

Final Report and Feasibility Study

Vinton, Iowa



Planning and Design Consultant:

2023

FLENKER
LAND ARCHITECTURE
CONSULTANTS, LLC



Professional Planning, Design &
Environmental Services

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Trees Forever
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 that was founded in 1997 by Meg Flenker. Professionally licensed FLAC works with both public- and private-sector clients throughout all phases of its projects—from the conceptual stages of assessing project feasibility, evaluating alternatives, researching funding, performing site analysis, and creating schematic designs, to preparing 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 persons with 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 Departments of Transportation.

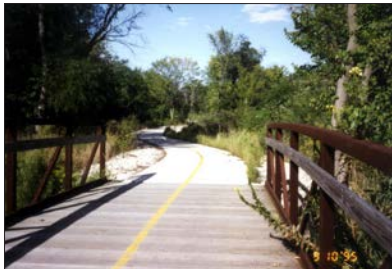
FLAC continually strives to create individualized and quality projects that create value—a guiding principle that has resulted in our involvement in the planning and design of various award-winning projects, both at the state and national levels.



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.

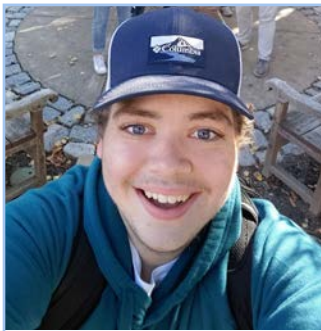
The Design Team



Meg Flenker, PLA, ASLA, CPESC, CPSWQ

Meg Flenker is a registered landscape architect with more than 34 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 Midwest 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-City area after graduating from Iowa State University. Today, she resides just north of the Quad Cities on the family farm where she grew up and continues to be active in the community by serving as the township clerk, cemetery sexton, and treasurer for the board of directors of the local volunteer fire department.



Trevor Smith, Intern

Trevor is entering his 4th year in the five-year Landscape Architecture program at Iowa State University with a minor in environmental studies. He has been with Flenker Land Architects since June 2023 and Community Visioning since May 2022. Born in Ankeny, Iowa, Trevor found a love for building things, especially with Legos, and after many trips to the Omaha Zoo with his grandmother, he found a love for exotic animals as well.

Landscape Architecture has opened the door for him to design zoos or enter into the realm of conservation design in the future. Trevor firmly believes landscape architecture is not just for humans and would love to create spaces that animals and humans can enjoy.



Mikky Ojha, Intern

Mikky is an enthusiastic MLA aspirant who is entering her second year in the Master of Landscape Architecture (MLA) program at Iowa State University. A native of Nepal, she received her undergraduate degree in Architecture from Tribhuvan University Institute of Engineering Pulchowk Campus. Prior to starting her graduate studies at Iowa State, Mikky worked in Nepal as a professional architect on several residential, commercial, and public park projects. Her work provided her with a working knowledge of and experience in interior design, residential drawings, park designs, commercial buildings, and restaurants.

During her career in architecture, Mikky came to realize the importance that the outdoor environment has when integrating buildings into their surroundings and creating a sense of place. In addition, she saw the positive impact that public and green spaces have on improving the quality of life in an urban setting. This new understanding that outdoor space warranted the same, if not more, focus than the buildings during the design process led her to the path of landscape architecture.

Program Overview

Vinton is one of 10 communities selected to participate in the 2023 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 Vinton visioning committee identified a number of goals and priority areas during the visioning process, which are included below:

- Improve pedestrian connectivity and accessibility
- Implement branded way-finding to enhance, the community's identity, user experience and streetscape aesthetics
- Utilize traffic-calming/control methods to assist in improving both vehicular and pedestrian safety and circulation
- Enhance the Vinton trail system by extending it to connect to both local and regional trails and adding additional site amenities such as benches and shade trees to improve user experience

Capturing the Vinton 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.



Design workshop (June 29, 2023): Community members review precedent boards and preliminary concepts and provide their input during the design workshop that was held during the Vinton Farmers Market



Design Workshop (June 29, 2023): A community member listens to an explanation of various intersection treatments to aid in traffic calming



Design Workshop (June 29, 2023): Community members use chalk to express what they believe makes Vinton a great place in which to live



Design Workshop (June 29, 2023): Community members use Wiki Sticks to layout desired routes for new sidewalks, trails, and safe routes to school

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Design Workshop (June 29, 2023): Community members review presentation boards and preliminary concepts and provide their input during the design workshop that was held during the Vinton Farmers Market

Program Overview

The city of Vinton is one of 10 communities selected to participate in the 2023 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).

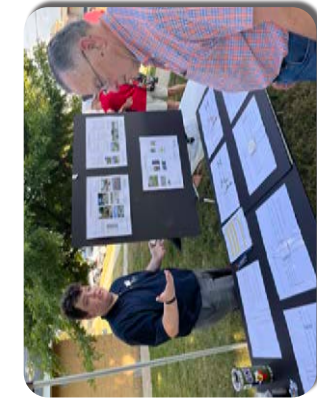
Visioning Program Goals:

- 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

Vinton Program Overview



Design Workshop (June 29, 2023): A community member explains to steering committee members and stakeholders who take part in a series of meetings that are facilitated by field coordinators from Trees Forever.

Each visioning community is represented by a steering committee of local residents and stakeholders who take part in a series of meetings that are facilitated by field coordinators from Trees Forever.

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

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

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



Design Workshop (June 29, 2023): Community members use chalk to express what they believe makes Vinton a great place in which to live

Community Goals

The steering committee identified a number of goals and priority areas during the visioning process. These goals and priorities were reflective of what residents identified during their participation in the TAB workshops. The community goals focused on four main initiatives:

- Improve pedestrian connectivity and accessibility
- Implement branded way-finding to enhance the community's identity, user experience and streetscape aesthetics
- Utilize traffic-calming/control methods to assist in improving both vehicular and pedestrian safety and circulation
- Enhance the Vinton trail system by extending it to connect to both local and regional trails and adding additional site amenities such as benches and shade trees to improve user experience

Refer to board 5, "What, Where, & Why," for further details related to the main community goals summarized above.



Design Workshop (June 29, 2023): Community members use M&M's Sticks to map desired routes for new sidewalks, trails, and safe routes to school

Capturing the Vinton Vision

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

1. Program Overview
2. Bioregional Assessments
3. Transportation Assets and Barriers
4. Transportation Inventory & Analysis
5. What, Where, & Why
6. Concept Plan
7. Community Identity
8. Safety & Traffic - Calming/Control
9. Connectivity & Accessibility
10. Trail Extension + Enhancements
11. Implementation

Flenker Land Architects Consultants, LLC
 LA: Meg Flenker, PLA, CPESC, CPSWQ
 Interns: Trevor Smith, Mikky Oljha
 Iowa State University | Trees Forever | Iowa Department of Transportation



Bioregional Assessment

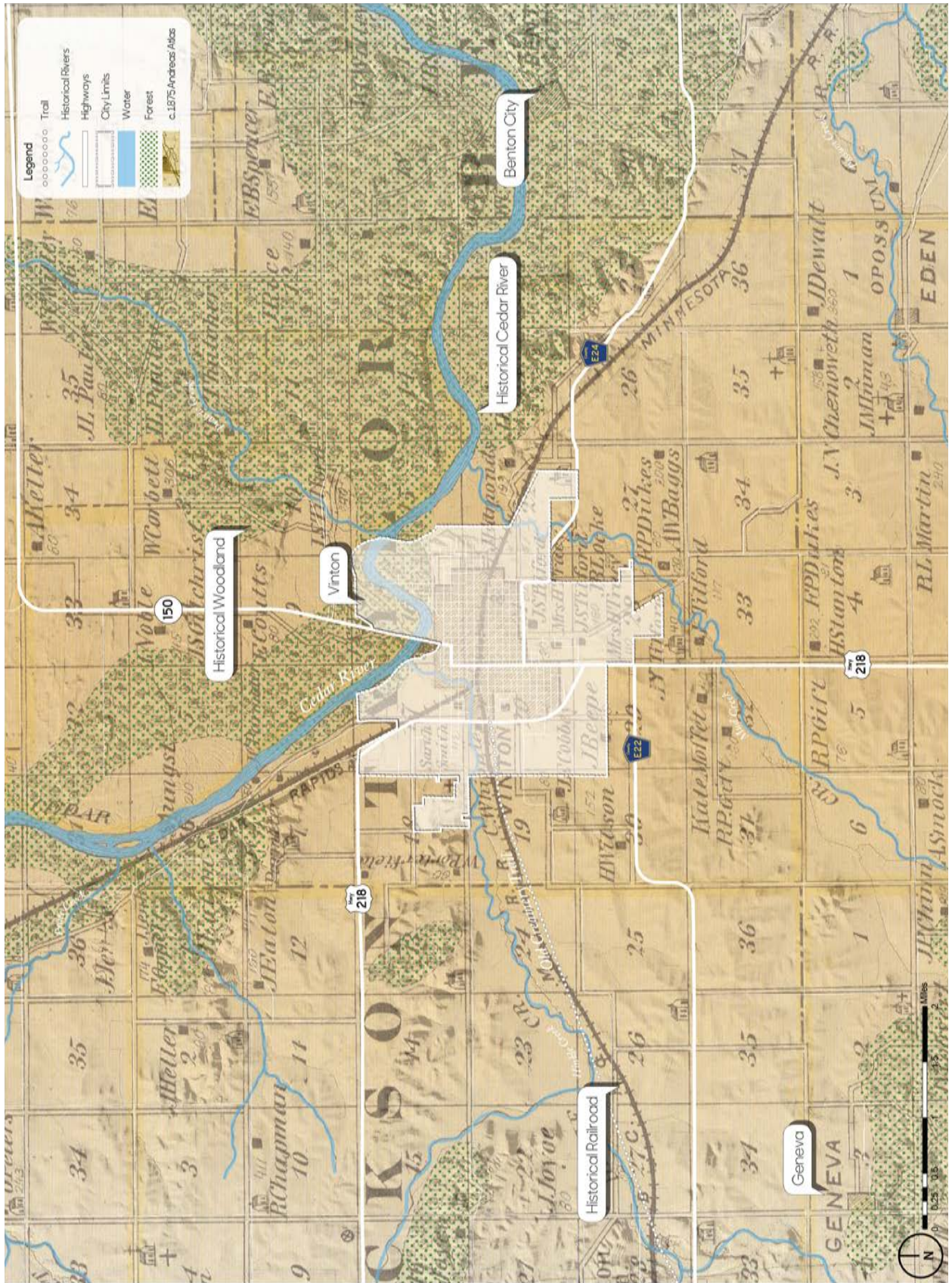
Historical Settlement Patterns

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.

Vinton 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

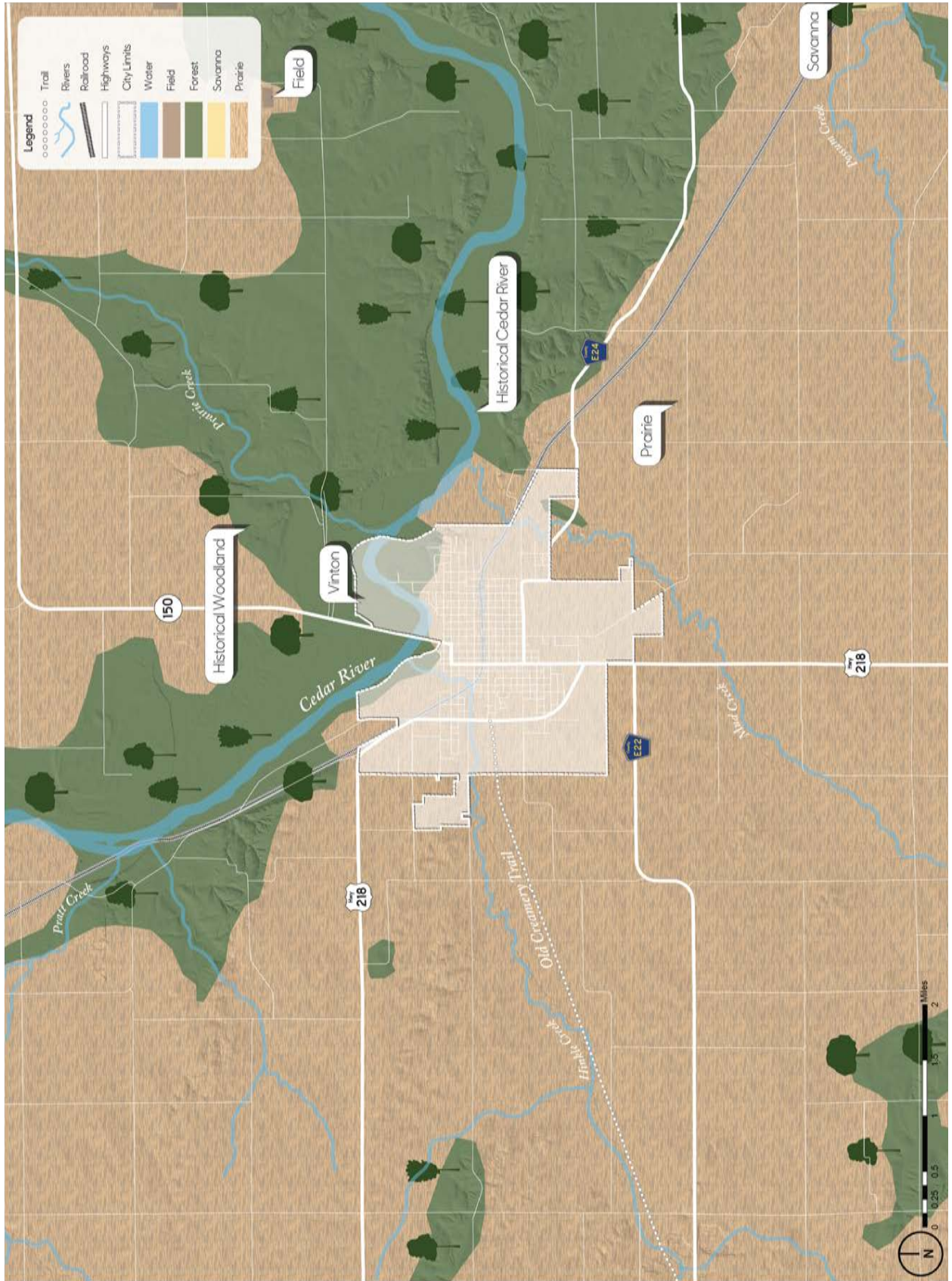
The plant community names mapped by the GLO surveyors varied. The original terminology they used has been preserved in the original data, but we have renamed them on this map to reflect names used to describe contemporary vegetation communities.

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. Prairie: Perennial non-woody plants; fire dominated.
3. Savanna: Scattered trees, with an open canopy, and prairie below. Fire dominated.
4. Field: Cultivated lands of early pioneers or Native Americans.

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

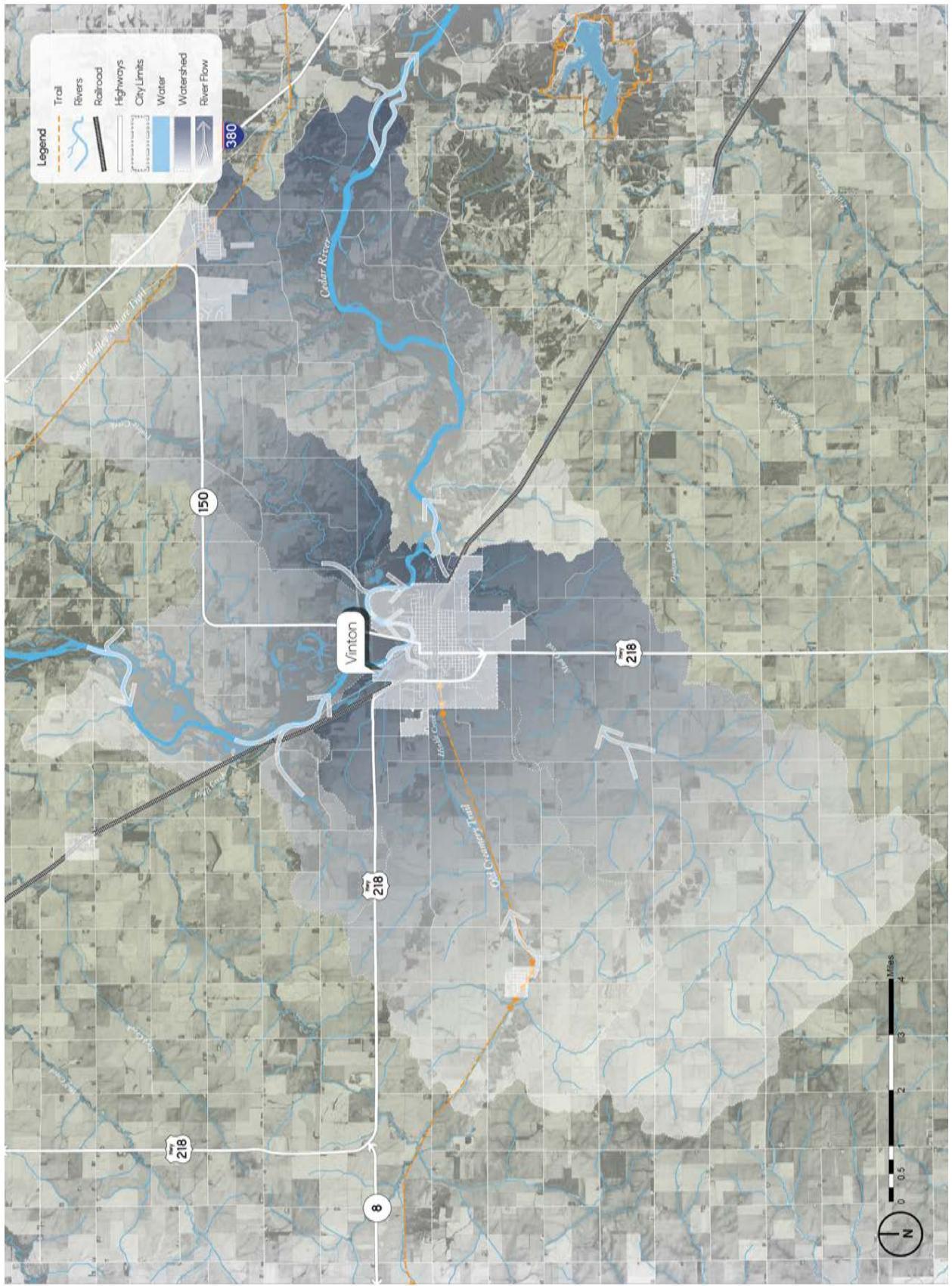


Regional Watershed

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.

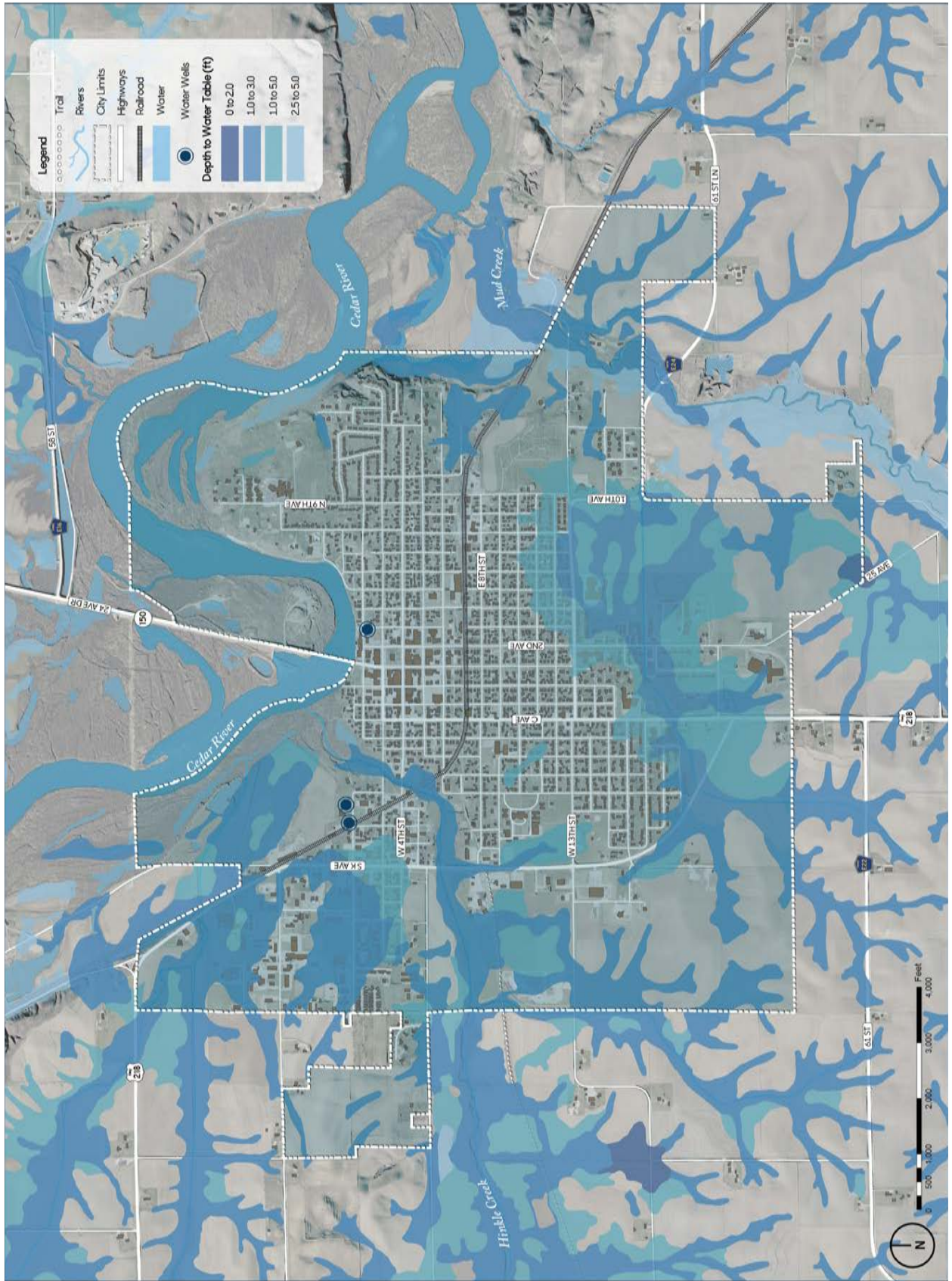


Depth to Water Table

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.

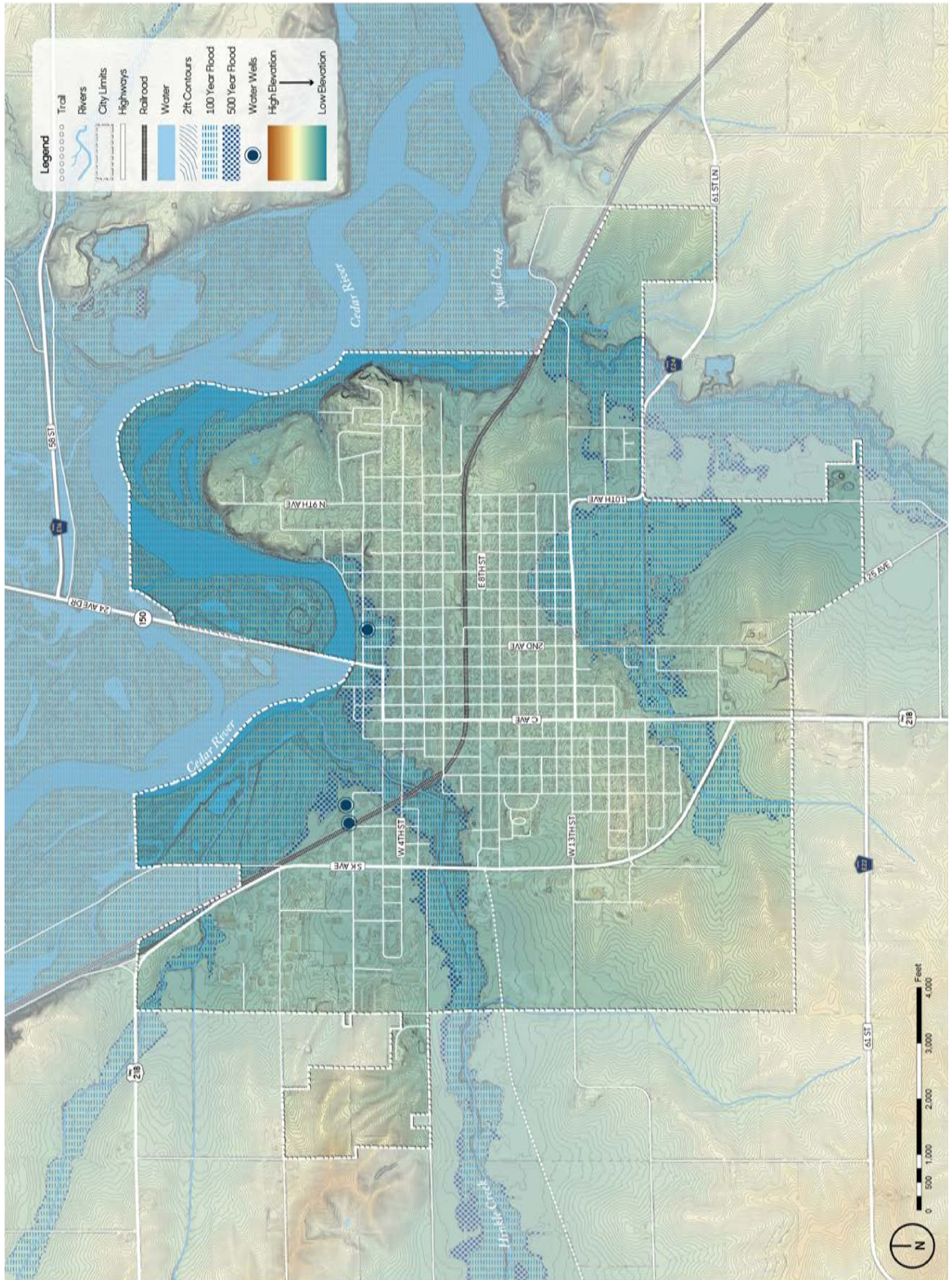


Elevation and Flow

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.

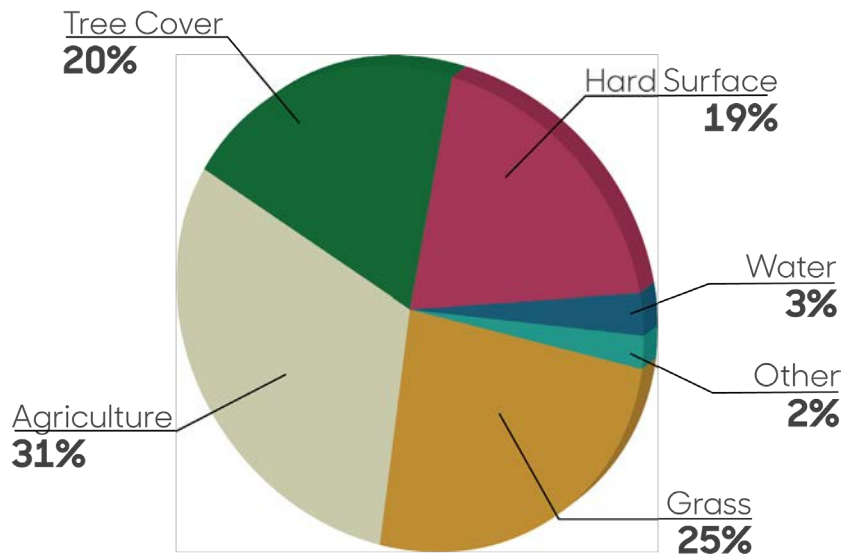
What do you observe about the dominant landcover types in your community?

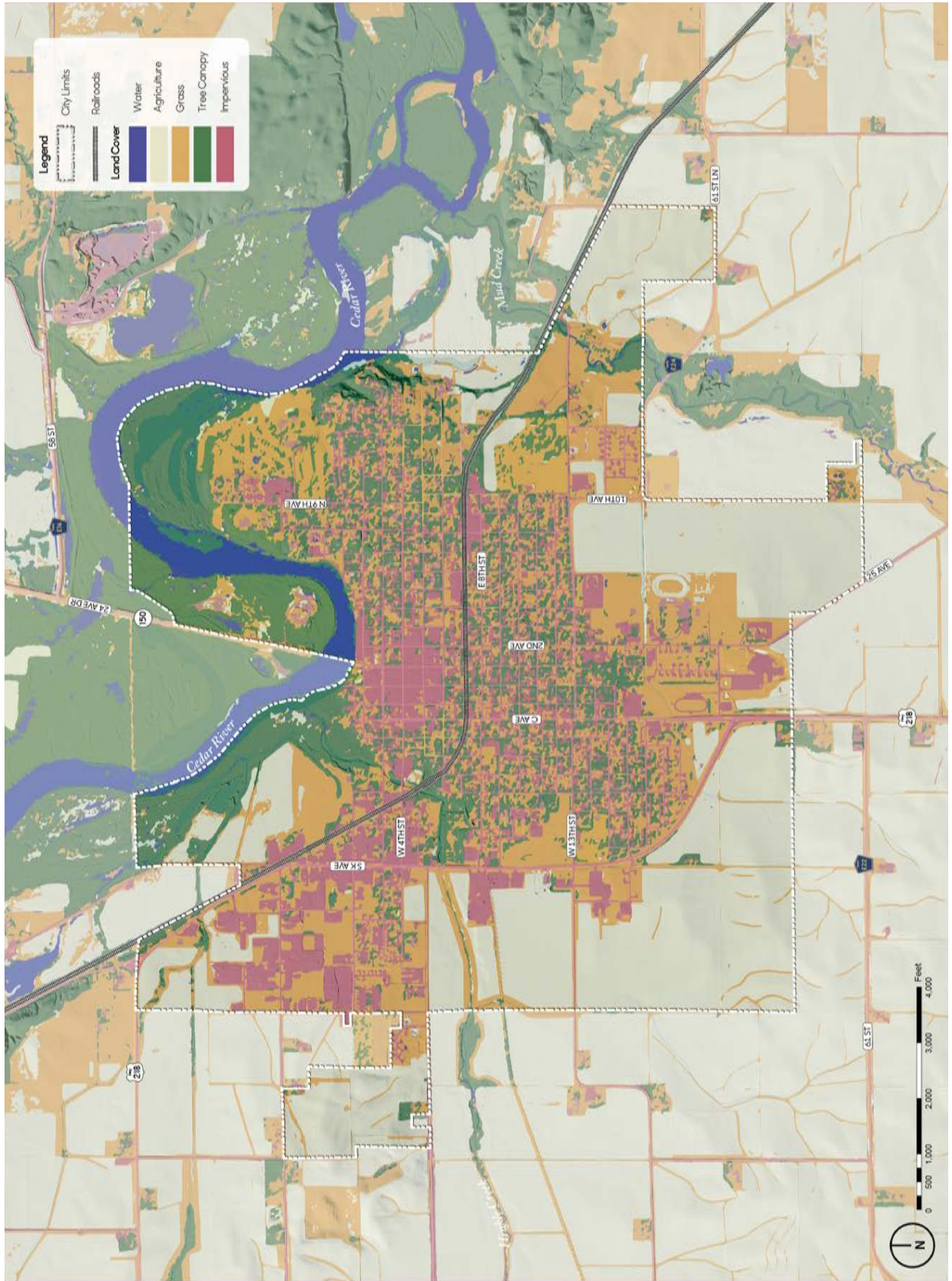
Where is the tree canopy most concentrated?

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

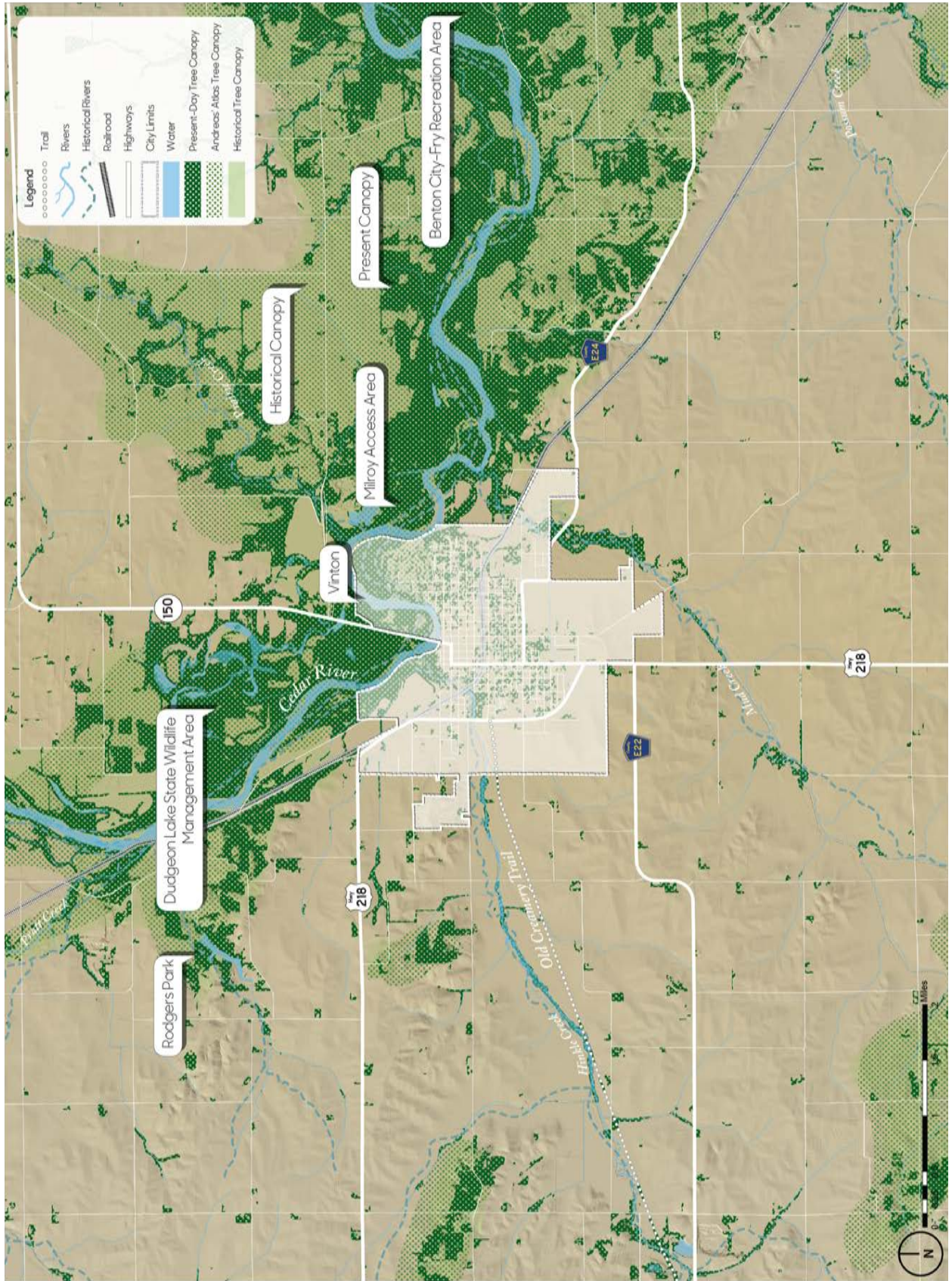
The map on this page shows how the landscape has changed over time, with an emphasis on vegetation and drainageways.¹ The map is helpful for understanding how landscapes change and considering how these changes might affect how well the landscape works to support human and ecological needs.

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 Vinton, 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 Vinton'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 Vinton residents with different transportation needs to participate in focus groups. A total of 46 residents attended Vinton's workshop. Participants were separated into five user groups and the Vinton 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.



Vinton's downtown is welcoming because of its streetscape amenities, safety features, green spaces, and ample parking.



Pedestrians don't feel comfortable walking along or crossing HWY 218 because of fast traffic and absence of sidewalks.



People enjoy the Nathan's Miles Glow Trail for its peaceful setting, distance, and minimal traffic. The surface is wide and well maintained and offers a fun experience at night when it glows.



The confusing geometry and fast traffic at the intersection of 13th St. and C Ave. creates challenging crossing conditions for pedestrians.



The well-maintained, wide sidewalk on 13th Street, along with a beautiful green space, provides a pleasant experience for walking.



The obstructed view, fast traffic, and undefined crosswalk make pedestrians uneasy to cross HWY 150 to get to Celebration Park.

What People Said

"A few days ago when I was coming home from school...there [were] two women and then a baby in a stroller. They had to run across [the intersection of US 218 and W 16th St because]...there's really not a good way for them to safely get across."

"...[the] Glow Trail...[is] really cool...[It's] two miles...it's one big loop...and there [are] benches scattered [along it]."

"I usually [bike] on the sidewalk [on 6th Ave] but there [are] a lot of curbs [without ramps] when I'm crossing the streets...I have to stop for a few seconds and actually pick my bike up."

"I walk home from the middle school every day, and I have to walk in the road because we don't have any sidewalks [on W 15th St]."



Youth

"I feel like [The Creamery] Trail doesn't get as much use because...[not] as many people know about it..."

"...[the] only option for us to run is in the streets. There's no sidewalk where [we] could run side by side...a lot of the sidewalks in general are very narrow, so it's hard to just even walk."

"...[The Old Creamery Trail] is very hard to see. There're people that go by it all the time [on Hwy 218] and don't realize that's where the trail is. And to me, it's unsafe, because...It's pretty busy right there."

"I love the idea of connecting the Old Creamery [Trail] to the Glow Trail..."

"A lot of [the] time, people are speeding [on 1st Ave near 3rd St] because they're heading out of town [on Highway] 150..."



Actives

"One thing we appreciate where we have it is shelter from the wind...certain parts of the Creamery Trail are nicely sheltered."

"I think 2nd Avenue needs attention because [of] the high school and the whole Anderson addition. There's going to be increasing traffic on that street... the street is going to have to be wider, and it needs sidewalks on one or both sides."

"We need an overpass over [US] 218 so the school kids on [the west] side don't have to walk across a busy highway."




Older Adults

"[Walking] used to be more enjoyable just from an aesthetic point of view before the derecho. We used to have beautiful maple trees."

"[The] sidewalks are horrible...all over...That's why a lot of people walk in the street...That's the only place you can walk."

"...it's nice that it's a Glow Trail, but there's no [other] lighting at night. I'm not sure how safe people feel that walk it at night."



Mobility Challenged

"When [the city] redid downtown and added more gutters...that made a tremendous difference for [reducing flooding in] the downtown area."

"The downtown sidewalks are...nice and wide [but] they're slanted...they did that for water issues...because... my [spouse] was in a wheelchair... we were very aware of that."

"A lot of people don't like the [angled] parking downtown, but [we] do...it allows you much better access to the businesses..."

"...the sidewalks... to downtown are terrible; they're just old and they haven't been updated."

"...Benton County Transportation... provide[s] bus and van services...mostly for the elderly and disabled, but...a lot of families use their service to get their children to preschool or to school."

"There's a bridge [on Hwy 218], but there [are] no sidewalks... people [are] walking in the bridge as people are driving over it. I've almost hit people there."

"...getting to the Old Creamery Trailhead] is a real mess... You have to jog across [Highway 218]...[because] the trailhead parking is on the east [side] of the street. The trail itself is on the west [side] of the street."




Steering Committee

"I don't let my kids walk to school... because they have to...walk in the streets...I would love it if they could walk to school...to the park... to the library, but it's not safe for them to do so..."

"I walk on streets with mature trees. [The] A Ave, 1st Ave, 2nd Ave neighborhood from 13th to downtown...is a really old neighborhood. They have big old shady trees..."

"When I walk my dog, I... [take Riverside Dr into the park]... You feel like you're not necessarily in town when you walk back there. You do get some traffic, but not a whole lot."

"Riverside Dr is a one lane-road...so it's hard if you're walking; you have to...get real close to the edge. If you have a dog or kids or if you're riding a bike, it can be rather cumbersome to keep everything safe..."



Parents

"[When] I moved here, I [thought], 'Oh, this is how they wrote the book *Where the Sidewalk Ends*,' because you'd be walking...on the sidewalk, and then...it just ends."

"I would like...[a] biking path for kids to be able to ride their bikes on for a significant amount of time and be safe the entire time..."

"...there's no sidewalk on [the Highway] 218...bridge [over Hinkle Creek]...it's very, very narrow... that becomes a safety hazard."

"I think there should streetlights on the Glow Trail...it should be well lit at night...It's a little scary...[but] you might lose your glow..."

Emerging Themes

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

Actives walk, bike, run, and go horseback riding for recreation and/or exercise. They also drive or call dial-a-ride. This group enjoys walking the paths at the cemetery. Actives would like more trees at Kiwanis Park and believe that the community would benefit from overall beautification.




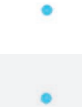




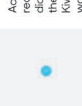
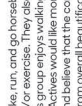





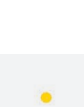


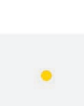
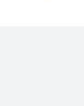
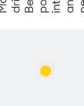
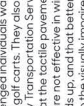
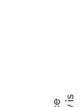


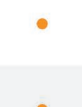



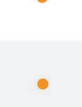
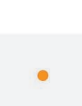
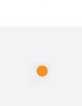
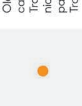






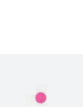
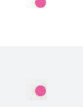
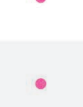
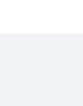
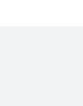
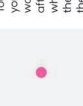
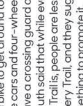





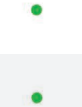


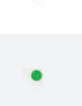
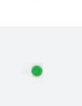
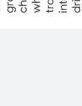
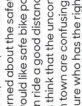



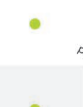

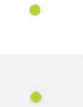
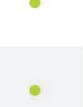

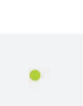
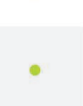




Mobility-challenged individuals walk, bike, and drive cars and golf carts. They also utilize the Benton County Transportation Service. They pointed out that the tactile pavement strips at intersections are not effective in winter when ice and snow builds up, and that better technology is needed to help the visually impaired.

Older adults walk, bike, and drive cars and golf carts. This group likes walking the Old Creamery Trail because it has benches, trees, a shelter, and nice surfaces. They would like 25th Avenue to be paved to reduce the amount of dust on the Glow Trail. They also want dark-sky lighting all over town.

Youth walk and bike to get around town. Older youth also drive cars and four-wheelers. They would like to have a crossing guard on A Avenue after school. Youth said that while everyone knows what the Glow Trail is, people are less familiar with the Old Creamery Trail, and they suggested that the city do something to promote it.

Parents walk, bike, drive, and ride scooters. This group is concerned about the safety of their children and would like safe bike paths for kids where they can ride a good distance away from traffic. Parents think that the uncontrolled intersections in town are confusing because drivers aren't sure who has the right-of-way.

Steering committee members walk, bike, and drive to get from place to place. Amenities such as access to water, trash receptacles, and lighting factor into this group's choices of walking and biking routes. A concern of the committee is how difficult it is for walkers and bikers to cross Highway 218 to get to the Old Creamery Trailhead.

| Destinations and Activities | Valued Qualities and Features | | | | Undesirable Qualities and Features | | | | Most Desired Improvements and Activities | | | | | |
|--|--|--|---|---|--|--|--|---|--|---|--|----------------------------------|-----------------------------|------------------------------------|
| | North's Miles Glow Trail | Downtown | Local Parks | Scenic Views & Natural Areas | Accessibility for Walkers & Cyclists | Trees & Shade | Flooding & Drainage Problems | Difficult Pedestrian/Cyclist Crossings | Inadequate Sidewalk Infrastructure | Deteriorated Roadway Conditions | Heavy & Speeding Traffic | Complete ADA-Compliant Sidewalks | Enhanced Trail Connectivity | Pedestrian/Cyclist Safety Features |
|  North's Miles Glow Trail is popular winter and all-year long. People enjoy walking, biking, and jogging. The trail is well-maintained and provides a safe space for outdoor activities. |  Some views and natural areas are principal draws for visitors. The trail provides a scenic backdrop for photos and offers a peaceful setting for walking and jogging. |  People also enjoy the aesthetics of older neighborhoods. The trail provides a scenic backdrop for photos and offers a peaceful setting for walking and jogging. |  Portraits in every focus group stressed the importance of well-maintained and wooded areas. The trail provides a scenic backdrop for photos and offers a peaceful setting for walking and jogging. |  Adults have trees and shade in the community and parks. The trail provides a scenic backdrop for photos and offers a peaceful setting for walking and jogging. |  The glow trail will take the issue of flooding and erosion. Some flooding also occurs on the trail. The trail provides a scenic backdrop for photos and offers a peaceful setting for walking and jogging. |  Flooding in 2019 and street flooding in 2020 were a concern for residents. The trail provides a scenic backdrop for photos and offers a peaceful setting for walking and jogging. |  Bikes, narrow and missing sidewalks are a concern for residents. The trail provides a scenic backdrop for photos and offers a peaceful setting for walking and jogging. |  Road conditions in general are a concern for residents. The trail provides a scenic backdrop for photos and offers a peaceful setting for walking and jogging. |  Heavy and speeding traffic is a concern for residents. The trail provides a scenic backdrop for photos and offers a peaceful setting for walking and jogging. |  Pedestrian and cyclist safety is a concern for residents. The trail provides a scenic backdrop for photos and offers a peaceful setting for walking and jogging. |  Traffic control measures are a concern for residents. The trail provides a scenic backdrop for photos and offers a peaceful setting for walking and jogging. | | | |
|  Mobility-challenged individuals walk, bike, and drive cars and golf carts. They also utilize the Benton County Transportation Service. They pointed out that the tactile pavement strips at intersections are not effective. They also mentioned that the tactile pavement strips at intersections are not effective. |  The trail provides a scenic backdrop for photos and offers a peaceful setting for walking and jogging. |  The trail provides a scenic backdrop for photos and offers a peaceful setting for walking and jogging. |  The trail provides a scenic backdrop for photos and offers a peaceful setting for walking and jogging. |  The trail provides a scenic backdrop for photos and offers a peaceful setting for walking and jogging. |  The trail provides a scenic backdrop for photos and offers a peaceful setting for walking and jogging. |  The trail provides a scenic backdrop for photos and offers a peaceful setting for walking and jogging. |  The trail provides a scenic backdrop for photos and offers a peaceful setting for walking and jogging. |  The trail provides a scenic backdrop for photos and offers a peaceful setting for walking and jogging. |  The trail provides a scenic backdrop for photos and offers a peaceful setting for walking and jogging. |  The trail provides a scenic backdrop for photos and offers a peaceful setting for walking and jogging. |  The trail provides a scenic backdrop for photos and offers a peaceful setting for walking and jogging. | | | |
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Transportation Inventory and Analysis

Knowledge of the transportation systems in and around a community is critical for sustainable transportation enhancement planning. Vinton's transportation system includes roadways, sidewalks, and recreational trails.

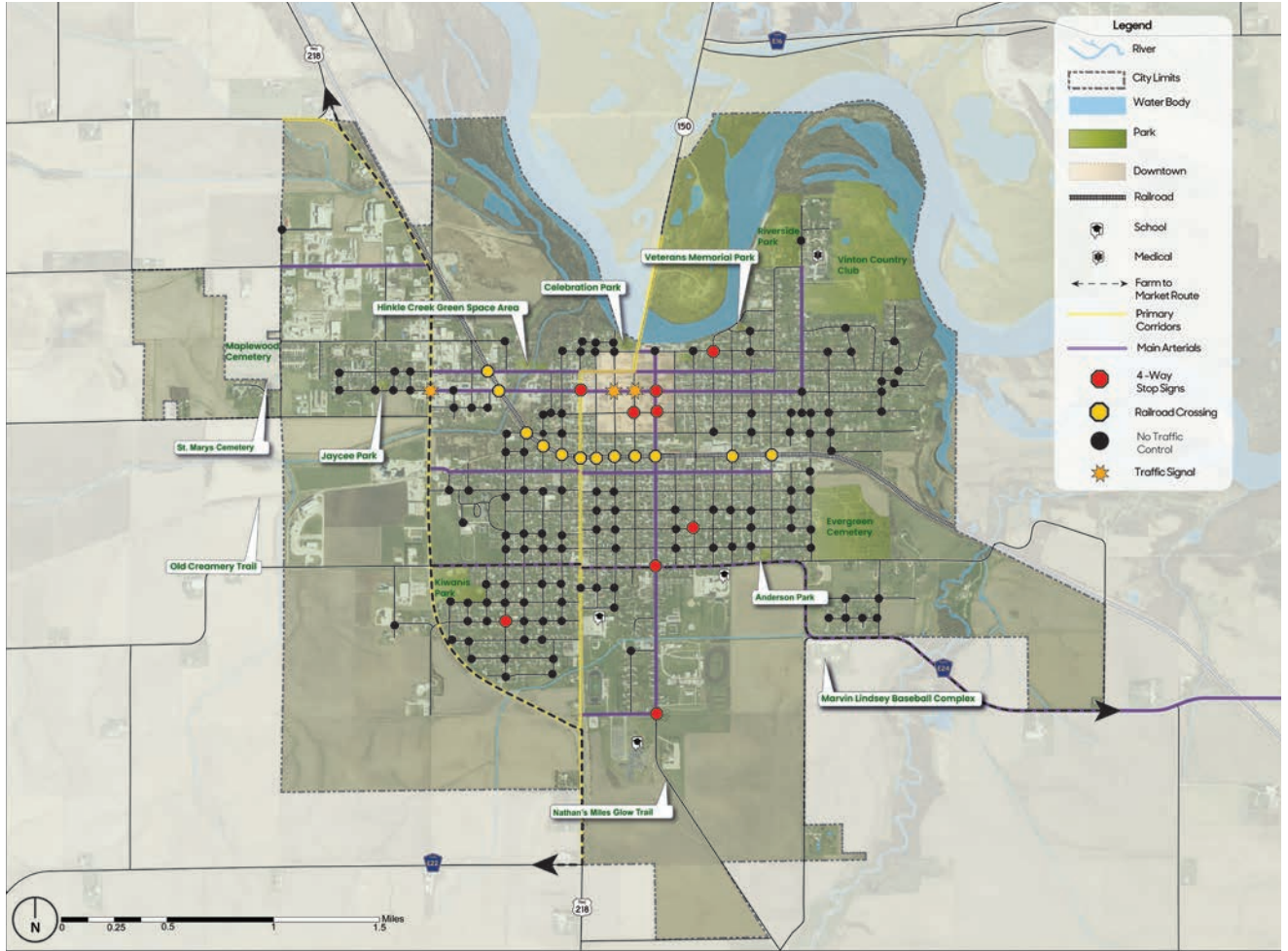
The Vinton visioning design team, along with representatives from the steering committee, met in mid-April 2023 with the Benton County Engineer, the Iowa Department of Transportation District Planner and a representative from Benton County Economic Development to discuss future improvements planned by the various agencies as well as to identify transportation-related issues of which the design team should be aware. City staff were also present at the meeting, including the city administrator, city clerk, public works director, and both the director and assistant director of the parks department.

Hwy. 218 and Hwy. 150 are both state highways and both were mentioned numerous times during the community focus groups as routes that needed enhanced pedestrian access to improve accessibility and connectivity. Nathan's Miles Glow Trail, the Old Creamery Trail, the walkway in Celebration Park, and the 13th Street sidewalk were noted by community members as being community assets.

The map on this board identifies the intersections where there is no traffic control (stop or yield signs). The lack of traffic control can be confusing to drivers - especially those drivers that are inexperienced - as to who has the right-of-way.



The Highway 218 corridor lacks efficient branded way-finding, pedestrian connectivity, safe and designated pedestrian crossings.



Map illustrating existing traffic control measures and the primary roadway in Vinton

The map on the next page graphically illustrates the existing posted speed limits, the Iowa Department of Transportation's (IDOT) Average Daily Traffic (ADT) count, and the intersections of concern and/or where visibility is an issue as noted by community members.

The ADT is taken from the IDOT's ADT interactive website. The traffic count data provides valuable information to better understand the vehicular circulation throughout the community. This, in turn, further explains various transportation related issues identified by the community members during the focus group sessions and design workshop and allows for the development of site specific and suitable transportation enhancements that help address the needs identified by the community.

Posted speed limits are important because the vehicle speed impacts the type of design tools that are most appropriate for providing successful traffic calming measures, determining readable text on way-finding signage and enhancing pedestrian and motorist safety.

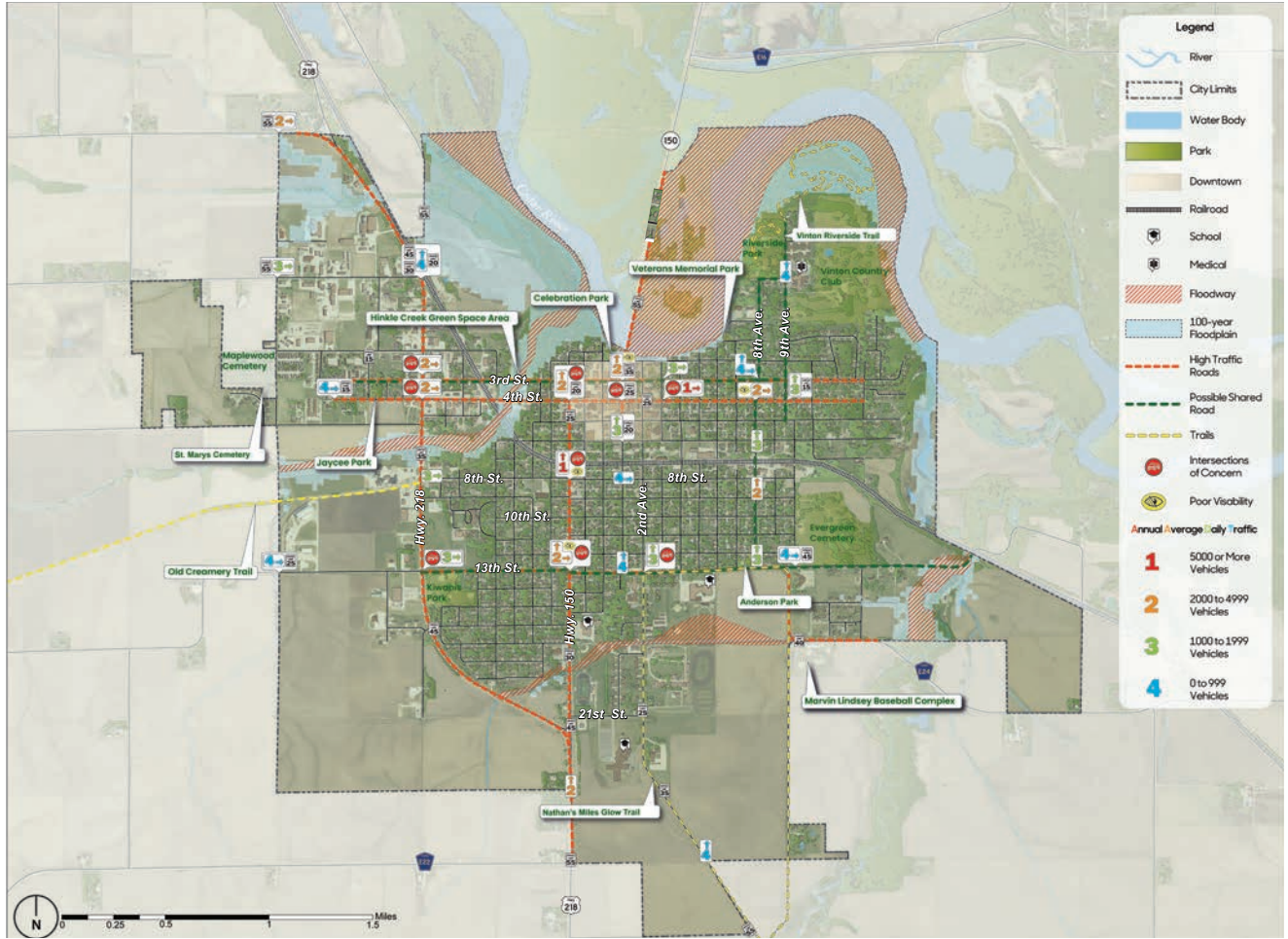
Traffic control is an important element in traffic calming. Ultimately, successful traffic control cannot rely solely on tangible elements like the enhancements proposed on the following boards, there also needs to be enforcement of the speed limits.



Uncontrolled intersections like this one at 4th St. & 9th Ave. confuse motorists and contribute to higher speeds.



Incomplete sidewalk segments, sidewalks in ill-repair, and lack of ADA accessibility prevent safe pedestrian circulation.



Map showing the existing traffic conditions: posted speed limits, Average Daily Traffic count, and intersections of concern

Programming Objectives

The Programming Objectives (goal setting) meeting is a critical component in the development of a successful project. Setting and prioritizing goals allows us to focus our efforts and resources more effectively to help the community develop a vision for Vinton. The design team met with Vinton's visioning committee to discuss its goals. The steering committee members presented to the design team their interpretations of the data presented in the transportation assets and barriers board, and bioregional information.

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

The landscape architecture design team organized the themes for the city of Vinton using the goals and desired improvements identified by the steering committee during the discussion, giving greater weight to those goals receiving more votes and common ideas presented multiple times. The chart on board 5, as well as the following, reflect a representation of the outcomes of the goal-setting process – the what, where, and why.

What, Where and Why?

Community Values /Themes Based on Assessments



Trail Extension + Enhancements

Goals:

- Expand trail system network for greater local and regional connectivity
- Enhance existing features
- Improve connectivity within town, including along main corridors

WHAT Exactly and WHERE?

- Create a recreational trail that loops in and around the city linking public parks, the schools, hospital, commercial districts, the Old Creamery Trail and the Glow Tail, and extends beyond the city limits to connect to the regional Cedar Valley Nature Trail system
- Enhance user safety and comfort by adding site amenities such as trees, benches, and lighting

WHY Change Anything?

- Encourage physical activity
- Enhance recreational opportunities
- Improve the user's experience and comfort
- Create a destination that is functional, aesthetic, and draws visitors

Community Values /Themes Based on Assessments



Connectivity & Accessibility

Goals:

- Achieve ADA standards of accessibility
- Improve walkability
- Provide safe and accessible routes to community destinations, businesses

WHAT Exactly and WHERE?

- Make all sidewalks are ADA compliant, well drained, the appropriate width for use and location, level, complete, and in good repair
- Construct a sidewalk connection between Celebration Park and the downtown on the west side of Hwy. 150
- Prioritize ADA compliance and 6-foot width (5-foot minimum) of sidewalks along the following streets and corridors: 3rd St., 4th St., W. 5th St., 13th St., E. 21st St./2nd Ave., Hwy. 218, C Ave, 8th Ave., and 9th Ave. (E. 3rd St. to hospital)

WHY Change Anything?

- Link destinations in town that are not connected to safe pedestrian routes
- Encourage more physical activity
- Supportive infrastructure would eliminate the need for people to walk in the streets and in the grass along roadways



Safety & Traffic-Calming/Control

Goals:

- Enhance street intersections
- Improve traffic control
- Slow vehicular traffic
- Provide safe pedestrian road crossings
- Create safe routes to school
- Repair deteriorated roadways

WHAT Exactly and WHERE?

- Provide safe pedestrian street crossings with ADA compliant ramps on all streets prioritizing the following corridors: Hwy. 218, C Ave., 2nd Ave., 8th Ave., 9th Ave., 3rd St., 4th St., 9th St. (AmeriCorp to Hwy. 218), and 13th St.
- Install high visibility crossings at the following intersections: Hwy. 218 & 3rd St., 4th St., 9th St., and 13th St.; 2nd Ave. & 13th St.; C Ave. & 3rd St., 4th St., 13th St., and W. 21st St.; 9th Ave. & 3rd St.; Hwy. 150 & 1st Ave. and 2nd St.; and 8th Ave. & 3rd St. and 13th St.
- Implement traffic control measures at uncontrolled intersections, including intersections in "Old Vinton", along most north-south streets (including C Ave. & 8th Ave.) and on 6th St. and 13th St.
- Utilize traffic calming methods to reduce the speed of vehicles along C Ave., 1st Ave., 2nd Ave., 8th Ave., Hwy. 218, 3rd St., 8th St. and 9th St.
- Sidewalk Program: Update the sidewalk standards, effectively promote the city's reimbursement program, and enforce the sidewalk ordinance

WHY Change Anything?

- Improve safety for pedestrians, cyclists, and motorists
- Improve vehicular and pedestrian circulation
- Enhance the aesthetics of the community
- Keep roadways, sidewalks, and trails in good repair

Community Values /Themes Based on Assessments



Community Identity

Goals:

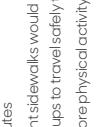
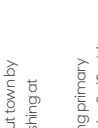

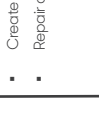
- Guide visitors to key places
- Clearly and uniformly identify community destinations
- Direct passersby and help them navigate to points of interest throughout the city
- Enhance user comfort
- Reduce "cluttered" signage
- Reinforce city branding efforts

WHAT Exactly and WHERE?

- Incorporate community caps that reinforce identity (branding) of Vinton into way-finding signage
- Reduce the signage along Hwy. 218 and throughout town by consolidating messages onto one sign and establishing at appropriate locations
- Way-finding signage with placement focused along primary and secondary corridors: 3rd St., 4th St., 13th St., E. 21st St./2nd Ave., Hwy. 218, C Ave, 8th Ave., and 9th Ave. (E. 3rd St. to hospital)

WHY Change Anything?

- Direct visitors to where you want them more efficiently
- Allow people to quickly identify public places
- Destination signage exposes visitors to places they might otherwise miss, thus encouraging extended stays
- Well maintained signs, transportation corridors, and infrastructure, reassure visitors that they are safe and on the right path
- Consolidate messages onto fewer signs and improve the visual environment
- Consistent graphics in way-finding signage create a unified and organized look
- Brand-supportive way-finding celebrates the community's unique character and creates a unified, memorable experience for visitors
- When branding is supported throughout the community, residents feel a stronger sense of place and take pride in knowing they are part of a unique community

| <p>Community Values / Themes Based on Assessments</p> | <p>Broad-Based Outcomes and Goals</p> | <p>WHAT Exactly and WHERE?</p> | <p>WHY Change Anything?</p> |
|---|--|--|--|
| <p></p> <p>Connectivity & Accessibility</p> | <ul style="list-style-type: none"> Achieve ADA standards of accessibility Improve walk-ability Provide safe and accessible routes to community destinations, businesses and public buildings | <ul style="list-style-type: none"> Make all sidewalks are ADA compliant, well drained, well drained, the appropriate width for use and location, level, complete, and in good repair Construct a sidewalk connection between Celebration Park and the downtown on the west side of Hwy. 150 Prioritize ADA compliance and 6-foot width (5-foot minimum) of sidewalks along the following streets and corridors: 3rd St., 4th St., W. 5th St., 13th St., E. 21st St./2nd Ave., Hwy. 218, C Ave, 8th Ave., and 9th Ave. (E. 3rd St. to hospital) | <ul style="list-style-type: none"> Link destinations in town that are not connected to safe pedestrian routes ADA compliant sidewalks would provide the opportunity for all user groups to travel safely throughout Vinton Encourage more physical activity Supportive infrastructure would eliminate the need for people to walk in the street |
| <p></p> <p>Community Identity</p> | <ul style="list-style-type: none"> Guide visitors to key places Clearly and uniformly identify community destinations Direct passerby and help them navigate to points of interest throughout the city Enhance user comfort Reduce "cluttered" signage Reinforce city branding efforts | <ul style="list-style-type: none"> Incorporate community caps that reinforce identity (branding) of Vinton into way-finding signage Reduce the signage along Hwy. 218 and throughout town by consolidating messages onto one sign and establishing at appropriate locations Way-finding signage with placement focused along primary and secondary corridors: 3rd St., 4th St., 13th St., E. 21st St./2nd Ave., Hwy. 218, C Ave, 8th Ave., and 9th Ave. (E. 3rd St. to hospital) | <ul style="list-style-type: none"> Get visitors to where you want them more efficiently Allow people to quickly identify public places Destination signage exposes visitors to places they might otherwise miss, thus encouraging extended stays Well maintained signs, transportation corridors, and infrastructure, reassure visitors that they are safe and on the right path Consolidate messages onto fewer signs and improve the visual environment Consistent graphics in way-finding signage create a unified and organized look Brand-supportive way-finding celebrates the community's unique character and creates a unified, memorable experience for visitors When branding is supported throughout the community, residents feel a stronger sense of place and take pride in knowing they are part of a unique community |
| <p></p> <p>Trail Extension + Enhancements</p> | <ul style="list-style-type: none"> Expand trail system network for greater local and regional connectivity Enhance existing features Improve connectivity within town | <ul style="list-style-type: none"> Construct a recreational trail that loops around the city, links to the Old Creamery Trail and the Glow Trail, and extends beyond the city limits to connect to the Cedar Valley Nature Trail system Enhance user safety and comfort by adding site amenities such as trees, benches, and lighting | <ul style="list-style-type: none"> Encourage physical activity Enhance recreational opportunities Improve the user's experience and comfort Connect all existing trails to create a larger unified trail network |
| <p></p> <p>Safety & Traffic-Calming/Control</p> | <ul style="list-style-type: none"> Enhance street intersections Improve traffic control Slow vehicular traffic Provide safe pedestrian road crossings Create safe routes to school Repair deteriorated roadways | <ul style="list-style-type: none"> Provide safe pedestrian street crossings with ADA compliant ramps on all streets prioritizing the following corridors: Hwy. 218, C Ave., 2nd Ave., 8th Ave., 9th Ave., 3rd St., 4th St., 9th St. (AmeriCorp to Hwy. 218), and 13th St. Install high visibility crossings at the following intersections: Hwy. 218 & 3rd St., 4th St., 9th St., and 13th St.; 2nd Ave. & 13th St.; C Ave. & 3rd St., 4th St., 13th St., and W. 21st St.; 9th Ave. & 3rd St.; Hwy. 150 & 1st Ave. and 2nd St.; and 8th Ave. & 3rd St. and 13th St. Implement traffic control measures at uncontrolled intersections, including intersections in "Old Vinton", along most north-south streets (including C Ave. & 8th Ave.) and on 6th St. and 13th St. Utilize traffic calming methods to reduce the speed of vehicles along C Ave., 1st Ave., 2nd Ave., 8th Ave., Hwy. 218, 3rd St., 8th St. and 9th St. Sidewalk Program: Update the sidewalk standards, effectively promote the city's city's reimbursement program, and enforce the sidewalk ordinance | <ul style="list-style-type: none"> Improve safety for pedestrians, cyclists, and motorists Improve vehicular and pedestrian circulation Enhance the aesthetics of the community Keep roadways, sidewalks, and trails in good repair |

Community Concept Plan

The concept master plan shows the proposed location for various enhancements ("projects") that are showcased in the visions illustrated on the project concept boards. These concepts represent potential design solutions to various challenges and desires related to Vinton's transportation system that residents identified throughout the visioning process. The icons shown on the plan represent the enhancements that provide solutions to meet one or more of each specific value/theme detailed on Board 5 (see previous page) with the same icon. This plan and the enhancements illustrated in the set of project concept boards identify opportunities for effective placemaking.

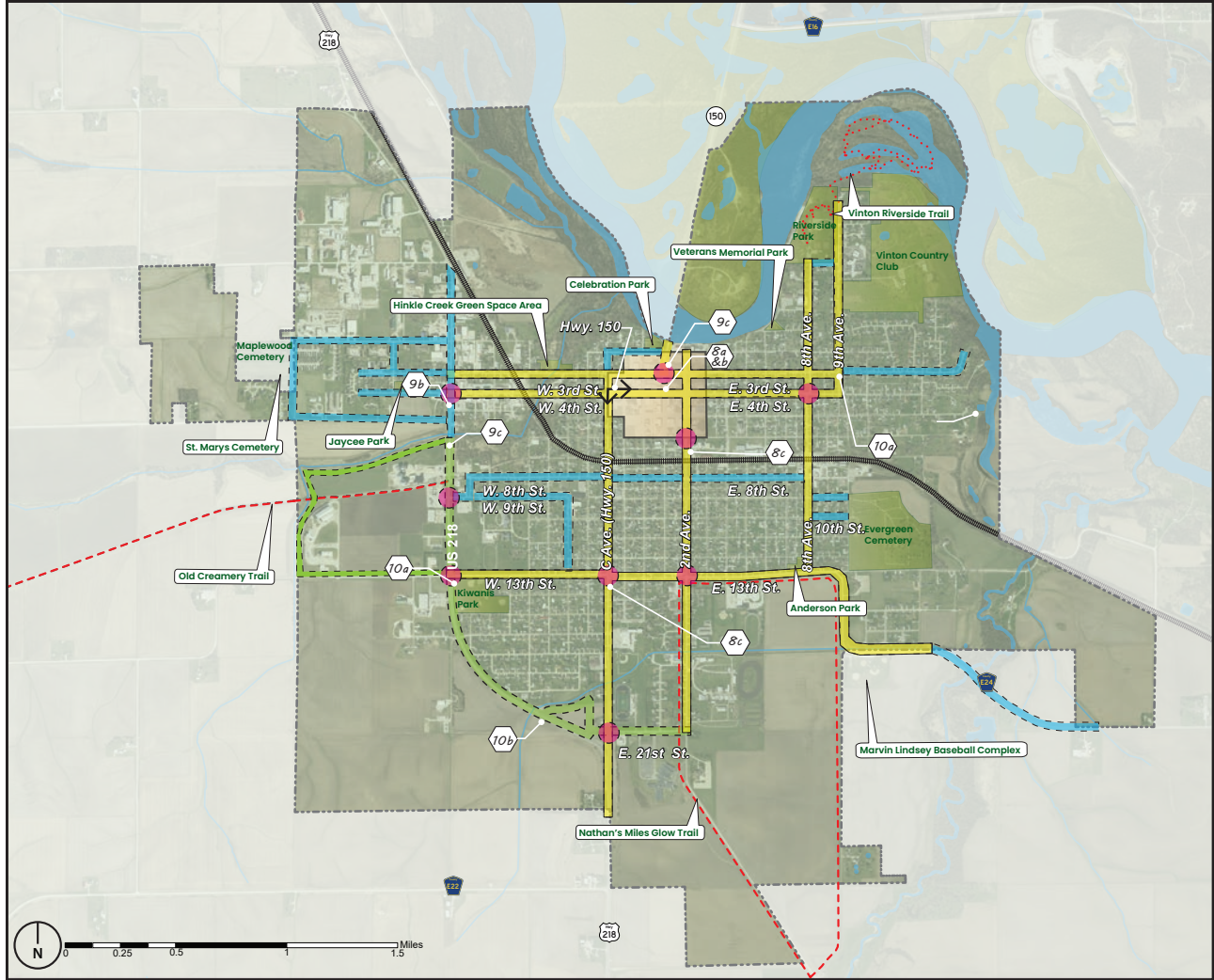
Placemaking

Perhaps one of the best definitions of placemaking is from Wikipedia: *"Placemaking is a multi-faceted approach to the planning, design and management of public spaces. Placemaking capitalizes on a local community's assets, inspiration, and potential, with the intention of creating public spaces that improve urban vitality and promote people's health, happiness, and well-being... Good placemaking makes use of underutilized space to enhance the urban experience at the pedestrian scale to build habits of locals."*





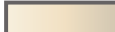


What, Where and Why?

As can be seen on the concept plan and in the concepts that follow, a project designed to address one concern has the potential to improve and/or solve other issues. As an example, enhancements that improve connectivity and accessibility can aid in strengthening community identity and improving safety and traffic control.






Adopting and utilizing a "complete streets" approach to planning, designing, building, operating, and maintaining streets enables safe access for all user types, including pedestrians, bicyclists, and motorists of all ages and abilities. The visions shown on the following boards were created following the complete streets methodology as part of placemaking efforts. For a more detailed master plan showing routes for different types of trails, as well as the location for highest priority ADA-compliant sidewalks, refer to the pedestrian circulation plan shown on Board 9a.



Legend

-  River
-  City Limits
-  Water Body
-  Park
-  Downtown
-  Railroad
-  Existing Trail

Priority Enhancement Areas & Types

- 
- 
- 
- 
- 

 Approximate location and board # of an illustrated enhancement concept

Project Scopes and Construction Costs

Opinion of Probable Construction Costs

On the following pages are cost opinions with estimated materials, quantities, and unit costs, which are all based on the concepts illustrated in this feasibility report and the associated concept design boards. These cost opinions are intended to be used for preliminary budgetary purposes only, and will need to be refined and updated as the project scope is defined and the preliminary design process begins. Unless otherwise specifically stated, the unit costs provided in the cost opinions are based on recent competitive let bids for comparable work items that are anticipated to be part of the proposed concepts. These bid costs include furnishing all materials, equipment, and the labor necessary to complete the work.

The quantity take-offs shown on the cost opinions were used to calculate and quantify the amounts for each line item and are shown to give a general idea as to the anticipated project scope. The quantities used were based on the associated conceptual design, and assumptions made as to quality, existing elevations/grades, subsurface conditions, etc. A topographic site survey should be completed prior to the design process and preparation of construction documents in order to validate and verify the items and quantities shown in these cost opinions.

Some factors that affect the cost of construction projects, and which the committee should be aware of are:

- The scope of work, which defines the extent and quality of the project.
- The type of project, which determines the design, materials, and methods of construction
- The location, which influences the land acquisition, permits, site conditions, and regulatory requirements
- The schedule, which affects the inflation factor, the availability of labor and materials, and the project duration
- The size and complexity of the project, which impacts the construction costs due to what types of laborers and trades are needed, whether special equipment is required, whether project elements are all standard or there is some customization
- The city, regulatory, or funding requirements for the project and/or contractor, which impacts the construction costs due to various things such as bonding and insurance requirements, warranties, or special methods and/or other criteria.

While the costs are based on publicly let and bid projects, costs for projects can decrease with donated materials, reduced cost materials, and volunteer labor, as appropriate for projects and/or funding requirements. Phasing of projects can also be utilized to decrease the immediate construction costs incurred and to better fit into budgets.

Costs Based on Percentages

The items listed in the cost opinion as percentages of project costs are budgetary place holders.

The Miscellaneous costs (Erosion & Sediment Control, Temporary Traffic Control, and Mobilization) will be dependent upon the final scope of work and regulatory and/or funding requirements that may be required for the project. These costs normally will not be shown or bid as a percentage, but instead as line items with quantities and unit prices and/or lump sums.

The Contingency Allowance is included to cover items that are undefined or are typically unknown early in the planning phase of a project. This contingency is to cover construction-related costs and does not account for the items listed below as not being included in the cost opinions.

The Design and Engineering Allowance, while shown as a percentage of construction cost can vary greatly and will be dependent upon the final scope of services and project scope. The fee is generally not based on a percentage of project cost, but instead is based on the designer's estimate of effort (time and materials) that they anticipate will be required on their part to perform the services agreed to for the project scope.

Not Included in Cost Opinions

The following are not part of the cost opinions

- Easement and right-of-way acquisition
- Permitting, inspection, or construction management
- Surveying, geotechnical investigation, documentation, or mitigation
- Special site remediation
- Utilities and/or their adjustments and modifications (utilities include electrical, storm sewer, sanitary, water, cable, telephone, and electrical)
- Special site remediation
- Escalation
- The cost for ongoing maintenance

The quantity for decorative lighting is not included (TBD) in the various estimates because the spacing of them (which determines the quantity) is dependent upon a number of factors that influence the quantity; some of these factors include the amount of coverage and brightness desired.

Abbreviations Used

Abbreviations used in the opinions of probable cost include:

| | | | |
|------------------|------------------------|-----------------|------------------|
| AC= acre | AL= Allowance | CF = cubic foot | CY = cubic yard |
| EA = each | LF = linear foot | LS = lump sum | SF = square foot |
| SY = square yard | TBD = to be determined | | |

Summary of Project Costs

Following is a summary of the estimated total opinion of costs for the various project concept designs proposed through Vinton's participation in the ILR's community visioning program and illustrated on boards 6 through 10, as well as in this report.

The breakdown of the individual cost estimates that make up the summary are included on the following pages in the sections that discuss each specific project.

| PROJECT SUMMARY: OPINION OF PROBABLE CONSTRUCTION COST | | Summer 2023 |
|---|------------------------------------|-----------------------|
| <i>Description</i> | <i>Estimated Totals</i> | |
| PROJECT | | |
| Community Identity (Board #7): Branded Banners, Decorative Lighting, Way-finding, Branded Street Signs | TBD | |
| Safety & Traffic Calming/Control (Board #8a-8b): Hwy.150/3rd St. & 1st Ave. Intersection W/ Option 1 | \$ 345,000.00 | |
| Option 1: Downtown Gateway Monuments (Pair) | \$ 67,000.00 | |
| Option 2: Downtown Gateway Monuments (Pair) | \$ 45,000.00 | |
| Safety & Traffic Calming/Control (Board #8c): 13th St. & C Ave. (Hwy. 150) Intersection | \$ 42,000.00 | |
| Safety & Traffic Calming/Control (Board #8c): 2nd Ave. & 6th St. Intersection | \$ 66,000.00 | |
| Connectivity & Accessibility (Board #9a): Pedestrian Circulation | TBD | |
| Connectivity & Accessibility (Board #9b): Hwy. 218 and 4th Street Enhancements | \$ 291,000.00 | |
| Connectivity & Accessibility (Board #9C): Hinkle Creek Crossing at Hwy. 218 (K Ave.) | \$ 271,000.00 | |
| Connectivity & Accessibility (Board #9C): Downtown Connection to Celebration Park | \$ 124,000.00 | |
| Trail Extension + Enhancements (Board #10a): 9th Ave. & 3rd St. Enhancements | \$ 516,000.00 | |
| Trail Extension + Enhancements (Board #10a): Hwy. 218 and 13th St. Enhancements | \$ 232,000.00 | |
| Trail Extension + Enhancements (Board #10b): Paved Shoulder | TBD | |
| Trail Extension + Enhancements (Board #10b): Separated Trail | \$1,841,700.00 | |
| | Total Enhancement Estimates | \$3,728,700.00 |

Design Expertise Recommended

Projects in their entirety, or portions of them may require help beyond the capability of the Vinton Visioning Committee, available city staff, and/or volunteers. The proposed projects may require one or more of the following on the project team in addition to a landscape architect. The following may be added onto the project team as deemed appropriate by the landscape architect and agreed to by the contracting authority: landscape architect, surveyor, civil engineer, structural engineer, and electrical engineer.

For any portion of a proposed project within or directly adjacent to the public right-of-way of a state highway will require coordination of the project with the Iowa Department of Transportation (IDOT) and possible permitting from IDOT. For any project within or directly adjacent to the public right-of-way of a county highway will require coordination of the project with the Benton County Engineer, and possible permitting from the county. Projects that will have an impact on a drainage ditch, stream, or other aquatic resource, may require coordination and permitting with the US Army Corps of Engineers, Iowa Department of Natural Resources, and US Fish and Wildlife Services. Projects disturbing more than 1.0 Acres will generally require an NPDES permit.

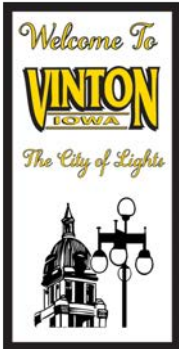
Community Identity

Community Identity

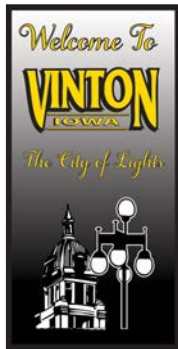
An important component of community identity is the concept of “way-finding” and the need to provide safe, easy, efficient movement and circulation of vehicular and pedestrian traffic (particularly visitors and tourists) into, through and within an urban area. Way-finding is more than simply directional signage that guides people to a certain attraction or destination. Comprehensive way-finding systems include signage, maps, symbols, colors, as well as physical design components such as lighting style, banners, and the design of transportation corridors (i.e., streets, sidewalks, right-of-way treatment, and adjacent uses).

Creating an effective way-finding system requires that all elements of the system, including color palette, styles, signage, and design details, are thoughtful and methodical. This and the following boards illustrate the proposed concepts that are intended to aid in strengthening Vinton’s way-finding system while providing solutions to other needs identified by the community.

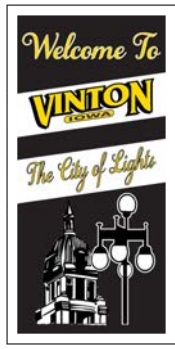
Branded way-finding catches people’s attention and embeds your community’s identity in their minds, along with successfully guiding travelers through town on routes that you want them to take, making way-finding systems a smart investment for economic growth and for attracting visitors.



Option 1a



Option 1b



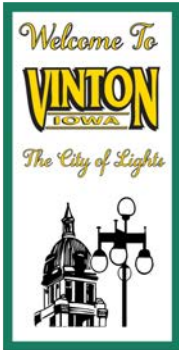
Option 1c



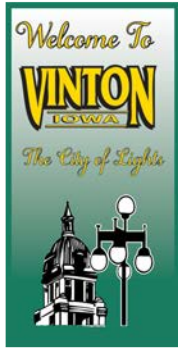
Option 1d



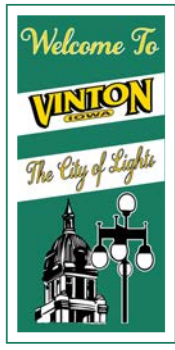
Option 1e



Option 2a



Option 2b



Option 2c



Option 2d



Option 2e

Branded banners for decorative lighting



Decorative lighting with banners proposed for major corridors, including Hwy. 218, C Ave., and 3rd & 4th St. from Hwy 218 to downtown. The lights will include pedestrian & vehicular combination, vehicular only, and pedestrian only, as shown above - the type used will depend on the location.

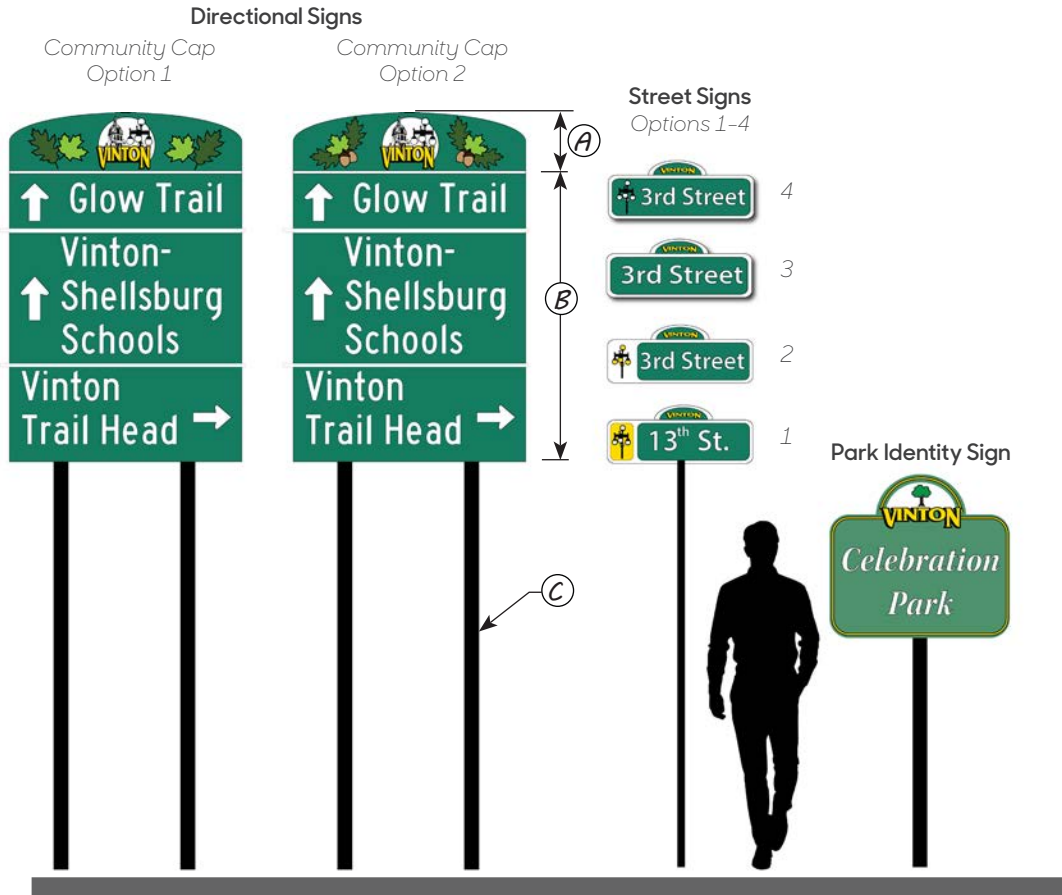
Decorative Lighting and Banner Design Highlights

Decorative Lighting

- The decorative light post style and color are to match the existing downtown decorative lighting.
- Down-lighting is proposed to minimize light pollution; the lighting fixture replicates the general style of the downtown decorative lighting.
- A round LED light bulb for the fixture will replicate the round light bulbs used in the } downtown decorative lighting.

Branded Banners

- Two options for color schemes are proposed: Option 1 is black, gold, and white (school colors) and Option 2 is green, gold, black, and white (way-finding signage colors). The Option 2 color palette is recommended because it creates a more unified appearance since it is more integral with the branded way-finding signage colors - creating the redundancy necessary to improve visual connectivity and strength community branding.
- Graphics used are all elements of the city's logo.



Branded way-finding signage: Directional Signage, Park Identity Signage & Street Signage

Branded Way-finding Signage Design Highlights

Directional Signage

- Color of sign panel (B) and community cap (A): Iowa DOT (IDOT) standard green.
- Community cap (A): Both options shown incorporate the city's existing logo and the leaves of popular trees (oak and maple) that are found in the city's parks and public land.
- Sign posts (C): IDOT-compliant metal breakaway posts, color to match light posts.

Park Identity Signage

- Color of sign: IDOT standard green, with a yellow border (logo yellow).
- Integrate the tree from the city park logo with the stylized "Vinton" from the city's logo; the use of the same colors and stylized name help create a unified signage system.

Street Signage

- Color of sign: IDOT standard green, with white border.
- Replicate the curved top from the directional signage on top of street sign with the stylized "Vinton" from the city's logo in yellow.
- Some options incorporate the streetlights from the city logo
- Sign posts: IDOT compliant metal breakaway posts

Design Expertise Recommended

Projects in their entirety, or portions of them may require help beyond the capability of the Vinton Visioning Committee, available city staff, and/or volunteers. For the Community Identity improvement project the visioning committee should expect to engage the services of a landscape architect and electrical engineer.

The committee should also expect that portions of this project will need to be coordinated with the Iowa Department of Transportation (Iowa DOT) District Engineer and the County Engineer during the design process. Permitting will also more than likely be required by the Iowa DOT.

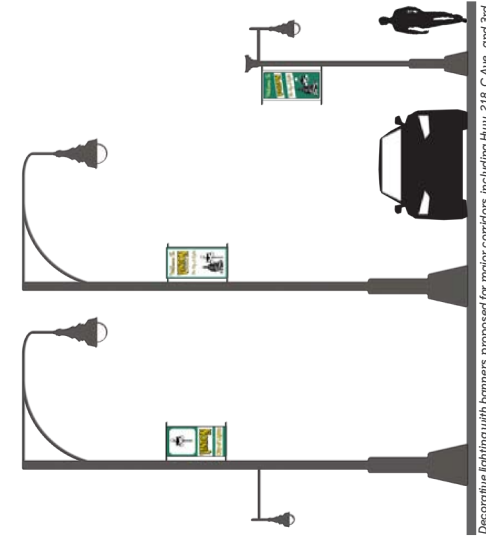
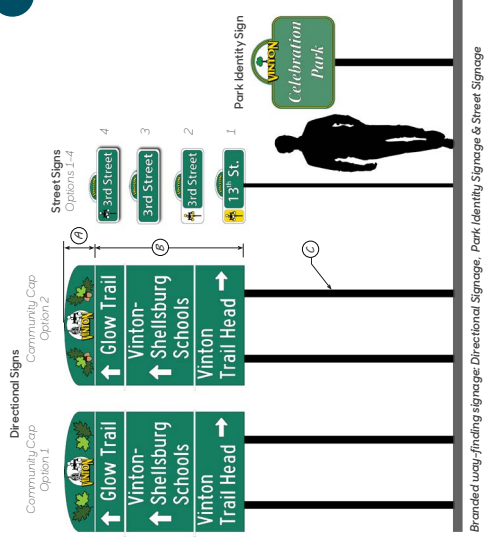
Opinion of Probable Construction Cost

| Community Identity (See Board #7 for Visual) | | Summer 2023 |
|--|-----------------------|--------------------|
| Description | Est. Budgetary | |
| Individual Items* | | |
| Branded Banners | | |
| - Branded Banners, 2' W x 4' L, budgetary number @ Cost (City Purchase, No Install, Not Bid) | | \$ 160.00 |
| Decorative Lighting | | |
| - Pedestrian Only Assembly budgetary number @ Cost (City Purchase, No Install, Not Bid) | | \$ 3,000.00 |
| - Vehicular Only Assembly budgetary number @ Cost (City Purchase, No Install, Not Bid) | | \$ 7,500.00 |
| - Pedestrian & Vehicular Combo Assembly budgetary number @ Cost (City Purchase, No Install, Not Bid) | | \$ 9,500.00 |
| Vehicular Directional Way-Finding Signage | | |
| - Single Destination Sign Allowance, Each | | \$ 2,200.00 |
| - Two Destination Sign Allowance, Each | | \$ 2,800.00 |
| - Three Destination Sign Allowance, Each | | \$ 3,200.00 |
| Branded Street Signs | | |
| - Branded Street Sign Allowance @ Cost (City Purchase, No Install, Not Bid) | | \$ 100.00 |
| - Break-Away Post @ Cost (City Purchase, No Install, Not Bid) | | \$ 125.00 |
| Park Identity Signage (size varies due to park name) | | |
| - Celebration Park Allowance | | \$ 2,200.00 |

* Individual Items are based on City's direct purchase cost from manufacturer unless otherwise specifically stated. Items that are shown as being purchased by the city do not include any installation cost.

The Temporary Traffic Control, Erosion & Sediment Control, Mobilization, Contingency, and Design & Engineering Allowances are not included in any of the prices shown.

7



Community Identity
An important component of community identity is the concept of "way-finding" and the need to provide safe, easy, efficient movement and circulation of vehicular and pedestrian traffic (particularly visitors and tourists) into, through and within an urban area. Way-finding is more than simply directional signage that guides people to a certain attraction or destination. Comprehensive way-finding systems include signage, maps, symbols, colors, as well as physical design components such as lighting style, banners, and the design of transportation corridors (i.e., streets, sidewalks, right-of-way treatment, and adjacent uses).

Creating an effective way-finding system requires that all elements of the system, including color palette, styles, signage, and design details, are thoughtful and methodical. This and the following boards illustrate the proposed concepts that are intended to aid in strengthening Vinton's way-finding system while providing solutions to other needs identified by the community.

Branded way-finding catches people's attention and embeds your community's identity in their minds, along with successfully guiding travelers through town on routes that you want them to take, making way-finding systems a smart investment for economic growth and for attracting visitors.



Branded banners for decorative lighting

Decorative Lighting and Banner Design Highlights

Decorative Lighting

- The decorative light post style and color are to match the existing downtown decorative lighting.
- Down-lighting is proposed to minimize light pollution; the lighting fixture replicates the general style of the downtown decorative lighting.
- A round LED light bulb for the fixture will replicate the round light bulbs used in the downtown decorative lighting.

Branded Banners

- Two options for color schemes are proposed: Option 1 is black, gold, and white (school colors) and Option 2 is green, gold, black, and white (way-finding signage colors). The Option 2 color palette is recommended because it creates a more unified appearance since it is more integral with the branded way-finding signage colors - creating the redundancy necessary to improve visual connectivity and strength community branding.
- Graphics used are all elements of the city's logo.

Branded Way-finding Signage Design Highlights

Directional Signage

- Color of sign panel (B) and community cap (A); Iowa DOT (IDOT) standard green.
- Community cap (A): Both options shown incorporate the city's existing logo and the leaves of popular trees (oak and maple) that are found in the city's parks and public land.
- Sign posts (C): IDOT-compliant metal breakaway posts, color to match light posts.

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- Color of sign: IDOT standard green, with a yellow border (logo yellow).
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Street Signage

- Color of sign: IDOT standard green, with white border.
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- Some options incorporate the streetlights from the city logo
- Sign posts: IDOT compliant metal breakaway posts

Vinton
Community Identity

Flenker Land Architects Consultants, LLC
LA: Meg Flenker, PLA, CPESC, CPSWQ
Interns: Trevor Smith, Mikky Oljha
Iowa State University | Trustee Forever | Iowa Department of Transportation



Safety and Traffic Control/Calming

Heavy and speeding traffic is of great concern to the adults in Vinton. Residents cited uncontrolled intersections as contributing to speeding, especially along main routes to and from the hospital, downtown, and schools. Heavy traffic along these routes and the two state highways (Hwy. 218 and Hwy. 150), along with the speeding, creates conditions that make pedestrians feel uncomfortable and threatened crossing the streets.

The primary purpose of traffic-calming and traffic-control is to support the livability and vitality of residential and commercial areas through improvements in non-motorist safety, mobility, and comfort by reducing automobile speeds. Traffic calming is accomplished through the use of physical measures such as raised intersections, raised crosswalks, bump-outs, hardscape and vertical elements, including vegetation and structures. Numerous types of context-sensitive solutions for traffic calming measures were shown at the public design workshop, along with different crosswalk treatments. The methods and treatments preferred by workshop participants and the Vinton community (as represented by the visioning steering committee) are shown on this and the following boards.

Traffic control is accomplished primarily through operational procedures, rules and laws, and physical components such as traffic signs, pavement markings, traffic lights, and advance-warning signs and devices. Consistent enforcement of rules and laws (i.e., speed limits) is an essential component to effectively addressing the safety and traffic calming/control in Vinton. Traffic calming/control elements shown on the following boards include: bump-outs, narrow streets, raised crosswalks, flashing warning lights and regulatory signage, street trees, decorative lighting, plantings, and vertical gateway markers.

Hwy. 150/3rd St. & 1st Ave. Intersection

This intersection is significant to Vinton because it is one of the primary gateways into the historical downtown and is also part of the entryway corridor to the city. Unfortunately, it does not garner the attention of visitors that it needs in part because of the uncontrolled traffic flow and speeding traffic traveling from the north via Hwy. 150 and to the east via Hwy. 150/3rd St., and in part because of its lackluster appearance.

Board 8a, along with board 8b, illustrate proposed improvements for this intersection to help with traffic calming and improve safety and user experience, as well as create more inviting and noteworthy gateways to the city and downtown.

Board 8a illustrates via section views and multiple image edits what the proposed improvements noted and shown in plan view on board 8a would look like. The images show how the various options proposed for gateway signage and crosswalk treatment change the character of the downtown.

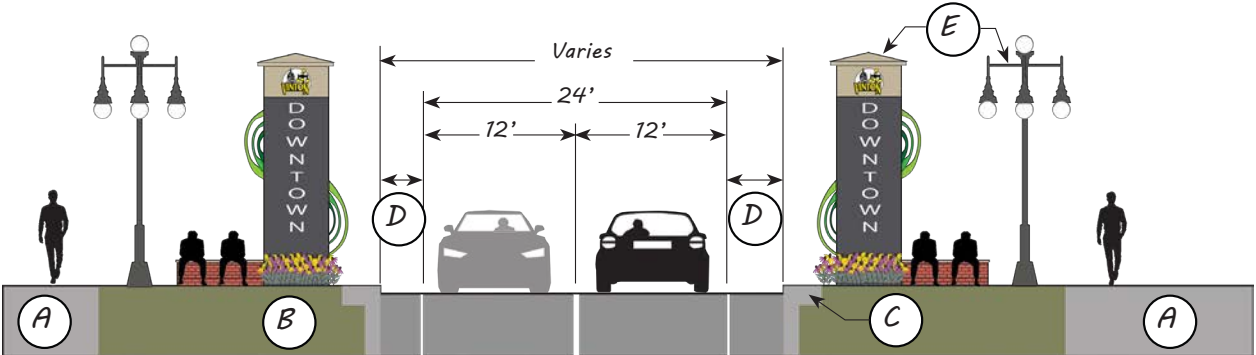
Also addressed on board 8a are the critical design considerations that are necessary to maintain safe and proper intersection visibility that the design team took when developing the concepts. As can be seen, both horizontal and vertical clearances were considered in terms of visibility. The Iowa DOT provides design guidance for visibility requirements that are based in part by speed, traffic count, and geometric layout of the roadway.

Downtown Gateway Monument

Two concepts are illustrated on this board. Option 1 is the artistic option with a decorative metal serpentine detail extending from the sides of the monument in various shades of green that draw from the community identity color palette. Option 2 represents a basic and simplified design.

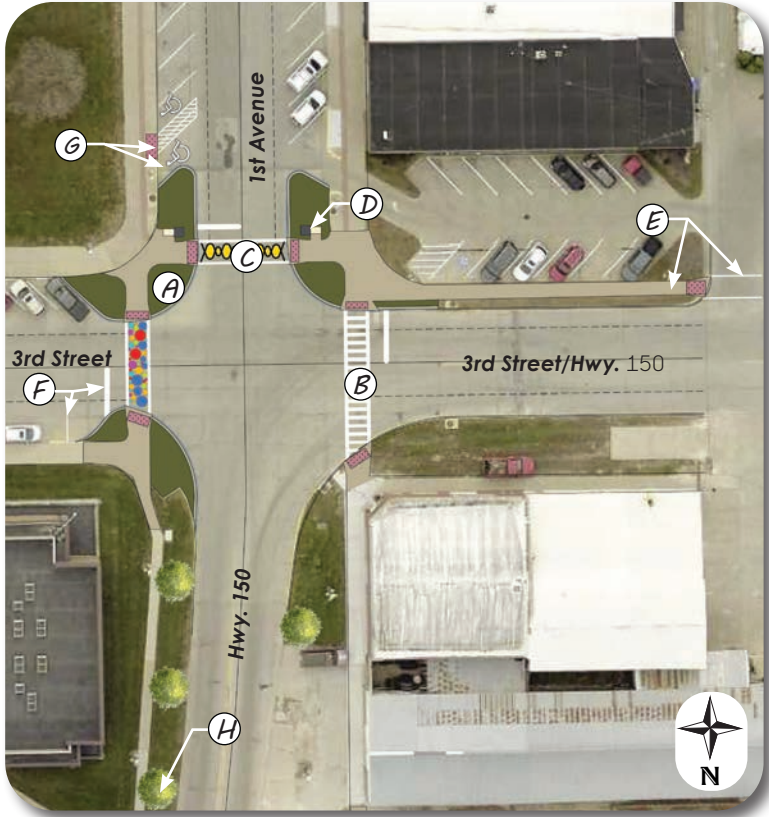


Aerial of existing conditions

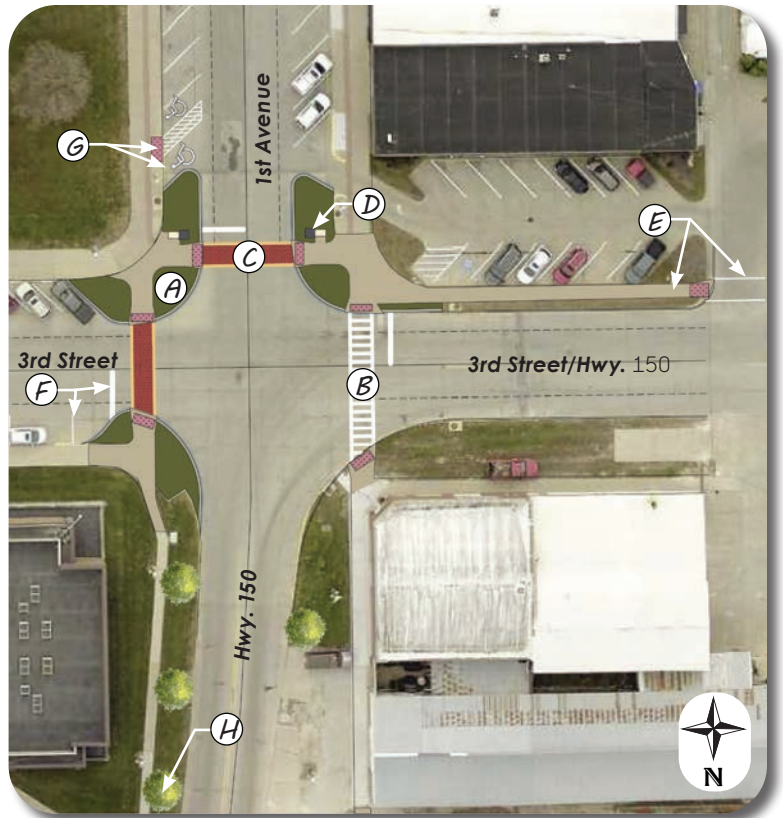


Typical section of proposed downtown gateway entry

- Typical Section Notes**
- (A) Existing sidewalk enhanced/modified as applicable for ADA accessibility and connectivity
 - (B) Landscaped bump-out
 - (C) Curb and concrete planting edge
 - (D) Excess road beyond driving lane, width varies
 - (E) Existing downtown lighting & proposed monument



Concept Option 1: Monument option 1 & artistic crosswalk



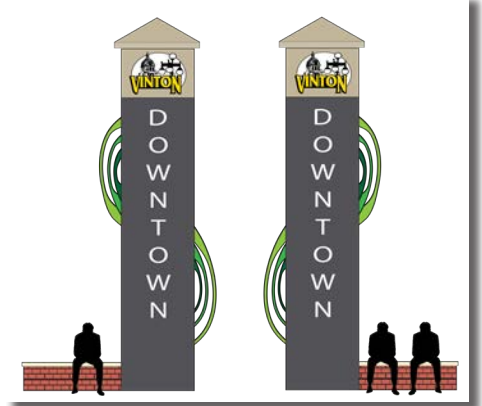
Concept Option 2: Monument option 1 & decorative crosswalk

Intersection Highlights

- (A) Landscaped bump-outs enhance safety, streetscape aesthetics, user experience and both vehicular and pedestrian circulation while slowing traffic via the resulting narrowing of the street (street lane widths will still be wider than standard street lane widths as can be seen in the plan views and typical section)
- (B) High-visibility painted crosswalks at designated pedestrian crossings along Hwy. 150 & Hwy. 218 combined with crosswalk warning signs alerting motorists in advance of the crosswalks.
- (C) Decorative pedestrian crosswalks in the downtown to enhance safety and aesthetics, as well as to provide the opportunity to create an ambiance that showcases Vinton's unique characteristics.
- (D) Gateway monuments to capture the attention of passersby and intrigue them to visit, while also contributing to the downtown's ambiance.
- (E) Widened and ADA-compliant sidewalks and painted crosswalks along 3rd St. corridor to increase pedestrian safety, strengthen connectivity to key destinations and Hwy. 218, and to reinforce the importance of the 3rd St. corridor.
- (F) Painted and maintained pavement markings provide clear direction and delineation as to the location of pedestrian crossings, where motorist stop, where they can park, and how much space is allowable for parking.
ADA-compliant parking and the associated sidewalk access.
- (G)
- (H) Street trees, decorative lighting, way-finding signage, traffic control devices, and ADA-compliant sidewalks assist in traffic calming/control while physically and visually linking the downtown to Celebration Park, creating a more aesthetic gateway, and enhancing the safety and user experience of both the motorist and pedestrian.



Photo of existing intersection from north side looking south along 1st Ave.



Downtown Monument Option 1



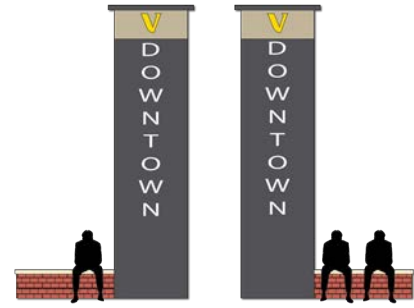
Intersection Concept Option 1: Monument option 1 & artistic crosswalk



Intersection Concept Option 2: Monument option 1 & decorative crosswalk



Photo of existing intersection from north side looking south along 1st Ave.



Downtown Monument Option 2



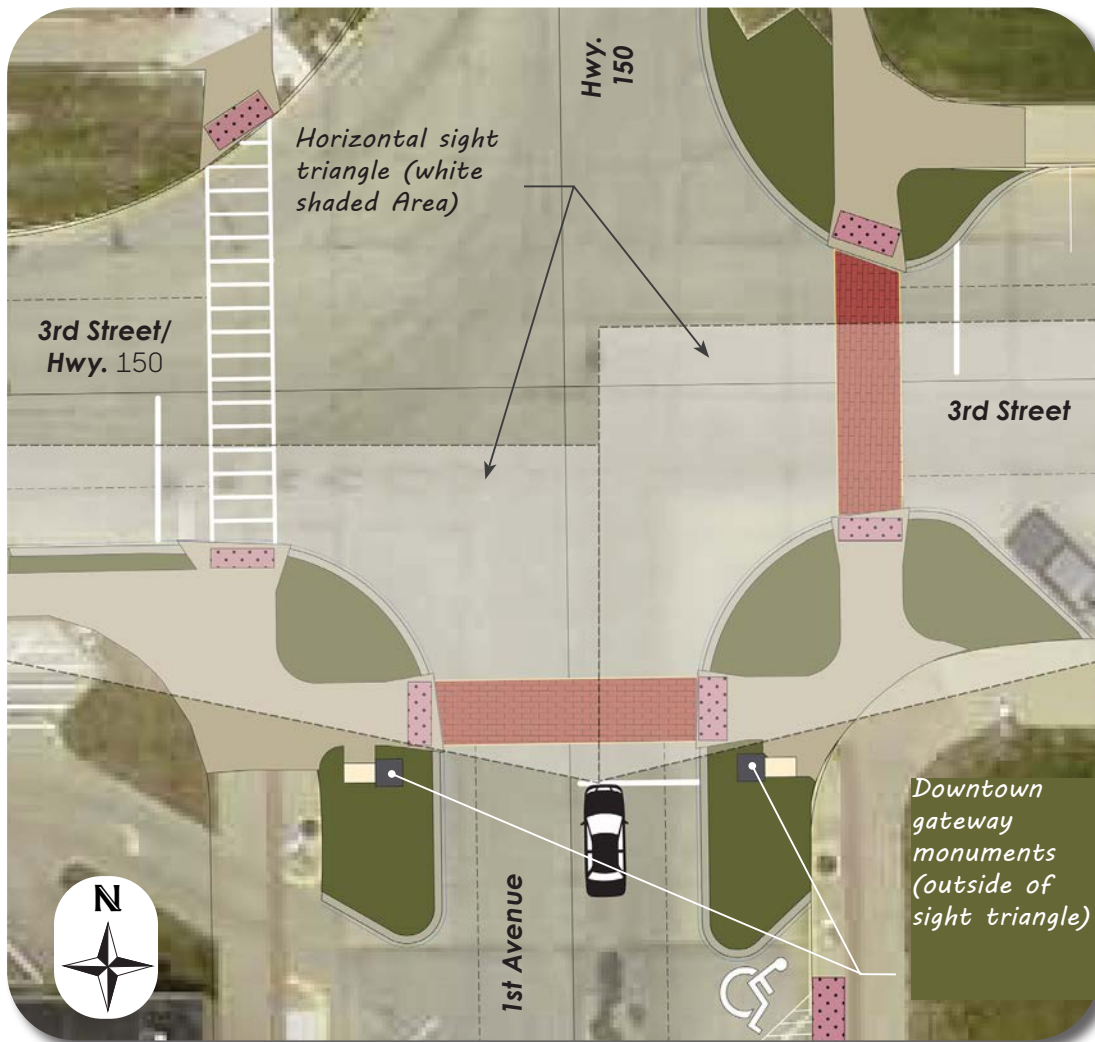
Intersection Concept Option 3: Monument option 2 & artistic crosswalk



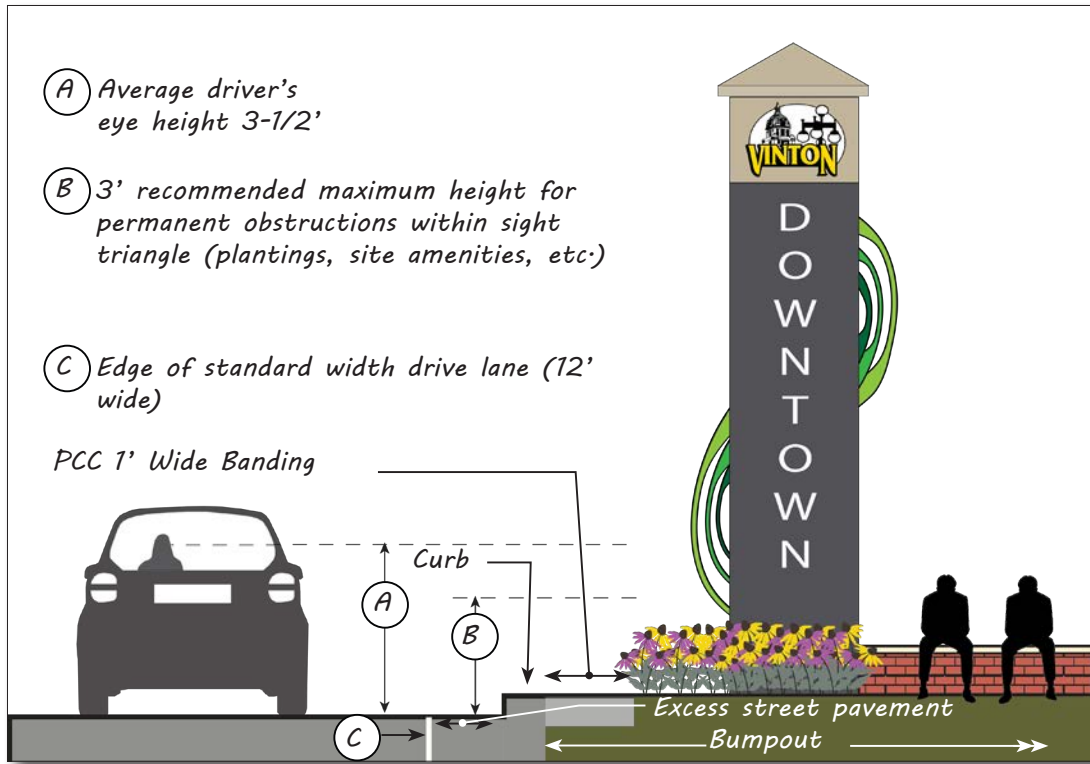
Intersection Concept Option 4: Monument option 2 & decorative crosswalk

Hwy. 150/3rd St. & 1st Ave. Intersection Visibility

Good visibility (aka: sight triangle) at intersections is critical to ensure the safety of motorists and pedestrians. Iowa DOT design standards for determining this were considered, when applicable, during the development of the concepts presented on this and the other design boards. As can be seen, the gateway monument and associated seating are located outside of the sight triangle. Also of consideration is the height of items within the triangle – such as plantings, which as a general rule should not exceed 3-foot tall – refer to typical section.



Aerial plan view of the proposed intersection enhancements and line of sight (sight triangle) based on Iowa DOT standard design criteria



Typical section of intersection enhancements based on Iowa DOT design criteria regarding vertical height of elements within the line of sight

Design Expertise Recommended

Projects in their entirety, or portions of them may require help beyond the capability of the Vinton Visioning Committee, available city staff, and/or volunteers. For the **Hwy. 150/3rd St. & 1st Ave.** improvement project the visioning committee should expect to engage the services of a landscape architect, surveyor, structural engineer, civil engineer and electrical engineer.

The committee should also expect that portions of this project will need to be coordinated with the Iowa Department of Transportation (Iowa DOT) District Engineer and the County Engineer. Permitting may also be required by the Iowa DOT.

Opinion of Probable Construction Cost

| Hwy. 150/3rd St. & 1st Ave. Intersection (See Board #8a & #8b for Visual) | | | | | Summer 2023 |
|---|-----------|------|---------------------|---|----------------------|
| Description | Est. Qty. | Unit | Estimated Unit Cost | Estimated Line Total | Estimated Totals |
| Bump-Outs & Sidewalks | | | | | \$ 108,831.75 |
| Demolition & Earthwork/Grading | | | | | \$ 18,886.50 |
| - Curb Removal | 258 | LF | \$ 12.00 | \$ 3,096.00 | |
| - Selective Removal | 585 | SY | \$ 22.50 | \$ 13,162.50 | |
| - Earth Excavation & Grading | 146 | CY | \$ 18.00 | \$ 2,628.00 | |
| Pavement | | | | | \$ 52,385.00 |
| - PCC Pedestrian Pavement, 5", Agg. Base Cse, 4" | 369 | SY | \$ 65.00 | \$ 23,985.00 | |
| - PCC Curb | 298 | LF | \$ 75.00 | \$ 22,350.00 | |
| - ADA Compliant Detectable Warning Panel | 110 | SF | \$ 55.00 | \$ 6,050.00 | |
| Landscaping | | | | | \$ 37,560.25 |
| - Planting Bed Prep & Shredded Hardwood Mulch, 3" | 1513 | SF | \$ 8.00 | \$ 12,104.00 | |
| - Amended Planting Mix | 106 | CY | \$ 50.00 | \$ 5,300.00 | |
| - Landscape Plantings | 1513 | SF | \$ 12.00 | \$ 18,156.00 | |
| - Sod | 1143 | SF | \$ 1.75 | \$ 2,000.25 | |
| Downtown Monuments | | | | \$ - | \$ 67,000.00 |
| Monument Option 1 | 1 | Pair | \$ 67,000.00 | \$ 67,000.00 | |
| Crosswalks | | | | | \$ 15,895.00 |
| Demolition | | | | | \$ 1,305.00 |
| - Selective Removal | 58 | SY | \$ 22.50 | \$ 1,305.00 | |
| Pavement | | | | | \$ 8,700.00 |
| - Decorative Crosswalk (3rd St. and 1st Ave.) | 58 | SY | \$ 150.00 | \$ 8,700.00 | |
| Permanent Traffic Control | | | | | \$ 5,890.00 |
| - High Visibility Painted Crosswalk (3rd St/Hwy. 150) | 1 | LS | \$ 1,260.00 | \$ 1,260.00 | |
| - ADA Painted Parking Aisle | 1 | LS | \$ 150.00 | \$ 150.00 | |
| - Painted Stop Lines | 1 | LS | \$ 280.00 | \$ 280.00 | |
| - ADA Painted Parking Symbols | 2 | EA | \$ 250.00 | \$ 500.00 | |
| - ADA Parking Stall Signage | 2 | EA | \$ 600.00 | \$ 1,200.00 | |
| - Traffic Control Signage | 5 | EA | \$ 500.00 | \$ 2,500.00 | |
| Miscellaneous | | | | | \$ 38,400.00 |
| Erosion & Sediment Control (5%) | 1 | LS | \$ 9,600.00 | \$ 9,600.00 | |
| Temporary Traffic Control (5%) | 1 | LS | \$ 9,600.00 | \$ 9,600.00 | |
| Mobilization (10%) | 1 | LS | \$ 19,200.00 | \$ 19,200.00 | |
| | | | | Section Subtotal | \$ 230,126.75 |
| | | | | 30% Contingency Allowance | \$ 69,038.03 |
| | | | | 15% Design & Engineering Allowance | \$ 44,874.72 |
| | | | | Total Probable Construction Cost | \$ 344,039.49 |
| | | | | | |
| | | | | Total Probable Construction Cost | \$ 345,000.00 |

8a

Safety & Traffic Calming/Control
Heavy and speeding traffic is of great concern to the adults in Vinton. Residents cited uncontrolled intersections as contributing to speeding, especially along main routes to and from the hospital, downtown, and schools. Heavy traffic along these routes and the two state highways (Hwy. 218 and Hwy. 150), along with the speeding, creates conditions that make pedestrians feel uncomfortable and threatened crossing the streets.

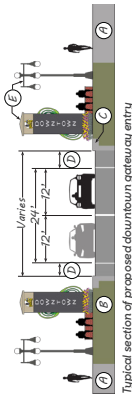
The primary purpose of traffic-calming and traffic-control is to support the livability and vitality of residential and commercial areas through improvements in non-motorist safety, mobility, and comfort by reducing automobile speeds. Traffic calming is accomplished through the use of physical measures such as raised intersections, raised crosswalks, bump-outs, hardscape and vertical elements, including vegetation and structures. Numerous types of context-sensitive solutions for traffic calming measures were shown at the public design workshop, along with different crosswalk treatments. The methods and treatments preferred by workshop participants and the Vinton community (as represented by the visioning steering committee) are shown on this and the following boards.

Traffic controls are accomplished primarily through operational procedures, rules and laws, and physical components such as traffic signs, pavement markings, traffic lights, and advance-warning signs and devices. Consistent enforcement of rules and laws (i.e., speed limits) is an essential component to effectively addressing the safety and traffic calming/control in Vinton. Traffic calming/control elements shown on the following boards include: bump-outs, narrow streets, raised crosswalks, flashing warning lights and regulatory signage, street trees, decorative plantings, and vertical gateway markers.

Hwy.150/3rd St. & 1st Ave. Intersection
This intersection is significant to Vinton because it is one of the primary gateways into the historical downtown and is also part of the entryway corridor to the city. Unfortunately, it does not garner the attention of visitors that it needs in part because of the uncontrolled traffic flow and speeding traffic travelling from the north via Hwy. 150 and to the east via Hwy.150/3rdSt. and in part because of its cluttered appearance.



Existing aerial plan view of Hwy. 150/3rd St. & 1st Ave.



Typical section of proposed downtown gateway entry

- Typical Section Notes**
- A Existing sidewalk enhanced/modified as applicable for ADA accessibility and connectivity
 - B Landscaped bump-out
 - C Curb and concrete planting edge
 - D Excess road beyond driving lane, width varies
 - E Existing downtown lighting & proposed monument

This board, along with board 8b, illustrate proposed improvements for this intersection to help with traffic calming and improve safety and user experience, as well as create more inviting and noteworthy gateways to the city and downtown.



Concept Option 1: Monument option 1 & artistic crosswalk



Concept Option 1: Monument option 1 & decorative crosswalk

Intersection Highlights

- A Landscaped bump-outs enhance safety, streetscape aesthetics, user experience and both vehicular and pedestrian circulation while slowing traffic via the resulting narrowing of the street (street lane widths will still be wider than standard street lane widths as can be seen in the plan views and typical section)
- B High-visibility painted crosswalks at designated pedestrian crossings along Hwy. 150 & Hwy. 218 combined with crosswalk warning signs alerting motorists in advance of the crosswalks.
- C Decorative pedestrian crosswalks in the downtown to enhance safety and aesthetics, as well as to provide the opportunity to create an ambience that showcases Vinton's unique characteristics.
- D Gateway monuments to capture the attention of passerby and intrigue them to visit, while also contributing to the downtown's ambience.
- E Widened and ADA-compliant sidewalks and painted crosswalks along 3rd St. corridor to increase pedestrian safety, strengthen connectivity to key destinations and Hwy. 218, and to reinforce the importance of the 3rd St. corridor.
- F Painted and maintained pavement markings provide clear direction and delineation as to the location of pedestrian crossings, where motorist stop, where they can park, and how much space is allowable for parking.
- G ADA-compliant parking and the associated sidewalk access.
- H Street trees, decorative lighting, way-finding signage, traffic control devices, and AD-compliant sidewalks assist in traffic calming/control while physically and visually linking the downtown to Celebration Park, creating a more aesthetic gateway, and enhancing the safety and user experience of both the motorist and pedestrian.

Vinton
Safety & Traffic Calming/Control

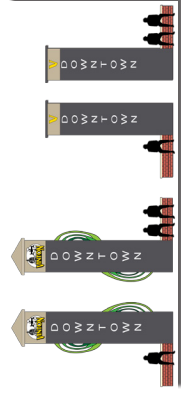
Flenker Land Architects Consultants, LLC
LA: Meg Flenker, PLA, CPESC, CPSWG
Interns: Tevor Smith, Mikky Olha
Iowa State University | Trees Forever | Iowa Department of Transportation



Hwy. 150/3rd St. & 1st Ave. Intersection (continued)
 This board illustrates via section views and multiple image edits what the proposed improvements noted and shown in plan view on board 8a would look like. The images show how the various options proposed for gateway signage and crosswalk treatment change the character of the downtown.

Also addressed on this board are the critical design considerations that are necessary to maintain safe and proper intersection visibility that the design team took when developing the concepts. As can be seen, both horizontal and vertical clearances were considered in terms of visibility. The Iowa DOT provides design guidance for visibility requirements that are based in part by speed, traffic count, and geometric layout of the roadway.

Downtown Gateway Monument
 Two concepts are illustrated on this board. Option 1 is the artistic option with a decorative metal serpentine detail extending from the sides of the monument in various shades of green that draw from the community identity color palette. Option 2 represents a basic and simplified design.



Downtown Monument Option 1
 Downtown Monument Option 2



Intersection Concept Option 1 & decorative crosswalk

Hwy. 150/3rd St. & 1st Ave. Intersection Visibility
 The visibility (aka: sight triangle) at intersections is critical to ensure the safety of motorists and pedestrians. Iowa DOT design standards for determining this were considered, when applicable, during the development of the concepts presented on this and the other design boards. As can be seen, the gateway monument and associated seating are located outside of the sight triangle. Also of consideration is the height of items within the triangle - such as plantings, which as a general rule should not exceed 3-foot tall - refer to typical section.



Photo of existing intersection from north side looking south along 1st Ave.

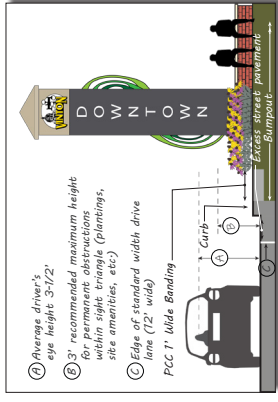


Intersection Concept Option 1, Monument option 1 & artistic crosswalk

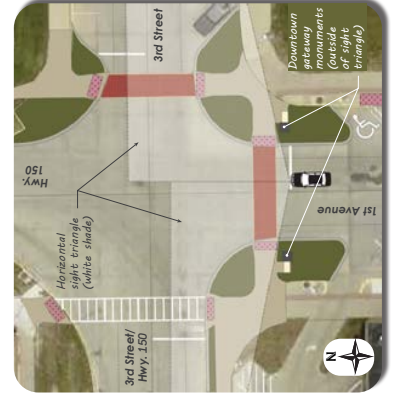


Intersection Concept Option 2, Monument option 2 & artistic crosswalk

8b



Typical section of intersection enhancements based on Iowa DOT design criteria regarding vertical height of elements within the line of sight



Aerial plan view of the proposed intersection enhancements and line of sight (sight triangle) based on Iowa DOT standard design criteria

Vinton
 Safety & Traffic Calming/Control

Flenker Land Architects Consultants, LLC
 LA: Meg Flenker, PLA, CPESC, CPSWG
 Interns: Trevor Smith, Mikky Oljha
 Iowa State University | Trees Forever | Iowa Department of Transportation



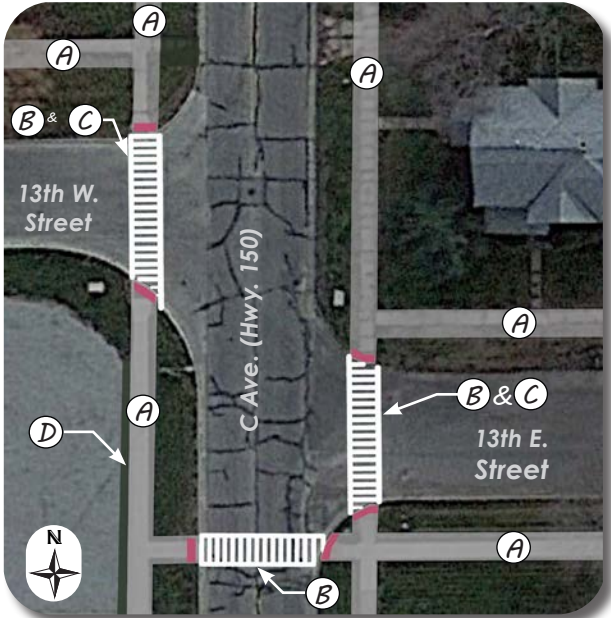
13th Street & C Ave. (Hwy. 150) Intersection

Residents identified this intersection as one of great concern due to the interaction that occurs between motorists and pedestrians. Both 13th Street and C Ave. (Hwy. 150) are heavily traveled primary corridors for motorists as well as for pedestrians, especially youth walking to and from school. The proposed concepts reduce the two existing pedestrian crossings of C Ave. (Hwy. 150) to one to minimize pedestrian and motorist interaction since there is currently no traffic control for C Ave. at this location.



Existing aerial plan view

Since Hwy. 150 is a state highway, any enhancements to the road, including traffic calming/control measures along it, need to be approved by the Iowa DOT BEFORE implementation - this includes traffic signage and pavement markings.

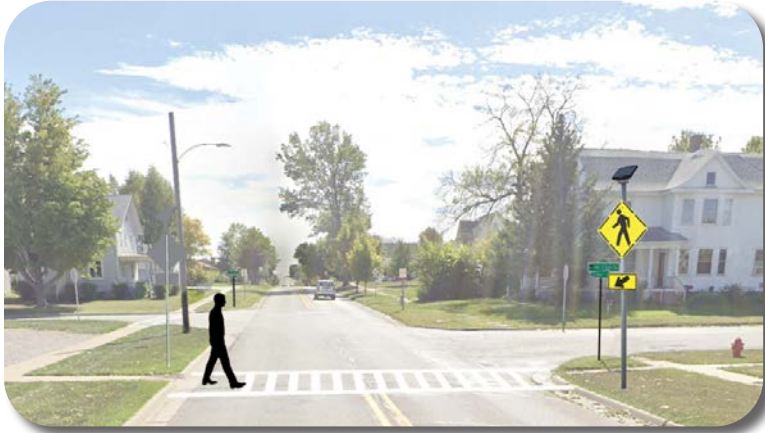


Aerial plan view of the proposed intersection enhancements and line of sight (sight triangle) based on Iowa DOT standard design criteria

- 13th St. & C Ave. Intersection Concept Highlights**
- (A) Existing sidewalk enhanced/modified as applicable for ADA accessibility and connectivity
 - (B) High visibility painted crosswalk & the associated crosswalk warning signs with flashing lights
 - (C) Possible location for raised crosswalk
 - (D) Lawn buffer between parking lot and sidewalk



Existing C Ave.
(Hwy. 150)
looking southerly
from north side of
intersection with
13th St.



Concept showing C Ave. (Hwy. 150) proposed enhancements,
including branded street signs and crosswalk warning signs



Existing 13th E. St.
looking easterly
from east side of
intersection with C
Ave. (Hwy. 150)



Concept showing 13th E. St. proposed enhancement

Design Expertise Recommended

Projects in their entirety, or portions of them may require help beyond the capability of the Vinton Visioning Committee, available city staff, and/or volunteers. For the **13th Street & C Ave. (Hwy. 150) Intersection** improvement project the visioning committee should expect to engage the services of a civil or traffic engineer.

The committee should expect to coordinate this project with the Iowa Department of Transportation (Iowa DOT) District Engineer. Permitting may also be required by the Iowa DOT.

Opinion of Probable Construction Cost

| 13th St. & C Ave. (Hwy. 150) Intersection (See Board #8c for Visual) | | | | | Summer 2023 | |
|--|-----------|------|---------------------|----------------------|---------------------|--|
| Description | Est. Qty. | Unit | Estimated Unit Cost | Estimated Line Total | Estimated Totals | |
| Crosswalks | | | | | \$ 1,000.00 | |
| Permanent Traffic Control | | | | | \$ 1,000.00 | |
| - Painted High Visibility Crosswalk (Hwy. 150) | 1 | LS | \$ 750.00 | \$ 750.00 | | |
| - Painted Crosswalk (W. 13th St. & E. 13th St.) | 1 | LS | \$ 250.00 | \$ 250.00 | | |
| Street Signage | | | | | \$ 650.00 | |
| Branded Street Name Signage Only (City Purchase, Not Installed) | | | | | \$ 650.00 | |
| - Branded Street Name Sign (City Purchase) | 4 | EA | \$ 100.00 | \$ 400.00 | | |
| - Break-A-Way Post (City Purchase) | 2 | EA | \$ 125.00 | \$ 250.00 | | |
| Flashing Beacons (City Purchase, Not Installed) | | | | | \$ 21,600.00 | |
| Permanent Traffic Beacons (City Purchase, Not Installed) | | | | | \$ 21,600.00 | |
| - Solar LED Flashing Beacon Amber Light W/ Crosswalk Ahead Sign | 2 | EA | \$ 1,900.00 | \$ 3,800.00 | | |
| - Push Button Pedestrian Flashing Crosswalk Sign | 2 | EA | \$ 8,900.00 | \$ 17,800.00 | | |
| Miscellaneous | | | | | \$ 4,500.00 | |
| Erosion & Sediment Control (5%) | 1 | LS | \$ - | \$ - | | |
| Temporary Traffic Control (5%) | 1 | LS | \$ 1,500.00 | \$ 1,500.00 | | |
| Mobilization (10%) | 1 | LS | \$ 3,000.00 | \$ 3,000.00 | | |
| Section Subtotal | | | | | \$ 27,750.00 | |
| 30% Contingency Allowance | | | | | \$ 8,325.00 | |
| 15% Design & Engineering Allowance | | | | | \$ 5,411.25 | |
| Total Probable Construction Cost | | | | | \$ 41,486.25 | |
| Total Probable Construction Cost | | | | | \$ 42,000.00 | |

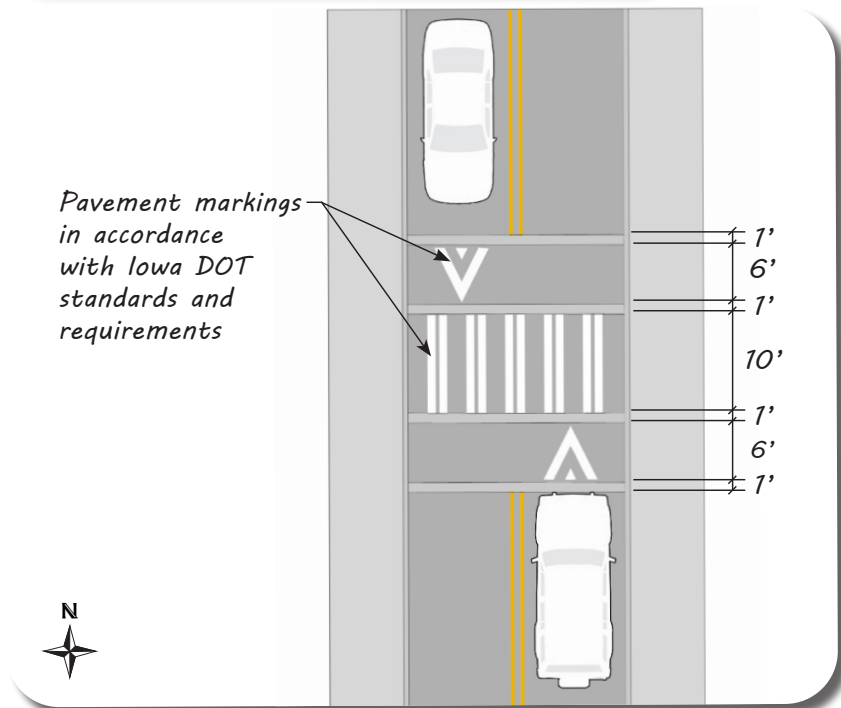
2nd Ave. & 6th St. Intersection

Fast moving traffic on a number of residential streets, including 2nd Ave. , was repeatedly noted as a concern by residents. Community feedback during the design workshop indicates that raised crosswalks were one of the solutions for traffic calming that was acceptable to residents for implementation in Vinton.

The crosswalk on the north side of the 2nd Ave. & 6th St. intersection was identified as an area that would benefit from raised crosswalks. One of the questions brought up was how a raised intersection could be integrated with the existing brick-paved street to maintain the existing character of the street. While the raised intersection can be constructed with asphalt, concrete, and brick, the concept shown in this report and Board 8c is for a brick crosswalk.

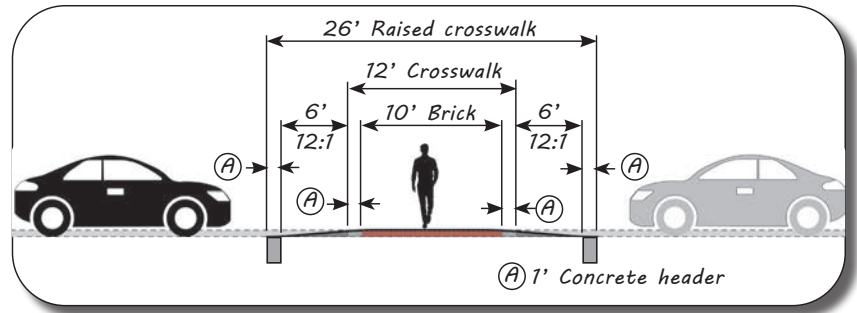


Existing aerial plan view



Typical raised crosswalk plan view

Typical raised crosswalk cross section



Plan view of proposed raised crosswalk with brick



Existing photo taken at intersection looking northerly along 2nd Ave.



Proposed concept showing brick crosswalk and concrete ramps

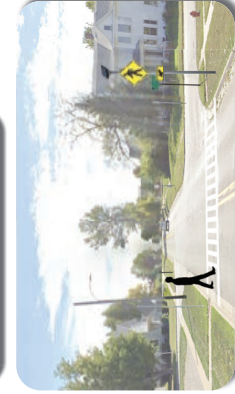
13th Street & C Ave. (Hwy. 150) Intersection

Residents identified this intersection as one of great concern due to the interaction that occurs between motorists and pedestrians. Both 13th Street and C Ave. (Hwy. 150) are heavily traveled primary corridors for motorists as well as for pedestrians, especially youth walking to and from school. The proposed concepts reduce the two existing pedestrian crossings of C Ave. (Hwy. 150) to one to minimize pedestrian and motorist interaction since there is currently no traffic control for C Ave. at this location.

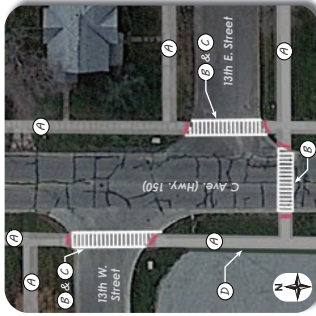


Existing aerial plan view

Since Hwy. 150 is a state highway, any enhancements to the road, including traffic calming/control measures along it, need to be approved by the Iowa DOT BEFORE implementation - this includes traffic signage and pavement markings.



Concept showing C Ave. (Hwy. 150) proposed enhancements, including branded street signs and crosswalk warning signs



Aerial plan view of the proposed intersection enhancements and line of sight (eight triangle) based on Iowa DOT standard design criteria

13th St. & C Ave. Intersection Concept Highlights

- A Existing sidewalk enhanced/modified as applicable for ADA accessibility and connectivity
- B High visibility painted crosswalk & the associated crosswalk warning signs with flashing lights
- C Possible location for raised crosswalk
- D Lawn buffer between parking lot and sidewalk



Concept showing 13th E. St. proposed enhancement

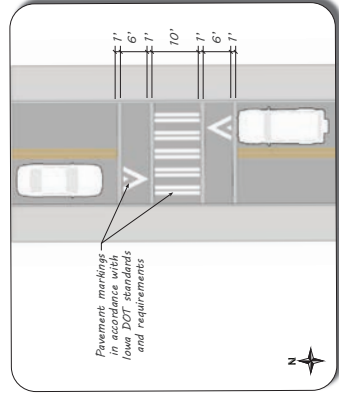
2nd Ave. & 6th St. Intersection

Fast moving traffic on a number of residential streets, including 2nd Ave., was repeatedly noted as a concern by residents. Community feedback during the design workshop indicates that raised crosswalks were one of the solutions for traffic calming that was acceptable to residents for implementation in Vinton.

The crosswalk on the north side of the 2nd Ave. & 6th St. intersection was identified as an area that would benefit from raised crosswalks. One of the questions brought up was how a raised intersection could be integrated with the existing brick-paved street to maintain the existing character of the street. While the raised intersection can be constructed with asphalt, concrete, and brick, the concept shown on this board is for a brick crosswalk.

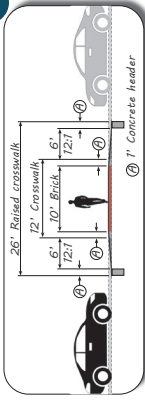


Typical raised crosswalk section



Proposed concept showing brick crosswalk and concrete ramps

8c



Typical raised crosswalk section



Plan view of proposed raised crosswalk with brick



Existing photo taken at intersection looking north along 2nd Ave.



Proposed concept showing brick crosswalk and concrete ramps

Vinton
Safety & Traffic Calming/Control

Flenker Land Architects Consultants, LLC

LA: Meg Flenker, PLA, CPESC, CPSWQ
Interns: Trevor Smith, Mikky Ojha
Iowa State University | Trees Forever | Iowa Department of Transportation



Connectivity & Accessibility

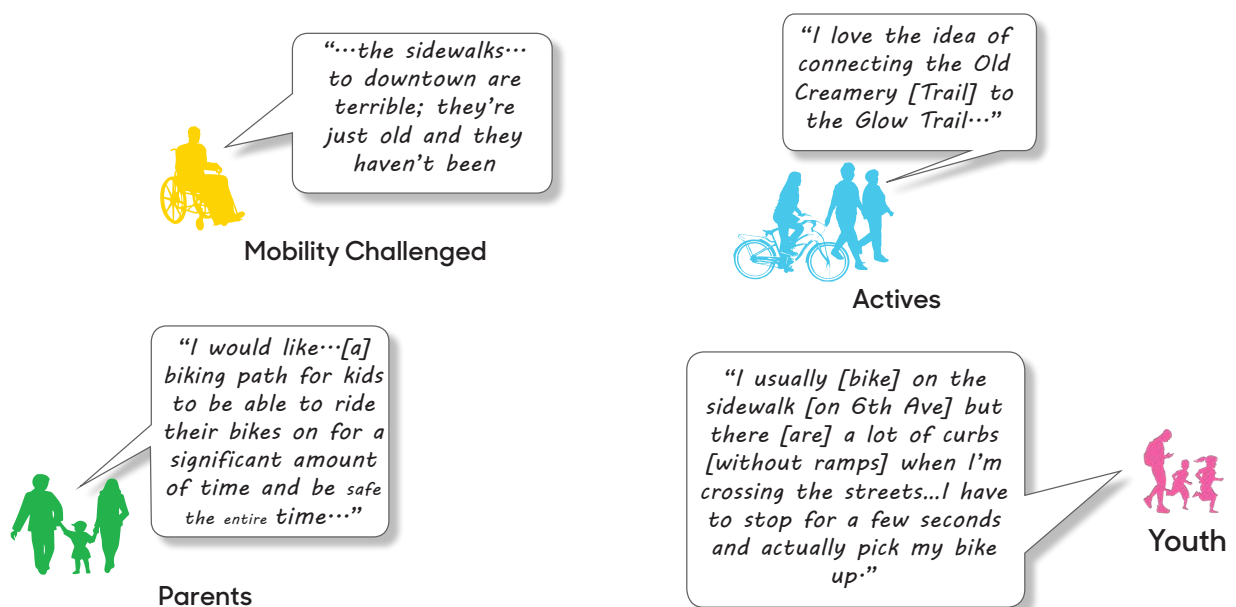
Connectivity and accessibility are two of the major transportation-related issues that impact all demographics in Vinton, as shown on the Transportation Assets and Barriers Analysis boards (see 3a-3c). Inadequate sidewalk infrastructure such as incomplete, broken, narrow, and rising sidewalks and inconsistent curb ramps, threatens user safety and limits pedestrian mobility. It also portrays a less than desirable view of the community to passersby.

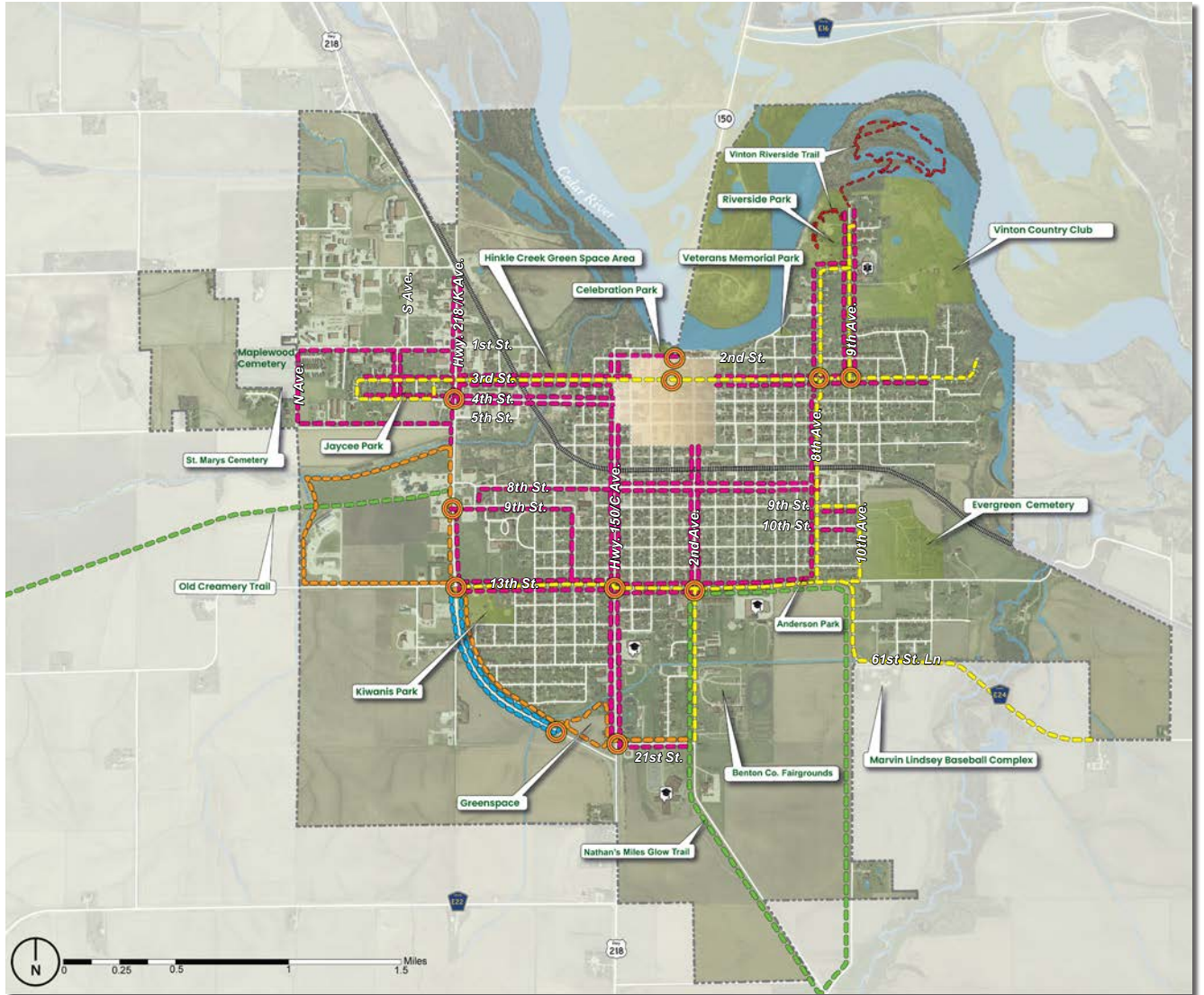
Citizen focus groups identified the need to improve the sidewalk system, which was further echoed by community members participating in the public design workshop held on June 29, 2023, during the Vinton Farmers Market. Desired improvements included making the sidewalks wider, accessible and ADA compliant, complete, and connected to key destinations throughout town - refer to Board 3c.

Pedestrian Circulation

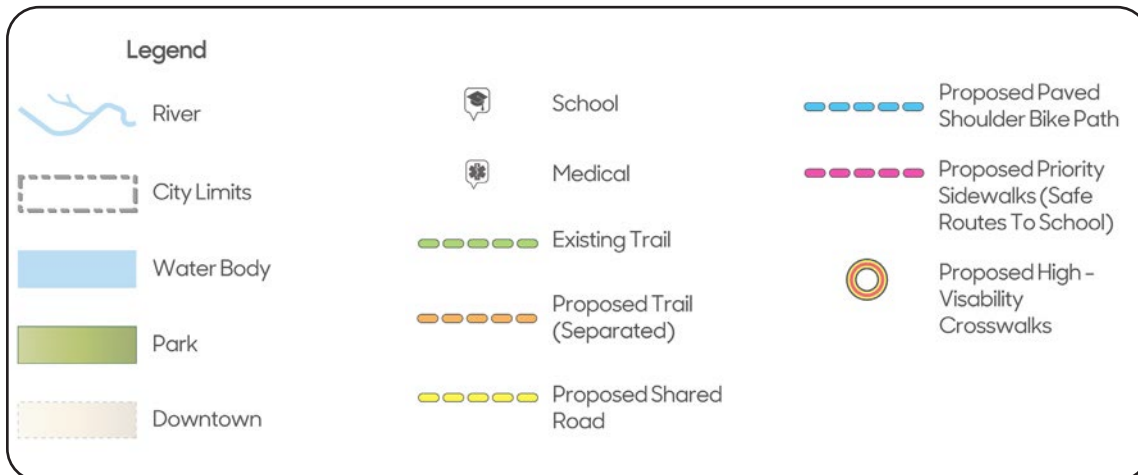
The map on board 9a and the following page, illustrates the input given by the community members and steering committee during the public design workshop, as well as that of the focus groups. In addition to an improved sidewalk system, the community would like to see an expanded trail system, designated safe routes to school, designated high-visibility crosswalks, and shared roads, as appropriate.

While the goal is to have all residential, commercial, and public areas served by an ADA-compliant sidewalk that is in good condition, the following map which is also shown on board 9a, identifies the highest priority areas.





This map is the pedestrian circulation concept plan. It highlights existing trails, proposed trail extensions (separated, shared road, and shoulder) as well as priority sidewalks. The priority sidewalks are to be complete, meet ADA accessibility requirements and serve as Vinton's "Safe Routes To School."



Highway 218 (K Avenue) & 4th Street Intersection

Residents identified the lack of pedestrian connectivity and accessibility along state Highway 218 as a major transportation barrier during the preliminary planning process – see boards 2 and 4. Heavily traveled, Hwy. 218 is one of the main arterials for residents and visitors, and provides the first impression of Vinton to travelers entering town from the northwest and south.



Existing Hwy. 218 & 4th St. intersection – photo taken from west side of Hwy. 218 looking easterly along 4th St.

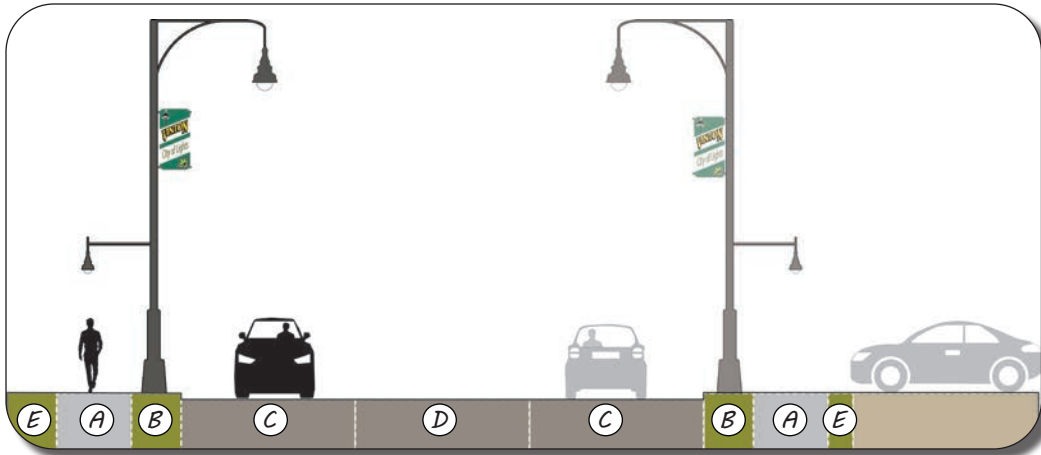
The proposed enhancements illustrated on this board address the transportation barriers noted by residents for Hwy. 218 as well as various other transportation-related concerns. The enhancements are targeted at turning Hwy. 218 into a “complete street,” while also improving circulation and augmenting the streetscape. The same strategies shown on these boards can be applied to other primary corridors as noted on board 5, including 4th Street.



Existing aerial plan view



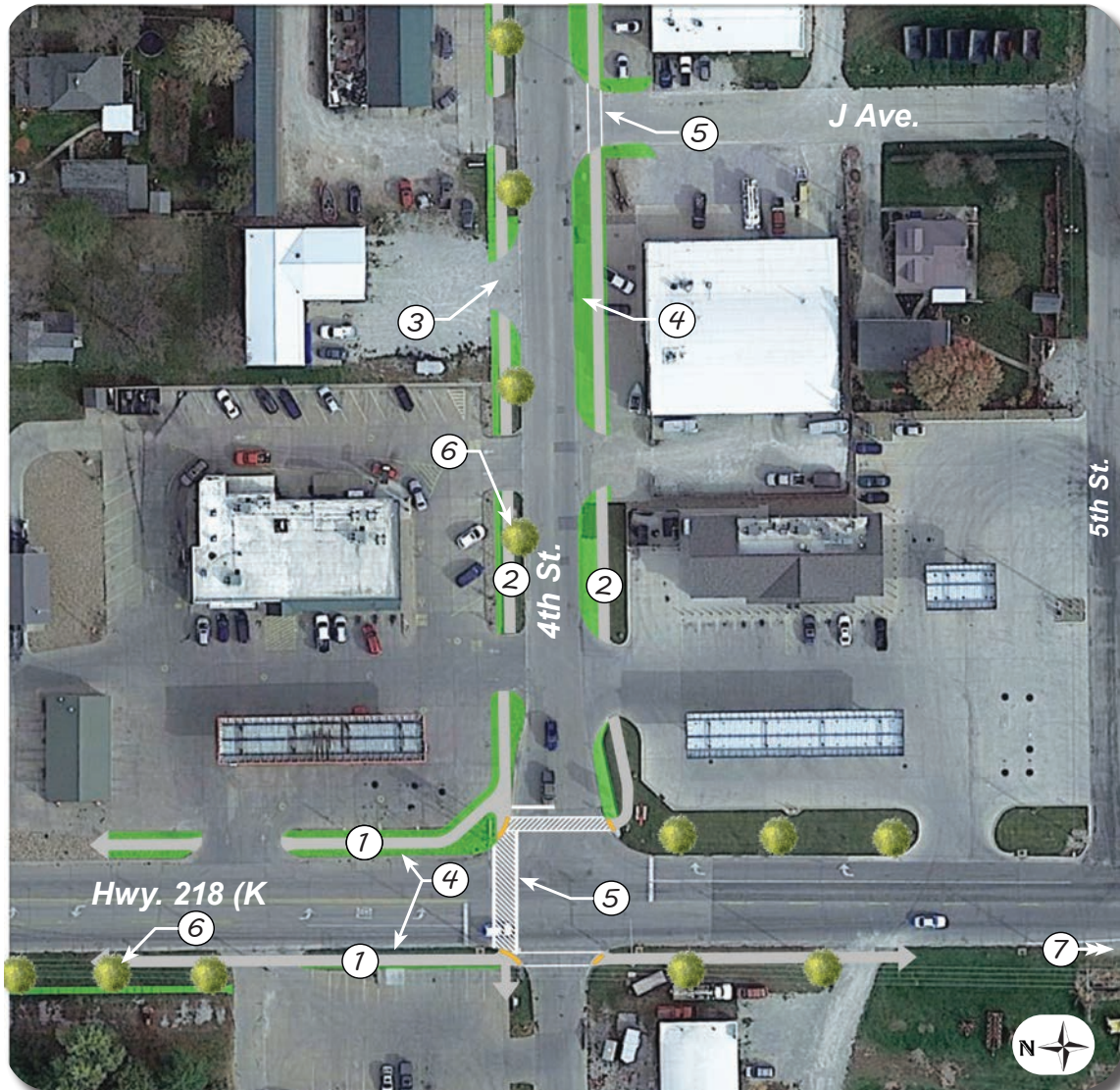
Proposed enhancements - ornamental grass to screen parking lots and highlight intersection; refer to proposed plan view and associated legend on this board for more information on enhancements



Typical section of Hwy. 218 public corridor (between 1st St. and 4th St.)

Hwy. 218 Corridor Typical Section Notes

- (A) 6-foot-wide ADA-compliant sidewalk (west side of Hwy. 218: from Hinkle Creek proposed pedestrian bridge crossing north; east side of Hwy. 218: from 4th St. north)
- (B) "Furnishing Zone": Minimum 4-foot-wide green space; location for decorative lighting, way-finding signage, traffic-control signage, possible street tree plantings when width is 6-feet or greater and sight triangles allow
- (C) Existing Hwy. 218 driving lane (+/- 12' to +/- 14')
- (D) Existing Hwy. 218 turning lane (+/- 12' to +/- 14')
- (E) "Frontage Zone" in road right-of-way, width varies - possible street tree plantings when width is 6-feet or greater; buffer plantings to screen views



Aerial plan view with proposed enhancements

Hwy. 218 and 4th Street Enhancement Highlight

- ① 6-foot-wide ADA-compliant sidewalk along Hwy. 218 north of Hinkle Creek
- ② Minimum 5-foot-wide ADA-compliant sidewalks along primary corridors leading to and from Hwy. 281 (see board 6)
- ③ Reduce size of ingress/egress driveways to standard sizes for specific uses
- ④ Eliminate adjacent connected back-out street parking (except in downtown area)
- ⑤ Paint crosswalks and install associated signage at intersections designated for pedestrian crossings
- ⑥ Install way-finding signage, decorative lighting, and street trees in the right-of-way public green space ("furnishing zone"), as applicable
- ⑦ Install a pedestrian bridge over Hinkle Creek (west side of Hwy. 218)

Opinion of Probable Construction Cost

| Hwy. 218 and 4th St. Intersection Enhancements (See Board #9b for Visual) | | | | | Summer 2023 |
|--|-----------|------|---------------------|----------------------|----------------------|
| Description | Est. Qty. | Unit | Estimated Unit Cost | Estimated Line Total | Estimated Totals |
| PCC Sidewalks (Hwy. 218 and 4th Intersection - Area on Plan View) | | | | | \$ 160,112.00 |
| Demolition & Earthwork/Grading | | | | | \$ 32,402.00 |
| - Curb Removal | 1 | LS | \$ 6,300.00 | \$ 6,300.00 | |
| - Sidewalk and Driveway Surfacing Removal | 1541 | SY | \$ 10.00 | \$ 15,410.00 | |
| - Earth Excavation & Grading | 594 | CY | \$ 18.00 | \$ 10,692.00 | |
| Pavement | | | | | \$ 121,990.00 |
| - PCC Curb | 1 | LS | \$ 40,000.00 | \$ 40,000.00 | |
| - PCC Pedestrian Pavement, 5" on Agg. Base Cse. 4" | 906 | SY | \$ 65.00 | \$ 58,890.00 | |
| - PCC Driveway Pavement, 8" on Agg. Base Cse. 4" | 300 | SY | \$ 77.00 | \$ 23,100.00 | |
| ADA Compliant Detectable Warning Panel | 104 | SF | \$ 55.00 | \$ 5,720.00 | \$ 5,720.00 |
| Landscaping (Hwy. 218 and 4th Intersection - Area on Plan View) | | | | | \$ 19,726.00 |
| Urban Seeding | | | | | \$ 11,205.00 |
| - Seeding and Fertilizing (Urban)& Mulching | 0.3 | AC | \$ 16,000.00 | \$ 4,800.00 | |
| - Topsoil, 6" | 305 | CY | \$ 21.00 | \$ 6,405.00 | |
| Landscaping | | | | | \$ 8,521.00 |
| - Planting Bed Prep & Shredded Hardwood Mulch, 3" | 152 | SF | \$ 8.00 | \$ 1,216.00 | |
| - Commercial Mowing Edge | 167 | LF | \$ 15.00 | \$ 2,505.00 | |
| - Street Trees | 12 | EA | \$ 400.00 | \$ 4,800.00 | |
| Decorative Lighting & Banners (Equipment Only, Not Installed) | | | | | TBD |
| Pedestrian Only Fixture (City Purchase) | TBD | EA | \$ 3,000.00 | TBD | TBD |
| Vehicular Only Fixture (City Purchase) | TBD | EA | \$ 7,500.00 | TBD | TBD |
| Pedestrian and Vehicular Combo Fixture (City Purchase) | TBD | EA | \$ 9,500.00 | TBD | TBD |
| Branded Banners (City Purchase) | TBD | EA | \$ 160.00 | TBD | TBD |
| Signage & Marking (Hwy. 218 and 4th Intersection - Area on Plan View) | | | | | \$ 14,225.00 |
| Vehicular Directional Way-Finding Signage Allowance | | | | | \$ 9,600.00 |
| - 3-Destination | 3 | EA | \$ 3,200.00 | \$ 9,600.00 | |
| Branded Street Name Signage Only (City Purchase, Not Installed) | | | | | \$ 975.00 |
| - Branded Street Name Sign (City Purchase) | 6 | EA | \$ 100.00 | \$ 600.00 | |
| - Break-A-Way Post (City Purchase) | 3 | EA | \$ 125.00 | \$ 375.00 | |
| Permanent Traffic Control | | | | | \$ 3,650.00 |
| - High Visibility Painted Sidewalk (Hwy. 218 and W.4th St.) | 1 | LS | \$ 2,900.00 | \$ 2,900.00 | |
| - Painted Crosswalks | 1 | LS | \$ 450.00 | \$ 450.00 | |
| - Painted Stop Lines | 1 | EA | \$ 300.00 | \$ 300.00 | |
| Miscellaneous(Hwy. 218 and 4th Intersection - Area on Plan View) | | | | | \$ - |
| Erosion & Sediment Control (5%) | | LS | \$ 9,700.00 | \$ - | \$ - |
| Temporary Traffic Control (5%) | | LS | \$ 9,700.00 | \$ - | \$ - |
| Mobilization (10%) | | LS | \$ 19,400.00 | \$ - | \$ - |
| | | | | | |
| Subtotal | | | | | \$ 194,063.00 |
| 30% Contingency Allowance | | | | | \$ 58,218.90 |
| 15% Design & Engineering Allowance | | | | | \$ 37,842.29 |
| Opinion of Total Probable Construction Cost | | | | | \$ 290,124.19 |
| | | | | | |
| Total Probable Construction Cost | | | | | \$ 291,000.00 |

Design Expertise Recommended

Projects in their entirety, or portions of them may require help beyond the capability of the Vinton Visioning Committee, available city staff, and/or volunteers. For the **Hwy. 218 and 4th St. Intersection Enhancement** improvement project the visioning committee should expect to engage the services of a landscape architect, surveyor, civil engineer and electrical engineer.

The committee should expect to coordinate this project with the Iowa Department of Transportation (Iowa DOT) District Engineer. Permitting may also be required by the Iowa DOT. Coordination with adjacent landowners should always be part of a project, however, it is especially critical for the success with this project.

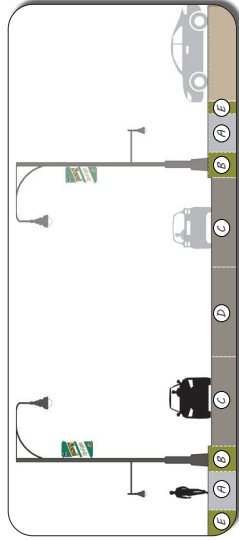
Highway 218 (K Avenue)

Residents identified the lack of pedestrian connectivity and accessibility along state Highway 218 as a major transportation barrier during the preliminary planning process – see boards 2 and 4. Heavily traveled, Hwy. 218 is one of the main arterials for residents and visitors, and provides the first impression of Vinton to travelers entering town from the northwest and south.

The proposed enhancements illustrated on this board address the transportation barriers noted by residents for Hwy. 218 as well as various other transportation-related concerns. The enhancements are targeted at turning Hwy. 218 into a "complete street", while also improving circulation and augmenting the streetscape. The same strategies shown on these boards can be applied to other primary corridors as noted on board 5, including 4th Street.

"there's no sidewalk on [the Highway] 218, bridge [over Hinkle Creek], it's very, very narrow, that becomes a safety hazard."

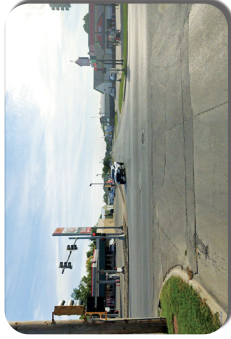
"There's a bridge [on Hwy 218] but there [are] no sidewalks... people [are] walking in the bridge as people are driving over it. I've almost hit people there."



- Hwy. 218 Corridor Typical Section Notes**
- ④ 6-foot-wide ADA-compliant sidewalk (west side of Hwy. 218; from Hinkle Creek proposed pedestrian bridge crossing north; east side of Hwy. 218; from 4th St. north)
 - ⑤ Furnishing Zone: Minimum 4-foot-wide green space; location for decorative lighting, way-finding signage, traffic-control signage, possible street tree plantings when width is 6-foot or greater; and sight triangles allow
 - ⑥ Existing Hwy. 218 driving lane (7'-12' to +/- 14')
 - ⑦ Existing Hwy. 218 turning lane (7'-12' to +/- 14')
 - ⑧ "Frontage Zone" in road right-of-way, width varies - possible street tree plantings when width is 6-foot or greater; buffer plantings to screen views

9b

Existing Hwy. 218 & 4th St. intersection - photo taken from west side of Hwy. 218 looking easterly along 4th St.



Proposed enhancements - ornamental grass to screen parking lots and highlight intersection; refer to proposed plan view and associated legend on this board for more information on enhancements

- Hwy. 218 and 4th Street Enhancement Highlight**
- ① 6-foot-wide ADA-compliant sidewalk along Hwy. 218 north of Hinkle Creek
 - ② Minimum 5-foot-wide ADA-compliant sidewalks along primary corridors leading to and from Hwy. 281 (see board 6)
 - ③ Reduce size of ingress/egress driveways to standard sizes for specific uses
 - ④ Eliminate adjacent connected back-out street parking (except in downtown area)
 - ⑤ Paint crosswalks and install associated signage at intersections designated for pedestrian crossings
 - ⑥ Install way-finding signage, decorative lighting, and street trees in the right-of-way public green space ("furnishing zone"), as applicable
 - ⑦ Install a pedestrian bridge over Hinkle Creek (west side of Hwy. 218)



Vinton
Connectivity and Accessibility

Flenker Land Architects Consultants, LLC

LA: Meg Flenker, P.L.A., CPESC, CPSWG
Interns: Tevor Smith, Mikky Oljha

Iowa State University | Trees Forever | Iowa Department of Transportation



Hinkle Creek Crossing at Hwy. 218 (K Ave.)

The lack of a pedestrian bridge over Hinkle Creek along Hwy. 218 was cited by residents as a major transportation barrier affecting the safety of both motorists and pedestrians.

The concept illustrated below was developed based on the feedback received from residents. According to a cursory review of available records, it appears that the Hwy. 218 corridor north of Hinkle Creek may not have a wide enough public right-of-way to accommodate a 10'-wide separated bike path with the necessary clearance zone and grading, but, this would need to be investigated further. It does appear, however, that there is adequate public right-of-way to construct a pedestrian-only bridge (not a recreation trail) that would connect to the proposed pedestrian pavements on either side. A pedestrian-only bridge/crossing would be less expensive than one for a recreational trail because of the decreased travel-way width required.



Existing Hwy. 218 (K Ave.) at Hinkle Creek - photo taken from north side of Hinkle Creek at intersection of 5th Street W. and Hwy. 218 looking southerly along Hwy. 218 toward Hinkle Creek



Proposed concept illustrates the following enhancements: 6-foot-wide ADA-compliant sidewalk, prefabricated pedestrian bridge, branded way-finding signage, decorative pedestrian lighting with banners, right-of-way planted with native prairie grasses and forbs, with wet ditch areas planted with appropriate native wet prairie/wetland vegetation such as prairie cord grass.

Design Expertise Recommended

Projects in their entirety, or portions of them may require help beyond the capability of the Vinton Visioning Committee, available city staff, and/or volunteers. For the **Hinkle Creek Crossing at Highway 218 (K Ave.)** improvement project the visioning committee should expect to engage the services of a landscape architect, surveyor structural engineer and civil engineer.

The committee should expect to coordinate this project with the Iowa Department of Transportation (Iowa DOT) District Engineer. Permitting may also be required by the Iowa DOT, the US Army Corps of Engineers and Iowa DNR.

Opinion of Probable Construction Cost

| Hinkle Creek Crossing at Hwy. 218 (K Ave.) (See Board #9c for Visual) | | | | | Summer 2023 |
|--|-----------|------|---------------------|----------------------|------------------|
| Description | Est. Qty. | Unit | Estimated Unit Cost | Estimated Line Total | Estimated Totals |
| Earthwork/Grading | | | | | \$ 12,500.00 |
| Earthwork/Grading | | | | | \$ 12,500.00 |
| - Earth Excavation, Fill & Grading | 1 | LS | \$ 12,500.00 | \$ 12,500.00 | |
| PCC Sidewalk (W. 5th St. to Bridge) | | | | | \$ 10,020.00 |
| Pavement on Grade | | | | | \$ 10,020.00 |
| - PCC Pedestrian Pavement, 5", Agg. Base Cse, 4" | 144 | SY | \$ 65.00 | \$ 9,360.00 | |
| - ADA Compliant Detectable Warning Panel | 12 | SF | \$ 55.00 | \$ 660.00 | |
| Landscaping | | | | | \$ 5,000.00 |
| Native Seeding | | | | | \$ 4,500.00 |
| - Planting Prep for Native Vegetation | 1 | LS | \$ 3,000.00 | \$ 3,000.00 | |
| - Seeding and Mulching | 1 | LS | \$ 1,500.00 | \$ 1,500.00 | |
| Rural Seeding | | | | | \$ 500.00 |
| - Seeding and Fertilizing (Rural) | 1 | LS | \$ 500.00 | \$ 500.00 | |
| Decorative Lighting & Banners (Equipment Only, Not Installed) | | | | | TBD |
| Pedestrian Only Fixture (City Purchase) | TBD | EA | \$ 3,000.00 | TBD | TBD |
| Vehicular Only Fixture (City Purchased) | TBD | EA | \$ 7,500.00 | TBD | TBD |
| Pedestrian and Vehicular Combo Fixture (City Purchase) | TBD | EA | \$ 9,500.00 | TBD | TBD |
| Branded Banners (City Purchase) | TBD | EA | \$ 160.00 | TBD | TBD |
| Way-Finding Signage | | | | | \$ 3,200.00 |
| Vehicular Directional Way-Finding Signage Allowance | | | | | \$ 3,200.00 |
| - 3-Destination | 1 | EA | \$ 3,200.00 | \$ 3,200.00 | |
| Pedestrian Bridge | | | | | \$ 119,700.00 |
| Pedestrian Bridge | | | | | \$ 119,700.00 |
| - Bridge Abutments | 1 | LS | \$ 15,000.00 | \$ 15,000.00 | |
| - Pre-Engineered Truss Trail Bridge, 50' L x 10' W | 1 | EA | \$ 90,000.00 | \$ 90,000.00 | |
| - Engineering Fabric | 1 | LS | \$ 2,200.00 | \$ 2,200.00 | |
| - Revetment Stone | 1 | LS | \$ 12,500.00 | \$ 12,500.00 | |
| Miscellaneous | | | | | \$ 30,400.00 |
| Erosion & Sediment Control (5%) | 1 | LS | \$ 7,600.00 | \$ 7,600.00 | |
| Temporary Traffic Control (5%) | 1 | LS | \$ 7,600.00 | \$ 7,600.00 | |
| Mobilization | 1 | LS | \$ 15,200.00 | \$ 15,200.00 | |
| Section Subtotal | | | | | \$ 180,820.00 |
| 30% Contingency Allowance | | | | | \$ 54,246.00 |
| 15% Design & Engineering Allowance | | | | | \$ 35,259.90 |
| Total Probable Construction Cost | | | | | \$ 270,325.90 |
| Total Probable Construction Cost | | | | | \$ 271,000.00 |

Downtown Connection to Celebration Park (Hwy. 150 & 2nd St.)

Celebration Park is a popular destination for the community given its location along the Cedar River and its close proximity to the downtown and county courthouse. This park hosts the Vinton farmers market is welcoming place to relax, enjoy the river, take a quick walk, or have a picnic.

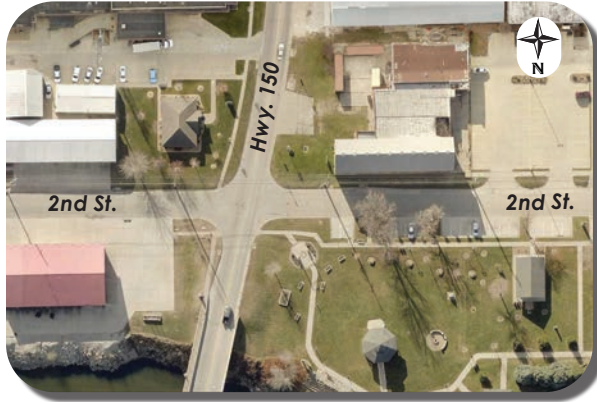
Residents cited concern over the safety of motorists and pedestrians accessing the park from the downtown via the Hwy. 150 corridor. Issues that the proposed concepts address include: traffic calming, traffic control, pedestrian connectivity and ADA accessibility, improved safety, and streetscape aesthetics. The proposed enhancements are illustrated in both plan and perspective views in the images below and on the next page.



Existing view of Hwy. 150 & 2nd St. intersection; photo taken from Hwy. 150 bridge looking southerly toward its intersection with 2nd St. toward downtown Vinton (intersection of Hwy. 150/3rd St. and 1st Ave.)



Proposed enhancements noted in highlights and on proposed aerial plan view

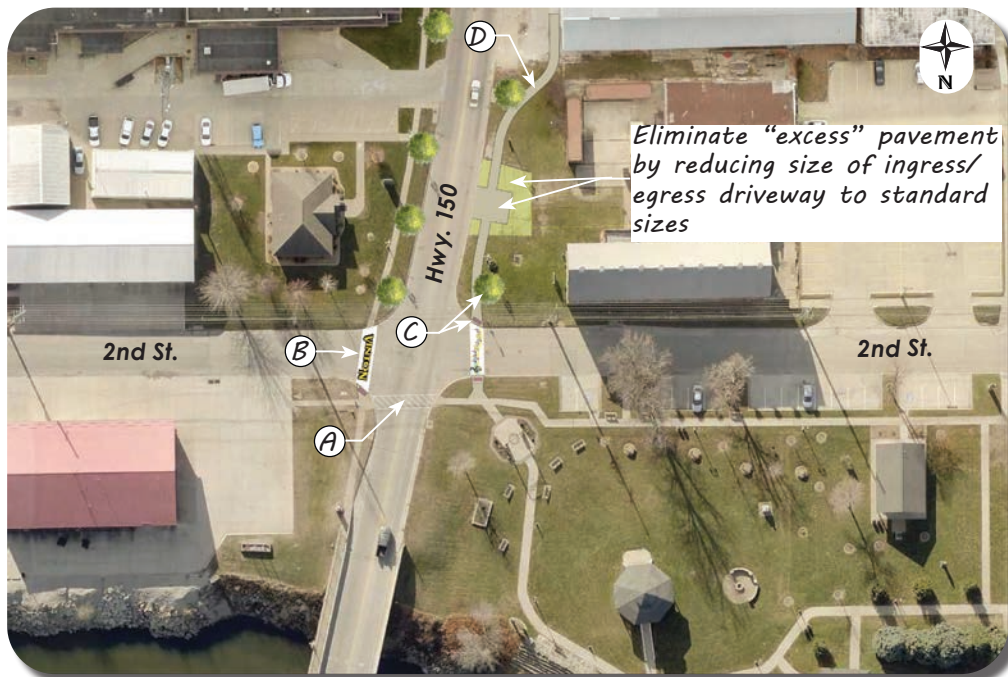


Existing aerial plan view

“...[the] only option for us to run is in the streets. There’s no sidewalk where [we] could run side by side...a lot of the sidewalks in general are very narrow, so it’s hard to just even walk.”



Actives



Proposed aerial plan view

Downtown Connection to Celebration Park Enhancement Highlights

- (A) High-visibility, painted crosswalk with high-visibility crosswalk warning signs alerting motorists of the crosswalks (i.e. in advance flashing lights)
- (B) Decorative pedestrian crosswalks to enhance safety and aesthetics, as well as create visual connectivity to downtown decorative crosswalks
- (C) Street trees, decorative lighting, way-finding signage, traffic-control devices and ADA-compliant sidewalks assist in traffic calming/control while physically and visually linking Celebration Park to the downtown, creating a more aesthetic gateway, and enhancing the safety and user experience of both the motorist and pedestrian
- (D) ADA-compliant sidewalk on west side of Hwy. 150 corridor to strengthen connectivity and enhance pedestrian

Design Expertise Recommended

Projects in their entirety, or portions of them may require help beyond the capability of the Vinton Visioning Committee, available city staff, and/or volunteers. For the **Connectivity From Downtown To Celebration Park** improvement project the visioning committee should expect to engage the services of a landscape architect, surveyor and electrical engineer.

The committee should expect to coordinate this project with the Iowa Department of Transportation (Iowa DOT) District Engineer and Benton County Engineer. Permitting may also be required by the Iowa DOT.

Opinion of Probable Construction Cost

| Connectivity From Downtown To Celebration Park (See Board #9c & #8a for Visual) | | | | | Summer 2023 |
|---|-----------|------|---------------------|----------------------|----------------------|
| Description | Est. Qty. | Unit | Estimated Unit Cost | Estimated Line Total | Estimated Totals |
| PCC Sidewalks | | | | | \$ 17,652.00 |
| Demolition & Earthwork/Grading | | | | | \$ 4,770.00 |
| - Selective Removal | 180 | SY | \$ 22.50 | \$ 4,050.00 | |
| - Earth Excavation & Grading | 40 | CY | \$ 18.00 | \$ 720.00 | |
| Pavement | | | | | \$ 12,882.00 |
| - PCC Pedestrian Pavement, 5" on Agg. Base Cse. 4" | 120 | SY | \$ 65.00 | \$ 7,800.00 | |
| - PCC Driveway Pavement, 6" on Agg. Base Cse. 4" | 66 | SY | \$ 77.00 | \$ 5,082.00 | |
| Landscaping | | | | | \$ 11,312.00 |
| Landscaping | | | | | |
| - Planting Bed Prep & Shredded Hardwood Mulch, 3" | 180 | SF | \$ 8.00 | \$ 1,440.00 | \$ 8,064.00 |
| - PCC Mowing Edge | 144 | LF | \$ 21.00 | \$ 3,024.00 | |
| - Street Trees | 9 | EA | \$ 400.00 | \$ 3,600.00 | |
| Sod | 2320 | SF | \$ 1.40 | \$ 3,248.00 | \$ 3,248.00 |
| Decorative Lighting & Banners (Equipment Only, Not Installed) | | | | | TBD |
| Pedestrian Only Fixture (City Purchase) | TBD | EA | \$ 3,000.00 | TBD | TBD |
| Vehicular Only Fixture (City Purchase) | TBD | EA | \$ 7,500.00 | TBD | TBD |
| Pedestrian and Vehicular Combo Fixture (City Purchase) | TBD | EA | \$ 9,500.00 | TBD | TBD |
| Branded Banner (City Purchase) | TBD | EA | \$ 160.00 | TBD | TBD |
| Way-Finding Signage | | | | | \$ 5,400.00 |
| Vehicular Directional Way-Finding Signage Allowance | | | | | \$ 5,400.00 |
| - 3-Destination | 1 | EA | \$ 3,200.00 | \$ 3,200.00 | |
| - 1-Destination | 1 | EA | \$ 2,200.00 | \$ 2,200.00 | |
| Crosswalks | | | | | \$ 12,472.00 |
| Demolition | | | | | \$ 1,872.00 |
| - Selective Removal (2nd St) | 64 | SY | \$ 22.50 | \$ 1,440.00 | |
| - Curb Removal | 36 | LF | \$ 12.00 | \$ 432.00 | |
| Pavement | | | | | \$ 9,600.00 |
| - Decorative Crosswalk (2nd St.) | 64 | SY | \$ 150.00 | \$ 9,600.00 | |
| Permanent Traffic Control | | | | | \$ 1,000.00 |
| - High Visibility Painted Crosswalk (Hwy. 150) | 1 | LS | \$ 850.00 | \$ 850.00 | |
| - Painted Stop Lines (2nd St.) | 1 | LS | \$ 150.00 | \$ 150.00 | |
| Flashing Beacons (City Purchase, Not Installed) | | | | | \$ 21,600.00 |
| Permanent Traffic Beacons (City Purchase, Not Installed) | | | | | \$ 21,600.00 |
| - Solar LED Flashing Beacon Amber Light W/ Crosswalk Ahead Sign | 2 | EA | \$ 1,900.00 | \$ 3,800.00 | |
| - Push Button Pedestrian Flashing Crosswalk Sign | 2 | EA | \$ 8,900.00 | \$ 17,800.00 | |
| Miscellaneous | | | | | \$ 14,000.00 |
| Erosion & Sediment Control (5%) | 1 | LS | \$ 3,500.00 | \$ 3,500.00 | |
| Temporary Traffic Control (5%) | 1 | LS | \$ 3,500.00 | \$ 3,500.00 | |
| Mobilization (10%) | 1 | LS | \$ 7,000.00 | \$ 7,000.00 | |
| Section Subtotal | | | | | \$ 82,436.00 |
| 30% Contingency Allowance | | | | | \$ 24,730.80 |
| 15% Design & Engineering Allowance | | | | | \$ 16,075.02 |
| Total Probable Construction Cost | | | | | \$ 123,241.82 |
| Total Probable Construction Cost | | | | | \$ 124,000.00 |

Hinkle Creek Crossing at Hwy. 218 (K Ave.)

The lack of a pedestrian bridge over Hinkle Creek along Hwy. 218 was cited by residents as a major transportation barrier affecting the safety of both motorists and pedestrians.

The concept illustrated below was developed based on the feedback received from residents. According to a cursory review of available records, it appears that the Hwy. 218 corridor north of Hinkle Creek may not have a wide enough public right-of-way to accommodate a 10'-wide separated bike path with the necessary clearance zone and grading, but this would need to be investigated further. It does appear, however, that there is adequate public right-of-way to construct a pedestrian-only bridge (not a recreation trail) that would connect to the proposed pedestrian pavements on either side. A pedestrian-only bridge/crossing would be less expensive than one for a recreational trail because of the decreased travel-way width required.



Existing Hwy. 218 (K Ave.) photo taken from north side of Hinkle Creek at intersection of 5th Street W. and Hwy. 218 showing stop sign and utility poles toward Hinkle Creek



Proposed concept illustrates the following enhancements: 6-foot-wide ADA-compliant sidewalk, pre-fabricated pedestrian bridge, branched way-finding signage, decorative pedestrian lighting with banners, right-of-way planted with native prairie grasses and forbs, with water-tolerant areas planted with appropriate native wet prairie wetland vegetation such as prairie cord grass.

Downtown Connection to Celebration Park (Hwy. 150 & 2nd St.)

Celebration Park is a popular destination for the community given its location along the Cedar River and its close proximity to the downtown and county courthouse. This park hosts the Vinton farmers markets welcoming place to relax, enjoy the river, take a quick walk, or have a picnic.

Residents cited concern over the safety of motorists and pedestrians accessing the park from the downtown via the Hwy. 150 corridor. Issues that the proposed concepts address include: traffic calming, traffic control, pedestrian connectivity and ADA accessibility, improved safety, and streetscape aesthetics.

The proposed enhancements are illustrated in both plan and perspective views in the images below and to the right.



"...[the] only option for us to run is in the streets- [we] could run side by side...a lot of the sidewalks in general are very narrow, so it's hard to just even walk..."



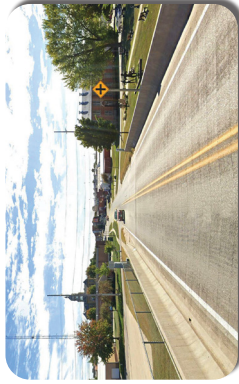
Actives



Proposed aerial plan view

9c

Existing view of Hwy. 150 & 2nd St. intersection; photo taken from Hwy. 150 bridge looking southward toward the intersection of Hwy. 150 and 2nd St. (intersection of Hwy. 150/2nd St. and 1st Ave.)



Proposed enhancements noted in highlights and on proposed aerial plan view

Downtown Connection to Celebration Park Enhancement Highlights

- A High-visibility painted crosswalk with high-visibility crosswalk warning signs alerting motorists of the crosswalks (i.e. in advance flashing lights)
- B Decorative pedestrian crosswalks to enhance safety and aesthetics, as well as create visual connectivity to downtown decorative crosswalks
- C Street trees, decorative lighting, way-finding signage, traffic-control devices and ADA-compliant sidewalks assist in traffic calming/control while physically and visually linking Celebration Park to the downtown, creating a more aesthetic gateway, and enhancing the safety and user experience of both the motorist and pedestrian
- D ADA-compliant sidewalk on west side of Hwy. 150 corridor to strengthen connectivity and enhance pedestrian safety and accessibility by providing an alternative to route to avoid crossing Hwy. 150 at base of bridge

Vinton Connectivity and Accessibility

Flenker Land Architects Consultants, LLC

LA: Meg Flenker, PLA, CPESC, CPSWG
Interns: Trevor Smith, Mikky Ojha

Iowa State University | Trees Forever | Iowa Department of Transportation



Trail Extension + Enhancements

Trail Extension + Enhancements

Creating a looped trail system that connects to the Old Creamery Trail, the Glow Trail, and regional trail systems such as the Cedar Valley Nature Trail was identified by residents as one of their most desired improvements. During the design workshop, community members had the opportunity to interact with the design team and communicate their opinions and ideas as to the route selection and what routes were priority – this was done by having them place Wiki Stix sticks on an aerial plan of the community in the location(s) they wanted trails and sidewalks. Residents gave highest priority to routes that would have the greatest impact to improving connectivity, accessibility, and safety.

The pedestrian circulation map shown on board 9a provides an overview of the proposed location(s) for trail extensions and sidewalks based on the community input received. This board and board 10b provide illustrations as to how these proposed improvements are envisioned.

The Vinton proposed trail system is anticipated to be comprised of three main segment types based on trail location and site conditions that consist of:

- 1) Shared road (pavement markings and signage) – shown on this board
- 2) Separated trail (recommend 10-foot-wide travel-way with 2-foot grass shoulders) – see board 10b
- 3) Paved road shoulder bike lane (recommend a 4-foot minimum buffer area between roadway and trail lane, with buffer area consisting of rumble strip and painted buffer between lane and shoulder lane)

Design Expertise Recommended

Projects in their entirety, or portions of them may require help beyond the capability of the Vinton Visioning Committee, available city staff, and/or volunteers. For the **4th Street and 9th Avenue Enhancement** improvement project and **Hwy. 218 and 13th Street Enhancement** improvement project, the visioning committee should expect to engage the services of a landscape architect, surveyor and civil engineer.

The committee should expect to coordinate any work adjacent to or within the right-of-way of Highway 218 with the Iowa Department of Transportation (Iowa DOT) District Permitting may also be required by the Iowa DOT for such work.



Existing view of 9th Ave. when looking north from 4th St.



Shared road segment: 9th Avenue proposed enhancements (extend from 3rd St. north to hospital)

4th Street and 9th Avenue Enhancement Elements

- 6-foot-wide ADA-compliant sidewalk on both the east and west sides of 9th Avenue from 3rd Street north to the north side of the hospital to serve as main pedestrian corridor and a segment of the safe route to schools
- Shared road pavement markings and associated signage
- Directional way-finding at appropriate locations
- Decorative lighting with banners can be added along the roadway to improve safety and serve as a way-finding tool to the hospital, Riverside Park, Vinton Country Club, and the Vinton Community Swimming Pool
- Enhanced hardscape: street and concrete curb and gutter

Opinion of Probable Construction Cost

| 9th Ave. and 3rd Street Intersection Enhancements (See Board # 10a for Visual) | | | | | Summer 2023 | |
|---|-----------|------|---------------------|----------------------|----------------------|--|
| Description | Est. Qty. | Unit | Estimated Unit Cost | Estimated Line Total | Estimated Totals | |
| PCC Sidewalks (9th Ave.-3rd St. Intersection to Hospital Segment) | | | | | \$ 209,030.50 | |
| Demolition & Earthwork/Grading | | | | | \$ 20,788.50 | |
| - Curb Removal | 130 | LF | \$ 12.00 | \$ 1,560.00 | | |
| - Selective Removal | 581 | SY | \$ 22.50 | \$ 13,072.50 | | |
| - Earth Excavation & Grading | 342 | CY | \$ 18.00 | \$ 6,156.00 | | |
| Pavement | | | | | \$ 176,362.00 | |
| - PCC Pedestrian Pavement, 5" on Agg. Base Cse. 4" | 2025 | SY | \$ 65.00 | \$ 131,625.00 | | |
| - PCC Driveway Pavement, 6" on Agg. Base Cse. 4" | 581 | SY | \$ 77.00 | \$ 44,737.00 | | |
| ADA Compliant Detectable Warning Panel | 216 | SF | \$ 55.00 | \$ 11,880.00 | \$ 11,880.00 | |
| Segmental Retaining Wall (9th Ave.-3rd St. Intersection to Hospital Segment) | | | | | \$ 56,400.00 | |
| Segmental Retaining Wall | | | | | \$ 56,400.00 | |
| - Segmental Retaining Wall | 1880 | SF | \$ 30.00 | \$ 56,400.00 | | |
| Landscaping (9th Ave.-3rd St. Intersection to Hospital Segment) | | | | | \$ 7,000.00 | |
| Urban Seeding | | | | | \$ 7,000.00 | |
| - Seeding and Fertilizing (Urban) & Mulching | 1 | LS | \$ 7,000.00 | \$ 7,000.00 | | |
| Decorative Lighting & Banners (Equipment Only, Not Installed) | | | | | TBD | |
| Pedestrian Only Fixture (City Purchase) | TBD | EA | \$ 3,000.00 | TBD | TBD | |
| Vehicular Only Fixture (City Purchase) | TBD | EA | \$ 7,500.00 | TBD | TBD | |
| Pedestrian and Vehicular Combo Fixture (City Purchase) | TBD | EA | \$ 9,500.00 | TBD | TBD | |
| Branded Banners (City Purchase) | TBD | EA | \$ 160.00 | TBD | TBD | |
| Signage & Markings (9th Ave.-3rd St. Intersection to Hospital Segment) | | | | | \$ 14,900.00 | |
| Vehicular Directional Way-Finding Signage Allowance | | | | | \$ 6,400.00 | |
| - 3-Destination | 2 | EA | \$ 3,200.00 | \$ 6,400.00 | | |
| Branded Street Name Signage Only (City Purchase, Not Installed) | | | | | \$ 1,300.00 | |
| - Branded Street Name Sign (City Purchase) | 8 | EA | \$ 100.00 | \$ 800.00 | | |
| - Break-A-Way Post (City Purchase) | 4 | EA | \$ 125.00 | \$ 500.00 | | |
| Share the Road | | | | | \$ 5,400.00 | |
| - Painted Sharrow Marking | 8 | EA | \$ 75.00 | \$ 600.00 | | |
| - Share the Road Signage | 8 | EA | \$ 600.00 | \$ 4,800.00 | | |
| Permanent Traffic Control | | | | | \$ 1,800.00 | |
| - Painted Crosswalks | 1 | LS | \$ 1,800.00 | \$ 1,800.00 | | |
| Miscellaneous (9th Ave.-3rd St. Intersection to Hospital Segment) | | | | | \$ 57,600.00 | |
| Erosion & Sediment Control (5%) | 1 | LS | \$ 14,400.00 | \$ 14,400.00 | \$ 14,400.00 | |
| Temporary Traffic Control (5%) | 1 | LS | \$ 14,400.00 | \$ 14,400.00 | \$ 14,400.00 | |
| Mobilization (10%) | 1 | LS | \$ 28,800.00 | \$ 28,800.00 | \$ 28,800.00 | |
| | | | | | | |
| Subtotal | | | | | \$ 344,930.50 | |
| 30% Contingency Allowance | | | | | \$ 103,479.15 | |
| 15% Design & Engineering Allowance | | | | | \$ 67,261.45 | |
| Opinion of Total Probable Construction Cost* | | | | | \$ 515,671.10 | |
| | | | | | | |
| Preliminary Opinion of Total Probable Construction Cost* | | | | | \$ 516,000.00 | |



Existing view from Hwy. 218 (K Ave.) looking easterly along 13th St.



Hwy. 218 (K Ave.) and 13th Street proposed enhancements; shared road segment

Hwy 218 and 13th Street Enhancement Highlights

- 6-foot-wide ADA-compliant sidewalk on both the north and south sides of 13th Street from Highway 218 to 2nd Ave. on south side and 8th Ave. on north side to serve as main pedestrian corridor and a segment of the safe routes to school
- Shared road pavement markings and associated signage to enhance safety
- Directional way-finding at appropriate locations and branded street signs to enhance community identity
- High-visibility painted crosswalks at main intersections to enhance safety
- Street trees to provide shade, assist in traffic calming, and enhance the aesthetics of the streetscape
- Site amenities (i.e., benches, bike racks, trash receptacles) to enhance user comfort along main pedestrian routes and bike trail
- Seating pads for benches - bench located on concrete adjacent to sidewalk/ trail, landscaped on the sides and back with low-maintenance plantings tolerant of conditions

Trail Extension + Enhancements

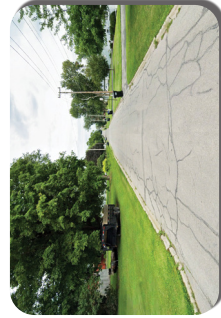
Creating a looped trail system that connects to the Old Creamery Trail, the Glow Trail, and regional trail systems such as the Cedar Valley Nature Trail was identified by residents as one of their most desired improvements. During the design workshop, community members had the opportunity to interact with the design team and communicate their opinions and ideas as to the route selection and what routes were priority - this was done by having them place Wiki Stix sticks on an aerial plan of the community in the location(s) they wanted trails and sidewalks. Residents gave highest priority to routes that would have the greatest impact to improving connectivity, accessibility, and safety.

The pedestrian circulation map shown on board 9a provides an overview of the proposed location(s) for trail extensions and sidewalks based on the community input received. This board and board 10b provide illustrations as to how these proposed improvements are envisioned.

The Vinton proposed trail system is anticipated to be comprised of three main segment types based on trail location and site conditions that consist of:

- 1) Shared road (pavement markings and signage) - shown on this board
- 2) Separated trail (recommend 10-foot-wide travel-way with 2-foot grass shoulders) - see board 10b
- 3) Paved road shoulder bike lane (recommend a 4-foot minimum buffer area between roadway and trail lane, with buffer area consisting of rumble strip and a painted buffer between lane and shoulder lane)

Existing view of 9th Ave. when looking north from 4th St.



10a

Existing view from Hwy. 218 (K Ave.) looking easterly along 13th St.



Shared road segment: 9th Avenue proposed enhancements (extended from 3rd St. north to hospital)

- #### 4th Street and 9th Avenue Enhancement Elements
- 6-foot-wide ADA-compliant sidewalk on both the east and west sides of 9th Avenue from 3rd Street north to the north side of the hospital to serve as main pedestrian corridor and a segment of the safe route to schools
 - Shared road pavement markings and associated signage
 - Directional way-finding at appropriate locations
 - Decorative lighting with banners can be added along the roadway to improve safety and serve as a way-finding tool to the hospital, Riverside Park, Vinton Country Club, and the Vinton Community Swimming Pool
 - Enhanced hardscape: street and concrete curb and gutter



Hwy. 218 (K Ave.) and 13th Street proposed enhancements; shared road segment

- #### Hwy 218 and 13th Street Enhancement Highlights
- 6-foot-wide ADA-compliant sidewalk on both the north and south sides of 13th Street from Highway 218 to 2nd Ave. on south side and 8th Ave. on north side to serve as main pedestrian corridor and a segment of the safe routes to school
 - Shared road pavement markings and associated signage to enhance safety
 - Directional way-finding at appropriate locations and branded street signs to enhance community identity
 - High-visibility painted crosswalks at main intersections to enhance safety
 - Street trees to provide shade, assist in traffic calming, and enhance the aesthetics of the streetscape
 - Site amenities (i.e. benches, bike racks, trash receptacles) to enhance user comfort along main pedestrian routes and bike trail
 - Seating pads for benches - bench located on concrete adjacent to sidewalk/trail, landscaped on the sides and back with low-maintenance plantings tolerant of conditions

Vinton

Trail Extension + Enhancements

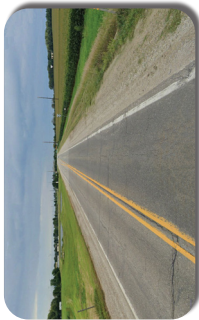
Flenker Land Architects Consultants, LLC

LA: Meg Flenker, P.L.A., CPESC, CPSWG
Interns: Trevor Smith, Mikky Oljha

Iowa State University | Trees Forever | Iowa Department of Transportation



Existing Hwy. 218 photo taken approximately 0.25-mile northwest of Hwy. 218 & Hwy. 150 intersection, near northwest end of abatement park, showing the existing roadway extending toward the Hwy. 218 & Hwy. 150 intersection.



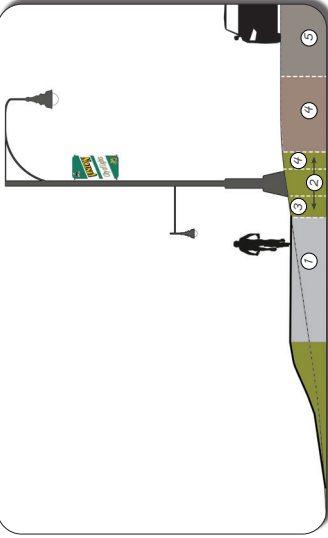
Paved road shoulder bike lane: Hwy. 218 proposed enhancements (option 1, interim)



Separated 10-foot-wide trail bike trail: Hwy. 218 proposed enhancements (option 2, preferred/final)



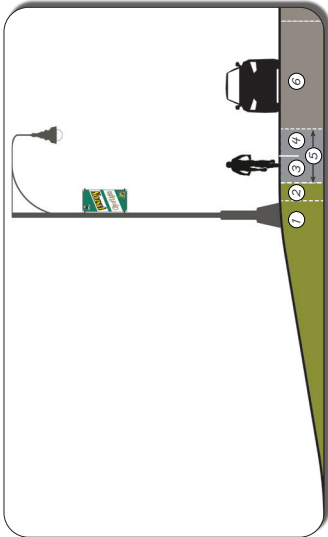
Excerpt from the proposed pedestrian circulation map shown on board 9a. This illustrates the location for the paved shoulder bike lane that is proposed to be an interim segment until a separated trail can be installed in this area as shown on the above excerpt.



Separated 10-foot-wide bike trail along Hwy. 218 - typical section

Trail Extension on Hwy. 218 - Separated 10-foot Bike Trail

- ① 10-foot-wide paved trail with 2' grass shoulder each side and a minimum 2'-wide clearance from vertical obstruction
- ② Roadway separation/furnishing zone (minimum 6-foot width); Decorative lighting with banners, way-finding signage;
- ③ Minimum 2' distance from edge of roadway shoulder and edge of trail
- ④ Existing +/- 8-foot-wide gravel shoulder of road
- ⑤ Existing driving lane (+/- 12' to +/- 14')



Paved road shoulder bike lane along Hwy. 218 - typical section

Trail Extension on Hwy. 218 - Paved Shoulder Bike Lane

- ① Furnishing zone; Decorative lighting with banners, way-finding signage
- ② Minimum 2'-foot shoulder/clearance from vertical obstruction
- ③ Minimum 4-foot-wide paved shoulder (one-way, one each side of road)
- ④ +/- 4' wide buffer with rumble strips and paint markings; signage
- ⑤ Existing +/- 8-foot-wide gravel shoulder of road
- ⑥ Existing driving lane (+/- 12' to +/- 14')

Vinton

Trail Extension + Enhancements

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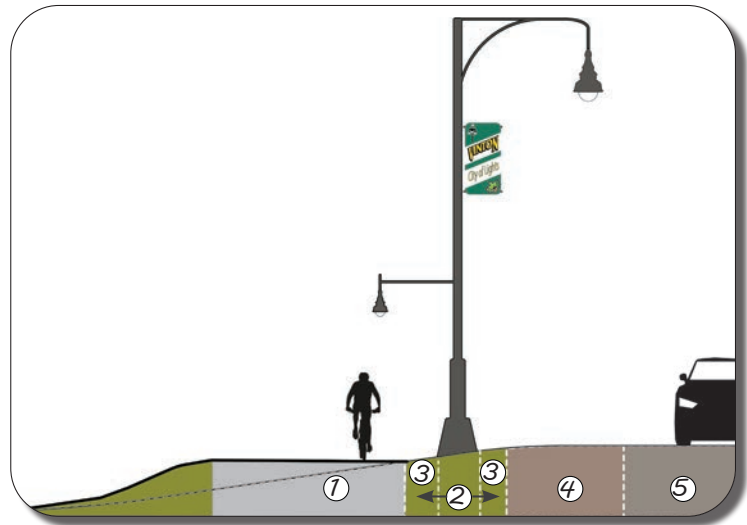
Existing Hwy. 218; photo taken approximately 0.25-miles northwest of Hwy. 218 & Hwy. 150 intersection, near northwest end of detention park area. Photo is looking southeasterly toward the Hwy. 218 & Hwy. 150 intersection.



Separated 10-foot wide trail: Hwy. 218 proposed enhancements



Excerpt from the proposed pedestrian circulation map shown on board 9a. This illustrates the location for the paved shoulder bike lane that is proposed to be an interim segment until a separated trail can be installed in this area as shown on the above excerpt.



----- Separated 10-foot-wide bike trail along Hwy. 218 - typical section

Trail Extension on Hwy. 218- Separated 10-foot Bike Trail

- ① 10-foot-wide paved trail with 2' grass shoulder each side and a minimum 2'-wide clearance from vertical obstruction
- ② Roadway separation/furnishing zone (minimum 6-foot width): Decorative lighting with banners, way-finding signs
- ③ Minimum 2' distance from edge of roadway shoulder and edge of trail
- ④ Existing +/- 8-foot-wide gravel shoulder of road
- ⑤ Existing driving lane (+/- 12' to +/- 14')

Design Expertise Recommended

Projects in their entirety, or portions of them may require help beyond the capability of the Vinton Visioning Committee, available city staff, and/or volunteers. For the **Separated Bike Trail Enhancement** improvement project the visioning committee should expect to engage the services of a landscape architect, surveyor, and civil engineer. The committee can expect that verification of the project and its layout may be required with the authority that required the mitigation pond.



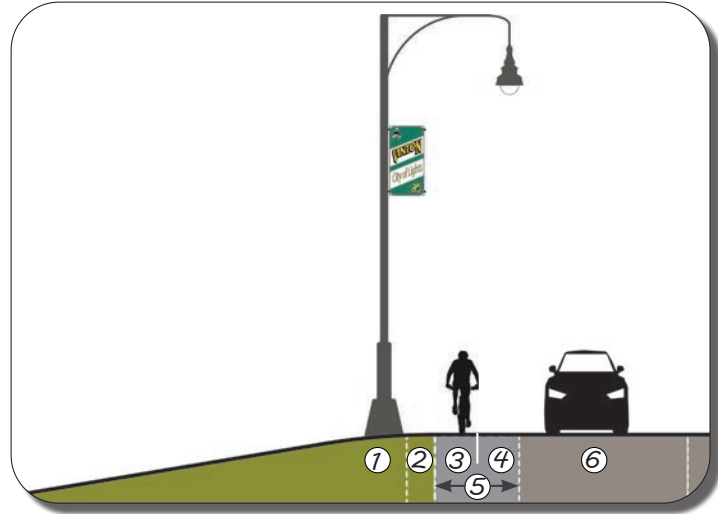
Existing Hwy. 218; photo taken approximately 0.25-miles northwest of Hwy. 218 & Hwy. 150 intersection, near northwest end of detention park area. Photo is looking southeasterly toward the Hwy. 218 & Hwy. 150 intersection.



Paved road shoulder bike lane along Hwy. 218 - typical section



Excerpt from the proposed pedestrian circulation map shown on board 9a. This illustrates the location for the paved shoulder bike lane that is proposed to be an interim segment until a separated trail can be installed in this area as shown on the above excerpt.



----- Paved road shoulder bike lane along Hwy. 218 - typical section

Trail Extension on Hwy. 218- Paved Shoulder Bike Lane

- ① Furnishing zone: Decorative lighting with banners, way-finding signage
- ② Minimum 2-foot shoulder/clearance from vertical obstruction
- ③ Minimum 4-foot-wide paved shoulder (one-way, one each side of road)
- ④ +/- 4' wide buffer with rumble strips and paint markings; signage
- ⑤ Existing +/- 8-foot-wide gravel shoulder of road
- ⑥ Existing driving lane (+/- 12' to +/- 14')

Design Expertise Recommended

Projects in their entirety, or portions of them may require help beyond the capability of the Vinton Visioning Committee, available city staff, and/or volunteers. For the **Paved Shoulder Bike Lane Enhancement** project the visioning committee should expect to engage the services of a landscape architect, surveyor, and civil engineer.

The committee can expect that they will have to coordinate with the Iowa DOT District Engineer and possibly the Benton County Engineer; IDOT permitting may also be required.

Opinion of Probable Construction Cost

To Be Determined

Trail Planning Cost Tool

The following information is taken from the most recent Iowa Department of Transportation's Iowa Bicycle and Pedestrian Long-Range Plan. This plan is dated December 11, 2018.

Cost estimates

While every trail is unique, it is possible to estimate an approximate cost per mile based on historical project data. In recent years, hundreds of miles of trail have been constructed in Iowa. An analysis of the construction costs shows that trails built on abandoned railroad grades are less expensive per mile than trails built on virgin land, while trails in cities or those requiring significant grading are among the most expensive.

Per mile costs for varying types of accommodations, based on recent historical construction costs, are presented in the following table. The modification factors are multipliers used to adjust the base cost per mile depending on varying conditions. For example, the typical cost per mile for a multi-use trail on former railroad grade is \$200,000 (0.5 modification factor times the \$400,000 base cost) and the typical cost per mile for a new sidepath along a rural roadway is \$480,000 (1.6 times \$300,000).

Table 5.2: Typical per mile cost estimates for multi-use trails based on historic costs in Iowa

| Facility Type | Typical Cost per Mile | Modification Factors | |
|--|-----------------------|------------------------|-----|
| New paved multi-use trail on independent alignment, 10' wide | \$400,000 | Former RR grade | 0.5 |
| | | Flat terrain | 0.6 |
| | | Rolling terrain | 1.0 |
| | | Hilly terrain | 1.2 |
| | | Along stream bank | 1.2 |
| | | Densely developed area | 2.0 |
| New paved sidepath, 10' wide | \$300,000 | Along urban roadway | 1.0 |
| | | Along rural roadway | 1.6 |
| | | Densely developed area | 1.4 |
| Upaved multi-use trail | \$200,000 | Former RR grade | 0.6 |
| | | Flat terrain | 1.0 |
| | | Rolling terrain | 1.2 |
| | | Hilly terrain | 1.4 |

Table 5.5: National Trail and USBRS per-mile cost estimates based on historic costs in Iowa

| Facility Type | Typical Cost per Mile | Modification Factors | |
|--|-----------------------|--|------|
| New paved multi-use trail on independent alignment, 10' wide | \$400,000 | Former RR grade | 0.5 |
| | | Flat terrain | 0.6 |
| | | Rolling terrain | 1.0 |
| | | Hilly terrain | 1.2 |
| | | Along stream bank | 1.2 |
| | | Densely developed area | 2.0 |
| New paved sidepath, 10' wide | \$300,000 | Along urban roadway | 1.0 |
| | | Along rural roadway | 1.6 |
| | | Densely developed area | 1.4 |
| New paved shoulders, 5' wide both sides | \$175,000* | Adequate shoulder width present | 1.0 |
| | | Embankment widening required | 2.0 |
| | | As a standalone project | 1.2 |
| | | (not part of a larger 3R** project) | |
| Shared Lane/Road | \$500 | Rural route generally follows one road with few turns (wayfinding signage) | 1.0 |
| | | Rural route includes many turns onto different roads (wayfinding signage) | 2.0 |
| | | Urban Route (wayfinding signage and shared lane markings) | 10.0 |

* The probable course of implementation is to provide paved shoulders as part of future reconstruction work during which paved shoulders would likely be provided anyway based on traffic volume. Paved shoulders provide many benefits such as reduced maintenance costs, reduction in run-off-road crashes, etc., so these costs should not be seen as solely for the benefit of bicycling and walking.

** Resurfacing, restoration, or rehabilitation. These projects are less intensive than reconstruction projects and are typically budgeted and scheduled the same year that they are completed

Implementation Strategies

The Visioning Program is just the beginning of the planning process for implementation of projects that will contribute to an enhanced quality of life in Vinton. Although there is much value in data gathering, analysis, conclusions and recommendations, the greatest value is providing the residents of Vinton 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 of community resources.

Expertise from a team of allied professions may be needed to successfully design and implement several of the identified improvement projects. A landscape architecture consultant is best suited to lead and manage the design process. This helps ensure that the community's goals 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.

It is recommended that projects be approached individually, keeping in mind some may occur at the same time or may require phasing to be completed. Short term projects are those that can be more easily accomplished or address safety issues. Long range projects will need to be implemented based on available funds and agreements with private landowners. Based on the strategy that early success builds momentum, we recommend the first projects be those that can be more easily accomplished and be highly visible.

Implementation Strategy Overview

Step One

Identify a Community Steering Committee to continue the momentum of the Community Visioning process. This group or groups will oversee the selection, planning and development of the projects.

Step Two

Develop a list that ranks all of the projects outlined in the feasibility study. This list will help prioritize goal setting, planning, and funding. Remember that each concept outlined in the feasibility study can be broken down in to smaller parts and phased.

Step Three

Identify a project to be implemented. Start with a small scale project such as way-finding signage or crosswalks, or an addition to a project that the city is already planning. Implementation of a small project can have a larger catalytic effect. It creates a visible statement that change is happening, keeps the momentum going and can be a great motivation for building support and funding for future projects. Determine whether further design or planning is needed.

Step Four

With each project, identify potential funding sources to finance the implementation of a small scale catalyst project and the higher priority projects.

Step Five

Once a grant, loan or other funding source has been secured, develop a plan for contracting for additional design, advertising for bid and contracting for construction of the project.

Step Six

Select and contract with a landscape architect or design professional as your lead design consultant for the identified community improvement project. Allow 3-6 months in the project timeline for design and construction documentation development.

Step Seven

Advertise and solicit competitive bids from contractors experienced in the type of work being bid. Allow 1-2 months in the project timeline for the bidding process, contractor selection, and execution of contract with a general contractor for the identified community improvement project. Allow 3-9 months in the project timeline for the construction of the project. The time required for the construction will be dependent upon the scope, size and complexity of the project.

Step Eight

Repeat the steps as each new project is determined

Implementation Timeline

Typical Timeline from Start of Design to Final Project Construction

| | |
|---|---------------|
| Selection and Execution of Contract with Designer | 1 - 3 months |
| Design and Construction Document Development: | 3 - 6 months |
| Project Bidding and Contractor Selection: | 1 - 3 months |
| <u>Construction:</u> | 3 - 10 months |
| | 8 - 22 months |

Implementation
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 Vinton.

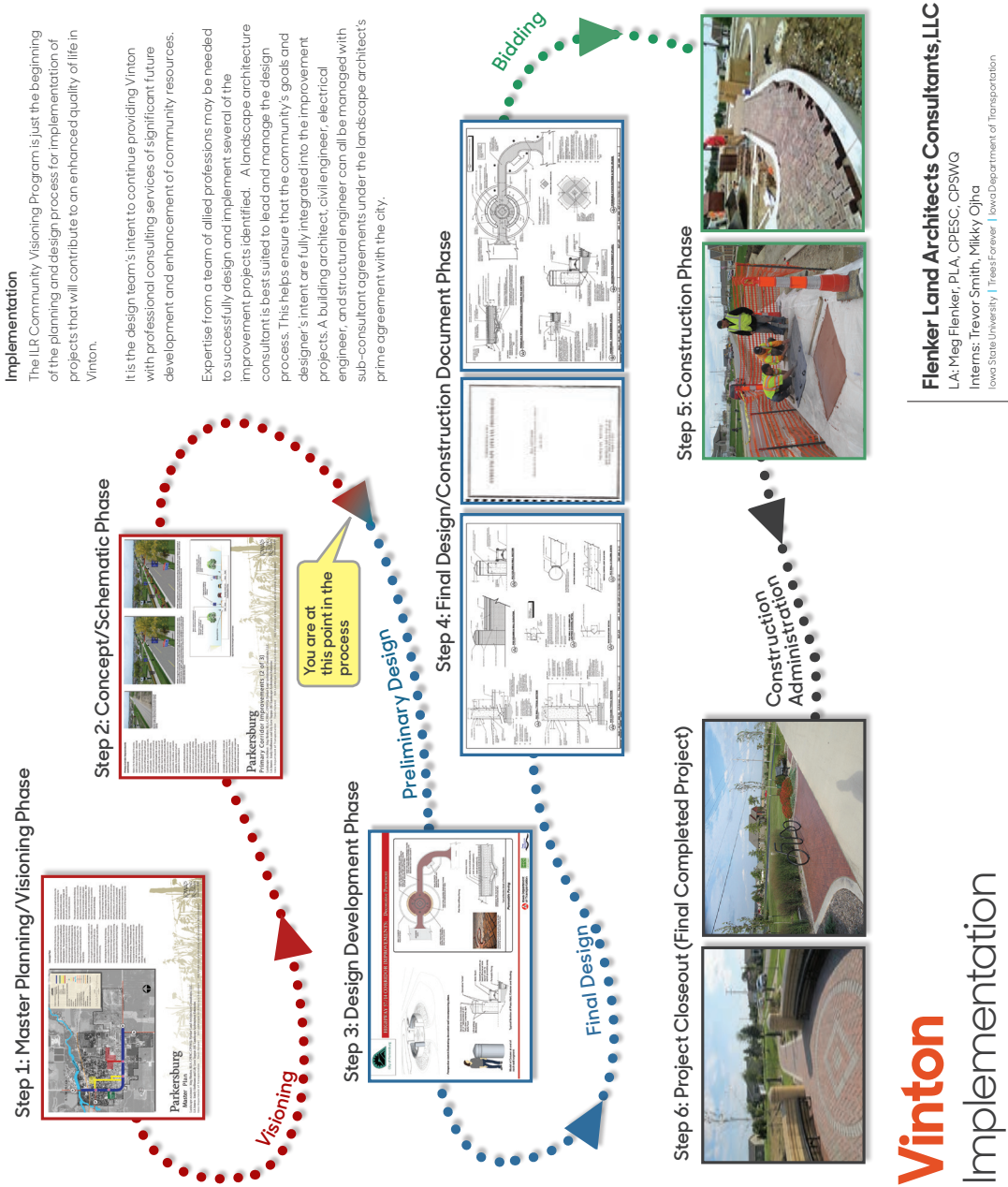
It is the design team's intent to continue providing Vinton with professional consulting services of significant future development and enhancement of community resources.

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 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. A building 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.

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

Year 1:
TASK 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 first project for implementation and **identify all applicable and eligible grant funding 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.**

Year 2:
TASK 1 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. Step 3: Design Development Phase, of the design process then begins.**
TASK 2 Reassess top three priority projects based on grant application success and **repeat Task 2-4 for a second project.**



Vinton
Implementation

Flenker Land Architects Consultants, LLC
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Interns: Trevor Smith, Mikky Oljha
Iowa State University | Trees Forever | Iowa Department of Transportation



Available Resources

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

Funding Opportunities

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

Funding Sources

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

Grant Programs

- Alliant Energy and Trees Forever Branching Out Program
- Federal Surface Transportation Program (STP)
- Iowa Clean Air Attainment Program (ICAAP)
- Iowa DOT/DNR Fund Iowa
- Iowa DOT 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)

2023