Final Report and Feasibility Study

Graettinger, Iowa

Program Partners:

Iowa Department of Transportation
Trees Forever
Iowa State University

Iowa's Living Roadways community visioning

Participants

Town Steering Committee

Angie Strohman
Barry Boner
Jessica Behrends
Cassie Oleson
Teaner Hoffman
Linda Schaller
Karen Spies
Barb Hoffman
Megan Helmich
Gina Lowman-Hall
Ivan Dalen
Nole Bochmann

Trees Forever

770 7th Avenue
Marion, IA 52302
319-373-0650
www.treesforever.org

Jeff Jensen
515-320-6756
jjensen@treesforever.org

Iowa State University

Landscape Architecture Extension
2321 North Loop Drive, Suite 121
Ames, IA 50010
515-294-3721
www.communityvisioning.org

Julia Badenhope, Program Director and Professor of Landscape Architecture
Sandra Oberbroeckling, Project Manager and Extension Program Specialist

Bolton & Menk

1519 Baltimore Drive
Ames, IA 50010
515-233-6100
www.bolton-menk.com

Josh Shields, PLA
515-233-6100 ext. 2913
joshuash@bolton-menk.com

Nate Schlorholtz
515-233-6100 ext. 3335
natesc@bolton-menk.com

Mahsa Adib, Jesse Bell
Landscape Architecture Interns
Iowa State University

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About Bolton & Menk

In 1949, two hard working Midwesterners – John Bolton and Martin Menk – saw people in their surrounding communities with dreams of a bright future, a desire to grow, and a common challenge of aging infrastructure. Their goal: to help communities make progress by listening to what people want, finding the best solutions for their needs, and treating them right. The legacy of John and Martin lives on. We still want to help, we work hard every day, and we always remember what got us here – we're people helping people. Today, Bolton & Menk, Inc. has more than 400 employees including a professional staff of over 150 engineers, planners, landscape architects, and surveyors.

Bolton & Menk specializes in providing public infrastructure solutions. We want to take care of our clients by providing the best services and solutions for them. From advocating for our communities, to designing their dreams, to finding funding; we take pride in our work throughout the Upper Midwest. Because we live here too. We believe in the power of face-to-face meetings, friendly conversations, and a collaborative decision making process to keep your projects on schedule, within budget, and focused on real, workable solutions.

Beyond our technical experience and skills, our service is also based on management and product delivery strategies we have developed over time:
Listen to the client's needs and wants
Learn the characteristics and personality of each client
Communicate proactively with staff, stakeholders, and the public
Develop **effective solutions** through consensus building
Achieve the **client's vision**
Foster **long-term relationships**

We promise every client two things: we'll work hard for you and we'll do a good job. We take a personal interest in the work being done around us. And at the end of the day, we're **Real People** offering **Real Solutions**.

Riverfront Renaissance Improvements | Hastings, MN

Program Overview

Graettinger is one of 10 communities selected to participate in the 2018 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 Graettinger visioning committee identified a number of goals and priority areas during the visioning process, which are included below:

- Parks Development
- Sidewalks/Trails Plan
- Family of Signage
- Downtown Corridor Enhancement

Capturing the Graettinger Vision

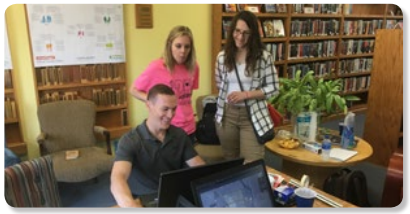
Based on the needs and desires of the local residents, as well as a detailed inventory of community resources, the design team developed a conceptual transportation enhancement plan. This plan, as well as the inventory information, is illustrated in the following set of presentation boards.

Capturing the Graettinger Vision

Based on the needs and desires of the local residents, as well as a detailed inventory of community resources, the design team developed conceptual park plans, a sidewalk/trails plan, a family of signage, and conceptual downtown corridor enhancements. These plans, as well as the inventory information, is illustrated in the following set of presentation boards.

01. Program Overview
02. Bioregional Context
03. Transportation Assets and Barriers Assessments
04. Transportation Behavior and Needs Survey (Not Included)
05. Transportation Inventory
06. Goal Setting
07. Concept Overview
08. Parks Development
09. Sidewalks/Trails Plan
10. Family of Signage
11. Downtown Corridor Enhancements


Transportation Meeting


Design Workshop Meeting


Preliminary Design Review Meeting


Robins Street Corridor

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04. Transportation Behaviors and Needs Assessment
05. Transportation Inventory and Analysis
06. Community Concept Plan
07. Parks Development
08. Sidewalks/Trails Development
09. Community Family of Signage
10. Downtown Corridor Enhancements


Cedar Avenue Trail/Sidewalk Development Opportunity


Fahnostock Park Enhancement Opportunity

Graettinger

Program Overview

Design Team
LA: Josh Shields, PLA; Nate Schlorholtz
Intern: Mahsa Adib, Jesse Bell
Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

Bioregional Assessment

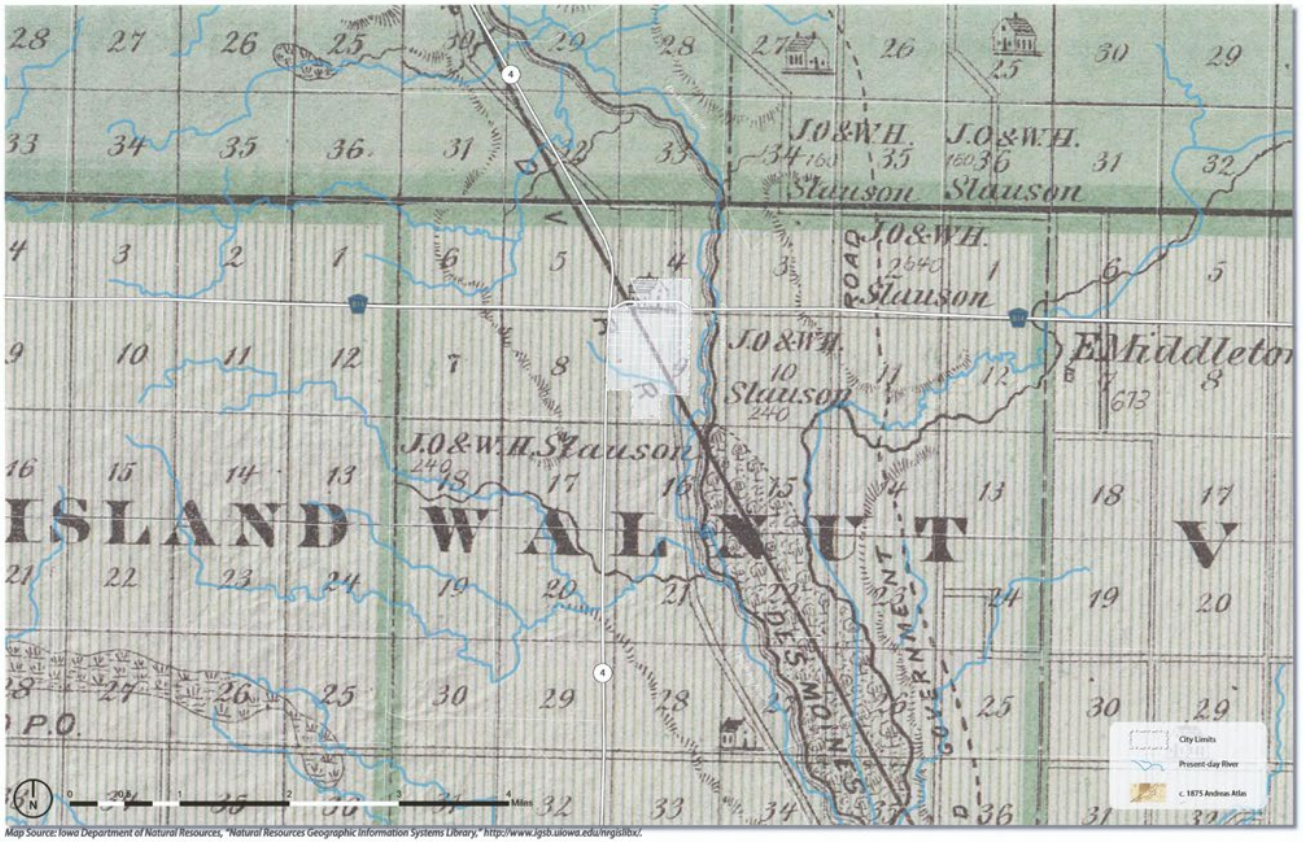
Settlement Patterns

This board uses maps 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.) High-quality scans of the Atlas have been arranged to correspond closely with present-day maps revealing major landscape changes as well as features that have persisted, such as railroad rights-of-way and in some cases remnant vegetation patches.

Gaettinger 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/nrgislibx/.

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Graettinger
Settlement Patterns

Bioregional Context

Julia Badenhope, Casey Cox, Riley Dunn, Dominick Florer, Hatvany Gomez-Concepcion, Ngoc Ho, Henry Herman, Alysse Kirkman, Giannis Koutsou, Emma Lorenz, Zoey Mauck, Carol Ustine

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Historical Vegetation

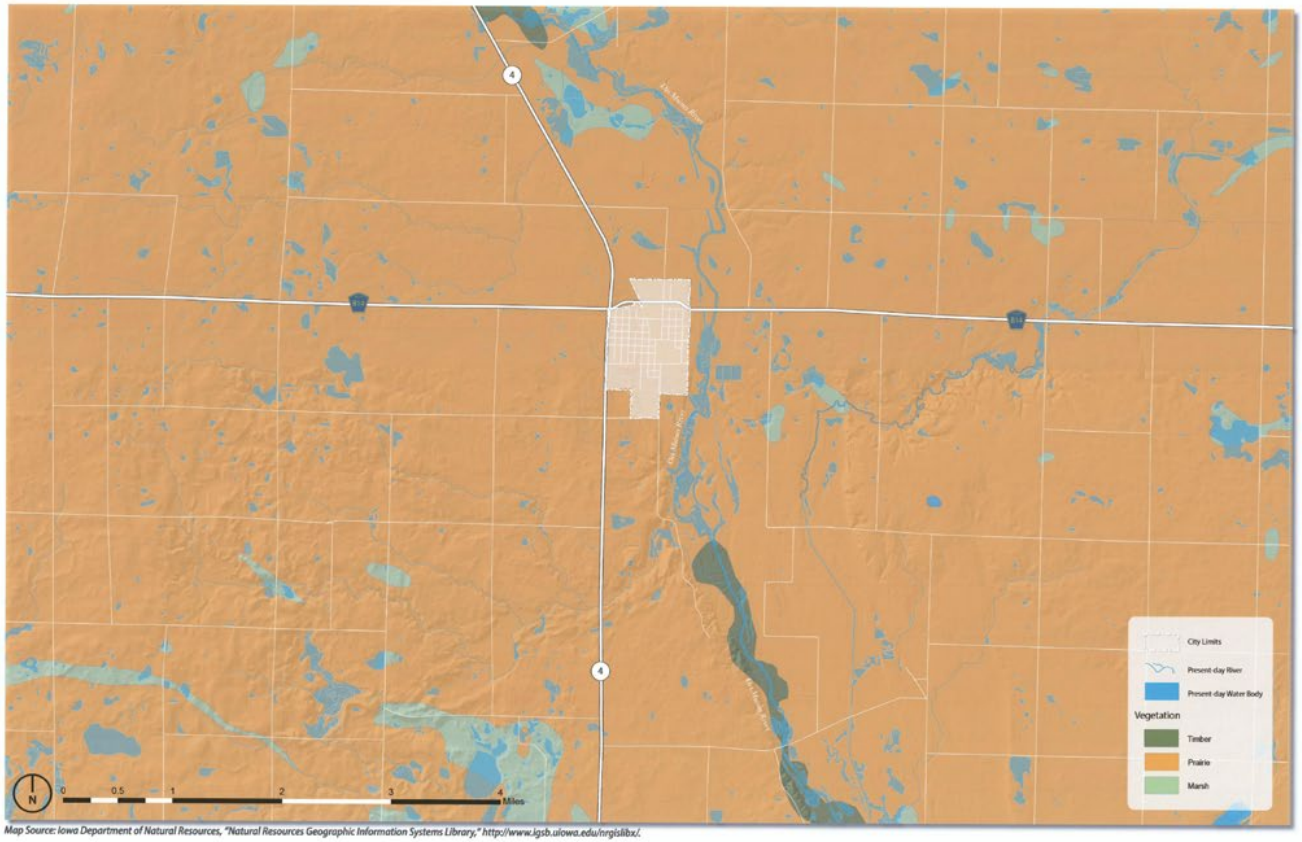
The vegetation information shown here is derived from township maps made by the General Land Office (GLO) surveys beginning in 1836 through 1859. The vegetation information was digitized in 1996 as a resource for natural resource management and is useful "...for the study of long term ecological processes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

The names of plant communities mapped by the GLO surveyors varied. The original terminology used by the surveyors who made maps has been preserved in the original data, but we have renamed these types on this map to reflect names used to describe contemporary ecological vegetation communities.

Not all communities will have all vegetation types, because various conditions that affect vegetation—such as geology, exposure to wind, seasonally high water or groundwater, and frequency of fire—differ from place to place. The following types have been mapped:

1. Forest: Tree dominated, with a mostly closed canopy. Ground vegetation shade tolerant. Developed under infrequent fire.
2. Savanna: Scattered trees, with an open canopy and prairie below. Fire dominated.
3. Marsh: Perennial non-woody plants, water and fire dominated.
4. Prairie: Perennial non-woody plants, fire dominated.
5. Field: Cultivated lands of early pioneers or Native Americans.

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.



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The vegetation names commonly used by the GLO surveyors include the following[2]:

1. Field: Cultivated lands of early pioneers or Native Americans.
2. Grove: Isolated dense stand of trees.
3. Marsh: Perennial wetlands, basins of irregular shape.
4. Prairie: Dominated by prairie grasses with individual or few scattered trees.
5. Thicket: Impenetrable blocks of shrubs, often thorny.
6. Timber: Contiguous blocks of trees extending to the horizon in at least one direction.

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Historical Vegetation

Bioregional Context

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Iowa's Living Roadways community visioning

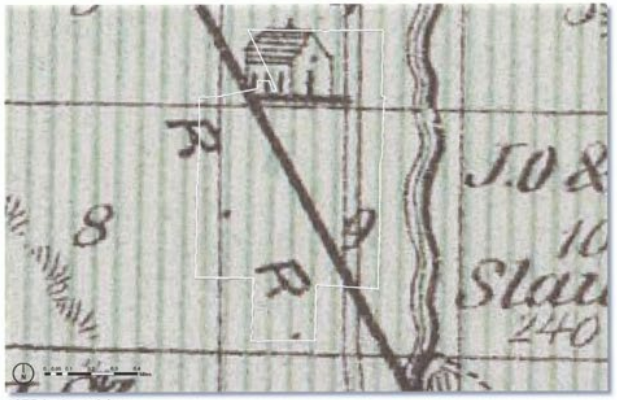
Change Over Time

In the images to the left, you can observe how land use has changed over time from the observed landscape patterns in the 1800s Andreas Atlas to the present day. By looking at landscape development patterns over time, one can begin to understand how technology, infrastructure, economic forces, and desired lifestyles have interacted with landform, climate, and processes to create present-day development patterns.

For example, consider how agricultural land use has changed land cover patterns. In general, one can see impacts of technology in larger field sizes, the reduction in wetlands and sloughs, and the elimination of fence lines as diverse farm crops and livestock production has given way to monoculture field-crop production.

New roads have been developed, usually cutting across the landscape topography on compacted roadbeds. Highways usually have low slopes and more gentle curves to facilitate high-speed movement, while roads targeted to more localized traffic can have steeper slopes and tighter curves. The result of these differences can be seen in the earthwork used to flatten the roadbeds near highways and the creation of "borrow pits" that sometimes appear as geometric ponds alongside highways.

Other observable changes are development that responds to floodplains. In many cases, development will avoid floodplains because of the risks of property damage. Between the 1940s and 1960s, development was placed in floodplains with the protection of levees. These earthworks are less effective with today's intense summer rainfall patterns, and in the most recent image, this floodplain development may have moved as a result.



1875 Andreas Atlas

1930s

1970s

Map Source: ISU GIS Facility, "Iowa Geographic Map Server," http://www. http://ortho.gis.iastate.edu/.

2015

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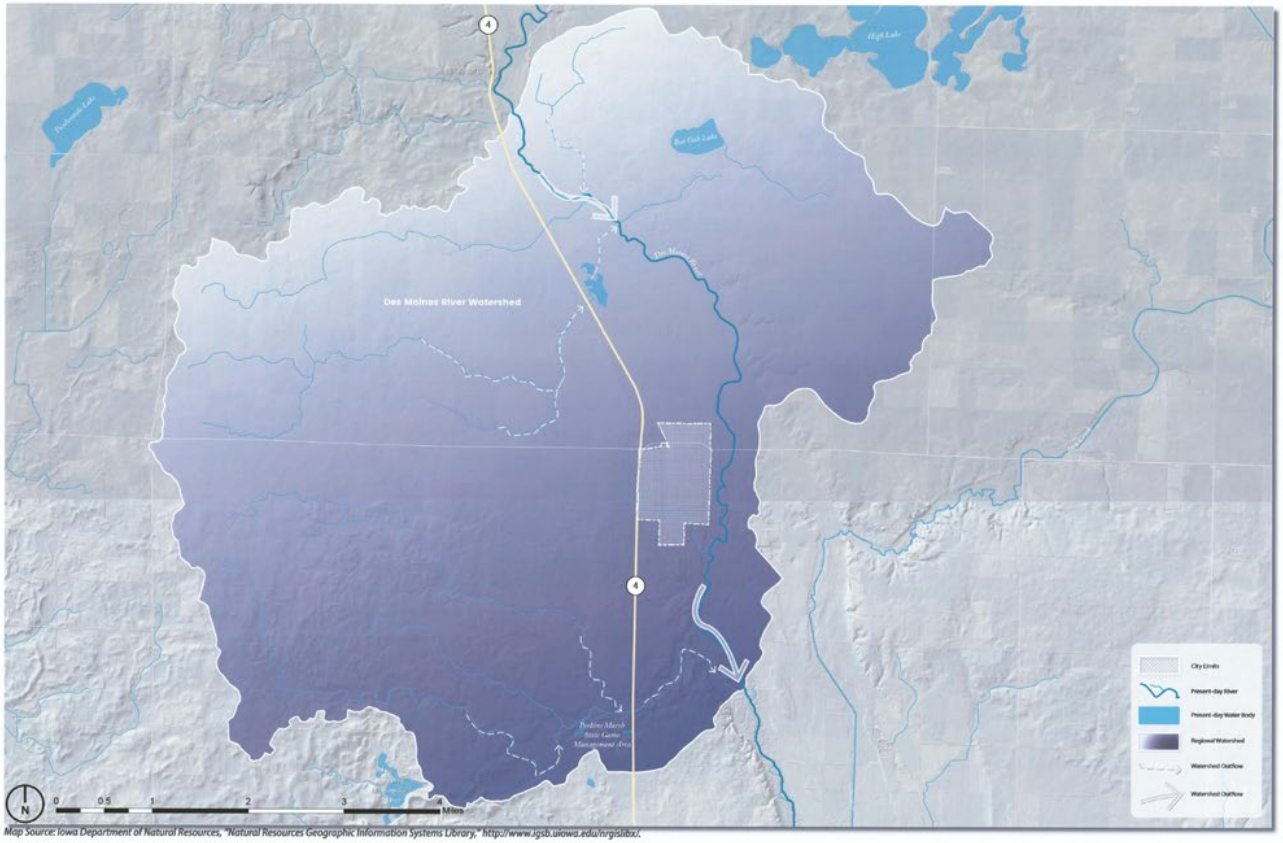
Regional Watershed

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.



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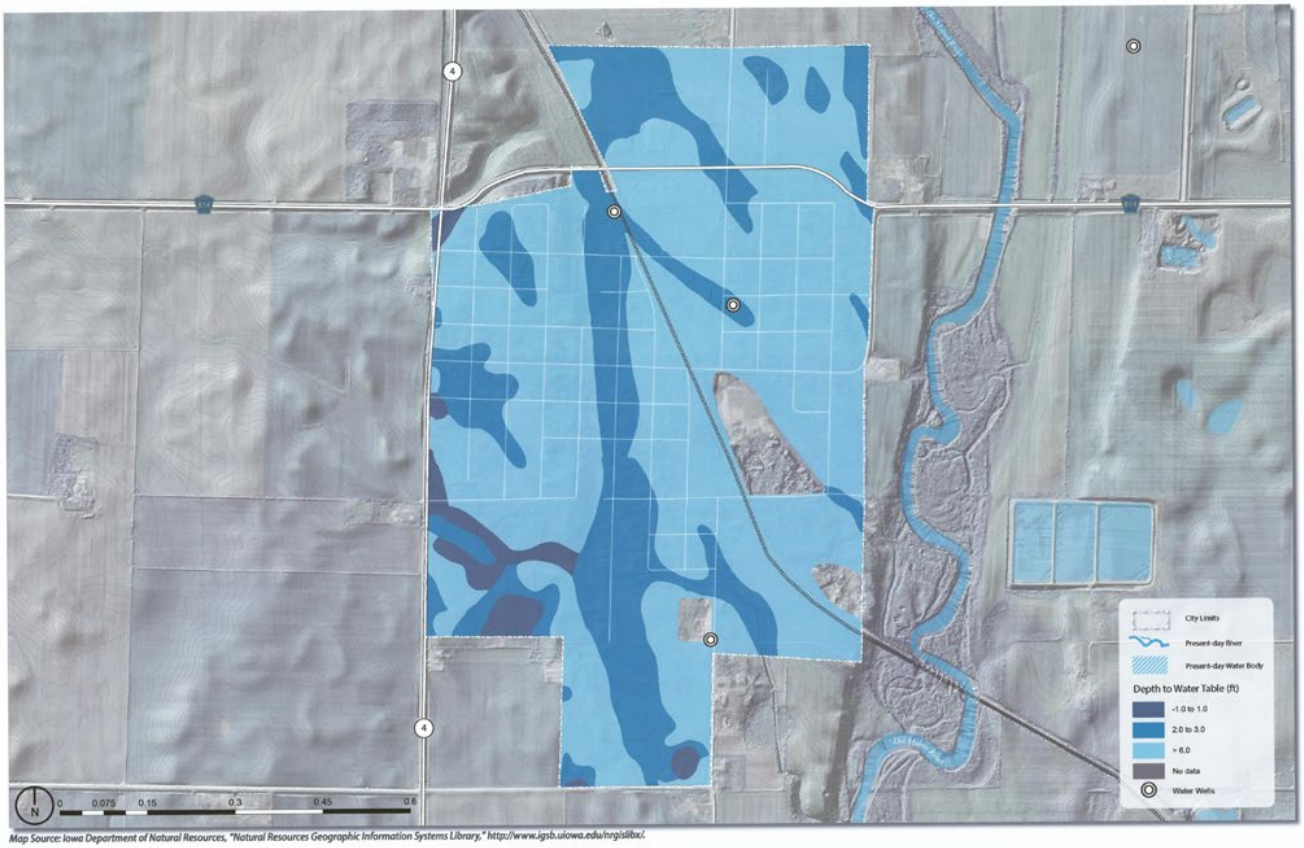
Depth to Water Table

The water table is defined as the level below 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 a 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 0 feet, water can well up out of the ground. This causes localized flooding, even if there is no surface water draining to the area.



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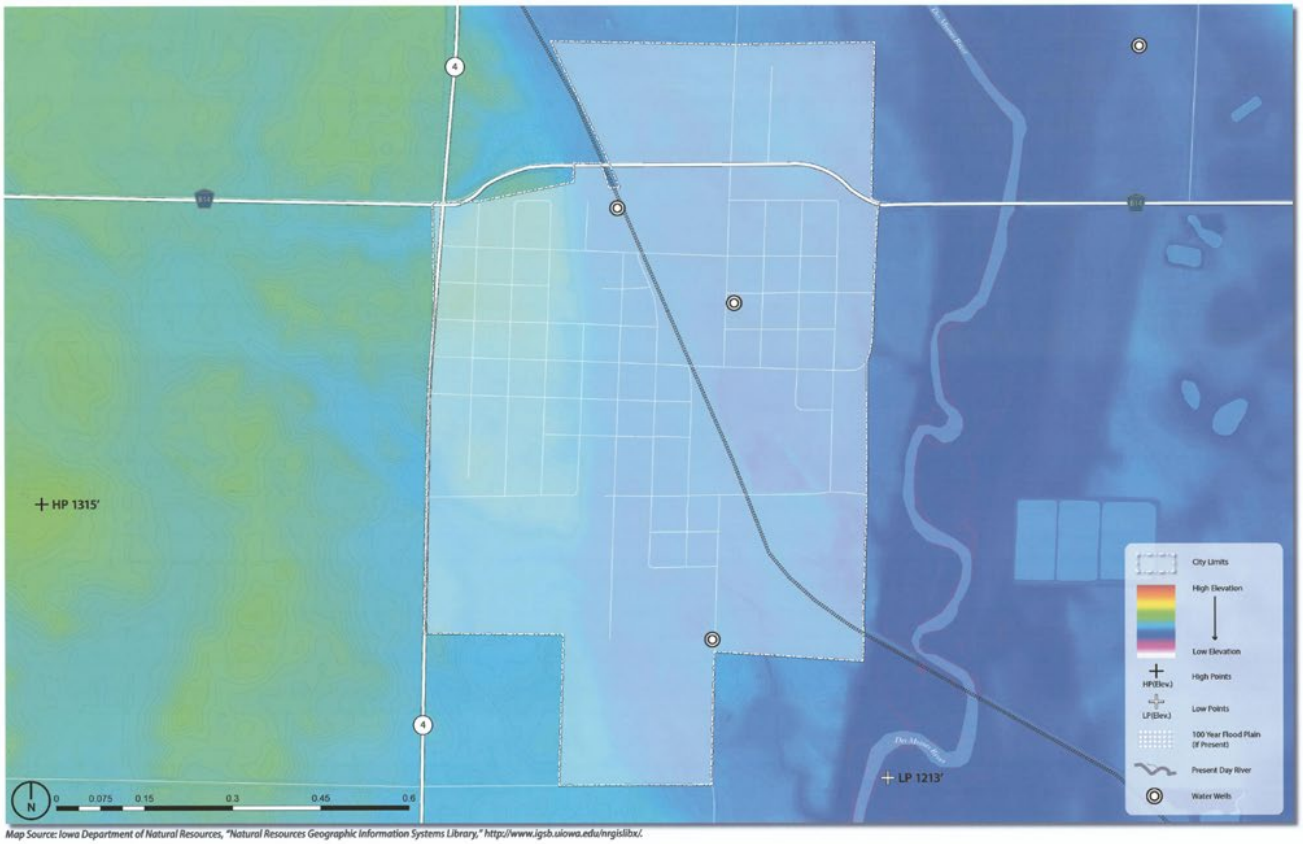
Elevation and Flow

The map to the left displays topographic differences in elevation using a combination of contour lines and the color gradient depicted in the legend. The high points 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 will reflect these features. Not all communities will have these elements; their absence on this map indicates that none are present.

Flood risk is correlated to low-lying land. This map also shows your community's flood risk as defined by the Federal Emergency Management Agency (FEMA) Flood Map Service Center. If your community has these features, this map will show the two most important flood zones, the Base Flood and the Regulatory Floodway (consult legend). Base Flood is the zone having a one percent 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 objects so that the floodwater can move freely, keeping the base flood elevation from rising.



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Iowa's Living Roadways community visioning

Present Day Land Cover

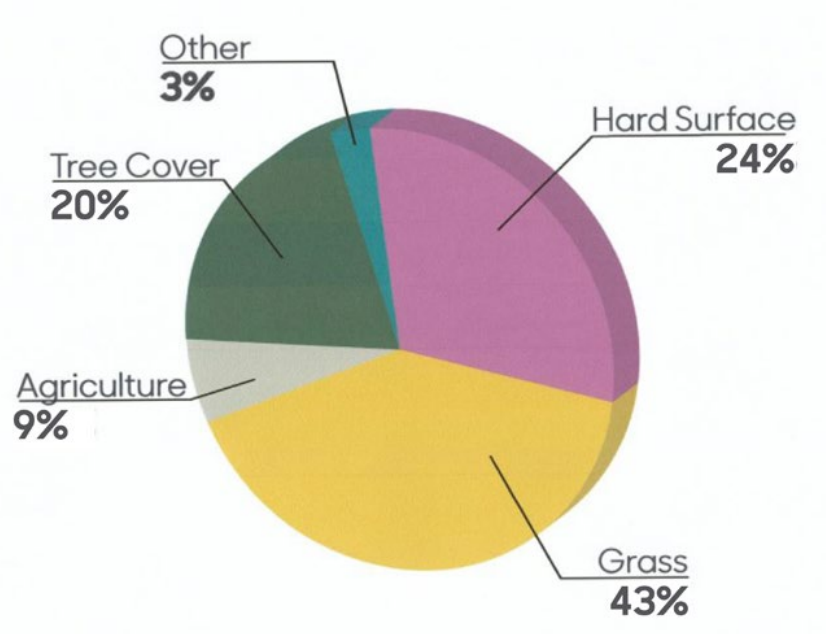
The land cover map depicts both natural and man-made land cover types with aerial imagery. The Iowa DNR created 15 unique classes for this dataset to differentiate land covers. Refer to the legend for a breakdown of land cover types within your community boundaries.

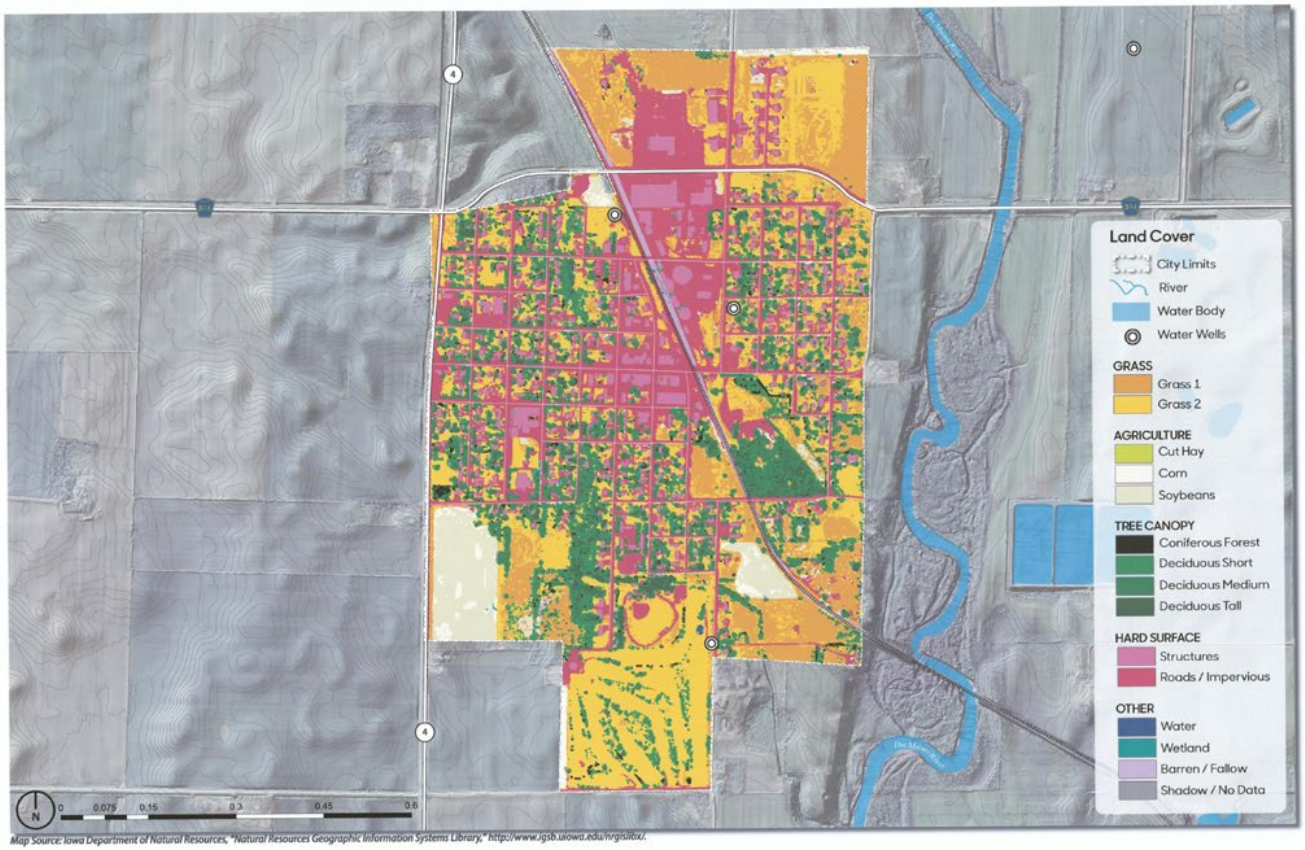
What do you observe about the dominant land cover types in your community? Where is the tree canopy most concentrated?

Compare the amount of impervious surfaces (e.g., parking lots, roads, buildings) 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





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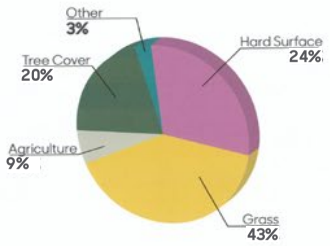

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Iowa's Living Roadways community visioning

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 Graettinger, 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 Graettinger'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 Graettinger residents with different transportation needs to participate in focus groups. A total of 50 residents attended Graettinger's workshop. Participants were separated into five user groups and the Graettinger 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 Impaired

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.

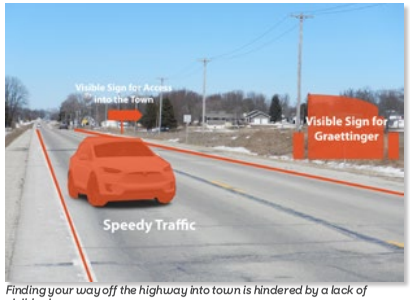
Citizens Park offers easy access and lots of shade.

Many residential areas lack lighting and sidewalks, making walking difficult.

The loop in Evergreen Park provides good access to a variety of amenities.

Main Street is wide, lacks shade, and floods. People don't like to walk there.

The golf course has a trail system.



Finding your way off the highway into town is hindered by a lack of visible signage.

What Factors Affect Transportation in Graettinger?

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 Graettinger, 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 Graettinger's transportation system works, we use focused, small-group conversations, mapping, and photos of the best and worst to understand local transportation.

Different Users = Different Needs

To capture insights about transportation from a variety of perspectives, we invited Graettinger residents with different transportation needs to participate in focus groups. A total of 50 residents attended Graettinger's workshop. Participants were separated into four user groups and the Graettinger steering committee.

Actives

(11 participants): 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 Impaired

(0 participants): 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

(9 participants): 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

(16 participants): 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

(6 participants): 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

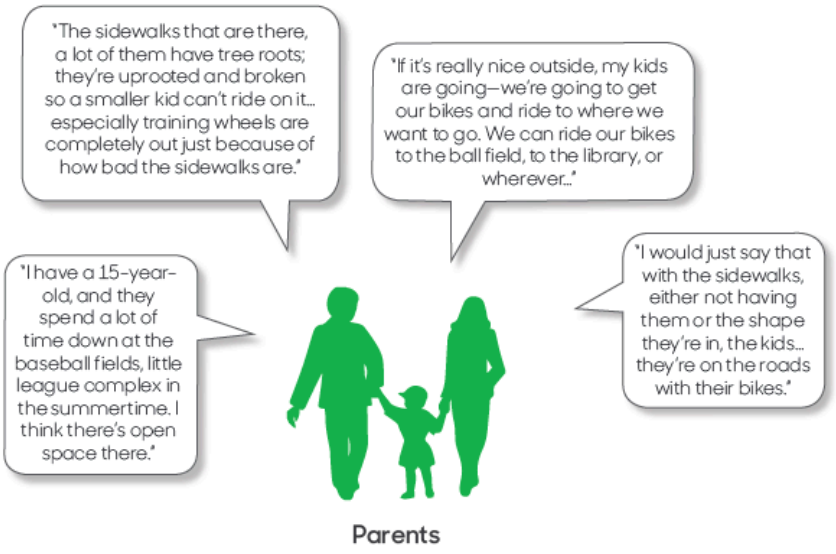
(8 participants): The common denominator for this user group is that their observations are influenced by special knowledge of the transportation system acquired during the Community Visioning assessment process. As a result, this group is more representative of decision makers.

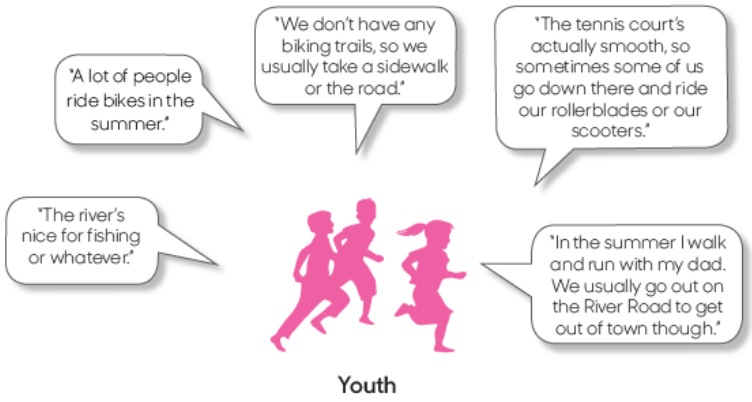
Graettinger
Overview

Transportation Assets and Barriers Analysis
Julia Badenhope, Sandra Oberbroeckling, Ngoc Ho, Mengtian Huang, and Carol Ustine
Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

What People Said


"The sidewalks that are there, a lot of them have tree roots; they're uprooted and broken so a smaller kid can't ride on it... especially training wheels are completely out just because of how bad the sidewalks are."
"If it's really nice outside, my kids are going—we're going to get our bikes and ride to where we want to go. We can ride our bikes to the ball field, to the library, or wherever..."
"I have a 15-year-old, and they spend a lot of time down at the baseball fields, little league complex in the summertime. I think there's open space there."
"I would just say that with the sidewalks, either not having them or the shape they're in, the kids... they're on the roads with their bikes."
Parents


"A lot of people ride bikes in the summer."
"We don't have any biking trails, so we usually take a sidewalk or the road."
"The tennis court's actually smooth, so sometimes some of us go down there and ride our rollerblades or our scooters."
"The river's nice for fishing or whatever."
"In the summer I walk and run with my dad. We usually go out on the River Road to get out of town though."
Youth


"It's kind of difficult to walk down to the little league fields I would say because there isn't any sort of path to get to the little league fields from Main if you're on the main part of Main Street."
"...the water just runs down the sidewalk—and then when it's melting—and now that sidewalk is just pure ice and the kids can barely walk on it."
"...when we walk, we walk on the roads mostly because ...most of the sidewalks aren't walkable."
"Recreational wise there's plenty of things to do; you've got the river, the golf course, tennis courts."
"There's a lot of wildlife to look at, wildlife everywhere."
Steering Committee

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.

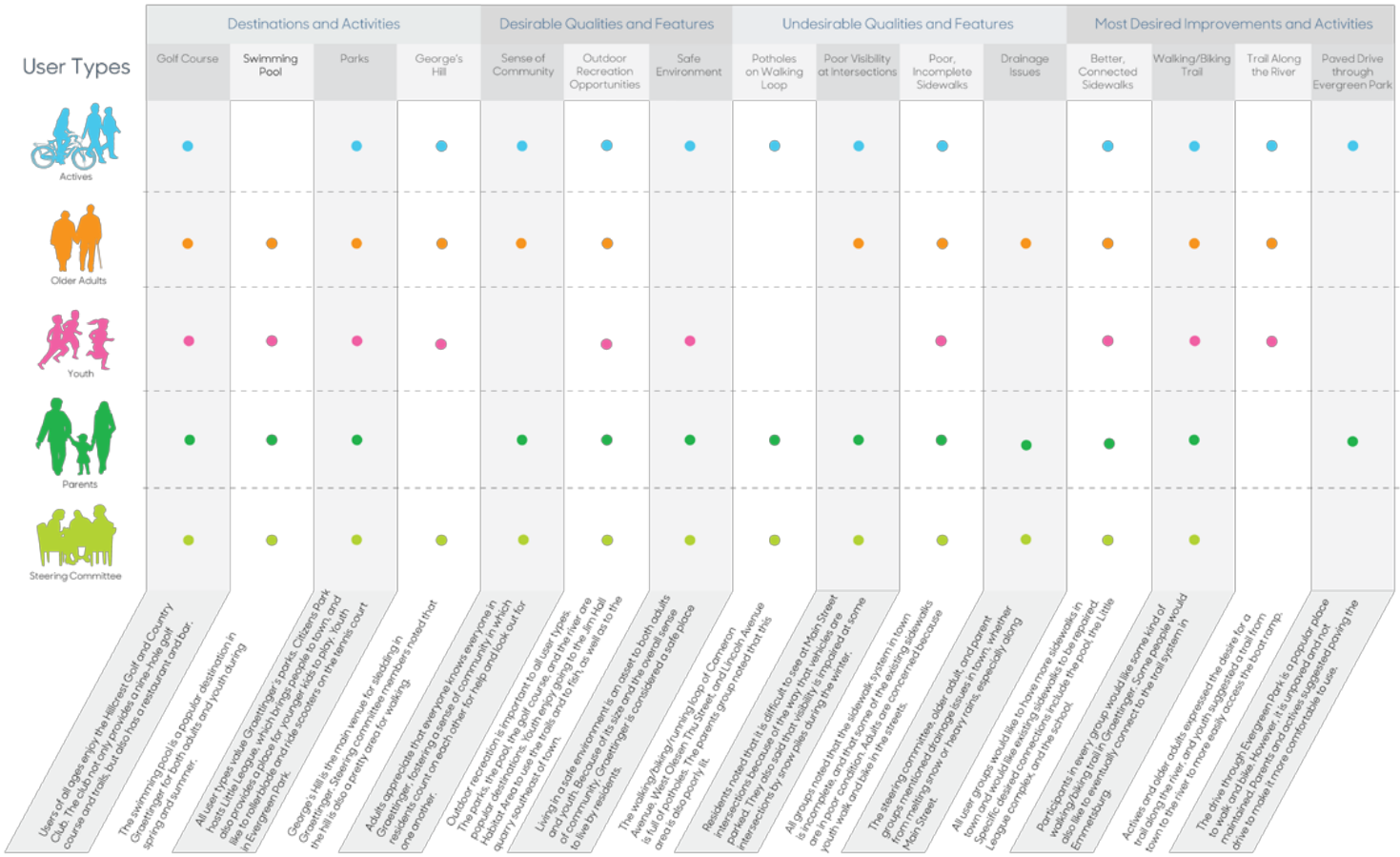
Actives: Actives walk, drive, bike and run, either as part of a daily commute or as recreational/sports training. They also drive ATVs and golf carts. This group considers Highway 4 a barrier because of the heavy traffic.

Older adults: Older adults primarily drive, bike, and walk to destinations. This group is interested in having smooth, safe, and accessible sidewalks. In addition to a trail along the river, they would like to have sidewalks along Van Gordon Avenue by the apartments.

Youth: Youth mainly walk and bike to get around the community. Older youth drive. This group would like a trail to the Jim Hall Habitat Area, as well as improvements made to the trails there.

Parents: Parents drive, walk, and bike. They are concerned about their children's safety as they travel throughout town. Of particular concern is speeding traffic on city streets, such as Washington Avenue and Olive Streets.

Steering committee: Steering committee members walk, drive, bike, and drive golf carts. This group is interested in improving the curbs and gutters, along with installing gateway and way-finding signage.



Graettinger
Emerging Themes

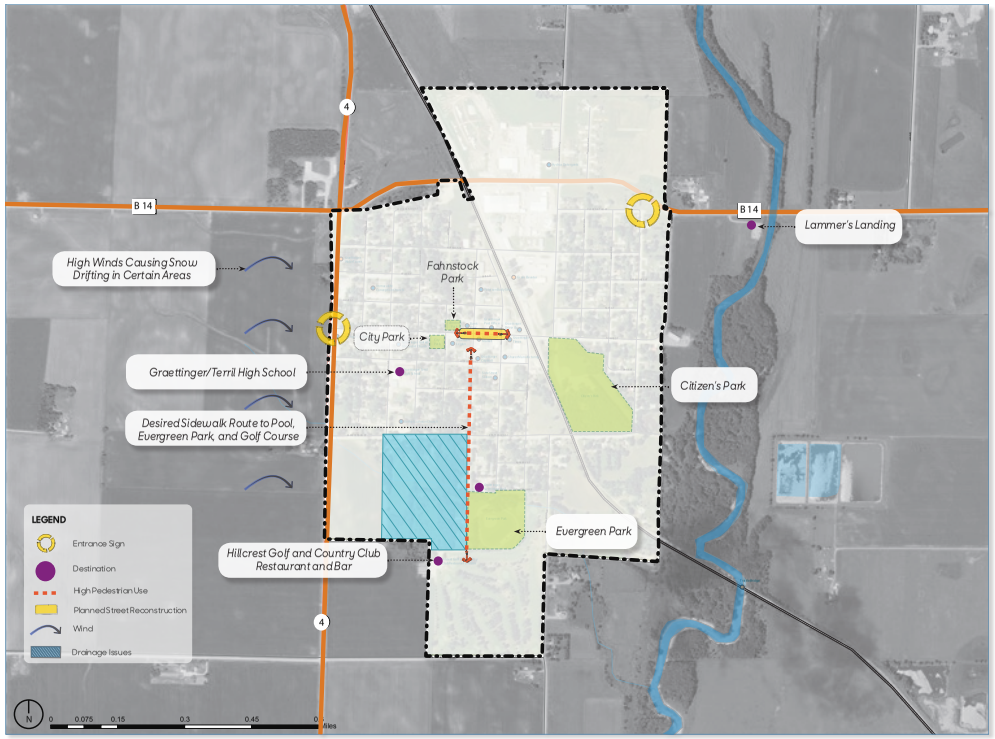
Transportation Assets and Barriers

Julia Badenhope and Sandra Oberbroeckling
Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

Transportation Inventory and Analysis

Transportation is an essential component in the overall safety and economic well-being of a community. Residents representing each user group expressed a desire to improve sidewalk and trail connections to area amenities, including the school, the pool, community parks, and the golf course. The design team will use this information to explore opportunities for improving connectivity, and safety throughout Graettinger. Discussions with county and state DOT officials, along with city maintenance staff, highlighted community entry's and current plans to reconstruct Robins Street in the Downtown area. Roadways affected by high winds and snow drifting were also noted during this meeting with transportation officials.



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Existing Sidewalk Condition along Cedar Avenue

Existing Robins Street Corridor Condition

Existing Shelter in Fahnstock Park

Existing Graettinger Entrance Sign

Graettinger

Transportation Inventory

Design Team
LAs: Josh Shields, PLA; Nate Schlorholtz
Interns: Mahsa Adib, Jesse Bell
Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

Goal Setting

Parks Development

- Connect parks through trail loops
- Need for camping/RV access and trail connection at Citizen's Park
- Desire for a skate area, basketball court, and trail connection at Evergreen Park
- Community gathering space needed
- Desire for toddler play are and small shelter in City Park

Sidewalks/Trails Plan

- Desire to expand connections to the existing trails/sidewalk system
- Connectivity/walking routes needed
- New sidewalks desired throughout town
- A loop trail could connect the parks
- Improve sidewalk connections and overall safety

Family of Signage

- Desire to improve navigation around the town
- Coordinate signage throughout the community
- Bring new businesses to Graettinger
- Improve aesthetics and prevent people from getting lost
- Wayfinding needed to community amenities and parks
- Desire to design a family of signage that would establish a theme throughout the community

Downtown Corridor Enhancement

- Improvements to the corridor on the west side of Robins Street near the downtown needed
- Desire for overall downtown corridor enhancements
- Improvements may inspire people to move to and/or stay in Graettinger
- Encourage new businesses to come to Graettinger

GOAL SETTING: ASSESSING AND PROGRAMMING COMMUNITY NEEDS

Community Values/Themes	Broad-Based Outcomes/Goals	Why Change Anything?	What Exactly and Where?
Economic Development 	· Better signage for business district · Enhanced aesthetics in downtown · Entry signage to increase town's visibility to visitors · Signage directing visitors to community destinations	· Improving visibility of downtown can increase foot traffic · Enhancing aesthetics in downtown will encourage shopping and entice new businesses to relocate to Graettinger	· Downtown corridor enhancements · Entry signage · Way-finding signage
Art & Culture/Community Pride 	· Beautify corridor into downtown · Add decorative elements to downtown · Expand community branding · Create community gathering area for events	· Beautifying downtown will reinforce community pride · Expanding the town's existing branding will strengthen community identity · Currently residents have no large gathering space for events	· Downtown corridor enhancements · Gateway Columns · Band shell/gathering space in Fahnstock Park
Safety 	· Establish a network of paved trails and sidewalks · Create play area for younger children	· Kids currently play in the street; paved trails and sidewalks give them a safer place to play · Residents do not have safe walking and biking routes · Current amenities and playgrounds are not safe for toddlers	· Trail and Sidewalk Plan so residents can safely access amenities throughout town · Toddler play area in City Park
Connectivity 	· Develop sidewalk and trail network connecting residents to community and area destinations · Make parks more accessible to all users	· Residents currently use streets to walk or bike to local destinations · A staircase connects City Park to the sidewalk, making it hard for some users to access the park	· Trail and sidewalk plan connecting residents to the school, the pool, parks, the golf course, and downtown · Provide accessible entry to all parks
Recreational Opportunities 	· Develop sidewalks and trails for walking and biking · Provide area for RV camping · Repurpose dilapidated or underutilized amenities in parks	· Having sidewalks and trails will encourage residents to be active · RV camping would give residents a local place to camp and attract visitors · Some amenities are underutilized and could be adopted for desired recreational uses	· Trail and sidewalk plan to provide routes and loops for recreational opportunities · Finding suitable location for RV camping · Repurpose tennis courts in Evergreen Park for basketball and roller skating
Natural Resources 	· Connection to Jim Hall Habitat Area · Connection to local canoe/kayak launch (Lammer's Landing)	· No current connection to Jim Hall Habitat Area; could become an amenity for current and prospective residents · Creating connection to Lammer's Landing could attract river users to spend time and money in town	· Trail route to Jim Hall Habitat Area · Trail route to Lammer's Landing

Graettinger

Goal Setting

Design Team
LAs: Josh Shields, PLA; Nate Schlorholtz
Interns: Mahsa Adib, Jesse Bell
Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

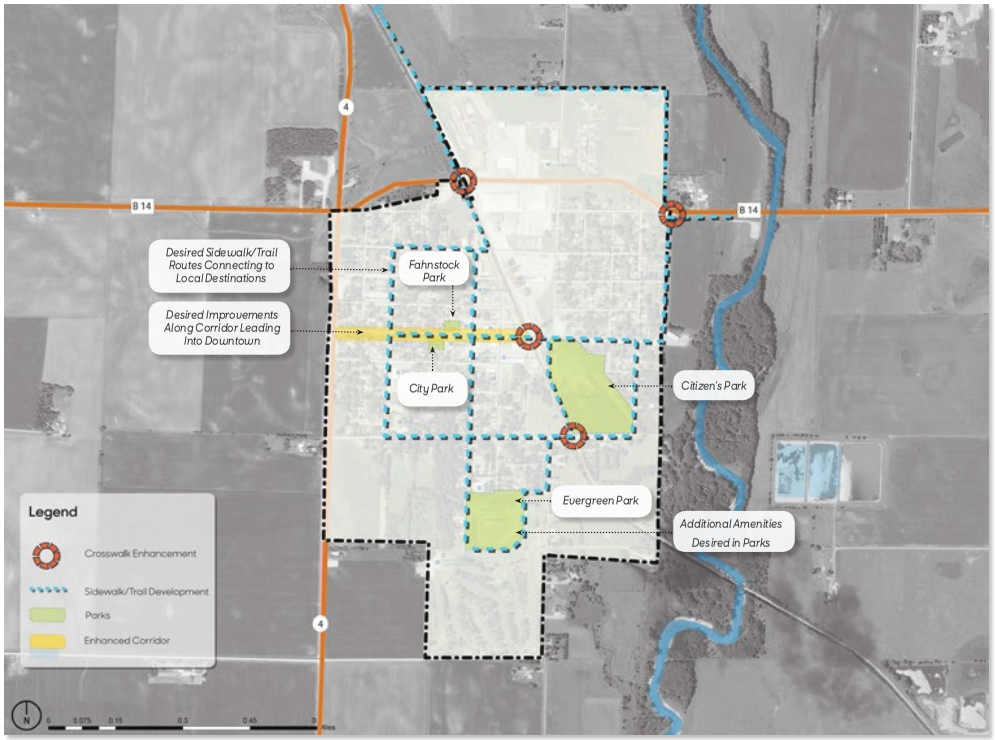
Community Concept Plan

Long-term visioning and planning are essential for a community to be able to provide sustainable, functional, and beneficial improvements. After reviewing results of the inventory and analysis of community resources, The Graettinger visioning committee set goals to help them realize their community vision.

Following this goal-setting process, the design team facilitated a conceptual design workshop, to assist community members visualize vision concepts.
Enhancements explored during the design workshop included:

- Developing sidewalks/Trails Plan
- Parks Development
- Robins Street Corridor Enhancements
- Developing Family of Signage for Community

The community concept plan is based on Graettinger resident input and brings together their ideas, goals, and visions for improvement projects.



Concept Overview

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The community concept plan is based on Graettinger resident input and brings together their ideas, goals, and visions for improvement projects.

Develop a Sidewalk and Trail Plan with Prioritized Route Phases

Create an Enhancement Plan for the Downtown Corridor

Add Desired Amenities to Existing Parks

Develop a Family of Signage Based on the Existing Theme

Graettinger

Concept Overview

Design Team
LAs: Josh Shields, PLA; Nate Schlorholtz
Interns: Mahsa Adib, Jesse Bell
Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

Parks Development

City Park

Residents voiced concerns that existing play structures at City Park may not provide safe play opportunities for area youth. They also recognized an opportunity to integrate toddler play equipment into available areas of the park to address this need. A concept plan was developed showing potential enhancements to City Park using input from both the Graettinger visioning committee and community residents. This concept explores opportunities for the community to improve accessibility and safety to and within the park, while improving play structure options, providing shelters, and screening traffic along Robins Street.

Key Concept Component

- Provide play options for toddlers and seating/shelters for parents
- Improve accessibility and safety within the park

Design Expertise Recommended

Projects may require help beyond the capacity of the visioning committee or available city staff. For this improvement project, the committee should expect to involve the following design professionals; Landscape Architect and Civil Engineer.

Project Cost Opinion

The following cost opinion is for conceptual design based on current Iowa bid pricing. Donated or at-cost materials and volunteer labor, when appropriate, could reduce overall project costs. Additional investigation will be necessary to determine the condition of and impact to existing utilities, which can be resolved in a subsequent design phase. As a result, not all utility costs are included in the cost opinion.

	UNIT	QUANTITY	UNIT COST	TOTAL
City Park Enhancements				
Mobilization	LS	1	$10,214.00	$10,214.00
Excavation	CY	1,545	$9.00	$13,905.00
Toddler Play Equipment	LS	1	$40,000.00	$40,000.00
Eng. Wood Fiber Safety Mulch	CY	52	$40.00	$2,080.00
5' Wide Path, Conc. (5" Thick)	SY	110	$55.00	$6,050.00
Bench	EA	3	$1,750.00	$5,250.00
8' x 8' Shelter	EA	2	$10,000.00	$20,000.00
8' Wide Trail, Conc. (5" Thick)	SY	270	$55.00	$14,850.00
			IMPROVEMENTS SUBTOTAL	$112,349.00
			CONTINGENCY (20%)	$22,469.80
			DESIGN/ENGINEERING FEES (15%)	$16,852.35
			SITE IMPROVEMENTS TOTAL	**$151,671.15**
			ANTICIPATED COST RANGE	**$115,000 - $155,000**

Fahnstock Park

Residents expressed a desire for a gathering space for community events. While exploring redevelopment opportunities, the design team considered accessibility to the Veterans Memorial and proposed band shell. To fully utilize available space, proposed improvements call for enhancements around the Veterans Memorial as well as installation of a rain garden to incorporate seasonal interest and demonstrate stormwater practices. The rain garden and Veterans Memorial enhancements are separated from the band shell by a viewing mound usable as both an improvisational natural play space and an informal seating area.

Key Concept Component

- Provide a community space that fosters social gathering through the band shell stage and the viewing mound
- Create a rain garden to incorporate seasonal interest and demonstrate stormwater practices
- Enhance Veteran's Memorial area

Design Expertise Recommended

Projects may require help beyond the capacity of the visioning committee or available city staff. For this improvement project, the committee should expect to involve the following design professionals; Landscape Architect, Water resources engineer, Structural Engineer, and Civil Engineer.

Project Cost Opinion

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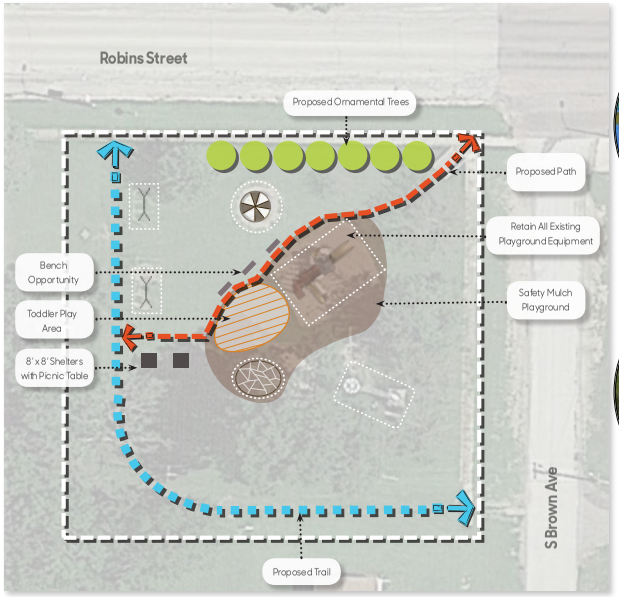
	UNIT	QUANTITY	UNIT COST	TOTAL
Fahnstock Park Enhancements				
Mobilization	LS	1	$26,630.00	$26,630.00
Excavation	CY	620	$9.00	$5,580.00
Band Shell	LS	1	$55,000.00	$55,000.00
5' Wide Path, Conc. (5" Thick)	SY	70	$55.00	$3,850.00
Concrete Pad	SF	2,200	$55.00	$121,000.00
Paver Band	SF	200	$65.00	$13,000.00
Paver Area near Veterans Memorial	SY	11	$120.00	$1,320.00
Berm/Rain Garden Grading	CY	460	$10.00	$4,600.00
Bench	EA	5	$1,750.00	$8,750.00
Planting Bed near Veterans Memorial	SF	150	$15.00	$2,250.00
Berm Seeding	AC	0	$4,500.00	$450.00
Rain Garden Planting	SF	500	$60.00	$30,000.00
Overstory Tree	EA	2	$550.00	$1,100.00
Ornamental Tree	EA	5	$400.00	$2,000.00
Evergreen Tree	EA	4	$600.00	$2,400.00
Band Shell Restrooms	LS	1	$15,000.00	$15,000.00
			IMPROVEMENTS SUBTOTAL	$292,930.00
			CONTINGENCY (20%)	$58,586.00
			DESIGN/ENGINEERING FEES (15%)	$43,939.50
			SITE IMPROVEMENTS TOTAL	**$395,455.50**
			ANTICIPATED COST RANGE	**$290,000 - $400,000**



City Park

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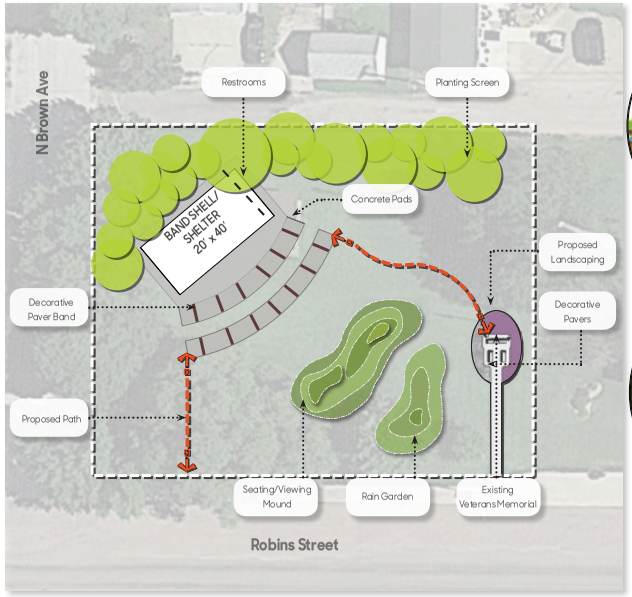

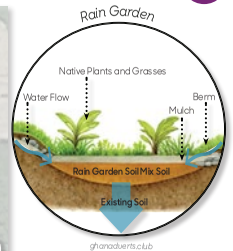

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Graettinger

Parks Development

Design Team
LAs: Josh Shields, PLA; Nate Schlorholtz
Interns: Mahsa Adib, Jesse Bell
Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

Parks Development

Evergreen Park

This park currently houses the high school's baseball and football fields. With the school district planning to build new facilities, these amenities will begin hosting Little League and general community play. Evergreen Park also sees a lot of use being adjacent to both the pool and golf course, and is a popular place for walking as noted on board 3C.

Residents indicated a desire for a basketball court during assessments and goal setting. The current tennis court at Evergreen Park is in disrepair. This amenity could be revamped for basketball and integrated into the trail system to provide access for residents.

Key Concept Component

- Repurpose the tennis court for other uses
- Improve accessibility to and within the park

Design Expertise Recommended

Projects may require help beyond the capacity of the visioning committee or available city staff. For this improvement project, the committee should expect to involve the following design professionals; Landscape Architect, and Civil Engineer.

Project Cost Opinion

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	UNIT	QUANTITY	UNIT COST	TOTAL
PARKS DEVELOPMENT				
Evergreen Park Enhancements				
Mobilization	LS	1	$2,418.00	$2,418.00
Excavation	CY	470	$9.00	$4,230.00
Court Resurfacing	SY	1,300	$7.00	$9,100.00
Basketball Court Painting	LS	1	$900.00	$900.00
Basketball Hoop	EA	2	$2,500.00	$5,000.00
5' Wide Path, Conc. (5" Thick)	SY	90	$55.00	$4,950.00
			IMPROVEMENTS SUBTOTAL	$26,598.00
			CONTINGENCY (20%)	$5,319.60
			DESIGN/ENGINEERING FEES (15%)	$3,989.70
			SITE IMPROVEMENTS TOTAL	**$35,907.30**
			ANTICIPATED COST RANGE	**$27,000 - $36,000**

Citizen's Park

The Des Moines River is an important natural amenity for Graettinger and serves as a destination for tourists from neighboring communities who come to use the water trail access at Lammer's Landing.

One of the potential locations identified by community members was a privately owned farm field at the east end of Robins St. However it is uncertain of whether this landowner would embrace selling or leasing land to the city for use as an RV park.

The design team identified a current portion of Citizen's Park as the future home of RV camping. The existing park would provide access to campers, and a future trail could provide pedestrian access to downtown and Lammer's Landing.

Key Concept Component

- Provide an RV camping area
- Enhance pedestrian access to and within the park

Design Expertise Recommended

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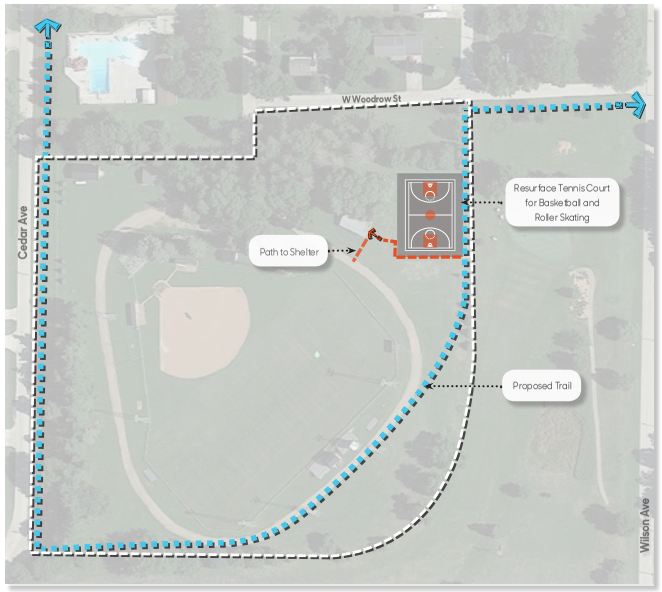
	UNIT	QUANTITY	UNIT COST	TOTAL
Citizen's Park Enhancements				
Mobilization	LS	1	$21,576.00	$21,576.00
Excavation	CY	11,090	$9.00	$99,810.00
Park Road/RV Camping Asphalt Paving	SY	2,200	$25.00	$55,000.00
Overstory Tree	EA	5	$550.00	$2,750.00
Evergreen Tree	EA	7	$600.00	$4,200.00
Ornamental Tree	EA	10	$400.00	$4,000.00
Electrical Services	LS	1	$5,000	$5,000
Dump Station & Sanitary Sewer	LS	1	$35,000	$35,000
Water Services	LS	1	$10,000	$10,000
			IMPROVEMENTS SUBTOTAL	$237,336.00
			CONTINGENCY (20%)	$47,467.20
			DESIGN/ENGINEERING FEES (15%)	$35,600.40
			SITE IMPROVEMENTS TOTAL	**$320,403.60**
			ANTICIPATED COST RANGE	**$240,000 - $325,000**



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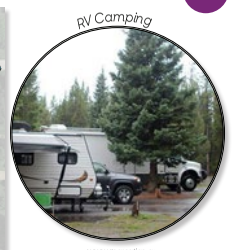

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Graettinger

Parks Development

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Iowa's Living Roadways community visioning

Sidewalks/Trails Plan

Prioritized Pedestrian Routes

Data provided during the community assessment indicate the value residents place on walking (see board 3c). Each user group expressed a desire to expand connections to the existing trail/sidewalk system. Development of a connected trail/sidewalk network will provide safer mobility and increased recreation opportunities among community destinations and amenities.

The design team worked with community members to identify destinations and desired walking routes within Graettinger. These routes are depicted as the sidewalks/trails plan. Anticipated lengths for each segment have also been provided. A typical section indicating how the community could begin realizing these links was developed to show spatial needs. This section depicts a landscaped buffer for street trees, lawn, or other landscaping separating a 5' sidewalk or 8-10' trail section within the public right-of-way. This section will need to be adjusted based on right-of-way width, utilities, and existing objects on each property where an improved route is considered for implementation.

Key Concept Component

- Develop a connected trail/sidewalk network with prioritized route phasing
- Enhance pedestrian connectivity between community destinations and amenities.

Design Expertise Recommended

Projects may require help beyond the capacity of the visioning committee or available city staff. For this improvement project, the committee should expect to involve the following design professionals; Landscape Architect, Civil Engineer, and Traffic Engineer.

Projects where sidewalk or trail are proposed to cross state or county highways should be coordinated with county engineer or DOT. Routes crossing railroad tracks should be coordinated with the Union Pacific Railroad.

Project Cost Opinion

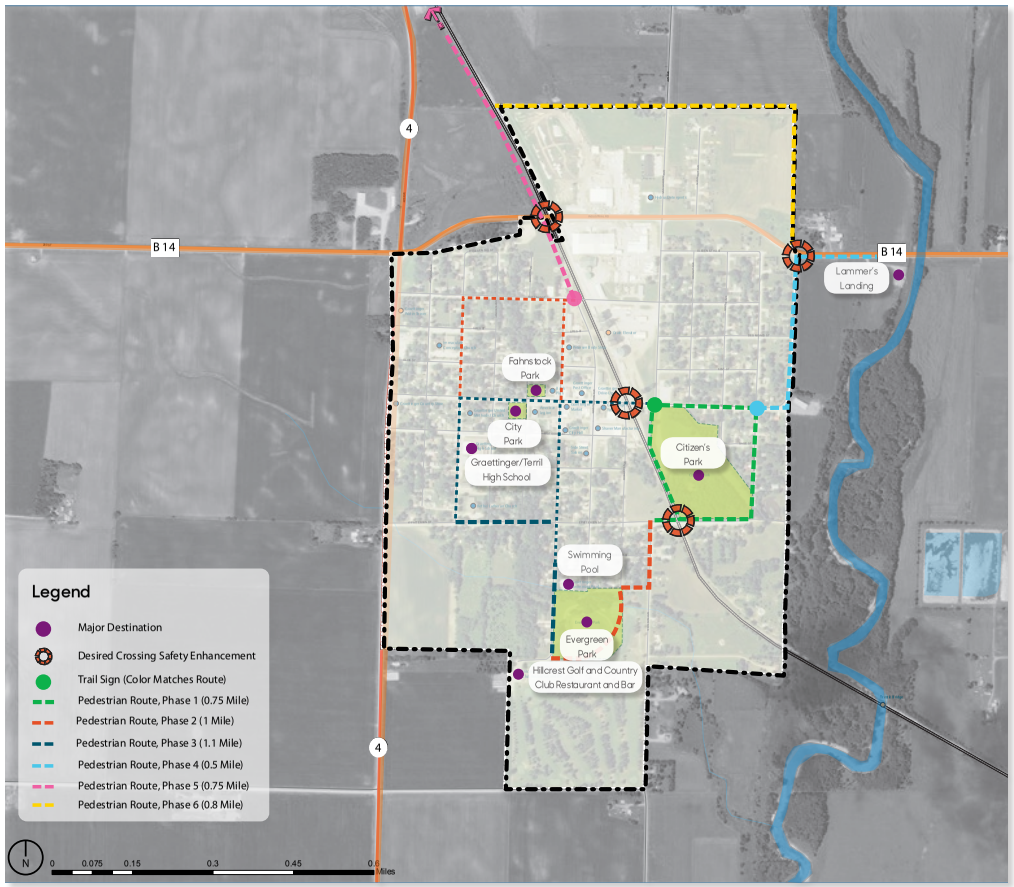
The following cost opinion is for conceptual design based on current Iowa bid pricing. Donated or at-cost materials and volunteer labor, when appropriate, could reduce overall project costs. Additional investigation will be necessary to determine the condition of and impact to existing utilities, which can be resolved in a subsequent design phase. As a result, not all utility costs are included in the cost opinion.

	UNIT	QUANTITY	UNIT COST	TOTAL
SIDEWALKS/TRAILS PLAN				
Mobilization (Includes all priority phases)	LS	1	$128,197.00	$128,197.00
Excavation (Includes all priority phases)	CY	7,000	$15.00	$105,000.00
Phase 1				
8' Wide Trail, Conc. (5" Thick)^	SY	3,560	$55.00	$195,800.00
Detectable Warning Panel	SF	48	$40.00	$1,920.00
Phase 2				
5' Wide Sidewalk, Conc. (5" Thick)	SY	1,667	$55.00	$91,685.00
8' Wide Trail, Conc. (5" Thick)^	SY	1,800	$55.00	$99,000.00
Detectable Warning Panel	SF	112	$40.00	$4,480.00
Phase 3				
5' Wide Sidewalk, Conc. (5" Thick)	SY	2,720	$55.00	$149,600.00
8' Wide Trail, Conc. (5" Thick)^	SY	1,700	$55.00	$93,500.00
Detectable Warning Panel	SF	200	$40.00	$8,000.00
Phase 4				
8' Wide Trail, Conc. (5" Thick)^	SY	2,230	$55.00	$122,650.00
Detectable Warning Panel	SF	16	$40.00	$640.00
Phase 5				
8' Wide Trail, Conc. (5" Thick)^	SY	3,560	$55.00	$195,800.00
Detectable Warning Panel	EA	40	$40.00	$1,600.00
Phase 6				
8' Wide Trail, Conc. (5" Thick)^	SY	3,825	$55.00	$210,375.00
Detectable Warning Panel	SF	48	$40.00	$1,920.00

^Trail could be widened to 10' if required by funding sources

IMPROVEMENTS SUBTOTAL	$1,410,167.00
CONTINGENCY (20%)	$282,033.40
DESIGN/ENGINEERING FEES (15%)	$211,525.05
SITE IMPROVEMENTS TOTAL	**$1,903,725.45**

ANTICIPATED COST RANGE **$1,400,000 - $2,000,000**



Proposed Street Section

Prioritized Pedestrian Routes

Data provided during the community assessment indicate the value residents place on walking (see board 3c). Each user group expressed a desire to expand connections to the existing trail/sidewalk system. Development of a connected trail/sidewalk network will provide safer mobility and increased recreation opportunities among community destinations and amenities.

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This section will need to be adjusted based on right-of-way width, utilities, and existing objects on each property where an improved route is considered for implementation.

Graettinger

Sidewalks/Trails Plan

Design Team
LAs: Josh Shields, PLA; Nate Schlorholtz
Interns: Mahsa Adib, Jesse Bell
Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

Family of Signage

Expanding Community Brand

Signage and lighting provide many benefits within a community from aesthetic treatments and safety to way-finding. For local residents these elements showcase community pride and sense of place. For tourists, the information on these elements can serve as landmarks and help them navigate the community.

The signage and streetscape elements package developed for Graettinger integrates the community's existing logo while using locally available materials. Incorporating these elements throughout the community will designate walking routes and identify civic destinations within Graettinger.

Key Concept Component

- Showcase community pride and sense of place, using the community's existing logo and locally available material
- Design entry signs narrow enough to be placed along Hwy 4
- Develop wayfinding signage to help visitors navigate the community

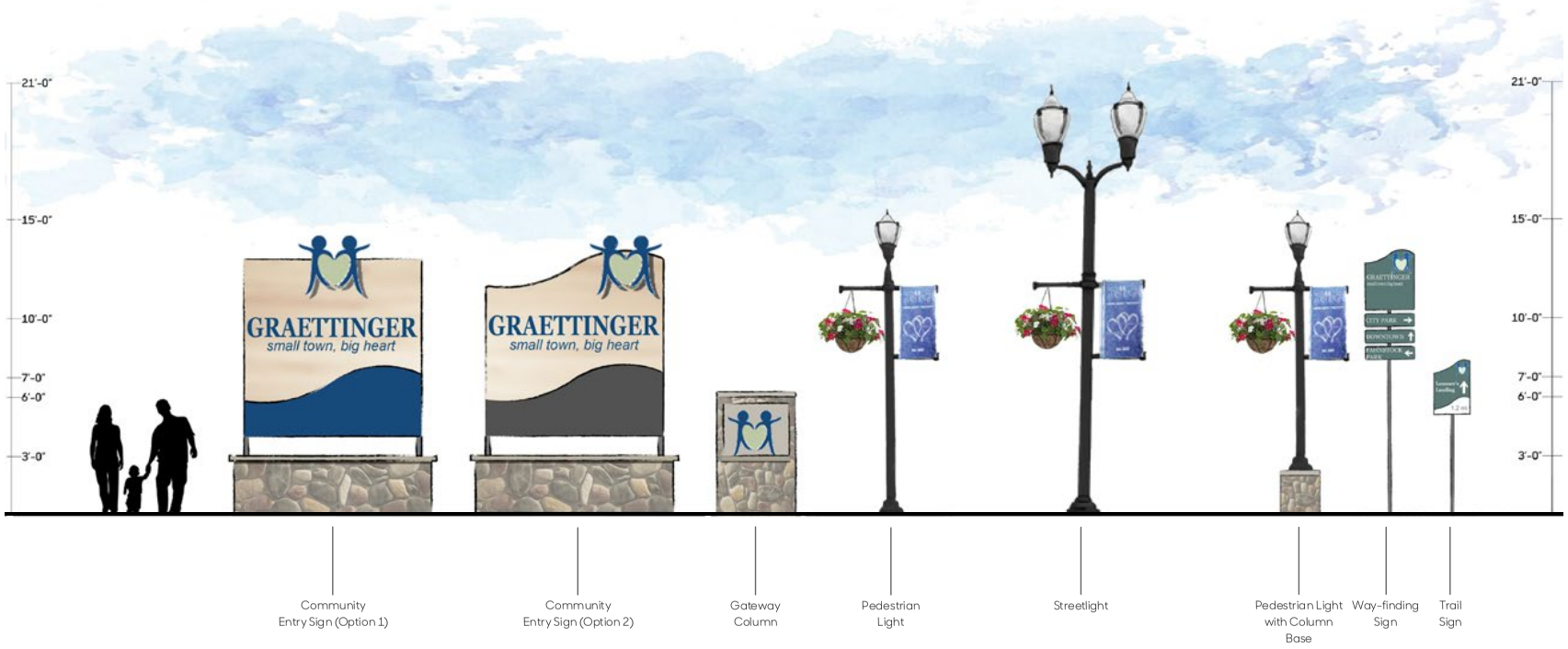
Design Expertise Recommended

Projects may require help beyond the capacity of the visioning committee or available city staff. For this improvement project, the committee should expect to involve the following design professionals; Landscape Architect, Sign Fabricator.

Project Cost Opinion

The following cost opinion is for conceptual design based on current Iowa bid pricing. Donated or at-cost materials and volunteer labor, when appropriate, could reduce overall project costs. Additional investigation will be necessary to determine the condition of and impact to existing utilities, which can be resolved in a subsequent design phase. As a result, not all utility costs are included in the cost opinion.

	UNIT	QUANTITY	UNIT COST	TOTAL
FAMILY OF SIGNAGE				
Community Entry Sign	EA	2	$12,500.00	$25,000.00
Wayfinding Sign	EA	3	$2,000.00	$6,000.00
Trail Sign	EA	3	$750.00	$2,250.00
Gateway Column	EA	3	$8,500.00	$25,500.00
			IMPROVEMENTS SUBTOTAL	$58,750.00
			CONTINGENCY (20%)	$11,750.00
			DESIGN/ENGINEERING FEES (15%)	$8,812.50
			SITE IMPROVEMENTS TOTAL	**$79,312.50**
			ANTICIPATED COST RANGE	**$60,000 - $80,000**



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Graettinger

Family of Signage

Design Team
LAs: Josh Shields, PLA; Nate Schlorholtz
Interns: Mahsa Adib, Jesse Bell
Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

Downtown Corridor Enhancements

Improving Aesthetics Along Robins Street

With proposed reconstruction already in the works for Robins Street, this enhancement plan aims to increase aesthetics, implement various types of signage, and plan for new lighting. Aesthetics are provided through hanging flower baskets, banners, and historic street lights. Wayfinding signage and gateway columns can help people familiarize themselves with the community and its amenities. New lighting will also help to increase overall safety while beautifying Downtown. Streetscape amenities can also improve awareness of pedestrian spaces to visitors and can entice new businesses to the community.

Key Concept Component

- Enhance entrance corridor into downtown
- Create beautification plan to go along with Robins street reconstruction
- Improve overall safety condition

Design Expertise Recommended

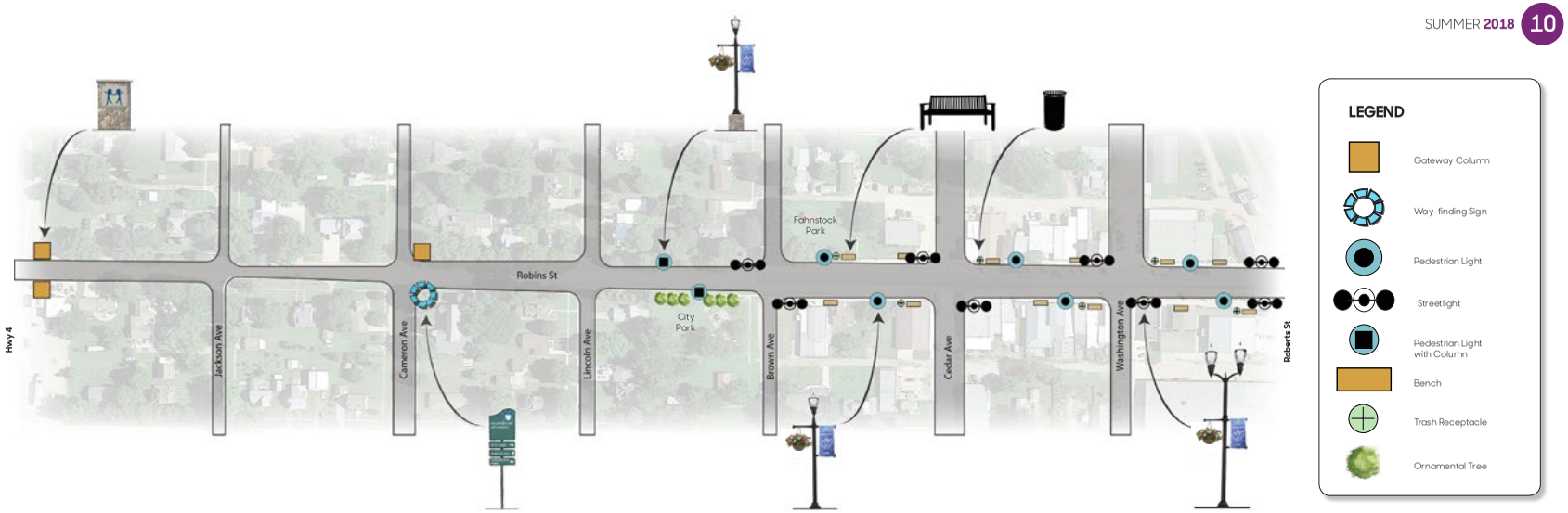
Projects may require help beyond the capacity of the visioning committee or available city staff. For this improvement project, the committee should expect to involve the following design professionals; Landscape Architect, Electrical Engineer, Sign Fabricator, and Artist.

Project Cost Opinion

The following cost opinion is for conceptual design based on current Iowa bid pricing. Donated or at-cost materials and volunteer labor, when appropriate, could reduce overall project costs. Additional investigation will be necessary to determine the condition of and impact to existing utilities, which can be resolved in a subsequent design phase. As a result, not all utility costs are included in the cost opinion.

	UNIT	QUANTITY	UNIT COST	TOTAL
DOWNTOWN CORRIDOR ENHANCEMENTS				
Mobilization	LS	1	$18,220.00	$18,220.00
Historic Street Light with Banner	EA	8	$9,500.00	$76,000.00
Historic Pedestrian Light with Banner	EA	6	$6,500.00	$39,000.00
Historic Pedestrian Light w/ Column Base and Banner	EA	2	$10,000.00	$20,000.00
Litter Receptacle	EA	6	$1,300.00	$7,800.00
Bench	EA	12	$1,750.00	$21,000.00
Hanging Planter Basket	EA	16	$1,000.00	$16,000.00
Ornamental Tree	EA	6	$400.00	$2,400.00
			IMPROVEMENTS SUBTOTAL	$200,420.00
			CONTINGENCY (20%)	$40,084.00
			DESIGN/ENGINEERING FEES (15%)	$30,063.00
			SITE IMPROVEMENTS TOTAL	**$270,567.00**

ANTICIPATED COST RANGE **$200,000 - $275,000**



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Graettinger

Downtown Corridor Enhancements

Design Team

LAs: Josh Shields, PLA; Nate Schlorholtz

Interns: Mahsa Adib, Jesse Bell

Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

Implementation Strategies

The Visioning Program is the beginning of the planning process for implementation of projects that will contribute to an enhanced quality of life in Graettinger. Despite the tremendous value in data gathering, analysis, conclusions, and recommendations; the greatest value is providing residents of Graettinger 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.

Recommendations

Project implementation should be determined based on the priority given it by the community and also with the realization of available funding sources. These funding sources may be through grants and private donations, but may also be in the form of volunteer labor, donated materials, or donated services.

The projects have been developed with a variety of different scales in mind, allowing some to be more easily realized than others. By reviewing the available resources and developing an implementation plan, the community can move forward towards realizing the fruits of its vision.

The primary goal of the community as it moves forward should be planning for successful projects. Successful implementation of a project allows for public support and interest to grow and can quickly lead to availability of additional and more diverse implementation resources - a community with a history of successful projects and involvement is more appealing to funding agencies. Therefore, a smaller project that fits the following criteria is generally recommended as a starting project for the community to undertake:

1. Is highly visible
2. Has a good chance of receiving a grant or funding assistance
3. Can use volunteers
4. Is not overly complicated

Because the information depicted on each board is conceptual in nature, the edits, sketches, and other deliverables are not intended for use as final design/construction documents. They need to be further developed with the help of professionals during a "design phase." During a design phase, concepts will be refined and developed to determine the actual character, size, and essentials that will become part of the final project. The final products from this phase may retain the general concepts depicted on the boards, but may look vastly different because of constraints or opportunities unknown during the visioning process. However, the design that emerges from final design may also look very similar to that developed during the Visioning Program.

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)