Final Report and Feasibility Study
Calamus, Iowa

Planning and Design Consultant:
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Flenker
Land Architecture
Consultants, LLC

Professional Planning, Design &
Environmental Services

Program Partners:
Iowa Department of Transportation
Trees Forever
Iowa State University

Iowa's Living Roadways
community
visioning

Participants

Town Steering Committee

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Melanie Buckner
Janet Donelson
Lance Goettsch
Jeff Griebel
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Jessie Jacobi
Mike Lacey
Grace Oldsen
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Autumn Reiling
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Trees Forever

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Julia Badenhope, Program Director and Professor of Landscape Architecture
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Timothy J. Hillberry, Student (3rd Year)
Landscape Architecture Intern
Iowa State University

Paola Monllor-Torres, 2021 Graduate
Landscape Architecture Intern
Iowa State University

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About Flenker Land Architects

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.

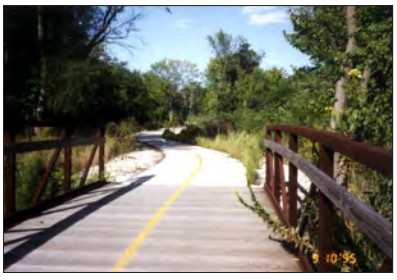
FLAC's personnel are trained and committed to consider aesthetics, detail, scale, pedestrian and vehicular circulation and interaction, project context, environmental impact, user safety, functionality, and how humans interact with their surroundings - all things that FLAC considers inherent to the success 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.

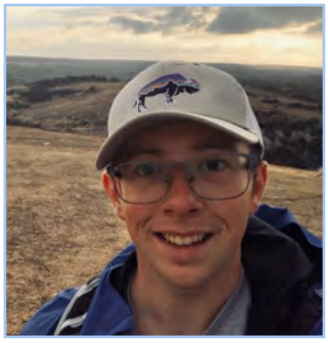
Sport Field & Park Design: Eldridge, Ia.

Native Habitat Design: Clinton, Ia.

Meg Flenker, PLA, ASLA, CPESC, CPSWQ

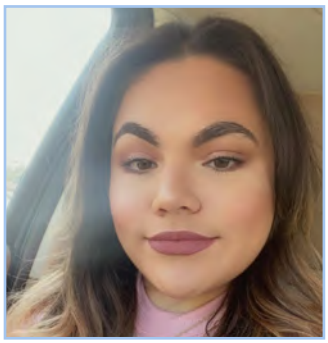
Meg Flenker is a registered landscape architect with over 32 years of professional experience in the landscape architectural, engineering, planning and environmental fields. In addition to holding various certifications in LID, sustainability, hardscape, and environmental planning and design, she is also a Certified Professional in Storm Water Quality (CPSWQ) and Certified Professional in Sediment & Erosion Control (CPSEC). Ms. Flenker holds her Bachelor of Landscape Architecture (BLA) degree from Iowa State University and her Master of Business Administration (MBA) degree from the University of Iowa. Meg worked for a mid-west engineering firm for 8 years before leaving to start Flenker Land Architecture Consultants in 1997, which is the same year that she became involved with the Iowa's Living Roadways Community Visioning Program.

A native of eastern Iowa, Meg returned to the Quad Cities after graduating from Iowa State. Today, she resides just north of the Quad-Cities on the family farm that she grew up on and is active in the community.



Timothy J. (TJ) Hillberry, Intern

TJ is a 4th-year Landscape Architecture student at Iowa State University, minoring in sustainable design. Born and raised in Iowa City, Iowa, TJ has always enjoyed the outdoors and admired nature's ability to bring people together. The field of landscape architecture has allowed him to pursue his passions for both the outdoors and design. Mr. Hillberry views landscape architecture as a professon that improves both the human and environmental health of places and spaces in an ecologically and environmentally friendly way.



Paola Monllor-Torres, Intern

Paola is a Spring 2021 graduate of Iowa State University's Landscape Architecture professional program. Born and raised in Puerto Rico, she moved to Iowa five years ago to start her studies in the design field where she quickly realized her love of landscape architecture. Ms. Monllor-Torres is interested educating hereself about other cultures and implementing their aspects into her design and personal life.

Ethan Morrow, Intern

A native of Aledo, Illinois, Ethan is in his fifth and final year in the 5-year professional Landscape Architecture program at Iowa State University, with a minor in sustainability. Ethan is passionate about designing and building things he creates and likes being active outdoors, especially near the water. Mr. Morrow enjoyed working with the communities this summer where he was able to apply his past construction experience in the planning and design of aesthetic and functional projects. He enjoys landscape architecture because of the many ways it can enrich people's lives.

Program Overview

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

- Create a train quiet zone within the city limits
- Upgrade the downtown streetscape to attract businesses and patrons and improve accessibility
- Improve community identity and physical and visual connectivity throughout Calamus by improving streetscapes, expanding and upgrading the sidewalk system, implementing way-finding signage and, decorative lighting
- Create more outdoor recreational opportunities for residents by creating a trail system throughout Calamus and a multi-use trail to neighboring Wheatland
- Expand the sport field offerings to include a football field with a track and more parking at the sport fields
- Identify opportunities for new residential expansions

Residents interacted with the design team in the creation of concepts and provided feedback during the design workshop held on July 8, 2021

Members of the local Calmus community visioning committee helped explain, answer questions, and gather input during the design workshop

Tactical urbanism was used in Calamus during RAGBRAI to create an interactive showcase for Calamus's participation in the Iowa's Living Roadways Visioning Program. The display, which was set up in the downtown, used milk crates to create arches and seating areas

Program Overview

The city of Calamus 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 (less than 10,000 residents).

Visioning Program Goals:

- Develop a conceptual plan and implementation strategies alongside local community residents.
- Enhance the natural, cultural and visual resources existing within communities.
- Assist 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's Department of Landscape Architecture and ISU Extension and Outreach, of which Community Visioning is part, manage the visioning process and the design team. In addition, ISU project staff and interns conduct a bioregional assessment and public input sessions, including transportation assets and barriers (TAB) focus groups, a random-sample survey, and a survey of high school students. Iowa State University, along with Trees Forever and the Iowa Department of Transportation, select private-sector Professional Landscape Architects (PLA) to be part of the design team and work with the various communities in creating their "community vision" and transportation enhancement plan.

Iowa State University processes the information collected from the focus groups and surveys and provides the data to the steering committee and design team for their use in developing community-centered transportation enhancements based on the needs and desires expressed by residents participating in the focus groups, surveys, and the public design workshop.

The Community Visioning program is sponsored by the Iowa Department of Transportation.

Community Goals

The Calamus steering committee identified a number of goals and priority areas during the visioning process. These goals and priorities were reflective of what residents identified during their participation in the TAB workshops held virtually in late February and early March 2021 (see boards 3a-3c), as well as the results of the sample survey and a survey of high school students.

- Create a train quiet zone within the city limits
- Upgrade the downtown streetscape to attract businesses and patrons and improve accessibility
- Improve community identity and physical and visual connectivity throughout Calamus by improving streetscapes, expanding and upgrading the sidewalk system, implementing way-finding signage and, decorative lighting
- Create more outdoor recreational opportunities for residents by creating a trail system throughout Calamus and a multi-use trail to neighboring Wheatland
- Expand the sport field offerings to include a football field with a track and more parking at the sport fields
- Identify opportunities for new residential expansions

Refer to board 7, "Goal Setting," for further details related to the community goals noted above.

Capturing the Calamus Vision

Based on the needs and desires of the local residents, as well as a detailed inventory of community resources, the design team developed transportation-based community improvement project concepts, which are illustrated in the following set of presentation boards:

1. Program Overview
2. Bioregional Assessments
3. Transportation Assets and Barriers Assessment
4. Transportation Behaviors and Needs Assement
5. High School Survey
6. Transportation Inventory
7. Goal Setting
8. Concept Plan Overview
9. Community Identity
10. Entryway Signage
11. Accessibility & Connectivity
12. Streetscape Enhancements
13. Downtown
14. Trail System
15. City Growth
16. Train Quiet Zone
17. Implementation

This board set is supplemented by a shared set of boards with Wheatland that addresses the proposed trail segment connecting Calamus to Wheatland. These supplemental presentation boards are identified as Cal-Wheat boards and include the following four boards:

1. Trail Plan & Identity
2. Trailhead
3. Trail Enhancements
4. Syracuse Bridge Area

Calamus

Program Overview

FLENKER LAND ARCHITECTURE CONSULTANTS, LLC
LA: Meg Flenker, PLA, ASLA, CPESC, CPSWQ
Interns: TJ Hillberry, Paola Monllor-Torres and Ethan Morrow
Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

Capturing the Calamus 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.

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Bioregional Assessment

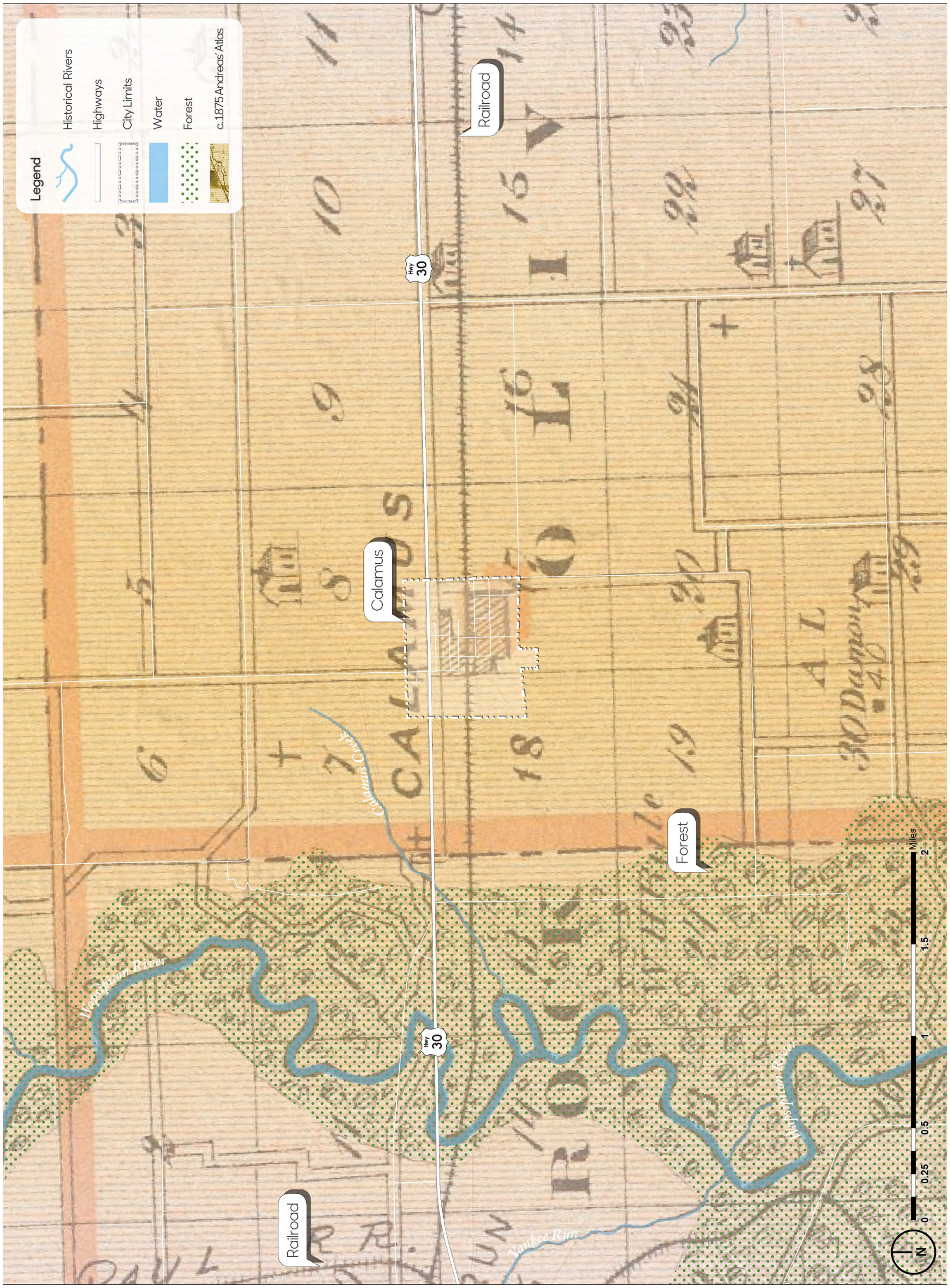
Historical Settlement Patterns

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.

Calamus 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?


Legend
Historical Rivers
Highways
City Limits
Water
Forest
c.1875 Andreas Atlas
Railroad
Calamus
Forest
Railroad
Hwy 30
Hwy 30
Miles
0 0.25 0.5 1 1.5 2
N

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]

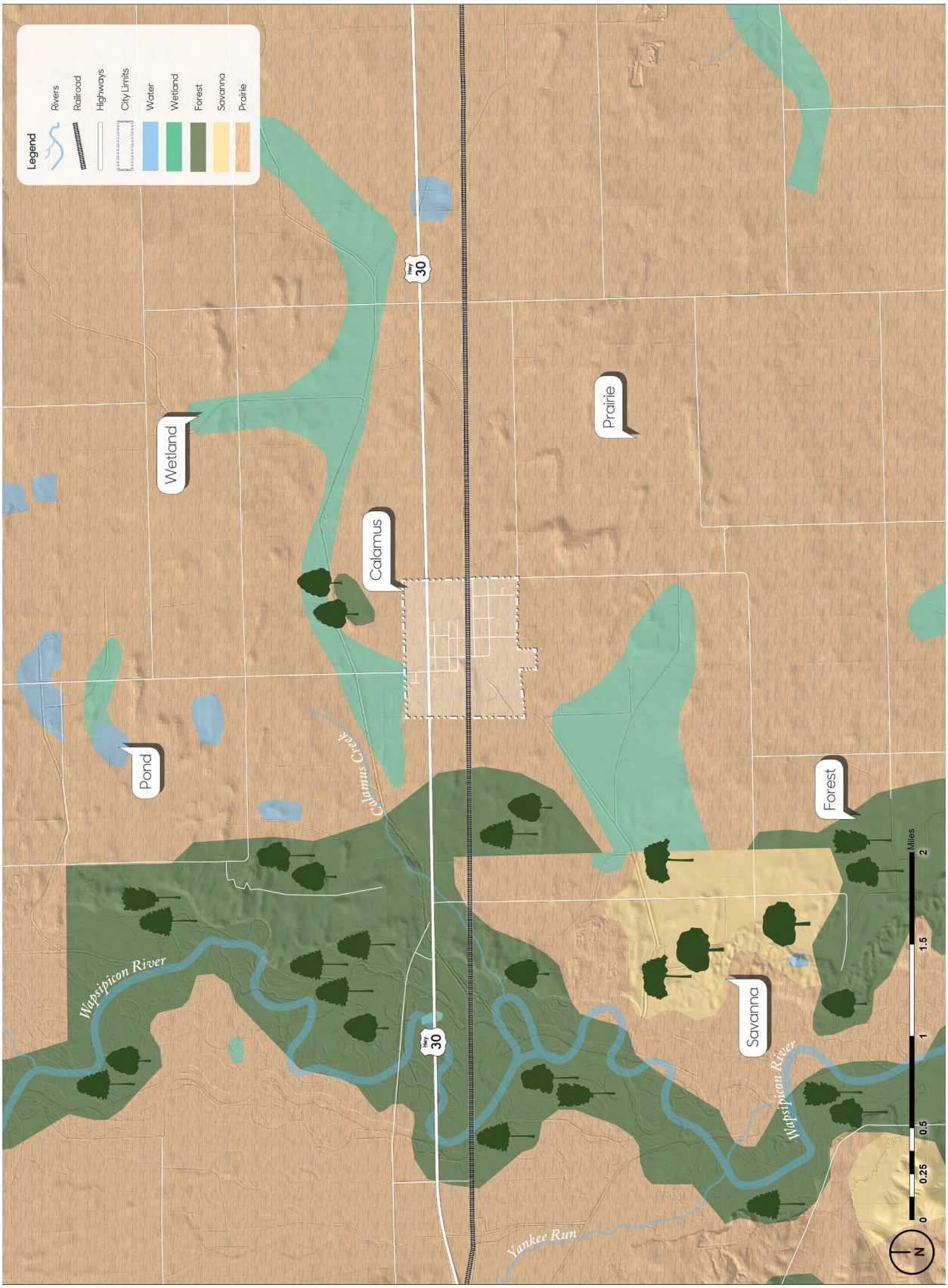
The plant community names mapped by the GLO surveyors varied. The original terminology they used has been preserved in the original data, but we have renamed them on this map to reflect names used to describe contemporary vegetation communities.

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 defined[1]:

1. Forest : Tree dominated, with a mostly closed canopy. Ground vegetation shade tolerant. developed under infrequent fire.
2. Wetland: Perennial, non-woody plants; water and fire dominated.
3. 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.

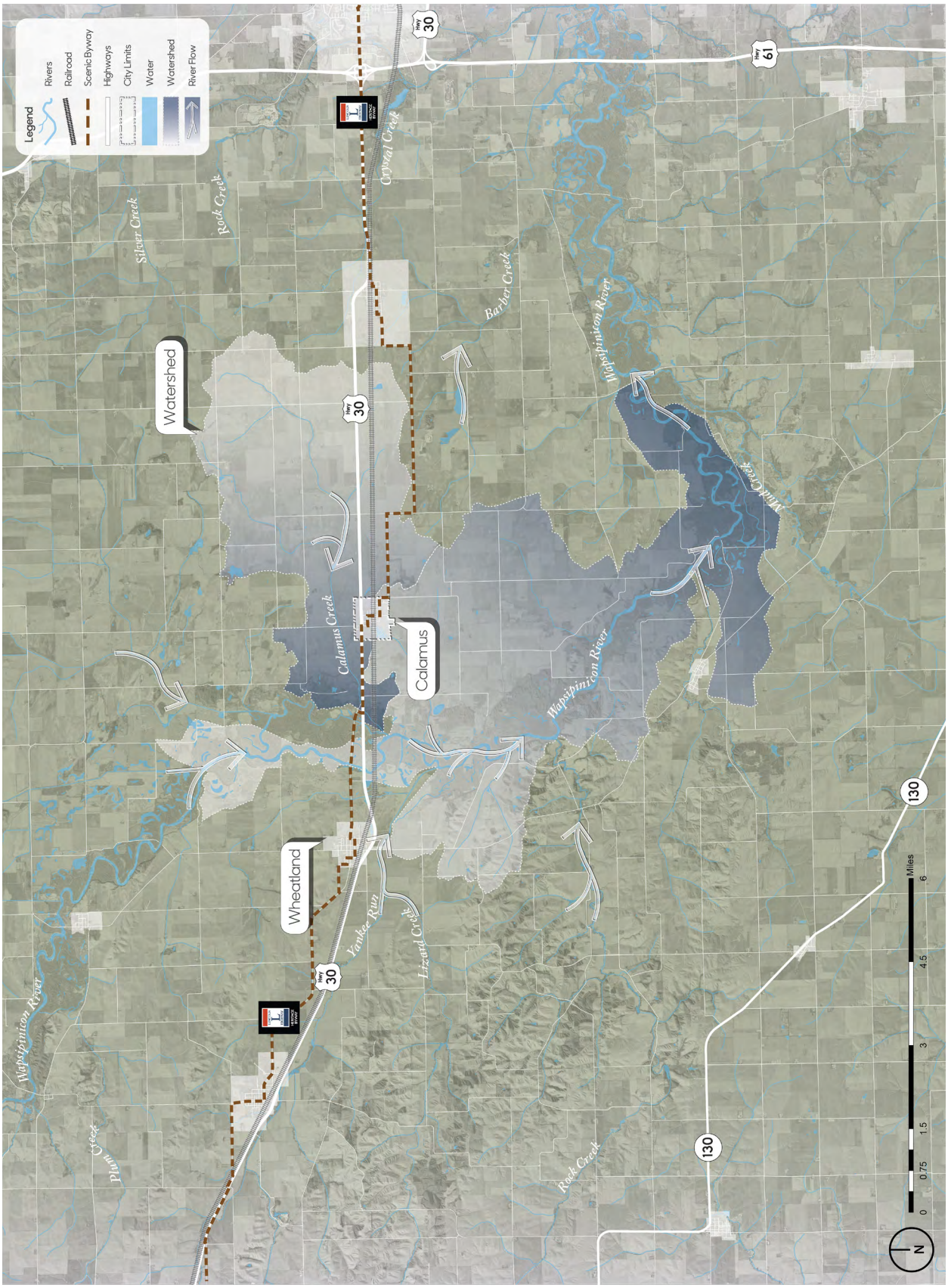

Legend
Rivers
Railroad
Highways
City Limits
Water
Wetland
Forest
Savanna
Prairie
Wetland
Prairie
Calamus
Pond
Forest
Savanna
Hwy 30
Hwy 30
Wapsipicon River
Calamus Creek
Wapsipicon River
Yankee Run
Miles
0
0.25
0.5
1
1.5
2
N

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.

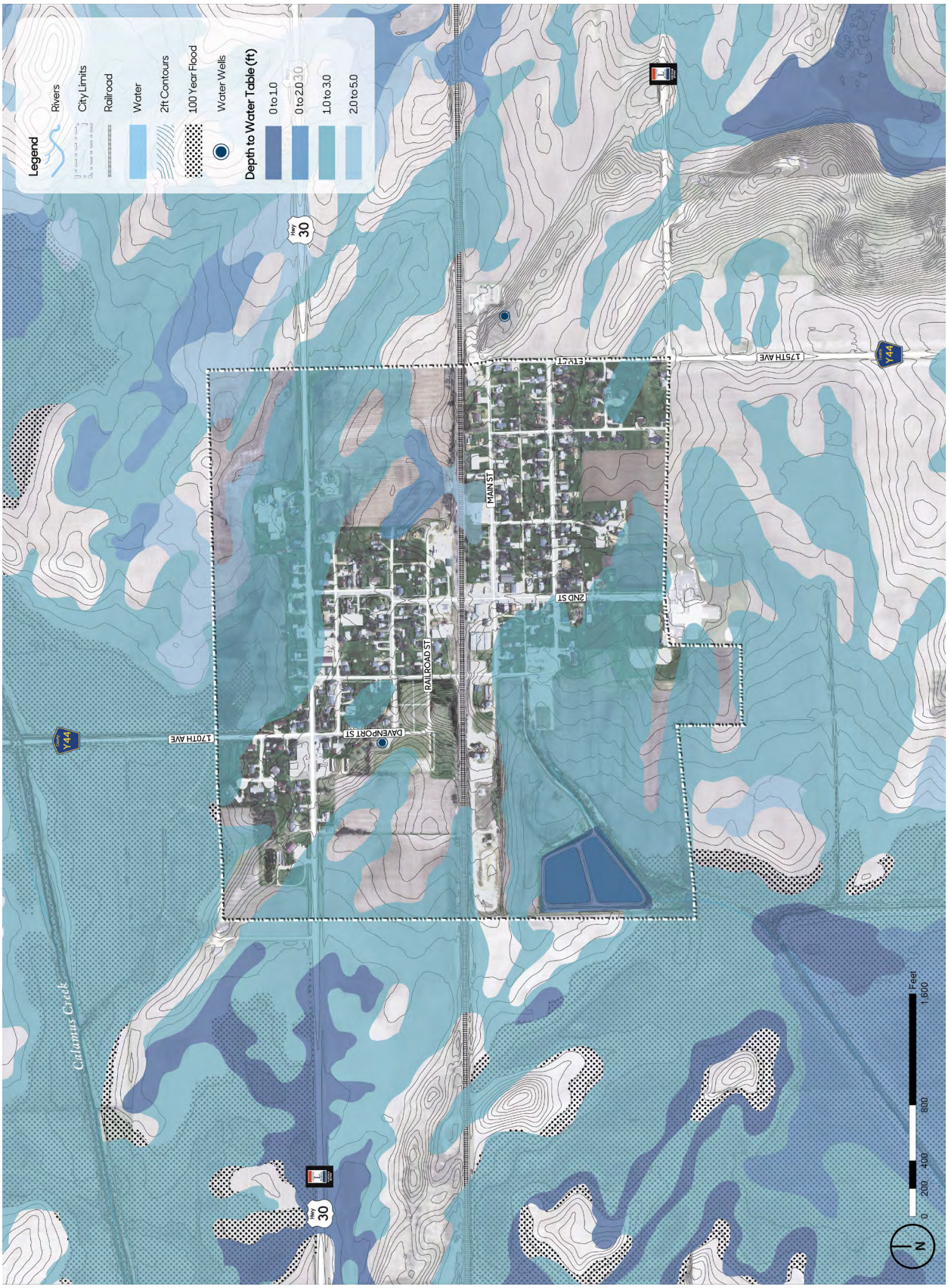

Legend
Rivers
Railroad
Scenic Byway
Highways
City Limits
Water
Watershed
River Flow
Watershed
Wheatland
Calamus
Hwy 30
Hwy 61
130
Silver Creek
Rock Creek
Orpwat Creek
Barber Creek
Wapsipinicon River
Calamus Creek
Yankee Run
Lizard Creek
Plum Creek
Miles
0
0.75
1.5
3
4.5
6
N

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 looding, even if there is no surface water draining to the area.

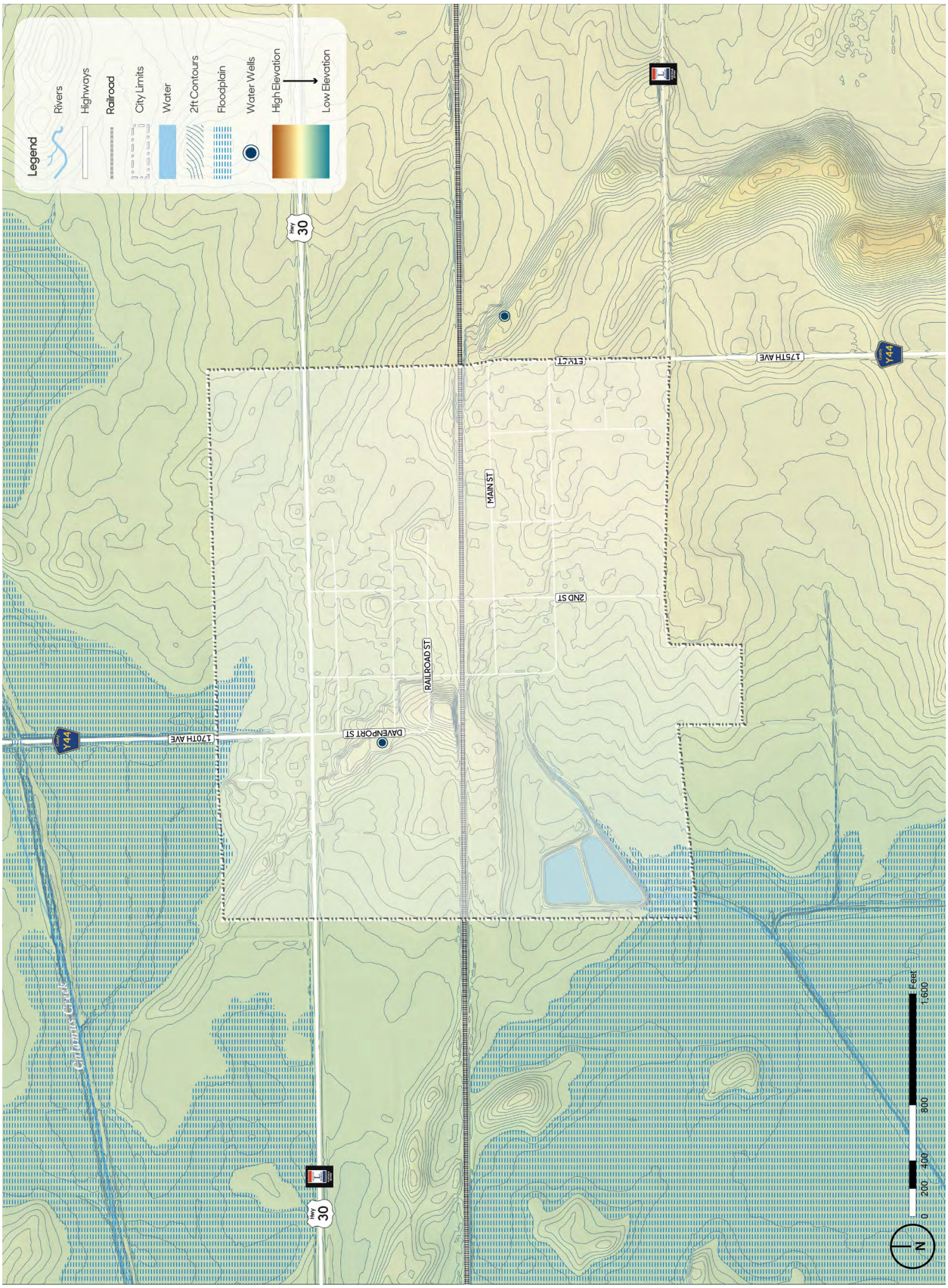

Legend
Rivers
City Limits
Railroad
Water
2ft Contours
100 Year Flood
Water Wells
Depth to Water Table (ft)
0 to 1.0
0 to 2.0
1.0 to 3.0
2.0 to 5.0
Hwy 30
Y44
170TH AVE
175TH AVE
DAVENPORT ST
RAILROAD ST
MAIN ST
2ND ST
ELM CT
Calamus Creek
Feet
0
200
400
800
1,600
N

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.


Legend
Rivers
Highways
Railroad
City Limits
Water
2ft Contours
Floodplain
Water Wells
High Elevation
Low Elevation
Hwy 30
Hwy 30
Hwy 30
Y44
Y44
170TH AVE
175TH AVE
ELK CT
MAIN ST
2ND ST
RAILROAD ST
DAVENPORT ST
Cedar Creek
0
200
400
800
1600
Feet
N

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.

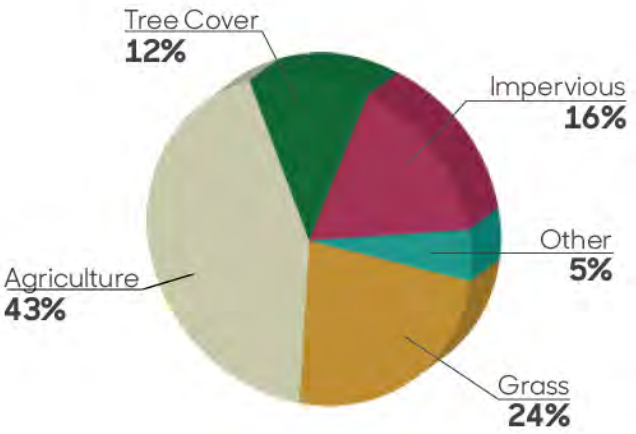
What do you observe about the dominant landcover types in your community?

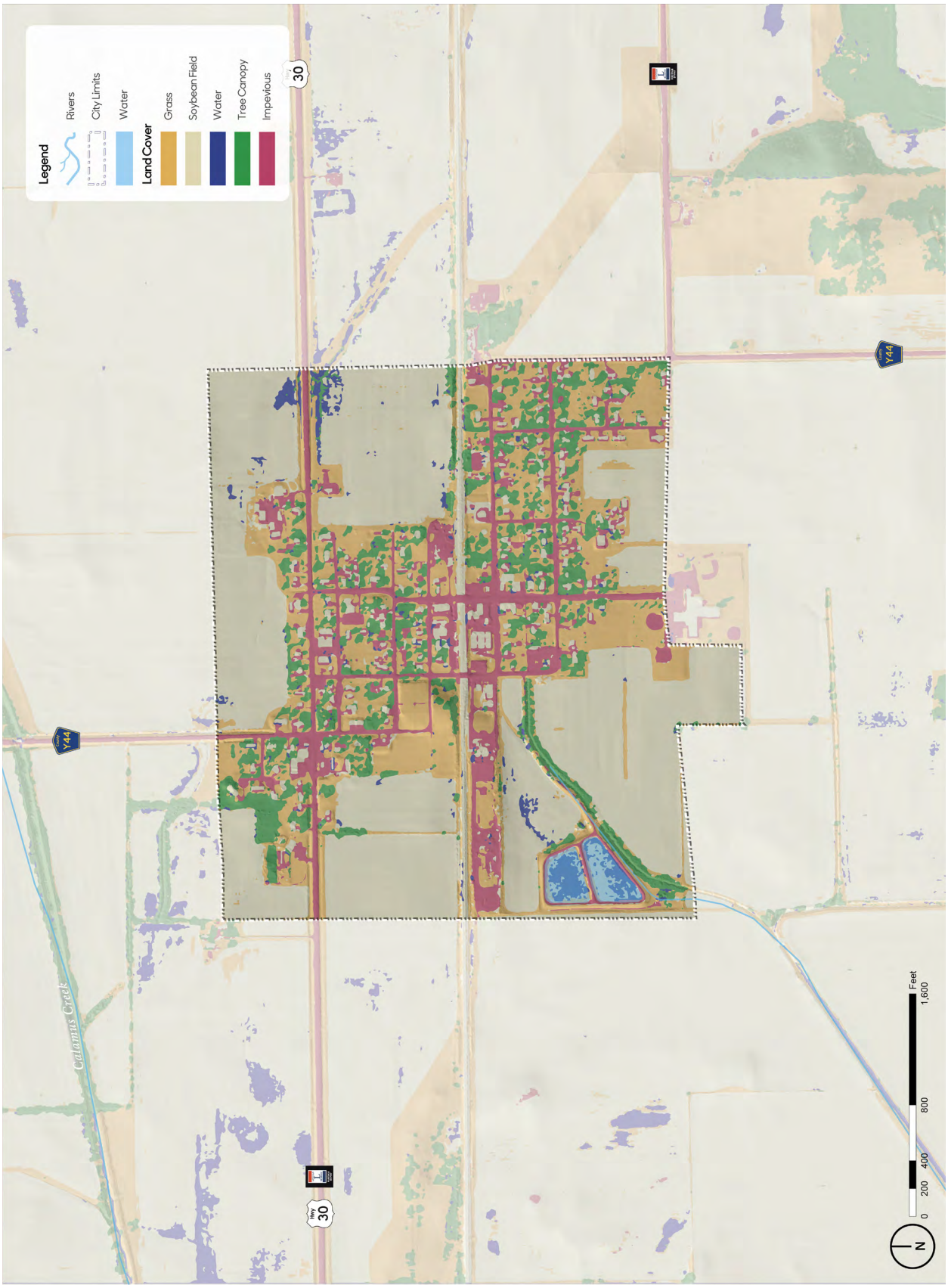
Where is the tree canopy most concentrated?

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




Legend
Rivers
City Limits
Water
Land Cover
Grass
Soybean Field
Water
Tree Canopy
Impevious
30
Y44
Calamus Creek
Feet
0
200
400
800
1,600
N

Landscape Change Over Time

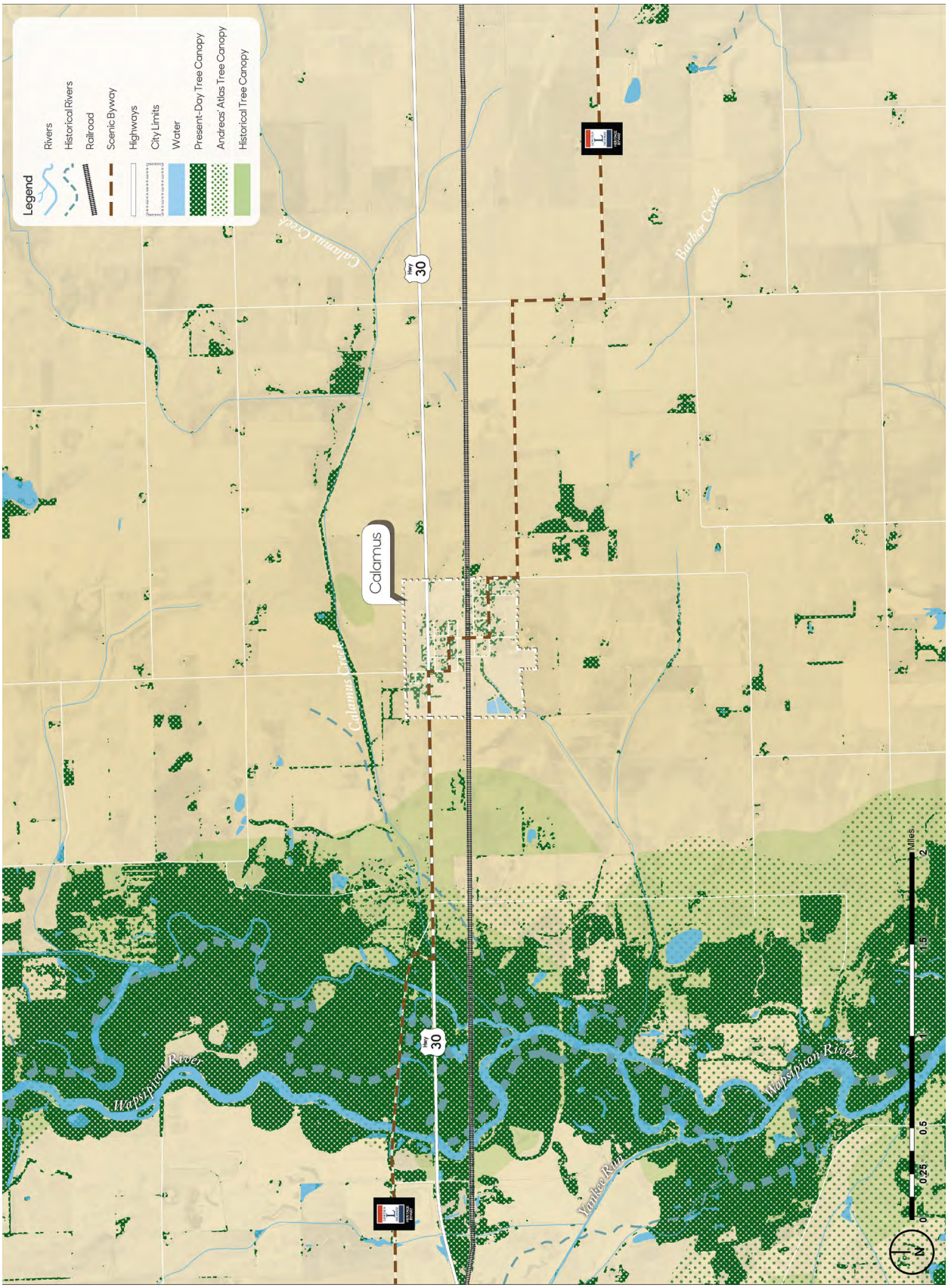
The map on this page shows how the landscape has changed over time, with an emphasis on vegetation and drainageways.[1] The map is helpful for understanding how landscapes change and considering how these changes might affect how well the landscape works to support human and ecological needs.

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?

1 This 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*.


Legend
Rivers
Historical Rivers
Railroad
Scenic Byway
Highways
City Limits
Water
Present-Day Tree Canopy
Andreas' Atlas Tree Canopy
Historical Tree Canopy
Calamus
Calamus Creek
Barber Creek
Wapsipinicon River
Yankee Run
Hwy 30
Miles
0
0.25
0.5
1
1.5
2
N

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 Calamus, 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 Calamus'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 Calamus residents with different transportation needs to participate in focus groups. A total of 34 residents attended Calamus's workshop. Participants were separated into five user groups and the Calamus 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

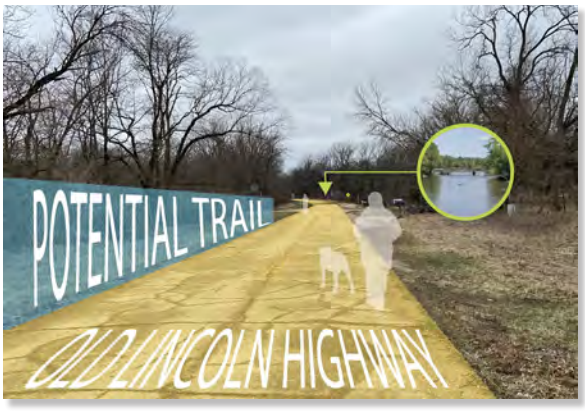
This group uses primarily non-motorized modes of transportation, so pedestrian- and bike-friendly streets and sidewalks are important. These users value the ability to get to destinations on foot or via bicycle and having goods and services within walking distance.

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.



The old Lincoln Highway has potential to be a nice recreational trail in Calamus.

The sidewalks along 2nd Street are narrow, broken, and inconsistent causing residents to walk in the street.

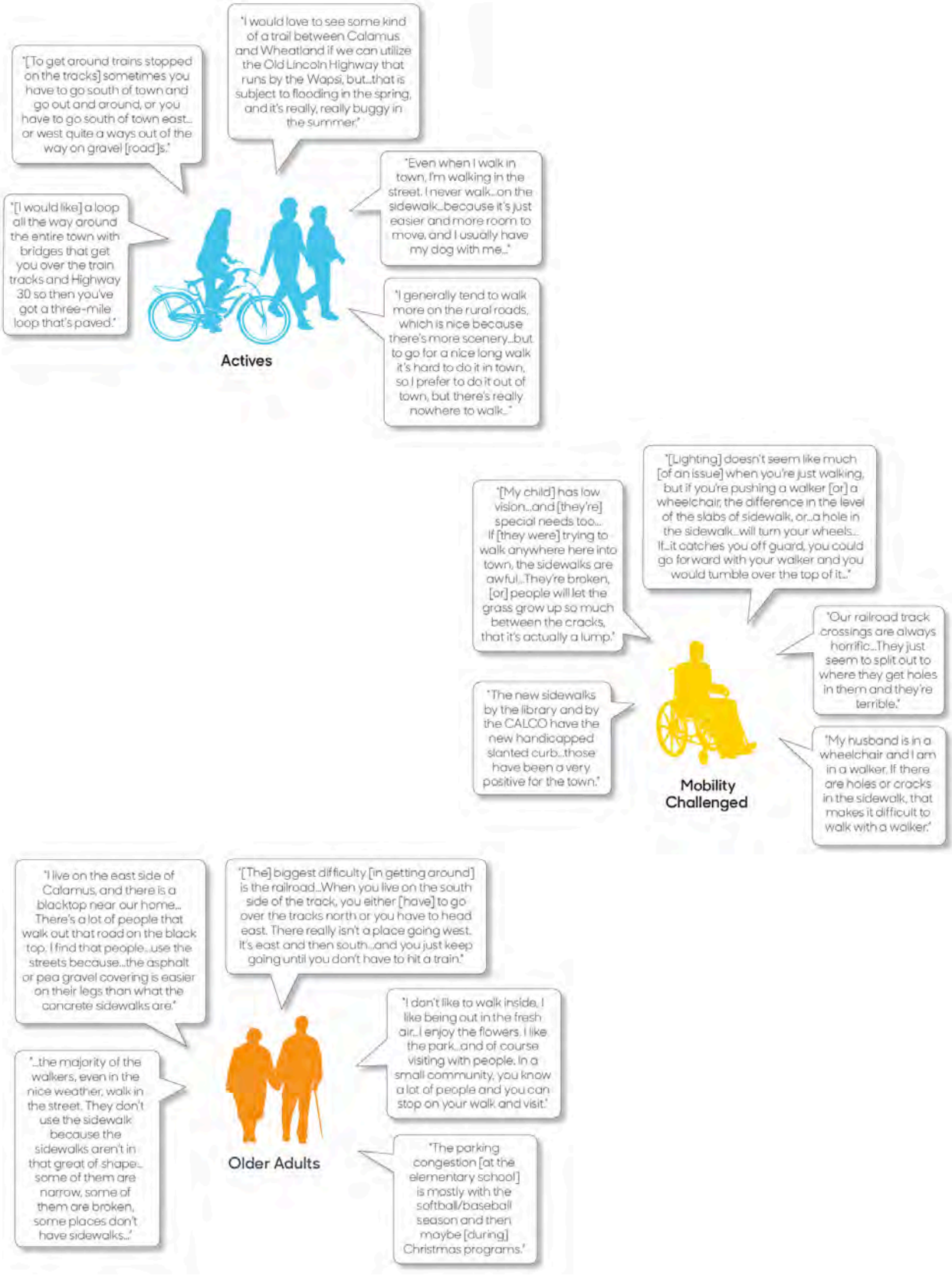
Main Street is a popular destination with a variety of businesses. There is good visibility at the intersection of 2nd and Main Streets.

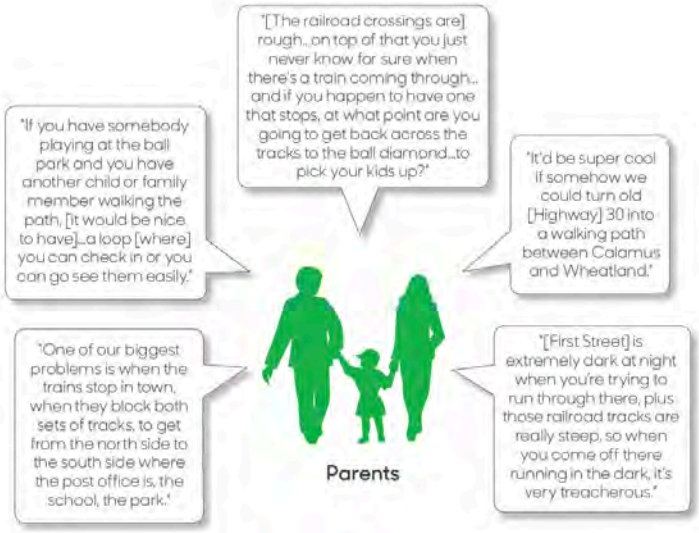
The railroad crossing at 1st Street is difficult to cross safely because of the rough surface, steep incline, lack of visibility, and train stoppages.

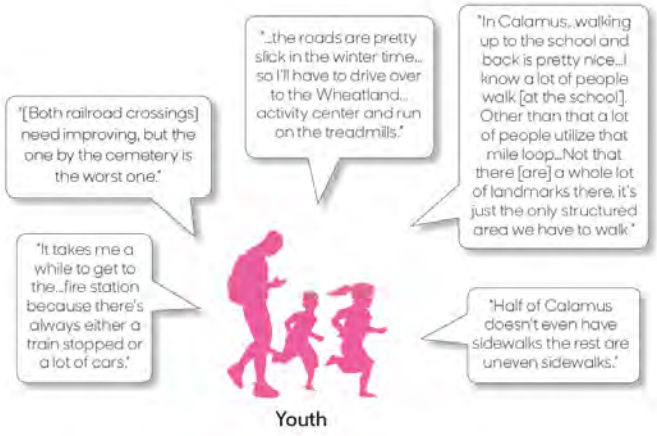
Grove Street has smooth surfaces and is an actively used loop for pedestrians.

The corner of Main and 5th Street is sharp, making it difficult to see oncoming traffic while biking.

What People Said




"[The railroad crossings are] rough...on top of that you just never know for sure when there's a train coming through... and if you happen to have one that stops, at what point are you going to get back across the tracks to the ball diamond...to pick your kids up?"
"If you have somebody playing at the ball park and you have another child or family member walking the path, [it would be nice to have]...a loop [where] you can check in or you can go see them easily."
"It'd be super cool if somehow we could turn old [Highway] 30 into a walking path between Calamus and Wheatland."
"One of our biggest problems is when the trains stop in town, when they block both sets of tracks, to get from the north side to the south side where the post office is, the school, the park."
"[First Street] is extremely dark at night when you're trying to run through there, plus those railroad tracks are really steep, so when you come off there running in the dark, it's very treacherous."
Parents


"[Both railroad crossings] need improving, but the one by the cemetery is the worst one."
"...the roads are pretty slick in the winter time... so I'll have to drive over to the Wheatland... activity center and run on the treadmills."
"In Calamus...walking up to the school and back is pretty nice...I know a lot of people walk [at the school]. Other than that a lot of people utilize that mile loop...Not that there [are] a whole lot of landmarks there, it's just the only structured area we have to walk."
"It takes me a while to get to the...fire station because there's always either a train stopped or a lot of cars."
"Half of Calamus doesn't even have sidewalks the rest are uneven sidewalks."
Youth


"All the other roads are very residential [with] pretty slow-moving cars for the most part...People do feel pretty safe walking down the street with their kids in strollers or a group or a couple adults or an adult and a couple kids."
"...from the park to the school, I don't think there are any streetlights that I can think of. So, when you have a night softball...or...baseball game, or a concert,...you would be walking in the dark..."
"...It would be awesome to have a walking or bike path between Calamus and Wheatland."
"There's definitely a favorite route that most...people [walk], and that's Grove Street and Main Street; [they] make that big loop almost like a parade route. I think that gets used a lot because it goes past the park and the campground."
"...I really like to walk down the road that goes through the cemetery because it's just a little bit more scenic, it's a little bit hilly, and there [are] trees and flowers all over..."
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 run, walk, and bike regularly for recreation, sports training, and getting around town. They appreciate the trails in the area, especially those at Sherman Park and Mock Ridge.

Mobility-challenged individuals' modes of transportation are primarily driving and walking. Smooth and wide surfaces are essential for this user type. This group walks on the street because of the poor condition of the sidewalks.

Older adults use various modes of transportation, including driving, walking, biking, motorcycling, and driving gators. This group appreciates smooth and connected sidewalks.

Youth walk around town. Older youth also drive. They enjoy playing in City Park on the playground equipment and at the sports fields. However, they are not content with the state of the playground equipment.

Parents drive, bike, walk, and ride golf carts around town. One significant concern identified by this group was the poor conditions and lack of connectivity in sidewalks around town. The safety surrounding poor lighting at night was another major concern from this group. They value the amenities and activities at City Park.

Steering committee members mainly walk, drive, and drive golf carts around town. They expressed concerns about the conditions and lack of sidewalks throughout Calamus. This group would like to see more beautification in the town.

User Types	Destinations and Activities			Desirable Qualities and Features			Undesirable Qualities and Features					Most Desired Improvements and Activities			
	Walking Loops	Trails	City Park	Natural Scenery	Lighting	Wide & Smooth Sidewalks	Issues Caused by Railroad	Incomplete Sidewalks	Poor Visibility	Lack of Connectivity	Absence of Parking	Pedestrian Trails	Town Beautification	Sidewalks & Roads	Pedestrian Crossing at RR
Actives	●	●	●	●		●	●	●	●	●		●			●
Mobility Challenged	●		●		●	●	●	●	●	●	●	●		●	
Older Adults			●	●		●	●	●			●		●	●	
Youth	●		●	●		●	●	●	●	●	●	●	●	●	
Parents	●	●	●		●		●	●	●		●	●	●	●	●
Steering Committee	●	●		●	●		●	●	●	●	●	●	●		●

- **Walking Loops:** Residents identified two walking loops within town that they like. The most popular route is a one-mile loop on Main, 5th, Grove, and 1st Streets. Active users sometimes expand the route to the north using 2nd and Winter Streets, creating a two-mile loop.
- **Trails:** Active adults, parents, and the steering committee all stated the significance of trails in their community. The active adults group enjoys utilizing Mock Ridge Trail and Sherman Park Trail.
- **City Park:** Multiple groups such as older adults and parents mentioned how City Park is visually pleasing and offers a variety of amenities. Families enjoy bringing their kids to play on the playground and the sports fields. Older adults like walking their dogs at the park.
- **Natural Scenery:** Residents appreciate the natural scenery when walking. The steering committee, youth, and older adults enjoy the presence of flowers and trees along a trail or walking path.
- **Lighting:** Participants like to walk in well-lit areas because they feel safer, especially at night. Mobility-challenged people feel safer on illuminated streets.
- **Wide & Smooth Sidewalks:** Nearly all user types mentioned their desire for smooth and wide sidewalks. Mobility-challenged individuals consider the sidewalks on 2nd street an asset because they are wide.
- **Issues Caused by Railroad:** The railroad through town is problematic for all user types because stopped trains block traffic. Both crossings in town are rough and difficult to cross, especially the one at 1st Street, which is on an incline. The steering committee noted that the train whistle is loud.
- **Incomplete Sidewalks:** Participants identified Grove Street, 2nd Street, and US 30 as places where sidewalks are incomplete. The poor condition of these walking paths makes it difficult for the mobility challenged to navigate with walkers.
- **Poor Visibility:** Residents encounter many blind spots across town, such as the intersection of US 30 and Y44, the hill along Lincoln Hwy, and the sharp curve on Grove Street. Lack of streetlights around the school, the CALCO building, City Park, and the cemetery also causes visibility issues.
- **Lack of Connectivity:** Calamus has very few paths for distance running or long walks. The shoulders of the roads are too narrow, making them unsafe to travel on. The steering committee and active adults discuss the lack of distance running courses for the cross-country team.
- **Absence of Parking:** Parking is a challenge at the elementary school, especially during events. The mobility challenged experience parking issues when visiting the City Park, and the youth mentioned a lack of parking along Main Street, such as at Steffen's Tap.
- **Pedestrian Trails:** The steering committee, mobility challenged participants, parents, youth, and actives suggested adding more trails throughout Calamus. Many residents would like to see a trail connecting Calamus to Wheatland.
- **Town Beautification:** Community members would like to see upgrades across the town. The steering committee suggested a beautification project, such as planting perennials as a community. Parents and youth would like to see more green spaces to spruce up the town.
- **Sidewalks & Roads:** Participants would like to see a complete sidewalk system throughout town and existing sidewalks, such as those on Grove Street, repaired.
- **Pedestrian Crossing at RR:** Steering committee members, actives, and parents would like to see a crossing installation or a pedestrian bridge over the railroad tracks. People also mentioned making the town a quiet zone for trains passing.

Transportation Behaviors and Needs

Overview

The survey gives the visioning steering committee objective, representative information for the goal-setting phase of community visioning. The quantitative data collected from survey responses complements the qualitative information gathered from the focus groups at the transportation assets and barriers workshop.

The modes of transportation that residents use and the routes they take suggest suitable types of transportation enhancements in these areas. Having a sense for people's willingness to help either financially or with their time is important because many transportation enhancements are funded from multiple sources, including grants, private donations, in-kind contributions, and volunteers. Understanding what types of improvements are important to residents gives the committee insight into how to prioritize projects.

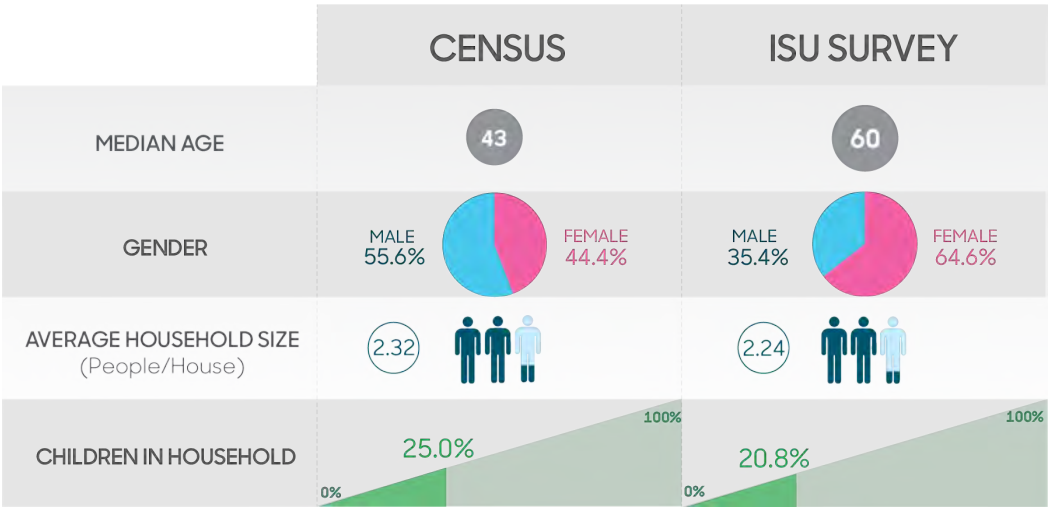
With assistance from Iowa State University's Survey Research Services staff in the Center for Survey Statistics and Methodology (CSSM-SRS), ISU visioning program staff conducted a survey to better understand the transportation patterns, behaviors, needs, and desires of Calamus residents. Surveys were mailed to 175 randomly selected residents living in Calamus and the surrounding area. To increase the response rate, the study was publicized through the local media and follow-up packets were mailed to nonrespondents. With adjustments for ineligible respondents (e.g., incorrect addresses, no longer living in the community), the final sample size was 153. A total of 79 people returned surveys, for a response rate of 51.6%. (A response rate of 20% is considered valid.)

We asked survey recipients what routes they use most often for going to work, walking, and biking. In addition, we asked what qualities and features are important during these activities. We also discovered what residents think is most important in terms of transportation enhancements that address issues such as accessibility, mobility, and safety. Finally, we learned whether or not residents are willing to contribute their time or their financial resources to making enhancements to Calamus. This series of boards summarizes the results of the survey as follows:

- Willingness to Help
- Enhancement Priorities
- Commuting Routes
- Walking Routes
- Biking Routes
- Regional Biking Routes

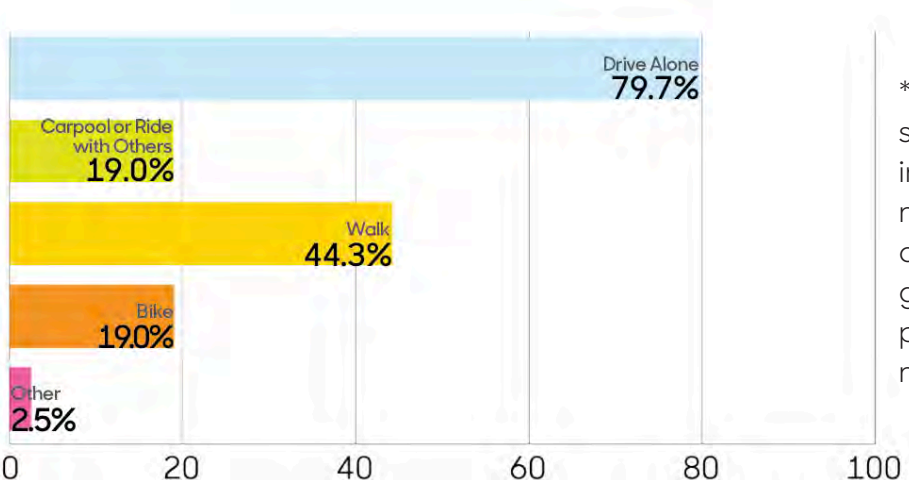
How We Did

The demographics of the respondents are somewhat different from those obtained from the 2019 American Community Survey Five-Year Estimate and the World Population Review. For example, the survey respondents median age of 60 is significantly older than the 2019 estimated average age for Calamus residents of 43. In terms of gender, the percentage of female survey respondents is significantly higher than that of the census. Average household size of survey respondents and the percentage of households with children among survey respondents are lower than those of the census estimate.



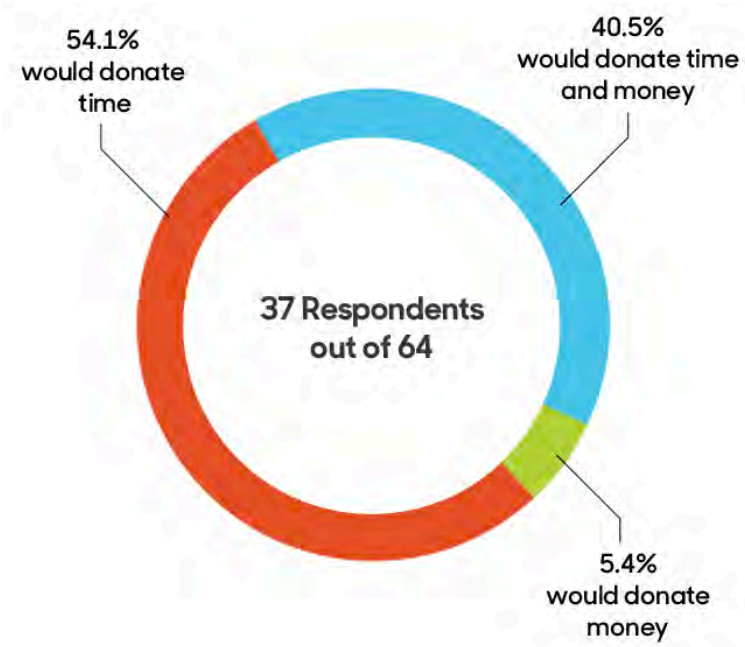
How Calamus Residents Travel

Most survey respondents drive to important destinations such as the convenience store, the post office, school, and church (79.7%). Nearly 20% carpool or ride with someone else. More than 44% of respondents indicated that they walk and 19% bike.



*Please note that some respondents indicated that they use more than one mode of transportation to get to work; therefore, percentages add up to more than 100%.

Willingness to Help



Most survey participants who answered this question are willing to contribute their time to community improvements (54.1%), while 40.5% would contribute their time and money. More than 5% of respondents indicated that they would be willing to contribute financially.

Compared to other small towns in Iowa, Calamus residents are more willing to become involved in improving their community. In 2014, on average, 43% of residents in small, rural towns volunteered to help with a community project.[1] Calamus exceeds this average by 14%.

In 2014, the most common reason residents in small-town Iowa said they didn't become involved in community projects is that no one asked them (34%). Twenty-eight percent on average said that they don't have time, which is significantly lower than the 2004 average of 59%. Sixteen percent indicated that they didn't know how to become involved, and 7% said that no community project needed volunteers.[1] These results indicate that the best ways to get people involved in community projects is to simply ask, along with advertising opportunities through traditional and social media outlets.

1 *Sigma: A Profile of Iowa Small Towns 1994 to 2014* (Ames, IA: Iowa State University College of Agriculture and Life Sciences, 2015).

Survey Participants Said...

"Our community and businesses could benefit from a 'multi-use' trail between Calamus and Wheatland. This could be used for walking, running, biking and golf carts."

"Lighting and sidewalks that you can walk on are greatly needed in this town. Currently if you want to walk on a level surface, you have to walk in the street because sidewalks are so broken and uneven."

"[A] need for Calamus & Wheatland is an eight-lane track for not only community use but C-W school to use too. It teaches the kids good practices for health & exercise plus is safe area for walking & running."

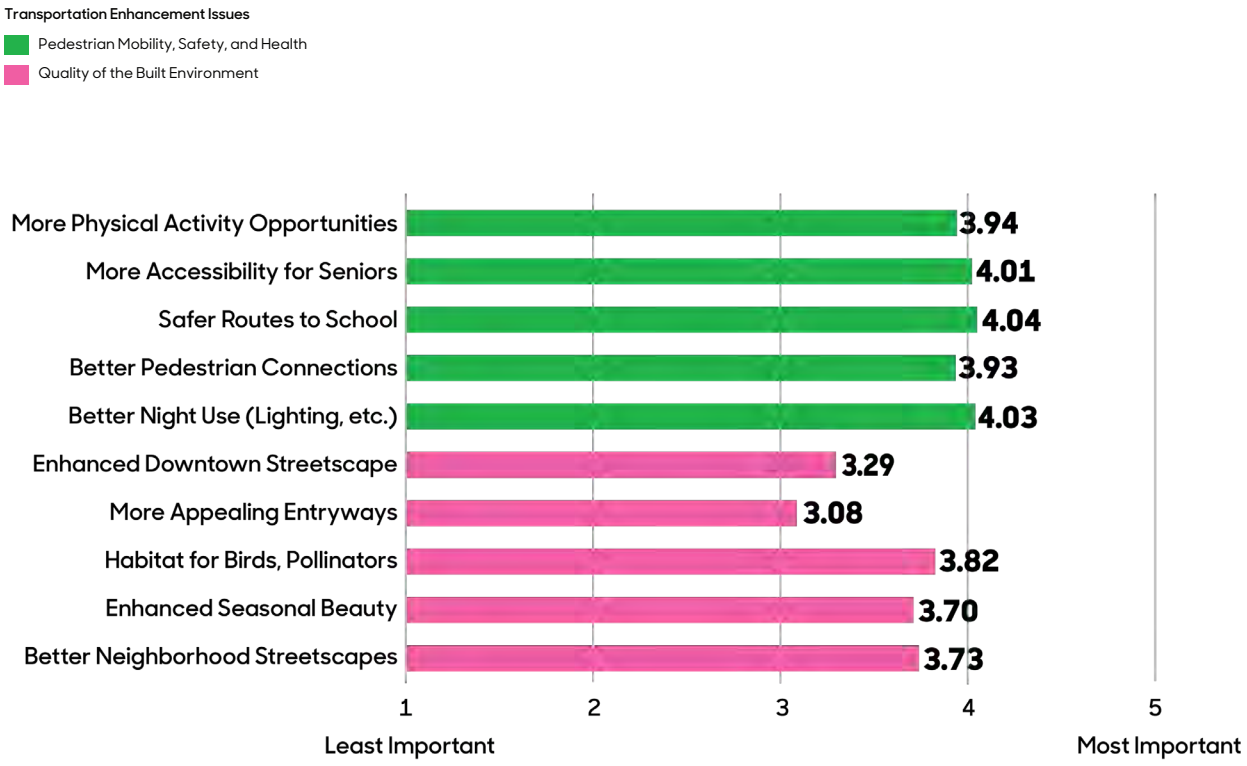
How Do You Get People to Help?
Ask, Show, and Advertise Opportunities

In 2014, the most common reason residents in small-town Iowa said they didn't become involved in community projects is that no one asked them (34%). Twenty-eight percent on average said that they don't have time, which is significantly lower than the 2004 average of 59%. Sixteen percent indicated that they didn't know how to become involved, and 7% said that no community project needed volunteers.[1] These results indicate that the best ways to get people involved in community projects is to simply ask, along with advertising opportunities through traditional and social media outlets.

2 *Sigma: A Profile of Iowa Small Towns 1994 to 2014* (Ames, IA: Iowa State University College of Agriculture and Life Sciences, 2015).

Priorities

On a scale of 1 to 5, with 5 being the most important, participants in Calamus ranked creating safer routes to school as most important, with a mean value of 4.04, followed by providing better night use (4.03). Other types of transportation enhancements that address pedestrian mobility, health, and safety are also considered important, such as improving accessibility for seniors (4.01) and providing more opportunities for physical activity (3.94). In terms of quality of the built environment, survey respondents consider creating habitat for birds and pollinators as most important (3.82), followed by better neighborhood streetscapes (3.73) and enhanced seasonal beauty (3.70).



Survey Participants Said...

"I would love to see some bike trails or walking/hiking areas that go a good distance so I could safely ride, walk or even hike."

"As a senior, I would love a walking path...I think it would be a great addition to the Calamus community and hope you would consider the needs of the senior population as well as the more active citizens."

"We need more sidewalks for our students to get safely to and from school. For many of my students they must walk on the streets to get home. [The] main problem road would be Pioneer."

"Please fix sidewalks! My daughter is legally blind and the horribly cracked sidewalks are hard for her to walk independently."

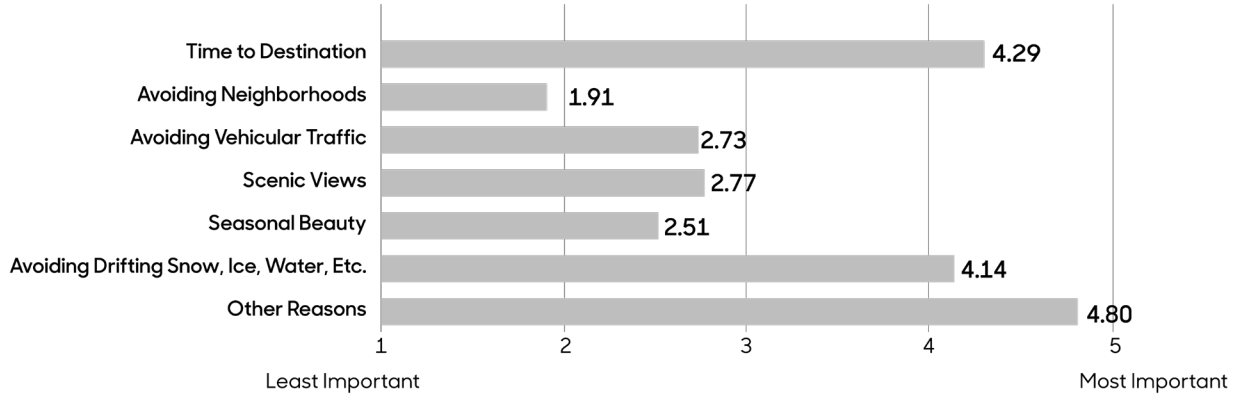
Commuting Routes

This map shows the commuting routes identified by 35 survey respondents. The frequency that the routes are used is depicted by their width, with most frequently used routes being the thickest. The primary commuting corridor in Calamus is US 30 traveling east out of town. Portions of the Lincoln Highway Heritage Byway are also heavily traveled through town, including 5th Street, Main Street, and 2nd Street. People also take the Lincoln Highway east out of town. Some people travel out of town to the west on US 30.

The circulation patterns that emerge when routes for biking, walking, and commuting are overlaid suggest suitable types of transportation enhancements. For example, where pedestrian and vehicular traffic intersect, such improvements could include creating better visibility, defining crossing points, or improving signage.

Why They Go That Way

On a scale of 1 to 5, with 5 being the most important, survey participants ranked the characteristics and features that factored into their choice of commuting route. Calamus respondents choose their routes primarily for other reasons, which include safety and avoiding stop signs and trains (mean value of 4.80). Time to destination is the next most important factor, with a mean value of 4.29. Avoiding weather-related issues such as snow and ice is also important, with a mean value of 4.14. Scenic views, seasonal beauty, avoiding traffic, and avoiding neighborhoods are not critical factors in determining commuting routes.



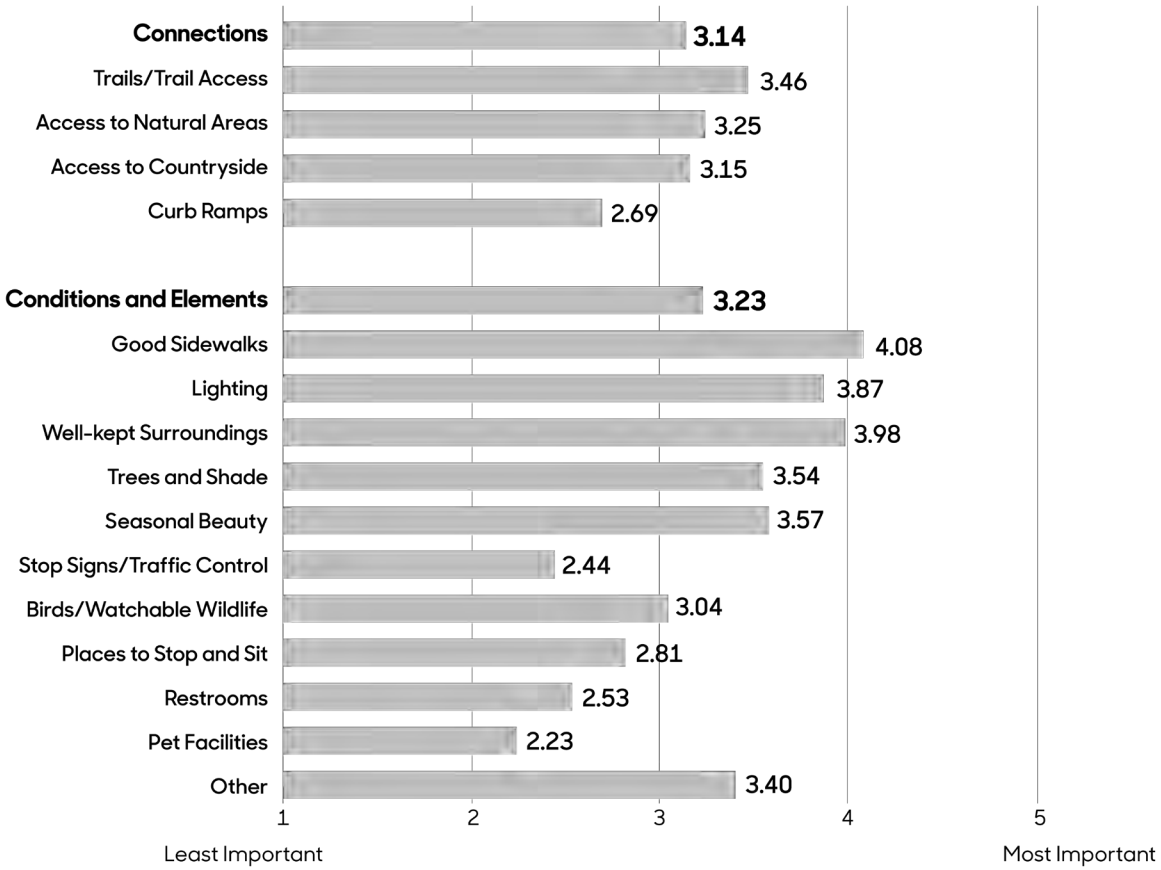

Lincoln Highway Heritage Byway
CLINTON ST
Hwy 30
WINTER ST
DAVENPORT ST
1ST ST
2ND ST
SPRING ST
RAILROAD ST
MAIN ST
GROVE ST
Commuting Routes (35 responses)
1–5 people
6–10 people
11–15 people
N
0
385
770
1,540
2,310
3,080 Feet

Walking Routes

This map shows the walking routes identified by 48 survey respondents. The frequency that the routes are used is depicted by their width, with most frequently used routes being the thickest. Walking in Calamus takes place primarily south of the railroad tracks on Grove, Main, 1st and 2nd Streets. A number of walkers make a loop consisting of Main, 5th, Grove, and 1st Streets. Some people walk east out of town along the Lincoln Highway Heritage Byway, and some go south out of town on 176th Avenue. Some walkers even walk along US Highway 30 both within and outside city limits.

Why They Go That Way

On a scale of 1 to 5, with 5 being the most important, survey participants ranked the characteristics and features that made their walking experience better. These features are categorized as either "connections" or "conditions and elements." Among Calamus participants, conditions/elements are somewhat more important than connections, with mean values of 3.23 and 3.14, respectively. In terms of connections, access to trails is most important with a mean value of 3.46. Good sidewalks (4.08) are the most important element determining walking routes, followed by well-kept surroundings (3.98) and lighting (3.87). Seasonal beauty and trees and shade are also somewhat significant (3.57 and 3.54, respectively).



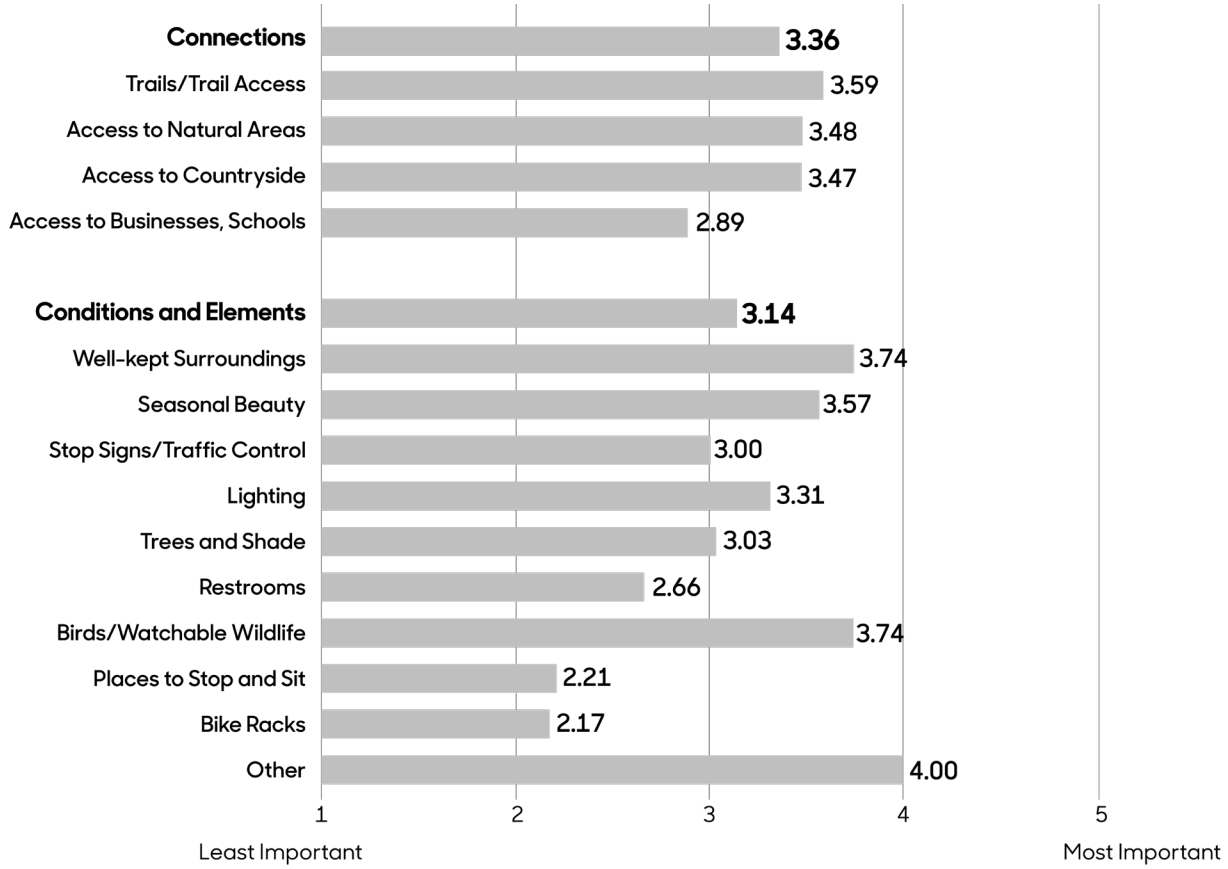

CLINTON ST
Hwy 30
US-30
WINTER ST
SPRING ST
RAILROAD ST
MAIN ST
GROVE ST
245 ST
Walking Routes (48 responses)
1-10 people
11-20 people
21-30 people
N
0
385
770
1,540
2,310
3,080 Feet

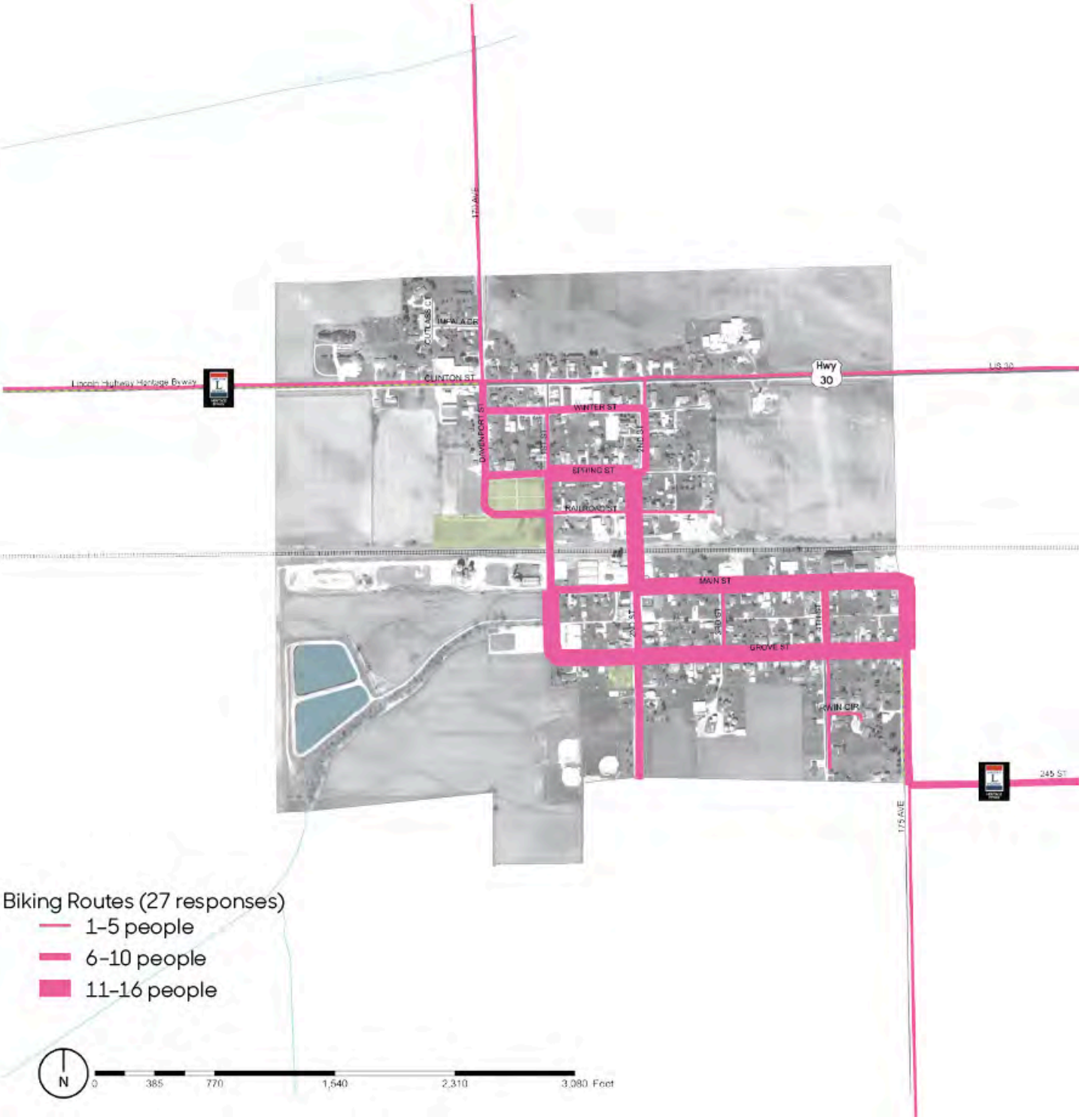
Biking Routes

This map shows the biking routes identified by 27 survey respondents. The frequency that the routes are used is depicted by their width, with most frequently used routes being the thickest. Like walkers, cyclists ride primarily south of the railroad tracks, on 1st, 2nd, 5th, Main, and Grove Streets. Some people bike east out of town on the Lincoln Highway Heritage Byway. North of the tracks, Spring Street is heavily traveled. Some bikers ride around Rose Hill Cemetery on Railroad and Davenport Streets. A few people ride along US 30 both within and outside city limits.

Why They Go That Way

On a scale of 1 to 5, with 5 being the most important, survey participants ranked the characteristics and features that made their biking experience better. These features are categorized as either "connections" or "conditions and elements." Among Calamus participants, connections are more important than conditions/elements, with mean values of 3.36 and 3.14, respectively. In terms of connections, access to trails is most important with a mean value of 3.59. In terms of conditions and elements, other factors such as access to the high school, low traffic, and smooth surfaces are most important (4.00). Well-kept surroundings and birds and watchable wildlife are significant as well, both with mean values of 3.74, followed by seasonal beauty (3.57).



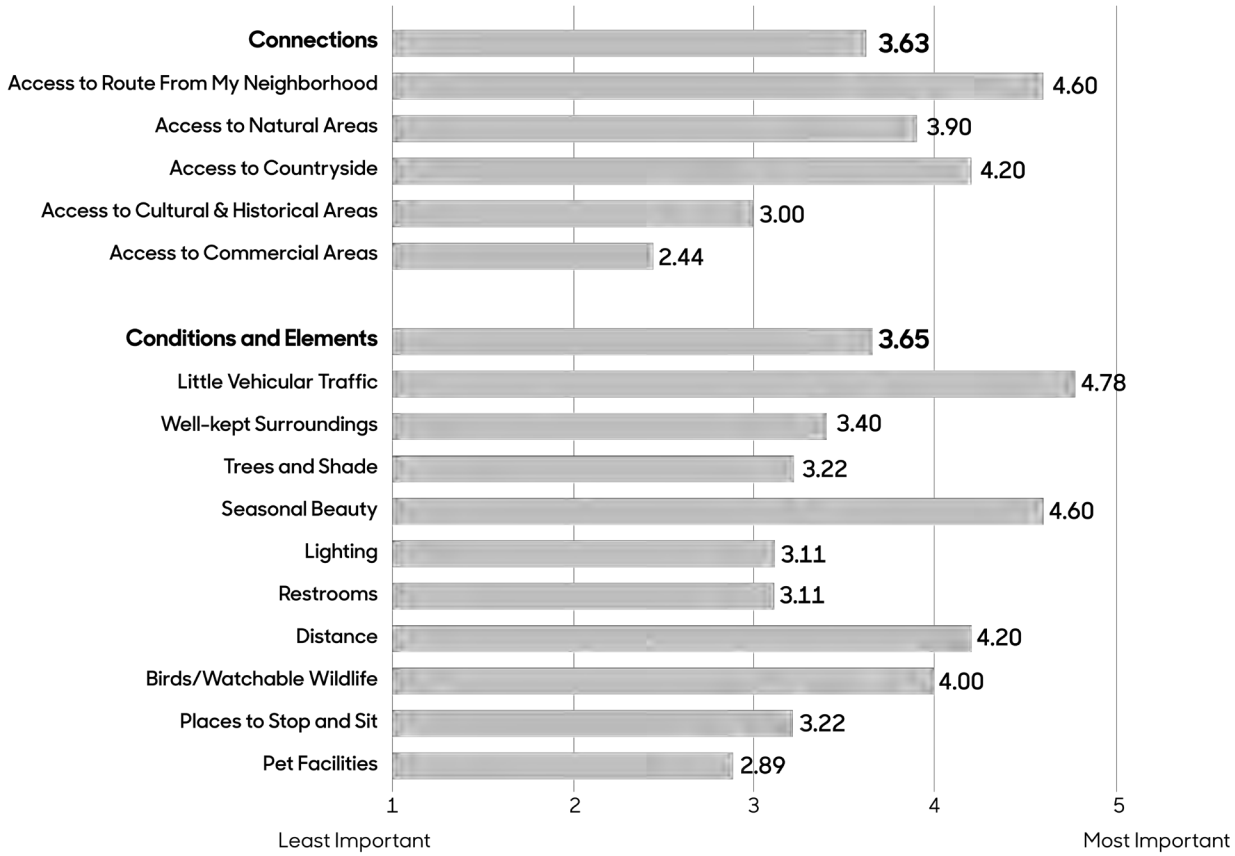

Lincoln Highway Heritage Byway
CLINTON ST
WINTER ST
8TH ST
MAIN ST
GROVE ST
RAILROAD ST
DAVENPORT ST
CUTLASS CT
IMPALA DR
IRWIN CIR
Hwy 30
245 ST
175 AVE
Biking Routes (27 responses)
1–5 people
6–10 people
11–16 people
N
0
385
770
1,540
2,310
3,080 Feet

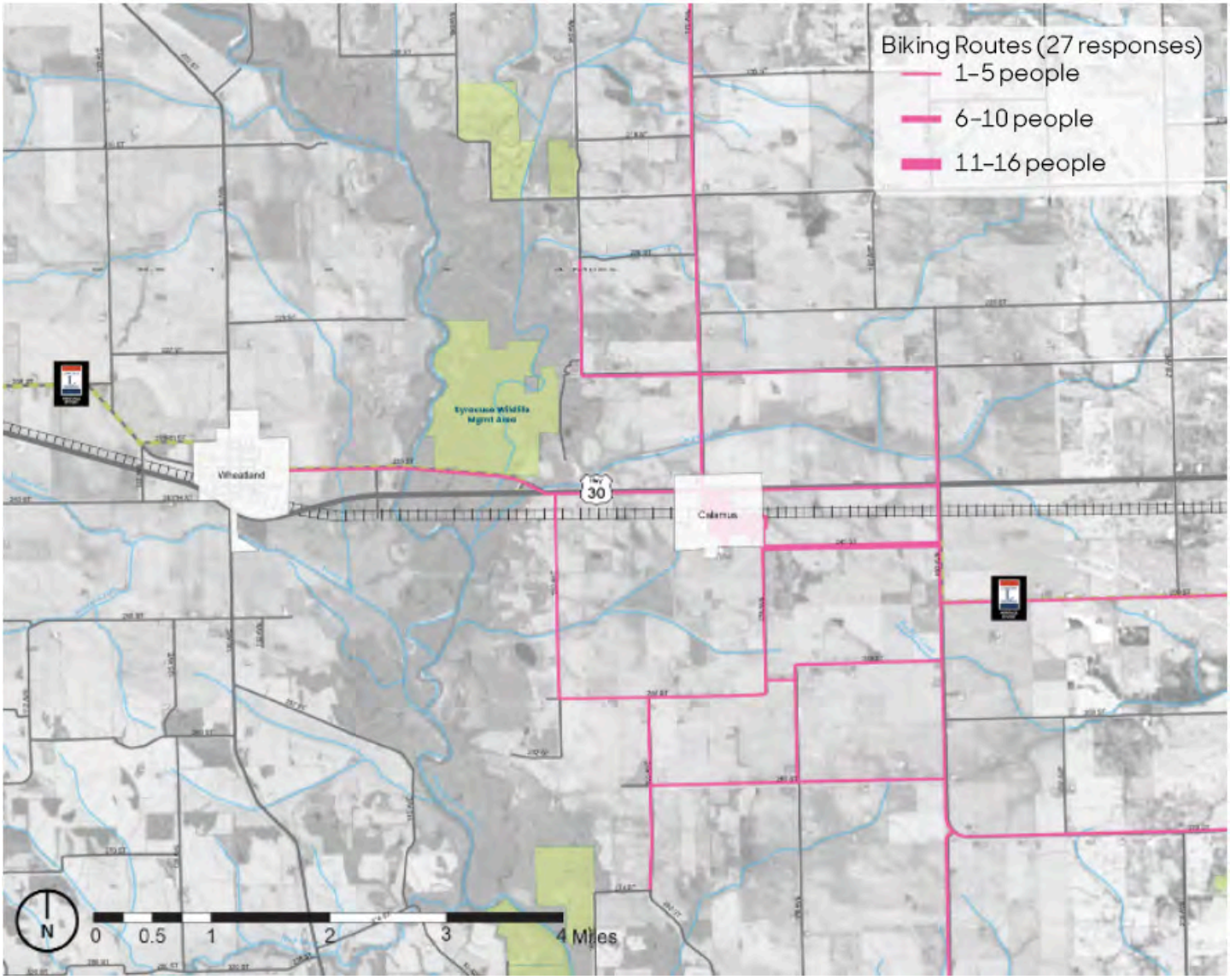
Regional Bike Routes

This map shows out-of-town biking routes identified by 27 survey respondents. The frequency that the routes are used is depicted by their width, with most frequently used routes being the thickest. Portions of the Lincoln Highway Heritage Byway are the most heavily used routes among Calamus cyclists, who bike both east out of town and west along the byway to the Syracuse Wildlife Management Area and on to Wheatland. Some people bike south to Sherman Park and some travel north to Mockridge County Wildlife Preserve.

Why They Go That Way

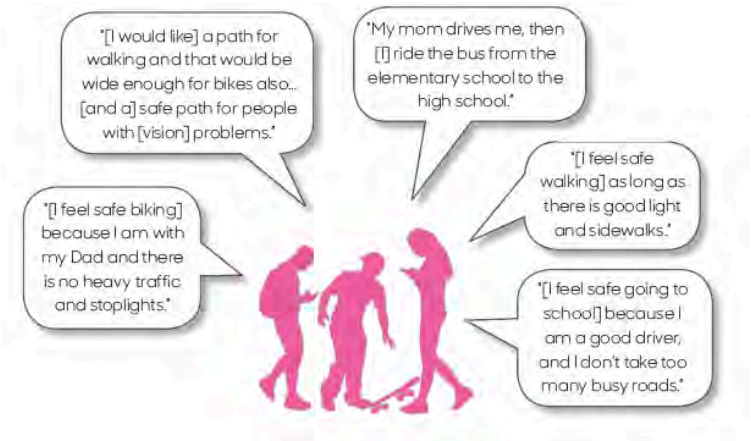
On a scale of 1 to 5, with 5 being the most important, survey participants ranked the characteristics and features that made their out-of-town biking experience better. These features are categorized as either "connections" or "conditions and elements." Among Calamus participants, connections have roughly the same importance as conditions/elements, with mean values of 3.63 and 3.65, respectively. In terms of connections, access to the route from one's neighborhood is most important with a mean value of 4.60, followed by access to the countryside (4.20). Little vehicular traffic (4.78) is the most important element to cyclists, followed by seasonal beauty (4.60), distance (4.20), and birds and watchable wildlife (4.00).




Biking Routes (27 responses)
1–5 people
6–10 people
11–16 people
Wheatland
Columbus
30
N
0
0.5
1
2
3
4 Miles

High School Transportation Survey

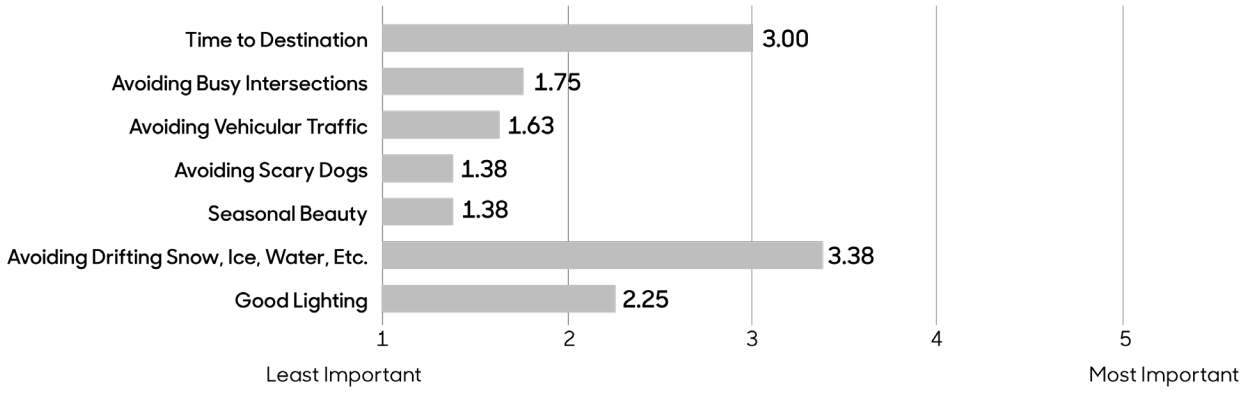
What They Said



Going to School

High school survey respondents were asked how they travel to school. The majority reported that they carpool or ride with someone else (62.5%). More than one-third indicated that they drive alone (37.2%), 25% walk to school, and 25% take the bus. Some respondents indicated that they use more than one mode of transportation to get to work; therefore, the percentages add up to more than 100%.

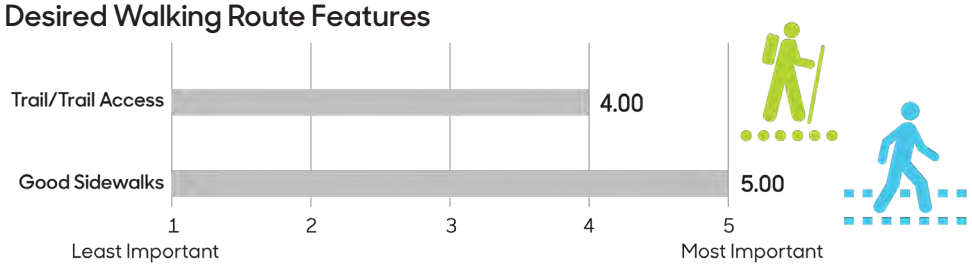
Respondents were also asked to draw the routes that they take to school on a map. These routes are included with the commuting routes identified by Wheatland residents, shown on board 4d. They were also asked to rank characteristics and features that factored into their choice of route to school on a scale of 1 to 5, with 5 being the most important. Among high school survey participants, avoiding weather-related issues such as snow and ice is the most important factor, with a mean value of 3.38. Time to destination (3.00) is the second most important factor determining routes to school. Avoiding busy intersections and vehicular traffic, avoiding scary dogs, seasonal beauty, and lighting are not considered important.



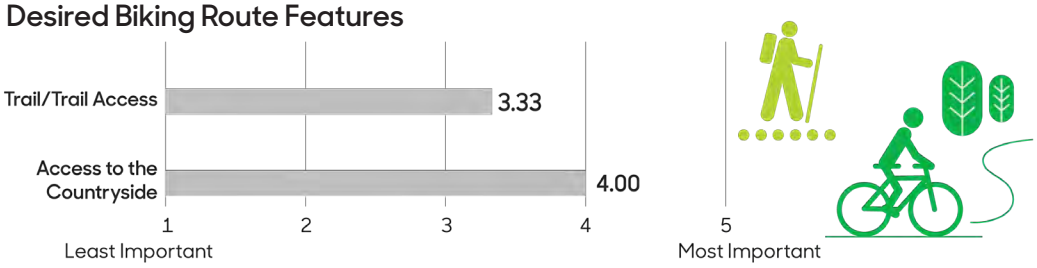
Walking & Biking

Survey respondents were asked to draw the routes that they walk and bike in town, as well as out-of-town biking routes. These routes are included with the routes identified by Wheatland residents. They were also asked to rank characteristics and features that factored into their choice of routes on a scale of 1 to 5, with 5 being the most important. The most popular features for walking, in-town biking, and out-of-town biking are summarized here.

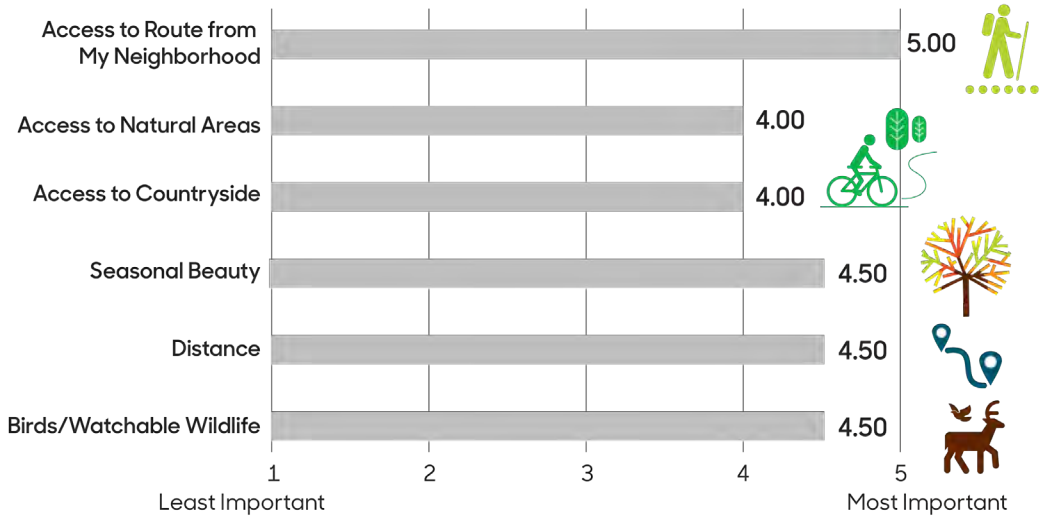
Desired Walking Route Features



Desired Biking Route Features



Desired Regional Biking Route Features



Transportation Inventory and Analysis

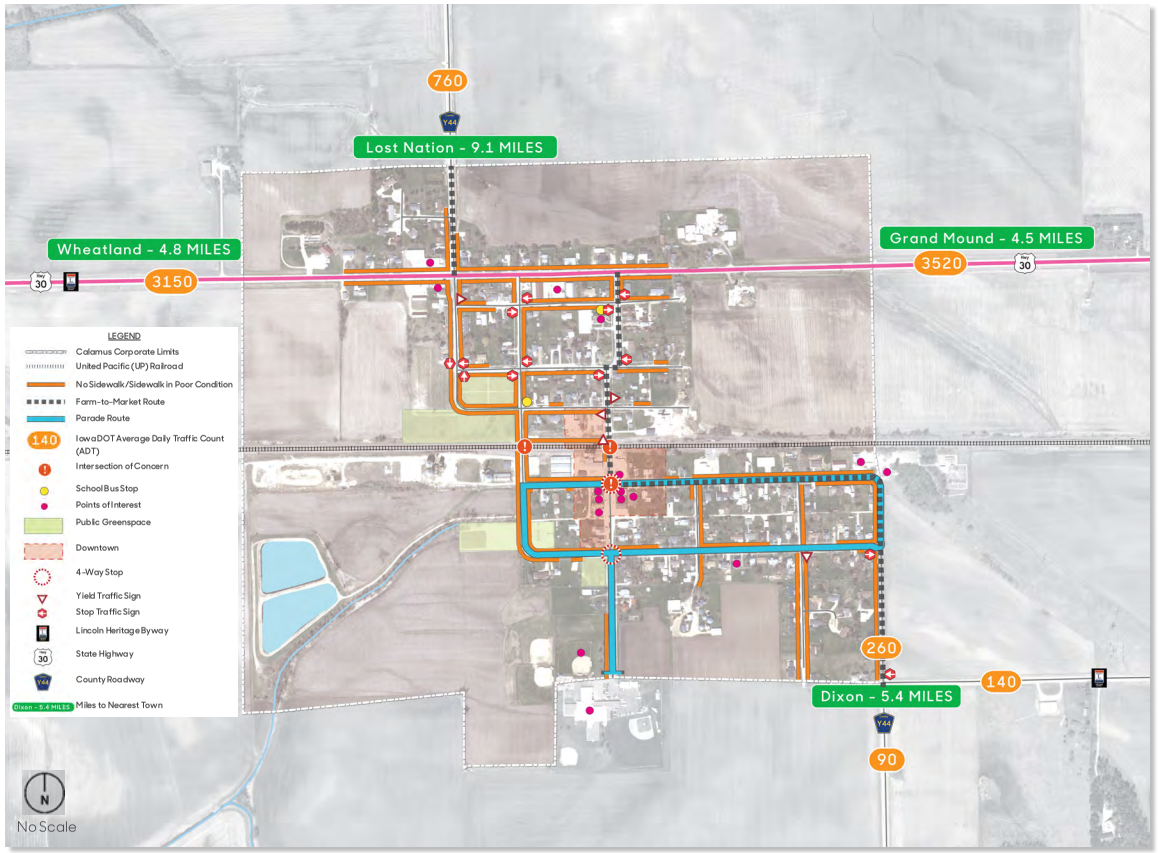
Knowledge of the transportation systems in and around a community is critical for sustainable transportation enhancement planning. Wheatland's transportation system includes roadways, sidewalks, and an active railroad.

The Calamus 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.

Several transportation-related assets and opportunities include destinations and activities such as Calmus City Park, Cal-Wheat Elementary School, the historic downtown, the Lincoln Highway Heritage Byway, and the nearby boat ramp and state-owned Syracuse Wildlife Management Area.

Items of concern related to Calamus's existing transportation system include:

- sidewalks - poor connectivity and segments that are missing, uneven, non ADA-compliant, narrow, and/or are otherwise in poor repair;
- multi-use trail - lack of a trail system within and around Calamus and between Wheatland and Calamus;
- rail-road - train horns are disruptive; pedestrian crossings are in poor repair; and periodic stopped trains on track prevent access between the northern part of Calamus and the downtown and school.
- lighting - lack of or insufficient lighting along major pedestrian and vehicular routes, especially downtown, threatens the safety of users.



Transportation Inventory Map

Transportation Inventory

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

The Calamus visioning design team met with the Clinton County Engineer, East Central Intergovernmental Association (ECIA) personnel and 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.

Several transportation-related assets and opportunities include destinations and activities such as Calmus City Park, Cal-Wheat Elementary School, the historic downtown, the Lincoln Highway Heritage Byway, and the nearby boat ramp and state-owned Syracuse Wildlife Management Area.

Items of concern related to Calamus's existing transportation system include:

- sidewalks - poor connectivity and segments that are missing, uneven, non ADA-compliant, narrow, and/or are otherwise in poor repair;
- multi-use trail – lack of a trail system within and around Calamus and between Wheatland and Calamus;
- rail-road - train horns are disruptive; pedestrian crossings are in poor repair; and periodic stopped trains on track prevent access between the northern part of Calamus and the downtown and school.
- lighting - lack of or insufficient lighting along major pedestrian and vehicular routes, especially downtown, threatens the safety of users.

Incomplete sidewalk segements contribute to poor pedestrian accessibility and connectivity

Narrow, uneven sidewalks and poor conditions of sidewalks at street crossings result in residents preferring to using the streets instead of the sidewalk due to lack of accessibility

Calamus

Transportation Inventory

FLENKER LAND ARCHITECTURE CONSULTANTS, LLC
LA: Meg Flenker, PLA, ASLA, CPESC, CPSWQ
Interns: TJ Hillberry, Paola Monllor-Torres and Ethan Morrow
Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

Goal Setting

Community Values		Broad-Based Outcomes and Goals
Accessibility and Connectivity		· Provide a complete, community-wide, ADA-compliant sidewalk system · Create a designated trail system throughout Calamus · Create a designated trail system connecting Calamus to Wheatland
Decorative Lighting		· Enhance nighttime safety and comfort of pedestrians · Highlight 2nd St. as main corridor · Strengthen place-making efforts · Design lighting to hold christmas lights, flags, and banners
Downtown Streetscape		· Reinforce city's branding and place-making efforts · Enhance the streetscape aesthetics and function · Preserve historic downtown · Improve accessibility at intersections and along west side of downtown
Way-finding Signage		· Themed way-finding signage throughout town · Clearly labeled community assets · Update street corner signs to be uniform · Reinforce city branding efforts · Entryway sign that incorporates the school colors and is easy to read
Railroad Quiet Zone		· Have the trains cease blowing their horns when crossing the tracks in town · Improve the pedestrian crossing at 2nd Street so it meets ADA-accessibility standards and is wider to accommodate the pedestrian traffic
Growth		· Expand the residential offerings in Calamus · Create more public amenities: multi-use trail and open space · Construct a full-sized football field and track for use by the Cal-Wheat school district, along with the associated parking and amenities

Why Change Anything?
· Encourage walking & cycling · Improve pedestrian circulation, safety, and accessibility · Create more recreational opportunities · Enhance pedestrian connectivity to community assets and points of interest · Connect Calamus to Wheatland
· Improve comfort and visibility for both drivers and pedestrians · Enhance streetscape aesthetics, function, and use · Help improve way-finding for visitors · Strengthen city branding through use of decorative light poles and banners
· Improve user comfort and accessibility · Attract more visitors and businesses to Calamus · Retain existing businesses · Improve the overall aesthetics
· Define & and strengthen city identity and branding · Create a better experience for visitors and those unfamiliar with area by guiding them to points of interest throughout town · Portray a unified appearance to visitors · Highlight areas of interest to passersby · Utilize school colors for way-finding signage when possible · Replace entryway signage that is needing repair with signage that requires less maintenance
· Create a more peaceful community · Improve the connectivity and safety of pedestrians
· Grow and sustain the community · Improve the connectivity and safety of pedestrians · Expand school athletic amenities needed to provide students with opportunities equal to other school districts

Community Concept Plan

The Iowa's Living Roadways Community Visioning program provides the unique opportunity for communities to receive professional assistance in grassroots community planning and design along transportation corridors. Over an approximately nine- month visioning process, Calamus residents participated in creating a concept plan (this board set) that focuses on enhancing the safety, accessibility, circulation, connectivity and aesthetics of the community.

The concept master plan to the right consists of enhancements that are based on the input received from Calamus residents throughout the visioning process. The concepts integrate the residents' various ideas and visions for improvements in such a way as to cohesively meet the values and goals expressed by the community during the TAB workshops and through surveys.

The concepts illustrated on this board set are the "big picture" ideas that show the overall design intent and provide direction for everyone involved on how all of the "pieces" will integrate to create continuity among the various projects as they become implemented over time as funding and other resources allow. The concept plan allows for long-term visioning and planning, which is essential for the community to be able to provide sustainable, functional, and beneficial improvements that are holistic and well integrated and that provide them with the best overall return on their investment.

Icons used on board 7 to symbolize community values/themes are shown on this board to denote the location(s) envisioned for the supporting enhancements to occur. The board numbers listed with it provide more information and illustrations. It is important to keep in mind that many of the locations proposed for enhancement that may or may not specifically be illustrated in this board set incorporate additional values/themes that are not specifically highlighted on this master plan.

Concept Plan Overview

The Iowa's Living Roadways Community Visioning program provides the unique opportunity for communities to receive professional assistance in grassroots community planning and design along transportation corridors. Over an approximately nine- month visioning process, Calamus residents participated in creating a concept plan (this board set) that focuses on enhancing the safety, accessibility, circulation, connectivity and aesthetics of the community.

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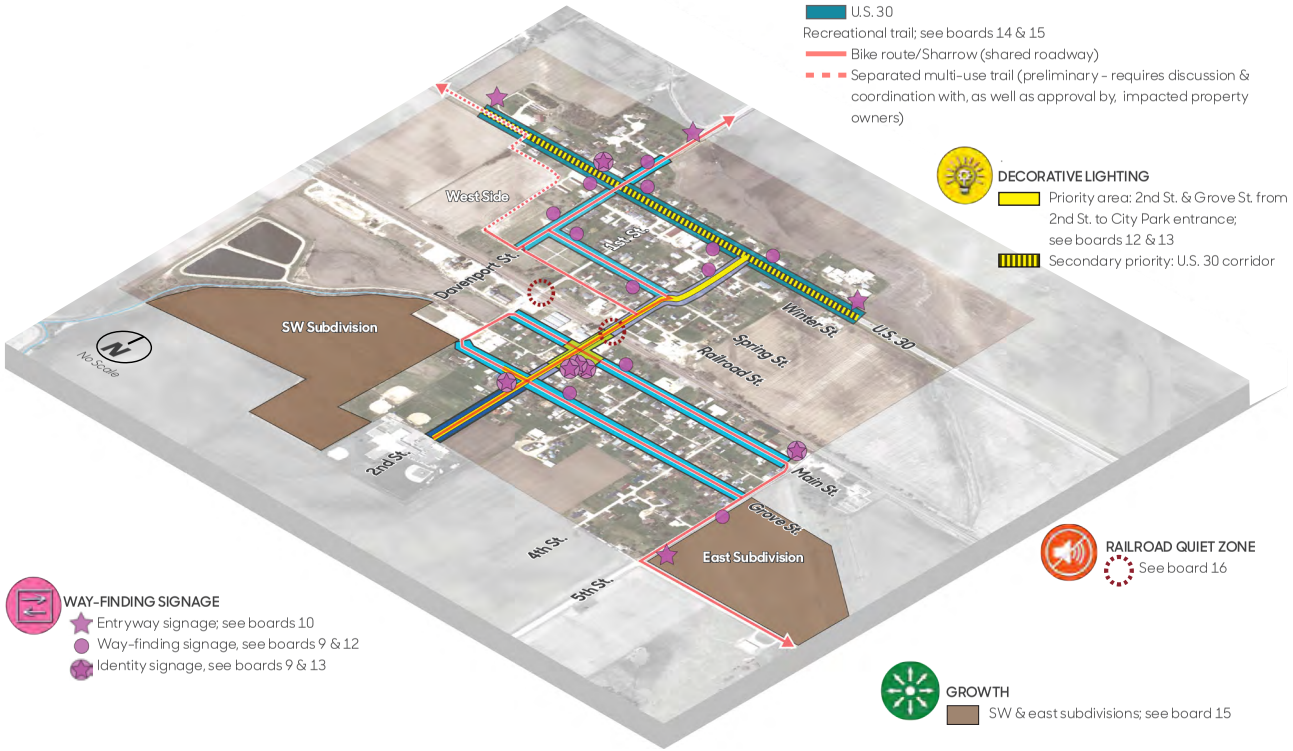
DOWNTOWN STREETSCAPE
Streetscape improvements include informational kiosk, identity signage, decorative lighting with downtown banners, accessibility and connectivity; see boards: 9, 11, 12, 13 & 14

ACCESSIBILITY AND CONNECTIVITY
ADA-compliant sidewalks; see boards 11, 12, 13, 14 & 15
- First Priority: 2nd St. (city banners on lights)
- First Priority: 2nd St. (school banners on lights)
- First Priority: 2nd St. (downtown banners on lights)
- Second Priority
- U.S. 30

Recreational trail; see boards 14 & 15
- Bike route/Sharrow (shared roadway)
- Separated multi-use trail (preliminary - requires discussion & coordination with, as well as approval by, impacted property owners)



DECORATIVE LIGHTING
Priority area: 2nd St. & Grove St. from 2nd St. to City Park entrance; see boards 12 & 13
Secondary priority: U.S. 30 corridor

RAILROAD QUIET ZONE
See board 16

WAY-FINDING SIGNAGE
- Entryway signage; see boards 10
- Way-finding signage, see boards 9 & 12
- Identity signage, see boards 9 & 13

GROWTH
SW & east subdivisions; see board 15

Calamus
Concept Plan Overview

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Iowa's Living Roadways community visioning

Cost Opinion Summary

Design Expertise Recommended

The proposed projects may require help beyond the capacity of the visioning committee or available city staff. For all proposed improvements, the committee should expect to involve additional professional design consultants, including, but not limited to landscape architects, civil engineers, structural engineers, and electrical engineers for detailed design, construction documentation, bidding assistance and construction administration services.

Coordination with other public agencies, including permitting, may be required for some projects depending on the location and scope of work. Coordination and contact should be made during the design stage and PRIOR to commencing work. Some of these agencies may include one or more of the following:

- Clinton County Engineer: Any work within and adjacent to the public right-of-way along Highway Y-44 or the Lincoln Highway
- Iowa Department of Transportation, District Engineer: Any work within and adjacent to the public right-of-way along Lincoln Highway and Highway 30
- Union Pacific Railroad: Any work within or adjacent to the railroad right-of-way
- United States Army Corps of Engineers Rock Island District: Any work (includes bridge work) within, directly adjacent to, or which may have an impact on a stream/creek and/or wetland
- Iowa Department of Natural Resources: Any work (includes bridge work) within a stream/creek, wetland, and/or floodplain, including the Syracuse Wildlife Managment Area.
- Clinton County Conservation Board: Any work within or adjacent to Clinton County Conservation areas
- Iowa Natural Resources Conservation District Office: Work within any privately owned undeveloped land

It is highly recommended that the visioning committee and city jointly reach out to East Central Intergovernmental Association (ECIA) to share with them the proposed projects and inquire about possible programs and funding opportunities that could help facilitate the implementation of each project. This should be done as soon as possible.

Project Scope and Cost Opinion

These projects and their estimated budgets are detailed in the following preliminary opinions of probable construction costs (OPC Costs). Estimates presented here are based on industry sources, previous project bid tabulations and research and are based on contracted work (includes labor, materials, and equipment necessary to do the job). Costs are presented in 2021 dollars and can be expected to escalate in subsequent years. The project scope, current bid environment, time of year, local site conditions, project

schedule, labor, and material costs may affect actual bid items and construction costs differently than presented in the estimates.

Area takeoffs, square footages, and linear footages used to calculate and quantify amounts are approximate and should be considered "ball park" intended only for general budgeting and planning purposes. In addition, because the estimates are based off of concept drawings, various assumptions were made that may impact final bid items, quantities and/or project costs . These assumptions are normally resolved during the subsequent design phase when specific site information is made available through a site survey and the design is further developed and refined and specific design details are determined, including final scope of work, dimensions, elevations, materials, and desired quality. During the design phase the OPC Cost will need be updated.

A site survey should be provided prior to the design and construction of the following projects to validate and verify the quantities shown in the various OPC Costs.

Abbreviations used in the OPC Costs costs include:

AC = Acre	EA= Each	OH=Overhead	T = Ton
AL = Allowance	LF = Linear Foot	SF = Square Foot	
CF = Cubic Foot	LS = Lump Sum	SY = Square Yard	
CY = Cubic Yard	MI = Mile	TBD = To be Determined	

The preliminary OPC Costs presented in this report are all based on the assumption that the work will be competitively bid and completed by qualified contractors. Some work items may be able to be completed by volunteers and/or city staff which may provide cost savings.

COST OPINION SUMMARY			
Description	***Opinion of Cost***		***Comments***
Way-finding Signage (Community Identity)			
Way-finding Identity Signage	$	56,828.40	*Five Signs: City Park, Downtown Pocket Park, City Hall/Library, CalCo, & Fire Station*
Way-finding Directional Signage	$	37,584.30	*One, Two, and Three Destinations*
Information Kiosk	$	47,610.00	*One for downtown*
Entryway Signage	$	60,949.08	*Representative cost - based on sign option 1*
Way-finding Signage Total*	***$***	***202,971.78***	
2nd Street Enhancements (Lighting, Downtown, 1st Priority Sidewalks)			
Second Street (Excluding Downtown)	$	618,143.40	*Decorative pedestrian and ped/vehicular combo lights; decorative crosswalks; 5' wide sidewalks*
Downtown	$	452,398.50	*Decorative pedestrian and ped/vehicular combo lights; decorative crosswalks; sidewalks; ramps;* steps and handrails
2nd Street Enhancements Total*	***$***	***1,070,541.90***	
Accessibility & Connectivity: Second Priority Sidewalks			
Davenport Street	$	125,469.60	*Removal & replacement of existing poor & fair sidewalks and extensions with 5' wide ADA sidewalks*
Spring Street	$	84,000.60	*Removal & replacement of existing poor & fair sidewalks and extensions with 5' wide ADA sidewalks*
Main Street	$	147,170.10	*Removal & replacement of existing poor & fair sidewalks and extensions with 5' wide ADA sidewalks*
Grove Street	$	171,754.80	*Removal & replacement of existing poor & fair sidewalks and extensions with 5' wide ADA sidewalks*
Second Priority Sidewalks Total*	***$***	***528,395.10***	

IMPORTANT: Estimates do not include removal of existing signage, property easements, land acquisition, utility modifications or site/boundary survey; it also does not include additional work to streets or remaining sidewalks shown on the plans as being in good condition unless otherwise noted in estimate (this includes addition of passing pads on 4' wide sidewalks to remain). The term utilities includes storm sewer, sanitary, water, and electrical. Costs assocated with permitting for projects is also not included.

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Community Identity

Overview

Community identity/branding encompasses the core elements that make a city unique and special to those who work, live, and visit. Through the visioning process the visioning committee concentrated on "visual" identity components that include: an updated city logo, unified styles for site amenities such as decorative lighting, and a complementary way-finding signage system that includes a community cap and banners.

Unified and complementary signage, lighting, site amenities (e.g. benches, trash receptacles and bike racks), as well as a city logo, can all be powerful components in successfully establishing a visually aesthetic and cohesive looking community.

Logos, together with way-finding systems, are an effective tool in creating character and a "sense of place" for a community. A city logo or seal and its repetitive use is important in creating an identity specific to Calamus, essentially "branding" the city.

Way-finding signage and light banners, as well as signage for the local park and public buildings that incorporate the city's logo and color palette, can greatly strengthen a community's identity and provide a quick visual graphic for visitors, showing where the primary streets and public places are. The use of way-finding signage like that shown on this board, especially along the U.S. 30 corridor, allows for the reduction of directional signage, which results in a cleaner and more organized look, thus reducing distractions.

In addition to banners and signage, decorative vehicular lighting along primary streets and downtown can strengthen community identity while improving the streetscape character, aesthetics, and nighttime safety. It also aids in allowing visitors unfamiliar with Calamus to navigate to the important public destinations.

Calamus citizens take great pride in having the Cal-Wheat elementary school in their community. The residents are very supportive of the school system and want to use the same Warrior blue and gray color as their city's color palette.

City Logo

The updated logo simplifies the existing one, making it easier to quickly discern. While color can be added, it is recommended by the design team that color application be done sparingly and just for the line work.

As can be seen on board 9, the logo is incorporated into the signage to increase its visibility for branding.

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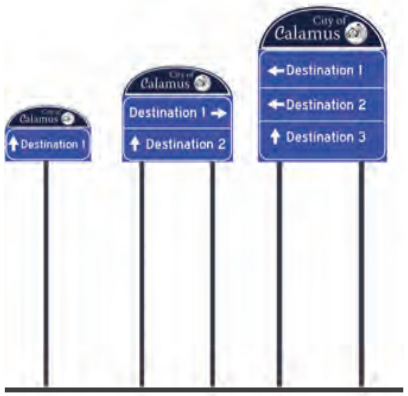
Photo 9a: Existing city logo

Concept 9b: Updated Logo

Concept 9c: Way-finding identity signage for public places



Concept 9d: Way-finding directional signage, DOT standard blue with Calamus's community cap

City Logo

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As can be seen on this board, the logo is incorporated into the signage to increase its visibility for branding.

Way-finding Signage

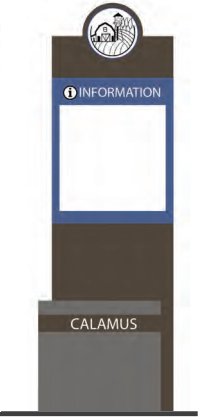
The way-finding signage family for Calamus consists of identity signage for public places (concept 9c), directional signage (concept 9d), banners for the primary corridors and downtown (concepts 9e & 9f), and informational kiosks (concepts 9g-9i). Proposed concept illustrations on the following boards will integrate some of the way-finding concepts shown on this board.

Concept 9e: Light banners for vehicular lighting along primary streets; alternate banners

Concept 9f: Light banners for vehicular lighting downtown; alternate banners

Concept 9g: Information kiosk style 1

Concept 9h: Informational kiosk style #2



Concept 9h: Informational kiosk style #3

Calamus

Community Identity

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Iowa's Living Roadways community visioning

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COMMUNITY IDENTITY *(See Boards #8 & #9 for Visual)*					**Summer 2021**
Description	***Est. Qty.***	***Unit***	***Estimated Unit Cost***	***Estimated Line Totals***	***Estimated Subtotal***
Way-finding Identity Signage					
City Hall & Public Library					*$ 8,340.00*
Aluminum Signage Panel	22	SF	$ 70.00	$ 1,540.00	
Black Metal Posts	2	EA	$ 350.00	$ 700.00	
Utilities Allowance (lighting and electrical)	1	AL	$ 5,000.00	$ 5,000.00	
Mobilization Allowance	1	AL	$ 1,100.00	$ 1,100.00	
City Park					*$ 8,030.00*
Aluminum Signage Panel	19	SF	$ 70.00	$ 1,330.00	
Black Metal Posts	2	EA	$ 350.00	$ 700.00	
Utilities Allowance (lighting and electrical)	1	AL	$ 5,000.00	$ 5,000.00	
Mobilization Allowance	1	AL	$ 1,000.00	$ 1,000.00	
CalCo					*$ 8,030.00*
Aluminum Signage Panel	19	SF	$ 70.00	$ 1,330.00	
Black Metal Posts	2	EA	$ 350.00	$ 700.00	
Utilities Allowance (lighting and electrical)	1	AL	$ 5,000.00	$ 5,000.00	
Mobilization Allowance	1	AL	$ 1,000.00	$ 1,000.00	
Downtown Pocket Park					*$ 8,340.00*
Aluminum Signage Panel	22	SF	$ 70.00	$ 1,540.00	
Black Metal Posts	2	EA	$ 350.00	$ 700.00	
Utilities Allowance (lighting and electrical)	1	AL	$ 5,000.00	$ 5,000.00	
Mobilization Allowance	1	AL	$ 1,100.00	$ 1,100.00	
Fire Station					
Aluminum Signage Panel	22	SF	$ 70.00	$ 1,540.00	$ 8,440.00
Black Metal Posts	2	EA	$ 400.00	$ 800.00	
Utilities Allowance (lighting and electrical)	1	AL	$ 5,000.00	$ 5,000.00	
Mobilization Allowance	1	AL	$ 1,100.00	$ 1,100.00	
				Section Subtotal	*$ 41,180.00*
				20% Contingency	*$ 8,236.00*
				Design & Engineering Allowance	*$ 7,412.40*
				Identity Signage Subtotal	***$ 56,828.40***
Way-finding Directional Signage					
One Destination					$ 815.00
Aluminum Signage Panel	4.5	SF	$ 70.00	$ 315.00	
Break-A-Way Posts	1	EA	$ 400.00	$ 400.00	
Mobilization Allowance	1	AL	$ 100.00	$ 100.00	
Two Destinations					$ 5,220.00
Aluminum Signage Panel	36	SF	$ 70.00	$ 2,520.00	
Break-A-Way Posts	6	EA	$ 400.00	$ 2,400.00	
Mobilization Allowance	1	AL	$ 300.00	$ 300.00	
Three Destinations					$ 21,200.00
Aluminum Signage Panel	200	SF	$ 70.00	$ 14,000.00	
Break-A-Way Posts	16	EA	$ 400.00	$ 6,400.00	
Mobilization Allowance	1	AL	$ 800.00	$ 800.00	
				Section Subtotal	*$ 27,235.00*
				20% Contingency	*$ 5,447.00*
				Design & Engineering Allowance	*$ 4,902.30*
				Vehicular Scaled Way-finding Signage Subtotal	***$ 37,584.30***
Informational Kiosk					
Pre-fabricated Custom Kiosk (non electrical) Allowance	1	AL	$ 25,000.00	$ 25,000.00	
Site Preparation and Grading Allowance	1	AL	$ 5,000.00	$ 5,000.00	
Mobilization Allowance	1	AL	$ 4,500.00	$ 4,500.00	
				Section Subtotal	*$ 34,500.00*
				20% Contingency	*$ 6,900.00*
				Design & Engineering Allowance	*$ 6,210.00*
				Information Kiosk Subtotal	***$ 47,610.00***
				Opinion of Probable Total Probable Construction Cost*	**$ 142,022.70**

** Estimate does not include removal of existing signage, property easements, land acquisition, utility modifications (i.e.: electrical field wire, connectors, raceways and associated hardware), or site/boundary survey.*

Entryway Signage

Overview
Entryway signage is one of the most important features in creating a visitor's first impression. It is a powerful amenity and is considered an extension of the way-finding signage family. The updated city logo, curved sign top, and font style used for the city name are all elements that are incorporated into the way-finding signage, including the entryway signage. These details help strengthen the identity of Calamus while creating a unified appearance.

Materials
The materials proposed for the monument signs include brick columns and a textured face panel that is envisioned to be either pre-cast colored concrete or high-density expanded Polystyrene (EPS). The lettering and logo are envisioned to be raised and backlit. All of the concepts show a solid base, as requested, for ease of maintenance.

The color and material selection for signs can create different perceptions. The warm earth-tone colors of the tans and browns convey a naturalized environment, whereas the cooler grays and charcoal combinations suggest a reserved atmosphere. In addition to considering the "feeling" that the colors elicit in passersby, the location for the sign and the background must also be evaluated. The sign needs to stand out and not fade into its surroundings - this is addressed by color selection, landscaping, and sign size. Refer to illustrations shown on this board.
The scale (size) of the sign is determined primarily by the size of the text that will be on the sign and the size of the text will be determined by the location of the sign (how far from the road) and the speed of the vehicles driving by. For Calamus, an appropriately-sized sign that is easily readable will need to be larger than the 6-foot-wide that currently exists.

Landscaping is integral to making an entryway sign complete. Landscaping can help frame the sign, provide year-round interest and background, and beautify the entryway. The landscaping should be simple and not compete with the signage, but instead soften it and help enhance it. Plant species need to be salt tolerant, and appropriate for the growing zone and field conditions.

Visual Impact
Community entryway signs have just seconds to make a visual impact on motorists. Therefore, it is important to make the signs quick to see and easy to read.

Compare the readability of the existing entryway sign (existing photo 10a) to all of the proposed entryway concepts (photo edits 10b through 10g) to see the impact that sign scale (size), colors, text size and landscaping have on readability.

Existing photo 10a: East entryway sign along U.S. 30

Photo edit 10b: Sign option 1 with landscaping

Photo edit 10c: Sign option 2 with landscaping

Photo edit 10d: Sign option 3 with landscaping

Photo edit 10e: Sign option 4 with landscaping

Photo edit 10f: Sign option 5 with landscaping

Photo edit 10g: Sign option 6 with landscaping

Entryway Signage Overview

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Compare the readability of the existing entryway sign (existing photo 10a) to all of the proposed entryway concepts (photo edits 10b through 10g) to see the impact that sign scale (size), colors, text size and landscaping have on readability.

The landscaping shown in the edits include prairie dropseed, black-eyed susan, purple coneflower, and quaking aspen. The planting area is mulched with concrete banding that matches or complements the colors of the signage. The mowing edge, along with native landscape plants, will help reduce maintenance needs.

Concept 10h: Sign option 1 during daytime and at night with halo lighting

Calamus

Entryway Signage

FLENKER LAND ARCHITECTURE CONSULTANTS, LLC
LA: Meg Flenker, PLA, ASLA, CPESC, CPSWQ
Interns: TJ Hillberry, Paola Monllor-Torres and Ethan Morrow
Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

The landscaping shown in the edits include prairie dropseed, black-eyed susan, purple coneflower, and quaking aspen. The planting area is mulched with concrete banding that matches or complements the colors of the signage. The mowing edge, along with native landscape plants, will help reduce maintenance needs.

ENTRYWAY SIGNAGE *(See Boards #8, #10 & #11 for Visual)*					**Summer 2021**
Description	***Est. Qty.***	***Unit***	***Estimated Unit Cost***	***Estimated Line Total***	***Estimated Totals***
Entryway Signage (Based on Sign Option 1)					
Sign Foundation					$ 12,074.00
Earth Excavation	34	CY	$ 8.00	$ 272.00	
Aggregate Base Course	22	Ton	$ 31.00	$ 682.00	
Concrete Footing	23	CY	$ 440.00	$ 10,120.00	
Suitable Backfill	20	CY	$ 50.00	$ 1,000.00	
Sign & Base					$ 22,027.50
Concrete Column Core	3	CY	$ 440.00	$ 1,320.00	
Brick Veneer	144	SF	$ 40.00	$ 5,760.00	
Sign Panel	60	SF	$ 30.00	$ 1,800.00	
Blue Painted Stainless Steel 18"Letters, Illuminated (Halo)	7	EA	$ 565.00	$ 3,955.00	
Black Painted Stainless Steel 6" Letters, Illuminated (Halo)	19	EA	$ 300.00	$ 5,700.00	
Black Painted Stainless Steel Logo & Line, Illum. (Halo) Allow.	1	AL	$ 1,900.00	$ 1,900.00	
Coping	24.5	SF	$ 65.00	$ 1,592.50	
Landscaping					$ 4,402.50
Deciduous Trees	3	EA	$ 425.00	$ 1,275.00	
Perennial Flowers	18	EA	$ 35.00	$ 630.00	
Ornamental Grasses	24	EA	$ 35.00	$ 840.00	
Planting Prep, Soil Amendment Allowance	1	AL	$ 1,500.00	$ 1,500.00	
Shredded Hardwood Mulch	3.5	CY	$ 45.00	$ 157.50	
Hardscape					$ 3,342.00
PCC Accent Mowing Edge (around Sign)	70	LF	$ 21.00	$ 1,470.00	
Steel Edging - Commercial Grade (Around Trees)	78	LF	$ 24.00	$ 1,872.00	
Finish Grading & Seeding					$ 320.00
Finish Grading	800	SF	$ 0.20	$ 160.00	
Seeding	800	SF	$ 0.20	$ 160.00	
Mobilization & Temporary Erosion Control					$ 2,000.00
Allowance	1	AL	$ 2,000.00	$ 2,000.00	
				Section Subtotal	*$ 44,166.00*
				20% Contingency	*$ 8,833.20*
				Design & Engineering Allowance	*$ 7,949.88*
				Entryway Signage Total Construction Cost*	***$ 60,949.08***
				Opinion of Total Probable Construction Cost*	***$ 60,949.08***

** Estimate does not include removal of existing signage, property easements, land acquisition, utility modifications (i.e.: electrical field wire, connectors, raceways and associated hardware), or site/boundary survey.*

Accessibility & Connectivity

Overiew

Accessibility and connectivity for pedestrians is important to the safety, health and well-being of residents, especially the mobility challenged, older adults, and youth who are more reliant on sidewalks for transportation through-out town. The majority of user groups in Calamus identified sidewalks as one of the top transportation barriers within the community. The users cited the narrow width, poor condition, and lack of complete segments as the main contributors to creating the barrier. Figure 11a is a map that shows the existing sidewalk conditions (it does not address width or accessibility) and proposed sidewalk expansion.

Sidewalks

Residents said that they would like to see upgrades to the city's sidewalk system as one of the top priorities. They would like to have a complete sidewalk system that is ADA-compliant and in good repair throughout town. Figures 11b through 11d on this board illustrate the spatial requirements for sidewalks. The majority of existing sidewalks within Calamus are 4' wide, which is the minimum width for an existing sidewalk.

To improve accessibility, pedestrian circulation, and meet current ADA requirements, the design team recommends a minimum width of five feet for residential sidewalks in Calamus, with wider widths recommended for areas where more pedestrian use is anticipated, such as in the downtown and along 2nd Street from Grove Street to the school.

Opportunity

Being located along U.S. 30 is an asset that provides Calamus with the opportunity to be exposed to a large number of passersby every day. These motorists could be potential tourists, or persons looking for a place to move to and/or locate their business. As such, Calamus needs to consider strengthening its segment of the U.S. 30 corridor in order to capture this audience. Implementing a way-finding signage system such as what is proposed and illustrated in this set of boards is an easy way to start. However, additional enhancements that require more planning, coordination, and investments in time and money also need to occur. These enhancements include either a six-foot-wide sidewalk along the north and south sides of U.S. 30, or a six-foot-wide sidewalk on the north side and a 10-foot- wide separated trail on the south side. The aforementioned would be in combination with the addition of decorative street lighting- all elements that will enhance the aesthetics, improve circulation and accessibility, attract visitors, and project an image of community pride and prosperity, which in turn will assist in stimulating growth in Calamus.

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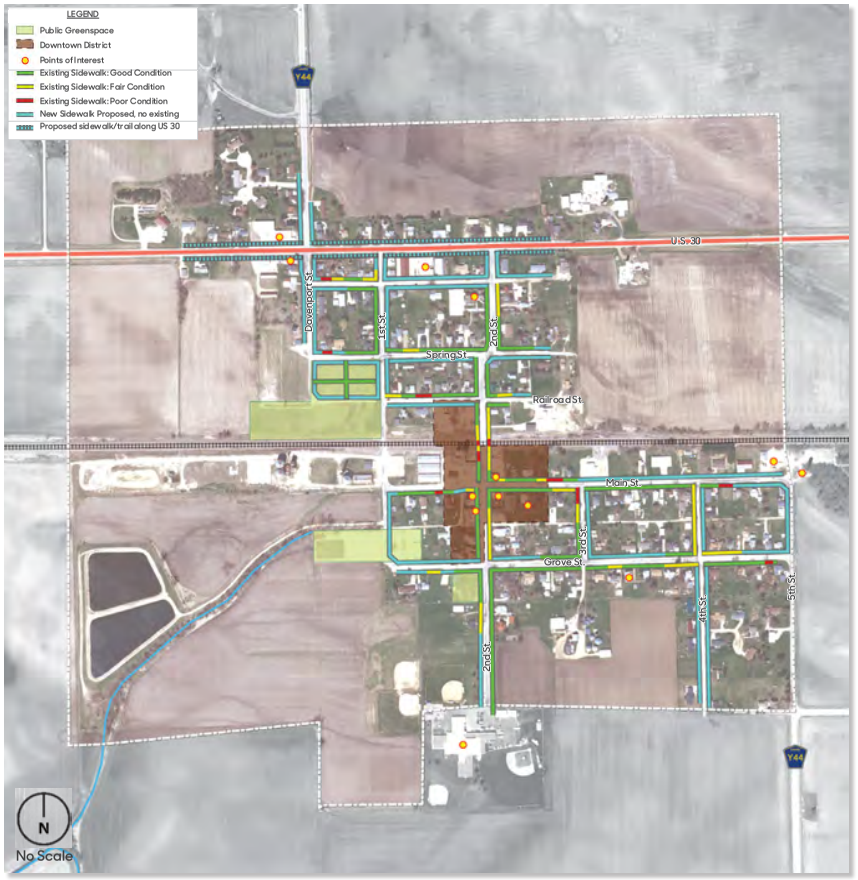

Figure 11a: Assessment of existing sidewalk conditions and proposed sidewalk expansion

Pedestrian Spatial Requirements:

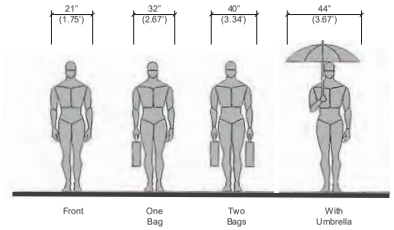

Figure 11b: Width requirements for selected pedestrian activities. Source: Time Saver Standards for Landscape Architecture.

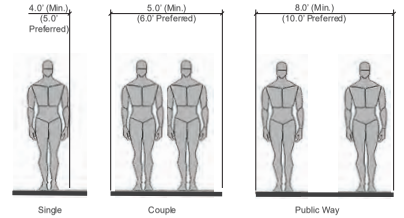

Figure 11c: Pedestrian walkway width requirements. Source: Time Saver Standards for Landscape Architecture.

Figure 11d: Pedestrian walkway width - spatial requirements for wheelchairs. Source: Time Saver Standards for Landscape Architecture.

Calamus

Accessibility & Connectivity

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Iowa's Living Roadways community visioning

CONNECTIVITY: SIDEWALKS *(See Boards # 8 & #12 for Visual)*					**Summer 2021**
Description	***Est. Qty.***	***Unit***	***Estimated Unit Cost***	***Estimated Line Total***	***Estimated Totals***
Second Priority Sidewalks					
Davenport Street					
New Sidewalk, None Existing (+/- 1,554 LF)					
Site Preparation and Grading Allowance	1	AL	$ 5,600.00	$ 5,600.00	$ *74,720.00*
5' Wide PCC Sidewalk, with Aggregate Base Course & Geotextile Fabric	864	SY	$ 80.00	$ 69,120.00	
ADA Compliant Detectable Warning Panel	90	SF	$ 60.00	$ 5,400.00	$ *5,400.00*
Finish Grading & Seeding Allowance	1	AL	$ 2,500.00	$ 2,500.00	$ 2,500.00
Mobilization Allowance	1	AL	$ 8,300.00	$ 8,300.00	$ 8,300.00
				Section Subtotal	$ *90,920.00*
				20% Contingency	$ *18,184.00*
				Design & Engineering Allowance	$ *16,365.60*
				Davenport Street Sidewalk Total Probable Construction Cost*	***$ 125,469.60***
Spring Street					
New Sidewalk, None Existing (+/- 950 LF)					$ *36,450.00*
Site Preparation and Grading Allowance	1	AL	$ 2,000.00	$ 2,000.00	
5' Wide PCC Sidewalk, with Aggregate Base Course	530	SY	$ 65.00	$ 34,450.00	
Existing Sidewalk Removal and Replacement: Poor Condition (+/- 82 LF)					$ *4,332.50*
Demolition, Assumed 4' SW	37	SY	$ 22.50	$ 832.50	
Site Preparation and Grading Allowance	1	AL	$ 250.00	$ 250.00	
5' Wide PCC Sidewalk, with Aggregate Base Course	50	SY	$ 65.00	$ 3,250.00	
Existing Sidewalk Removal and Replacement: Fair Condition (+/- 96 LF)					$ *5,787.50*
Demolition, Assumed 4' SW	43	SY	$ 22.50	$ 967.50	
Site Preparation and Grading Allowance	1	AL	$ 500.00	$ 500.00	
5' Wide PCC Sidewalk, with Aggregate Base Course	54	SY	$ 80.00	$ 4,320.00	
ADA Compliant Detectable Warning Panel	100	SF	$ 65.00	$ 6,500.00	$ *6,500.00*
Finish Grading & Seeding Allowance	1	AL	$ 1,800.00	$ 1,800.00	$ 1,800.00
Mobilization Allowance	1	AL	$ 6,000.00	$ 6,000.00	$ 6,000.00
				Section Subtotal	$ *60,870.00*
				20% Contingency	$ *12,174.00*
				Design & Engineering Allowance	$ *10,956.60*
				Spring Street Sidewalk Total Probable Construction Cost*	***$ 84,000.60***
Main Street					
New Sidewalk, None Existing (+/- 1,570 LF)					$ *61,245.00*
Site Preparation and Grading Allowance	1	AL	$ 4,500.00	$ 4,500.00	
5' Wide PCC Sidewalk, with Aggregate Base Course	873	SY	$ 65.00	$ 56,745.00	
Existing Sidewalk Removal and Replacement: Poor Condition (+/- 180 LF)					$ *8,800.00*
Demolition, Assumed 4' SW	80	SY	$ 22.50	$ 1,800.00	
Site Preparation and Grading Allowance	1	AL	$ 500.00	$ 500.00	
5' Wide PCC Sidewalk, with Aggregate Base Course	100	SY	$ 65.00	$ 6,500.00	
Existing Sidewalk Removal and Replacement: Fair Condition (+/- 360 LF)					$ *17,600.00*
Demolition, Assumed 4' SW	160	SY	$ 22.50	$ 3,600.00	
Site Preparation and Grading Allowance	1	AL	$ 1,000.00	$ 1,000.00	
5' Wide PCC Sidewalk, with Aggregate Base Course	200	SY	$ 65.00	$ 13,000.00	
ADA Compliant Detectable Warning Panel	80	SF	$ 60.00	$ 4,800.00	$ *4,800.00*
Finish Grading & Seeding Allowance	1	AL	$ 3,400.00	$ 3,400.00	$ 3,400.00
Mobilization Allowance	1	AL	$ 10,800.00	$ 10,800.00	$ 10,800.00
				Section Subtotal	$ *106,645.00*
				20% Contingency	$ *21,329.00*
				Design & Engineering Allowance	$ *19,196.10*
				Main Street Sidewalk Total Probable Construction Cost*	***$ 147,170.10***
Grove Street					
New Sidewalk, None Existing (+/- 1,810 LF)					$ *70,890.00*
Site Preparation and Grading Allowance	1	AL	$ 5,500.00	$ 5,500.00	
5' Wide PCC Sidewalk, with Aggregate Base Course	1006	SY	$ 65.00	$ 65,390.00	
Existing Sidewalk Removal and Replacement: Poor Condition (+/- 40 LF)					$ *2,400.00*
Demolition, Assumed 4' SW	18	SY	$ 22.50	$ 405.00	
Site Preparation and Grading Allowance	1	AL	$ 500.00	$ 500.00	
5' Wide PCC Sidewalk, with Aggregate Base Course	23	SY	$ 65.00	$ 1,495.00	
Existing Sidewalk Removal and Replacement: Fair Condition (+/- 562 LF)					$ *27,570.00*
Demolition, Assumed 4' SW	250	SY	$ 22.50	$ 5,625.00	
Site Preparation and Grading Allowance	1	AL	$ 1,600.00	$ 1,600.00	
5' Wide PCC Sidewalk, with Aggregate Base Course	313	SY	$ 65.00	$ 20,345.00	
ADA Compliant Detectable Warning Panel	120	SF	$ 60.00	$ 7,200.00	$ *7,200.00*
Finish Grading & Seeding Allowance	1	AL	$ 3,900.00	$ 3,900.00	$ 3,900.00
Mobilization Allowance	1	AL	$ 12,500.00	$ 12,500.00	$ 12,500.00
				Section Subtotal	$ *124,460.00*
				20% Contingency	$ *24,892.00*
				Design & Engineering Allowance	$ *22,402.80*
				Grove Street Sidewalk Total Probable Construction Cost*	***$ 171,754.80***
				Opinion of Total Probable Construction Cost*	***$ 528,395.10***

** Estimate does not include property easements, land acquisitions, any utility modifications, site/boundary survey or an additional work to remaining sidewalks shown on the plans as beir in good condition (including addition of passing pads).*

CONNECTIVITY: SIDEWALKS *(See Boards #8 & #12 for Visual)* Summer 2021

Description	*Est. Qty.*	*Unit*	*Estimated Unit Cost*	*Estimated Line Total*	*Estimated Totals*
Third Priority Sidewalks: East - West Streets					
Winter Street					
New Sidewalk, None Existing (+/- 1,995 LF)					$ 48,760.00
Site Preparation and Grading Allowance	1	AL	$ 5,600.00	$ 5,600.00	
5' Wide PCC Sidewalk, with Aggregate Base Course	664	SY	$ 65.00	$ 43,160.00	
Existing SW Rem. and Replace.: Poor Condition (+/- 90 LF)					$ 4,875.00
Demolition, Assumed 4' SW	50	SY	$ 22.50	$ 1,125.00	
Site Preparation and Grading Allowance	1	AL	$ 500.00	$ 500.00	
5' Wide PCC Sidewalk, with Aggregate Base Course	50	SY	$ 65.00	$ 3,250.00	
Existing Sidewalk Removal and Replacement: Fair Condition (+/- 165 LF)					$ 8,800.00
Demolition, Assumed 4' SW	92	SY	$ 22.50	$ 2,070.00	
Site Preparation and Grading Allowance	1	AL	$ 750.00	$ 750.00	
5' Wide PCC Sidewalk, with Aggregate Base Course	92	SY	$ 65.00	$ 5,980.00	
ADA Compliant Detectable Warning Panel	120	SF	$ 60.00	$ 7,200.00	$ 7,200.00
Finish Grading & Seeding Allowance	1	AL	$ 2,400.00	$ 2,400.00	$ 2,400.00
Mobilization Allowance	1	AL	$ 12,500.00	$ 12,500.00	$ 12,500.00
				Section Subtotal	$ 84,535.00
				20% Contingency	$ 16,907.00
				Design & Engineering Allowance	$ 15,216.30
				Winter Street Sidewalk Total Probable Construction Cost*	***$ 116,658.30***
Railroad Street					
New Sidewalk, None Existing (+/- 1,381 LF)					$ 53,920.00
Site Preparation and Grading Allowance	1	AL	$ 4,000.00	$ 4,000.00	
5' Wide PCC Sidewalk, with Aggregate Base Course	768	SY	$ 65.00	$ 49,920.00	
Existing Sidewalk Removal and Replacement: Poor Condition (+/- 55 LF)					$ 2,892.50
Demolition, Assumed 4' SW	25	SY	$ 22.50	$ 562.50	
Site Preparation and Grading Allowance	1	AL	$ 250.00	$ 250.00	
5' Wide PCC Sidewalk, with Aggregate Base Course	32	SY	$ 65.00	$ 2,080.00	
Existing Sidewalk Removal and Replacement: Fair Condition (+/- 152 LF)					$ 7,555.00
Demolition, Assumed 4' SW	68	SY	$ 22.50	$ 1,530.00	
Site Preparation and Grading Allowance	1	AL	$ 500.00	$ 500.00	
5' Wide PCC Sidewalk, with Aggregate Base Course	85	SY	$ 65.00	$ 5,525.00	
ADA Compliant Detectable Warning Panel	80	SF	$ 60.00	$ 4,800.00	$ 4,800.00
Finish Grading & Seeding Allowance	1	AL	$ 2,600.00	$ 2,600.00	$ 2,600.00
Mobilization Allowance	1	AL	$ 8,100.00	$ 8,100.00	$ 8,100.00
				Section Subtotal	$ 79,867.50
				20% Contingency	$ 15,973.50
				Design & Engineering Allowance	$ 14,376.15
				Railroad Street Sidewalk Total Probable Construction Cost*	***$ 110,217.15***
				Opinion of Total Probable Construction Cost*	***$ 226,875.45***

** Estimate does not include property easements, land acquisitions, any utility modifications, site/boundary survey or an additional work to remaining sidewalks shown on the plans as being in good condition (including addition of passing pads).*

CONNECTIVITY: SIDEWALKS *(See Boards #8 & #12 for Visual)*					**Summer 2021**
Description	***Est. Qty.***	***Unit***	***Estimated Unit Cost***	***Estimated Line Total***	***Estimated Totals***
Third Priority Sidewalks: North - South Streets					
First Street					
New Sidewalk, None Existing (+/- 1,479 LF)					$ 57,695.00
Site Preparation and Grading Allowance	1	AL	$ 4,200.00	$ 4,200.00	
5' Wide PCC Sidewalk, with Aggregate Base Course & Geotextile Fabric	823	SY	$ 65.00	$ 53,495.00	
Existing Sidewalk Removal and Replacement: Fair Condition (+/- 70 LF)					$ 3,755.00
Demolition, Assumed 4' SW	32	SY	$ 22.50	$ 720.00	
Site Preparation and Grading Allowance	1	AL	$ 500.00	$ 500.00	
5' Wide PCC Sidewalk, with Aggregate Base Course & Geotextile Fabric	39	SY	$ 65.00	$ 2,535.00	
ADA Compliant Detectable Warning Panel	120	SF	$ 60.00	$ 7,200.00	$ 7,200.00
Finish Grading & Seeding Allowance	1	AL	$ 1,200.00	$ 1,200.00	$ 1,200.00
Mobilization Allowance	1	AL	$ 8,300.00	$ 8,300.00	$ 8,300.00
				Section Subtotal	$ 78,150.00
				20% Contingency	$ 15,630.00
				Design & Engineering Allowance	$ 14,067.00
				First Street Sidewalk Total Probable Construction Cost*	***$ 107,847.00***
Third Street					
New Sidewalk, None Existing (+/- 385 LF)					$ 15,010.00
Site Preparation and Grading Allowance	1	AL	$ 1,100.00	$ 1,100.00	
5' Wide PCC Sidewalk, with Aggregate Base Course & Geotextile Fabric	214	SY	$ 65.00	$ 13,910.00	
Existing Sidewalk Removal and Replacement: Poor Condition (+/- 82 LF)					$ 4,072.50
Demolition, Assumed 4' SW	37	SY	$ 22.50	$ 832.50	
Site Preparation and Grading Allowance	1	AL	$ 250.00	$ 250.00	
5' Wide PCC Sidewalk, with Aggregate Base Course & Geotextile Fabric	46	SY	$ 65.00	$ 2,990.00	
Existing Sidewalk Removal and Replacement: Fair Condition (+/- 98 LF)					$ 4,865.00
Demolition, Assumed 4' SW	44	SY	$ 22.50	$ 990.00	
Site Preparation and Grading Allowance	1	AL	$ 300.00	$ 300.00	
5' Wide PCC Sidewalk, with Aggregate Base Course & Geotextile Fabric	55	SY	$ 65.00	$ 3,575.00	
ADA Compliant Detectable Warning Panel	80	SF	$ 60.00	$ 4,800.00	$ 4,800.00
Finish Grading & Seeding Allowance	1	AL	$ 1,000.00	$ 1,000.00	$ 1,000.00
Mobilization Allowance	1	AL	$ 3,500.00	$ 3,500.00	$ 3,500.00
				Section Subtotal	$ 33,247.50
				20% Contingency	$ 6,649.50
				Design & Engineering Allowance	$ 5,984.55
				Third Street Sidewalk Total Probable Construction Cost*	***$ 45,881.55***
Fourth Street					
New Sidewalk, None Existing (+/- 2,072 LF)					$ 80,680.00
Site Preparation and Grading Allowance	1	AL	$ 5,800.00	$ 5,800.00	
5' Wide PCC Sidewalk, with Aggregate Base Course & Geotextile Fabric	1152	SY	$ 65.00	$ 74,880.00	
Existing Sidewalk Removal and Replacement: Fair Condition (+/- 374 LF)					$ 19,665.00
Demolition, Assumed 4' SW	42	SY	$ 22.50	$ 945.00	
Site Preparation and Grading Allowance	1	AL	$ 5,200.00	$ 5,200.00	
5' Wide PCC Sidewalk, with Aggregate Base Course & Geotextile Fabric	208	SY	$ 65.00	$ 13,520.00	
ADA Compliant Detectable Warning Panel	80	SF	$ 60.00	$ 4,800.00	$ 4,800.00
Finish Grading & Seeding Allowance	1	AL	$ 4,000.00	$ 4,000.00	$ 4,000.00
Mobilization Allowance	1	AL	$ 13,000.00	$ 13,000.00	$ 13,000.00
				Section Subtotal	$ 122,145.00
				20% Contingency	$ 24,429.00
				Design & Engineering Allowance	$ 21,986.10
				Fourth Street Sidewalk Total Probable Construction Cost*	***$ 168,560.10***
Fifth Street					
New Sidewalk, None Existing (+/- 394 LF)					$ 15,400.00
Site Preparation and Grading Allowance	1	AL	$ 1,100.00	$ 1,100.00	
5' Wide PCC Sidewalk, with Aggregate Base Course	220	SY	$ 65.00	$ 14,300.00	
ADA Compliant Detectable Warning Panel	80	SF	$ 60.00	$ 4,800.00	$ 4,800.00
Finish Grading & Seeding Allowance	1	AL	$ 750.00	$ 750.00	$ 750.00
Mobilization Allowance	1	AL	$ 2,500.00	$ 2,500.00	$ 2,500.00
				Section Subtotal	$ 23,450.00
				20% Contingency	$ 4,690.00
				Design & Engineering Allowance	$ 4,221.00
				Fifth Street Sidewalk Total Probable Construction Cost*	***$ 32,361.00***
				Total Probable Construction Cost*	***$ 354,649.65***

** Estimate does not include property easements, land acquisitions, any utility modifications, site/boundary survey or an additional work to remaining sidewalks shown on the plans as being in good condition (including addition of passing pads).*

CONNECTIVITY: TRAIL *(See Boards # 8, #13 & #14 for Visual)*					**Summer 2021**
Description	***Est. Qty.***	***Unit***	***Estimated Unit Cost***	***Estimated Line Total***	***Estimated Totals***
Sharrow Segment (Shared Street)					
Sharrow *(+/- 11,865 LF ~ 2.25 Mi.) ~ within City Limits*					
Share-The-Road Pavement Markings, Symbols, Allowance	1	AL	$ 17,500.00	$ 17,500.00	$ 17,500.00
Share-The-Road Signage Allowance	1	AL	$ 12,750.00	$ 12,750.00	$ 12,750.00
Mobilization Allowance	1	AL	$ 3,000.00	$ 3,000.00	$ 3,000.00
				Section Subtotal	$ 33,250.00
				20% Contingency	$ 6,650.00
				Design & Engineering Allowance	$ 5,985.00
				Sharrow Total Probable Construction Cost*	**$ 45,885.00**
Separated Trail 1 (10' Wide with 2' Grass Shoulders) +/- 0.25 Miles					
Trail Segment 1 (+/- 1,366 LF) ~ West side of city from US 30 south to city dump area					
10' Wide Trail, Paved (5" PCC) On Grade; and Excavation	1,518	SY	$ 51.00	$ 77,418.00	$ 98,062.80
Contingency Item if needed: Engineering Fabric	*1,518*	*SY*	*$ 6.60*	*$ 10,018.80*	
Contingency Item if needed: Aggregae Base Course, 4" and Associated Excavation	*1,518*	*SY*	*$ 7.00*	*$ 10,626.00*	
Site Preparation and Grading Allowance	1	AL	$ 5,800.00	$ 5,800.00	$ 5,800.00
Painted Pavement Markings (Centerline)	1,366	LF	$ 1.75	$ 2,390.50	$ 2,390.50
ADA Compliant Detectable Warning Panel	30	SF	$ 60.00	$ 1,800.00	$ 1,800.00
Trail Signage Allowance	1	AL	$ 6,000.00	$ 6,000.00	$ 6,000.00
Site Amenities (Benches, Trash Receptacles, Bike Racks) Allowance	1	AL	$ 5,000.00	$ 5,000.00	$ 5,000.00
Final Grading and Seeding (Shoulders) Allowance	1	AL	$ 2,200.00	$ 2,200.00	$ 2,200.00
Mobilization Allowance	1	AL	$ 11,000.00	$ 11,000.00	$ 11,000.00
				Section Subtotal	$ 132,253.30
				20% Contingency	$ 26,450.66
				Design & Engineering Allowance	$ 23,805.59
				Separated Trail Segment 1 Total Probable Construction Cost*	**$ 182,509.55**
Separated Trail 2 (10' Wide with 2' Grass Shoulders) +/- 1.00 Miles					
Trail Segment 2 (+/- 5,470 LF) ~ SW Subdivision and to School					
10' Wide Trail, Paved (5" PCC) On Grade; and Excavation	6,100	SY	$ 51.00	$ 311,100.00	$ 394,060.00
Contingency Item if needed: Engineering Fabric	*6,100*	*SY*	*$ 6.60*	*$ 40,260.00*	
Contingency Item if needed: Aggregae Base Course, 4" and Associated Excavation	*6,100*	*SY*	*$ 7.00*	*$ 42,700.00*	
Site Preparation and Grading Allowance	1	AL	$ 30,400.00	$ 30,400.00	$ 30,400.00
Painted Pavement Markings (Centerline)	5,470	LF	$ 1.75	$ 9,572.50	$ 9,572.50
ADA Compliant Detectable Warning Panel	70	SF	$ 60.00	$ 4,200.00	$ 4,200.00
Trail Signage Allowance	1	AL	$ 9,000.00	$ 9,000.00	$ 9,000.00
Site Amenities (Benches, Trash Receptacles, Bike Racks) Allowance	1	AL	$ 15,000.00	$ 15,000.00	$ 15,000.00
Final Grading and Seeding (Shoulders) Allowance	1	AL	$ 8,800.00	$ 8,800.00	$ 8,800.00
Mobilization Allowance	1	AL	$ 30,000.00	$ 30,000.00	$ 30,000.00
				Section Subtotal	$ 501,032.50
				20% Contingency	$ 100,206.50
				Design & Engineering Allowance	$ 90,185.85
				Separated Trail Segment 2 Total Probable Construction Cost*	**$ 691,424.85**
Separated Trail 3 (10' Wide with 2' Grass Shoulders) +/- 0.45 Miles					
Trail Segment 3 (+/- 2,404 LF) ~ East Subdivision					
10' Wide Trail, Paved (5" PCC) On Grade; and Excavation	2,672	SY	$ 51.00	$ 136,272.00	$ 172,611.20
Contingency Item if needed: Engineering Fabric	*2,672*	*SY*	*$ 6.60*	*$ 17,635.20*	
Contingency Item if needed: Aggregae Base Course, 4" and Associated Excavation	*2,672*	*SY*	*$ 7.00*	*$ 18,704.00*	
Site Preparation and Grading Allowance	1	AL	$ 18,000.00	$ 18,000.00	$ 18,000.00
Painted Pavement Markings (Centerline)	2,404	LF	$ 1.75	$ 4,207.00	$ 4,207.00
ADA Compliant Detectable Warning Panel	30	SF	$ 60.00	$ 1,800.00	$ 1,800.00
Trail Signage Allowance	1	AL	$ 6,000.00	$ 6,000.00	$ 6,000.00
Site Amenities (Benches, Trash Receptacles, Bike Racks) Allowance	1	AL	$ 5,000.00	$ 5,000.00	$ 5,000.00
Final Grading and Seeding (Shoulders) Allowance	1	AL	$ 3,900.00	$ 3,900.00	$ 3,900.00
Mobilization Allowance	1	AL	$ 19,250.00	$ 19,250.00	$ 19,250.00
				Section Subtotal	$ 230,768.20
				20% Contingency	$ 46,153.64
				Design & Engineering Allowance	$ 41,538.28
				Separated Trail Segment 3 Total Probable Construction Cost*	**$ 318,460.12**
				Opinion of Total Probable Construction Cost*	**$ 1,238,279.52**

** Estimate does not include property easements, land acquisitions, site/boundary surveys, or any utility modifications.*

Streetscape Enhancements

Downtown
Improving the aesthetics, accessibility, and connectivity of the downtown area is a priority of residents.

The enhancements proposed and illustrated in photo edit 14b include the following and are envisioned for the 2nd St. corridor between the railroad tracks and Grove St.:

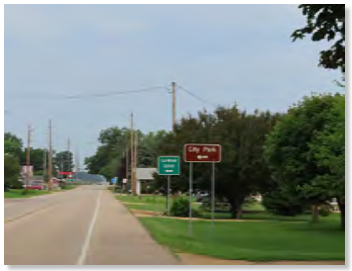
- Site amenities: coordinated benches and trash receptacles and decorative lighting (all black in color)
- Decorative lighting: historical-styled pole lighting with banner and hanging basket for flowers to add greenery to the downtown area
- Crosswalk: decorative colored and stamped concrete with brick pattern and concrete banding
- ADA-compliant curb ramp and sidewalks

Historical West Side of Downtown
The downtown historical buildings on the west side of 2nd Street all have steps into their buildings, which has resulted in each building owner putting in their own ADA ramps, creating a chaotic and unappealing look. Residents would like to see accessiblity improved without reducing the street width; thus, the existing sidewalk width cannot be changed.

As shown in the 13d edit, a sidewalk of appropriate width to meet ADA guidelines would be constructed at the elevation of each building's doorway (top tier). There would a ramp on the south end and steps on the north as well as along the length of the east side. Handrails that match the color of the site amenities are proposed for both the ramp and steps.

School Entrance
Second Street continues through downtown, past City Park and ends at the Cal-Wheat Elementary school. While not an extension of the downtown, it still is an important segment of the 2nd St. corridor for both residents and visitors.
Photo edit 13g illustrates the enhancements that are envisioned along this segment of the corridor:

- Decorative lighting: with school themed banners
- Crosswalk: decorative colored and stamped concrete with brick pattern and concrete banding
- ADA-compliant curb ramp and sidewalks
- Wider sidewalks (6' minimum)
- Identity signage for City Park
- Crosswalk: decorative colored and stamped
- Seal coat extended on the east side of the road to provide a hardened, paved area to park for residents



Existing Photo 12a: Photo taken from U.S. 30 looking westerly along the U.S. 30 corridor

Existing Photo 12c: Photo taken from U.S. 30 looking southerly along 2nd Street, the primary corridor to the downtown and school

Example 12e: Directional sign showing three destinations

Example 12f: Decorative pavement (colored & stamped concrete)

Example 12g: Decorative light and banner

Legend

A 8' MINIMUM VERTICAL CLEARANCE

B 2' MINIMUM HORIZONTAL CLEARANCE

C 5' WIDE SIDEWALK (RECOMMENDED MINIMUM)

Typical section 12h: Proposed typical sidewalk section

Photo edit 12b: Proposed way-finding signage helps eliminate multiple signs that c2ate a cluttered look while strengthening the city's identity

Photo edit 12d: Decorative lighting with banners, ADA compliant sidewalks, way-finding directional signage, decorative pavement for crosswalks all aid in emphasizing the importance of this corridor to visitors

Streetscape Enhancements Overview

Establishing a streetscape that is both functional and aesthetic is critical to attracting visitors, future development, and potential businesses. The streetscape must be able to effectively accommodate both vehicular and pedestrian traffic while being inviting to both the businesses and visitors.

Decreasing excess signage by implementing an organized way-finding system as shown in photo edit 12b can greatly improve the corridor aesthetics.

Complete Streets

Establishing a successful streetscape is not just about curb appeal; it is also about taking into account users of all ages and abilities, regardless of their mode of transportation. This method of design is called Complete Streets. Complete Streets enable safe, convenient, and comfortable travel. The proposed concept shown in photo edit 12d illustrates this approach.

Some of the benefits of the proposed concept include improved accessibility, connectivity, safety, enhanced way-finding, and circulation.

Second Street is a primary corridor; however, to visitors there is nothing to distinguish it from the other streets. The concept shown in photo edit 12d illustrates some of the enhancements proposed to depict its importance. These same enhancements will continue along 2nd Street, through the downtown and to the school. It is essential to continue carrying out the same elements along the entire corridor and not introduce new styles or materials to avoid creating a look of chaos.

Images 12e through 12g are show the proposed way-finding directional signage, the decorative stamped concrete crosswalk, and the decorative light.

Sidewalk Accessibility

Accessibility means different things to different people, depending upon their experience and needs. Ensuring pedestrian accessibility requires the consideration of a number of factors including: width, surface materials used, longitudinal and cross slope, distance from horizontal and vertical obstructions, site distances and clear zones at intersections, surface finish, joint construction, and presence of curbs or steps.

The typical section shown in 12h illustrates the minimum recommended widths for the sidewalks and the minimum vertical and horizontal distance needed from obstructions.

Calamus

Streetscape Enhancements

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Interns: TJ Hillberry, Paola Monllor-Torres and Ethan Morrow
Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

Downtown

Downtown
Improving the aesthetics, accessibility, and connectivity of the downtown area is a priority of residents.

The enhancements proposed and illustrated in photo edit 14b include the following and are envisioned for the 2nd St. corridor between the railroad tracks and Grove St.:

- Site amenities: coordinated benches and trash receptacles and decorative lighting (all black in color)
- Decorative lighting: historical-styled pole lighting with banner and hanging basket for flowers to add greenery to the downtown area
- Crosswalk: decorative colored and stamped concrete with brick pattern and concrete banding
- ADA-compliant curb ramp and sidewalks

Historical West Side of Downtown
The downtown historical buildings on the west side of 2nd Street all have steps into their buildings, which has resulted in each building owner putting in their own ADA ramps, creating a chaotic and unappealing look. Residents would like to see accessiblity improved without reducing the street width; thus, the existing sidewalk width cannot be changed.

As shown in the 13d edit, a sidewalk of appropriate width to meet ADA guidelines would be constructed at the elevation of each building's doorway (top tier). There would a ramp on the south end and steps on the north as well as along the length of the east side. Handrails that match the color of the site amenities are proposed for both the ramp and steps.

School Entrance
Second Street continues through downtown, past City Park and ends at the Cal-Wheat Elementary school. While not an extension of the downtown, it still is an important segment of the 2nd St. corridor for both residents and visitors.
Photo edit 13g illustrates the enhancements that are envisioned along this segment of the corridor:

- Decorative lighting: with school themed banners
- Crosswalk: decorative colored and stamped concrete with brick pattern and concrete banding
- ADA-compliant curb ramp and sidewalks
- Wider sidewalks (6' minimum)
- Identity signage for City Park
- Crosswalk: decorative colored and stamped
- Seal coat extended on the east side of the road to provide a hardened, paved area to park for residents

Existing photo 13a: Photo taken from 2nd St. & Main St. intersection looking northeasterly towards the post office

Existing photo 13c: Photo taken from the west side of 2nd St. in downtown and looking northerly along the sidewalk

Existing photo 13e: Photo taken from the intersection of 2nd St. & Grove St. looking southerly along 2nd St. toward the school

Example 13f: Light banners for 2nd St. south of Main St.

Photo edit 13b: Decorative lighting with banners and hanging flower baskets, ADA-compliant sidewalks, street furniture and crosswalks

Downtown

Improving the aesthetics, accessibility, and connectivity of the downtown area is a priority of residents.

The enhancements proposed and illustrated in photo edit 14b include the following and are envisioned for the 2nd St. corridor between the railroad tracks and Grove St.:

- Site amenities: coordinated benches and trash receptacles and decorative lighting (all black in color)
- Decorative lighting: historical-styled pole lighting with banner and hanging basket for flowers to add greenery to the downtown area
- Crosswalk: decorative colored and stamped concrete with brick pattern and concrete banding
- ADA-compliant curb ramp and sidewalks

Photo edit 13d: Concept to improve accessibility and pedestrian circulation while enhancing the aesthetics

Historical West Side of Downtown

The downtown historical buildings on the west side of 2nd Street all have steps into their buildings, which has resulted in each building owner putting in their own ADA ramps, creating a chaotic and unappealing look. Residents would like to see accessiblity improved without reducing the street width; thus, the existing sidewalk width cannot be changed.

As shown in the 13d edit, a sidewalk of appropriate width to meet ADA guidelines would be constructed at the elevation of each building's doorway (top tier). There would a ramp on the south end and steps on the north as well as along the length of the east side. Handrails that match the color of the site amenities are proposed for both the ramp and steps.

Photo edit 13g: Decorative lighting with school banners, wider ADA-compliant sidewalks, decorative crosswalks, and visible park identity sign strengthen the importance of the corridor and safety of users

School Entrance

Second Street continues through downtown, past City Park and ends at the Cal-Wheat Elementary school. While not an extension of the downtown, it still is an important segment of the 2nd St. corridor for both residents and visitors.

Photo edit 13g illustrates the enhancements that are envisioned along this segment of the corridor:

- Decorative lighting: with school themed banners
- Crosswalk: decorative colored and stamped concrete with brick pattern and concrete banding
- ADA-compliant curb ramp and sidewalks
- Wider sidewalks (6' minimum)
- Identity signage for City Park
- Crosswalk: decorative colored and stamped
- Seal coat extended on the east side of the road to provide a hardened, paved area to park for residents

Calamus Downtown

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Iowa's Living Roadways community visioning

STREETSCAPE & DOWNTOWN ENHANCEMENTS *(See Boards #15 & #16 for Visual)*					**Summer 2021**
Description	***Est. Qty.***	***Unit***	***Estimated Unit Cost***	***Estimated Line Total***	***Estimated Totals***
Second Street (Minus the Downtown ~ Railroad Tracks to Alley between Main St. & Grove St.)					
Sidewalk					
New Sidewalk, None Existing (+/- 936 LF)					$ 43,760.00
Site Preparation and Grading Allowance	1	AL	$ 3,200.00	$ 3,200.00	
6' Wide PCC Sidewalk, with Aggregate Base Course & Geotextile Fabric	624	SY	$ 65.00	$ 40,560.00	
Existing Sidewalk Removal and Replacement: Fair Condition (+/- 832 LF)					$ 46,525.00
Demolition, Assumed 4' SW	340	SY	$ 22.50	$ 7,650.00	
Site Preparation and Grading Allowance	1	AL	$ 2,800.00	$ 2,800.00	
6' Wide PCC Sidewalk, with Aggregate Base Course & Geotextile Fabric	555	SY	$ 65.00	$ 36,075.00	
ADA Compliant Detectable Warning Panel	180	SF	$ 60.00	$ 10,800.00	$ 10,800.00
Finish Grading & Seeding Allowance	1	AL	$ 3,000.00	$ 3,000.00	$ 3,000.00
Decorative Site Lighting					
Decorative Site Lighting					$ 278,100.00
Pedestrian Scale	25	EA	$ 7,500.00	$ 187,500.00	
Vehicular & Pedestrian Combo	9	EA	$ 9,500.00	$ 85,500.00	
Calamus Themed Light Banners Allowance	1	AL	$ 5,100.00	$ 5,100.00	
Decorative Pavement Crosswalks					
Decorative PCC Crosswalks (2nd St. @ US 30, 2nd St. @ Grove St on E, S & W Quadrants)					$ 24,245.00
Demolition of Existing Road Pavement	114	SY	$ 22.50	$ 2,565.00	
Site Preparation Allowance	1	AL	$ 8,000.00	$ 8,000.00	
Decorative Colored PCC Crosswalk Pavement	114	SY	$ 120.00	$ 13,680.00	
Signage Allowance	1	AL	$ 1,000.00	$ 1,000.00	$ 1,000.00
Mobilization Allowance	1	AL	$ 40,500.00	$ 40,500.00	$ 40,500.00
				Section Subtotal	$ 447,930.00
				20% Contingency	$ 89,586.00
				Design & Engineering Allowance	$ 80,627.40
				Second Street Enhancements Total Probable Construction Cost*	***$ 618,143.40***
Downtown (Railroad Tracks to Alley between Main St. & Grove St.)					
Sidewalk					
Existing Sidewalk Removal and Replacement: All except adjacent to permeable pave. (+/- 786 LF)					$ 79,585.00
Sidewalk Demolition	790	SY	$ 22.50	$ 17,775.00	
Site Preparation and Grading Allowance	1	AL	$ 5,000.00	$ 5,000.00	
10' Wide PCC Sidewalk, with Aggregate Base Course & Geotextile Fabric	874	SY	$ 65.00	$ 56,810.00	
Poured in Place PCC Ramp (+/- 19' L x 7' W) Allowance	1	AL	$ 13,500.00	$ 13,500.00	$ 13,500.00
Poured in Place PCC Steps (+/- 112' x 2' and +/- 6' x 3')	1	AL	$ 25,000.00	$ 25,000.00	$ 25,000.00
Handrails for Ramp and Steps (Galvanized steel, powder coated black)	130	LF	$ 140.00	$ 18,200.00	$ 18,200.00
ADA Compliant Detectable Warning Panel	96	SF	$ 60.00	$ 5,760.00	$ 5,760.00
Decorative Site Lighting					
Decorative Site Lighting					$ 121,000.00
Pedestrian Scale	7	EA	$ 7,500.00	$ 52,500.00	
Vehicular & Pedestrian Combo	7	EA	$ 9,500.00	$ 66,500.00	
Calamus Themed Light Banners Allowance	1	AL	$ 2,000.00	$ 2,000.00	
Decorative Pavement Crosswalks					
Decorative PCC Crosswalks (2nd St. @ Main St. - all 4 Quads)					$ 34,780.00
Demolition of Existing Road Pavement	216	SY	$ 22.50	$ 4,860.00	
Site Preparation Allowance	1	AL	$ 4,000.00	$ 4,000.00	
Decorative Colored PCC Crosswalk Pavement	216	SY	$ 120.00	$ 25,920.00	
Mobilization Allowance	1	AL	$ 30,000.00	$ 30,000.00	$ 30,000.00
				Section Subtotal	$ 327,825.00
				20% Contingency	$ 65,565.00
				Design & Engineering Allowance	$ 59,008.50
				Second Street Enhancements Total Probable Construction Cost*	***$ 452,398.50***
				Opinion of Total Probable Construction Cost*	***$ 1,070,541.90***

** Estimate does not include property easements, land acquisitions, any utility modifications, site/boundary survey or an additional work to street or sidewalk to remain.*

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City Growth

Overview

The two subdivisions shown in concept plans 15a & 15b are the two areas where the city anticipates its residential growth to occur in the near term. Rising urban crime and the high costs for housing and other associated costs, coupled with the pandemic and ability for many people to work remotely, there is a trend of people moving out from the larger urban areas to small towns like Calamus. Calamus would like to capitalize on this surge.

Many of these people are looking for larger lots. To meet this demand, the lots in the eastern subdivision are approximately 1/2 acre in size, whereas the size of lots in the southwestern subdivision are larger and range from approximately 3/4 to 1 acre in size.

Concept plan 15a: Preliminary concept illustrating a possible layout for a residential subdivision on the southwestern side of town, adjacent to the school property. This concept includes a full-sized football field and track, along with the associated amenities and parking. Residents indicated their desire and need for the aforementioned, however, the school does not have enough room on their site for these improvements

Concept plan 15b: Preliminary concept illustrating a possible layout for a residential subdivision on the eastern side of town, adjacent to 5th Street and 245th Street

LEGEND

1. PCC sidewalk
2. Street
3. 10' wide separated multi-use trail
4. Area for a park and bike rest area
5. Street with parallel parking
6. Full- sized football field and 400-M track
7. Concession stand and restrooms
8. Parking lot
9. Bleachers (ADA Compliant)
10. 500 -year (light blue) and 100 -year flood (dark blue)
11. Ticket office
12. Perimeter fence
13. 10' wide trail connectivity to school
14. Sewer lift station and public space
15. Crosswalk
16. Grass buffer on each side of trail

City Growth

The two subdivisions shown in concept plans 15a & 15b are the two areas where the city anticipates its residential growth to occur in the near term. Rising urban crime and the high costs for housing and other associated costs, coupled with the pandemic and ability for many people to work remotely, there is a trend of people moving out from the larger urban areas to small towns like Calamus. Calamus would like to capitalize on this surge.

Many of these people are looking for larger lots. To meet this demand, the lots in the eastern subdivision are approximately 1/2 acre in size, whereas the size of lots in the southwestern subdivision are larger and range from approximately 3/4 to 1 acre in size.

Calamus
City Growth

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Train Quiet Zone

All user groups identified one or more issues with the railroad, most of which had to do with the trains stopping and blocking traffic and also with the loudness of their horn(s). The enhancements identified by the various user groups indicated that they would like to have a Train Quiet Zone through town and to upgrade the pedestrian crossing on Second Street.

According to representatives from the Federal Railroad Administration (FRA) and the Iowa DOT railway division, it is up to the railroad to decide which measures are to be put in place. They may be as shown in one of the concept plans illustrated on this board or it may be a combination of different things – it is entirely up to the railroad inspectors from United Pacific (UP), the owners of the railroad running through Calamus.

If and once a quiet zone is granted, then the UP will do all of the construction work and will bill the city for that work. If the train engineer finds something damaged or missing, such as if a channelization device breaks off, then the railroad can automatically revoke the quiet zone.

In addition, even though an area is marked as a quiet zone, the train engineer can still sound the horn if she/he thinks that someone is not seeing the train or is not paying attention.

While the First Street railroad crossing is not specifically illustrated here, it would have the same applications, except there would be no pedestrian protection (17f, 17g, and 17j) since there is no existing or proposed sidewalk. There may, however, need to be a guardrail or other barriers required along the sides of the street to prevent motorists from running around the edge of the street and gate when the gates are down.

UP RAILROAD: TRAIN QUIET ZONE *(See Board # 16 for Visual)*

Description	***Cost Range Per Crossing***	
UP Railroad Train Quiet Zone Estimates of Cost Range		
Four-Quadrant Gate Systems	$ 300,000.00	$ 500,000.00
Basic Active Warning System (Includes Flashing Lights and Gates, Constant Warning Time,	$ 185,000.00	$ 400,000.00
Power Out Indicator and Cabin		
Basic Inter-Connect	$ 5,000.00	$ 15,000.00
Annual Maintenance	$ 4,000.00	$ 10,000.00

Costs taken from Union Pacific list of General Costs of Safety Measures; design and construction is done by Union Pacific Railroad and charged to city

Existing aerial 16a: Plan view of 2nd Street railroad crossing

Train Quiet Zone

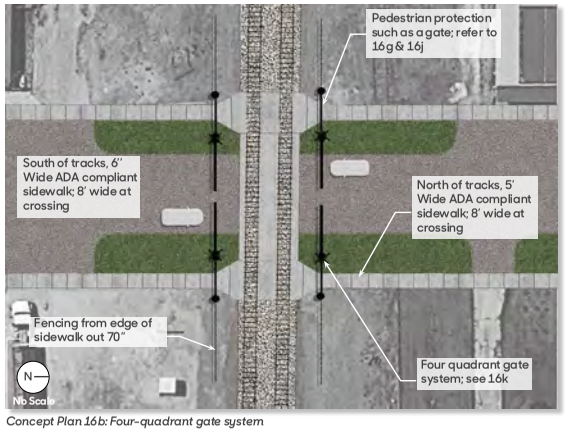
All user groups identified one or more issues with the railroad, most of which had to do with the trains stopping and blocking traffic and also with the loudness of their horn(s). The enhancements identified by the various user groups indicated that they would like to have a Train Quiet Zone through town and to upgrade the pedestrian crossing on Second Street.

According to representatives from the Federal Railroad Administration (FRA) and the Iowa DOT railway division, it is up to the railroad to decide which measures are to be put in place. They may be as shown in one of the concept plans illustrated on this board or it may be a combination of different things - it is entirely up to the railroad inspectors from United Pacific (UP), the owners of the railroad running through Calamus.

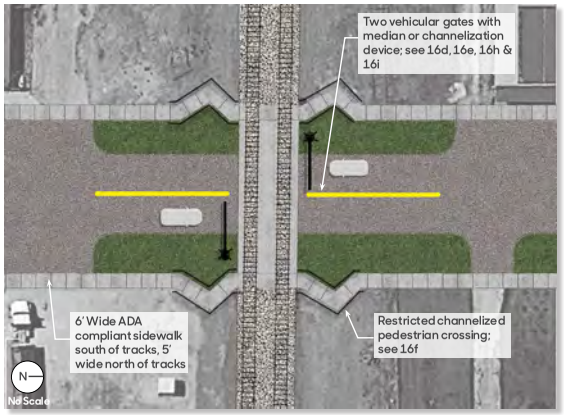
If and once a quiet zone is granted, then the UP will do all of the construction work and will bill the city for that work. If the train engineer finds something damaged or missing, such as if a channelization device breaks off, then the railroad can automatically revoke the quiet zone.

In addition, even though an area is marked as a quiet zone, the train engineer can still sound the horn if she/he thinks that someone is not seeing the train or is not paying attention.

While the First Street railroad crossing is not specifically illustrated here, it would have the same applications, except there would be no pedestrian protection (17f, 17g, and 17j) since there is no existing or proposed sidewalk. There may, however, need to be a guardrail or other barriers required along the sides of the street to prevent motorists from running around the edge of the street and gate when the gates are down.



Concept Plan 16b: Four-quadrant gate system



Concept Plan 16c: Two gates with medians or channelization devices

Example 16d: Gates with channelization devices

Example 16h: Gates with medians

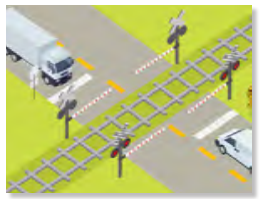
Example 16e: Gates with channelization devices

Example 16i: Gates with medians

Example 16f: Restricted channelized pedestrian crossing

Example 16j: Automatic gate control for pedestrian crossing

Example 16g: Pedestrian gate crossing



Example 16k: Four-quadrant gate system

Calamus
Train Quiet Zone

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Iowa's Living Roadways community visioning

Cal-Wheat: Warrior Trail

Overview

All user groups from both Calamus and Wheatland identified a trail connection between their communities as one of the highest priorities. While the two towns are located approximately 4 miles apart, they consider themselves one community, Cal-Wheat. Their school district, Cal-Wheat, has the Warrior as their mascot, so it seemed fitting to the residents to name this proposed trail segment the Cal-Wheat Warrior Trail.

The proposed trail offers both historic and environmental appeal. Located nearly adjacent to U.S. Highway 30, the main east-west route across the northern tier of the country, and approximately 10 minutes from U.S. Highway 61, a major north-south route from Minnesota to Louisiana, the trail location is easy to access for both intra-and interstate travelers. The trail is in close proximity to larger urban areas, with less than an hour's drive to the Quad-Cities, Iowa City, Maquoketa, Cedar Rapids, DeWitt, and Clinton.

The Lincoln Highway is designated as a heritage byway; along and within the corridor of the proposed trail route are three historic highway bridges and an approximately 100-foot section of the original Lincoln Highway pavement.

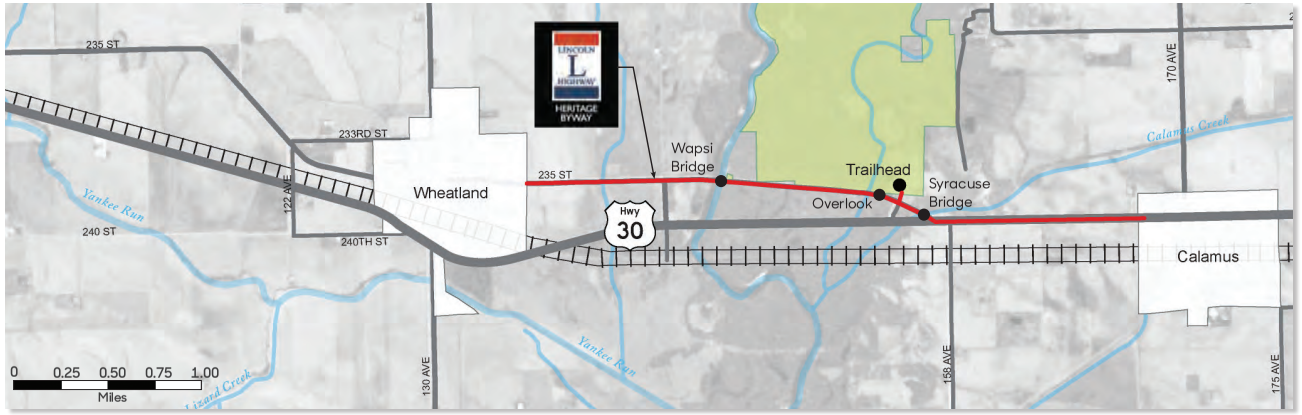
The proposed trail corridor has a plethora of landscape and plant community types. Prairie, wetlands, woodlands, swamps, along with the Wapsi River and its backwaters, all lie within or adjacent to the corridor. A trailhead is proposed to be located at the southeast corner of the 709-acre Syracuse Wildlife Managment Area.

Trail Typologies

There are a number of trail typologies. However, just two that are the most plausible for and applicable to the proposed Cal-Wheat Warrior Trail.

Trail typology 1, the separated trail, is most desired by the general population, primarily due to safety. Separated trails can be used by a greater cross-section of people - accomodating families, youth, elderly and mobility challenged. The separated trail can also be multi-use, allowing the use of golf carts and side by sides, along with cycling, walking, and running.

The second typology, shared road (sharrow), is generally the least desirable, especially on rural and/or busy roadways. This type of trail does not promote multi-use pedestrian activites, and families and other recreationalists are hesitant to utilize it, considering it unsafe. Based on resident feedback, a shared road trail is the least desirable option. Residents from both commnities want a separated trail system and a complete ADA-compliant sidewalk system so they do not have to walk and bike on the roads.



Concept Plan 1a: General proposed trail route for the Cal-Wheat Warrior Trail that will connect Wheatland and Calamus

Figure 1b: Proposed logo for the community trail reinforces ties to the Lincoln Highway as well as to each individual city - Calamus (Sweet Flag) and Wheatland (Wheat)

Warrior Trail Overview

All user groups from both Calamus and Wheatland identified a trail connection between their communities as one of the highest priorities. While the two towns are located approximately 4 miles apart, they consider themselves one community, Cal-Wheat. Their school district, Cal-Wheat, has the Warrior as their mascot, so it seemed fitting to the residents to name this proposed trail segment the Cal-Wheat Warrior Trail.

The proposed trail offers both historic and environmental appeal. Located nearly adjacent to U.S. Highway 30, the main east-west route across the northern tier of the country, and approximately 10 minutes from U.S. Highway 61, a major north-south route from Minnesota to Louisiana, the trail location is easy to access for both intra-and interstate travelers. The trail is in close proximity to larger urban areas, with less than an hour's drive to the Quad-Cities, Iowa City, Maquoketa, Cedar Rapids, DeWitt, and Clinton.

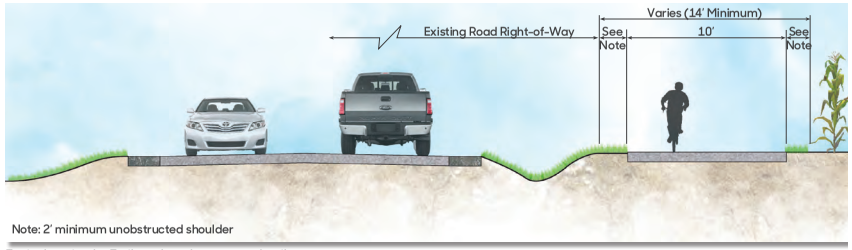
The Lincoln Highway is designated as a heritage byway; along and within the corridor of the proposed trail route are three historic highway bridges and an approximately 100-foot section of the original Lincoln Highway pavement.

The proposed trail corridor has a plethora of landscape and plant community types. Prairie, wetlands, woodlands, swamps, along with the Wapsi River and its backwaters, all lie within or adjacent to the corridor. A trailhead is proposed to be located at the southeast corner of the 709-acre Syracuse Wildlife Managment Area.

Trail Typologies

There are a number of trail typologies. However, just two that are the most plausible for and applicable to the proposed Cal-Wheat Warrior Trail.

Trail typology 1, the separated trail, is most desired by the general population, primarily due to safety. Separated trails can be used by a greater cross-section of people - accomodating families, youth, elderly and mobility challenged. The separated trail can also be multi-use, allowing the use of golf carts and side by sides, along with cycling, walking, and running.



Typical section 1c: Trail typology 1 - separated trail

The second typology, shared road (sharrow), is generally the least desirable, especially on rural and/or busy roadways. This type of trail does not promote multi-use pedestrian activites, and families and other recreationalists are hesitant to utilize it, considering it unsafe. Based on resident feedback, a shared road trail is the least desirable option. Residents from both commnities want a separated trail system and a complete ADA-compliant sidewalk system so they do not have to walk and bike on the roads.

Sign 1d: Typical signage for shared roadways

Photo 1e: Trail typology 2 - shared road

Cal-Wheat
Trail Plan & Identity

FLENKER LAND ARCHITECTURE CONSULTANTS, LLC
LA: Meg Flenker, PLA, ASLA, CPESC, CPSWQ
Interns: TJ Hillberry, Paola Monllor-Torres and Ethan Morrow
Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

SUMMARY: Opinion Of Probable Construction Cost			
Description	*Opinion of Cost*	*Comments*	
Cal-Wheat Trail & Sidewalk Connectivity	**$ 2,016,334.56**	*$ 979.80*	*Sharrow*
		$ 1,515,457.58	*Separated Trail*
		$ 499,897.18	*Pedestrian Sidewalk*
Trailhead Enhancements	**$ 545,491.92**		
Trail Enhancments	**$ 264,990.36**		
		$ 59,064.00	*Trailhead Gateway Enhancements*
		$ 111,642.00	*Wapsi Bridge Vehicular Barrier Enh.*
		$ 94,284.36	*Corridor Trail Enhancements*
Syracuse Rest Area	**$ 225,609.30**		
Cal-Wheat Trail Concept Enhancement Program	**$ 3,052,426.14**		

Trailhead

Overview

Representatives from both the Calamus and Wheatland visioning committees met with state, local, and county officials in mid-June 2021 to review the proposed Warrior Trail corridor as well as the area of the Syracuse Wildlife Management Area where the original Lincoln Highway pavement remnant is located. Due to the historical significance of the pavement remnant, combined with the location of this area relative to the proposed trail corridor and the Lincoln Highway Heritage Byway, this area was deemed the most logical location for the Trailhead.

This proposed trailhead not only provides a convenient area to park and access the Warrior Trail, but more importantly, it enhances the area by highlighting the remnant and expanding the native restoration work that the state has done. The addition of site amenities such as a defined and accessible parking lot, ADA-compliant sidewalks, picnic shelter, benches, and interpretive and informational signage will enhance the comfort of the user. Sidewalks and paths meandering through the different plant communities and providing connectivity to the site amenities encourages interaction with the environment and learning at the site.

The photo shown on board 2 is of the original Lincoln Highway remnant as it exists today. It is not marked and the parkingarea goes right up to the edge.

TRAILHEAD ENHANCEMENTS *(See Cal-Wheat Board #2 for Visual)*					**Summer 2021**
Description	***Est. Qty.***	***Unit***	***Estimated Unit Cost***	***Estimated Line Total***	***Estimated Totals***
Trailhead Enhancements					
Asphalt Parking Lot & Vehicular Drive (from Lincoln Hwy. to Parking Lot)					$ 105,703.00
Paved (Asphalt) Parking Lot & Vehicular Drive, includes Aggregate Base Course & Excavation	1,955	SY	$ 40.00	$ 78,200.00	
Contingency Item if needed: Engineering Fabric	*1,955*	*SY*	*$ 6.60*	*$ 12,903.00*	
Final Grading and Preparation Allowance	1	AL	$ 4,600.00	$ 4,600.00	
Pavement Marking Allowance (Stall lines, Arrows, ADA Logo)	1	AL	$ 6,000.00	$ 6,000.00	
Regulatory Signage Allowance	1	AL	$ 4,000.00	$ 4,000.00	
Way-Finding Signage					$ 28,500.00
Identity Signage Allowance	1	AL	$ 5,000.00	$ 5,000.00	
Identity Park Signage Landscape Allowance	1	AL	$ 1,500.00	$ 1,500.00	
Informational Kiosk (Allowance)	1	AL	$ 16,000.00	$ 16,000.00	
Interpretive Signage Allowance	1	AL	$ 6,000.00	$ 6,000.00	
Sidewalk (Varies by location, 6' Wide Minimum)					$ 72,191.00
Paved Sidewalk On Grade (5" PCC) and Excavation	985	SY	$ 51.00	$ 50,235.00	
Contingency Item if needed: Engineering Fabric	*985*	*SY*	*$ 6.60*	*$ 6,501.00*	
Contingency Item if needed: Aggregate Base Course, 4" and Associated Excavation	*985*	*SY*	*$ 7.00*	*$ 6,895.00*	
Site Preparation and Grading Allowance	1	AL	$ 2,800.00	$ 2,800.00	
ADA Compliant Detectable Warning Panel	96	SF	$ 60.00	$ 5,760.00	
Prairie Path, 5' (concept 2a, item 16)					$ 2,320.00
Crushed Ag-Lime Path and Associated Excavation	180	SY	$ 11.50	$ 2,070.00	
Site Preparation and Grading Allowance	1	AL	$ 250.00	$ 250.00	
Support Facilities					$ 78,500.00
Picnic Shelter Allowance	1	AL	$ 30,000.00	$ 30,000.00	
Modular ADA Restroom Allowance	1	AL	$ 40,000.00	$ 40,000.00	
Drinking Fountain w/Pet Basin Allowance	1	AL	$ 8,500.00	$ 8,500.00	
Site Amenities					$ 40,810.00
Metal Bench, 6' (With Cal-Wheat logo)	5	EA	$ 2,300.00	$ 11,500.00	
Metal Trash Receptacle (With Cal-Wheat logo)	4	EA	$ 1,900.00	$ 7,600.00	
Decorative Bike Rack Allowance	1	AL	$ 11,250.00	$ 11,250.00	
Picnic Tables	6	EA	$ 1,020.00	$ 6,120.00	
Picnic Tables, ADA compliant	2	EA	$ 1,150.00	$ 2,300.00	
Paved (5" PCC) Site Amenity Pads On Grade; and Excavation	40	SY	$ 51.00	$ 2,040.00	
Landscaping					$ 46,645.00
Formal Native Planting Landscaping (concept 2a, item 11)					
Demo Existing Gravel Parking Area & Amended Soil, Allowance	1	AL	$ 7,200.00	$ 7,200.00	
Native Grasses & Forbs Plant Plugs Allowance	1	AL	$ 9,500.00	$ 9,500.00	
Decorative Shredded Hardwood Mulch	335	SY	$ 9.00	$ 3,015.00	
Ground Prep Allowance	1	AL	$ 1,000.00	$ 1,000.00	
Trees					
Understory Native Deciduous Trees	14	EA	$ 275.00	$ 3,850.00	
Overstory Native Deciduous Trees	13	EA	$ 450.00	$ 5,850.00	
Decorative Shredded Hardwood Mulch	90	SY	$ 9.00	$ 810.00	
Native Planting Identification Display Garden (concept 2a, item 8)					
Amended Soil, Allowance	1	AL	$ 1,700.00	$ 1,700.00	
Native Grasses & Forbs Plant Plugs Allowance	1	AL	$ 2,500.00	$ 2,500.00	
Decorative Shredded Hardwood Mulch	80	SY	$ 9.00	$ 720.00	
Ground Prep, Allowance	1	AL	$ 500.00	$ 500.00	
Identification Labels Allowance	1	AL	$ 1,000.00	$ 1,000.00	
Lawn & Ground Prep	1	AL	$ 9,000.00	$ 9,000.00	
Mobilization Allowance	1	AL	$ 20,615.00	$ 20,615.00	$ 20,615.00
				Section Subtotal	$ 395,284.00
				Concept Stage 20% Contingency	$ 79,056.80
				Design & Engineering Allowance	$ 71,151.12
				Trailhead Enhancements Opinion of Total Probable Construction Cost*	***$ 545,491.92***
				TRAILHEAD ENHANCEMENTS: Opinion of Total Probable Construction Cost*	***$ 545,491.92***

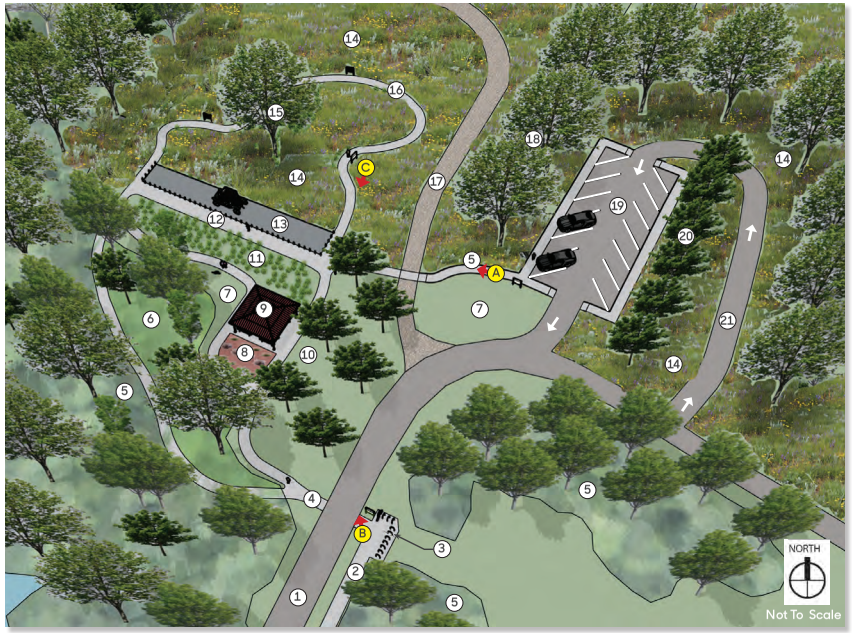
** Estimate does not include property easements, land acquisitions, site/boundary surveys, or any utility modifications including electric, sanitary, and water.*

LEGEND

1. Ingress/egress drive from Lincoln Highway to Trailhead (shared access for vehicles and bicyclist)
2. 6' wide sidewalk connection from Lincoln Highway sidewalk to trailhead
3. Bike parking using nature-inspired decorative themed bike racks like those proposed for the Syracuse bridge area
4. 6' wide sidewalk to access shelter, historical Lincoln Highway roadway display, native prairie/pollinator garden, and lawn areas; and to meander along existing woodland edge
5. Existing woodland
6. Maintained lawn with native tree mix for shade
7. Maintained lawn area
8. Native plant identification display garden
9. Shelter with picnic tables and trash receptacles
10. Maintained lawn area with native ornamental trees
11. Formal landscape area utilizing native prairie plants
12. 8' wide sidewalk along display area, along with interpretive signage
13. Historical display of Lincoln Highway pavement remnant and vintage Model T; display area protected by posts and cables reflective of ones used along Lincoln Highway (to prevent vehicles from accessing the roadway display)
14. Existing native prairie/pollinator garden
15. Bur oak tree (one)
16. 5' wide path meandering through prairie/pollinator garden; interpretive signage spaced adjacent to path
17. Existing gravel drive
18. Native oak buffer to include bur oak, white oak, and chinkapin oak
19. Angled parking, includes ADA-compliant stalls as required
20. Tree buffer utilizing native understory trees
21. One-way drive to angled parking lot

Trailhead

Representatives from both the Calamus and Wheatland visioning committees met with state, local, and county officials in mid-June 2021 to review the proposed Warrior Trail corridor as well as the area of the Syracuse Wildlife Management Area where the original Lincoln Highway pavement remnant is located.



Birds'- eye plan view 2a: Concept plan for trailhead

Due to the historical significance of the pavement remnant, combined with the location of this area relative to the proposed trail corridor and the Lincoln Highway Heritage Byway, this area was deemed the most logical location for the Trailhead.

This proposed trailhead not only provides a convenient area to park and access the Warrior Trail, but more importantly, it enhances the area by highlighting the remnant and expanding the native restoration work that the state has done. The addition of site amenities such as a defined and accessible parking lot, ADA-compliant sidewalks, picnic shelter, benches, and interpretive and informational signage will enhance the comfort of the user. Sidewalks and paths meandering through the different plant communities and providing connectivity to the site amenities encourages interaction with the environment and learning at the site.

The photo to the right is of the original Lincoln Highway remnant as it exists today. It is not marked and the parking area goes right up to the edge.

A *Concept sketch 2b: View from southwestern corner of parking lot looking westerly towards the shelter, kiosks, and historic Lincoln Highway pavement*

B *Concept sketch 2c: View from bike parking area looking northwesterly towards the shelter and information signage; nature-inspired artistic bike racks like those shown on board 4 are recommended*

C *Concept sketch 2d: View from trail that runs through the prairie and is looking southerly towards the historic Lincoln Highway, the shelter, prairie, and kiosks*

Cal-Wheat Trailhead

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Iowa's Living Roadways community visioning

Trail Enhancements

Trailhead Gateway

The existing entryway to the historic site of the original Lincoln Highway pavement remnant is unmarked and looks like a private drive, deterring visitors not familiar with the area.

The proposed enhancements are intended to clearly identify the entryway, improve pedestrian accessibility, and continue the style of the historic byway. To accomplish this, the concept illustrates a large, simple overhead gateway sign on columns that repeats the details of the existing Wapsi and overflow bridge rail columns. The Lincoln Highway logo and the Cal-Wheat Warrior Trail logos are both inlaid into the sign columns to continue the brand identity of the road and trail.

Wapsi Bridge Vehicular Barrier Treatment

The visioning committees from both Calamus and Wheatland would like to see the Wapsi bridge kept open to allow for pedestrian and light recreational vehicle (e.g. golf carts, side by sides, ATVs, and snowmobiles). In order to prevent use by passenger vehicles and farm equipment, a barrier is proposed for each end of the Wapsi bridge as illustrated in photo edit 3b on board 3.

The barrier would include a curbed planting area with native plantings installed in a formal design, and large limestone slabs on end and spaced to prevent passage of vehicles. This barrier would be slightly curved instead of straight across. Signage like what is shown above would incorporate the trail logo and list what was allowed on the bridge.

Trail Corridor Enhancements

Trail enhancements contribute to improving user enjoyment and comfort. Photo edit 3f on board 3 illustrates the following proposed enhancements: 1) removal of fallen, dead, dying, invasive and otherwise undesirable vegetation along the trail corridor and replacement with native prairie when applicable; 2) observation overlook with interpretive signage; 3) vehicular pull-off areas with sheltered picnic tables; 4) way-finding signage; 5) well marked (signed) shared-road segments; 6) pedestrian sidewalk when there is not enough room for a separated trail; and 7) maintained area adjacent to trail and walkways. Other enhancements for along the entire trail corridor include branded benches and trash receptacles (Warrior Trail logo inlays) as shown in photo edit 3d.

Existing photo 3a: Photo taken from Lincoln Highway Heritage Byway looking northeasterly toward the entrance drive to the portion of Syrcuse Wildlife Management Area that is proposed for the trailhead

Existing photo 3c: Photo taken from Lincoln Highway Heritage Byway looking westerly towards what is known as the overflow bridge. The overflow bridge is being replaced and will be opened to vehicular access, but the Wapsi bridge, which is located farther west and is closed as well, will not be open for vehicular traffic.

The Wapsi bridge will be able to be accessible to pedestrians and light recreational vehicles such as golf carts, side by sides and ATVs. Since the view to the Wapsi bridge was obstructed and this view was comparable, this photo was used to show what is proposed to limit access on each end of the Wapsi bridge.

Existing photo 3e: Photo taken from Lincoln Highway Heritage Byway west of entrance to trailhead looking easterly

Example 3f: Sheltered picnic table

Photo edit 3d: Proposed trailhead entryway

Photo edit 3d: Proposed vehicular barrier access treatment for each end of Wapsi bridge

Photo edit 3f: Proposed enhancements along the Warrior Trail corridor to increase user enjoyment

Trailhead Gateway

The existing entryway to the historic site of the original Lincoln Highway pavement remnant is unmarked and looks like a private drive, deterring visitors not familiar with the area.

The proposed enhancements are intended to clearly identify the entryway, improve pedestrian accessibility, and continue the style of the historic byway. To accomplish this, the concept illustrates a large, simple overhead gateway sign on columns that repeats the details of the existing Wapsi and overflow bridge rail columns. The Lincoln Highway logo and the Cal-Wheat Warrior Trail logos are both inlaid into the sign columns to continue the brand identity of the road and trail.

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The barrier would include a curbed planting area with native plantings installed in a formal design, and large limestone slabs on end and spaced to prevent passage of vehicles. This barrier would be slightly curved instead of straight across. Signage like what is shown above would incorporate the trail logo and list what was allowed on the bridge.

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Cal-Wheat
Trail Enhancements

FLENKER LAND ARCHITECTURE CONSULTANTS, LLC
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Iowa's Living Roadways community visioning

CAL-WHEAT TRAIL ENHANCEMENTS (See Cal-Wheat Boards #1 & #3 for Visual)					**Summer 2021**
Description	***Est. Qty.***	***Unit***	***Estimated Unit Cost***	***Estimated Line Total***	***Estimated Totals***
Sharrow Segment (Shared Street); +/- 1.42 Miles					
Sharrow ~ See note 1					$ 710.00
Shared rural road with minimal signage - See note 2	1.42	MI	$ 500.00	$ 710.00	
				Section Subtotal	$ 710.00
				Concept Stage 20% Contingency	$ 142.00
				Design & Engineering Allowance	$ 127.80
				Sharrow Trail Segment Opinion of Total Probable Construction Cost*	**$ 979.80**
Separated Trail (10' Wide with 2' Grass Shoulders); +/- 2.20 Miles					
Separated Trail ~ See note 3					$ 1,056,000.00
New paved, 10' side, multi-use trail on independent alignment - See note 4	2.20	MI	$ 480,000.00	$ 1,056,000.00	
Site Amenities (Benches, Trash Receptacles, Bike Racks) and associated PCC pads Allowance					$ 38,491.00
Metal Bench w/trail logo, 6'	8	EA	$ 2,300.00	$ 18,400.00	
Metal Trash Receptacle w/trail log	4	EA	$ 1,900.00	$ 7,600.00	
Decorative Shadow Bike Racks	8	EA	$ 650.00	$ 5,200.00	
Paved (5" PCC) Site Amenity Pads On Grade; and Excavation	85	SY	$ 51.00	$ 4,335.00	
Contingency Item if needed: Engineering Fabric	*85*	*SY*	*$ 6.60*	*$ 561.00*	
Contingency Item If needed: Aggregate Base Course, 4" and Associated Excavation	*85*	*SY*	*$ 7.00*	*$ 595.00*	
Final Grading and Preparation Allowance	1	AL	$ 1,800.00	$ 1,800.00	
Mobilization Allowance	1	AL	$ 2,000.00	$ 2,000.00	$ 2,000.00
				Section Subtotal	$ 1,096,491.00
				Concept Stage 20% Contingency	$ 219,298.20
				Design & Engineering Allowance	$ 197,668.38
				Separated Trail Opinion of Total Probable Construction Cost*	**$ 1,515,457.58**
Pedestrian Sidewalk (6' Wide); +/- 1.2 Miles					
Sidewalk, 6' Wide ~ See note 5					$ 293,320.00
Paved Sidewalk On Grade (5" PCC) and Excavation	4,200	SY	$ 51.00	$ 214,200.00	
Contingency Item if needed: Engineering Fabric	*4,200*	*SY*	*$ 6.60*	*$ 27,720.00*	
Contingency Item If needed: Aggregate Base Course, 4" and Associated Excavation	*4,200*	*SY*	*$ 7.00*	*$ 29,400.00*	
Site Preparation and Grading Allowance	1	AL	$ 13,600.00	$ 13,600.00	
ADA Compliant Detectable Warning Panel	140	SF	$ 60.00	$ 8,400.00	
Site Amenities					$ 38,491.00
Metal Bench w/trail logo, 6'	8	EA	$ 2,300.00	$ 18,400.00	
Metal Trash Receptacle w/trail log	4	EA	$ 1,900.00	$ 7,600.00	
Decorative Shadow Bike Racks	8	EA	$ 650.00	$ 5,200.00	
Paved (5" PCC) Site Amenity Pads On Grade; and Excavation	85	SY	$ 51.00	$ 4,335.00	
Contingency Item if needed: Engineering Fabric	*85*	*SY*	*$ 6.60*	*$ 561.00*	
Contingency Item If needed: Aggregate Base Course, 4" and Associated Excavation	*85*	*SY*	*$ 7.00*	*$ 595.00*	
Final Grading and Preparation Allowance	1	AL	$ 1,800.00	$ 1,800.00	
Mobilization Allowance	1	AL	$ 16,600.00	$ 16,600.00	$ 16,600.00
				Section Subtotal	$ 348,411.00
				Concept Stage 20% Contingency	$ 69,682.20
				Design & Engineering Allowance	$ 65,203.98
				Pedestrian Sidewalk Opinion of Total Probable Construction Cost*	**$ 499,897.18**
				CAL-WHEAT TRAIL & SIDEWALK CONNECTIVITY: Opinion of Total Probable Construction Cost*	**$ 2,016,334.56**

** Estimate does not include property easements, land acquisitions, site/boundary surveys, or any utility modifications including electric, sanitary, and water.*

Note 1: Segment is from 142nd Avenue, easterly, to the east end of the historic Lincoln Highway trestle bridge where Syracuse rest area starts
Note 2: Estimated unit cost is based on the Iowa Department of Transportation's most recent Iowa Bicycle and Pedestrian Long-Range Plan (dated 2020) which is based on historic costs in Iowa
Note 3: Segments are as follows: 1) Wheatland Manor, easterly, to 142nd Avenue (+/- 0.95 miles); 2) Syracuse rest area egress/ingress drive @ Hwy. 30, easterly, to the west end (parallel to Hwy. 30) of the proposed Calamus separated trail segment (+/- 1.25 miles)
Note 4: Estimated unit cost is based on the Iowa Department of Transportation's most recent Iowa Bicycle and Pedestrian Long-Range Plan (dated 2020) which is based on historic costs in Iowa
Note 5: Segments are as follows: 1) 142nd Avenue, easterly, to west end of Wapsi bridge (+/- 0.27 mile); 2) east end of Wapsi bridge, easterly, to west end of Overflow bridge (+/- 0.76 mile); east end of Overflow bridge, easterly, to start of Trailhead sidewalk (+/- 0.17 mile)

Syracuse Bridge Area

Overview

The Syracuse Bridge area is located along Lincoln Highway in the area between the existing historic trestel bridge and U.S. Highway 30. It is highly visible to motorists traveling along U.S. 30 and is a popular stop for Lincoln Highway enthusiast who tour the Lincoln Highway in their vintage cars. The lure of the area for the enthusiast is the existing trestel bridge which they like to use as a backdrop for photos of their vintae cars. Because of the high visibility and popularity of the trestel bridge, the Cal-Wheat community wanted to create an aesthetic, memorable space for the trail users while still accommodating the tourists who want to get a photo with the trestel bridge.

SYRACUSE BRIDGE AREA ENHANCEMENTS *(See Cal-Wheat Board #4 for Visual)*					**Summer 2021**
Description	*Est. Qty.*	*Unit*	*Estimated Unit Cost*	*Estimated Line Total*	*Estimated Totals*
Syracuse Rest Area Enhancements					
Pavement Demolition					$ 12,375.00
Demolition of Existing Pavement	550	SY	$ 22.50	$ 12,375.00	
Asphalt Parking Lot & Vehicular Drive					$ 61,577.00
Paved (Asphalt) Parking Lot & Vehicular Drive, includes Aggregate Base Course & Excavation	995	SY	$ 40.00	$ 39,800.00	
Contingency Item if needed: Engineering Fabric	*995*	*SY*	*$ 6.60*	*$ 6,567.00*	
Final Grading and Preparation Allowance	1	AL	$ 2,950.00	$ 2,950.00	
Pavement Marking Allowance (Stall lines, Arrows, ADA Logo)	1	AL	$ 2,900.00	$ 2,900.00	
Regulatory Signage Allowance	1	AL	$ 2,500.00	$ 2,500.00	
Concrete (PCC) Curb	160	LF	$ 21.00	$ 3,360.00	
Final Grading and Preparation Allowance	1	AL	$ 3,500.00	$ 3,500.00	
Decorative Pavement (Vintage Photo Staging Area, Bike Rack Areas, Bench Swing Areas)					$ 9,350.00
Decorative Colored & Stamped PCC Crosswalk Pavement, Complete	61	SY	$ 120.00	$ 7,320.00	
Final Grading and Preparation Allowance	1	AL	$ 500.00	$ 500.00	
PCC Banding, Complete	180	LF	$ 8.50	$ 1,530.00	
Way-Finding Signage					$ 19,500.00
Identity Signage Allowance	2	AL	$ 5,000.00	$ 10,000.00	
Identity Park Signage Landscape Allowance	1	AL	$ 1,500.00	$ 1,500.00	
Informational Kiosk (Allowance)	1	AL	$ 8,000.00	$ 8,000.00	
Sidewalk (Varies by location, 6' Wide Minimum)					$ 19,364.00
Paved Sidewalk On Grade (5" PCC) and Excavation	240	SY	$ 51.00	$ 12,240.00	
Contingency Item if needed: Engineering Fabric	*240*	*SY*	*$ 6.60*	*$ 1,584.00*	
Contingency Item if needed: Aggregate Base Course, 4" and Associated Excavation	*240*	*SY*	*$ 7.00*	*$ 1,680.00*	
Site Preparation and Grading Allowance	1	AL	$ 800.00	$ 800.00	
ADA Compliant Detectable Warning Panel	36	SF	$ 60.00	$ 2,160.00	
Decorative Compass Pavement Inlay, Complete Allowance	1	AL	$ 900.00	$ 900.00	
Site Amenities					$ 21,550.00
Metal Bench, 6' (With Cal-Wheat logo)	2	EA	$ 2,300.00	$ 4,600.00	
Metal Trash Receptacle (With Cal-Wheat logo)	2	EA	$ 1,900.00	$ 3,800.00	
Decorative Heron Bike Rack	3	EA	$ 2,000.00	$ 6,000.00	
Decorative Shadow Bike Racks	5	EA	$ 650.00	$ 3,250.00	
Bench Swing Allowance (4 Ea.)	1	AL	$ 2,400.00	$ 2,400.00	
Decorative Vehicle Barrier Allowance (3 Ea.)	1	AL	$ 1,500.00	$ 1,500.00	
Landscaping					$ 24,144.00
Formal Native Planting Landscaping (Parking Lot Islands) Allowance	1	AL	$ 10,000.00	$ 10,000.00	
Overstory Native Deciduous Trees	1	EA	$ 425.00	$ 425.00	
Understory Native Deciduous Trees	3	EA	$ 275.00	$ 825.00	
Commercial Aluminum Edging, Black Annodized	70	LF	$ 16.00	$ 1,120.00	
Decorative Shredded Hardwood Mulch	86	SY	$ 9.00	$ 774.00	
Native Praire & Ground Prep, Allowance	1	AL	$ 9,500.00	$ 9,500.00	
Lawn & Ground Prep	1	AL	$ 1,500.00	$ 1,500.00	
Mobilization Allowance	1	AL	$ 8,000.00	$ 8,000.00	$ 8,000.00
				Section Subtotal	$ 163,485.00
				Concept Stage 20% Contingency	$ 32,697.00
				Design & Engineering Allowance	$ 29,427.30
				Syracuse Bridge Rest Area Enhancements Opinion of Total Probable Construction Cost*	**$ 225,609.30**
				SYRACUSE REST AREA ENHANCEMENTS: Opinion of Total Probable Construction Cost*	**$ 225,609.30**

** Estimate does not include property easements, land acquisitions, site/boundary surveys, or any utility modifications including electric, sanitary, and water.*

Syracuse Bridge Area

The Syracuse Bridge area is located along Lincoln Highway in the area between the existing historic trestel bridge and U.S. Highway 30. It is highly visible to motorists traveling along U.S. 30 and is a popular stop for Lincoln Highway enthusiast who tour the Lincoln Highway in their vintage cars. The lure of the area for the enthusiast is the existing trestel bridge which they like to use as a backdrop for photos of their vintae cars. Because of the high visibility and popularity of the trestel bridge, the Cal-Wheat community wanted to create an aesthetic, memorable space for the trail users while still accommodating the tourists who want to get a photo with the trestel bridge.

Example 4b: Bench swing

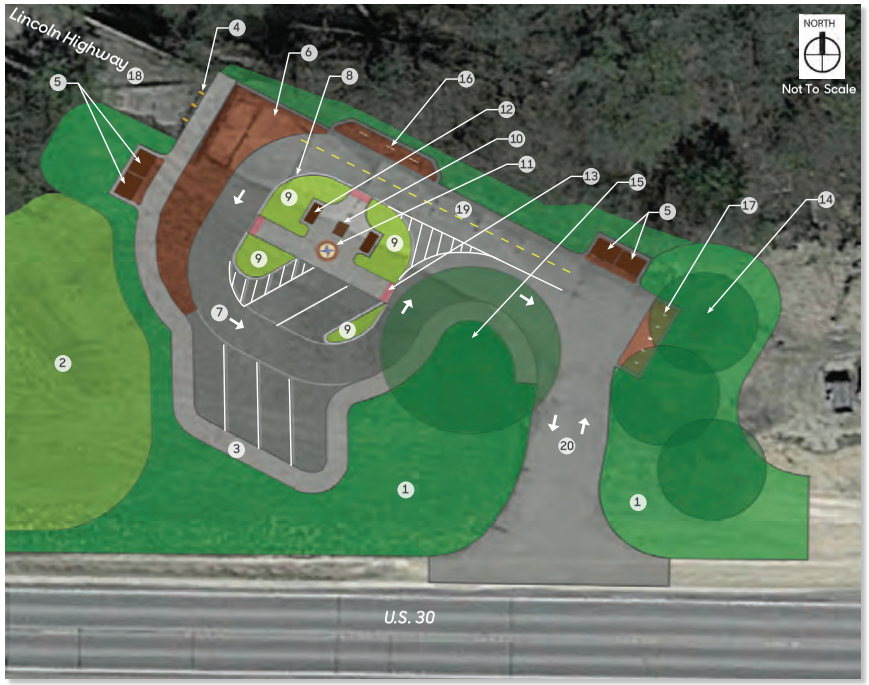
Example 4c: Heron bike racks

Example 4d: Nature-themed shadow bike racks

Existing photo 4f: Photo taken from eastern end looking westerly toward the trestel bridge

LEGEND

1. Maintained lawn
2. Managed native prairie
3. Pedestrian sidewalk (min. 6' wide)
4. Decorative vehicle barrier
5. Covered bench swing on decorative pavement
6. Vintage auto photo staging area on decorative pavement
7. One-way vehicular pavement
8. Concrete curb
9. Formal planting with short native grasses
10. Cal-Wheat Warrior Trail information kiosk
11. Decorative compass pavement inlay
12. Benches
13. ADA-compliant sidewalk ramp with warning pad
14. Oranmental tree
15. Overstory native tree
16. Bike parking area with decorative bike racks (heron) on decorative pavement
17. Bike parking area with decorative bike racks (shadow) on decorative pavement
18. Multi-use Cal-Wheat Warrior trail
19. Multi-use Cal-Wheat Warrior trail shared with one-way auto lane
20. Shared road segment



Concept plan 4a: This illustration shows the location for the proposed elements at the bridge and the circulation patterns for both pedestrians and motorists

Photo edit 4g: Enhancements proposed consider user comfort as well as maintenance

Photo edit 4h: This illustration is the same one as above but without the trees; it should be noted that the proposed bike racks provide an "art" element when not being used

Cal-Wheat

Syracuse Bridge Area

FLENKER LAND ARCHITECTURE CONSULTANTS, LLC
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Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

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 Calamus. Despite the tremendous value in data gathering, analysis, conclusions, and recommendations; the greatest value is providing residents of Calamus 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

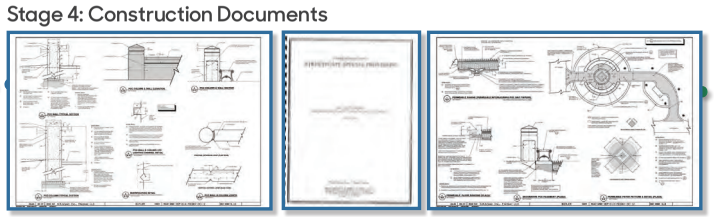
It is Flenker Land Architecture Consultants, LLC (FLAC)desire to continue to serve Calamus in the role of the city's landscape architect consultant. Our involvement and familiarity with the community and visioning plans as well as our extensive experience with similar types of projects, including their funding, would be an asset to Calamus.

Expertise from a team of allied professions may be needed to successfully design and implement several of the improvement projects identified. A landscape architecture consultant with registered landscape architects such as FLAC is best suited to lead and manage the design process. This helps ensure that the community's goals and designer's intent are fully integrated into the improvement projects. An architect, civil engineer, electrical engineer, and structural engineer can all be managed with sub-consultant agreements under the landscape architect's prime agreement with the city.

Design Process

The graphics on board 17 illustrate the multi-stage process generally involved to take a project from a "vision" to implementation. This process is referred to as the "Design Process." The specifics of each stage of the process, including the amount of effort and detail required, will be dependent upon a number of factors, including: project size, scope, complexity, project schedule, and funding sources.

Projects that are developed through the Community Visioning Program and presented on the board set and as part of this feasibillty report are the beginning of this design process.



Calamus
Implementation

Implementation Overview

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Projects that are developed through the Community Visioning Program and presented on these boards are the beginning of this design process.

Action Plan

What next? It is recommended that project implementation be approached using the following basic action plan.

YEAR 1

TASK 1 Schedule monthly steering committee meetings, confirm understanding of scope and estimated costs of identified projects, and **prioritize the top three projects for design refinement and implementation.**

TASK 2 Determine the most practical project for implementation and **identify all applicable and eligible grant funding and other resource opportunities.**

TASK 3 Utilizing Community Visioning deliverables and assistance from Trees Forever and a landscape architect, **submit application(s) for eligible and related grant programs.**

TASK 4 Upon a successful grant application and securing funding, **develop a schedule for project design, bidding, and construction, and select and execute a contract with a landscape architect as the lead design consultant. Stage 3 of the design process then begins.**

YEARS 2 - 10 & Beyond

TASK 1 Each year reassess top three priority projects based on grant application success and other funding and resource opportunities and **repeat Task 2-4 for the next selected project.**

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Iowa's Living Roadways community visioning

Recommendations

Based on economic return and increased quality of life, proposed projects are recommended to be approached individually, keeping in mind that some may run concurrently, and others may require phasing. 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. ***Many of the larger projects may also be completed in phases as funds become available.*** 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

Keep in mind that It is important to have two goals related to implementation: create success and build on those successes. Initial projects should most likely require the least funding and present the fewest barriers toimplementation. Many of the projects proposed in this document and through this process have numerous elements incorporated with one another. These elements have the potential to be separated and completed systematically. This will provide an opportunityto address smaller, more affordable portions of work to build success without substantial fundraising efforts.

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 and look very similar to what was conceptualized during the Visioning Program, or, they may look vastly different because of further city input and/or constraints or opportunities unknown during the visioning process.

Action Plan

What happens next? This is a common question that almost every community asks when completing the Community Visioning Program. It is recommended that project implementation be approached using the following basic action plan.

Year 1

Task	Task Summary
1	Schedule monthly steering committee meetings, confirm understanding of scope and estimated costs of identified projects, and ***prioritize the top three projects for design refinement and implementation.***
2	Determine the most practical first project for implementation and ***identify all applicable and eligible grant funding opportunities.***
3	Utilizing Community Visioning deliverables and assistance from Trees Forever and a landscape architect, ***submit application(s) for eligible and related grant programs.***
4	Upon a successful grant application and securing funding, ***develop a schedule for project design, bidding, and construction, and select and execute a contract with a landscape architect as the lead design consultant. Stage 3 of the design process begins.***

Year 2 & Subsequent Years (until all Visioning projects are complete)

1	Each year reassess top three priority projects based on grant application success and ***repeat Task 2-4 for the next selected project.***

Community Project Funding Options

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.

Additional funding programs can be found in the Trees Forever Funding Guide.

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)

FLENKER
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