8" PCC) on Grade	876	SY	\$100.00	\$87,600.00
Parking Pavement at new park	280	SY	\$100.00	\$28,000.00
Aggregate Base Course, 6" and Excavation	876	SY	\$10.00	\$8,760.00
Site Preparation and Grading Allowance	7,667	SY	\$4.56	\$34,960.00
ADA Compliant Detectable Warning Panel	90	SF	\$72.00	\$6,480.00
Painted Pavement Markings	300	LF	\$2.10	\$630.00
Signage Allowance	1	AL	\$4,000.00	\$4,000.00
Park Amenities (Benches, trash Receptacles, Bike Racks) Allowance	1	AL	\$30,000.00	\$30,000.00
Final Grading and Seeding Allowance	15,768	SF	\$1.92	\$30,274.56
Mobilization Allowance	1	AL	\$17,047.47	\$17,047.47
Section Subtotal				\$301,172.03
20% Contingency				\$60,234.41
Design & Engineering Allowance				\$54,210.97
Total probable Construction Cost				\$415,617.41
Opinion of Probable Construction Cost				\$415,617.41

8c
2022



Existing site plan



Parents

"Ella [Street] needs a stop sign [at the five-street intersection] because you can't see people coming... You're at a stop sign and then you're pulling out and you can't see people coming up that hill."



Steering Committee

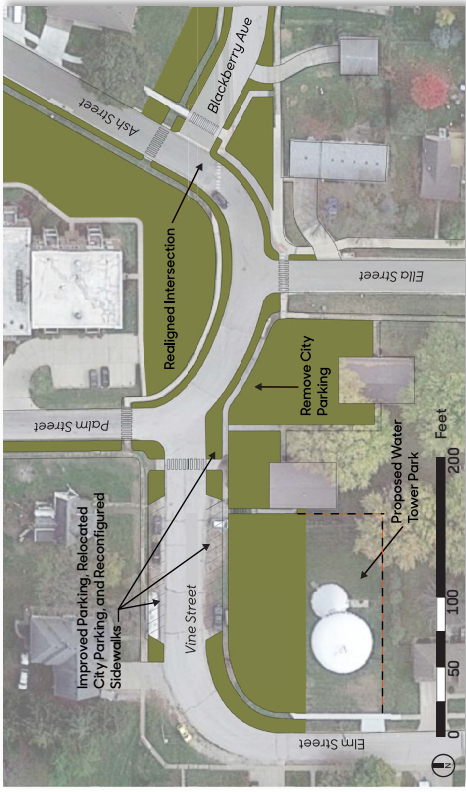
"There [are] five streets, literally meeting in one place [at the north end of Ella Street]. No one really knows...who does what...the signage is not very clear."

Ella Street Five-way Intersection

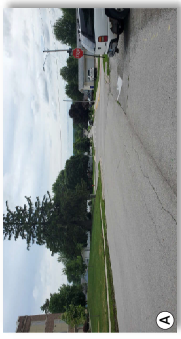
This five-way intersection poses circulation and visibility challenges for its users due to its layout and the terrain. Further complicating this intersection is the city parking lot that is adjacent to the intersection and which has no controlled access, allowing cars to back out directly into the intersection.

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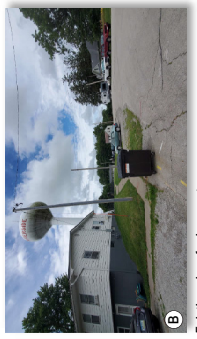
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 - Blackberry Avenue and Ash Street
 - Ella Street and Vine Street
 - Palm Street and Vine Street
- Replacing and adding additional sidewalk sections to improve accessibility and strengthen connectivity in areas that include:
 - West side of Ash Street
 - Both sides of realigned portion of Blackberry Avenue
 - South side of the intersection between Ella Street and Vine Street
 - Along the south side of Vine Street by the new city parking lot to the east side of Elm Street



Proposed intersection reconfiguration and infrastructure updates



Existing view facing northeast



Existing view facing west

Riverside
Ella Street Five-way Intersection

Martin Gardner Architecture

Designer: Kyle Martin, Landscape Architect; Meg Flenker
Intern: Zahra Salahshoor
Iowa State University | Trees Forever | Iowa Department of Transportation



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English River Access

The English River offers ample recreational opportunities for Riverside residents and regional ecotourists alike. However, residents find the existing river access at the south end of Hall Park to be inaccessible because of the absence of a sidewalk and parking. In addition, the boat ramp is obscured from both park users and vehicular passersby on Riverside Road by overgrown vegetation.

The design proposal addresses accessibility issues with the addition of a paved drive, walkway, and parking. Removing excess vegetation makes the area both easier to find and more attractive. Other amenities proposed include terraced seating, which creates opportunities for people watching while controlling erosion; shade trees; an interactive water play area; and a universally accessible pavilion with picnic tables. The pavilion takes the shape of the USS Enterprise starship, paying homage to Riverside being the future birthplace of Captain James T. Kirk from the TV series Star Trek.

English River Access Costs

Riverside Cost Opinion	Estimated Quantity	Unit	Estimated Unit Cost	Opinion of Cost
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English River Access (See Board #9 for Visual)

Demolition				\$439,030.80
Existing Ramp	100	EA	\$45	\$4,500.00
Tree Removal	100	EA	\$500.00	\$50,000.00
River Dredging	44,960	EA	\$8.00	\$359,680.00
Mobilization Allowance	1	AL	\$24,850.80	\$24,850.80
Boat Ramp Amenity and Retaining Outcropping				\$292,913.33
Aggregate Base Course, 6" and Excavation	227	SY	\$10.00	\$2,266.67
Concrete Ramp Paving	133	SY	\$100.00	\$13,333.33
Excavation	3,667	CY	\$35.00	\$128,333.33
Retaining Blocks	876	EA	\$150.00	\$131,400.00
Signage	1	AL	\$1,000	\$1,000.00
Mobilization Allowance	1	AL	\$16,580.00	\$16,580.00
Parking Amenity				\$23,320.00
Gravel Paving	222	SY	\$90	\$20,000.00
Signage	1	AL	\$2,000	\$2,000.00
Mobilization Allowance	1	AL	\$1,320.00	\$1,320.00
Pavilion Amenity				\$427,816.00
Foundations	1,600	LF	\$150.00	\$240,000.00
Pavilion Slab	178	SY	\$61.20	\$10,880.00
Sidewalk/Path	44	SY	\$61.20	\$2,720.00
Railings	50	LF	\$200	\$10,000.00
Pavilion Structure with USS Enterprise Decorative Trim and Paint	1,600	AL	\$80	\$128,000.00
Picnic Tables	8	EA	\$1,000	\$8,000.00
Signage	1	AL	\$1,000	\$1,000.00
Electrical	1	AL	\$3,000	\$3,000.00
Mobilization Allowance	1	AL	\$24,216.00	\$24,216.00
				Section Subtotal
				\$1,207,296.13
				20% Contingency
				\$241,459.23
				Design & Engineering Allowance
				\$217,313.30
				Total probable Construction Cost
				\$1,666,068.66
Opinion of Probable Construction Cost				\$1,666,068.66

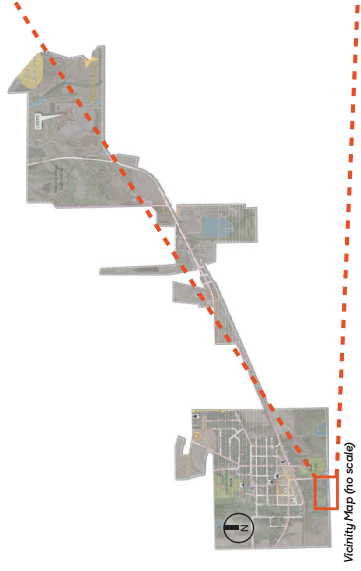
9
2022

The English River offers ample recreational opportunities for Riverside residents and regional ecotourists alike. However, residents find the existing river access at the south end of Hall Park to be inaccessible because of the absence of a sidewalk and parking. In addition, the boat ramp is obscured from both park users and vehicular passersby on Riverside Road by overgrown vegetation.

The design proposal addresses accessibility issues with the addition of a paved drive, walkway, and parking. Removing excess vegetation makes the area both easier to find and more attractive. Other amenities proposed include terraced seating, which creates opportunities for people watching while controlling erosion; shade trees; an interactive water play area; and a universally accessible pavilion with picnic tables. The pavilion takes the shape of the USS Enterprise starship, paying homage to Riverside being the future birthplace of Captain James T. Kirk from the TV series Star Trek.



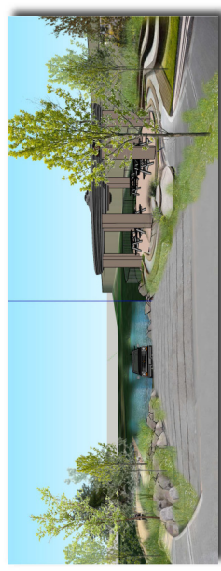
Bird's-eye view of proposed enhancements



Vicinity Map (no scale)



View of interactive water play area from river level



View of proposed enhancements from top of boat ramp (facing south)

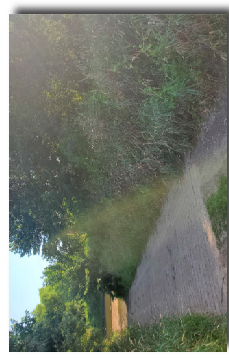


Older Adults

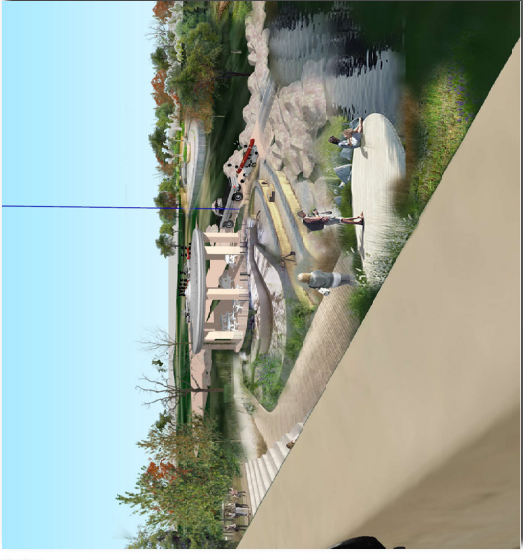
"The river access area] definitely could be improved upon. I feel like, there could be a shelter and there could be a sidewalk or a trail that you could drive down, park watch the river."



Existing boat ramp facing east from Riverside Road bridge



Existing boat ramp facing south from top of boat ramp



View of proposed enhancements from Riverside Road bridge looking east

Riverside English River Access



Martin Gardner Architecture
 Designer: Kyle Martin, Landscape Architect; Meg Flenker
 Intern: Zahra Salahshoor
 Iowa State University | Trees Forever | Iowa Department of Transportation

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Implementation Strategies

Overview

The ILR Community Visioning Program is just the beginning of the planning and design process for implementation of projects that will contribute to an enhanced quality of life in Riverside. Despite the tremendous value in data gathering, analysis, conclusions, and recommendations; the greatest value is providing residents of Riverside with the opportunity to look at their community from different perspectives and to motivate future positive change. It is the design team's intent to provide the community with a framework for significant future development and enhancement to community resources.

Professional Involvement

It is the desire of Martin Gardner Architecture, P.C. and Flenker Land Architecture Consultants, LLC (FLAC) to continue to serve Riverside in the role of the city's landscape and architectural consultants. Our involvement and familiarity with the community and visioning plans as well as our extensive experience with similar types of projects, including their funding, would be an asset to Riverside. Expertise from a team of other allied professions will be needed to successfully design and implement several of the improvement projects identified. This helps ensure that the community's goals and designer's intent are fully integrated into the improvement projects.

Design Process

Every project outlined in this year's Community Visioning effort for Riverside contains unique aspects and features that require varying levels of consultation, acquisition, design, construction, maintenance and programming for end use. Beginning the process for each project from a zoomed-out perspective is important to further plan and implement. With that in mind, the process for each project is outlined below. As projects develop, the need for additional consultation and design may become necessary beyond the assistance that is described below.

7. Community Connectivity

Trails Outside City Limits

Trails outside of City Limits will require coordination with the Iowa Department of Transportation, Washington and Johnson County governments for permission to pursue trails along County and State Highways. It may be necessary that property be acquired to create space for a continuous trail path between communities. These trails may need to be pursued in phases as funding and permissions become available outside of Riverside's jurisdiction.

Trails Inside City Limits

Working with a landscape architect and the city engineer, it will be necessary to

Implementation Strategies

determine and finalize routes. Property may need to be acquired and could affect the final paths of trails. Once the final paths have been determined, the landscape architect and a civil engineer will help plan for any desired amenities, complete the design for signage, utilities, trail structures, and surfacing, and create construction documents that can be used for bidding and construction. The civil engineer and landscape architect will then follow the project through construction to its completion. The city will need planning and budgeting for ongoing maintenance.

Sidewalks

The efforts to build sidewalks inside city limits is ongoing and encouraged to continue in similar fashion. Building sidewalks as part of larger infrastructure projects such as street reconstruction affords economies of scale. As every block of the city has differing utilities and grades, it will be necessary for the city engineer to coordinate needed consultants. Including the services of a landscape architect should always be considered, particularly where the rights-of-way provide opportunities for additional amenities such as pocket parks, school bus stops, and streetscape plantings and paving.

8a. Downtown Enhancements

Doing any work touching the right-of-way along Highway 22 will require coordination with the Iowa Department of Transportation from the very beginning of any further design work. It may be necessary that property be acquired, or easements be developed in order to plan and build the new parking areas. The City Council will need to consider, advertise and hold public hearings for any street closures.

The conceptual design provided during this Community Visioning effort should be further developed schematically by a landscape architect in coordination with the city engineer or a consulting civil engineer. A schematic level of design will investigate deeper aspects of the project like property boundaries, utilities and soil conditions. These aspects will facilitate various options and potential phasing. The phasing of these projects will clarify the sequence of jurisdictional approvals, funding and construction. Once the schematic design is finalized the landscape architect and a civil engineer will develop more detail for any desired amenities, complete the design for signage, utilities, plantings, and surfacing, then create construction documents that can be used for bidding and construction. The civil engineer, landscape architect and any other consultants will then follow the project through construction to its completion. Having a continuity of project knowledge across all phases is key to success.

The city will need planning and budgeting for ongoing maintenance. Programming the plaza space with activities that coordinate with annual festivals and events will also be key in showing the value of this project.

Implementation Strategies

8b. School Parking Reconfiguration

The first step for this project is to open discussions with the school district to build consensus around a concept. Consensus will include developing a strategy for long-term traffic concerns, land acquisition, and cost sharing, if any. A landscape architect can facilitate these discussions.

The conceptual design provided during this Community Visioning effort should be further developed schematically by a landscape architect in coordination with the city engineer or a consulting civil engineer. A schematic level of design will investigate deeper aspects of the project and facilitate options. Once the schematic design is finalized, the landscape architect and a civil engineer will develop more detail for any desired amenities in the remaining open space, complete the design for signage, utilities, plantings, storm water management, and surfacing. Then they will create construction documents that can be used for bidding and construction. The civil engineer and landscape architect will then follow the project through construction to its completion.

The city and/or school district will need planning and budgeting for ongoing maintenance.

8c. Ella Street Five-way Intersection

The efforts to build sidewalks inside city limits is ongoing and encouraged to continue in similar fashion. Building sidewalks as part of larger infrastructure projects such as street reconstruction affords economies of scale. Property may need to be acquired and could affect the final intersection design. As with any project the city should engage and keep adjacent property owners apprised of project goals and expectations throughout the process moving forward. A property survey will be part of the effort to clarify property boundaries to determine if street and sidewalk layouts proposed are feasible. As every corner of this intersection has differing utilities and grades, it will be necessary for the city engineer to coordinate needed consultants. Including the services of a landscape architect should always be considered, particularly where the rights-of-way provide opportunities for additional amenities such as pocket parks, school bus stops, streetscape plantings and paving. Creating and developing a park at the water tower could serve as a standalone project and should engage a landscape architect.

The city will need planning and budgeting for ongoing maintenance of the street, sidewalks adjoining or on public property.

Implementation Strategies

9. English River Access

Working with the Iowa Department of Natural Resources will be needed. Their guidance will be key in following regulations and identifying funding resources. The conceptual design provided during this Community Visioning effort should be further developed schematically by a landscape architect in coordination with a consulting civil engineer, environmental engineer, and architect. A schematic level of design will investigate deeper aspects of the project and facilitate options and potential phasing. The phasing of this project will clarify the sequence of jurisdictional approvals, funding and construction.

Once the schematic design is finalized the landscape architect and team of consultants will develop more detail for any desired amenities, complete the design for signage, utilities, plantings, retaining materials, and surfacing, then create construction documents that can be used for bidding and construction. The team of consultants will then follow the project through construction to its completion. Having a continuity of project knowledge across all phases is key to success.

The city will need planning and budgeting for ongoing maintenance.

Available Resources

There are many creative ways that communities can raise the resources necessary to fund and implement projects. The following list is a compilation of various sources and opportunities for funding the projects conceptualized during the visioning process. This list is not all-inclusive; it is meant to serve as a tool to assist in brainstorming ideas.

Funding Opportunities

- Grants
- Partnerships (private and public)
- Trusts and endowments
- Fund-raising and donations
- Memorials
- Volunteer labor
- Low-interest loans
- Implementation of project in phases

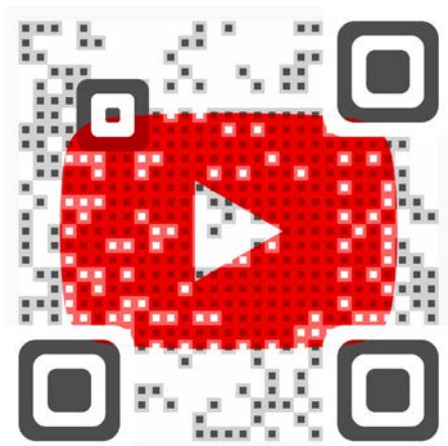
Funding Sources

- Iowa Department of Transportation
- Iowa Department of Natural Resources
- Iowa Department of Education
- Iowa Department of Economic Development
- Utility companies
- Trees Forever

Grant Programs

- Alliant Energy and Trees Forever Branching Out Program
- Federal Surface Transportation Program (STP)
- Iowa Clean Air Attainment Program (ICAAP)
- Iowa DOT/DNR Fund Iowa
- Iowa DOT Iowa's Living Roadways Projects Program
- Iowa DOT Living Roadways Trust Fund Program
- Iowa DOT Pedestrian Curb Ramp Construction Program
- Iowa DOT Statewide Transportation Enhancement Funding
- Iowa DNR Recreation Infrastructure Program
- Land and Water Conservation Fund
- National Recreational Trails Program
- Pheasants Forever
- Revitalization Assistance for Community Improvement (RACI) Grant Program
- State Recreational Trails Program
- Transportation Alternatives Program (TAP)

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