

Final Report and Feasibility Study

Wheatland, Iowa



Planning and Design Consultant:
Flenker Land Architecture Consultants, LLC
29476 240th Avenue
Long Grove, Iowa 52756
563-225-2255
www.flenkerlandarchitects.com

FLENKER
LAND ARCHITECTURE
CONSULTANTS, LLC



Professional Planning, Design &
Environmental Services

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



Participants

Town Steering Committee

April Carpenter

Laurie Ganzer

Rita Hart

Derek Hendricksen

Kristen Hendricksen

Barb Jesse

Kim Kay

Francis Boggus (Home Town Pride Coach)

Steve Rohling

Jenna VanerHeiden

Trees Forever

80 West 8th Avenue

Marion, IA 52302

319-373-0650

www.treesforever.org

Emily Swihart

563-260-1000

E-Mail: eswihart@treesforever.org

Iowa State University

Landscape Architecture Extension

2321 North Loop Drive, Suite 121

Ames, IA 50010

515-294-3721

www.communityvisioning.org

Julia Badenhope, Program Director and Professor of Landscape Architecture

Sandra Oberbroeckling, Project Manager and Program Specialist

Chad Hunter, Landscape Architecture Outreach Studio Manager

Flenker Land Architecture Consultants, LLC

29476 240th Avenue

Long Grove, Iowa 52756

Voice: 563-225-2255

www.FlenkerLandArchitects.com

Meg Flenker, PLA, ASLA, CPESC, CPSWQ

Phone: 563-225-2255

mflenker@flenkerlandarchitects.com

Timothy J. Hillberry, Student (3rd Year)

Landscape Architecture Intern

Iowa State University

Paola Monllor-Torres, 2021 Graduate

Landscape Architecture Intern

Iowa State University

Ethan Morrow, Student (4th Year)

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.

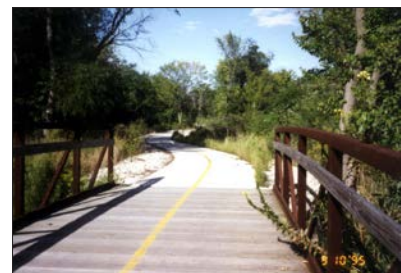
Flenker Land Architecture Consultants, LLC, continually strive to create individualized and quality projects that create value - a guiding principle that has resulted in our involvement in the planning and design of various award winning projects, both at the state and national level.



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 profession 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 herself 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

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

- Improve the pedestrian experience by adequately lighting primary routes and providing site amenities such as benches
- Enhance pedestrian accessibility, safety, and circulation by repairing, replacing, and building new ADA-compliant sidewalks to create a complete sidewalks system
- Upgrade the downtown streetscape to attract businesses and patrons
- Increase community identity and visual connectivity throughout Wheatland and to community assets by creating a way-finding system which integrates elements that strengthen Wheatland's identity
- Create more outdoor recreational opportunities for residents by improving city parks and creating multi-use trails within Wheatland and to neighboring Calamus



Residents reviewed preliminary concepts and provided feedback during the design workshop held on July 9, 2021.

Program Overview

The city of Wheatland 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

Wheatland

Program Overview



Members of the local Wheatland community visioning committee help explain, answer questions, and gather input during the design workshop.

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 bi-regional 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 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 public design workshop.



Tactile urbanism was used during the design workshop to help residents visualize and experience the spatial relationship of specific elements proposed, show curbs, milk crates, and temporary yellow paint that will be placed on the north side of the Jefferson and Main Street intersection.

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

Community Goals

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

- ▶ Improve the pedestrian experience by adequately lighting primary routes and providing site amenities such as benches
- ▶ Enhance pedestrian accessibility, safety, and circulation by repairing, replacing, and building new ADA-compliant sidewalks to create a complete sidewalks system
- ▶ Upgrade the downtown streetscape to attract businesses and patrons
- ▶ Increase community identity and visual connectivity throughout Wheatland and to community assets by creating a way-finding system which integrates elements that strengthen Wheatland's identity
- ▶ Create more outdoor recreational opportunities for residents by improving city parks and creating multi-

use trails within Wheatland and to neighboring Calamus

1 Summer 2021

Refer to board 5, "Goal Setting," for further details related to the community goals noted above.

Capturing the Wheatland 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. Bio-regional Assessments
3. Transportation Assets and Barriers Assessment
4. Transportation Inventory
5. Goal Setting
6. Concept Plan Overview
7. Community Identity
8. Community Entryways
9. Accessibility & Connectivity
10. Lighting & Sidewalks
11. Primary Corridors
12. Trails
13. Lions Park & City Park
14. Downtown
15. Implementation

This board set is supplemented by a shared set of boards with Calamus which addresses the proposed trail segment connecting Wheatland to Calamus. 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



FLENKER LAND ARCHITECTURE CONSULTANTS, LLC

LA: Meg Flecker, PLA, ASLA, CPESC, CPSWQ
Interns: TJ Hillberry, Paola Montlar-Torres and Ethan Morrow
Iowa State University | Trees Forever | Iowa Department of Transportation

Capturing the Wheatland 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.

Bioregional Assessment

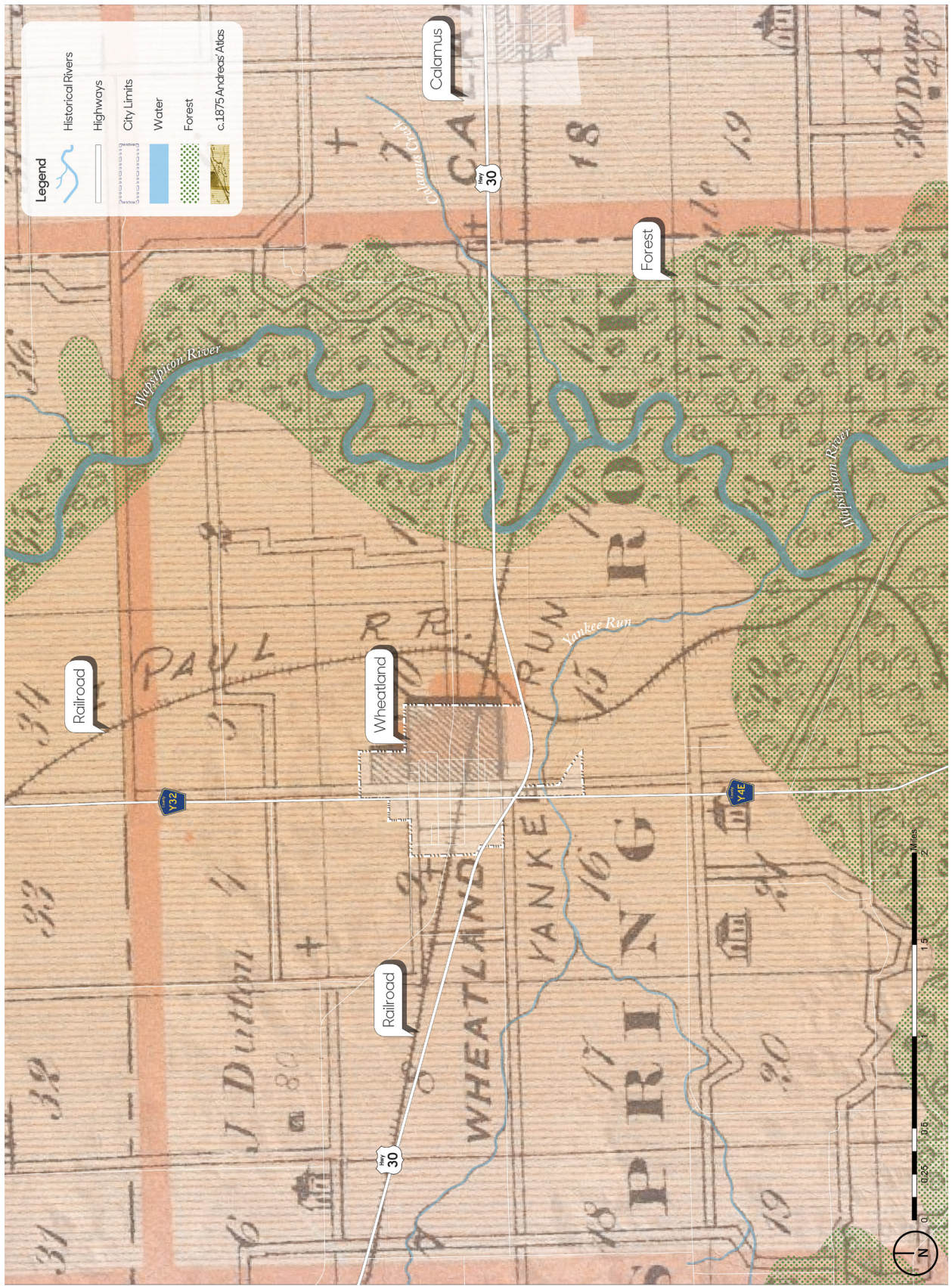
Historical Settlement Patterns

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.

Wheatland 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?



Historical Vegetation

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

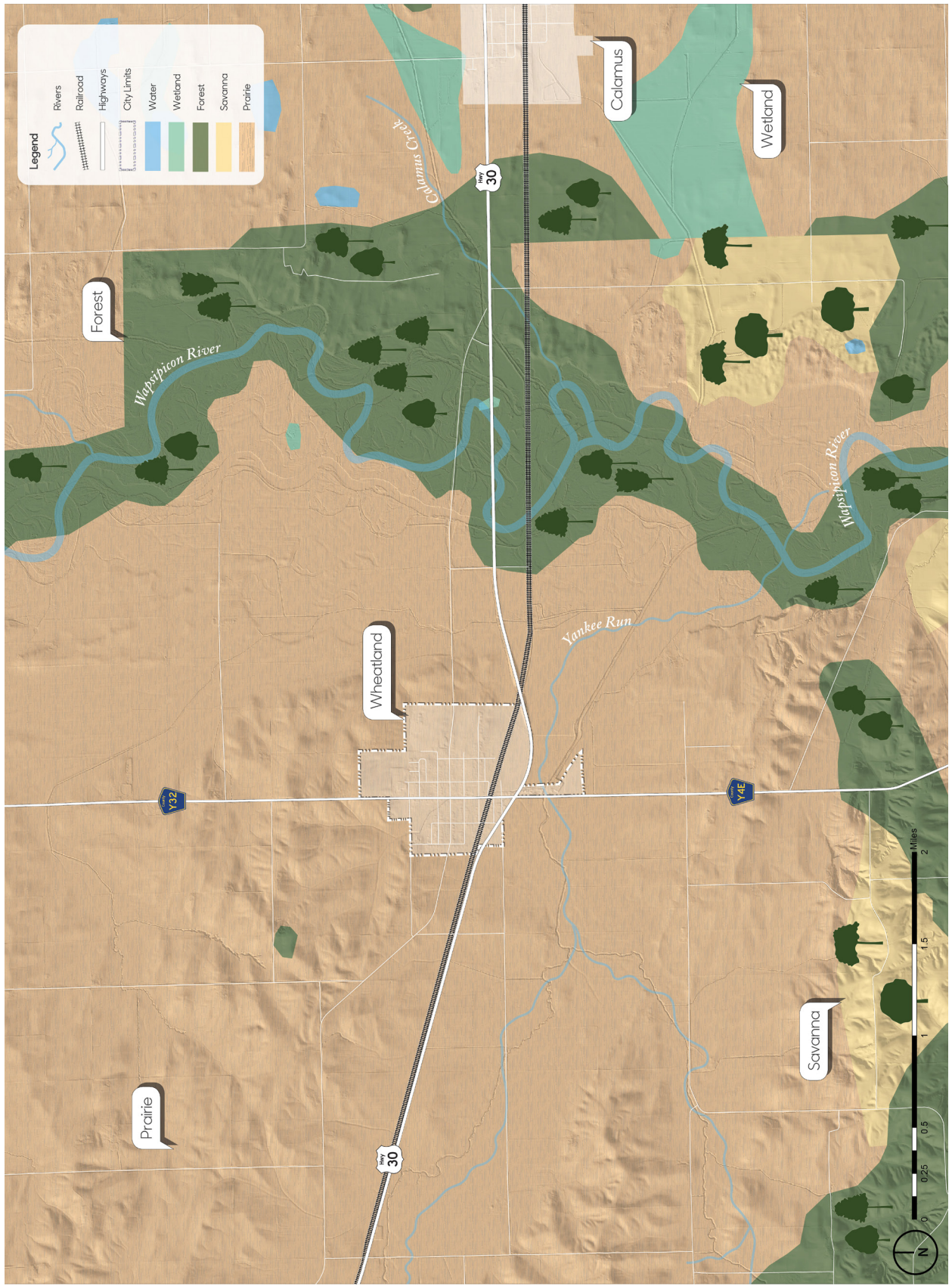
The plant community names mapped by the GLO surveyors varied. The original terminology they used has been preserved in the original data, but we have renamed them on this map to reflect names used to describe contemporary vegetation communities.

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

The vegetation types are defined¹:

1. Forest: Tree dominated, with a mostly closed canopy. Ground vegetation shade tolerant. developed under infrequent fire.
2. 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.

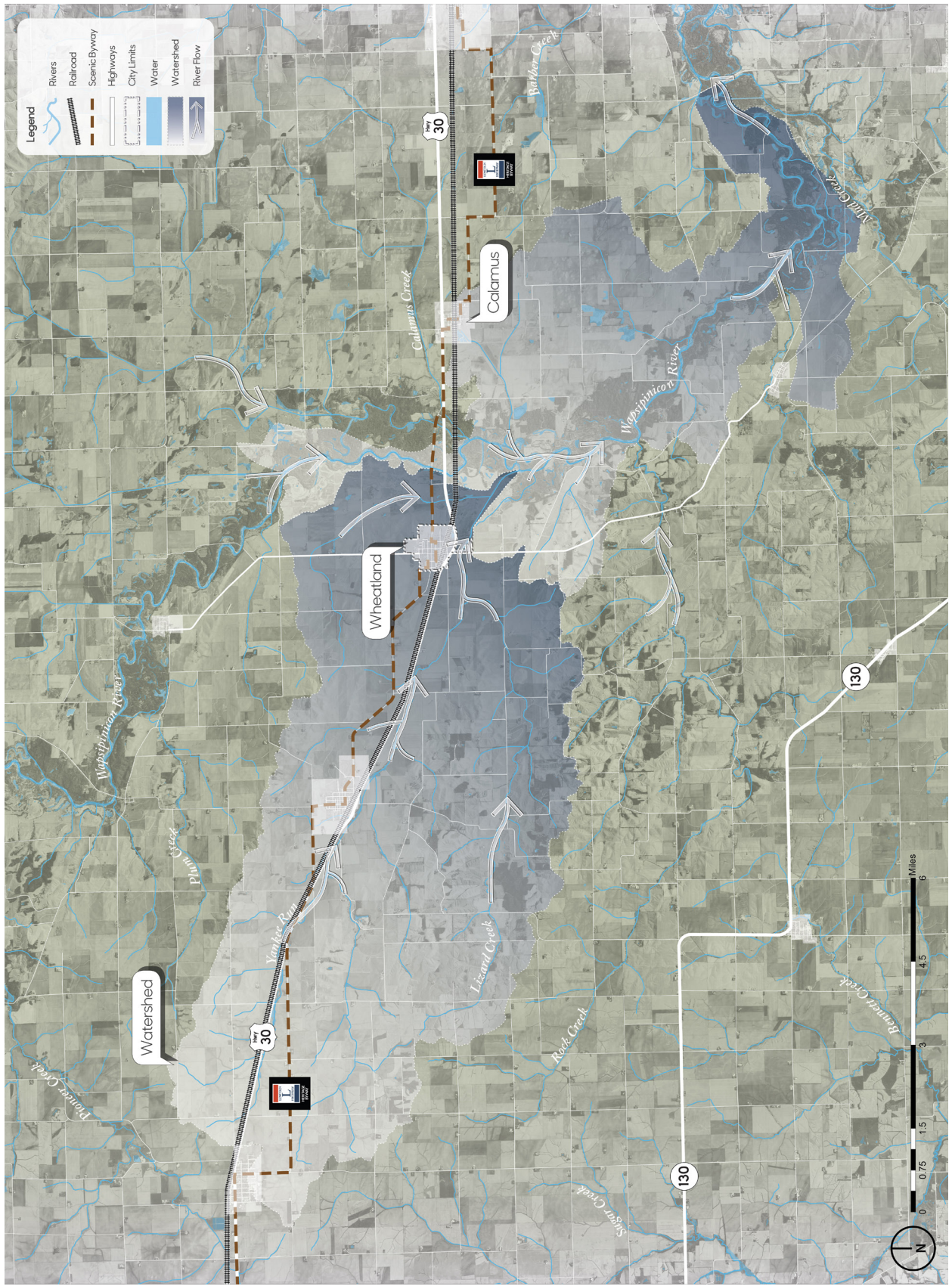


Regional Watershed

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.

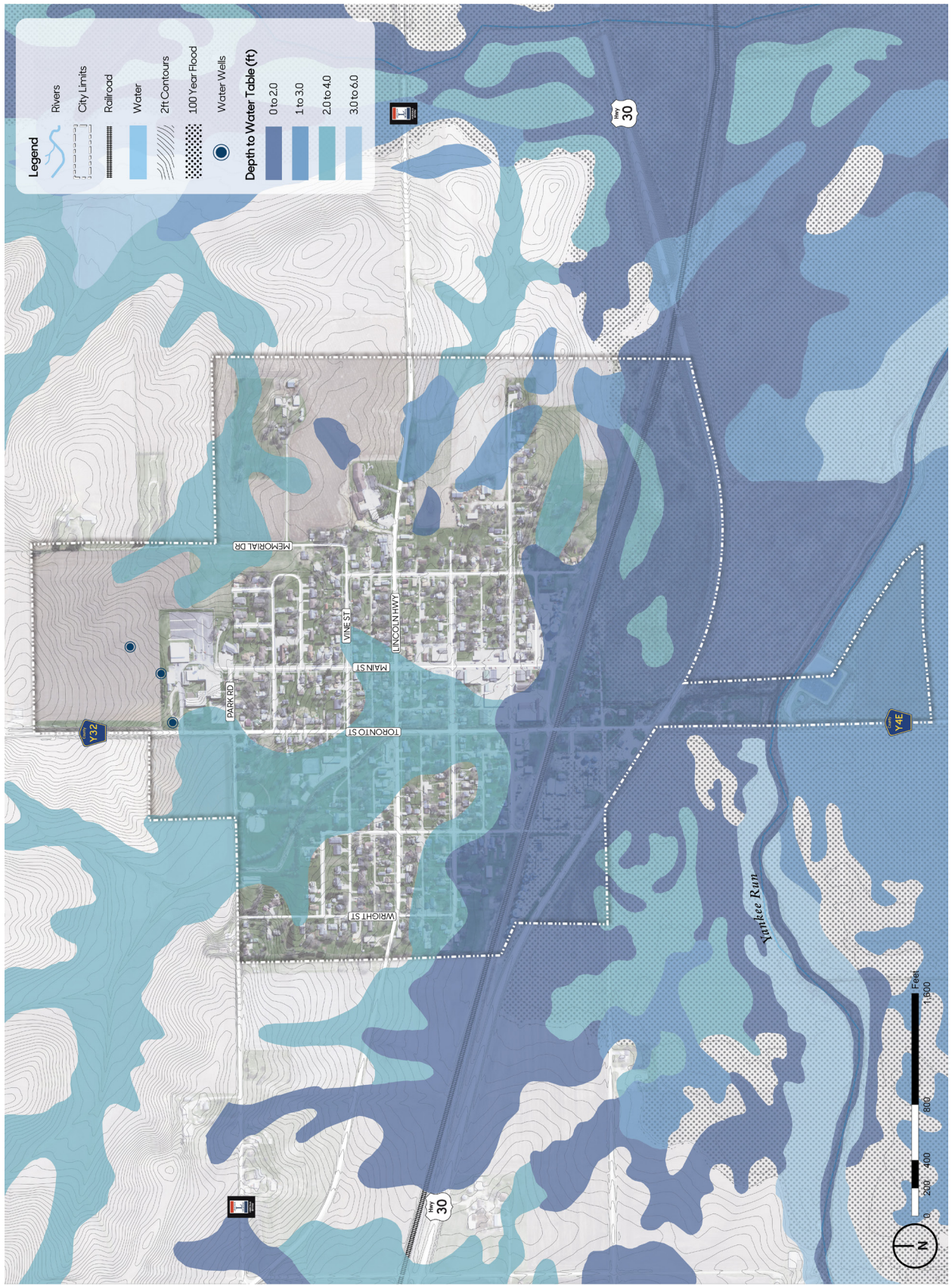


Depth to Water Table

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

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

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

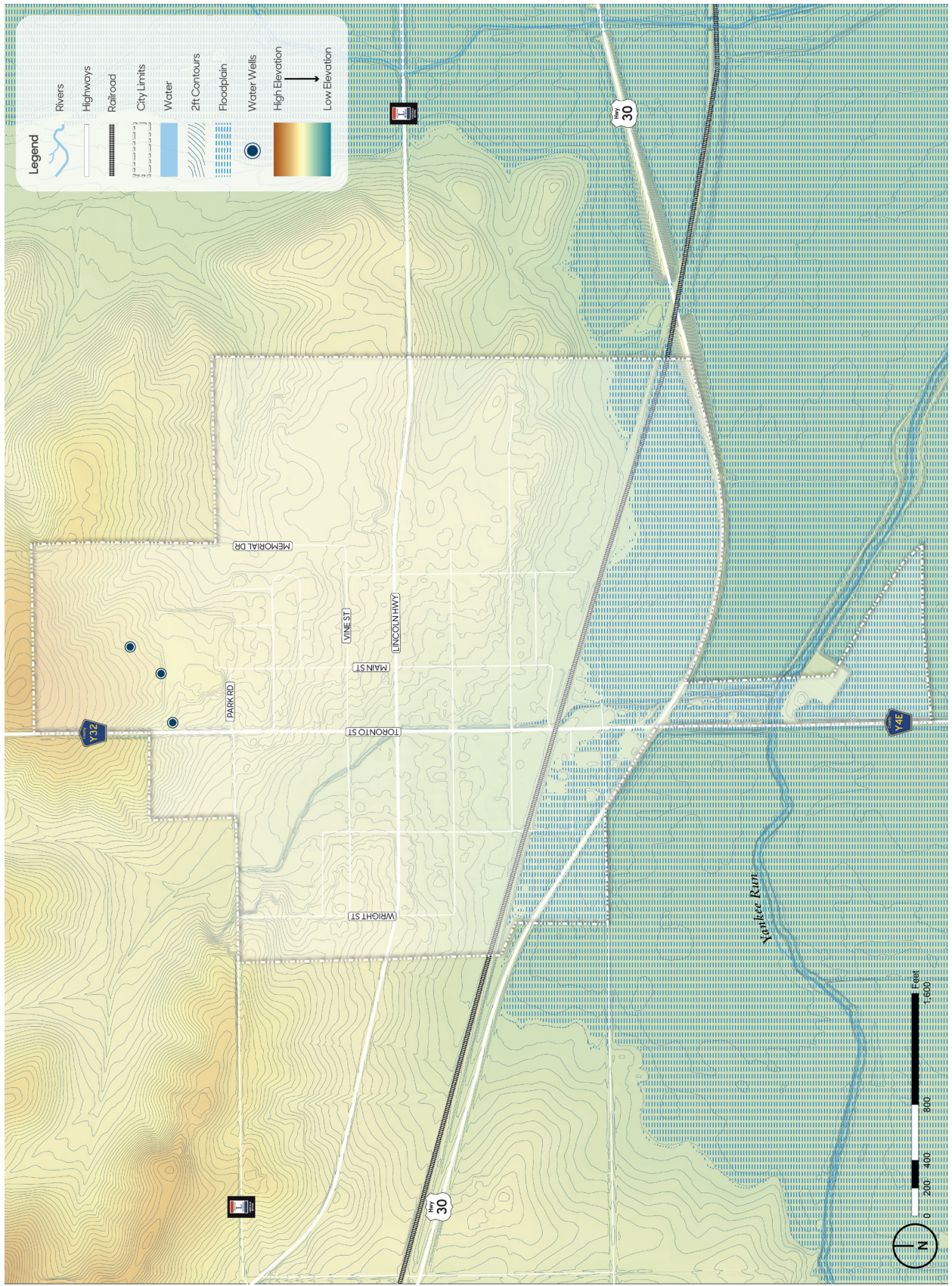


Elevation and Flow

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.



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.

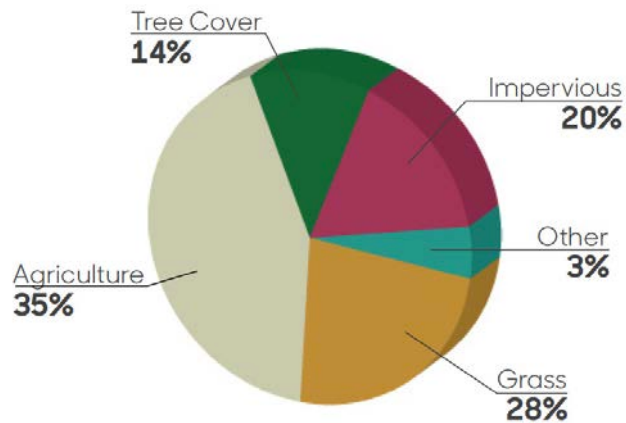
What do you observe about the dominant landcover types in your community?

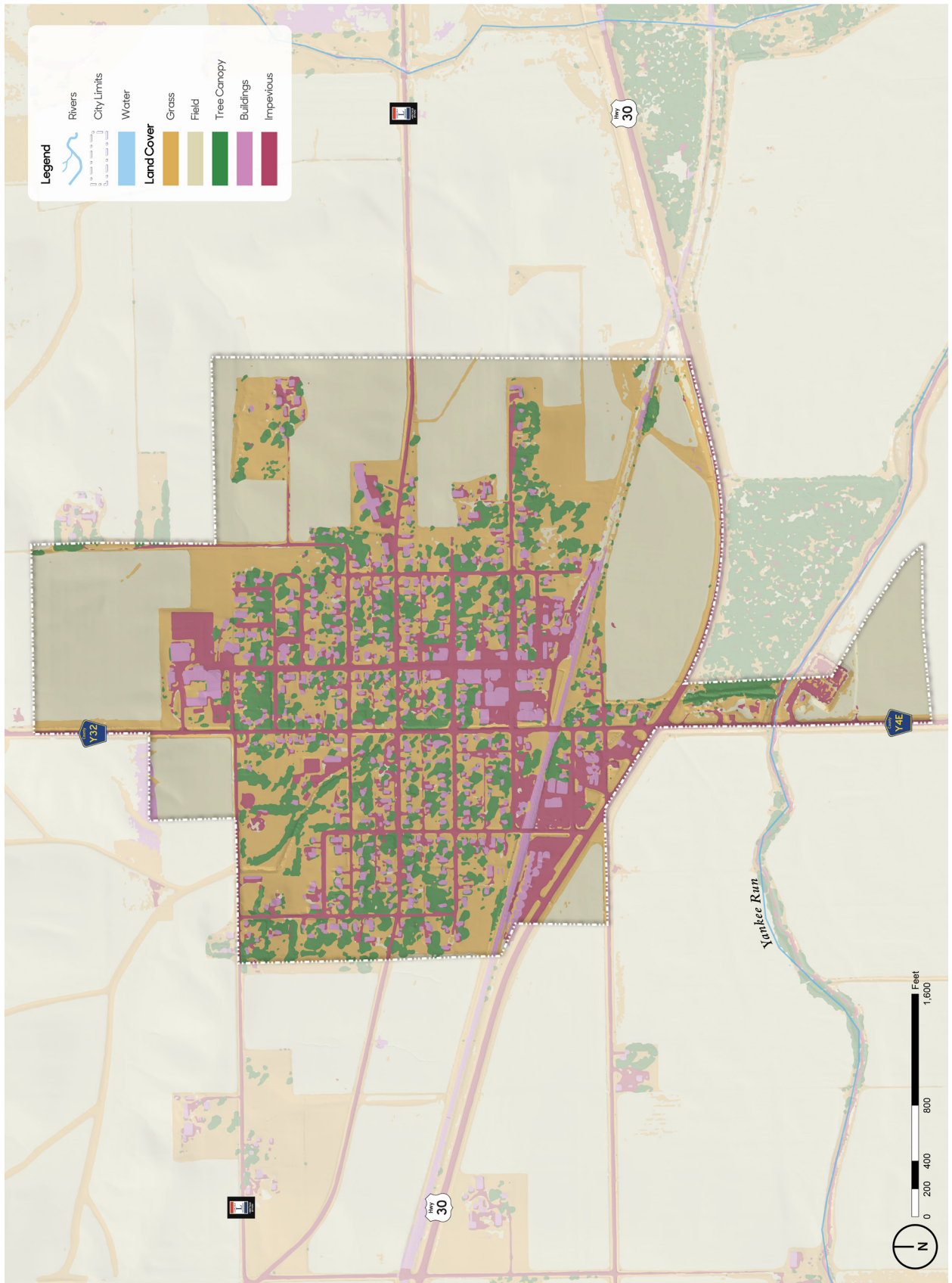
Where is the tree canopy most concentrated?

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





Landscape Change Over Time

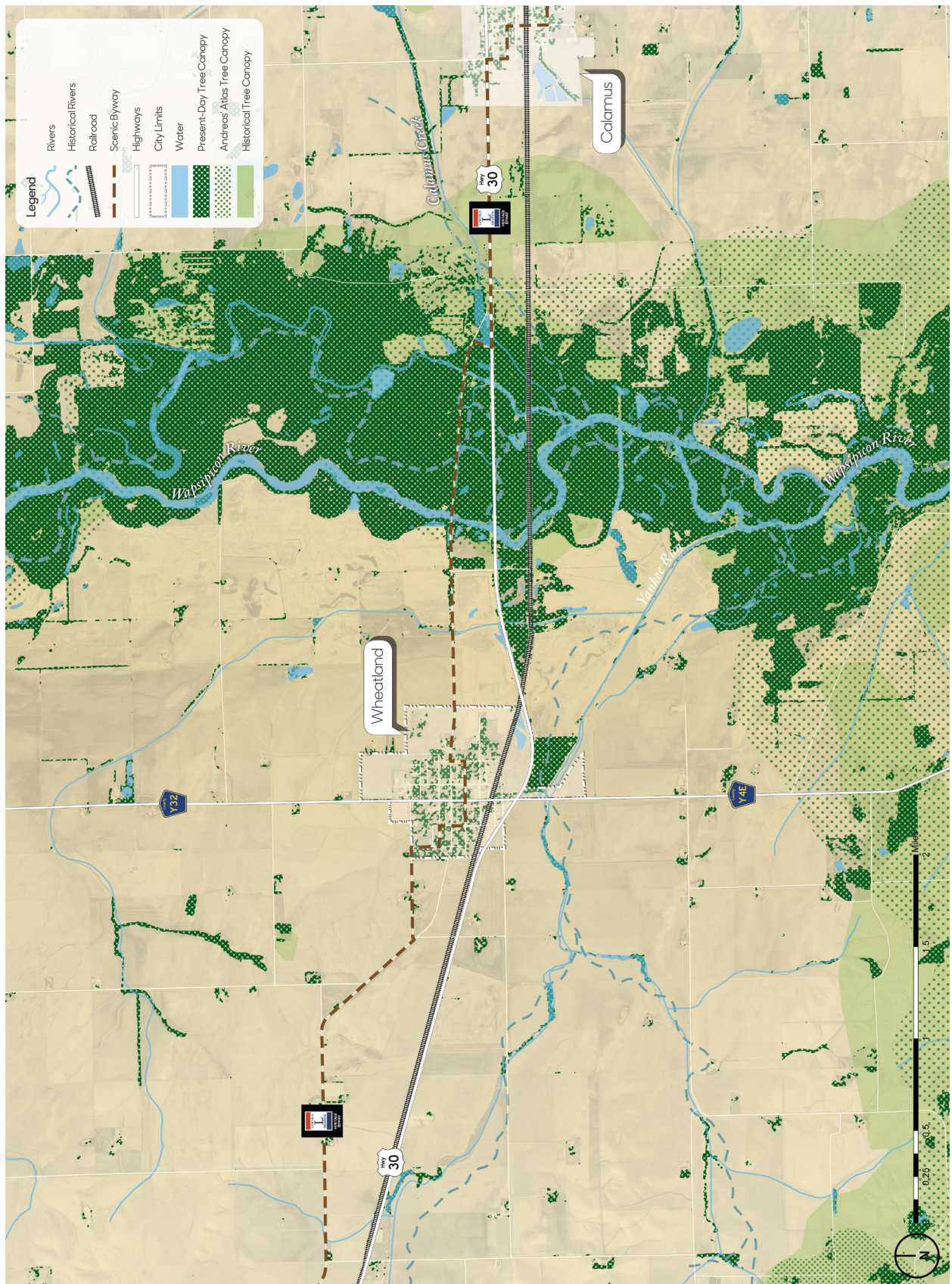
The map on this page shows how the landscape has changed over time, with an emphasis on vegetation and drainageways.¹ The map is helpful for understanding how landscapes change and considering how these changes might affect how well the landscape works to support human and ecological needs.

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.



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 Wheatland, 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 Wheatland'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 Wheatland residents with different transportation needs to participate in focus groups. A total of 32 residents attended Wheatland's workshop. Participants were separated into five user groups and the Wheatland 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.



Lion's Park provides an inviting entrance into Wheatland.



Highway 30 has fast-moving traffic and lacks pedestrian access to its businesses.



Historic Lincoln Highway serves as a connection between Wheatland and Calamus and is appreciated for the natural scenery along it.



The intersection of 130th Street and Vine Street has no sidewalks nor pedestrian access to the City Park.




Main Street is appreciated for its wide, accessible sidewalks, parking, and businesses.



The railroad crossing along S. Williams Street is rough and often blocked by trains.

What People Said



Actives

"I would like to have sidewalks in order to safely make sure that I'm not going to hit a pothole with my daughter in a stroller and crash."

"It would be nice to be able to go out past the Wheatland Manor and...on that old highway [30]...It would be nice to have a path off the side of that so we could get some distance in and... look at the scenery rather than to go...continually around town, just for a little change of scenery."

"Toronto Street is really narrow as far as walking or running or bicycling."

"Toronto Street could use sidewalks all the way up and down it. We have kids [who] walk back and forth to school, and they're walking in the roads, and that's a concern for safety."

"I always enjoy it when my kids ride along with me...I'll run and they'll ride their bikes along with me. They're getting out and getting some exercise and so am I."



Mobility Challenged


"[The railroad crossing at Toronto Street is rough. I could see the wheels of my son's wheelchair getting caught in the ruts.]"

"[Main Street is good for walking because the sidewalks are wide and smooth.]"

"[The sidewalks at the school need to be more accessible.]"

"[I would like biking or walking paths to the schools and between Wheatland and Calamus.]"

"[I would like to have accessible sidewalks to Wheatland Manor.]"



Older Adults


"...Long Grove and Eldridge...have a beautiful trail connecting the two. We...started trying to plan a path between Calamus and Wheatland; it would be huge, a chore...but a pipe dream."

"I do a lot of walking...I like to be out of the wind...I tend to go to the DeWitt walking path. There [are] a lot of trees there...You're out of the wind. It's a little bit warmer if it's cool. There's a lot of shade if it's hot. It's very nice. It's fairly level, and it's always cleared, if possible. It's just beautiful...You don't have to worry about traffic."

"I watch a lot of the walkers walk by my house, and...they're always walking out in the street, which is a good thing...but I've noticed that with this Dollar General...[there] seems to be a lot more traffic out and about."

"I always walk with a friend. It gets me going and gets me out there... the other part I like...is if it's pretty, if it's beautiful, if there's trees and birds around, it's just more enjoyable."

"A point of interest is our old highway, Old Highway 30...it was kind of a historical road, and they closed it down because... it needed upgrades, and they decided that it was too much money to put anything into it, but it has some historical value."



Parents


"If you're driving, [the railroad crossings are]...rough...I don't walk over them because...I think it's kind of a divide. I don't know how safe it is to walk on the other [side]... but...traffic is a lot higher on the...south side of the tracks."

"A lot of us use the road to the St. Paul's Cemetery [Memorial Drive], so there's definitely not any lighting out in that area, but it's a nice path because there's not a lot of cars out there."

"...when we go for runs or bike rides in town, we have to stay on the street because the sidewalk isn't wide enough or smooth enough for a double stroller."

"The park road does not have a sidewalk, and also does not have a lot of lighting on it, so if you would walk at night there's not a lot of lighting on that path."

"My kids really like going up to the high school and using the parking lots because it's the smoothest surface that we have in town, and they like using...the walkway up to the high school doors as a ramp [for scooters]."



Youth

"What makes [biking] enjoyable for us is not going alone, if we were with each other or... someone's riding bike along with us. That's probably what makes it the most enjoyable."

"[They should] make the area between Harry's Tires and the area with all the bins a little safer for kids."

"I don't think people can use the sidewalks very much just because [they are] not connected."

"There are a lot of [snow] pile ups along Main Street that make it a lot harder to get around when you're trying to run on the roads."

"[It would be nice to] add more sidewalks down by the park."



Steering Committee

"...Wheatland is laid out well on [its] Main Street...you can park in one spot, go to the post office, go to the insurance office, go to the hair salon."

"I think better signage on both Highway 30 and 130th Avenue would be better, because people coming from wherever...they're not always familiar with the road, and the blind spot, so better signage would be good too."

"The other obstacle... is how many times the trains go through, how many times we're stuck waiting at the train intersection..."

"[Wheatland] is a safe place...[my grandkids and I] will walk to the bank and...go to the library, and they enjoy it."

"[The railroad crossings] are terrible, and they have always been terrible. I don't understand why they can't get that to be smoother."

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 get around by driving, walking, and driving golf carts. This group enjoys running along the old Lincoln Highway because there is little traffic and the road is flat. Actives want a walking path near the nursing home to make it safer for running and to create more activity for residents.





Mobility-challenged individuals rely on driving and walking to get around town. Smooth, wide surfaces are important. This group would like accessible sidewalks near the nursing home and a connection between the ball fields and the playground at Lions Park.

Older adults walk and drive to most destinations. Safety, visual appeal and good company are important to them when walking. This group would like a scenic walking path where people don't have to worry about traffic.

Youth enjoy activities in town such as swimming at the pool, kayaking, and walking dogs. They appreciate many aspects of the Lions Park, but would be delighted to have new playground equipment, better facilities, and a splash pad.

Parents said that they mainly walk around town. They have a few concerns with Lions Park such as lack of parking, poor conditions of the parking lot, and an absence of connectivity to the ball park from the playground.

Steering committee members bike, walk, and drive around town. This group would like way-finding signage directing visitors to destinations such as the high school and local parks. Committee members also want signage and flashing lights at the intersection of 130th Avenue and Highway 30.

User Types	Destinations and Activities			Desirable Qualities and Features			Undesirable Qualities and Features			Most Desired Improvements and Activities					
	Lions Park	Main Street	Memorial Drive	Accessible Sidewalks	Safety	Visual Appeal	Incomplete Sidewalks	Issues Caused by Railroad	Highway 30	Lack of Lighting	Heavy Traffic	Beautification	Lighting	Sidewalks	Trail
 Actives	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
 Mobility Challenged	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
 Older Adults	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
 Youth	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
 Parents	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
 Steering Committee	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

Lions Park is popular among majority of user groups. The park hosts a variety of activities such as walking, picnicking and playing ball. Youth like the creek and the vegetation and aesthetic appeal.

Adult focus-group participants like the layout of Main Street. The active group appreciate the wide, smooth sidewalk and the availability of parking. The wide, smooth sidewalk and the centerline to park along Memorial Drive and the trees, and the area is visually appealing.

All group types desire smooth and wide sidewalks. Sidewalks, parents and actives like even and accessible enough and smooth enough for strollers.

Safety is important to actives, steering committee members, older adults and youth. Actives want to feel safe when they run in town, especially at night. Youth adults value the visual appeal. Residents identified Memorial Highway. Actives enjoy watching the sunset over the fields. All user types identified the inconsistent sidewalks as barriers in town, particularly along West Street. Towns in town, and uneven in town.

The railroad crossing in Wheatland causes issues for participants. Trains stopped on the tracks often cause delays for drivers. Parents and mobility-challenged people find it difficult and unsafe to cross the tracks.

Highway 30 is an obstacle for adult users. Older adults and parents said that heavy traffic makes it challenging to cross. The blind spot at the corner of 130th Avenue and Highway 30 is a concern for the steering committee.

Residents mentioned that there are areas with inadequate lighting along streets in Wheatland such as Park Road, City Park, Lions Park, and St. Pauls Cemetery and speeding areas in town with high volumes of traffic. West and West Lincoln Way has high volumes of traffic. The steering committee members, parents, and older adults noted areas in town with high volumes of traffic and stop signs.

Steering committee older adults and actives suggest beautification throughout the town. People could be appointed. The steering committee and youth desire more lighting of the ballpark in Lions Park. Actives would like more lighting of the ballpark in Lions Park. Actives would like more lighting of the ballpark in Lions Park. Actives would like more lighting of the ballpark in Lions Park. Actives would like more lighting of the ballpark in Lions Park.

All groups would like to see upgrades to the town's accessible sidewalks around and discussed to the town's steering committee and youth discussed to the town's steering committee. Mobility-challenged and actives would like to see a trail connecting Wheatland and Colonus. Youth expressed the need for a designated place for track runners.

All groups work more walking and biking trails in and around town. Older adults, parents, and actives would like to see a trail connecting Wheatland and Colonus. Youth expressed the need for a designated place for track runners.

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.

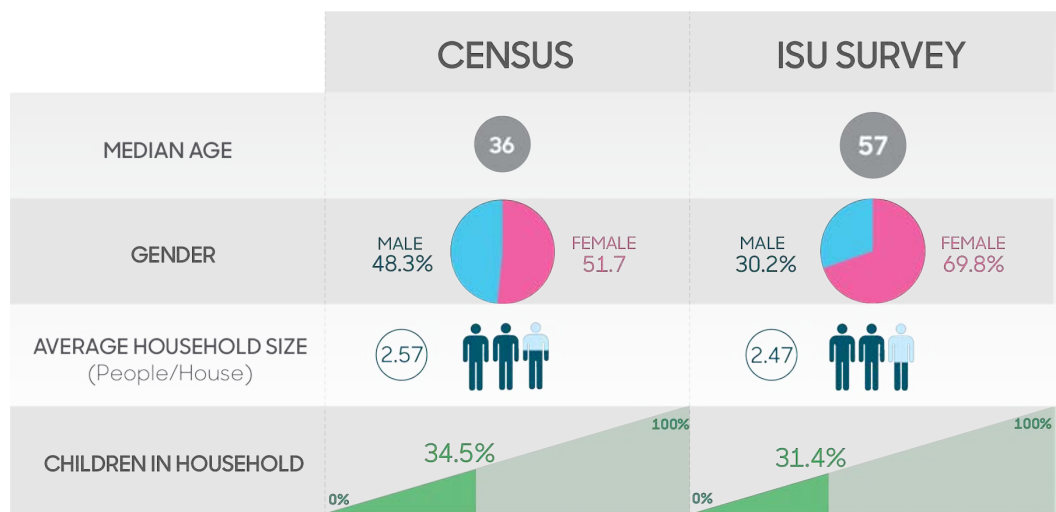
With assistance from Iowa State University's Survey Research Services staff in the Center for Survey Statistics and Methodology (CSSM-SRS), ISU visioning program staff conducted a survey to better understand the transportation patterns, behaviors, needs, and desires of Wheatland residents. Surveys were mailed to 260 randomly selected residents living in Wheatland 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 230. A total of 119 people returned surveys, for a response rate of 51.7%. (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 Wheatland. 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

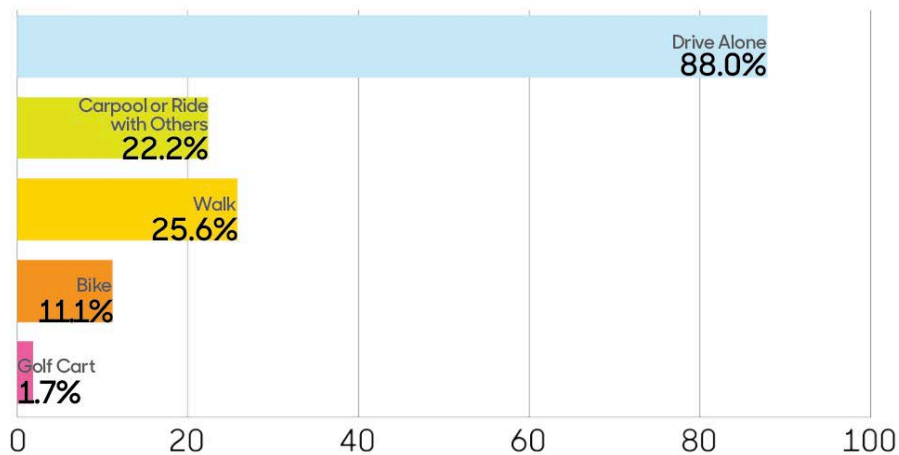
How We Did

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 57 is significantly older than the 2019 estimated average age for Wheatland residents of 36. 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.



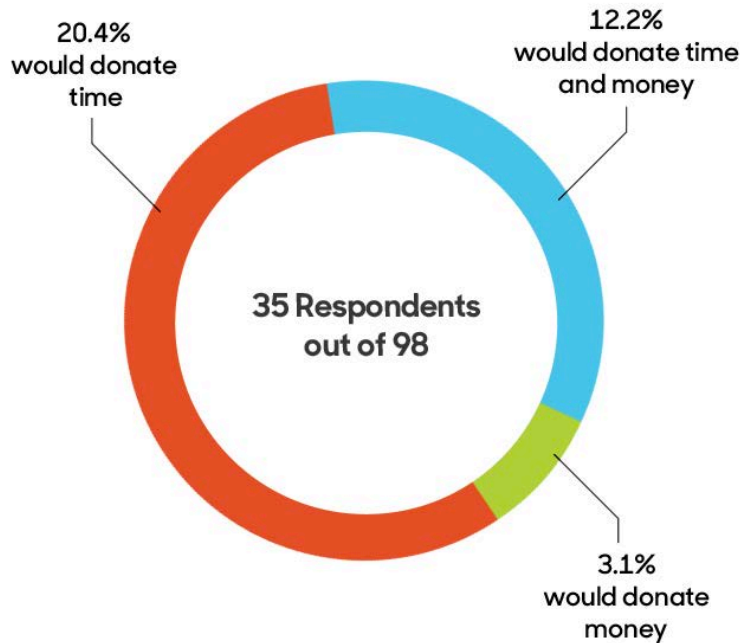
How Wheatland Residents Travel

Most survey respondents drive to important destinations such as the convenience store, the post office, school, and church (88%). More than 22% carpool or ride with someone else. More than 25% of respondents indicated that they walk, 11.1% bike, and 1.7% drive golf carts.



*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 (57.1%), while 12.2% would contribute their time and money. More than 3% of respondents indicated that they would be willing to contribute financially.

Compared to other small towns in Iowa, Wheatland residents are somewhat less 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 Wheatland's average is 8% lower.

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...



"I know of many people who live in the area [who] drive/transport their bikes to other areas with trails to ride outside."

"[We] need a dog park that is also accessible to seniors and those with impairments with parking nearby."



"[I] would like better sidewalks for stroller use."

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.

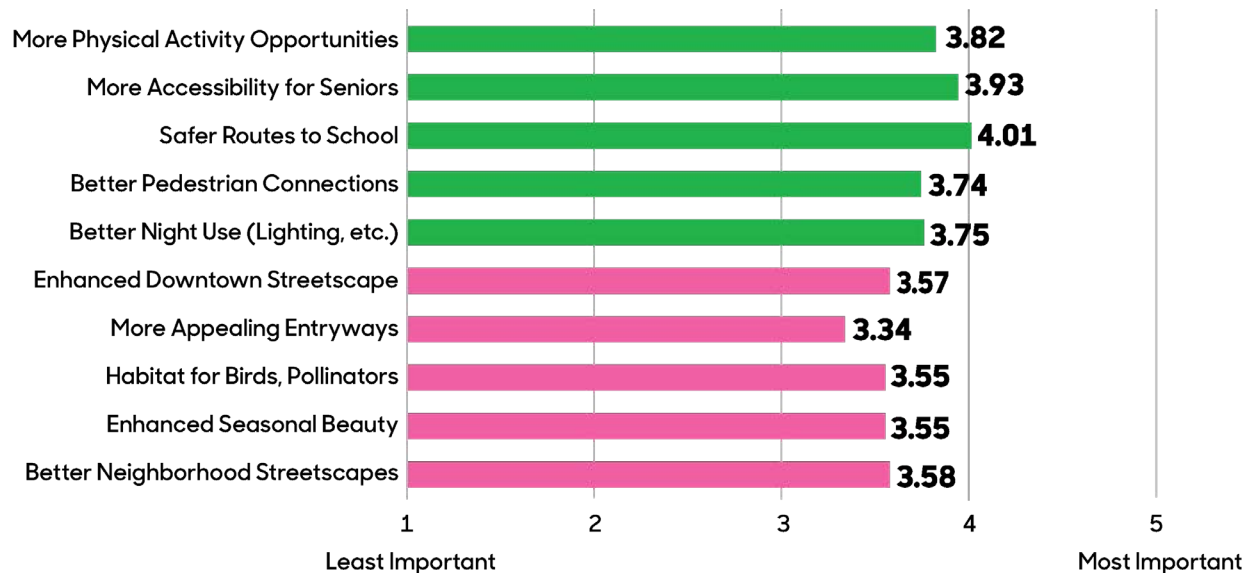
² Sigma: A Profile of Iowa Small Towns 1994 to 2014 (Ames, IA: Iowa State University College of Agriculture and Life Sciences, 2015).

Priorities

On a scale of 1 to 5, with 5 being the most important, participants in Wheatland ranked creating safer routes to school as most important, with a mean value of 4.01. Other types of transportation enhancements that address pedestrian mobility, health, and safety are also considered important, such as improving accessibility for seniors (3.93) and creating more opportunities for physical activity (3.82). In terms of quality of the built environment, survey respondents consider better neighborhood streetscapes as most important (3.58), followed by enhanced downtown streetscape (3.57), and enhanced seasonal beauty and habitat for birds and pollinators (3.55 each). These responses are consistent with improvements that focus-group participants suggested.

Transportation Enhancement Issues

- Pedestrian Mobility, Safety, and Health
- Quality of the Built Environment



Survey Participants Said...



"Wheatland and the surrounding area have beautiful scenery that could be capitalized on while improving our community's access to physical activity."

"I would love more safe areas for our people in town to walk and ride bikes." citizens."



"[I] would love to walk on Hwy 30 but it's unsafe due to narrow roads and cars driving too fast. [We] need [a] separate walk/bike path to feel safe on that road. And all of our track/cross country kids run on that road [from] Wheatland towards Calamus almost daily."

"My children love biking, walking and riding their scooters. I wish we had better sidewalks or a dedicated walking, biking, scooter trail that was safe."



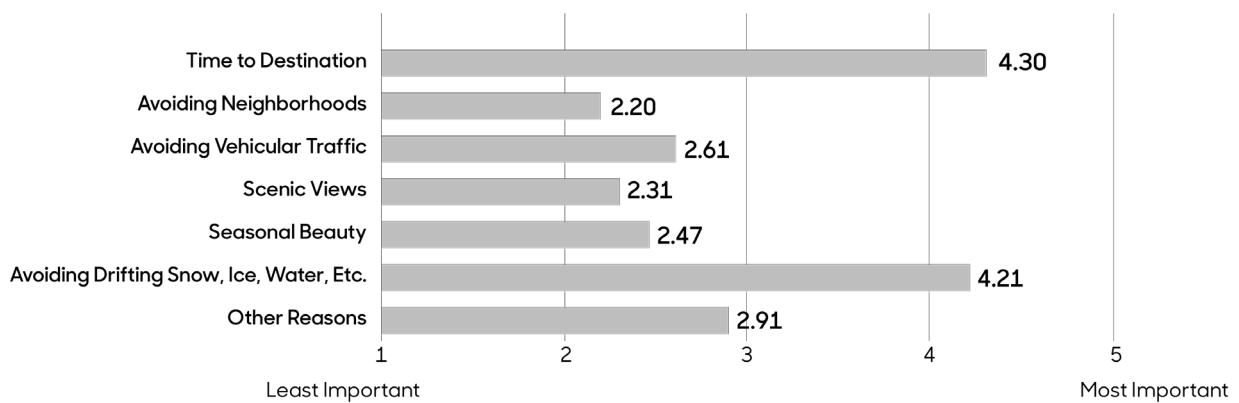
Routes to Work and School

This map shows the commuting routes identified by 70 survey respondents, 8 of whom were high school students who identified the routes they take to school. The frequency that the routes are used is depicted by their width, with most frequently used routes being the thickest. The primary commuting route in Wheatland is Toronto Street from Lincoln Way south to US Highway 30, from where most commuters go east. A number of people also travel east from Main Street on Lincoln Way. Toronto Street north to the high school is also frequently traveled, as well as Williams Street from Washington Street to 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. Among Wheatland participants, time to destination is the most important factor, with a mean value of 4.30. Avoiding weather-related issues such as snow and ice (4.21) is the second most important factor determining commuting routes. Scenic views, seasonal beauty, and avoiding neighborhoods and vehicular traffic are not critical factors in determining commuting routes.



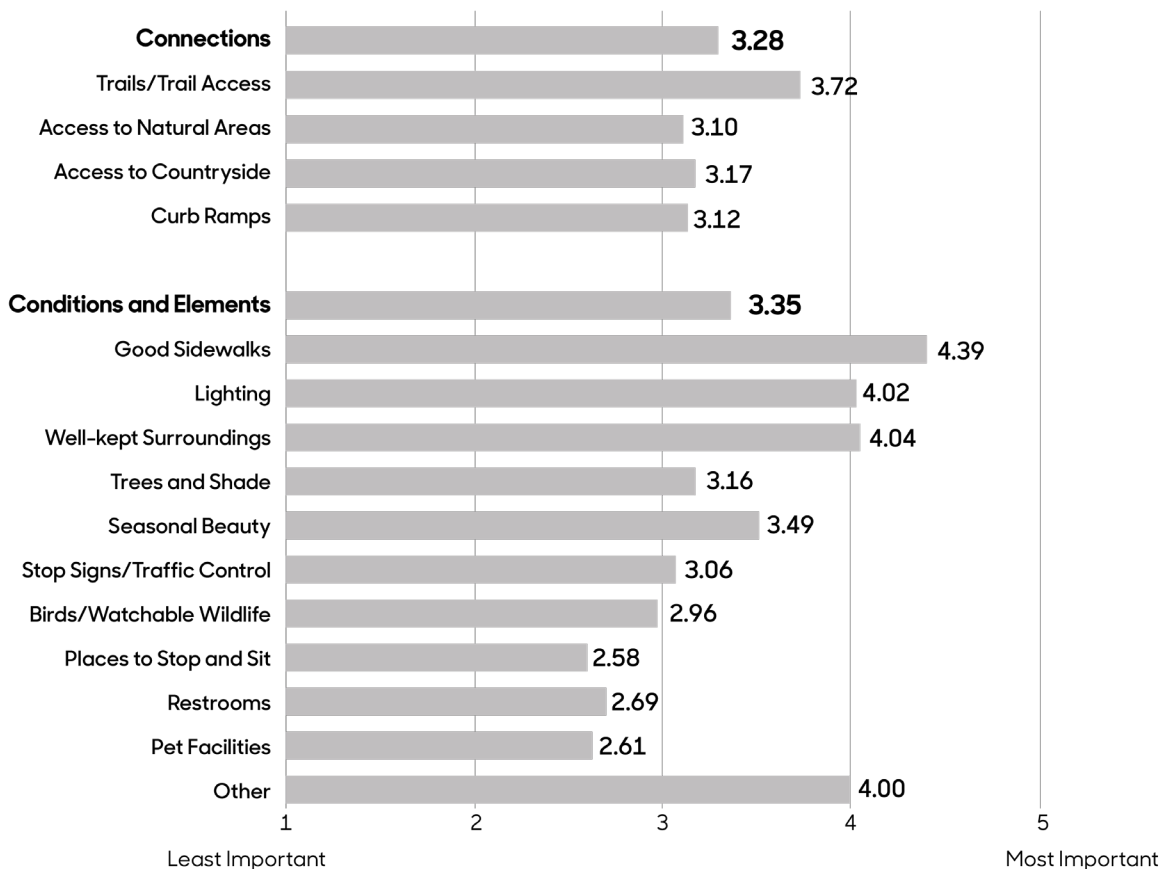


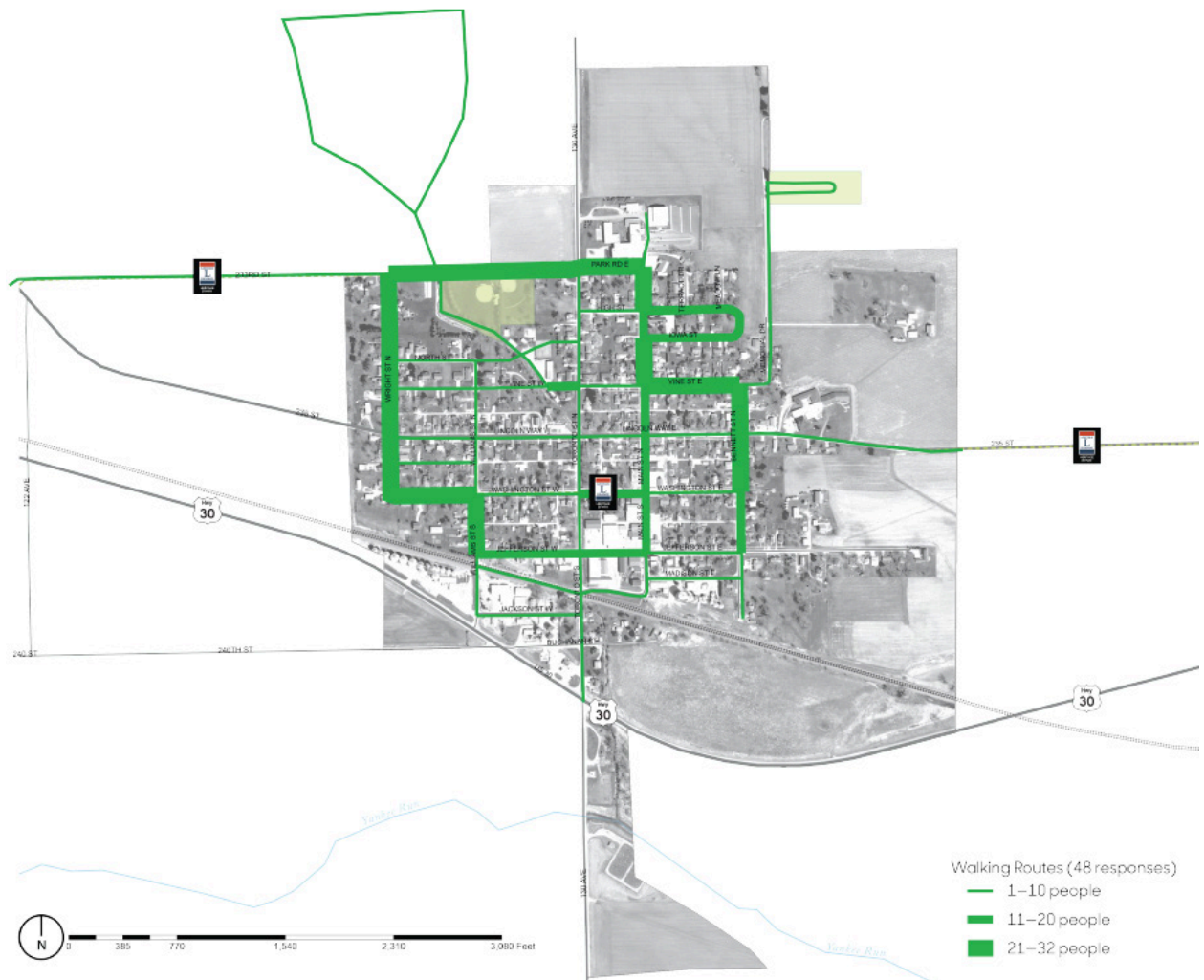
Walking Routes

This map shows the walking routes identified by 48 survey respondents, 2 of whom were high school students. The frequency that the routes are used is depicted by their width, with most frequently used routes being the thickest. Walkers in Wheatland tend to make a loop around the community on the peripheral streets, including Park Road, Wright Street, Washington Street, Williams Street, Jefferson Street, Bennett Street, Vine Street, and Main Street. Some people also include the loop of Iowa and High Streets. Walkers go to St. Paul's Cemetery, and some follow along the west side of the Lions Park and then head north out of town. A few people walk along the Lincoln Highway Heritage Byway as well.

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 Wheatland participants, conditions/elements are of somewhat more important than connections, with mean values of 3.35 and 3.28, respectively. In terms of connections, access to trails is most important with a mean value of 3.72. Good sidewalks (4.39) are the most important element to walkers, followed by well-kept surroundings (4.04) and lighting (4.02). Other factors (4.00) affecting the routes that walkers take include road conditions.



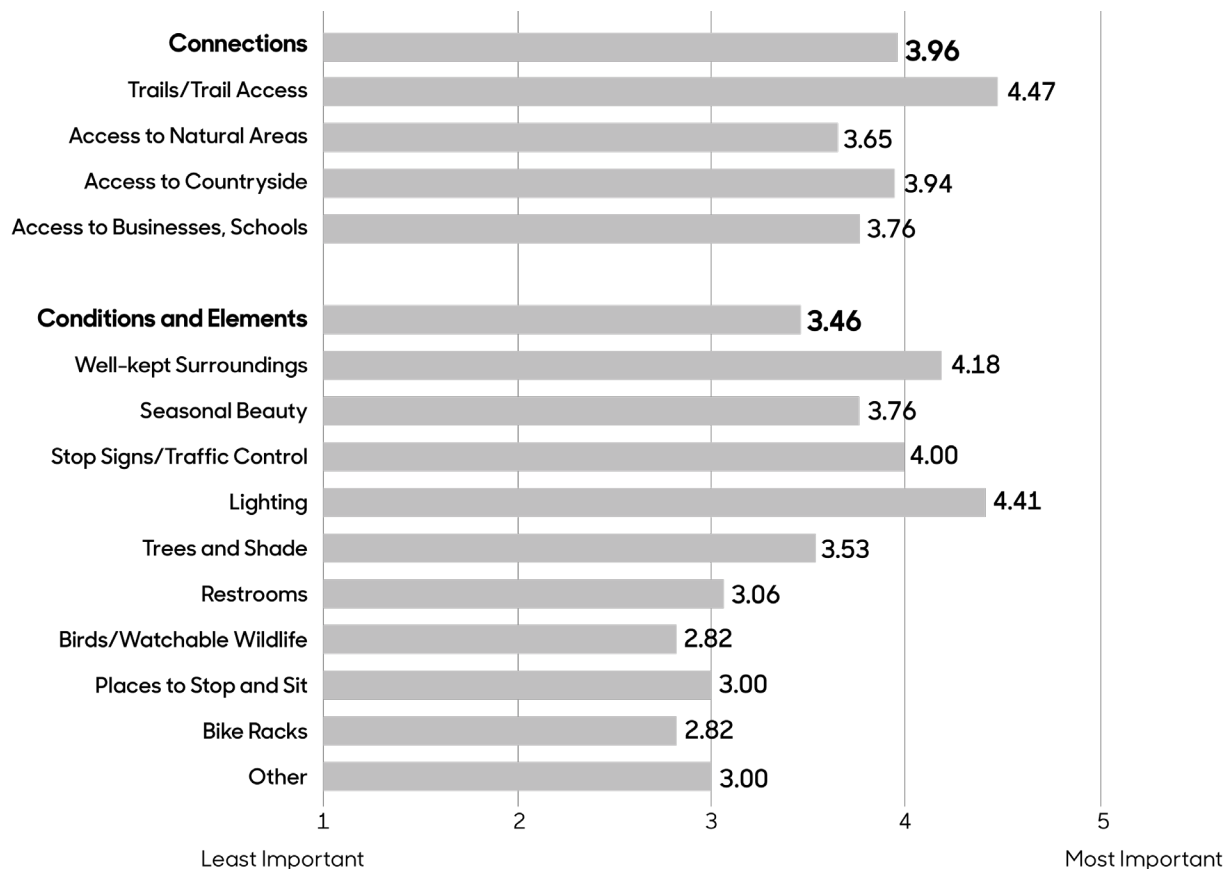


Biking Routes

This map shows the biking routes identified by 24 survey respondents, 4 of whom were high school students. The frequency that the routes are used is depicted by their width, with most frequently used routes being the thickest. Like walkers, bikers in Wheatland ride the peripheral streets—Park Road, Wright Street, Washington Street, Williams Street, Jefferson Street, Bennett Street, Vine Street, and Main Street—to make a loop around town. A good number of cyclists ride the Lincoln Highway Heritage Byway, primarily going east out of town, though some do go west.

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 Wheatland participants, connections are significantly more important than conditions/elements, with mean values of 3.96 and 3.46, respectively. In terms of connections, access to trails is most important with a mean value of 4.47. Access to the countryside (3.94) is the second most important connection. The most important factor affecting route choice among cyclists is lighting (4.41), followed by well-kept surroundings (4.18) and stop signs/traffic control (4.00). Seasonal beauty (3.76) and trees and shade (3.53) are also significant elements to cyclists.



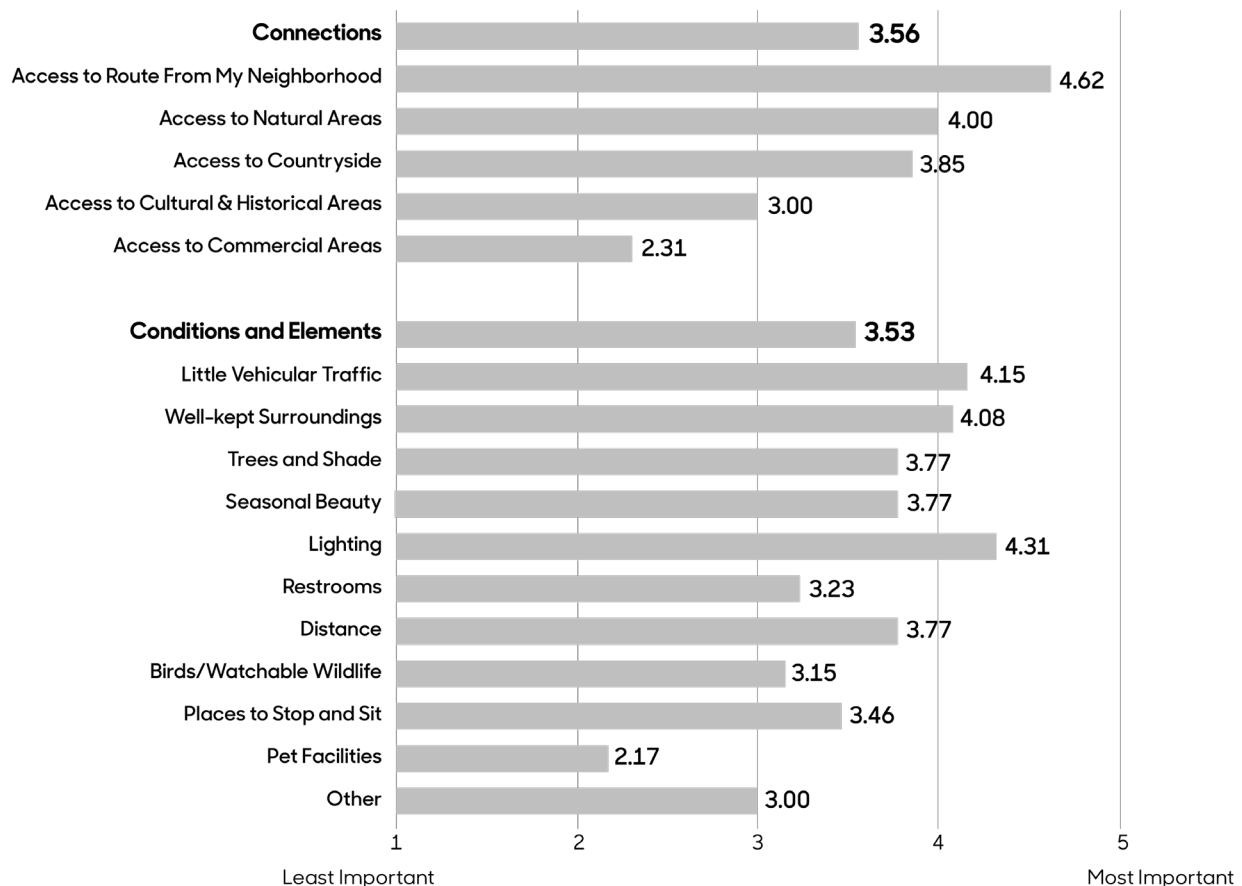


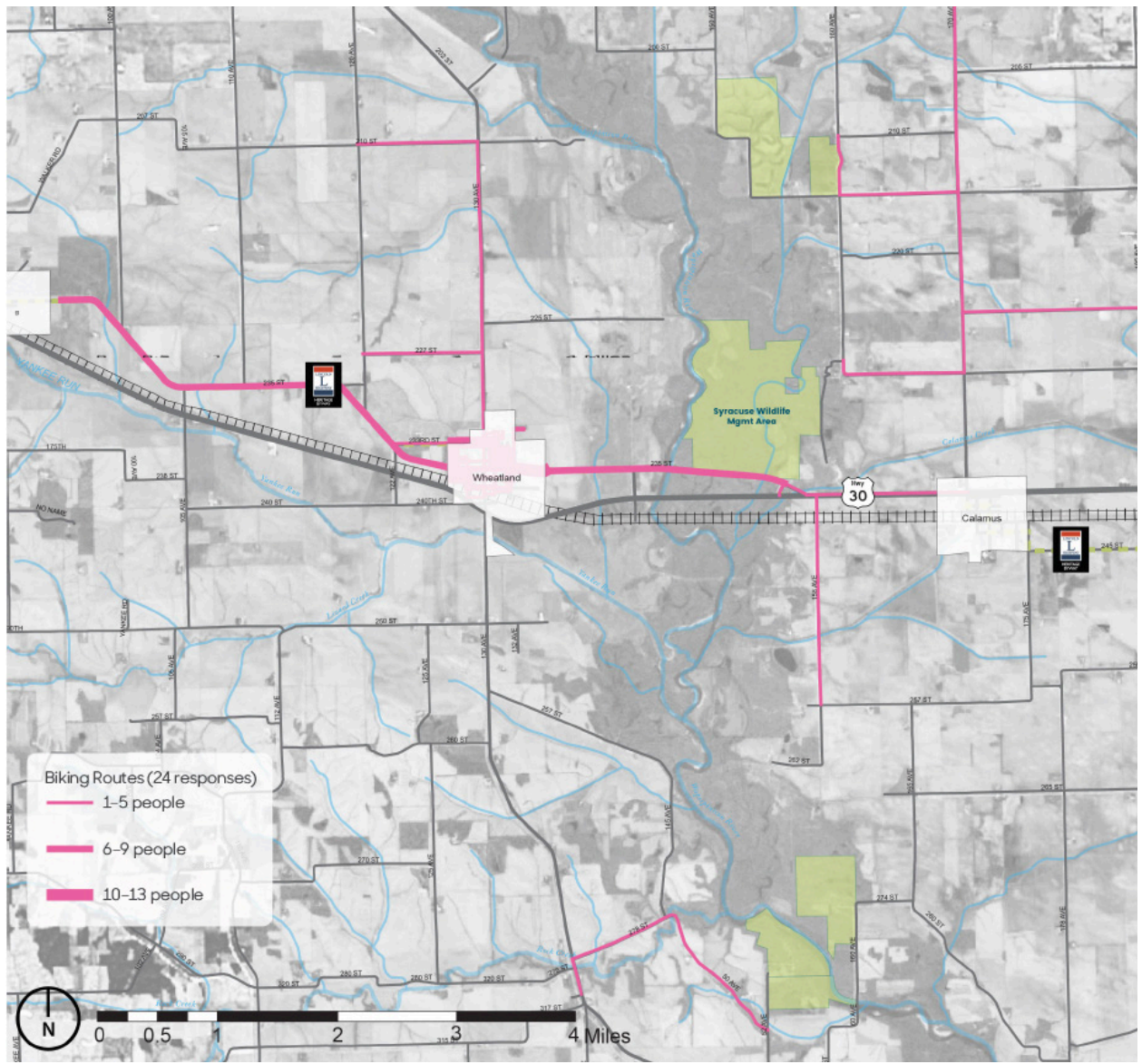
Regional Bike Routes

This map shows the biking routes identified by 24 survey respondents, 4 of whom were high school students. The frequency that the routes are used is depicted by their width, with most frequently used routes being the thickest. The Lincoln Highway Heritage Byway is the most heavily used route among Wheatland cyclists, who bike both east out of town to the Syracuse Wildlife Management Area and on to Calamus and west out of town to Lowden. Some people bike the roads west of Sherman Park and some travel north and east near Mockridge County Wildlife Preserve.

Why They Go That Way

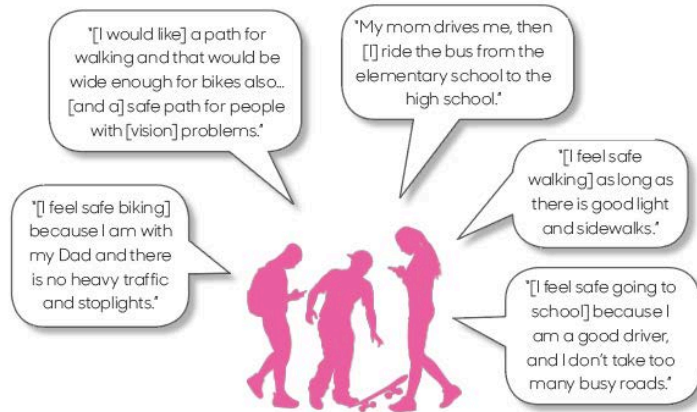
On a scale of 1 to 5, with 5 being the most important, survey participants ranked the characteristics and features that made their biking experience better. These features are categorized as either "connections" or "conditions and elements." Among Wheatland participants, connections have roughly the same importance as conditions/elements, with mean values of 3.56 and 3.53, respectively. In terms of connections, access to trails is most important with a mean value of 4.62. The most important factor affecting route choice is lighting (4.31), followed by little vehicular traffic (4.15), and well-kept surroundings (4.08). Trees and shade, seasonal beauty, and distance are equally significant, each with a mean value of 3.77.





High School Transportation Survey

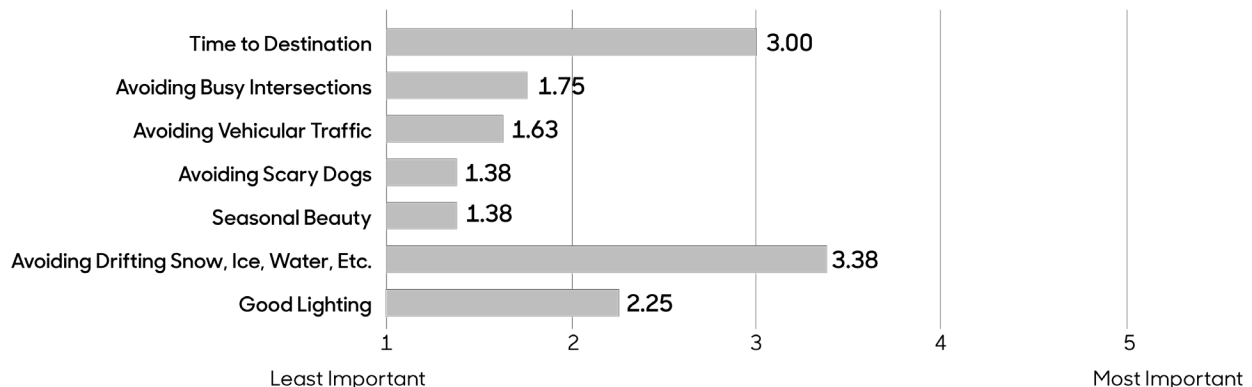
What They Said



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.



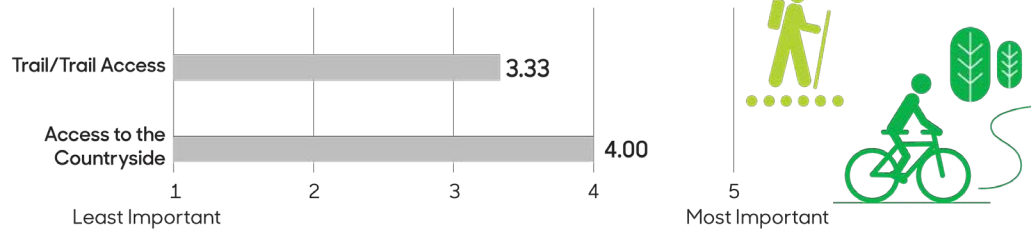
Walking & Biking

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.

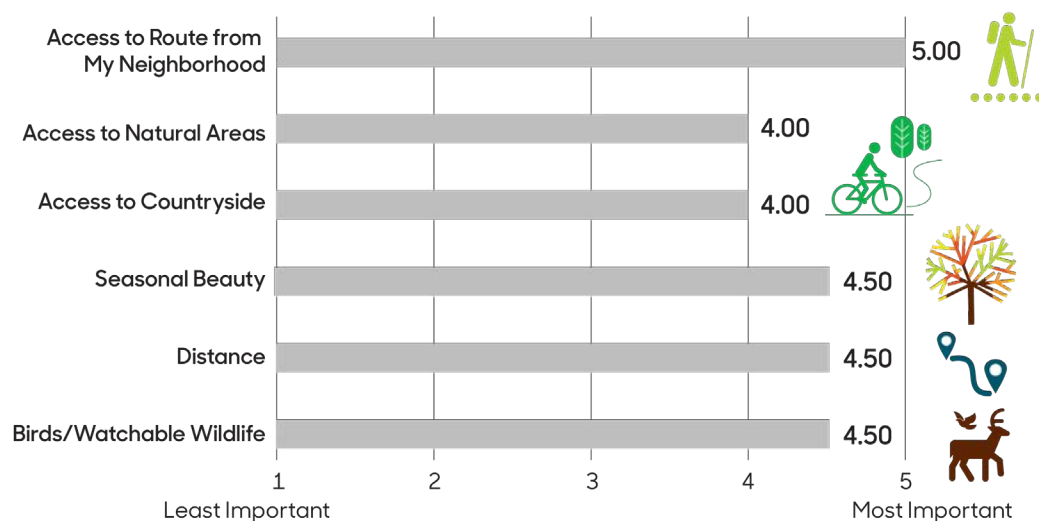
Desired Walking Route Features



Desired Biking Route Features



Desired Regional Biking Route Features



Transportation Inventory and Analysis

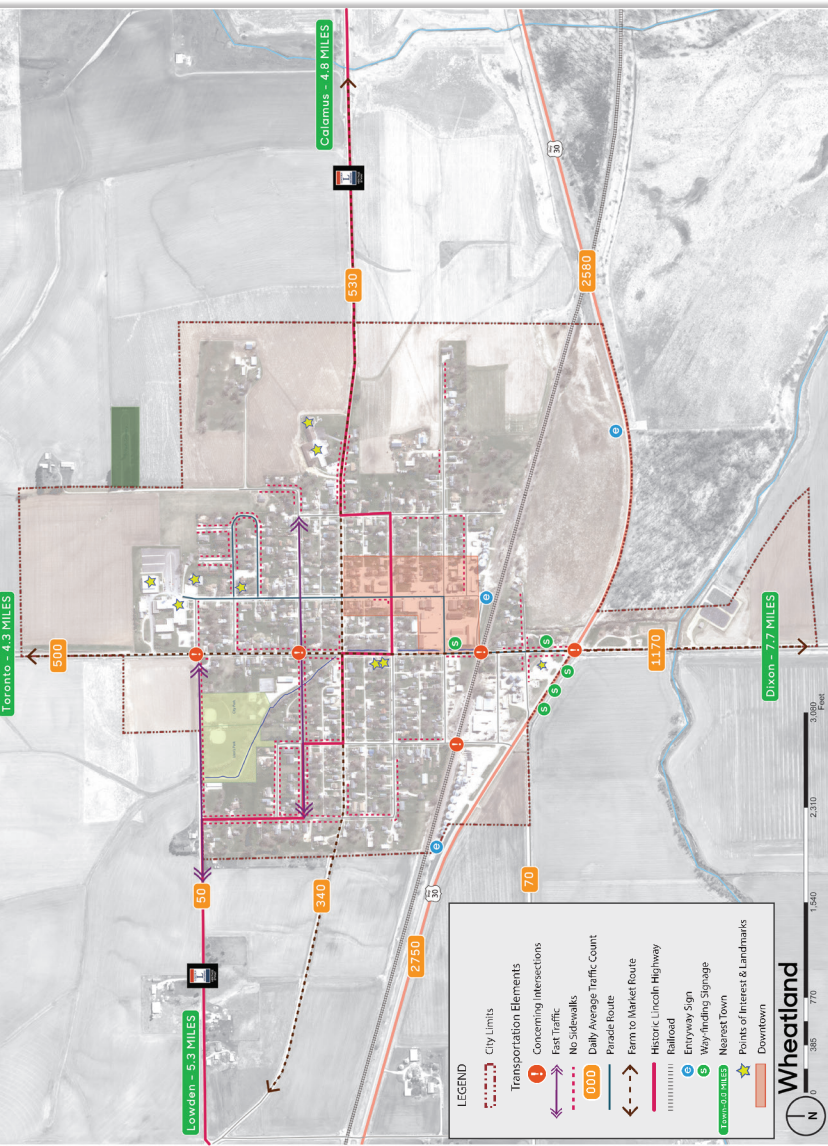
Knowledge of the transportation systems in and around a community is critical for sustainable transportation enhancement planning. Wheatland's transportation system includes roadways, sidewalks, and an active railroad.

The Wheatland 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 Lions Park, City Park, Cal-Wheat High School, Wheatland Manor, the historic Lincoln Byway, and the nearby boat ramp and state owned Syracuse Wildlife Management Area.

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

- sidewalks – poor connectivity and segments that are missing, uneven, don't meet ADA requirements, and/or are otherwise in poor repair;
- multi-use trail – lack of a trail system within and around Wheatland and between Wheatland and Calamus;
- rail-road – periodic stopped trains prevent access to Hwy. 30 from the north and access to Wheatland from the south;
- lighting – lack of or insufficient lighting along major pedestrian and vehicular routes threaten the safety of users.



Transportation Inventory Map

Summer 2021 4

Transportation Inventory

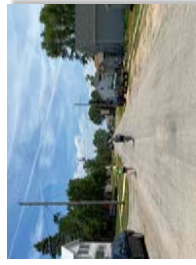
Knowledge of the transportation systems in and around a community is critical for sustainable transportation enhancement planning. Wheatland's transportation system includes roadways, sidewalks, and an active railroad.

The Wheatland 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.

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- rail-road - periodic stopped trains prevent access to Hwy. 30 from the north and access to Wheatland from the south;
- lighting - lack of or insufficient lighting along major pedestrian and vehicular routes threaten the safety of users.



Due to the lack of a trail system combined with a sidewalk system that is incomplete, narrow, and has segments that are in fair to poor condition, pedestrians and cyclists are forced to utilize the streets.



Poorly maintained and "disappearing" sidewalks contribute to poor pedestrian accessibility and connectivity.

Wheatland
Transportation Inventory

FLENKER LAND ARCHITECTURE CONSULTANTS, LLC
L.A. Meg Flenker, P.L.A., ASLA, CPESC, CPSWQ
Interns: TJ Hillberry, Paola Monjar-Torres and Ethan Morrow
Iowa State University | Trees Forever | Iowa Department of Transportation



Community Concept Plan

The Iowa's Living Roadways Community Visioning program provides the unique opportunity for communities to receive professional assistance in grass roots community planning and design along transportation corridors. Over an approximately 9 month visioning process, Wheatland residents participated in creating a concept plan (this board set) that focused on enhancing the safety, accessibility, circulation, connectivity and aesthetics of the community. In addition, the community members envisioned opportunities to create additional recreational activities that would engage more residents of all ages & abilities to enjoy.

The concept master plan shown on board 6 consists of enhancements that are based on the input received from the Wheatland residents throughout the visioning process. The concepts integrate the community members various ideas and visions for improvements in such a way as to cohesively meet the values and goals established by the community during the TAB workshops.

The concepts illustrated in the board set are the "big picture" ideas. They show the overall design intent and provide direction for everyone involved on how all of the "pieces" will integrate so that there is unity among all of 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 as well as provide them with the best overall return on their investment.

Icons used on board 5 to symbolize community values/themes are shown on board 6 to denote the location(s) envisioned for the supporting enhancements to occur. The boards that provide more information and illustrations are listed with it.

Summer 2021 6

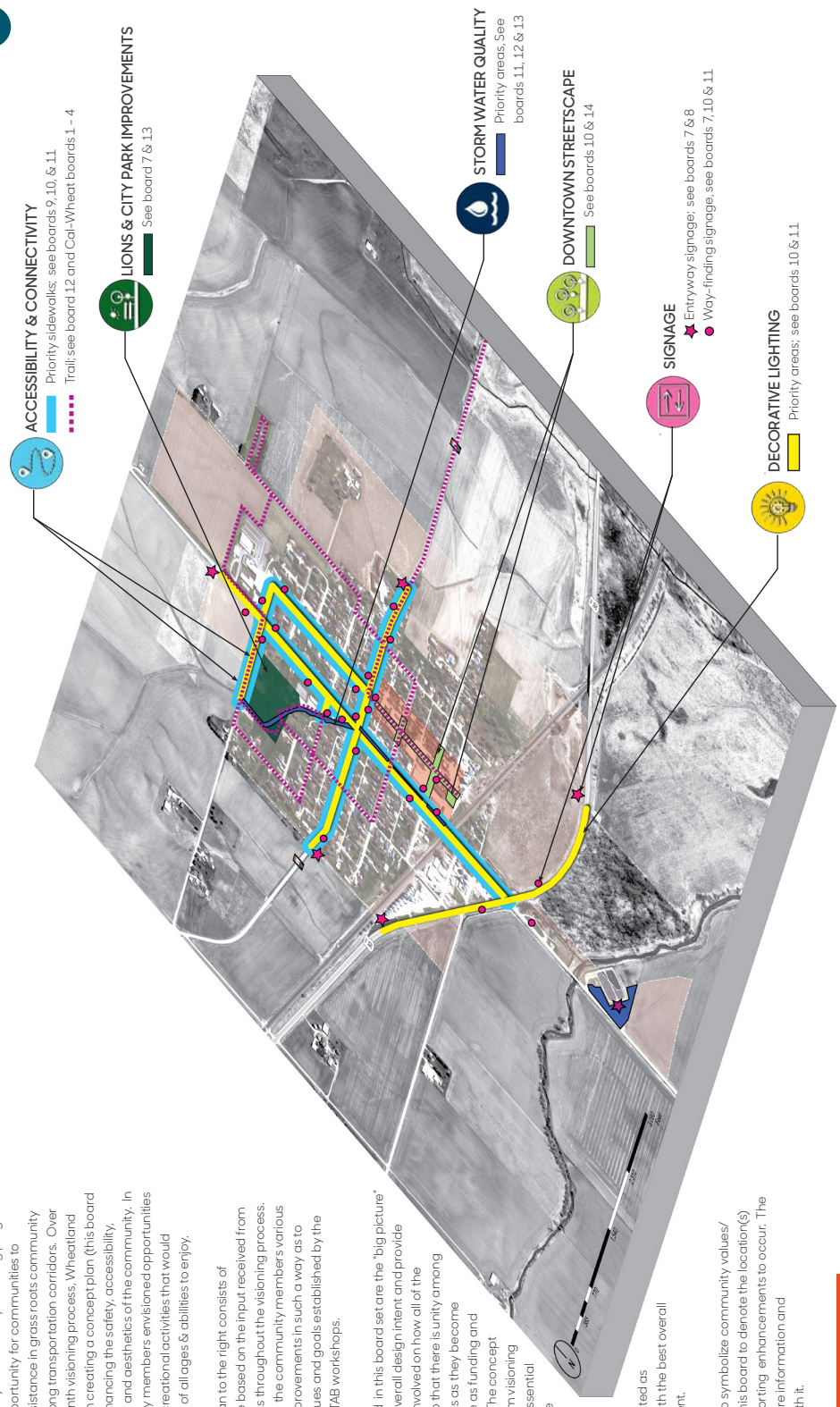
Concept Plan Overview

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

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ACCESSIBILITY & CONNECTIVITY
 Priority sidewalks, see boards 9, 10, & 11
 Trail, see board 12 and Cal-Wheat boards 1 - 4

LIONS & CITY PARK IMPROVEMENTS
 See board 7 & 13

STORM WATER QUALITY
 Priority areas, See boards 11, 12 & 13

DOWNTOWN STREETScape
 See boards 10 & 14

SIGNAGE
 Entryway signage, see boards 7 & 8
 Way-finding signage, see boards 7, 10 & 11

DECORATIVE LIGHTING
 Priority areas, see boards 10 & 11

Wheatland

Concept Plan Overview

FLENKER LAND ARCHITECTURE CONSULTANTS, LLC

L.A. Meg Flenker, P.L.A., ASLA, CPESC, CPSWQ
 Interns: TJ Hillberry, Paola Monllor-Torres and Ethan Morrow
 Iowa State University | Trees Forever | Iowa Department of Transportation



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 the Highway Y-32, Lincoln Highway and Highway Y-4E
- 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 Management 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.

SUMMARY: Opinion Of Probable Construction Cost		
<i>Description</i>	<i>Opinion of Cost</i>	<i>Comments</i>
South Entryway	\$ 59,288.94	
Secondary Sidewalks Connectivity (East-West)	\$ 766,621.74	
	\$ 54,318.18	High St.
	\$ 117,264.12	Iowa St.
	\$ 68,450.76	North St.
	\$ 240,207.63	Vine St.
	\$ 118,451.61	Washington St.
	\$ 82,075.50	Jefferson St.
	\$ 34,276.44	Madison St.
	\$ 13,081.02	Jackson St.
	\$ 38,496.48	Buchanan St.
Secondary Sidewalk Connectivity (North-South)	\$ 535,425.23	
	\$ 148,654.98	Wright St.
	\$ 152,239.94	Williams St.
	\$ 96,533.07	N. Bennett St.
	\$ 137,997.24	Memorial Dr.
Primary Corridor Enhancements	\$ 4,230,728.66	
	\$ 392,623.80	Highway 30
	\$ 1,081,644.80	Toronto St.
	\$ 1,348,319.34	Lincoln Hwy.
	\$ 615,569.01	Park Road
	\$ 659,142.27	Main St. (Not Downtown)
	\$ 133,429.44	Vine St.
Trail Enhancements	\$ 675,840.92	
	\$ 36,225.00	Sharrow
	\$ 639,615.92	Separated Trail
Park Enhancements	\$ 1,158,639.72	
Downtown Enhancements	\$ 2,455,478.16	
	\$ 2,238,315.84	Downtown Streetscape
	\$ 217,162.32	Downtown Pocket Park
Concept Enhancement Program	\$ 9,882,023.38	
Opinion of Probable Construction Cost		

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 associated with permitting for projects is also not included.

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Community Identity

Overview

Community identity, also referred to as “branding”, encompasses the core elements that make a community unique and special to those who work, live, and visit. Through the visioning process the visioning committee concentrated on “visual” identity components that included: an updated city logo, unified styles for site amenities such as decorative lighting and a complimentary way-finding signage system that included various types of signs, a community cap and banners.

An essential step in creating a successful community branding program is to establish design criteria which may include a specific color palate, materials list, style for site amenities and list of acceptable street trees and other vegetation that can be planted within the city’s right-of-way. Adherence and enforcement of these guidelines, regardless of timing and phasing of enhancements is important, as it is in the repetition of the components that will strengthen the city’s branding efforts.

City Logo

The community and visioning committee members worked with the design team to update their existing logo. Public comments received emphasized the need to incorporate grain bins and the railroad into the updated logo since they are such a strong part of Wheatland’s history.

Figure 7a shows the existing logo, while figures 7b – 7e illustrate the updated logo with different color combinations.

As can be seen in figure 7f, the proposed logo would be incorporated into the signage and banners. The goal is to create instant recognition of the logo and associate it with Wheatland.

Way-Finding Signage

Way-finding signage that directed visitors to destinations such as the high school and local parks was identified as a priority during the TAB workshops.

A unified way-finding signage family is critical to establishing a sense of place that is easily recognizable to visitors that they are in Wheatland. As illustrated in Figure 7f, this is accomplished by the incorporation of the city logo, use of a consistent color palette and materials, and the repetition of other details. Site amenities, such as lighting can also be a vital part of way-finding.

Way-finding signage helps visitors orient and navigate themselves quickly and safely to important destinations within the community and to easily and quickly recognize public places.

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Figure 7a: Existing Logo

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Figure 7b: Updated Logo 1



Figure 7c: Updated Logo 2



Figure 7d: Updated Logo 3



Figure 7e: Updated Logo 4

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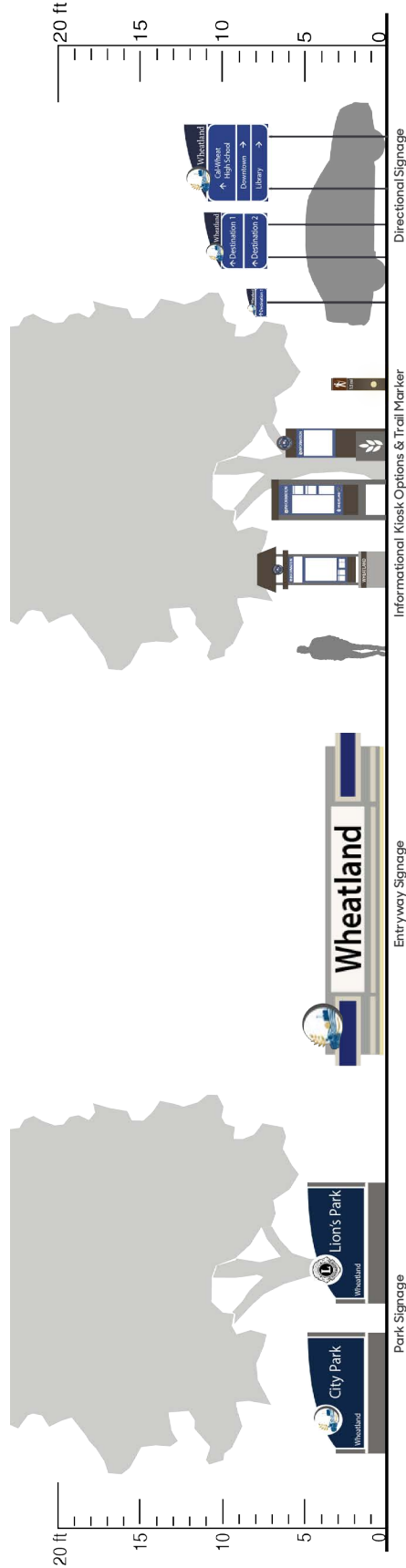


Figure 7f: Proposed way-finding signage family

Wheatland
Community Identity

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

Iowa's Living Roadways
community
visioning

Community Entryways

Overview

Community entryways act as the "front porch" to a community. They are where visitors form their first impression as to what a community is like; they are also the familiar and welcoming beacon to its residents, signifying to them that they are home.

The consistent treatment of each community entryway is critical to creating a unified appearance. While the existing field conditions at each entryway may require the modification of the specific treatment, it is important to keep the signage style, as well as the hardscape and plant material selection the same or very similar.

An example of two different entryway field conditions are shown on board 8 in photos 8a and 8d.

West Entryway (via Highway 30)

The western entryway is unique from the other entryways in that there may be an opportunity to utilize an existing privately owned grain bin as a "medium" on to which the entryway signage can be painted. The bins are located at a prime location for a west entryway sign – adjacent to Hwy. 30, and at the end of a curve where the motorist are cant miss seeing it.

The large size of the western most bin would allow for a large "entryway sign" which would be sure to garner the attention of passerby – leaving a profound impact on the +/- 2,750 vehicles that utilize this route daily. As can be seen in illustrations 8b and 8c, the proposed "entryway sign" shown on the bin is similar to the proposed entrance signage to be used for the other entrances. The design on the bin reflects the same elements of the traditional entrance signs – incorporating the logo, the name (in the same font), and the rectangle that the name is located in.

While being able to utilize the privately owned grain bin for the entryway sign would be ideal, it is important to note that at this time this is just a preliminary idea (concept). There have been no in-depth discussions, details or specifics discussed with the owner(s), only casual "what if" conversations with some of the local visioning committee members.

Other entryway enhancements include the planting of street trees along the south side of Hwy. 30. The trees are intended to:

- 1) Create a buffer that will serve as both an "edge" and screen of the adjacent development, making the area seem more organized and "clean"
- 2) Calm traffic by decreasing the visual; scale of the roadway corridor
- 3) Direct views

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Community Entryways



Existing photo 8a: Photo taken entering the west side of Wheatland via Hwy. 30

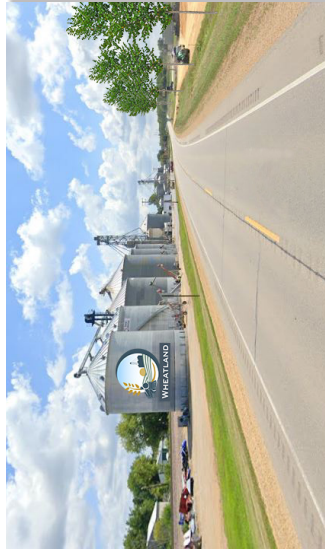


Photo edit 8b: Concept illustrating the readability of the logo when a background is used within the logo

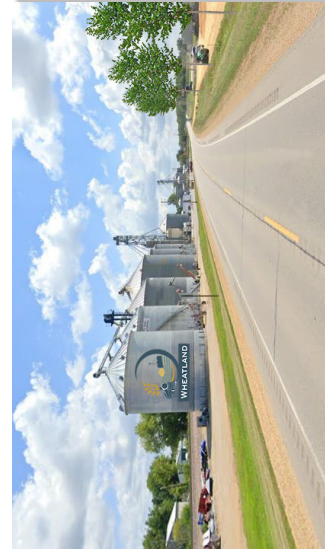


Photo edit 8c: Concept illustrating how colors used for the logo can impact the readability in different environments, depending on their use



Existing Photo 8d: Photo taken entering Wheatland from the south side of Hwy. 30 via 130th Ave. (Y4E)



Photo edit 8e: Concept illustrating the proposed south entryway enhancements

South Entryway (via 130th Avenue/Y4E)

Presently there is no south entryway signage, even though +/- 1,170 vehicles travel this route daily, making it the third busiest ingress-egress to Wheatland. It is intended that the same style entrance sign shown in concept 8e and on board 7 would be used at all of the other entrances (with the exception of the Hwy. 30 west entryway). The size of the sign may be smaller at some of the other entryways depending on the distance that it is from the roadway and the speed limit - all which are used to determine the size required for best readability.

The south entryway is proposed to be set into the slope of the sewage pond berms in order to raise it's height for better visibility. Ease of maintenance along with aesthetics govern the design of the landscaping which includes a short limestone retaining wall in the front (to allow for the construction of the sign and landscaping on the berm), and a mowing edge along the planting area at the top of the retaining wall. Formal plantings around the sign provide for year-round interest and are dominated by native vegetation. Maintained lawn and native prairie are proposed for the area. The lawn is for a mow path along the chain link fence, around the signage and to create a view angle from the road - all as illustrated in photo edit 8e.

FLENKER LAND ARCHITECTURE CONSULTANTS, LLC

L.A.: Meg Flenker, P.L.A., ASLA, CPESC, CPSWQ
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SOUTH ENTRYWAY SIGNAGE (See Board #8 for Visual)					Summer 2021
Description	Est. Qty.	Unit	Estimated Unit Cost	Estimated Line Total	Estimated Totals
South Entryway					
Monument Entrance Sign					\$ 18,500.00
Concrete Monument Sign Allowance	1	AL	\$ 18,500.00	\$ 18,500.00	
Sign Foundation					\$ 8,063.00
Earth Excavation	42	CY	\$ 8.00	\$ 336.00	
Aggregate Base Course	7	Ton	\$ 31.00	\$ 217.00	
Concrete Footing	14	CY	\$ 440.00	\$ 6,160.00	
Suitable Backfill	27	CY	\$ 50.00	\$ 1,350.00	
Ornamental Landscaping (around monument sign)					\$ 4,360.00
Plant Material Allowance	1	EA	\$ 2,500.00	\$ 2,500.00	
Shredded Hardwood Mulch	40	SY	\$ 9.00	\$ 360.00	
Planting Prep, Soil Amendment Allowance	1	AL	\$ 1,500.00	\$ 1,500.00	
Hardscape					\$ 8,210.00
PCC Accent Mowing Edge (around Sign)	60	LF	\$ 21.00	\$ 1,260.00	
Limestone Wall	139	SF	\$ 50.00	\$ 6,950.00	
Native Prairie (+/- 2.6 Acres)					\$ 17,400.00
Native Prairie Allowance	1	AL	\$ 17,400.00	\$ 17,400.00	
Way-Finding Signage					\$ 2,830.00
Aluminium Signage Panel	29	SF	\$ 70.00	\$ 2,030.00	
Break-A-Way Posts	2	EA	\$ 400.00	\$ 800.00	
Mobilization Allowance					\$ 2,100.00
<i>Section Subtotal</i>					\$ 42,963.00
<i>20% Contingency</i>					\$ 8,592.60
<i>Design & Engineering Allowance</i>					\$ 7,733.34
South Entryway Signage Option of Total Probable Construction Cost*					\$ 59,288.94
South Entryway Signage Opinion of Total Construction Cost*					\$ 59,288.94

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

Accessibility & Connectivity

Overview

All user groups within the Wheatland community 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 9a is a map that graphically shows the existing sidewalk conditions (does not address width or accessibility) and proposed sidewalk expansion.

Sidewalks

Residents stated that they would like to see upgrades to the city's sidewalks system as one of the top priorities. They would like to have the sidewalks wider, "smoother", accessible, and integrated into the entire community in order to create a complete network throughout town, especially around the school. Figures 9b and 9d on this board illustrate the spatial requirements required and recommended for sidewalks. The majority of existing sidewalks within Wheatland are 4' wide which is the minimum width for a sidewalk.

To improve accessibility and pedestrian circulation, the design team recommends a minimum width of five foot for residential sidewalks in Wheatland, with wider widths recommended for areas where more pedestrian use is anticipated, such as along and within Lions and City Park, in the downtown, around the High School, as well as along primary corridors such as Toronto Street.

Trails

In addition to an improved sidewalk system, residents also cited a community trail which connected to Calamus as a top priority. All user groups indicated that they would like to see a trail system where they and their families could enjoy the scenic beauty and additional recreational activity. They would prefer a separated trail system where they do not have to worry about traffic.

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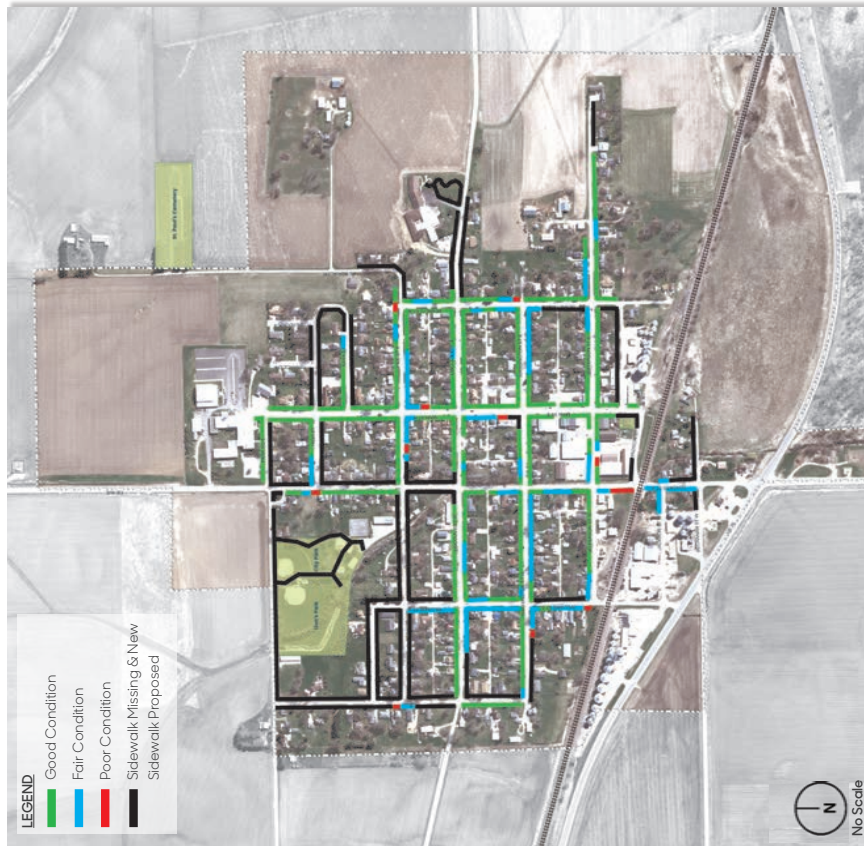


Figure 9a: Assessment of existing sidewalk condition and proposed sidewalk expansion

Pedestrian Spatial Requirements:

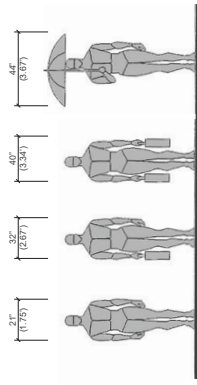


Figure 9b: Width requirements for selected pedestrian activities. Source: Time Saver Standards for Landscape Architecture.

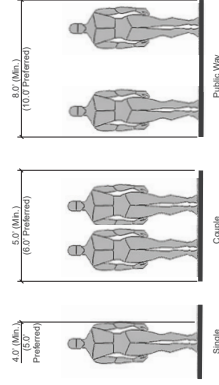


Figure 9c: Pedestrian walkway width requirements. Source: Time Saver Standards for Landscape Architecture.

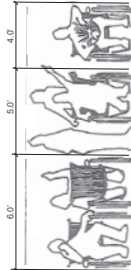


Figure 9d: Pedestrian walkway width - spatial requirements for wheelchair. Source: Time Saver Standards for Landscape Architecture.



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Wheatland Accessibility & Connectivity

CONNECTIVITY: EAST-WEST STREET SIDEWALKS (See Boards #9 & #10 for Visual) Summer 2021

Description	Est. Qty.	Unit	Estimated Unit Cost	Estimated Line Total	Estimated Totals
Second Priority Sidewalks: East - West Streets					
High Street					
New Sidewalk, None Existing (+/- 674 LF)					\$ 25,425.00
5' Wide Paved Sidewalk On Grade (5" PCC) and Excavation	375	SY	\$ 51.00	\$ 19,125.00	
Contingency Item if needed: Engineering Fabric	375	SY	\$ 6.60	\$ 2,475.00	
Contingency Item if needed: Aggregate Base Course, 4" and Associated Excavation	375	SY	\$ 7.00	\$ 2,625.00	
Site Preparation and Grading Allowance	1	AL	\$ 1,200.00	\$ 1,200.00	
Existing Sidewalk Removal and Replacement: Fair Condition (+/- 102 LF)					\$ 5,501.00
Existing Sidewalk Demolition, +/- 4' Wide	50	SY	\$ 22.50	\$ 1,125.00	
5' Wide Paved Sidewalk On Grade (5" PCC) and Excavation	60	SY	\$ 51.00	\$ 3,060.00	
Contingency Item if needed: Engineering Fabric	60	SY	\$ 6.60	\$ 396.00	
Contingency Item if needed: Aggregate Base Course, 4" and Associated Excavation	60	SY	\$ 7.00	\$ 420.00	
Site Preparation and Grading Allowance	1	AL	\$ 500.00	\$ 500.00	
Entire Project Area					
ADA Compliant Detectable Warning Panel	96	SF	\$ 60.00	\$ 5,760.00	\$ 5,760.00
Finish Grading & Seeding Allowance	1	AL	\$ 800.00	\$ 800.00	\$ 800.00
Mobilization Allowance	1	AL	\$ 1,875.00	\$ 1,875.00	\$ 1,875.00
Section Subtotal					\$ 39,361.00
20% Contingency					\$ 7,872.20
Design & Engineering Allowance					\$ 7,084.98
High Street Sidewalk Opinion of Total Probable Construction Cost*					\$ 54,318.18
Iowa St.					
New Sidewalk, None Existing (+/- 1,760 LF)					\$ 66,508.00
5' Wide Paved Sidewalk On Grade (5" PCC) and Excavation	980	SY	\$ 51.00	\$ 49,980.00	
Contingency Item if needed: Engineering Fabric	980	SY	\$ 6.60	\$ 6,468.00	
Contingency Item if needed: Aggregate Base Course, 4" and Associated Excavation	980	SY	\$ 7.00	\$ 6,860.00	
Site Preparation and Grading Allowance	1	AL	\$ 3,200.00	\$ 3,200.00	
Existing Sidewalk Removal and Replacement: Fair Condition (+/- 240 LF)					\$ 11,946.00
Existing Sidewalk Demolition, +/- 4' Wide	110	SY	\$ 22.50	\$ 2,475.00	
5' Wide Paved Sidewalk On Grade (5" PCC) and Excavation	135	SY	\$ 51.00	\$ 6,885.00	
Contingency Item if needed: Engineering Fabric	135	SY	\$ 6.60	\$ 891.00	
Contingency Item if needed: Aggregate Base Course, 4" and Associated Excavation	135	SY	\$ 7.00	\$ 945.00	
Site Preparation and Grading Allowance	1	AL	\$ 750.00	\$ 750.00	
Entire Project Area					
ADA Compliant Detectable Warning Panel	12	SF	\$ 60.00	\$ 720.00	\$ 720.00
Finish Grading & Seeding Allowance	1	AL	\$ 1,700.00	\$ 1,700.00	\$ 1,700.00
Mobilization Allowance	1	AL	\$ 4,100.00	\$ 4,100.00	\$ 4,100.00
Section Subtotal					\$ 84,974.00
20% Contingency					\$ 16,994.80
Design & Engineering Allowance					\$ 15,295.32
Iowa Street Sidewalk Opinion of Total Probable Construction Cost*					\$ 117,264.12
North Street					
New Sidewalk, None Existing (+/- 1,206 LF)					\$ 45,482.00
5' Wide Paved Sidewalk On Grade (5" PCC) and Excavation	670	SY	\$ 51.00	\$ 34,170.00	
Contingency Item if needed: Engineering Fabric	670	SY	\$ 6.60	\$ 4,422.00	
Contingency Item if needed: Aggregate Base Course, 4" and Associated Excavation	670	SY	\$ 7.00	\$ 4,690.00	
Site Preparation and Grading Allowance	1	AL	\$ 2,200.00	\$ 2,200.00	
ADA Compliant Detectable Warning Panel	12	SF	\$ 60.00	\$ 720.00	\$ 720.00
Finish Grading & Seeding Allowance	1	AL	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00
Mobilization Allowance	1	AL	\$ 2,400.00	\$ 2,400.00	\$ 2,400.00
Section Subtotal					\$ 49,602.00
20% Contingency					\$ 9,920.40
Design & Engineering Allowance					\$ 8,928.36
North Street Sidewalk Opinion of Total Probable Construction Cost*					\$ 68,450.76
Vine Street					
New Sidewalk, None Existing (+/- 2,934 LF)					\$ 110,598.00
5' Wide Paved Sidewalk On Grade (5" PCC) and Excavation	1,630	SY	\$ 51.00	\$ 83,130.00	
Contingency Item if needed: Engineering Fabric	1,630	SY	\$ 6.60	\$ 10,758.00	
Contingency Item if needed: Aggregate Base Course, 4" and Associated Excavation	1,630	SY	\$ 7.00	\$ 11,410.00	
Site Preparation and Grading Allowance	1	AL	\$ 5,300.00	\$ 5,300.00	
Existing Sidewalk Removal and Replacement: Poor Condition (+/- 196 LF)					\$ 9,631.00
Existing Sidewalk Demolition, +/- 4' Wide	90	SY	\$ 22.50	\$ 2,025.00	
5' Wide Paved Sidewalk On Grade (5" PCC) and Excavation	110	SY	\$ 51.00	\$ 5,610.00	
Contingency Item if needed: Engineering Fabric	110	SY	\$ 6.60	\$ 726.00	
Contingency Item if needed: Aggregate Base Course, 4" and Associated Excavation	110	SY	\$ 7.00	\$ 770.00	
Site Preparation and Grading Allowance	1	AL	\$ 500.00	\$ 500.00	
Existing Sidewalk Removal and Replacement: Fair Condition (+/- 620 LF)					\$ 42,974.50
Existing Sidewalk Demolition, +/- 4' Wide	275	SY	\$ 22.50	\$ 6,187.50	
5' Wide Paved Sidewalk On Grade (5" PCC) and Excavation	345	SY	\$ 51.00	\$ 17,595.00	
Contingency Item if needed: Engineering Fabric	345	SY	\$ 6.60	\$ 2,277.00	
Contingency Item if needed: Aggregate Base Course, 4" and Associated Excavation	345	SY	\$ 7.00	\$ 2,415.00	
Site Preparation and Grading Allowance	1	AL	\$ 14,500.00	\$ 14,500.00	
Entire Project Area					
ADA Compliant Detectable Warning Panel	156	SF	\$ 60.00	\$ 9,360.00	\$ 9,360.00
Finish Grading & Seeding Allowance	1	AL	\$ 1,500.00	\$ 1,500.00	\$ 1,500.00

CONNECTIVITY: EAST-WEST STREET SIDEWALKS (See Boards #9 & #10 for Visual)						Summer 2021
Description	Est. Qty.	Unit	Estimated Unit Cost	Estimated Line Total	Estimated Totals	
Mobilization Allowance	1	AL	\$ 8,700.00	\$ 8,700.00	\$ 8,700.00	
Section Subtotal					\$ 174,063.50	
20% Contingency					\$ 34,812.70	
Design & Engineering Allowance					\$ 31,331.43	
Vine Street Sidewalk Opinion of Total Probable Construction Cost*					\$ 240,207.63	
Washington Street						
New Sidewalk, None Existing (+/- 473 LF)						
5' Wide Paved Sidewalk On Grade (5" PCC) and Excavation	265	SY	\$ 51.00	\$ 13,515.00	\$ 18,119.00	
Contingency Item if needed: Engineering Fabric	265	SY	\$ 6.60	\$ 1,749.00		
Contingency Item if needed: Aggregate Base Course, 4" and Associated Excavation	265	SY	\$ 7.00	\$ 1,855.00		
Site Preparation and Grading Allowance	1	AL	\$ 1,000.00	\$ 1,000.00		
Existing Sidewalk Removal and Replacement: Poor Condition (+/- 1,196 LF)						
Existing Sidewalk Demolition, +/- 4' Wide	535	SY	\$ 22.50	\$ 12,037.50	\$ 57,746.50	
5' Wide Paved Sidewalk On Grade (5" PCC) and Excavation	665	SY	\$ 51.00	\$ 33,915.00		
Contingency Item if needed: Engineering Fabric	665	SY	\$ 6.60	\$ 4,389.00		
Contingency Item if needed: Aggregate Base Course, 4" and Associated Excavation	665	SY	\$ 7.00	\$ 4,655.00		
Site Preparation and Grading Allowance	1	AL	\$ 2,750.00	\$ 2,750.00		
Existing Sidewalk Removal and Replacement: Fair Condition (+/- 26 LF)						
Existing Sidewalk Demolition, +/- 4' Wide	12	SY	\$ 22.50	\$ 270.00	\$ 1,489.00	
5' Wide Paved Sidewalk On Grade (5" PCC) and Excavation	15	SY	\$ 51.00	\$ 765.00		
Contingency Item if needed: Engineering Fabric	15	SY	\$ 6.60	\$ 99.00		
Contingency Item if needed: Aggregate Base Course, 4" and Associated Excavation	15	SY	\$ 7.00	\$ 105.00		
Site Preparation and Grading Allowance	1	AL	\$ 250.00	\$ 250.00		
Entire Project Area						
ADA Compliant Detectable Warning Panel	48	SF	\$ 60.00	\$ 2,880.00	\$ 2,880.00	
Finish Grading & Seeding Allowance	1	AL	\$ 1,500.00	\$ 1,500.00	\$ 1,500.00	
Mobilization Allowance	1	AL	\$ 4,100.00	\$ 4,100.00	\$ 4,100.00	
Section Subtotal					\$ 85,834.50	
20% Contingency					\$ 17,166.90	
Design & Engineering Allowance					\$ 15,450.21	
Washington Street Sidewalk Opinion of Total Probable Construction Cost*					\$ 118,451.61	
Jefferson Street (outside of downtown limits)						
New Sidewalk, None Existing (+/- 310 LF)						
5' Wide Paved Sidewalk On Grade (5" PCC) and Excavation	120	SY	\$ 51.00	\$ 6,120.00	\$ 8,152.00	
Contingency Item if needed: Engineering Fabric	120	SY	\$ 6.60	\$ 792.00		
Contingency Item if needed: Aggregate Base Course, 4" and Associated Excavation	120	SY	\$ 7.00	\$ 840.00		
Site Preparation and Grading Allowance	1	AL	\$ 400.00	\$ 400.00		
Existing Sidewalk Removal and Replacement: Poor Condition (+/- 902 LF)						
Existing Sidewalk Demolition, +/- 4' Wide	400	SY	\$ 22.50	\$ 9,000.00	\$ 43,723.00	
5' Wide Paved Sidewalk On Grade (5" PCC) and Excavation	505	SY	\$ 51.00	\$ 25,755.00		
Contingency Item if needed: Engineering Fabric	505	SY	\$ 6.60	\$ 3,333.00		
Contingency Item if needed: Aggregate Base Course, 4" and Associated Excavation	505	SY	\$ 7.00	\$ 3,535.00		
Site Preparation and Grading Allowance	1	AL	\$ 2,100.00	\$ 2,100.00		
Entire Project Area						
ADA Compliant Detectable Warning Panel	60	SF	\$ 60.00	\$ 3,600.00	\$ 3,600.00	
Finish Grading & Seeding Allowance	1	AL	\$ 1,100.00	\$ 1,100.00	\$ 1,100.00	
Mobilization Allowance	1	AL	\$ 2,900.00	\$ 2,900.00	\$ 2,900.00	
Section Subtotal					\$ 59,475.00	
20% Contingency					\$ 11,895.00	
Design & Engineering Allowance					\$ 10,705.50	
Jefferson Street Sidewalk Opinion of Total Probable Construction Cost*					\$ 82,075.50	
Madison Street						
New Sidewalk, None Existing (+/- 592 LF)						
5' Wide Paved Sidewalk On Grade (5" PCC) and Excavation	330	SY	\$ 51.00	\$ 16,830.00	\$ 22,418.00	
Contingency Item if needed: Engineering Fabric	330	SY	\$ 6.60	\$ 2,178.00		
Contingency Item if needed: Aggregate Base Course, 4" and Associated Excavation	330	SY	\$ 7.00	\$ 2,310.00		
Site Preparation and Grading Allowance	1	AL	\$ 1,100.00	\$ 1,100.00		
ADA Compliant Detectable Warning Panel	12	SF	\$ 60.00	\$ 720.00	\$ 720.00	
Finish Grading & Seeding Allowance	1	AL	\$ 500.00	\$ 500.00	\$ 500.00	
Mobilization Allowance	1	AL	\$ 1,200.00	\$ 1,200.00	\$ 1,200.00	
Section Subtotal					\$ 24,838.00	
20% Contingency					\$ 4,967.60	
Design & Engineering Allowance					\$ 4,470.84	
Madison Street Sidewalk Opinion of Total Probable Construction Cost*					\$ 34,276.44	
Jackson Street						
Existing Sidewalk Removal and Replacement: Fair Condition (+/- 162 LF)						
Existing Sidewalk Demolition, +/- 4' Wide	72	SY	\$ 22.50	\$ 1,620.00	\$ 7,809.00	
5' Wide Paved Sidewalk On Grade (5" PCC) and Excavation	90	SY	\$ 51.00	\$ 4,590.00		
Contingency Item if needed: Engineering Fabric	90	SY	\$ 6.60	\$ 594.00		
Contingency Item if needed: Aggregate Base Course, 4" and Associated Excavation	90	SY	\$ 7.00	\$ 630.00		
Site Preparation and Grading Allowance	1	AL	\$ 375.00	\$ 375.00		
ADA Compliant Detectable Warning Panel	12	SF	\$ 60.00	\$ 720.00	\$ 720.00	

CONNECTIVITY: EAST-WEST STREET SIDEWALKS (See Boards #9 & #10 for Visual)						Summer 2021
Description	Est. Qty.	Unit	Estimated Unit Cost	Estimated Line Total	Estimated Totals	
Finish Grading & Seeding Allowance	1	AL	\$ 450.00	\$ 450.00	\$ 450.00	
Mobilization Allowance	1	AL	\$ 500.00	\$ 500.00	\$ 500.00	
<i>Section Subtotal</i>					\$ 9,479.00	
<i>20% Contingency</i>					\$ 1,895.80	
<i>Design & Engineering Allowance</i>					\$ 1,706.22	
Jackson Street Sidewalk Opinion of Total Probable Construction Cost*					\$ 13,081.02	
Buchanan Street						
New Sidewalk, None Existing (+/- 642 LF)						\$ 23,256.00
5' Wide Paved Sidewalk On Grade (5" PCC) and Excavation	360	SY	\$ 51.00	\$ 18,360.00		
<i>Contingency Item if needed: Engineering Fabric</i>	360	SY	\$ 6.60	\$ 2,376.00		
<i>Contingency Item if needed: Aggregate Base Course, 4" and Associated Excavation</i>	360	SY	\$ 7.00	\$ 2,520.00		
Site Preparation and Grading Allowance	1	AL	\$ 1,200.00	\$ 1,200.00	\$ 1,200.00	
ADA Compliant Detectable Warning Panel	24	SF	\$ 60.00	\$ 1,440.00	\$ 1,440.00	
Finish Grading & Seeding Allowance	1	AL	\$ 600.00	\$ 600.00	\$ 600.00	
Mobilization Allowance	1	AL	\$ 1,400.00	\$ 1,400.00	\$ 1,400.00	
<i>Section Subtotal</i>					\$ 27,896.00	
<i>20% Contingency</i>					\$ 5,579.20	
<i>Design & Engineering Allowance</i>					\$ 5,021.28	
Buchanan Street Sidewalk Opinion of Total Probable Construction Cost*					\$ 38,496.48	
E-W Secondary Sidewalk Opinion of Probable Total Construction Cost*						\$ 766,621.74

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

CONNECTIVITY: NORTH-SOUTH STREET SIDEWALKS (See Boards #9 & #10 for Visual)						Summer 2021
Description	Est. Qty.	Unit	Estimated Unit Cost	Estimated Line Total	Estimated Totals	
Second Priority Sidewalks: North-South Streets						
Wright Street						
New Sidewalk, None Existing (+/- 2,490 LF)						
5' Wide Paved Sidewalk On Grade (5" PCC) and Excavation	1385	SY	\$ 51.00	\$ 70,635.00		
Contingency Item if needed: Engineering Fabric	1385	SY	\$ 6.60	\$ 9,141.00		
Contingency Item if needed: Aggregate Base Course, 4" and Associated Excavation	1385	SY	\$ 7.00	\$ 9,695.00		
Site Preparation and Grading Allowance	1	AL	\$ 4,500.00	\$ 4,500.00	\$ 4,500.00	
ADA Compliant Detectable Warning Panel	120	SF	\$ 60.00	\$ 7,200.00	\$ 7,200.00	
Finish Grading & Seeding Allowance	1	AL	\$ 1,550.00	\$ 1,550.00	\$ 1,550.00	
Mobilization Allowance	1	AL	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	
Section Subtotal					\$ 107,721.00	
20% Contingency					\$ 21,544.20	
Design & Engineering Allowance					\$ 19,389.78	
Wright Street Sidewalk Opinion of Total Probable Construction Cost*					\$ 148,654.98	
Williams Street						
New Sidewalk, None Existing (+/- 1,075 LF)						
5' Wide Paved Sidewalk On Grade (5" PCC) and Excavation	598	SY	\$ 51.00	\$ 30,498.00		
Contingency Item if needed: Engineering Fabric	598	SY	\$ 6.60	\$ 3,946.80		
Contingency Item if needed: Aggregate Base Course, 4" and Associated Excavation	598	SY	\$ 7.00	\$ 4,186.00		
Site Preparation and Grading Allowance	1	AL	\$ 2,000.00	\$ 2,000.00		
Section Subtotal					\$ 36,630.80	
Existing Sidewalk Removal and Replacement: Fair Condition (+/- 1,126 LF)						
Existing sidewalk Demolition, +/- 4' Wide	500	SY	\$ 22.50	\$ 11,250.00		
5' Wide Paved Sidewalk On Grade (5" PCC) and Excavation	630	SY	\$ 51.00	\$ 32,130.00		
Contingency Item if needed: Engineering Fabric	630	SY	\$ 6.60	\$ 4,158.00		
Contingency Item if needed: Aggregate Base Course, 4" and Associated Excavation	630	SY	\$ 7.00	\$ 4,410.00		
Site Preparation and Grading Allowance	1	AL	\$ 2,600.00	\$ 2,600.00		
Section Subtotal					\$ 54,548.00	
Entire Project Area						
ADA Compliant Detectable Warning Panel	144	SF	\$ 60.00	\$ 8,640.00		
Finish Grading & Seeding Allowance	1	AL	\$ 1,200.00	\$ 1,200.00		
Mobilization Allowance	1	AL	\$ 5,300.00	\$ 5,300.00		
Section Subtotal					\$ 110,318.80	
20% Contingency					\$ 22,063.76	
Design & Engineering Allowance					\$ 19,857.38	
Williams Street Sidewalk Opinion of Total Probable Construction Cost*					\$ 152,239.94	
N. Bennett St.						
New Sidewalk, None Existing (+/- 508 LF)						
5' Wide Paved Sidewalk On Grade (5" PCC) and Excavation	285	SY	\$ 51.00	\$ 14,535.00		
Contingency Item if needed: Engineering Fabric	285	SY	\$ 6.60	\$ 1,881.00		
Contingency Item if needed: Aggregate Base Course, 4" and Associated Excavation	285	SY	\$ 7.00	\$ 1,995.00		
Site Preparation and Grading Allowance	1	AL	\$ 1,000.00	\$ 1,000.00		
Section Subtotal					\$ 18,411.00	
Existing Sidewalk Removal and Replacement: Fair Condition (+/- 861 LF)						
Existing sidewalk Demolition, +/- 4' Wide	385	SY	\$ 22.50	\$ 8,662.50		
5' Wide Paved Sidewalk On Grade (5" PCC) and Excavation	480	SY	\$ 51.00	\$ 24,480.00		
Contingency Item if needed: Engineering Fabric	480	SY	\$ 6.60	\$ 3,168.00		
Contingency Item if needed: Aggregate Base Course, 4" and Associated Excavation	480	SY	\$ 7.00	\$ 3,360.00		
Site Preparation and Grading Allowance	1	AL	\$ 2,400.00	\$ 2,400.00		
Section Subtotal					\$ 42,070.50	
Entire Project Area						
ADA Compliant Detectable Warning Panel	72	SF	\$ 60.00	\$ 4,320.00		
Finish Grading & Seeding Allowance	1	AL	\$ 750.00	\$ 750.00		
Mobilization Allowance	1	AL	\$ 3,400.00	\$ 3,400.00		
Section Subtotal					\$ 69,951.50	
20% Contingency					\$ 13,990.30	
Design & Engineering Allowance					\$ 12,591.27	
N. Bennett Street Sidewalk Opinion of Total Probable Construction Cost*					\$ 96,533.07	
Memorial Drive						
New Sidewalk, None Existing (+/- 2,481 LF)						
5' Wide Paved Sidewalk On Grade (5" PCC) and Excavation	1,380	SY	\$ 51.00	\$ 70,380.00		
Contingency Item if needed: Engineering Fabric	1,380	SY	\$ 6.60	\$ 9,108.00		
Contingency Item if needed: Aggregate Base Course, 4" and Associated Excavation	1,380	SY	\$ 7.00	\$ 9,660.00		
Site Preparation and Grading Allowance	1	AL	\$ 4,500.00	\$ 4,500.00		
Finish Grading & Seeding Allowance	1	AL	\$ 1,550.00	\$ 1,550.00	\$ 1,550.00	
Mobilization Allowance	1	AL	\$ 4,800.00	\$ 4,800.00	\$ 4,800.00	
Section Subtotal					\$ 99,998.00	
20% Contingency					\$ 19,999.60	
Design & Engineering Allowance					\$ 17,999.64	
Memorial Drive Sidewalk Opinion of Total Probable Construction Cost*					\$ 137,997.24	
N-S Secondary Sidewalk Opinion of Probable Total Construction Cost*					\$ 535,425.23	

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

Lighting & Sidewalks

Overview

A major component in improving accessibility and connectivity (both visual and physical) is lighting. Almost all user groups indicated that they would like to see lighting throughout town improved, especially along primary routes such as Park Road. Refer to board 6, "Concept Plan", for proposed priority corridors to receive lighting.

Lighting

The typical section on board 10 (figure 10a) demonstrates the scale and different types of lighting envisioned and shown in the various concepts illustrated in the board set. Figure 10b is an enlarged photo of the pedestrian light fixture illustrated in the typical section above and the various proposed concepts. Figures 10c and 10d are a few examples of lighting banners for the lighting concepts created by the design team. The banner designs integrate the city logo in order to strengthen visual connectivity and strengthen city branding efforts.

The pedestrian light fixture style shown is considered to be "transitional". The transitional style combines the historic nature of Wheatland with a modern and contemporary twist. The vehicular lighting proposed is the typical cobra head style common for lighting roadways and many city streets.

LED lighting is recommended for the lighting due to its longevity and reduction in operational costs. As with all public site amenities, it is important to make sure that the lights are commercial grade and manufactured by a reputable and experienced company.

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.



Existing Photo 10e: Southwest corner Vine St. & Bernett St. intersection facing southerly



Photo edit 10f: Proposed improvements shown include painted crosswalk, wider sidewalk (4' to 5'), ADA compliant ramp with detectable warnings, and street trees



Figure 10b: Proposed pedestrian light fixture



Figure 10d: Light banner example 2

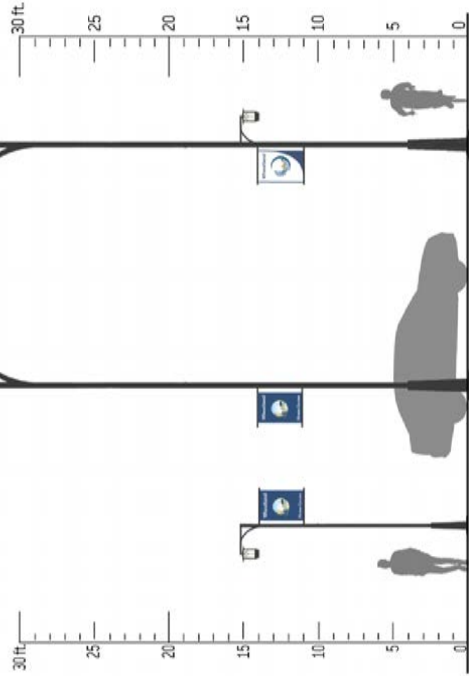


Figure 10c: Typical section of proposed decorative lighting, left to right: pedestrian only, combination pedestrian and vehicular, and vehicular only

Lighting & Accessibility

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FLENKER LAND ARCHITECTURE CONSULTANTS, LLC

LA: Meg Flecker, P.L.A., ASLA, CPESC, CPSWG
Interns: TJ Hillberry, Paola Monllor-Torres and Ethan Morrow
Iowa State University | Trees Forever | Iowa Department of Transportation



Lighting & Sidewalks



Primary Corridors

Overview

Primary corridors are streets that serve as main routes for motorists and pedestrians to points of interest throughout town. These primary corridors are the priority areas identified to receive lighting and sidewalk enhancements first; these are also the corridors where the way-finding signage will be located.

The concepts illustrated on board 11 focus on Toronto Street and Lincoln Highway, however, as shown on the **Concept Plan Overview** (board 6), Highway 30, Main Street, Park Street, and a portion of Vine Street and Jefferson Street are also considered primary corridors.

Toronto Street

The illustrations of the concepts shown for the improvements for Toronto Street show two options. The second option is the same as the first option except that the overhead utility is placed underground and the road is redone with new pavement.

Following are the enhancements illustrated in the two different views of Toronto Street (refer to photo edits 11b, 11c, 11d, and 11e):

- Decorative vehicular and pedestrian lighting with two alternating types of decorative banners
- Way-finding signage
- Defining the “edge” of the roadway by removing expansive drives that are not needed (this also improves circulation and safety for both motorist and pedestrians)
- Demarcation of crosswalks
- ADA compliant sidewalks
- Grass boulevard
- Open ditch enhancement: removal of woody vegetation and invasive, noxious and otherwise weedy species and replace with native grasses and forbs tolerant of field conditions

Lincoln Highway

The enhancements proposed for the Lincoln Highway corridor include the same as those listed for Toronto Street and are illustrated in Photo edit 11h.

Residents identified the importance of having a sidewalk or trail connect to Wheatland Manor. Providing ADA compliant sidewalks that are well lit will allow the community and residents of Wheatland Manor to safely walk around the neighborhood and other parts of town. The enhancements also highlight the importance of this historic corridor to visitors.

Primary Corridors

Primary corridors are streets that serve as main routes for motorists and pedestrians to points of interest throughout town. These primary corridors are the priority areas identified to receive lighting and sidewalk enhancements first; these are also the corridors where the way-finding signage will be located.

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- ADA compliant sidewalks
- Grass boulevard
- Open ditch enhancement: removal of woody vegetation and invasive, noxious, and otherwise weedy species and replace with native grasses and forbs tolerant of field conditions



Existing photo 11a: N. Toronto St. photo taken south of intersection with Jefferson St. looking northerly

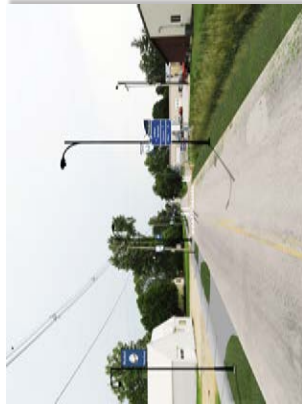
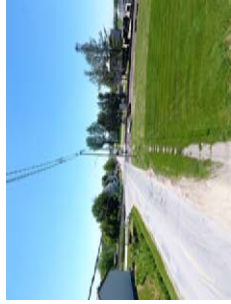


Photo edit 11b: Decorative lighting, ADA compliant sidewalks, and a managed ditch enhance the aesthetics of this important corridor.



Photo edit 11c: Concept illustrating the proposed enhancements with the overhead utility placed underground and new pavement



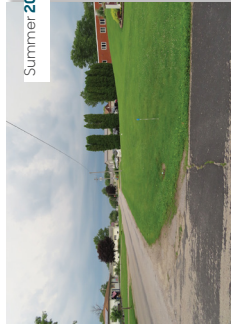
Existing photo 11a: N. Toronto St. photo taken south of intersection with Jefferson St. looking southerly



Photo edit 11e: Decorative lighting, ADA compliant sidewalks, and a managed ditch enhance the aesthetics of this important corridor.



Photo edit 11f: Concept illustrating the proposed enhancements with the overhead utility placed underground and new pavement



Existing photo 11g: Lincoln Highway photo taken from Wheatland Manor drive way looking westerly



Photo edit 11h: Decorative lights with banners, ADA compliant sidewalks, and way-finding signage contribute to highlighting the importance of this corridor

Lincoln Highway

The enhancements proposed for the Lincoln Highway corridor include the same as those listed for Toronto Street and are illustrated in Photo edit 11h.

Residents identified the importance of having a sidewalk or trail connect to Wheatland Manor. Providing ADA compliant sidewalks that are well lit will allow the community and residents of Wheatland Manor to safely walk around the neighborhood and other parts of town.

The enhancements also highlight the importance of this historic corridor to visitors.

Summer 2021 11

Wheatland
Primary Corridors

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

Iowa's Living Roadways
community
visioning

PRIMARY CORRIDOR ENHANCEMENTS [See Boards #7, #8, #9, #10, & #11 for Visual]						Summer 2021
Description	Est. Qty.	Unit	Estimated Unit Cost	Estimated Line Total	Estimated Totals	
Hwy. 30 (West City Limit/West Entryway to East Entryway Sign): +/- 3,900 LF						
Decorative Site Lighting						\$ 231,000.00
Vehicular Lighting Only (Cobra)	44	EA	\$ 5,000.00	\$ 220,000.00		
Wheatland Themed Light Banners Allowance	1	AL	\$ 11,000.00	\$ 11,000.00		
Landscaping						\$ 34,570.00
Street Trees, Deciduous	70	EA	\$ 350.00	\$ 24,500.00		
Decorative Shredded Hardwood Mulch	230	SY	\$ 9.00	\$ 2,070.00		
Site Preparation Allowance	1	AL	\$ 8,000.00	\$ 8,000.00		
Way-Finding Signage						\$ 5,240.00
Aluminium Signage Panel	52	SF	\$ 70.00	\$ 3,640.00		
Break-A-Way Posts	4	EA	\$ 400.00	\$ 1,600.00		
Mobilization Allowance						\$ 13,700.00
	1	AL	\$ 13,700.00	\$ 13,700.00		
Section Subtotal						\$ 284,510.00
Concept Stage 20% Contingency						\$ 56,902.00
Design & Engineering Allowance						\$ 51,211.80
Hwy. 30 Primary Corridor Enhancements Opinion of Total Probable Construction Cost*						\$ 392,623.80
Toronto St./Y-32/130th Ave. (Hwy. 30 to north side of high school; +/- 3,600 LF)						
Sidewalk						\$ 175,430.50
New Sidewalk (None Existing)						\$ 77,344.00
5' Wide Paved Sidewalk On Grade (5" PCC) and Excavation	1,140	SY	\$ 51.00	\$ 58,140.00		
Contingency Item if needed: Engineering Fabric	1,140	SY	\$ 6.60	\$ 7,524.00		
Contingency Item if needed: Aggregate Base Course, 4" and Associated Excavation	1,140	SY	\$ 7.00	\$ 7,980.00		
Site Preparation and Grading Allowance	1	AL	\$ 3,700.00	\$ 3,700.00		
Existing Sidewalk Removal and Replacement (Poor Condition)						\$ 9,195.50
Existing Sidewalk Demolition, +/- 4' Wide	85	SY	\$ 22.50	\$ 1,912.50		
5' Wide Paved Sidewalk On Grade (5" PCC) and Excavation	105	SY	\$ 51.00	\$ 5,355.00		
Contingency Item if needed: Engineering Fabric	105	SY	\$ 6.60	\$ 693.00		
Contingency Item if needed: Aggregate Base Course, 4" and Associated Excavation	105	SY	\$ 7.00	\$ 735.00		
Site Preparation and Grading Allowance	1	AL	\$ 500.00	\$ 500.00		
Existing Sidewalk Removal and Replacement (Fair Condition)						\$ 38,970.00
Existing Sidewalk Demolition, +/- 4' Wide	360	SY	\$ 22.50	\$ 8,100.00		
5' Wide Paved Sidewalk On Grade (5" PCC) and Excavation	450	SY	\$ 51.00	\$ 22,950.00		
Contingency Item if needed: Engineering Fabric	450	SY	\$ 6.60	\$ 2,970.00		
Contingency Item if needed: Aggregate Base Course, 4" and Associated Excavation	450	SY	\$ 7.00	\$ 3,150.00		
Site Preparation and Grading Allowance	1	AL	\$ 1,800.00	\$ 1,800.00		
Existing Sidewalk Removal and Replacement (Good Condition)						\$ 22,621.00
Existing Sidewalk Demolition, +/- 4' Wide	210	SY	\$ 22.50	\$ 4,725.00		
5' Wide Paved Sidewalk On Grade (5" PCC) and Excavation	260	SY	\$ 51.00	\$ 13,260.00		
Contingency Item if needed: Engineering Fabric	260	SY	\$ 6.60	\$ 1,716.00		
Contingency Item if needed: Aggregate Base Course, 4" and Associated Excavation	260	SY	\$ 7.00	\$ 1,820.00		
Site Preparation and Grading Allowance	1	AL	\$ 1,100.00	\$ 1,100.00		
Entire Project Area						\$ 27,300.00
ADA Compliant Detectable Warning Panel	380	SF	\$ 60.00	\$ 22,800.00		
Finish Grading & Seeding Allowance	1	AL	\$ 4,500.00	\$ 4,500.00		
Decorative Site Lighting						\$ 534,000.00
Vehicular Lighting Only (Cobra)	13	EA	\$ 5,000.00	\$ 65,000.00		
Vehicular & Pedestrian Combo	27	EA	\$ 9,500.00	\$ 256,500.00		
Pedestrian Lighting Only	27	EA	\$ 7,500.00	\$ 202,500.00		
Wheatland Themed Light Banners Allowance	1	AL	\$ 10,000.00	\$ 10,000.00		
Stormwater Ditch Enhancement/Improvement						\$ 14,000.00
Vegetation Removal (Invasive, Noxious, Weedy & Otherwise Undesirable Vegetation) Allowance	1	AL	\$ 5,000.00	\$ 5,000.00		
Seeding Preparation and Seeding with Native Herbaceous Vegetation Allowance	1	AL	\$ 9,000.00	\$ 9,000.00		
Traffic Control						\$ 6,500.00
Crosswalk Pavement Marking Allowance	1	AL	\$ 2,000.00	\$ 2,000.00		
Regulatory Signage Allowance	1	AL	\$ 4,500.00	\$ 4,500.00		
Way-Finding Signage						\$ 5,240.00
Aluminium Signage Panel	52	SF	\$ 70.00	\$ 3,640.00		
Break-A-Way Posts	4	EA	\$ 400.00	\$ 1,600.00		
Removal of Expansive Drives (Access Control)						\$ 7,386.60
Driveway Demolition within Public Right-of-Way	86	SY	\$ 22.50	\$ 1,935.00		
Site Preparation and Grading Allowance	1	AL	\$ 2,000.00	\$ 2,000.00		
6" Paved (PCC) Drive - See Concept #11B	36	SY	\$ 54.50	\$ 1,962.00		
Contingency Item if needed: Engineering Fabric	36	SY	\$ 6.60	\$ 237.60		
Contingency Item if needed: Aggregate Base Course, 4" and Associated Excavation	36	SY	\$ 7.00	\$ 252.00		
Final Grading and Seeding Allowance	1	AL	\$ 1,000.00	\$ 1,000.00		
Mobilization Allowance						\$ 37,200.00
	1	AL	\$ 37,200.00	\$ 37,200.00		
Section Subtotal						\$ 779,757.10
Concept Stage 20% Contingency						\$ 155,951.42
Design & Engineering Allowance						\$ 145,936.28
Toronto Street Primary Corridor Enhancements Opinion of Total Probable Construction Cost*						\$ 1,081,644.80
Lincoln Highway/Z24 (West City Limit to East Edge of Wheatland Manor): +/- 3,600 LF						
Sidewalk						\$ 273,193.00
New Sidewalk (None Existing)						\$ 65,539.00
5' Wide Paved Sidewalk On Grade (5" PCC) and Excavation	965	SY	\$ 51.00	\$ 49,215.00		
Contingency Item if needed: Engineering Fabric	965	SY	\$ 6.60	\$ 6,369.00		
Contingency Item if needed: Aggregate Base Course, 4" and Associated Excavation	965	SY	\$ 7.00	\$ 6,755.00		
Site Preparation and Grading Allowance	1	AL	\$ 3,200.00	\$ 3,200.00		
Existing Sidewalk Removal and Replacement (Fair Condition)						\$ 32,873.00
Existing Sidewalk Demolition, +/- 4' Wide	300	SY	\$ 22.50	\$ 6,750.00		
5' Wide Paved Sidewalk On Grade (5" PCC) and Excavation	380	SY	\$ 51.00	\$ 19,380.00		
Contingency Item if needed: Engineering Fabric	380	SY	\$ 6.60	\$ 2,508.00		
Contingency Item if needed: Aggregate Base Course, 4" and Associated Excavation	380	SY	\$ 7.00	\$ 2,660.00		
Site Preparation and Grading Allowance	1	AL	\$ 1,575.00	\$ 1,575.00		
Existing Sidewalk Removal and Replacement (Good Condition)						\$ 159,181.00

PRIMARY CORRIDOR ENHANCEMENTS (See Boards #7, #8, #9, #10, & #11 for Visual)					Summer 2021	
Description	Est. Qty.	Unit	Estimated Unit Cost	Estimated Line Total	Estimated Totals	
Aluminium Signage Panel	58	SF	\$ 70.00	\$ 4,060.00		
Break-A-Way Posts	4	EA	\$ 400.00	\$ 1,600.00		
Mobilization Allowance	1	AL	\$ 22,750.00	\$ 22,750.00	\$	22,750.00
					Section Subtotal	\$ 475,166.50
					Concept Stage 20% Contingency	\$ 95,033.30
					Design & Engineering Allowance	\$ 88,942.47
					Main Street Primary Corridor Enhancements Opinion of Total Probable Construction Cost*	\$ 659,142.27
Vine St. (South Entrance to City Park to Toronto St.): +/- 210 LF						
Sidewalk						
New Sidewalk (None Existing)				\$ 18,458.00	\$	18,458.00
5' Wide Paved Sidewalk On Grade (5" PCC) and Excavation	230	SY	\$ 51.00	\$ 11,730.00		
Contingency Item if needed: Engineering Fabric	230	SY	\$ 6.60	\$ 1,518.00		
Contingency Item if needed: Aggregate Base Course, 4" and Associated Excavation	230	SY	\$ 7.00	\$ 1,610.00		
Site Preparation and Grading Allowance	1	AL	\$ 800.00	\$ 800.00		
ADA Compliant Detectable Warning Panel	30	SF	\$ 60.00	\$ 1,800.00		
Finish Grading & Seeding Allowance	1	AL	\$ 1,000.00	\$ 1,000.00		
Decorative Site Lighting					\$	69,300.00
Vehicular & Pedestrian Combo	3	EA	\$ 9,500.00	\$ 28,500.00		
Pedestrian Lighting Only	5	EA	\$ 7,500.00	\$ 37,500.00		
Wheatland Themed Light Banners Allowance	1	AL	\$ 3,300.00	\$ 3,300.00		
Traffic Control					\$	1,000.00
Crosswalk Pavement Marking Allowance	1	AL	\$ 500.00	\$ 500.00		
Regulatory Signage Allowance	1	AL	\$ 500.00	\$ 500.00		
Way-Finding Signage					\$	2,830.00
Aluminium Signage Panel	29	SF	\$ 70.00	\$ 2,030.00		
Break-A-Way Posts	2	EA	\$ 400.00	\$ 800.00		
Mobilization Allowance	1	AL	\$ 4,600.00	\$ 4,600.00	\$	4,600.00
					Section Subtotal	\$ 96,188.00
					Concept Stage 20% Contingency	\$ 19,237.60
					Design & Engineering Allowance	\$ 18,003.84
					Vine Street Primary Corridor Enhancements Opinion of Total Probable Construction Cost*	\$ 133,429.44
					PRIMARY CORRIDOR ENHANCEMENTS: Opinion of Probable Total Construction Cost*	\$ 4,230,728.66

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

Trails

Overview

As noted on board 9, during the community TAB workshops, Wheatland residents from all user groups expressed the need and desire for a trail system within and around Wheatland and connecting to Calamus. In addition, the youth cited that a trail could be used for track runners since the Cal-Wheat school district has no track for the runners to practice, thus forcing them to use the road since most of the sidewalks are intermittent or pose concerns for runners.

Families and recreational users prefer separated trails over other types because of safety. In fact, studies have shown that use drops dramatically for other types of trails such as sharrows, paved shoulders, and bike lanes. While the ultimate goal for the community is to have a separated multi-use trail system, there are segments where a shared road (sharrow) may need to be utilized due to field conditions and/or property ownership as well as other constraints.

The concepts illustrated on board 12 are of the separated trail segments. Refer to Cal-Wheat boards 1 through 4 for concepts proposed for the trail connection between Wheatland and Calamus.

High School

A trail is proposed to go around the northern, western and eastern perimeter of the school grounds in order to provide critical and safe access and connectivity to the area. It is envisioned that the trail could meander between the rows of most of the existing evergreens that are located on the northwest corner of the property and be installed with.

In addition to the trail, other site amenities include: way-finding signage, decorative lighting and banners, addressing accessibility to the trail and existing sidewalk, implementing a marked crosswalk on E. Park Street, and repairing and managing eroded areas like was present at the end of the sidewalk.

Parks

Linking the proposed trail system to both Lions Park and City Park, including adding a sidewalk network within the parks ranked high with the community. The trail is seen as a much needed improvement that will provide all age groups with added recreational opportunities and enhance the circulation as well as provide access to the portion of Lions Park that is on the west and south side of the creek.

Trails Overview

As noted on board 9, during the community TAB workshops, Wheatland residents from all user groups expressed the need and desire for a trail system within and around Wheatland and connecting to Colonus. In addition, the youth cited that a trail could be used for track runners since the Cat-Wheat school district has no track for the runners to practice, thus forcing them to use the road since most of the sidewalks are intermittent or pose concerns for runners.

Families and recreational users prefer separated trails over other types because of safety. In fact, studies have shown that use drops dramatically for other types of trails such as sharrows, paved shoulders, and bike lanes. While the ultimate goal for the community is to have a separated multi-use trail system, there are segments where a shared road (sharrow) may need to be utilized due to field conditions and/or property ownership as well as other constraints.

The concepts illustrated on this board are of the separated trail segments. Refer to Cal-Wheat boards 1 through 4 for concepts proposed for the trail connection between Wheatland and Colonus.

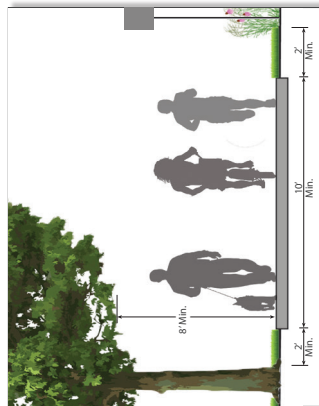


Figure 12c: Proposed typical separated recreational trail section



Existing photo 12a: Looking north along the west side of the school from the intersection of N. Toronto St. and E. Park St.



Photo edit 12b: A portion of the community trail system is proposed to provide connectivity to the school as a separated trail, providing safe access for youth and other community members to access the school and fitness facility

High School

A trail is proposed to go around the northern, western and eastern perimeter of the school grounds in order to provide critical and safe access and connectivity to the area. It is envisioned that the trail could meander between the rows of most of the existing evergreens that are located on the northwest corner of the property and be installed with.

In addition to the trail, other site amenities include: way-finding signage, decorative lighting and banners, addressing accessibility to the trail and existing sidewalk, implementing a marked crosswalk on E. Park Street, and repairing and managing eroded areas like was present at the end of the sidewalk.



Existing photo 12c: North end of Lions Park on west side of creek, photo taken from W. Park Street looking southerly



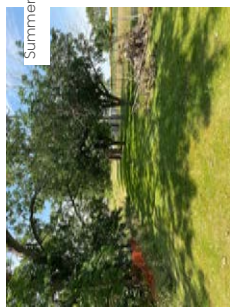
Photo edit 12d: The new trail system is proposed to have site amenities to enhance the comfort and enjoyment of the user

Parks

Linking the proposed trail system to both Lions Park and City Park, including adding a sidewalk network within the parks ranked high with the community. The trail is seen as a much needed improvement that will provide all age groups with added recreational opportunities and enhance the circulation as well as provide access to the portion of Lions Park that is on the west and south side of the creek.

As can be seen in photo edit 12d, the proposed trail will enter the north side of Lions Park between the existing creek corridor and the western property line.

A pedestrian bridge is proposed to allow the trail to cross over from the south side of the creek to the north side. This is



Existing photo 12e: south side of baseball diamond in Lions Park (north side of creek), photo taken looking westerly



Photo edit 12f: The new trail system is proposed to meander through Lions Park and City Park, connecting the south side of Lions Park to the north side via pedestrian bridge.

illustrated in photo edit 12f.

The enhancements proposed include:

- Way-finding and interpretive signage
- Site amenities that include benches, trash receptacles, bike racks, water filling stations, and dog stations
- Open ditch enhancement: removal of woody vegetation and invasive, noxious and otherwise weedy species and replace with native grasses and forbs tolerant of field conditions
- Supplemental planting of shade trees tolerant of site conditions, such as Honeylocust



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

As can be seen in photo edit 12d, the proposed trail will enter the north side of Lions Park between the existing creek corridor and the western property line.

A pedestrian bridge is proposed to allow the trail to cross over from the south side of the creek to the north side. This is illustrated in photo edit 12f.

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- Supplemental planting of shade trees tolerant of site conditions,, such as Honeylocust

CONNECTIVITY: TRAIL (See Boards # 6, #11 & #12 for Visual)					Summer 2021
Description	Est. Qty.	Unit	Estimated Unit Cost	Estimated Line Total	Estimated Totals
Sharrow Segment (Shared Street)					
Sharrow (+/- 11,660 LF ~ 2.21 Mi.) ~ within City Limits					\$ 25,000.00
Share-The-Road Pavement Markings, Symbols, Allowance	1	AL	\$ 9,500.00	\$ 9,500.00	
Share-The-Road Pavement Markings, Symbols, Allowance	1	AL	\$ 15,500.00	\$ 15,500.00	
Mobilization Allowance	1	AL	\$ 1,250.00	\$ 1,250.00	\$ 1,250.00
<i>Section Subtotal</i>					\$ 26,250.00
<i>Concept Stage 20% Contingency</i>					\$ 5,250.00
<i>Design & Engineering Allowance</i>					\$ 4,725.00
Sharrow Trail Segment Opinion of Total Probable Construction Cost*					\$ 36,225.00
Separated Trail (10' Wide with 2' Grass Shoulders); +/- 0.37 Miles					
Trail Segment 1 (+/- 1,980 LF) ~ Memorial Drive west toward high school to E. Park Rd					\$ 187,239.80
10' Wide Trail, Paved (5" PCC) On Grade; and Excavation	2,200	SY	\$ 51.00	\$ 112,200.00	
<i>Contingency Item if needed: Engineering Fabric</i>	2,200	SY	\$ 6.60	\$ 14,520.00	
<i>Contingency Item if needed: Aggregate Base Course, 4" and Associated Excavation</i>	2,200	SY	\$ 7.00	\$ 15,400.00	
Final Grading and Preparation Allowance	1	AL	\$ 11,000.00	\$ 11,000.00	
Seeding (Shoulders) Allowance	1	AL	\$ 1,300.00	\$ 1,300.00	
Painted Pavement Markings (Centerline)	1,980	LF	\$ 1.75	\$ 3,465.00	
ADA Compliant Detectable Warning Panel	40	SF	\$ 60.00	\$ 2,400.00	
Trail Way-finding Signage Allowance	1	AL	\$ 6,000.00	\$ 6,000.00	
Site Amenities (Benches, Trash Receptacles, Bike Racks) and associated PCC pads Allowance					
Metal & Plastic Bench, 6'	3	EA	\$ 2,200.00	\$ 6,600.00	
Metal & Plastic Trash Receptacle	3	EA	\$ 1,800.00	\$ 5,400.00	
Metal Bike Rack	1	AL	\$ 6,000.00	\$ 6,000.00	
Paved (5" PCC) Site Amenity Pads On Grade; and Excavation	38	SY	\$ 51.00	\$ 1,938.00	
<i>Contingency Item if needed: Engineering Fabric</i>	38	SY	\$ 6.60	\$ 250.80	
<i>Contingency Item if needed: Aggregate Base Course, 4" and Associated Excavation</i>	38	SY	\$ 7.00	\$ 266.00	
Final Grading and Preparation Allowance	1	AL	\$ 500.00	\$ 500.00	
Decorative Site Lighting (+/- 1,530 LF adjacent to school property)					\$ 257,000.00
Pedestrian Light Only	34	EA	\$ 7,500.00	\$ 255,000.00	
School Themed Light Banners Allowance	1	AL	\$ 2,000.00	\$ 2,000.00	
Mobilization Allowance	1	AL	\$ 10,500.00	\$ 10,500.00	\$ 10,500.00
<i>Section Subtotal</i>					\$ 454,739.80
<i>Concept Stage 20% Contingency</i>					\$ 90,947.96
<i>Design & Engineering Allowance</i>					\$ 83,428.16
Separated Trail Opinion of Total Probable Construction Cost*					\$ 639,615.92
TRAIL CONNECTIVITY: Opinion of Probable Total Construction Cost*					\$ 675,840.92

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

Lions Park & City Park

Overview

Lions Park and City Park are often viewed as one park because of their adjacency, together they serve as a main community attraction and destination – offering a variety of both passive and active recreational opportunities.

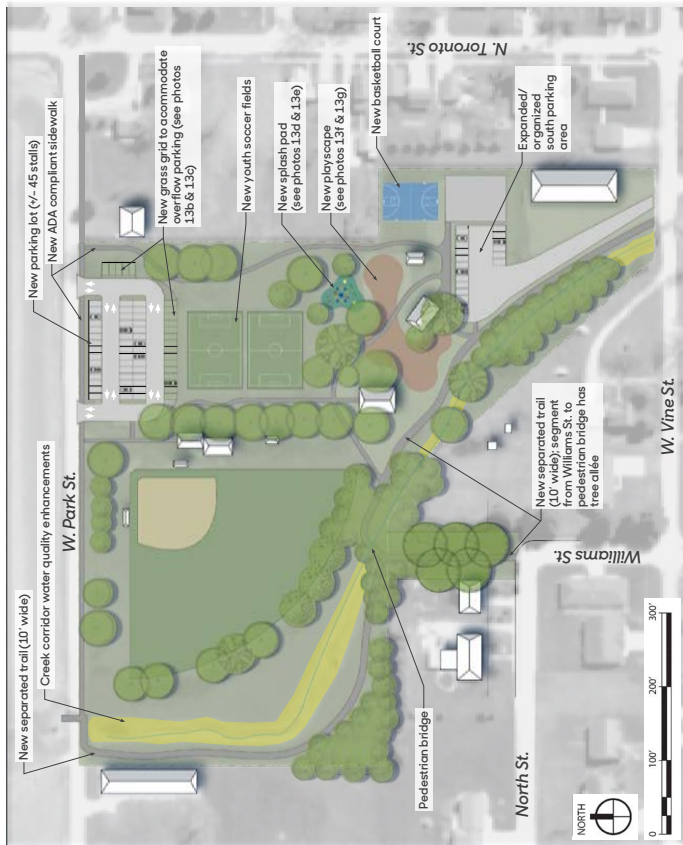
During the TAB and design workshops, community members expressed their concerns over the limited parking and the safety issues involved with having cars back out onto Park St from the north parking area. The residents also noted the need for accessible sidewalks within the park, especially between the ball field and the playground. Other needed enhancements identified included a new playground and a splash pad, and a need to better manage storm water and improve water quality.

Concept plan 13a on board 13 illustrates the proposed enhancements envisioned and their approximate location. Photos 13b through 13g show a few examples of what some of the proposed enhancements could look like. For instance, instead of a themed splash pad, some different options may be to go with a design that utilizes bright colors and more abstract equipment (13d) or one that is reflective of nature and more naturalized (13e) – the selection should integrate with and be complimentary to the style chosen for the playscape. Photo 13f shows a transitional playscape, while Photo 13g shows a playscape that is naturalistic and would pair well with the naturalized splash pad shown in photo 13e.

Photo edits 12d and 12f on board 12 illustrate the vision for the proposed trail and creek corridor within the parks. Partial concept plan 13h on this board illustrates an alternate route for the trail to enter Lions Park from the north. This alternate route is the least desirable because of its location behind the outfield of the ball field, of which the majority of residents at the design workshop agreed.

All of the enhancements proposed will improve the safety, and contribute to the overall health and well-being of the community. When appropriate, elements of the enhancements such as the permeable grass grid and native vegetation have been integrated to help manage storm-water in order to reduce runoff and improve water quality.

Summer 2021 13



Concept plan 13a: Proposed enhancements for the existing Lions Park and City Park

Lions Park & City Park

Lions Park and City Park are often viewed as one park because of their adjacency, together they serve as a main community attraction and destination - offering a variety of both passive and active recreational opportunities.

During the TAB and design workshops, community members expressed their concerns over the limited parking and the safety issues involved with having cars back out onto Park St from the north parking area. The residents also noted the need for accessible sidewalks within the park, especially

between the ball field and the playground. Other needed enhancements identified included a new playground and a splash pad, and a need to better manage storm water and improve water quality.

Concept plan 13a above illustrates the proposed enhancements envisioned and their approximate location. Photos 13b through 13g show a few examples of what some of the proposed enhancements could look like. For instance, instead of a themed splash pad, some different options may be to go with a design that utilizes bright colors and more



Photo 13b: Grass Grid Example

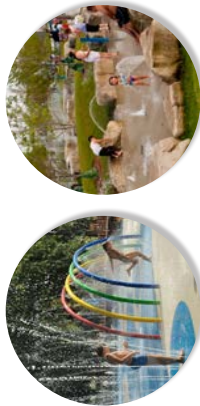


Photo 13c: Grass Grid Example



Photo 13d: Splash Pad Example

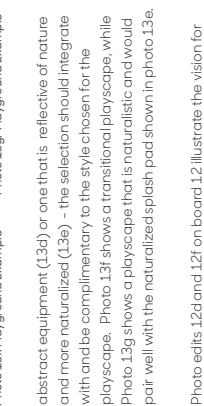


Photo 13e: Playground Example



Partial concept plan 13h: The plan above shows an alternate route for the 10' wide separated trail on the northwest portion of the park

outfield of the ball field, of which the majority of residents at the design workshop agreed.

All of the enhancements proposed will improve the safety, and contribute to the overall health and well-being of the community. When appropriate, elements of the enhancements such as the permeable grass grid and native vegetation have been integrated to help manage storm-water in order to reduce runoff and improve water quality.

Wheatland

Lions Park & City Park

FLENKER LAND ARCHITECTURE CONSULTANTS, LLC

L.A. Meg Flenker, P.L.A., ASLA, CPESC, CPSWQ
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LIONS PARK & CITY PARK ENHANCEMENTS (See Boards #7, #12 & #13 for Visual)					Summer 2021	
Description	Est. Qty.	Unit	Estimated Unit Cost	Estimated Line Total	Estimated Totals	
City Park and Lions Park Enhancements						
North End Parking Lot						
Paved (Asphalt) Parking Lot, includes Aggregate Base Course & Excavation	2,326	SY	\$ 40.00	\$ 93,040.00	\$ 149,391.60	
<i>Contingency Item if needed: Engineering Fabric</i>	2,326	SY	\$ 6.60	\$ 15,351.60		
Final Grading and Preparation Allowance	1	AL	\$ 7,000.00	\$ 7,000.00		
Pavement Marking Allowance (Stall Lines, Arrows, ADA Logo)	1	AL	\$ 6,000.00	\$ 6,000.00		
Grass Grid Parking Area	2590	SF	\$ 10.00	\$ 25,900.00		
Regulatory Signage Allowance	1	AL	\$ 2,100.00	\$ 2,100.00		
South End Parking Lot						
Paved (Asphalt) Parking Lot, includes Aggregate Base Course & Excavation	1,670	SY	\$ 40.00	\$ 66,800.00	\$ 83,572.00	
<i>Contingency Item if needed: Engineering Fabric</i>	1,670	SY	\$ 6.60	\$ 11,022.00		
Final Grading and Preparation Allowance	1	AL	\$ 3,250.00	\$ 3,250.00		
Pavement Marking Allowance (Stall Lines, ADA Logo)	1	AL	\$ 1,500.00	\$ 1,500.00		
Regulatory Signage Allowance	1	AL	\$ 1,000.00	\$ 1,000.00		
Demolition						
North Cut-off Wood Posts Removal Allowance	1	AL	\$ 2,000.00	\$ 2,000.00	\$ 5,500.00	
Removal of Existing Pavement Slab for Playground	1	AL	\$ 3,500.00	\$ 3,500.00		
Separated Trail (10' Wide with 2' Grass Shoulders); +/- 1,500 LF						
10' Wide Trail, Paved (5" PCC) On Grade; and Excavation	1,670	SY	\$ 51.00	\$ 85,170.00	\$ 213,245.40	
<i>Contingency Item if needed: Engineering Fabric</i>	1,670	SY	\$ 6.60	\$ 11,022.00		
<i>Contingency Item if needed: Aggregate Base Course, 4" and Associated Excavation</i>	1,670	SY	\$ 7.00	\$ 11,690.00		
Final Grading and Preparation Allowance	1	AL	\$ 2,500.00	\$ 2,500.00		
Seeding (Shoulders) Allowance	1	AL	\$ 1,250.00	\$ 1,250.00		
ADA Compliant Detectable Warning Panel	60	SF	\$ 60.00	\$ 3,600.00		
Trail Signage (Regulatory, Interpretive, Way-finding) Allowance	1	AL	\$ 12,600.00	\$ 12,600.00		
Pavement Marking, Centerline	1500	LF	\$ 1.75	\$ 2,625.00		
Site Amenities (Benches, Trash Receptacles, Bike Racks) and associated PCC pads Allowance						
Metal & Plastic Bench, 6'	8	EA	\$ 2,200.00	\$ 17,600.00		
Metal & Plastic Trash Receptacle	4	EA	\$ 1,800.00	\$ 7,200.00		
Metal Bike Rack	1	AL	\$ 6,000.00	\$ 6,000.00		
Paved (5" PCC) Site Amenity Pads On Grade; and Excavation	54	SY	\$ 51.00	\$ 2,754.00		
<i>Contingency Item if needed: Engineering Fabric</i>	54	SY	\$ 6.60	\$ 356.40		
<i>Contingency Item if needed: Aggregate Base Course, 4" and Associated Excavation</i>	54	SY	\$ 7.00	\$ 378.00		
Final Grading and Preparation Allowance	1	AL	\$ 500.00	\$ 500.00		
Formal Native Plant Landscaping (by seating areas) Allowance	1	AL	\$ 10,000.00	\$ 10,000.00		
W. Park Road Culvert Extension Allowance	1	AL	\$ 8,000.00	\$ 8,000.00		
Pedestrian Pre-fab Bridge Allowance	1	AL	\$ 30,000.00	\$ 30,000.00		
Park Entryway Signage						
North Entrance Identify Park Signage Allowance	1	AL	\$ 15,000.00	\$ 15,000.00	\$ 40,000.00	
North Entrance Identify Park Signage Landscape Allowance	1	AL	\$ 5,000.00	\$ 5,000.00		
South Entrance Identify Park Signage Allowance	1	AL	\$ 15,000.00	\$ 15,000.00		
South Entrance Identify Park Signage Landscape Allowance	1	AL	\$ 5,000.00	\$ 5,000.00		
Sidewalk (Varies by location, 6' Wide Minimum)						
Paved Sidewalk On Grade (5" PCC) and Excavation	1,140	SY	\$ 51.00	\$ 58,140.00	\$ 116,017.00	
<i>Contingency Item if needed: Engineering Fabric</i>	1,140	SY	\$ 6.60	\$ 7,524.00		
<i>Contingency Item if needed: Aggregate Base Course, 4" and Associated Excavation</i>	1,140	SY	\$ 7.00	\$ 7,980.00		
Site Preparation and Grading Allowance	1	AL	\$ 2,250.00	\$ 2,250.00		
Final Grading and Seeding Allowance	1	AL	\$ 750.00	\$ 750.00		
ADA Compliant Detectable Warning Panel	32	SF	\$ 60.00	\$ 1,920.00		
Site Amenities (Benches, Trash Receptacles) and associated PCC pads Allowance						
Metal & Plastic Bench, 6'	10	EA	\$ 2,200.00	\$ 22,000.00		
Metal & Plastic Trash Receptacle	3	EA	\$ 1,800.00	\$ 5,400.00		
Metal Bike Rack	1	AL	\$ 6,000.00	\$ 6,000.00		
Paved (5" PCC) Site Amenity Pads On Grade; and Excavation	55	SY	\$ 51.00	\$ 2,805.00		
<i>Contingency Item if needed: Engineering Fabric</i>	55	SY	\$ 6.60	\$ 363.00		
<i>Contingency Item if needed: Aggregate Base Course, 4" and Associated Excavation</i>	55	SY	\$ 7.00	\$ 385.00		
Site Preparation and Grading Allowance	1	AL	\$ 500.00	\$ 500.00		
Splash Pad						
Splash Pad Allowance	1	AL	\$ 50,000.00	\$ 50,000.00	\$ 64,915.00	
Site Amenities (Benches, Trash Receptacles) and associated PCC pads Allowance						
Metal & Plastic Bench, 6'	5	EA	\$ 2,200.00	\$ 11,000.00		
Metal & Plastic Trash Receptacle	1	EA	\$ 1,800.00	\$ 1,800.00		
Paved (5" PCC) Site Amenity Pads On Grade; and Excavation	25	SY	\$ 51.00	\$ 1,275.00		
<i>Contingency Item if needed: Engineering Fabric</i>	25	SY	\$ 6.60	\$ 165.00		
<i>Contingency Item if needed: Aggregate Base Course, 4" and Associated Excavation</i>	25	SY	\$ 7.00	\$ 175.00		
Site Preparation and Grading Allowance	1	AL	\$ 500.00	\$ 500.00		
Playscape (Natural Playground)						
Playground Allowance	1	AL	\$ 50,000.00	\$ 50,000.00	\$ 67,438.00	
Site Amenities (Benches, Trash Receptacles) and associated PCC pads Allowance						
Metal & Plastic Bench, 6'	6	EA	\$ 2,200.00	\$ 13,200.00		
Metal & Plastic Trash Receptacle	1	EA	\$ 1,800.00	\$ 1,800.00		
Paved (5" PCC) Site Amenity Pads On Grade; and Excavation	30	SY	\$ 51.00	\$ 1,530.00		
<i>Contingency Item if needed: Engineering Fabric</i>	30	SY	\$ 6.60	\$ 198.00		
<i>Contingency Item if needed: Aggregate Base Course, 4" and Associated Excavation</i>	30	SY	\$ 7.00	\$ 210.00		
Site Preparation and Grading Allowance	1	AL	\$ 500.00	\$ 500.00		
Basketball Court						
Asphalt Basketball Court Allowance (full court)	1	AL	\$ 25,000.00	\$ 25,000.00	\$ 37,715.00	
Site Amenities (Benches, Trash Receptacles) and associated PCC pads Allowance						
Metal & Plastic Bench, 6'	4	EA	\$ 2,200.00	\$ 8,800.00		
Metal & Plastic Trash Receptacle	1	EA	\$ 1,800.00	\$ 1,800.00		
Paved (5" PCC) Site Amenity Pads On Grade; and Excavation	25	SY	\$ 51.00	\$ 1,275.00		
<i>Contingency Item if needed: Engineering Fabric</i>	25	SY	\$ 6.60	\$ 165.00		
<i>Contingency Item if needed: Aggregate Base Course, 4" and Associated Excavation</i>	25	SY	\$ 7.00	\$ 175.00		
Site Preparation and Grading Allowance	1	AL	\$ 500.00	\$ 500.00		
Soccer Fields						
					\$ 6,000.00	

LIONS PARK & CITY PARK ENHANCEMENTS (See Boards #7, #12 & #13 for Visual)					Summer 2021
Description	Est. Qty.	Unit	Estimated Unit Cost	Estimated Line Total	Estimated Totals
Grading, Site Preparation and Seeding Allowance	1	AL	\$ 6,000.00	\$ 6,000.00	
Creek Corridor Water Quality Enhancements (+/- 1, 140 LF; +/- 1.10 Acres)					\$ 15,000.00
Vegetation Removal (Invasive, Noxious, Weedy & Otherwise Undesirable Vegetation) Allowance	1	AL	\$ 6,000.00	\$ 6,000.00	
Seeding Preparation and Seeding with Native Herbaceous Vegetation Allowance	1	AL	\$ 9,000.00	\$ 9,000.00	
Mobilization Allowance	1	AL	\$ 40,800.00	\$ 40,800.00	\$ 40,800.00
<i>Section Subtotal</i>					\$ 839,594.00
<i>Concept Stage 20% Contingency</i>					\$ 167,918.80
<i>Design & Engineering Allowance</i>					\$ 151,126.92
Lions Park & City Park Enhancements Opinion of Total Probable Construction Cost*					\$ 1,158,639.72
LIONS PARK & CITY PARK ENHANCEMENTS: Opinion of Total Construction Cost*					\$ 1,158,639.72

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

Downtown

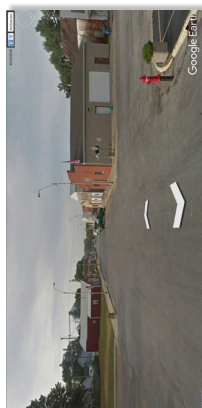
Overview

Establishing a streetscape that is both functional and aesthetic is critical to have a thriving downtown. The streetscape must be able to effectively accommodate both vehicular and pedestrian traffic while being inviting to both businesses and visitors.

Traditionally, bump-outs and/or re-configuration of on street parking provide the opportunity to incorporate greenery, such as street trees or plantings into a streetscapes to improve the aesthetics of the area while enhancing the users comfort and enjoyment. Due to the city's need to not lose any parking, the design quickly abandoned reconfiguration of the parking and focused on bump-outs. While beautification and adding greenery was cited by numerous user groups as being a priority for downtown, the attendees at the design workshop were overwhelmingly against bump-outs. Even with in field installations on the day of the workshop that represented the proposed bump-outs (showing no loss of parking and sufficient turning radii for semis), the attendees still did not want them. Based on the feedback from the design workshop and other constraints, the incorporation of greenery was abandoned.

The enhancements proposed for the downtown area are illustrated in photo edits 14b and 14c and the pocket park plan and sketches (14d – 14f). The enhancements are intended to aid in improving accessibility, connectivity, safety, way-finding, circulation and the overall aesthetics of the downtown area. These enhancements include:

- ADA-compliant sidewalks and ramps on both sides of the street and ADA-compliant crosswalks – all to encourage pedestrian traffic
- Decorative pavement inlay in the bumper overhang and utility zone of the sidewalk to help define the walking area
- Way-finding signage to help visitors navigate to Wheatland's important destinations
- Reduce driveway width to recommended widths in order to create a defined edge which improves aesthetics, safety and circulation
- Clearly marked parking stall lines to maximize parking spaces
- Clearly marked no parking zones to improve safety and circulation
- Demarcation of crosswalks with pavement marking paint or with decorative pavement in order to define pedestrian crossings
- Designated handicapped stalls placed in each block of the downtown to comply with governmental regulatory requirements
- Decorative lighting with banners to reinforce city branding efforts
- Pocket park in an empty lot located at the southwest end of Main St.



Existing Photo 14a: Photo taken from north side of Main St. & E Washington intersection looking south along Main St.



Photo edit 14b: This concept illustrates a retrofit, where the existing paving and sidewalks remain



Photo edit 14c: This concept illustrates a more comprehensive approach, where the overhead utility is placed underground and the street pavement is redone.

Wheatland Downtown

Downtown

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The proposed pocket park integrates the railroad identity into both the proposed pergola and shaded seating (design symbolizes railroad tracks). Native prairie/pollinator gardens that are confined between walkways and/or paved mowing

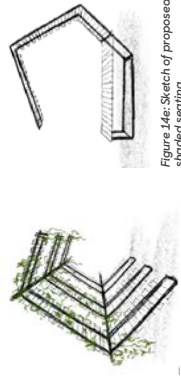


Figure 14d: Sketch of proposed pergola



Figure 14e: Sketch of proposed shaded seating



Concept Plan 14f: Pocket park proposed for empty lot located to the southwest of the intersection of Madison St. and S. Main St.

edges create a low maintenance perimeter to help define the boundary and provide year round interest. The movable benches and picnic tables in the central lawn area can be easily moved or repositioned to allow the area to serve as an open space for community events and gatherings.

Implementing the proposed enhancements should be part of the city's overall revitalization plan and efforts for attracting businesses and people to Wheatland. Improvements proposed for the downtown can be retrofitted into the existing streetscape as illustrated in photo edit 14b or can be part of a larger streetscape renovation (photo edit 14c), either way, the enhancements can be staged/phased in over a period of time as resources allow.

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



Pocket Park

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DOWNTOWN STREETSCAPE ENHANCEMENTS (See Boards #10 & #14 for Visual)						Summer 2021
Description	Est. Qty.	Unit	Estimated Unit Cost	Estimated Line Total	Estimated Totals	
Main St. (Lincoln Hwy south to end of Main St.), E. Jefferson St. (Toronto St. to east side Main St.)						
Street Overlay						
Asphalt Overlay Complete	11,360	SY	\$ 31.40	\$ 356,704.00	\$ 431,680.00	
<i>Contingency Item if needed: Engineering Fabric</i>	11,360	SY	\$ 6.60	\$ 74,976.00		
Sidewalk						
Demolition, Varies, 4' to 10'	3,600	SY	\$ 12.00	\$ 43,200.00	\$ 306,348.00	
New 5' Wide PCC Sidewalk, with Aggregate Base Course & Excavation	780	SY	\$ 58.00	\$ 45,240.00		
<i>Contingency Item if needed: Engineering Fabric</i>	780	SY	\$ 6.60	\$ 5,148.00		
New 10' Wide PCC Sidewalk, with Aggregate Base Course & Excavation	2,975	SY	\$ 58.00	\$ 172,550.00		
<i>Contingency Item if needed: Engineering Fabric</i>	2,975	SY	\$ 6.60	\$ 19,635.00		
Site Preparation and Grading Allowance	1	AL	\$ 18,775.00	\$ 18,775.00		
Finish Grading & Seeding Allowance	1	AL	\$ 1,800.00	\$ 1,800.00		
Decorative Site Lighting						
Pedestrian Light Only	56	EA	\$ 7,500.00	\$ 420,000.00	\$ 711,000.00	
Vehicular & Pedestrian Combo	30	EA	\$ 9,500.00	\$ 285,000.00		
Wheatland Themed Light Banners Allowance	1	AL	\$ 6,000.00	\$ 6,000.00		
Decorative Pavement Crosswalks (Main & Jefferson; Main & Washington; Start @ Lincoln Hwy. & Toronto)						
Demolition of Existing Road Pavement	460	SY	\$ 22.50	\$ 10,350.00	\$ 67,850.00	
Site Preparation Allowance	1	AL	\$ 2,300.00	\$ 2,300.00		
Decorative Colored & Stamped PCC Crosswalk Pavement	460	SY	\$ 120.00	\$ 55,200.00		
Traffic Control						
Crosswalk Pavement Marking Allowance	1	AL	\$ 2,200.00	\$ 2,200.00	\$ 9,200.00	
Regulatory Signage Allowance	1	AL	\$ 7,000.00	\$ 7,000.00		
Way-Finding Signage						
Aluminium Signage Panel	87	SF	\$ 70.00	\$ 6,090.00	\$ 8,490.00	
Break-A-Way Posts	6	EA	\$ 400.00	\$ 2,400.00		
Street Furniture						
Metal & Plastic Bench	4	EA	\$ 2,200.00	\$ 8,800.00	\$ 12,400.00	
Metal & Plastic Trash Receptacle	2	EA	\$ 1,800.00	\$ 3,600.00		
Mobilization Allowance						
	1	AL	\$ 75,000.00	\$ 75,000.00	\$ 75,000.00	
Section Subtotal					\$ 1,621,968.00	
<i>Concept Stage 20% Contingency</i>					\$ 324,393.60	
<i>Design & Engineering Allowance</i>					\$ 291,954.24	
Downtown Streetscape Enhancements Opinion of Total Probable Construction Cost*					\$ 2,238,315.84	
Downtown Pocket Park						
Shade & Screen Structures						
Pergola Allowance	1	AL	\$ 25,000.00	\$ 25,000.00	\$ 40,000.00	
Shaded Seating Allowance	1	AL	\$ 15,000.00	\$ 15,000.00		
Site Furniture						
Metal & Plastic Bench	3	EA	\$ 2,200.00	\$ 6,600.00	\$ 11,400.00	
Metal & Plastic Trash Receptacle	1	EA	\$ 1,800.00	\$ 1,800.00		
Plastic Picnic Table	3	EA	\$ 1,000.00	\$ 3,000.00		
Decorative Lighting						
Pedestrian Light Only	6	EA	\$ 7,500.00	\$ 45,000.00	\$ 45,000.00	
Pedestrian Pavement						
Paved Sidewalk On Grade (5" PCC) and Excavation	260	SY	\$ 51.00	\$ 13,260.00	\$ 18,296.00	
<i>Contingency Item if needed: Engineering Fabric</i>	260	SY	\$ 6.60	\$ 1,716.00		
<i>Contingency Item if needed: Aggregate Base Course, 4" and Associated Excavation</i>	260	SY	\$ 7.00	\$ 1,820.00		
Site Preparation and Grading Allowance	1	AL	\$ 1,500.00	\$ 1,500.00		
Landscaping						
Pollinator Garden Allowance, Plugs	1	AL	\$ 3,900.00	\$ 3,900.00	\$ 16,518.00	
PCC Mowing Edge	148	LF	\$ 22.00	\$ 3,256.00		
Commercial Aluminum Edging, Black Anodized	212	LF	\$ 16.00	\$ 3,392.00		
Ornamental Deciduous Trees	9	EA	\$ 275.00	\$ 2,475.00		
Decorative Shredded Hardwood Mulch	105	SY	\$ 9.00	\$ 945.00		
Site Preparation Allowance	1	AL	\$ 750.00	\$ 750.00		
Lawn (Sod), Allowance	1	AL	\$ 1,800.00	\$ 1,800.00		
Street Furniture						
Metal & Plastic Bench	4	EA	\$ 2,200.00	\$ 8,800.00	\$ 12,400.00	
Metal & Plastic Trash Receptacle	2	EA	\$ 1,800.00	\$ 3,600.00		
Mobilization Allowance						
	1	AL	\$ 7,500.00	\$ 7,500.00	\$ 7,500.00	
Section Subtotal					\$ 151,114.00	
<i>Concept Stage 20% Contingency</i>					\$ 30,222.80	
<i>Design & Engineering Allowance</i>					\$ 28,325.52	
Downtown Pocket Park Enhancements Opinion of Total Probable Construction Cost*					\$ 217,162.32	
DOWNTOWN ENHANCEMENTS: Opinion of Probable Total Construction Cost*					\$ 2,455,478.16	

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

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.

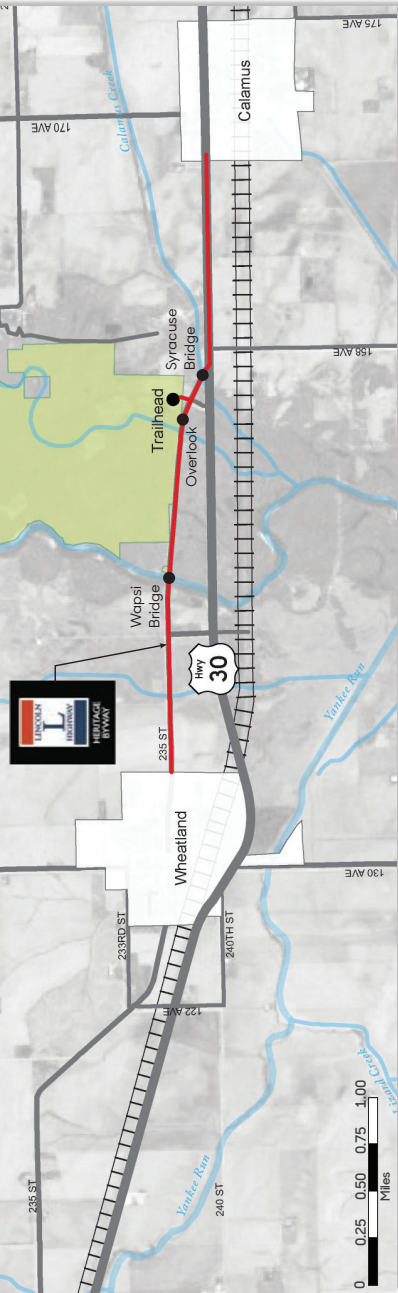
The proposed trail corridor has a plethora of landscape and plant community types. Prairie, wetlands, woodlands, swamps, along with the Wapsi River and its backwaters, all lie within or adjacent to the corridor. A trailhead is proposed to be located at the southeast corner of the 709-acre Syracuse Wildlife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

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.

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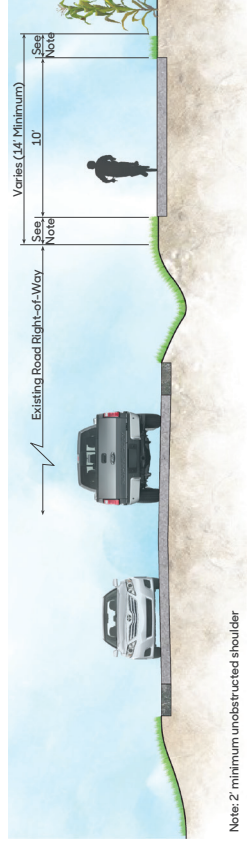
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Figure 1b: Proposed logo for the community trail reinforces ties to the Lincoln Highway as well as to each individual city - Calamus (Sweet Flag) and Wheatland (Wheat)



Note: 2' minimum unobstructed shoulder

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 activities, 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 communities 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

FLENER LAND ARCHITECTURE CONSULTANTS, LLC

LA: Meg Flenker, P.L.A., ASLA, CPESC, CPSWG
Interns: TJ Hillberry, Paola Montlor-Torres and Ethan Marrow
Iowa State University | Trees Forever | Iowa Department of Transportation



SUMMARY: Opinion Of Probable Construction Cost			
<i>Description</i>	<i>Opinion of Cost</i>	<i>Comments</i>	
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 Enhancements	\$ 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.

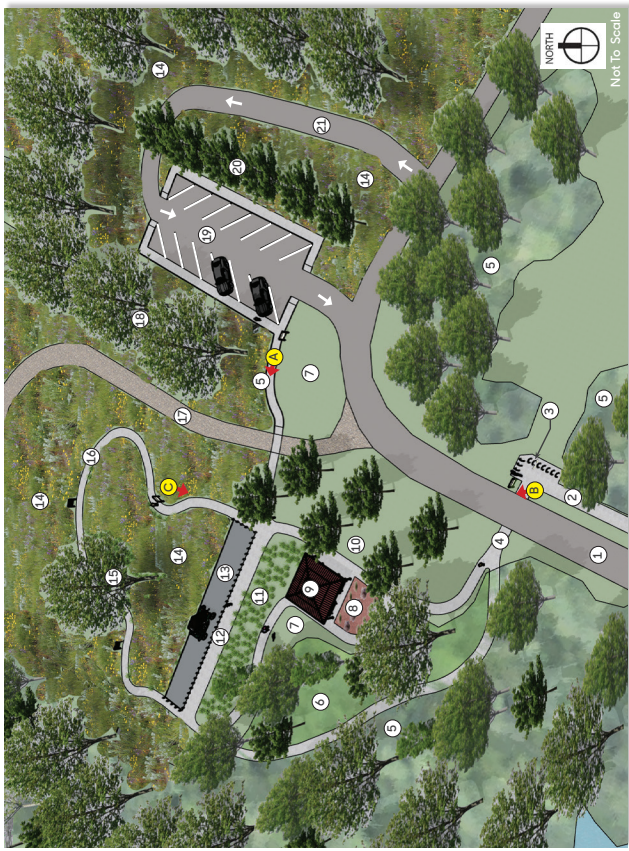
This proposed trailhead not only provides a convenient area to park and access the Warrior Trail, but more importantly, it enhances the area by highlighting the remnant and expanding the native restoration work that the state has done. The addition of site amenities such as a defined and accessible parking 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 parking area 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)						
Paved (Asphalt) Parking Lot & Vehicular Drive, includes Aggregate Base Course & Excavation	1,955	SY	\$ 40.00	\$ 78,200.00		
<i>Contingency Item if needed: Engineering Fabric</i>	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		
<i>Contingency Item if needed: Engineering Fabric</i>	985	SY	\$ 6.60	\$ 6,501.00		
<i>Contingency Item if needed: Aggregate Base Course, 4" and Associated Excavation</i>	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	
<i>Concept Stage 20% Contingency</i>					\$ 79,056.80	
<i>Design & Engineering Allowance</i>					\$ 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.

Summer 2021 2



- 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.



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 LA: Meg Flenker, P.L.A., ASLA, CPESC, CPSWAG
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 Iowa State University | Trees Forever | Iowa Department of Transportation

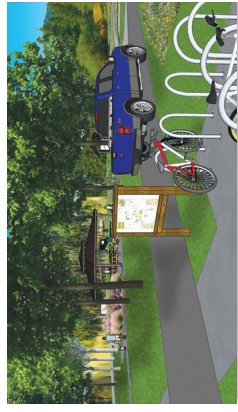


The photo to the right is of the original Lincoln Highway remnant as it exists today. It is not marked and the parking area goes right up to the edge.

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.



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



B Concept sketch 2c: View from bike parking area looking northward towards the shelter and information signage; 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 southward towards the historic Lincoln Highway, the shelter, prairie, and kiosks



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 northwesterly toward the proposed trailhead area that is proposed for the trailhead



Photo edit 3a: Proposed trailhead entryway



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



Example 3f: Sheltered picnic table



Photo edit 3c: Photo taken from Lincoln Highway Heritage Byway looking westerly toward the proposed trailhead area that is proposed for the trailhead



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

Photo edit 3e: Proposed trailhead barrier access treatment for each end of Wapsi bridge

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 above.

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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.

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Cal-Wheat Trail Enhancements



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



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

Trail Corridor Enhancements

Trail enhancements contribute to improving user enjoyment and comfort. Photo edit 3f above 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.

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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						
Shared rural road with minimal signage - See note 2	1.42	MI	\$ 500.00	\$ 710.00	\$ 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						
New paved, 10' side, multi-use trail on independent alignment - See note 4	2.20	MI	\$ 480,000.00	\$ 1,056,000.00	\$ 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						
Paved Sidewalk On Grade (5" PCC) and Excavation	4,200	SY	\$ 51.00	\$ 214,200.00	\$ 293,320.00	
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		
					\$ 38,491.00	
Site Amenities						
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		
					\$ 16,600.00	
Mobilization Allowance						
					\$ 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

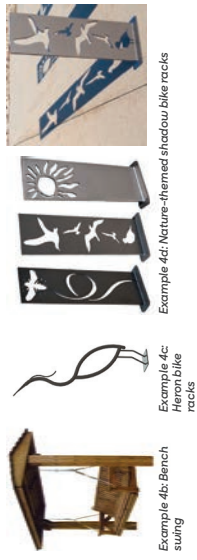
The Syracuse Bridge area is located along Lincoln Highway in the area between the existing historic trestle bridge and U.S. Highway 30. It is highly visible to motorists traveling along U.S. 30 and is a popular stop for Lincoln Highway enthusiasts who tour the Lincoln Highway in their vintage cars. The lure of the area for the enthusiast is the existing trestle bridge which they like to use as a backdrop for photos of their vintage cars. Because of the high visibility and popularity of the trestle 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 trestle bridge.

SYRACUSE BRIDGE AREA ENHANCEMENTS <i>(See Cal-Wheat Board #4 for Visual)</i>						Summer 2021
Description	Est. Qty.	Unit	Estimated Unit Cost	Estimated Line Total	Estimated Totals	
Syracuse Rest Area Enhancements						
Pavement Demolition						
Demolition of Existing Pavement	550	SY	\$ 22.50	\$ 12,375.00	\$ 12,375.00	
Asphalt Parking Lot & Vehicular Drive						
Paved (Asphalt) Parking Lot & Vehicular Drive, includes Aggregate Base Course & Excavation	995	SY	\$ 40.00	\$ 39,800.00	\$ 61,577.00	
<i>Contingency Item if needed: Engineering Fabric</i>	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)						
Decorative Colored & Stamped PCC Crosswalk Pavement, Complete	61	SY	\$ 120.00	\$ 7,320.00	\$ 9,350.00	
Final Grading and Preparation Allowance	1	AL	\$ 500.00	\$ 500.00		
PCC Banding, Complete	180	LF	\$ 8.50	\$ 1,530.00		
Way-Finding Signage						
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)						
Paved Sidewalk On Grade (5" PCC) and Excavation	240	SY	\$ 51.00	\$ 12,240.00		
<i>Contingency Item if needed: Engineering Fabric</i>	240	SY	\$ 6.60	\$ 1,584.00		
<i>Contingency Item if needed: Aggregate Base Course, 4" and Associated Excavation</i>	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						
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						
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 Anodized	70	LF	\$ 16.00	\$ 1,120.00		
Decorative Shredded Hardwood Mulch	86	SY	\$ 9.00	\$ 774.00		
Native Prairie & 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
					<i>Concept Stage 20% Contingency</i>	\$ 32,697.00
					<i>Design & Engineering Allowance</i>	\$ 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 trestle 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 enthusiasts who tour the Lincoln Highway in their vintage cars. The lure of the area for the enthusiast is the existing trestle bridge which they like to use as a backdrop for photos of their vintage cars. Because of the high visibility and popularity of the trestle 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 trestle bridge.



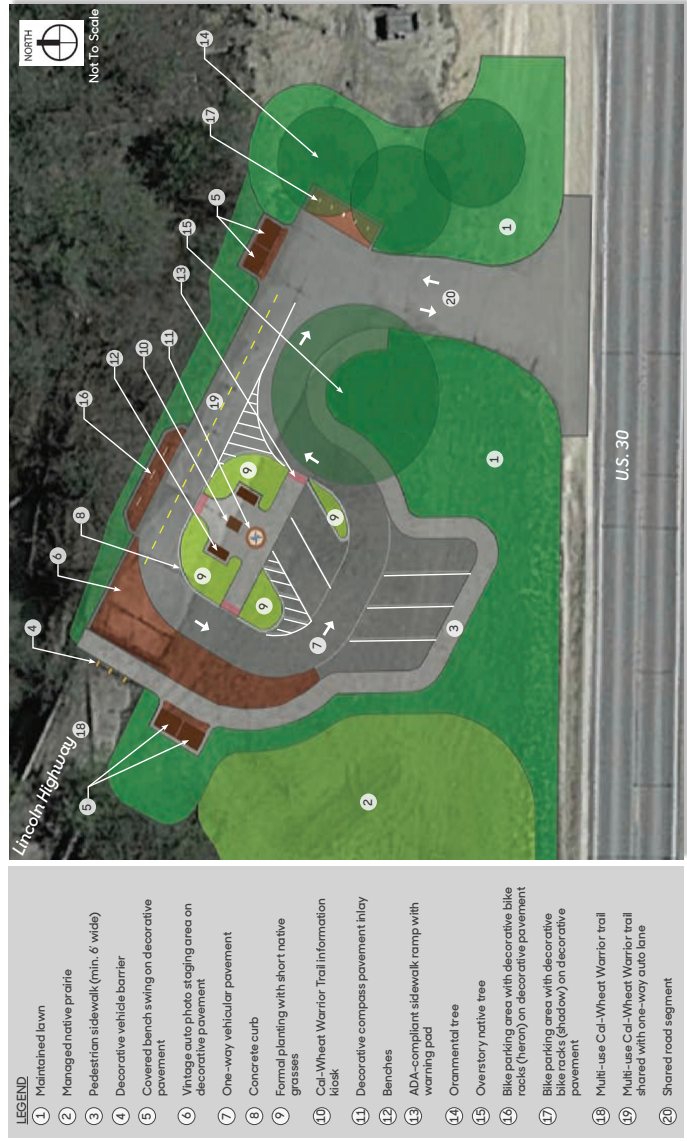
Example 4b: Bench staging

Example 4c: Heron bike racks

Example 4d: Nature-themed shadow bike racks



Existing photo 4f: Photo taken from eastern end looking westerly toward the trestle 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 Ornamental 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

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Implementation Strategies

Overview

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

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 15 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 feasibility report are the beginning of this design process.

Implementation 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 Wheatland.

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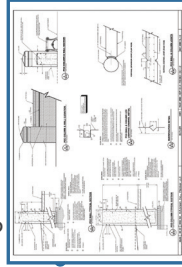
Stage 2: Concept (Schematic) Design



You are at this point in the process

Preliminary Design

Stage 4: Construction Documents



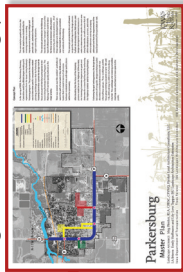
Bidding

Stage 5: Construction Administration (Implementation)



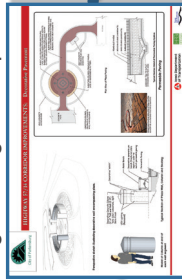
Construction Administration

Stage 1: Master Planning (Vision)



Visioning

Stage 3: Design Development



Design

Completed Project (Implemented)



structural engineer can all be managed with sub-consultant agreements under the landscape architect's prime agreement with the city.

The graphics on this board 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 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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Wheatland
 Implementation

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 to implementation. 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 opportunity to 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

<u>Task</u>	<u>Task Summary</u>
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.
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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
LAND ARCHITECTURE
CONSULTANTS, LLC



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29476 240th Avenue
Long Grove, Iowa 52756
www.flenkerlandarchitects.com