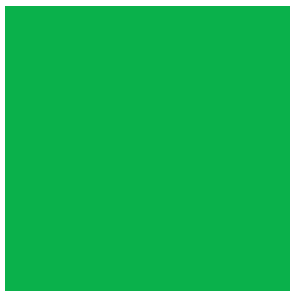


# FOREST CITY

Final Report and Feasibility Study | 2018



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

# Participants

## Town Visioning Committee

Norma Hertzler	Pat Lovik	Aaron Korth
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University of Nebraska - Lincoln

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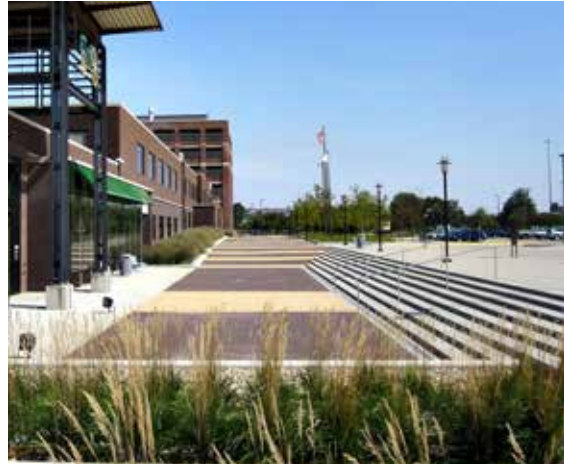
# About RITLAND+KUIPER Landscape Architects

Craig Ritland founded the firm Craig Ritland Landscape Architect (CRLA) in 1970 in Waterloo, Iowa. Since developing the master plan for George Wyth Memorial State Park in the early 1970s, this office has participated in many of the important public improvements that have added to the quantity and quality of open space in Iowa. With over 50 years of experience, Craig Ritland is still the lead principal of the firm bringing invaluable insight and expertise to each project.

In 2013, CRLA became RITLAND+KUIPER Landscape Architects, a full-service landscape architectural firm with CLARB and State Registered Landscape Architects. The firm consists of three full-time Landscape Architects with 78 years of combined experience.

Throughout our history, RKL A has provided park and recreation master planning and detailed design and construction services for a diverse array of City, County, and State recreation areas.

We enjoy utilizing a highly interactive process with our clients, often through the facilitation of public input. One example of this is our annual work over the past 20 years with the Iowa Living Roadways Community Visioning Program with Iowa State University and Trees Forever. We have guided the public input in over 35 different communities and have helped them develop plans that, in many cases, have lead to successful community enhancements.



**RITLAND+KUIPER**  
LANDSCAPE ARCHITECTS

## Program Overview

Forest City is one of 10 communities selected to participate in the 2018 Iowa's Living Roadways Community Visioning Program. The program, which selects communities through a competitive application process, provides professional planning and design assistance along transportation corridors to small Iowa communities (populations of fewer than 10,000).

Goals for the Visioning Program include:

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

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

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

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

### Community Goals

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

- Pammel Park: Improve park's entrance, create parking, relocate existing baseball fields, restructure camping area to improve quality of camping, convert baseball field to dog park, and add rental cabins
- Safety: Improve existing sidewalks, enhance pedestrian crosswalks, and update lighting within specific areas of the community
- Recreation: Create a trails master plan, designate a cultural corridor along J Street with 10' trails, and implement new baseball fields
- Signage: Expand the community theme to include way-finding signage and incorporate art onto local grain silo

### Capturing the Forest City 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.

SUMMER 2018 1



Existing Welcome Signage



Annotated Map from the Transportation Analysis Meeting



Community Workshop Exercise at Forest City's YMCA



Created Image Showing Cultural Corridor along J Street

### Program Overview

Forest City was one of 10 communities selected to participate in the 2018 Iowa's Living Roadways (ILR) 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).

The ILR Community Visioning Program assists community members with planning local transportation systems that are safe, accessible, and ecologically sensitive. Planning also takes into account local use patterns and needs of residents, and supports these goals by gathering research-based information that guides transportation goal setting and design.

### Community Goals

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### Capturing the Forest City Vision

Based on the needs and desires of 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, Transportation Inventory and Analysis, Concept Overview, and Community Design boards.

# Forest City Program Overview

**RITLAND+KUIPER Landscape Architects**  
 Landscape Architects: Craig Ritland, FASLA & Samantha Price, PLA  
 Landscape Architecture Intern: Jerry Philbin  
 Iowa State University | Trees Forever | Iowa Department of Transportation



# Bioregional Assessment

## Settlement Patterns

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

### **Forest City 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?



SPRING 2018 2a

**Settlement Patterns**

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Map Source: Iowa Department of Natural Resources. "Natural Resources Geographic Information Systems Library." <http://www.gis.iowa.edu/mgpi/ibx/>

**Forest City**

Settlement Patterns

**Bioregional Context**

Julia Bodenhopf, Casey Cox, Riley Dunn, Dominick Florer, Hatvany Gomez- Concepcion, Ngoc Ho, Henry Herman, Alyse Kir kman, Gianni Koutsou, Emma Lorenz, Zoey Mauck, Carol Ustine  
 Iowa State University | Trees Forever | Iowa Department of Transportation



## Historical Vegetation

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

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

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

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

---

<sup>1</sup> 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.

SPRING 2018 2b

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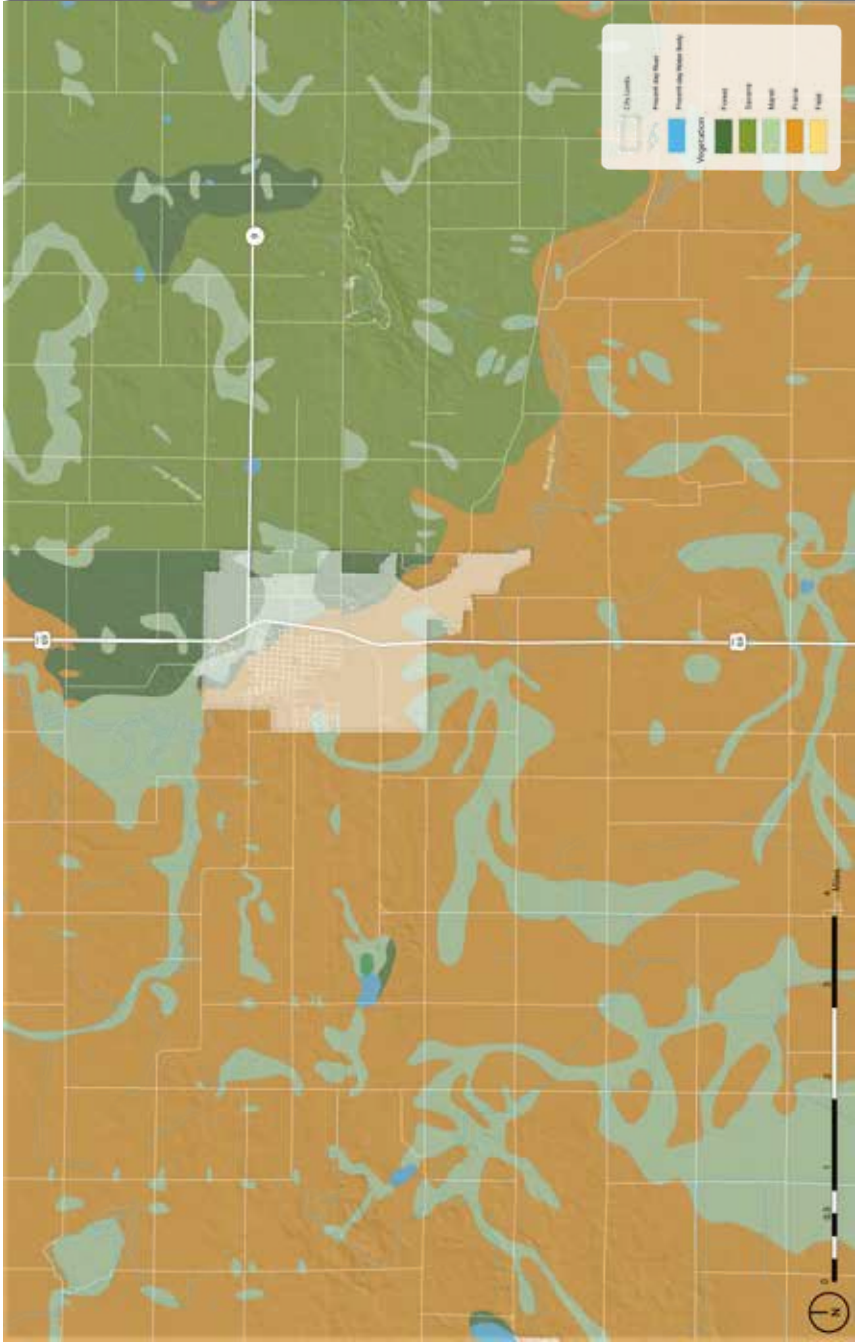
The names of plant communities mapped by the GLO surveyors varied. The original terminology used by the surveyors who made maps has been preserved in the original data, but we have renamed the plant types on this map to reflect names used in contemporary ecological vegetation communities.

Not all communities will show all vegetation types...in part because the people making the maps in the 1800's did not understand and record the subtleties of different plant communities. In addition, landscape conditions that effect vegetation change from place to place. These factors include geology, exposure to wind, seasonal flooding or high ground water, and fire frequency.

The vegetation included in the map may include the following:

1. **Forest**: Trees with mainly closed canopy; ground vegetation shade tolerant. Infrequent fire disturbance.
2. **Savanna**: Scattered trees with an open canopy and prairie below. Frequent fire disturbance.
3. **Marsh**: Mainly perennial non-woody plants; water dominated and frequent fires.
4. **Prairie**: Mainly perennial non-woody plants with frequent fire disturbance.
5. **Field**: Cultivated lands of early pioneers or Native Americans.

<sup>1</sup> J.E. Blaser, "Resettlement Vegetation of Cass County Illinois," Transactions of the Illinois Academy of Science (1957), 15-24, located in Michael Charles Miller, "Vegetation of Cass County Illinois," Master's Thesis, Iowa State University, 1993, 8.



Map Source: Iowa Department of Natural Resources, "Natural Resources Geographic Information Systems Library," <http://www.gis.iowa.edu/ngi/dlib/>.

**Forest City**

Historical Vegetation

**Bioregional Context**

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

Iowa State University | Trees Forever | Iowa Department of Transportation



## Change Over Time

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

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

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

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

SPRING 2018 2c

**Change Over Time**

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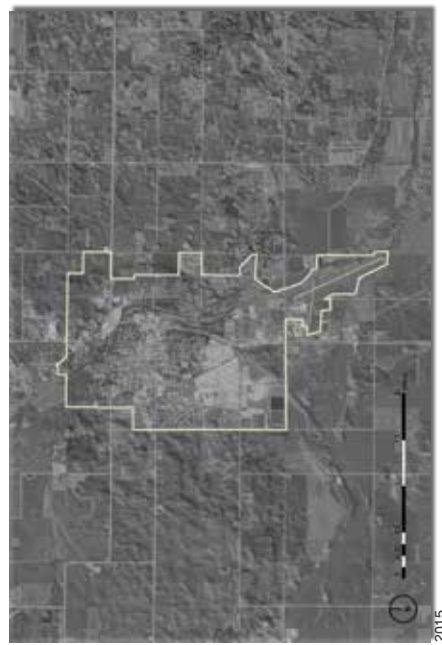
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1930s



2015



1875 Andreas Atlas



1970s

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

**Forest City**  
Change Over Time

**Bioregional Context**

Julia Badenhop, Casey Cox, Riley Dunn, Dominick Florer, Hatvany Gomez-Conceptcion, Ngoc Ho, Henry Herman, Alysse Kirkman, Giannis Koutsou, Emma Lorenz, Zoey Mauck, Coral Ustine  
Iowa State University | Trees Forever | Iowa Department of Transportation



## 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.

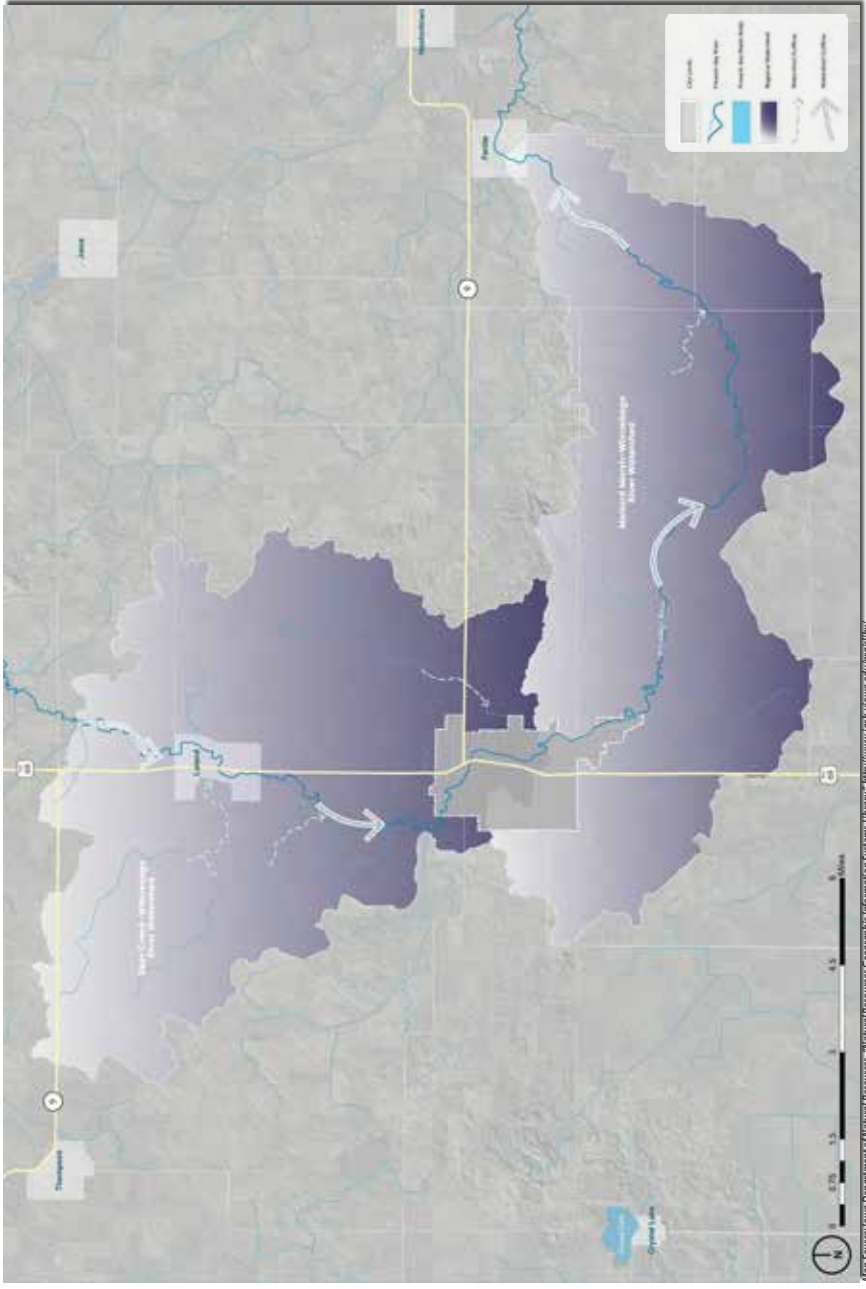
SPRING 2018 **2d**

**Regional Watershed**

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**Forest City**  
Regional Watershed

**Bioregional Context**

Julia Badenhop, Casey Cox, Riley Dunn, Dominick Florer, Hatvany Gomez-Conceptacion, Ngoc Ho, Henry Herman, Alyse Kirkman, Glannis Koutsou, Emma Lorenz, Zoey Mauck, Coral Ustine  
Iowa State University | Trees Forever | Iowa Department of Transportation



## Depth to Water Table

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

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

Where the value is less than 0 feet, water can well up out of the ground. This causes localized flooding, even if there is no surface water draining to the area.



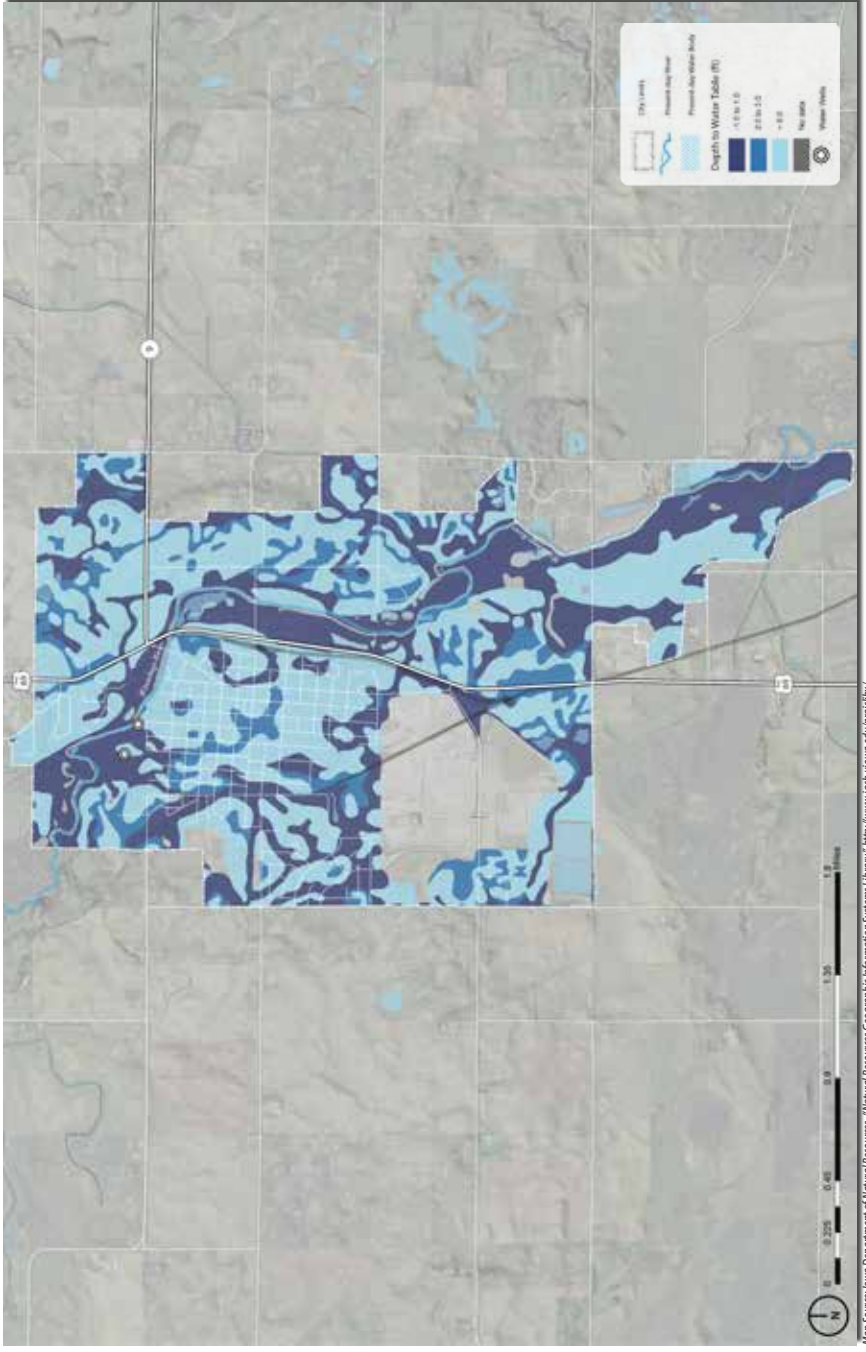
SPRING 2018 **2e**

**Depth to Water Table**

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Map Source: Iowa Department of Natural Resources, "Natural Resources Geographic Information Systems Library," <http://www.gis.iowa.gov/englib/>.

**Forest City**

Depth to Water Table

**Bioregional Context**

Julia Badenhop, Casey Cox, Riley Dunn, Dominick Florer, Hatvany Gomez-Concepcion, Ngoc Ho, Henry Herrman, Alysse Kirkman, Giannis Koutsou, Emma Lorenz, Zoey Mauck, Carol Ustine  
 Iowa State University | Trees Forever | Iowa Department of Transportation



## Elevation and Flow

The map to the left displays topographic differences in elevation using a combination of contour lines and the color gradient depicted in the legend. The high points and low points have also been located.

Note the relationship of your community to the surrounding elevation; is it located in a valley or on high ground, or is it split between the two?

If your community lies within or near a floodplain or floodway, the map will reflect these features. Not all communities will have these elements; their absence on this map indicates that none are present.

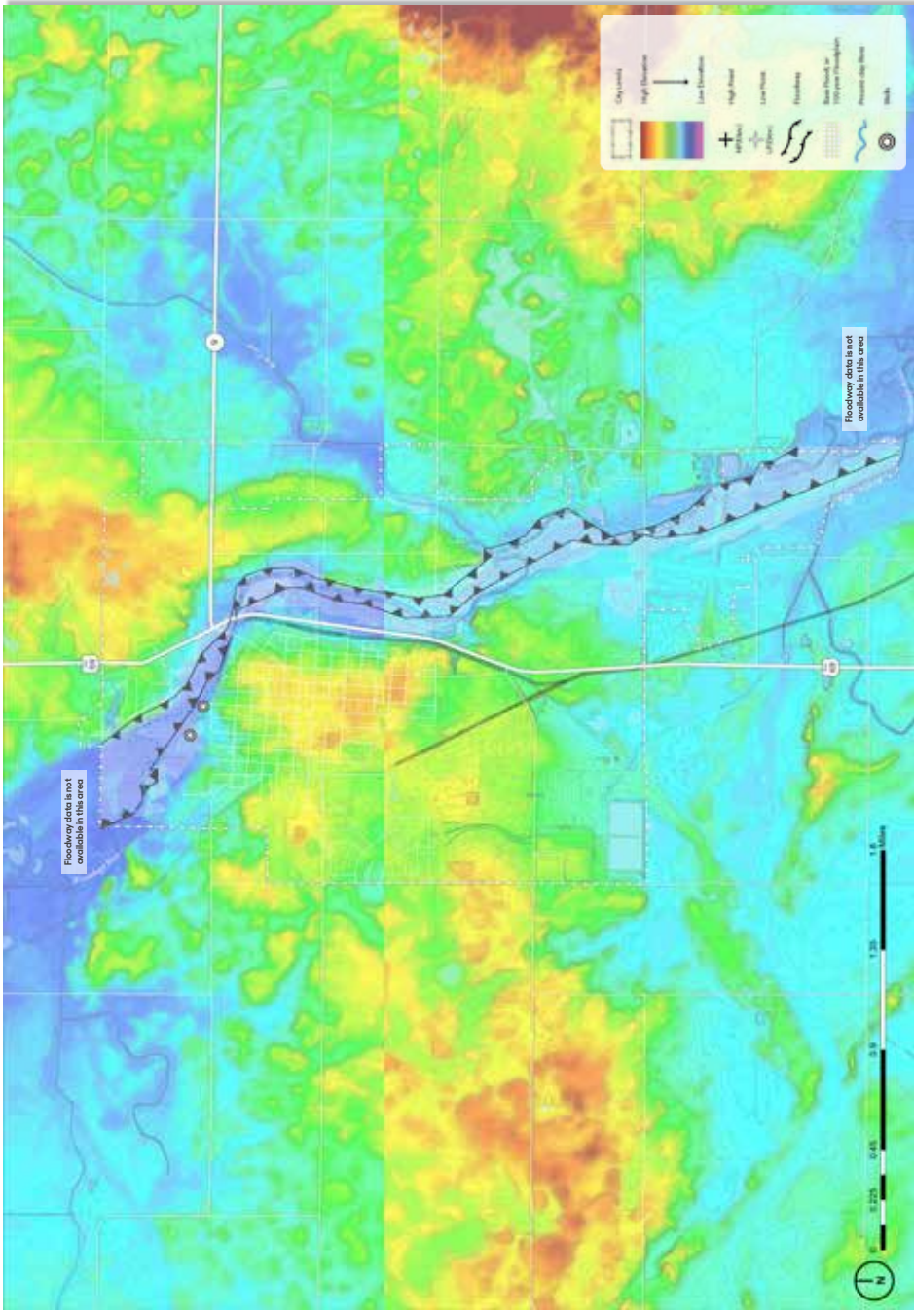
Flood risk is correlated to low-lying land. This map also shows your community's flood risk as defined by the Federal Emergency Management Agency (FEMA) Flood Map Service Center. If your community has these features, this map will show the two most important flood zones, the Base Flood and the Regulatory Floodway (consult legend). Base Flood is the zone having a one percent chance of being equaled or exceeded in any given year, also referred to as the "100-year floodplain." The Regulatory Floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of objects so that the floodwater can move freely, keeping the base flood elevation from rising.

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**Forest City**

**Elevation and Flow**

**Bioregional Context**

Julia Badenhop, Casey Cox, Riley Dunn, Dominick Florer, Hatvany Gomez-Concepton, Ngoc Ho, Henry Herman, Alyse Kirkman, Giannis Koutsou, Emma Lorenz, Zoey Mauck, Carol Ustine  
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## Present Day Land Cover

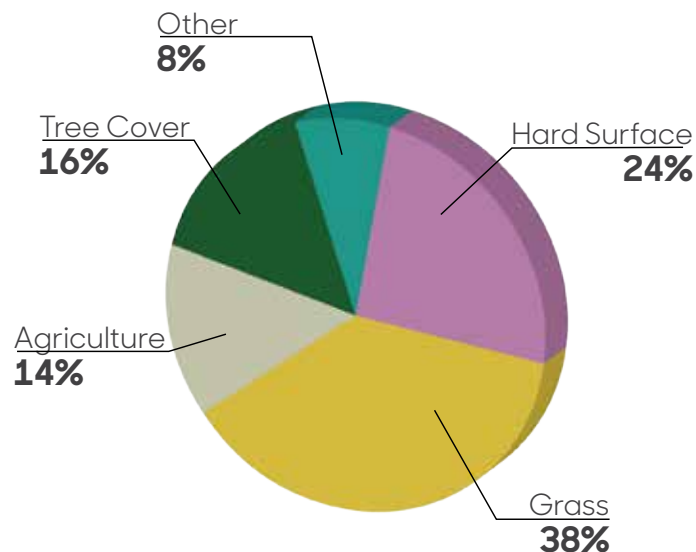
The land cover map depicts both natural and man-made land cover types with aerial imagery. The Iowa DNR created 15 unique classes for this dataset to differentiate land covers. Refer to the legend for a breakdown of land cover types within your community boundaries.

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

Compare the amount of impervious surfaces (e.g., parking lots, roads, buildings) to the other surfaces (e.g., water, grass, and agriculture.) What does this mean for surface water movement?

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

### Percent Land Cover Type



**Present Day Land Cover**

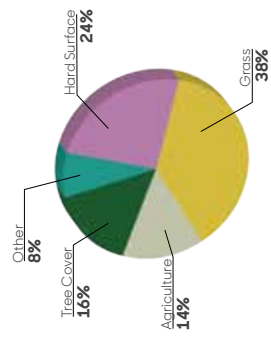
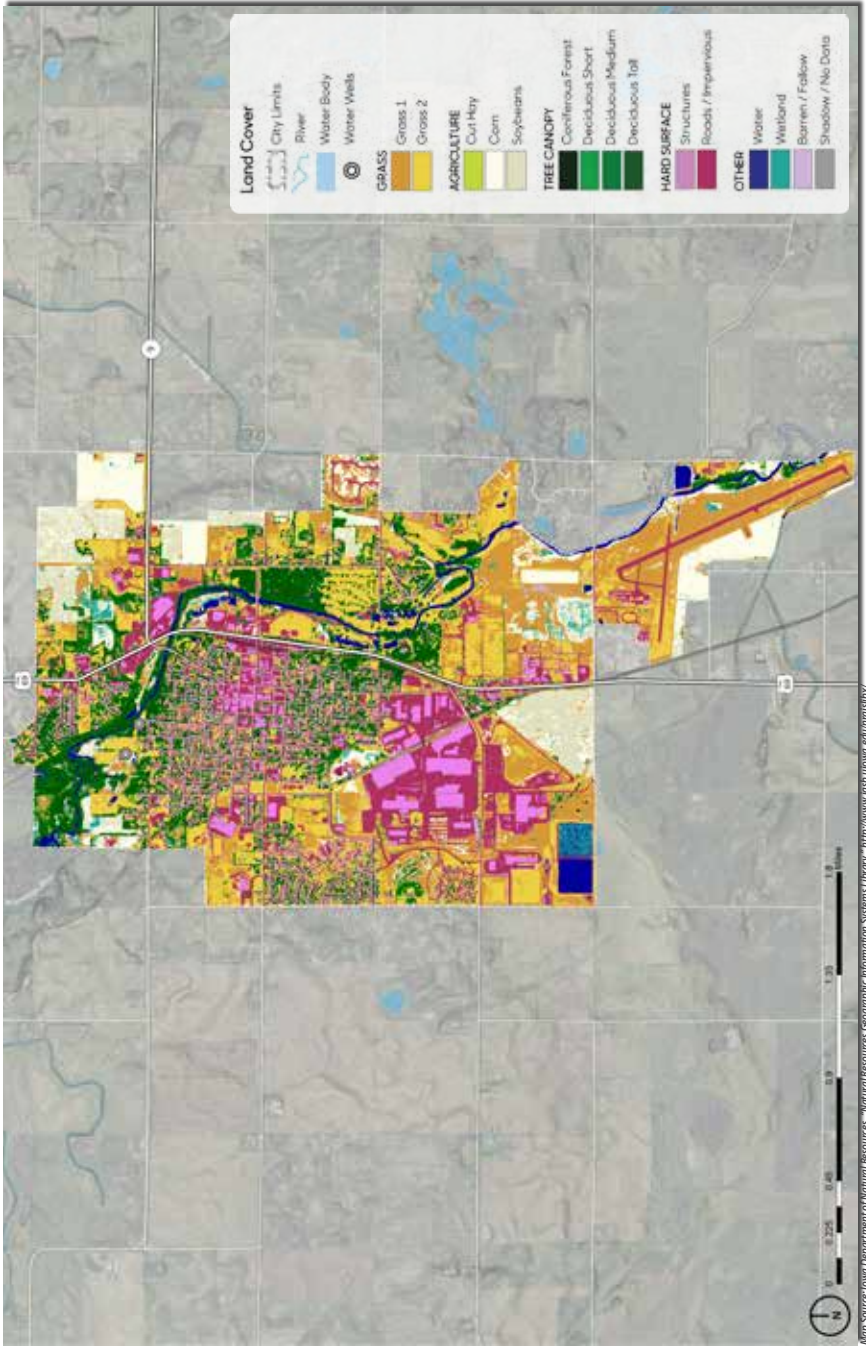
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Percent Land Cover Type

**Forest City**

Present Day Land Cover

**Bioregional Context**

Julia Badenhop, Casey Cox, Riley Dum, Dominick Florer, Hatvany Gomez-Concepcion, Ngoc Ho, Henry Herman, Alysse Kirkman, Gianni Koutsou, Emma Lorenz, Zoey Mauk, Coral Ustine  
 Iowa State University | Trees Forever | Iowa Department of Transportation

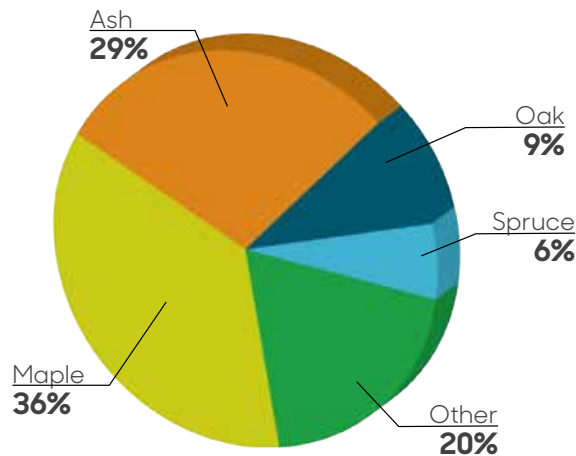


## The Urban Forest

The map on the left depicts public right-of-way trees that have been surveyed by the Iowa Department of Natural Resources (Iowa DNR).<sup>1</sup> The trees are divided into three categories: healthy trees, hazard trees, and ash trees.

Hazard trees are distinguished with a yellow triangle symbol. The hazard designation reflects tree condition using the Iowa DNR's priority rating. Trees highlighted on this map are "dangerous, dead, or dying, and no amount of maintenance will increase longevity or safety," or are infected by "insects, pathogens, or parasites."

Ash trees are distinguished with a purple cross. They are under imminent threat from the Emerald Ash Borer (EAB),\* an invasive highly destructive beetle that has already killed tens of millions of ash trees in North America.<sup>2</sup> EAB was first discovered in Iowa in 2010 and was confirmed in 30 Iowa counties as of 2016.<sup>3</sup>



The graphic above shows how many of the city's trees are of the same species. There is a strong possibility that 29% (Ash trees) of Forest City's city owned trees will die once EAB is carried to the area. With proper planning and management, the city's canopy can be improved by planting suitable trees that can gradually replace hazard trees and Ash trees. Improving species diversity will create a more resilient urban forest.

1 Iowa Department of Natural Resources Community Tree Inventories, <http://www.iowadnr.gov/Conservation/Forestry/Urban-Forestry/Community-Tree-Inventories>

2 EAB is a significant threat to our urban, suburban, and rural forests because it kills stressed and healthy ash trees. EAB is so aggressive that ash trees may die within two or three years after they become infested. Ash trees are as important ecologically as they are economically in the forests of the eastern United States. Emerald Ash Borer the Green Menace, USDA Program Aid No. 1769, 2008, [https://www.aphis.usda.gov/publications/plant\\_health/content/printable\\_version/EAB-GreenMenace-reprint\\_June09.pdf](https://www.aphis.usda.gov/publications/plant_health/content/printable_version/EAB-GreenMenace-reprint_June09.pdf).

3 "Iowa Tree Pests website," Entomology and Plant Science Bureau of the Iowa Department of Agriculture and Land Stewardship (IDALS), last updated February 9, 2016, [http://www.iowatreepests.com/eab\\_home.html](http://www.iowatreepests.com/eab_home.html).



Map Source: Iowa Department of Natural Resources, "Natural Resources Geographic Information Systems Library," <http://www.pds.iastate.edu/nrglib/>.

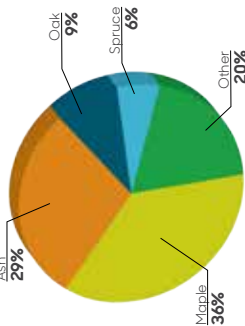
SPRING 2018 2h

### The Urban Forest

The map on the left depicts city owned trees that have been surveyed by the Iowa Department of Natural Resources (Iowa DNR). The trees are divided into three categories: healthy trees, hazard trees, and ash trees.

"Hazard" trees are distinguished with a yellow triangle symbol. The hazard designation reflects tree condition using the Iowa DNR's priority rating. Trees highlighted on this map are "dangerous, dead, or dying, and no amount of maintenance will increase longevity or safety," or are infested by "insects, pathogens, or parasites."

"Ash" trees are distinguished with a purple cross. They are under imminent threat from the Emerald Ash Borer (EAB), "an invasive beetle that disrupts circulation in the tree resulting in the loss of tens of millions of ash trees in North America; EAB was first discovered in Iowa in 2010 and was confirmed in 30 Iowa counties as of 2016."



The graphic above shows how many of the city's trees are of the same species. There is a strong possibility that 29% (Ash trees) of Forest City's city-owned trees will die once EABs carried to the area. With proper planning and management, the city's canopy can be improved by planting suitable trees that can gradually replace hazard trees and Ash trees. Improving species diversity will create a more resilient urban forest.

1. Iowa Department of Natural Resources, "Emerald Ash Borer," <http://www.iowadnr.gov/Conservation/Forestry/AshBorer-Iowa-as-y/Community/Trees/>.
2. EAB is a significant threat to our urban, suburban, and rural forests because it kills trees and healthy ash trees. EAB is so aggressive that ash trees may die within a few years of infestation. EAB is not native to Iowa and is not native to the United States. EAB is native to the Green Mountains, USA (Program A-10-1, 2008). [http://www.dnr.state.nj.us/naturalresources/forestry/forestmanagement/forestmanagement/EAB/GreenMountains-report\\_A1002008.pdf](http://www.dnr.state.nj.us/naturalresources/forestry/forestmanagement/forestmanagement/EAB/GreenMountains-report_A1002008.pdf).
3. Emerald Ash Borer (EAB) is a highly invasive pest that has caused the death of millions of ash trees in the United States. The Iowa Department of Natural Resources (DNR) has updated its EAB response plan. <http://www.iowadnr.gov/Conservation/Forestry/AshBorer-Iowa-as-y/Community/Trees/>.



**Bioregional Context**  
 Julia Badenhop, Casey Cox, Riley Dunn, Dominick Florer, Hatvany Gomez- Concepcion, Ngoc Ho, Henry Herman, Alysse Kirkman, Giannis Koutsou, Emma Lorenz, Zoey Mauck, Carol Ustine  
 Iowa State University | Trees Forever | Iowa Department of Transportation

**Forest City**  
 Urban Forest

# 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 Forest City, 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 Forest City'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 Forest City residents with different transportation needs to participate in focus groups. A total of 44 residents attended Forest City's workshop. Participants were separated into five user groups and the Forest City 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.



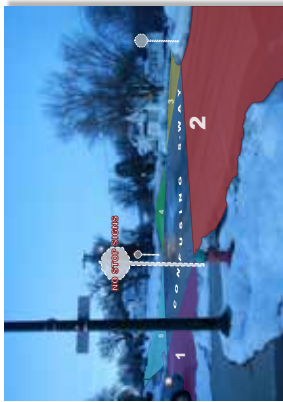
Steering Committee

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.





A popular destination, Thomas Bearse Park provides river access and scenic trails.



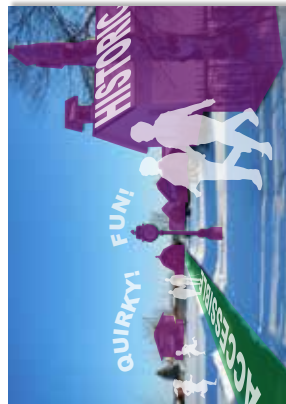
The lack of stop signs at the live-uey stop leads to confusion.



The footbridge in Pammel Park connects trails.



The absence of a bridge at the end of 7th Street creates disconnect between the north neighborhoods and the rest of town.



An important destination, Heritage Park hosts festivals, concerts, and community activities.



Children think it's risky to go between the school and the YMCA because there are no crosswalks.

SPRING 2018 3a

## What Factors Affect Transportation in Forest City?

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.

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## Different Users = Different Needs

To capture insights about transportation from a variety of perspectives, we invited Forest City residents with different transportation needs to participate in focus groups. A total of 44 residents attended Forest City's workshop. Participants were separated into five user groups and the Forest City steering committee.



Actives

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



Mobility Impaired

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



Older Adults

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



Youth

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



Parents

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



Steering Committee

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

# Forest City Overview

## Transportation Assets and Barriers Analysis

Julia Badenhop, Sandra Oberbroeckling, Emma Lorenz, Abby Schafer, Clare Kiboko, and Emma Georgieff

Iowa State University | Trees Forever | Iowa Department of Transportation



# What People Said



"It's not wide, there's no shoulder for biking, walking. You see kids leaving school walking down Spring Valley Road; it's very dangerous."

"Pammel Park's pretty lit."

"...a lot of times when I bicycle ...from the YMCA...I'll cross Highway 69 at the lights, then go out on the River Road, but with the lights and the traffic at Winnebago...I kind of dread going down there by the lights."

"I think it would be nice if there was a bench for walkers and runners along the trail that goes along Highway 9."

"We need something there for bicyclers going in and out [of Clark Street Trail]—some kind of sign—plus better access."

## Actives



"If you walk there [Clarks Woods] in the first part of May, the wild flowers...there's carpets of dogtooth violets, jack in the pulpits."

"This intersection at 6th and L is a two way stop north/south, when basketballs going on there are people parked there. I'm six foot four, and I can't see through that intersection and people just fly from city hall down that hill. I feel like it's dangerous for me, let alone if I was six and can't see around the cars."

"I think a real benefit is to have Waldorf University here, because our kids growing up could see Pippi Longstocking, and the St. Paul Chamber Orchestra came. It adds to the community."

"Thorpe Park, if that was connected with a bike trail, I would definitely go out there a lot."

"We've got some very nice bike paths that you can go out to Pilot Knob and come back in...but just getting access to them [is] pretty difficult without being on the street."

## Older Adults



"Once my mom was walking, a car didn't stop for her. She didn't get hit. It got really close though."

"On the side roads, roads that have houses on both sides, there's typically enough light to see but not enough light to tell if there's going to be ice in front of you."

"Forest City takes field trips out that general direction, and when we take field trips it takes just 15 minutes of sitting in traffic right there; we need more streets, better streets."

"We'll bike from our house all the way out to Pilot Knob, [then] we'll bike the course there."

"Right here is also a really, really steep hill with the bike tracks and the traffic stop at the bottom."

## Youth

"[It's a] challenge...getting over the Highway on J Street to get to Pammel Park. Recreation for the kids getting into Pammel Park at the technical entrance off of G Street...there's no stop sign [or] street light...yet that's the entrance for the ball fields for the kids, so that's pretty scary."

"I feel that Clarks Woods spot is completely underutilized, because...there's no place to [access]."

"...if there was an easier way to get to school, walking, riding their bike, they would have been here, but a lot of times they couldn't get here because of...that."

"Our river trail is an untapped resource...for recreation. I think we could really tap into that more."

"People that had moved here from...all over the country...said the first week they were here they couldn't believe they could let their kids go and run to the park or...run anywhere in town...We've got the small-town atmosphere."



Parents

"Hynes Spur Trail goes right into Airport Drive, but that's something that literally will stop people on the trail. So that's kind of a hinderance to moving around. It's a two-mile trail, and there [are] a lot of people who would prefer to go more than two miles."

"There's no safe walking along Highway 69, and there's a lot of pedestrian traffic right there."

"I moved here when I was 12 or 13 from a really big city, and I was shocked there [are] no sidewalks anywhere—what are you supposed to do?"



Steering Committee

"It's a mental thing when I was raising...two boys, you want to say, 'Ride your bike to school, walk to school,' and having to traverse that intersection myself I said, 'No...Call us cowards, do whatever you want, my kids aren't crossing.'"

"I'm in real estate, and I've actually had people decline the north edge, you know, Woodland Drive and Sunset View Drive because of their kids getting into town."

## Emerging Themes

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

**Actives:** Actives primarily bike and spend time in local parks and at the river. They are concerned with the limited access to routes and poor surface conditions for bicycles. They desire safer crossings over the highway and more amenities.

**Older adults:** Older adults value the existing amenities and assets within their community. They would like to see these assets, such as parks and schools, become more accessible. They want smooth, continuous sidewalks and a footbridge that crosses the river.

**Youth:** Youth mainly walk and bike to get around the community. Their biggest barrier is the highway that divides town. Traffic and high speeds of vehicles limit their accessibility to certain amenities. They desire safer routes to school that avoid vehicular traffic.

**Parents:** Parents drive, walk, and bike. They are concerned about their children's safety as they travel throughout town, and would like to see their kids have more freedom with safer routes. They want more places to recreate with their families and better sidewalks for the use of their kids.

**Steering committee:** Steering committee members walk and drive for transportation. They expressed their concern that Highway 69 divides the town, affecting where people live, how kids get to school, and people's access to recreation. They desire ways to connect trail systems with the parks, and relieve the division that the highway creates.

User Types	Destinations and Activities		Desirable Qualities and Features			Undesirable Qualities and Features				Most Desired Improvements and Activities						
	Pilot Knob State Park	Panama Park	THCA	YICA	YMCA	Good School System	Sense of Community	Highway 69 Crossing	Sidewalk System	Lack of Connectivity	Flooding	Lack of Maintenance	Connected Trail System/ Parks	Safe Crossing Over Highway 69	Updated Recreation Facilities	Improved Sidewalk System
<b>Actives</b>	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
<b>Older Adults</b>	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
<b>Youth</b>	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
<b>Parents</b>	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
<b>Steering Committee</b>	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

Actives primarily bike and spend time in local parks and at the river. They are looking for better walking conditions for routes and poor surface conditions for bicycles. They desire safer crossings over the highway and more amenities.

Older adults value the existing amenities and are looking for more. They would like to see these areas, such as parks and schools, become more accessible. They want smooth, paved sidewalks and a footbridge that crosses the river.

Youth mainly walk and bike to get around the community. Their biggest barrier is the highway that divides town. They are looking for ways to improve their accessibility to certain amenities. They desire safer routes to school that avoid vehicular traffic.

Parents drive, walk, and bike. They are concerned about their children's safety when they walk or bike to school. They would like to see their kids have more freedom with safer routes. They want more parks to recreate with their friends and better sidewalks for the use of their kids.

Steering committee members walk and drive for recreation. They are most concerned about the safety of the town, affecting where people live, work, and play. They are looking for ways to connect trail systems with the parks, and relieve the tension that the highway creates.

Aller groups enjoyed Pilot Knob State Park as a popular destination for outdoor recreation. They said they would like to see more trails, better parking, and more amenities. They also mentioned the need for a good playground for kids and a good playground for adults. They said they would like to see more trails and better parking. They also mentioned the need for a good playground for kids and a good playground for adults.

Many users enjoy the proximity of the parks to downtown Panama. They mentioned that they would like to see more trails and better parking. They also mentioned the need for a good playground for kids and a good playground for adults.

The THCA is a great resource for outdoor recreation. They mentioned that they would like to see more trails and better parking. They also mentioned the need for a good playground for kids and a good playground for adults.

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# Transportation Behaviors and Needs

## Overview

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

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

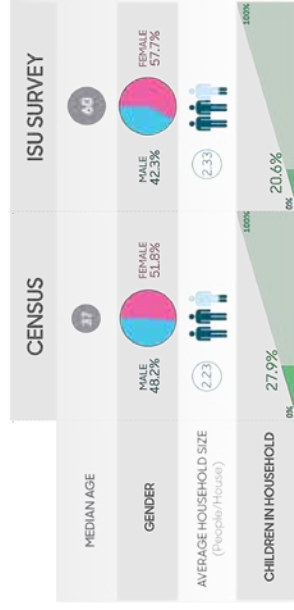
With assistance from Iowa State University's Survey Research Services staff in the Center for Survey Statistics and Methodology (CSSM-SRS), ISU visioning program staff conducted a survey to better understand the transportation patterns and behaviors, needs and desires of Forest City residents. Surveys were mailed to 300 randomly selected residents living in Forest City and the surrounding area. To increase the response rate, the study was publicized through the local media and follow-up packets were mailed to nonrespondents. With adjustments for ineligible respondents (e.g., incorrect addresses, no longer living in the community), the final sample size was 264. A total of 98 people returned surveys, for a response rate of 37.1%. (A response rate of 20% is considered valid.)

We asked survey recipients what routes they used most often for going to work, walking, and biking. We also asked whether or not residents would like a recreation trail and where they think it should be. We also discovered what residents think is most important in terms of transportation enhancements that address issues such as accessibility, mobility, and safety. Finally, we learned whether or not residents are willing to contribute their time or their financial resources to making enhancements to Forest City. This series of boards summarizes the results of the survey as follows:

1. Willingness to Help
2. Enhancement Priorities
3. Commuting Routes
4. Walking Routes
5. Biking Routes
6. Desired Trail Routes

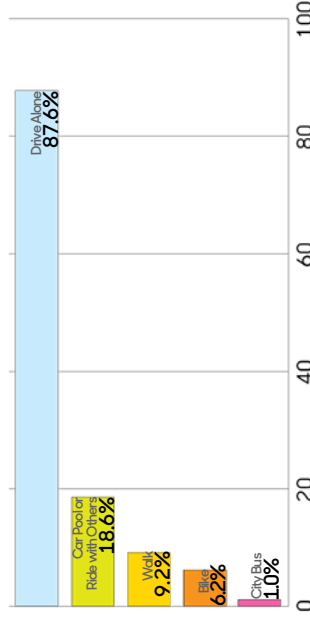
## How Did We Do?

The demographics of the respondents are somewhat different from those obtained from the 2016 American Community Survey Five-Year Estimate. For example, the survey respondents median age of 40 is significantly older than the 2016 estimated average age for Forest City residents of 37. The average household size of respondents is similar to that of the 2016 estimate. In terms of gender and number of children in the household, survey respondents demographics differ from the 2016 estimates.



## How Do Forest City Residents Travel?

Most survey respondents drive to important destinations such as the convenience store, the post office, school, and church (87.6%). More than 18% car pool or ride with someone else, 9.2% walk, and 6.2% bike. One percent of respondents take the city bus.



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

## Why Do A Survey?

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- Commuting Routes
- Walking Routes
- Biking Routes
- Desired Trail Routes

# Forest City Overview



Transportation Behavior and Needs Survey  
 Julia Badenhop and Sandra Oberbroeckling

Iowa State University | Trees Forever | Iowa Department of Transportation

## Willingness to Help

Most survey participants who answered this question are willing to contribute their time and talent to community improvements (60.6%), while more than 30% would contribute both time and talent and financial help. Nearly 10% of respondents indicated that they would be willing to contribute financially.

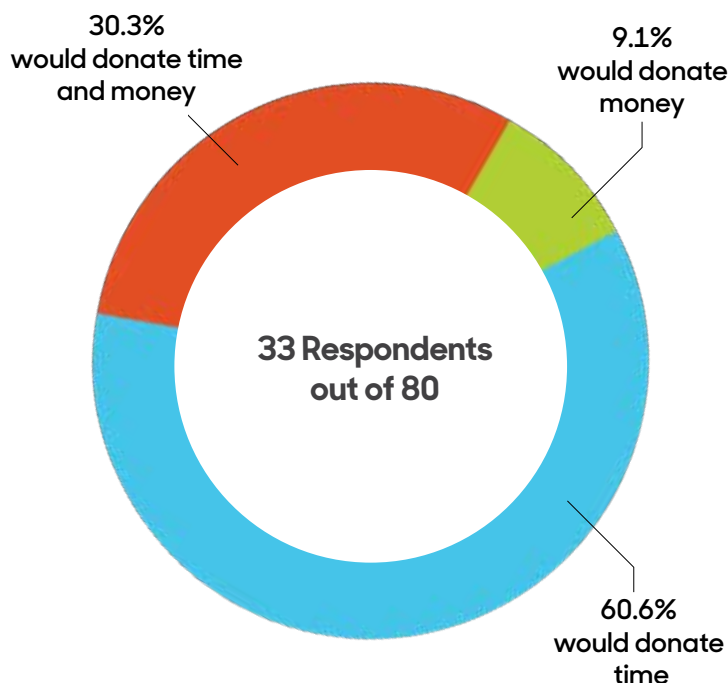
Compared to other small towns in Iowa, Forest City residents are slightly less willing to become involved in improving their community. In 2014, on average, 43% of residents in small, rural towns volunteered to help with a community project.<sup>1</sup>

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

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

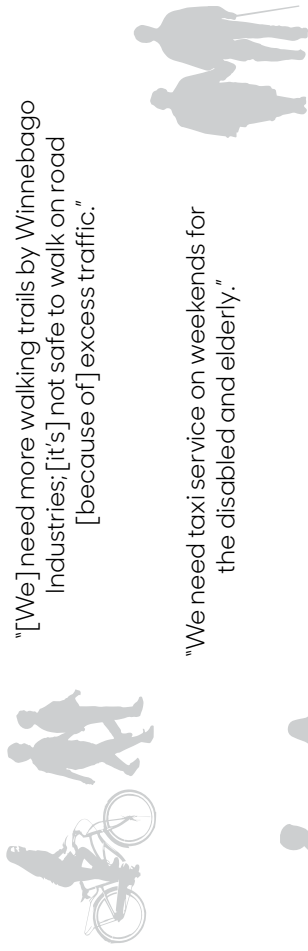
### ARE PEOPLE WILLING TO HELP?

**More than 41% said YES!**





## WHAT DID PEOPLE SAY? Survey Participants Said...

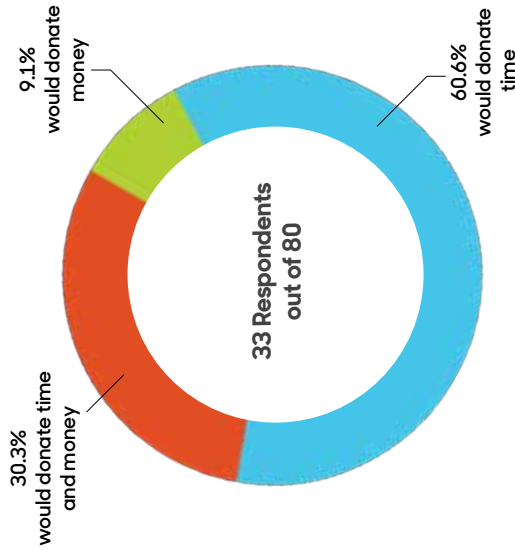


"[We] need more walking trails by Winnebago Industries; [it's] not safe to walk on road [because of] excess traffic."

"We need taxi service on weekends for the disabled and elderly."

"Our sidewalks in town could definitely use some fixing."

## ARE PEOPLE WILLING TO HELP? More than 41% said YES!



**Willingness to implement change**  
Most survey participants who answered this question are willing to contribute their time and talent to community improvements (60.6%), while more than 30% would contribute both time and talent and financial help. Nearly 10% of respondents indicated that they would be willing to contribute financially.

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## HOW DO YOU GET PEOPLE TO HELP?

### Ask, Show, and Advertise Opportunities

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**Forest City**  
Willingness to Help

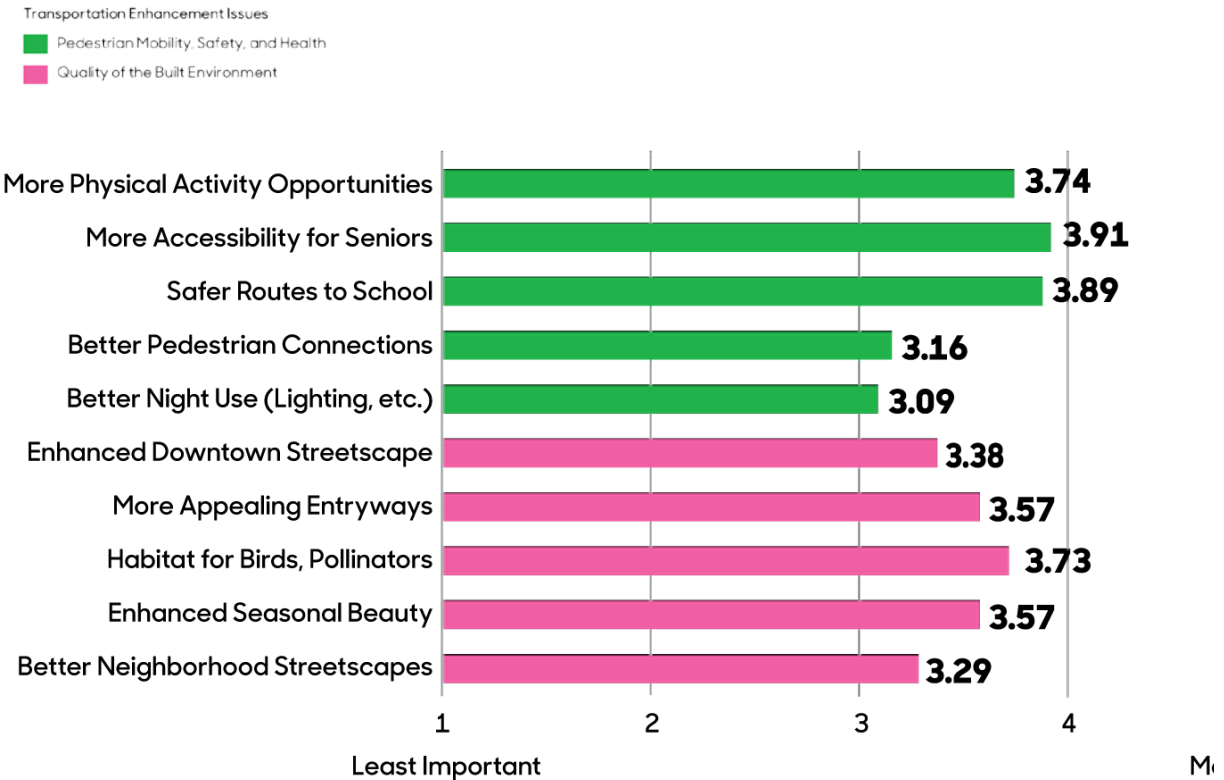
**Transportation Behavior and Needs Survey**  
Julia Badenhop and Sandra Oberbroeckling  
Iowa State University | Trees Forever | Iowa Department of Transportation



## Priorities

### WHAT TYPES OF ENHANCEMENTS ARE IMPORTANT?

# Mobility, Safety, and Health!

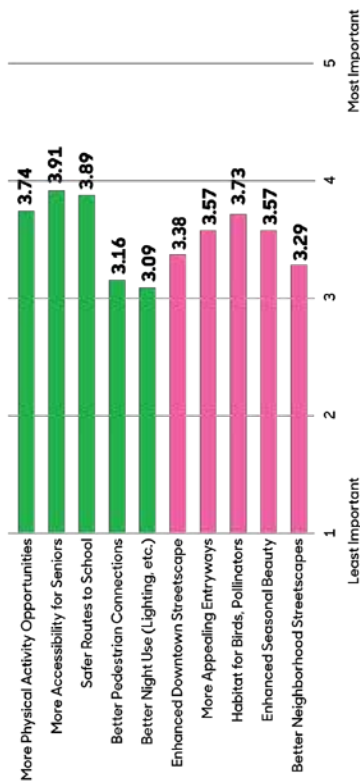


Importance of transportation enhancement by type (84 responses).

On a scale of 1 to 5, with 5 being the most important, participants in Forest City ranked creating more accessibility for seniors as most important, with a mean value of 3.91. Other transportation enhancements that address pedestrian mobility, health, and safety are also considered important, such as providing more opportunities for physical activity (3.74) and creating safer routes to school (3.89). In terms of quality of the built environment, creating more habitat for birds and pollinators is most important (3.73). These findings are consistent with the views expressed by focus group participants during the Transportation Assets and Barriers workshop held in April 2018.

WHAT TYPES OF ENHANCEMENTS ARE IMPORTANT?  
**Mobility, Safety, and Health!**

Transportation Enhancement Issues  
■ Pedestrian Mobility, Safety, and Health  
■ Quality of the Built Environment

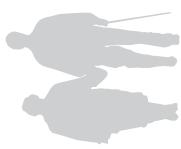


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WHAT DID THEY SAY?  
**Survey Participants Said...**

SPRING 2018 4c

"Many in our community love hiking/walking and love their dogs, but we don't have the greatest facilities here. A great start would be our sidewalks. Too many people are forced to walk on the side of the street because half of the sidewalks do not connect."



"[We need] ride share—better/improved transportation for seniors and the disadvantaged that would also be available on weekends."



"[We need an] evening taxi or run current ones longer during day. People would like to get to movies or restaurants or later appointments for haircuts, concerts, and ballgames, etc."



"Development of walking/biking trail on the west side of town increases safety, encourages fitness, showcases schools and public recreation facilities...allows alternative transportation to Winnebago and 3M, and positions development of housing on the west nearer schools and employment centers. Go west!"

**Forest City**  
 Priorities



**Transportation Behavior and Needs Survey**  
 Julia Badenhop and Sandra Oberbroeckling  
 Iowa State University | Trees Forever | Iowa Department of Transportation

# Commuting Routes

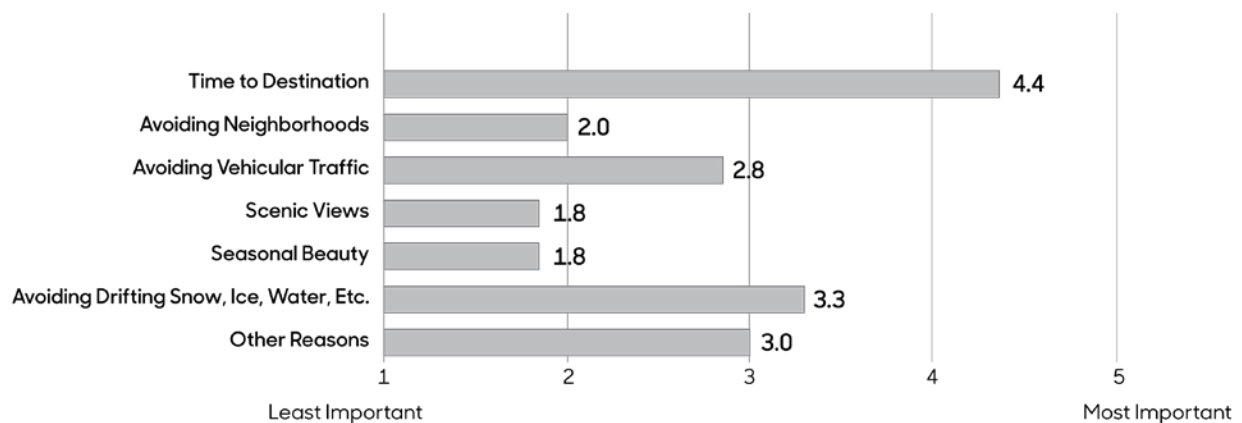
## How They Get There

This map shows the commuting routes identified by 47 survey respondents. The frequency that the routes are used is depicted by their thickness, with most frequently used routes being the thickest. The primary commuting corridor in Forest City is Highway 69 north and south. Some people also go west on County Road A42 and travel east on Highway 9. In town, 335th Street is the most heavily traveled, followed by West J Street, John K. Hanson Drive, and South 4th Street.

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

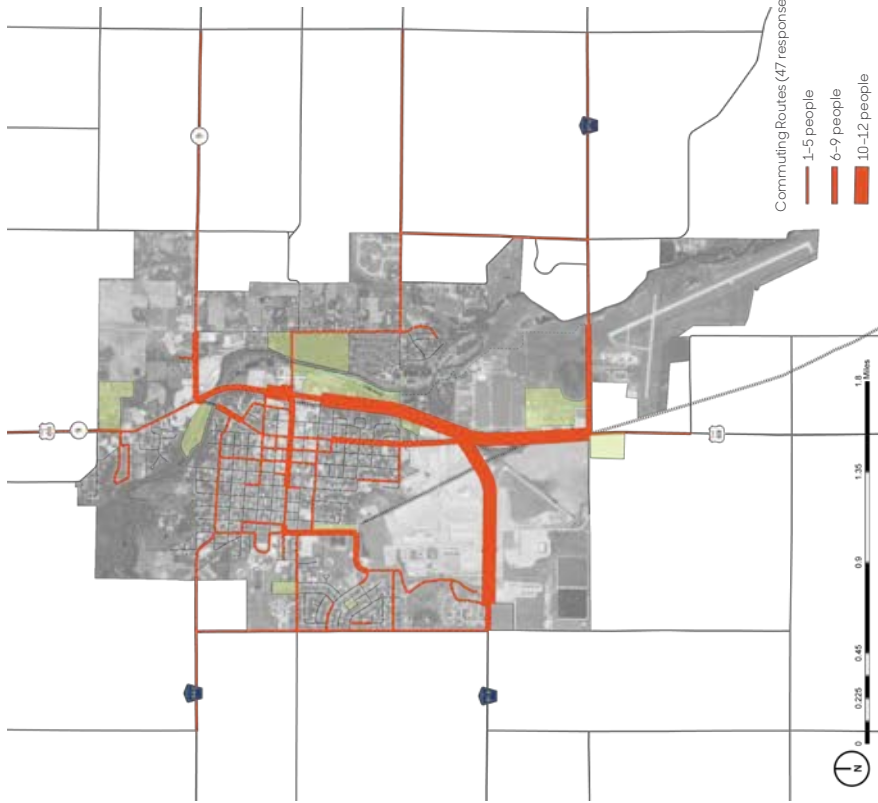
## Why They Go That Way

On a scale of 1 to 5, with 5 being the most important, survey participants ranked the characteristics and features that factored into their choice of commuting route. Among Forest City participants, time to destination is clearly the most important factor, with a mean value of 4.4. Avoiding weather-related issues such as snow and ice is also considered important, with a mean value of 3.3, followed by other reasons (3.0), which include safe sidewalks and most direct route. Avoiding neighborhoods, scenic views, and seasonal beauty are not critical factors in determining commuting routes.



## How They Get There

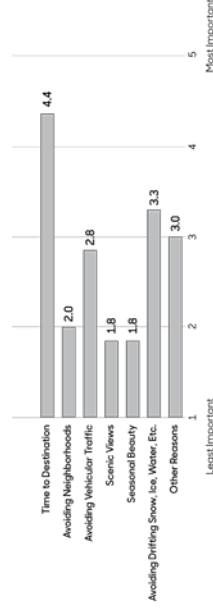
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# Forest City Commuting Routes

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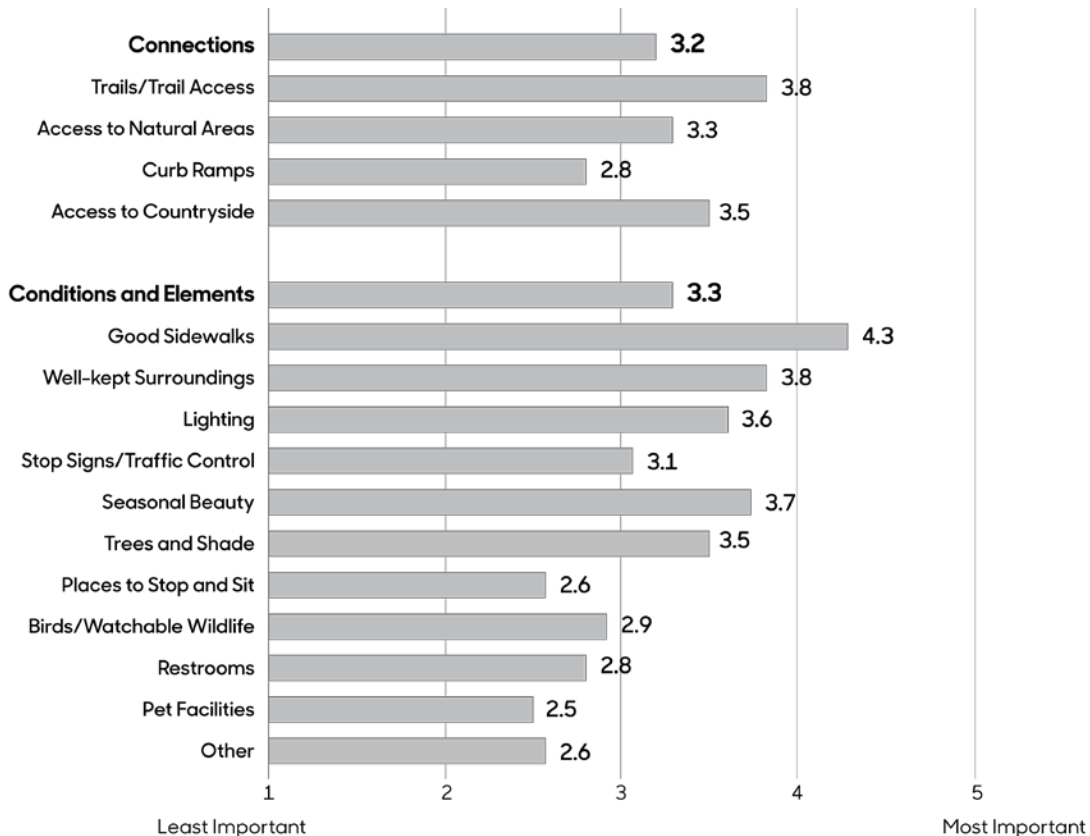
# Walking Routes

## How They Get There

This map shows the walking routes identified by 40 survey respondents. The frequency that the routes are used is depicted by their thickness, with most frequently used routes being the thickest. Hynes Trail is the most popular walking route among survey respondents. People also frequently walk the streets surrounding Waldorf University, as well as North Clark Street and West J Street. Some people walk in Clarks Woods Park and the cemetery.

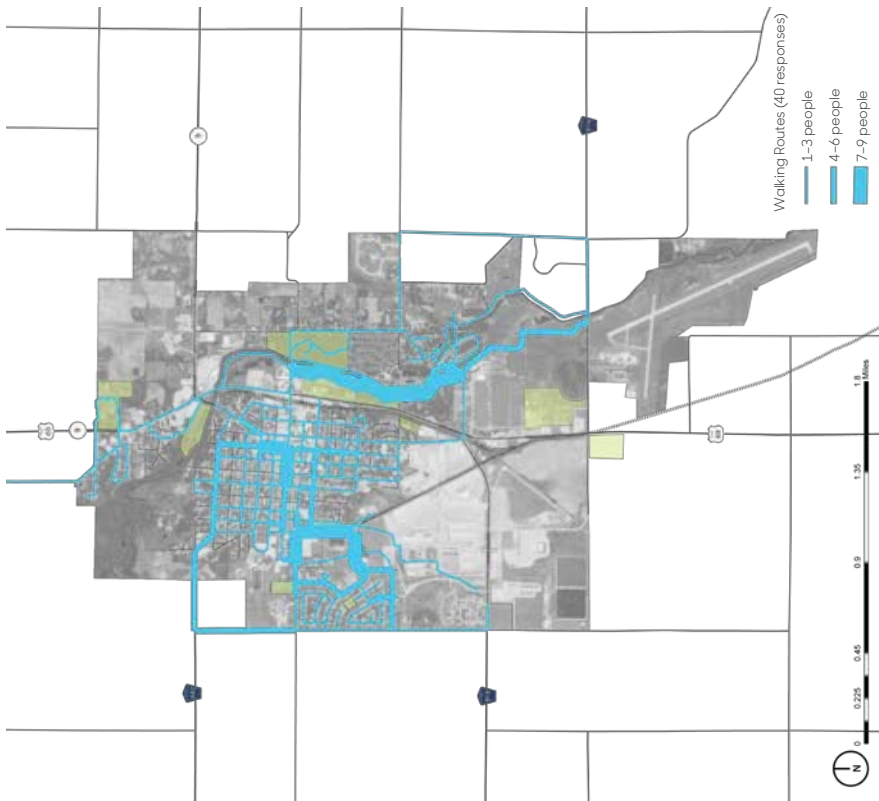
## Why They Go That Way

On a scale of 1 to 5, with 5 being the most important, survey participants ranked the characteristics and features that made their walking experience better. These features are categorized as either "connections" or "conditions and elements." Among Forest City participants, connections and conditions/elements are of similar importance, with mean values of 3.2 and 3.3, respectively. In terms of connections, access to trails is most important with a mean value of 3.8. Good sidewalks (4.3) are the most important element to walkers, followed by well-kept surroundings (3.8) and seasonal beauty (3.7). Other significant factors include lighting (3.6) and trees and shade (3.5).



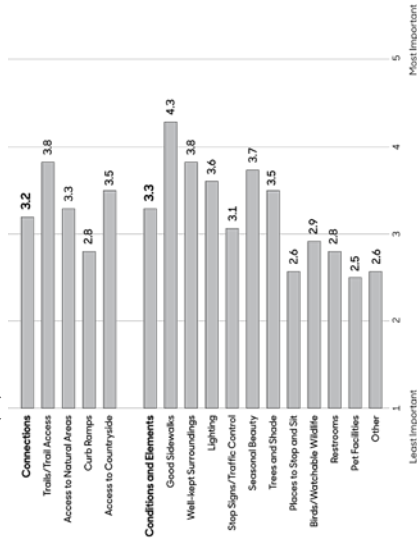
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## Forest City Walking Routes

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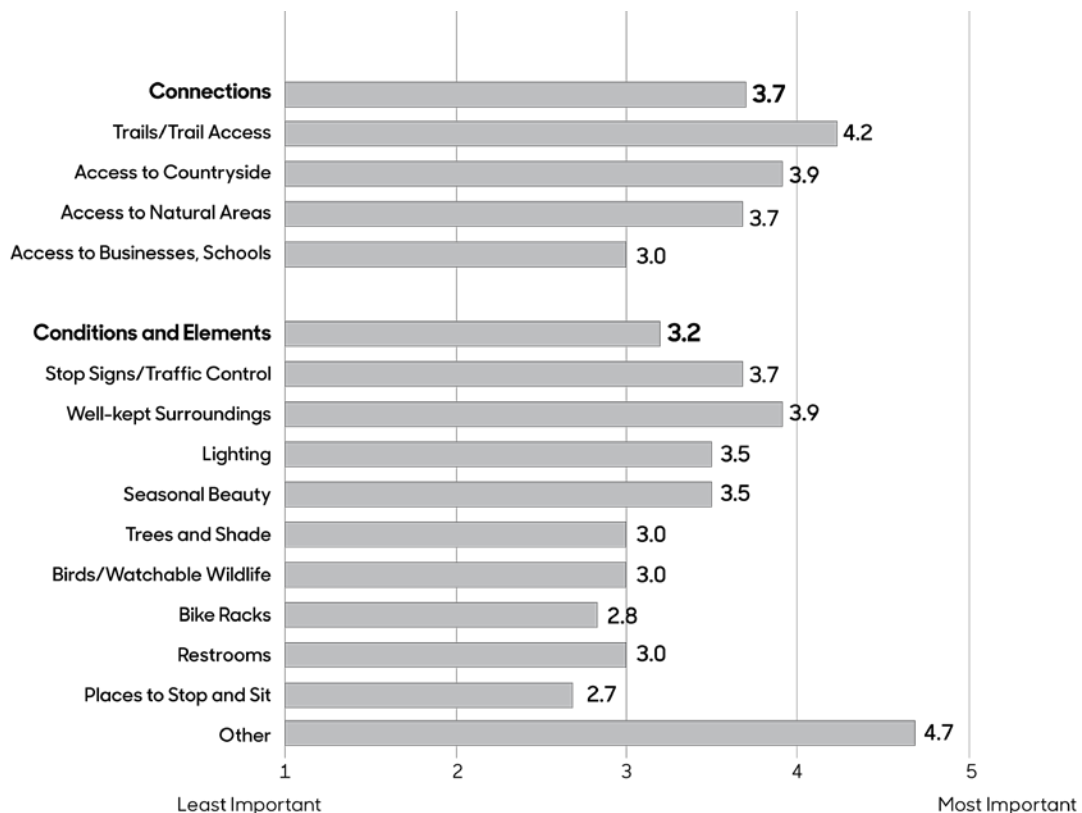
# Biking Routes

## How They Get There

This map shows the biking routes identified by 17 survey respondents. The frequency that the routes are used is depicted by their thickness, with most frequently used routes being the thickest. Like walkers, bikers prefer to ride on Hynes Trail. A few people bike in Clarks Woods Park and the cemetery, and others bike the streets on the periphery of town. Some people also bike on roads outside city limits, including Highway 9.

## Why They Go That Way

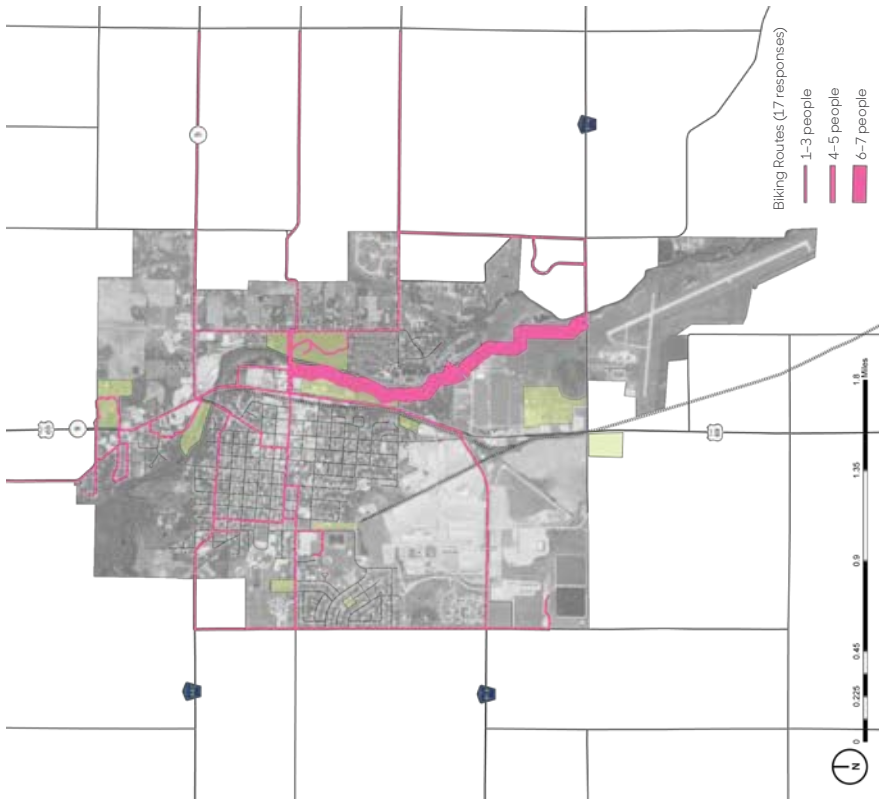
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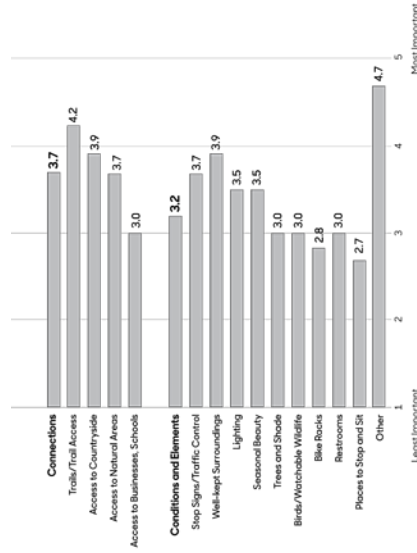
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# Forest City Biking Routes

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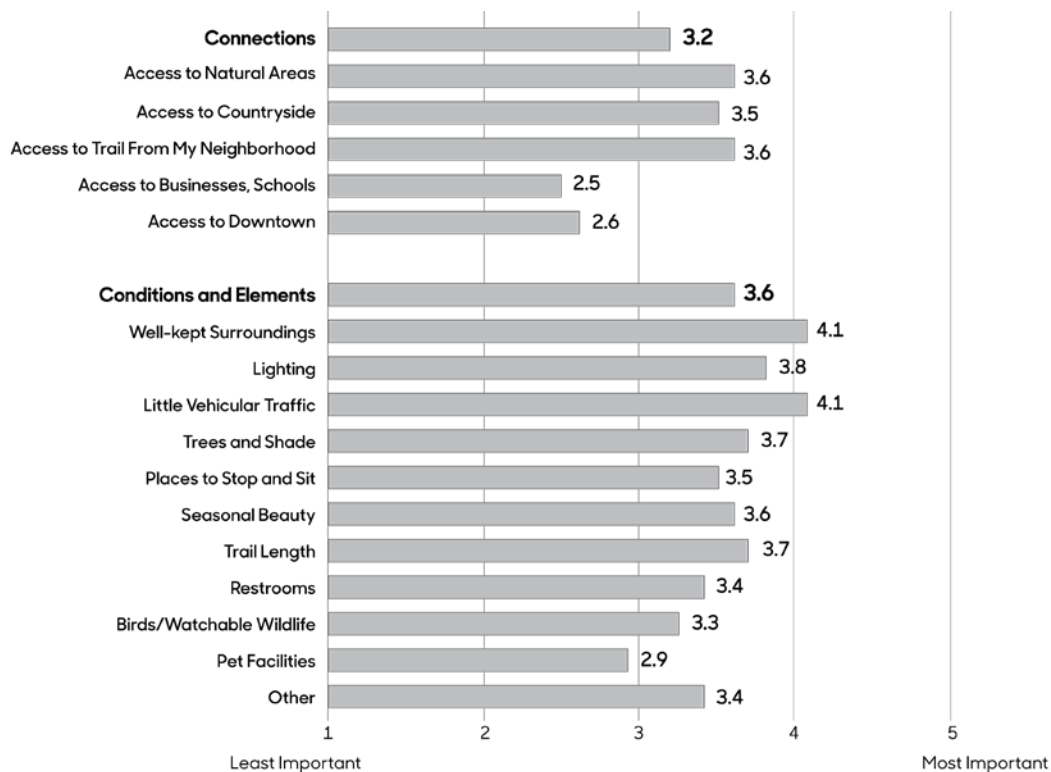
## Desired Trail Routes

### Where People Want Trails

This map shows the desired trail routes identified by 20 survey respondents. The frequency that the routes are identified is depicted by their thickness, with most frequently identified routes being the thickest. The most popular location for a trail among survey respondents is along 160th Avenue between County Road A42 and West I Street. Other suggestions include connecting County Roads A42 and B14 with a trail down 160th Avenue, and adding a trail along John K. Hanson Drive.

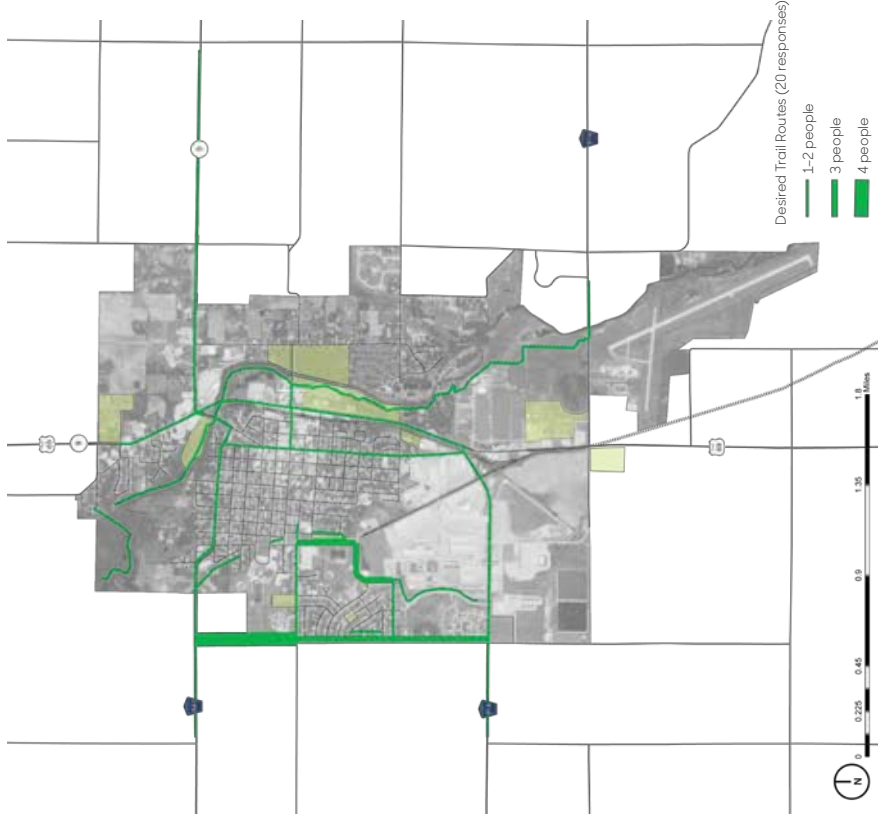
### Important Trail Features

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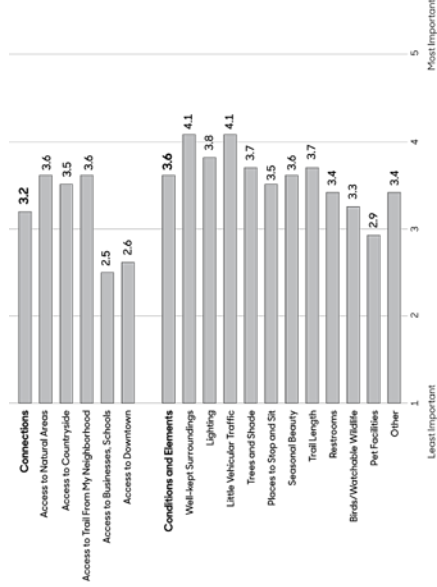
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## Forest City

### Desired Trail Routes

#### Transportation Behavior and Needs Survey

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# Transportation Inventory and Analysis

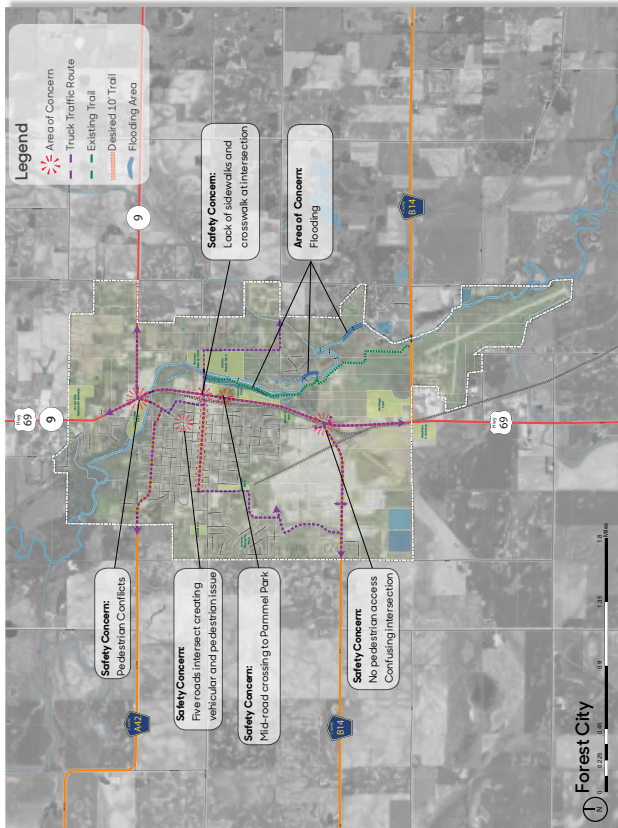
Forest City is a college town anchored by industry and nearby recreational opportunities. The industry in town and the intersection of two State highways creates transportation issues related to increased truck traffic and pedestrian conflicts. Like many communities, accessibility is an issue due to aging infrastructure, incomplete sidewalks, and steep grades.

Forest City's top three priorities encompassing mobility, safety and health were increased physical activity opportunities, safer routes to school, and more accessibility (reference: Priorities, 4c). There is a lack of adequate sidewalks in town, with many disconnected from each other or non-existent. The community would like to see a system of trails and sidewalks connecting the university, schools, and neighborhoods with nearby parks, amenities, and the Hanson Trail and Pilot Knob trail system.

It was mentioned throughout the analysis process that crossing Highway 69 as a pedestrian or cyclist can be challenging. Highway 69 acts as a barrier between Forest City and many of its parks and recreational opportunities, including river recreation (reference: Emerging Themes, 3c).

The intersection of J Street and Highway 69 was designated by the community as "the #1 area of safety issues." Kids on bicycles speed down the hill on J Street southeast towards the ball diamonds, blindly crossing busy Highway 69 in the process. Eliminating this access point would increase safety in Pammel Park (reference: What People Said, 3b).

The intersection of Highway 69 and Highway 9 is another conflict area for pedestrians, especially those traveling north to the local grocery store, medical clinic, and several area restaurants. During the winter months, snow is piled on the sidewalks to the west of Highway 69 making them impassable. Lack of sidewalks on the east side of Highway 69 make traveling to these destinations by foot or bike especially challenging. During the Transportation Inventory and Analysis meeting, the community expressed their interest in using a roundabout at the Highway 69 and Highway 9 intersection. However, Krista Rostad, Iowa Department of Transportation District 2 transportation planner, stated there was not enough room for that solution. She did suggest the use of ADA-compliant warning detectors on the sidewalks and highly-visible crosswalks.



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Intersection of Highway 69 and Highway 9



Intersection of J Street and Highway 69  
Photo Credit: ianmagnuson.com



Intersection of G Street and Highway 69



Existing 4' Sidewalk Along J Street

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## Forest City

### Transportation Inventory and Analysis

**RITLAND+KUIPER Landscape Architects**  
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Iowa State University | Trees For Ever | Iowa Department of Transportation



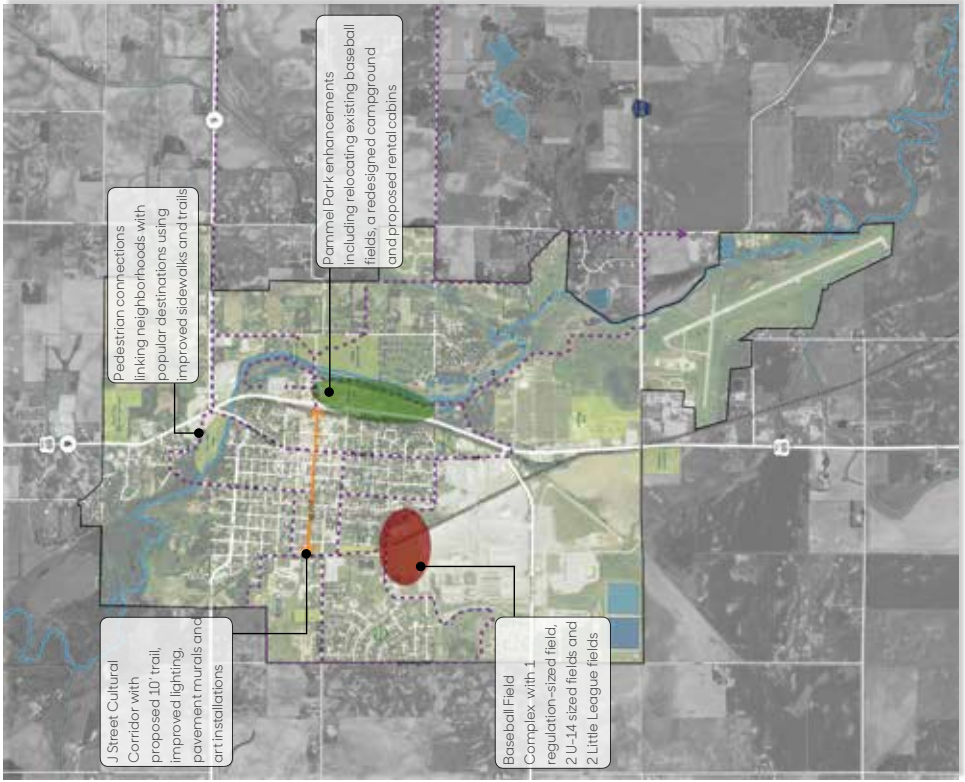
## Community Concept Plan

Many of the transportation-related issues within Forest City are common among rural Iowa communities. A lack of sidewalks results in pedestrian-related issues, busy highways and streets bisect popular destinations within the community, and lack of way-finding signs makes it difficult for visitors to navigate the community.

"I was shocked there were no sidewalks here. What are we supposed to do?" stated a visioning committee member (Re: What People Said, 3b). An emerging theme on all of the analysis boards was a lack of pedestrian connections within the community. The visioning committee prioritized popular destinations and neighborhoods where pedestrian connections would be most important. The design team created a connectivity plan with several phases that would benefit the entire community, including pedestrian traffic from Waldorf University.

US Highway 69 is a major thoroughfare that runs perpendicular to J Street, a major corridor in Forest City. The visioning committee wanted to transform J Street, the entrance into the business district, Winnebago County Courthouse, and Waldorf University into a "cultural corridor," showcasing the uniqueness that Forest City possesses. The corridor would feature a 10' trail on the south side that would link with the Boman Fine Arts Center to the west and Pammel Park to the east. Art, sculpture, pavement murals, improved lighting, banners, way-finding signage, and tree plantings would enhance J Street and set it apart from other areas of Forest City.

"[G Street], there's no stop sign or street light, yet that's the entrance for the ball fields for the kids, so that's pretty scary," commented one parent regarding Pammel Park (Re: What People Said, 3b). Safety is a concern in Pammel Park due to the draw of the baseball fields for youth coupled with no safe crossing on US Highway 69. The visioning committee wanted to explore alternatives if the baseball fields were removed from Pammel Park and put elsewhere. This removal resulted in a baseball field complex located near the Forest City Family Aquatic Center. Residents expressed interest in adding a dog park, fruit trees, an expanded disc golf course, and an improved camping experience during the workshop. The design team was then able to propose a new design for Pammel Park to improve its function and safety.



**Forest City**  
Concept Overview

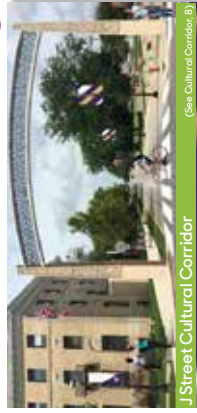
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J Street Cultural Corridor (See Cultural Corridor, 8)



Baseball Field Complex (See Baseball Field Complex, 10)



Way-finding and Signage (See Way-finding and Signage, 7)



Pammel Park Enhancements (See Pammel Park Enhancements, 9)

**RITLAND+KUIPER Landscape Architects**  
Landscape Architects: Craig Ritland, FASLA & Samantha Price, PLA  
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## Connectivity Assessment Plan

The Forest City Master Plan was created based on feedback from residents, information from the analysis boards and on-site evaluations of road and sidewalk conditions. Priority was given to trails and sidewalks that created links between neighborhoods in Forest City (Re: Desired Trail Routes, 4g).

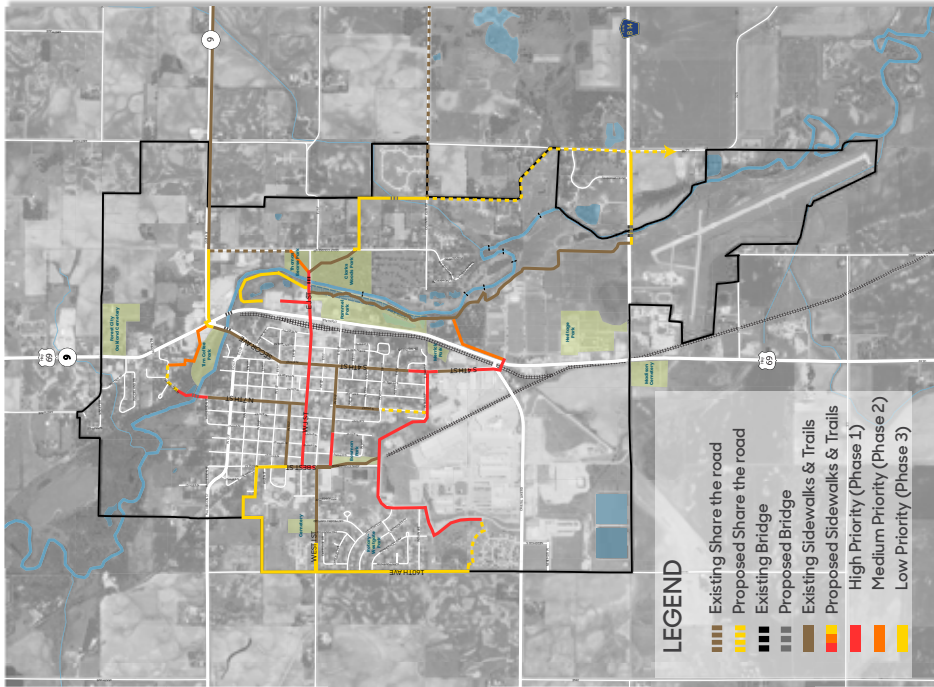
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**Forest City**

Connectivity Assessment Plan



Cross section showing existing J Street conditions



Cross section showing proposed J Street conditions



Example share the road sign



Proposed share the road on TSB Way leading to area businesses



Existing sidewalk on J Street will be replaced with 10' trail

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## Connectivity Assessment Plan - Opinion of Probable Cost

The connectivity assessment plan breaks down the project into three phases. Those phases could be further broken down as priorities within the phases are addressed and funding is secured. To lower the overall costs, 4' to 8' sidewalks could be implemented in lieu of a 10' trail. This approach cuts down on grant opportunities but could be implemented in areas where a 4' sidewalk would work, and local funding can be used.

Without a site survey, it is challenging to consider all costs that could be associated with this project. The design team has broken down the costs associated with 100 linear feet of 4' to 10' pavement, including removal costs and other associated costs. The visioning committee can use this estimate as a tool to determine what our option would be for estimated costs. Additional items to budget for include a percentage of the overall project costs and are as follows: 20% contingency, 15% mobilization and 15% design and engineering fees.

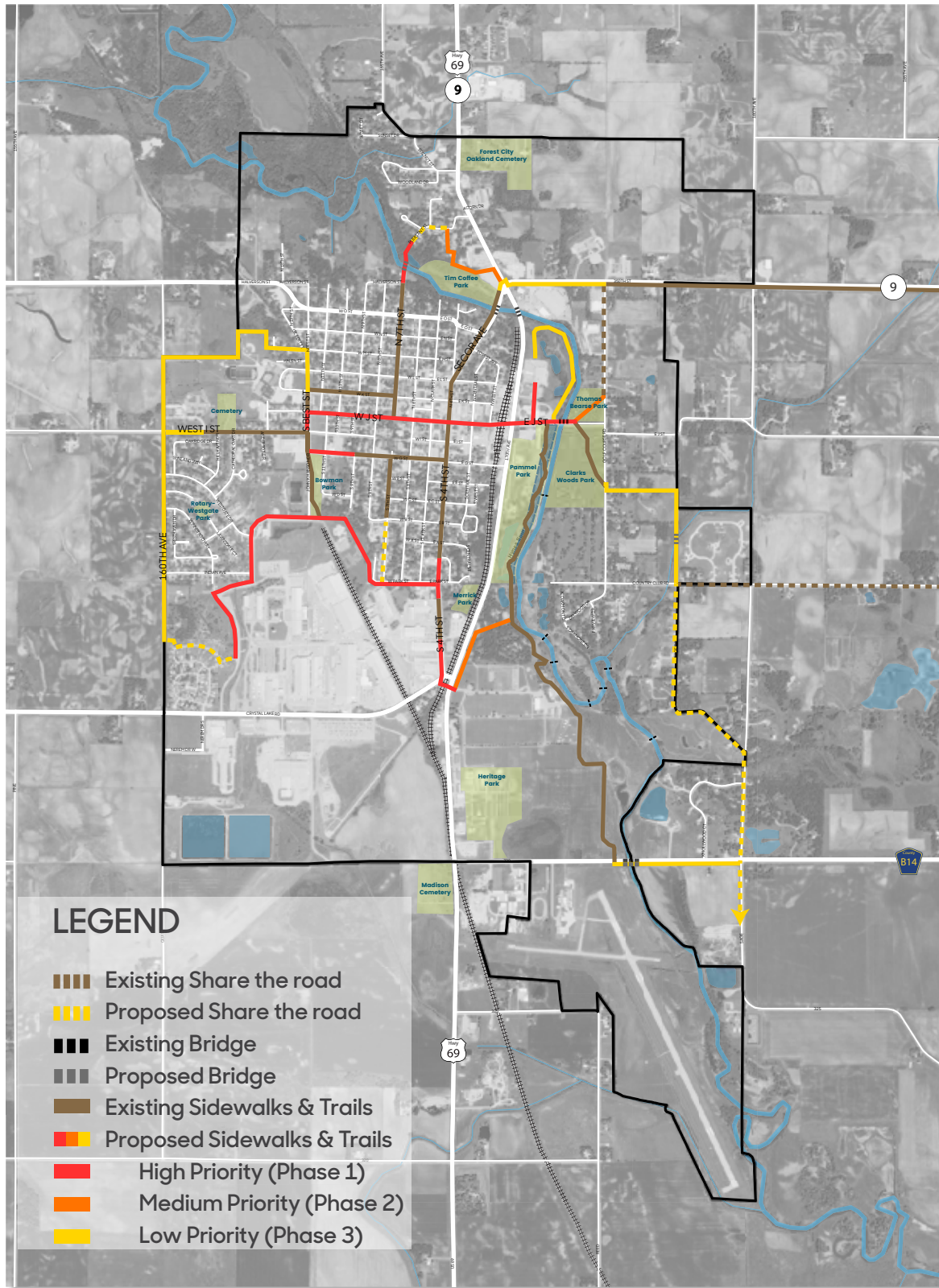
The following cost opinion is based on estimated material quantities and contracted installation prices. Project costs can decrease with donated materials, reduced cost materials, and volunteer labor. All quantities are estimated, and a site survey should be conducted prior to implementation to verify quantities shown in the cost opinions.

Abbreviations used in the following costs opinion include:

SY=square yard      SF = square foot      LF= linear foot      EA = each

Connectivity Assessment Plan	QTY	Unit	Unit Cost	Subtotal
<b>Pavement Removal for 100 LF</b>				
Sidewalk, 100 LF, 4" depth, 4' wide	44	SY	\$15.00	\$660.00
Curb & Gutter, 100 LF	100	LF	\$15.00	\$1,500.00
<b>Sidewalk Installation per 100 LF</b>				
4' Sidewalk	400	SF	\$6.50	\$2,600.00
6' Sidewalk	600	SF	\$6.50	\$3,900.00
8' Sidewalk	800	SF	\$6.50	\$5,200.00
10' Sidewalk	1,000	SF	\$6.50	\$6,500.00
<b>ADA &amp; Safety Features</b>				
ADA Curb Ramps with Warning Panels	1	EA	\$950.00	\$950.00
Highly-visible Crosswalk	1	EA	\$500.00	\$500.00
Flashing Pedestrian Sign	1	EA	\$1,500.00	\$1,500.00
Non-flashing Yield to Pedestrian Sign	1	EA	\$150.00	\$150.00
<b>Share the Road</b>				
Pavement Markings	100	LF	\$1.00	\$100.00
Share the Road Signage	1	EA	\$150.00	\$150.00
<b>Pedestrian Bridge</b>				
Pedestrian bridge costs would start at \$100,000. Final costs would depend on location, size and materials used.				
<b>Trail Amenities</b>				
Bench	1	EA	\$2,000.00	\$2,000.00
Trash Receptacle	1	EA	\$1,500.00	\$1,500.00
Tree Plantings with Amended Soil	1	EA	\$400.00	\$400.00
Trail Signage	1	EA	\$500.00	\$500.00
Mile Marker Signage	1	EA	\$50.00	\$50.00
Pedestrian LED Solar Light	1	EA	\$8,000.00	\$8,000.00
Bike Rack	1	EA	\$750.00	\$750.00

# Connectivity Assessment Plan



## Way-finding & Signage

Forest City's logo incorporates its name and appropriately includes a people/tree graphic. The existing entrance sign, banners, and park signs incorporate the city's logo, which could also be used on the way-finding signage and in the design of the cultural corridor's pavement murals. A cohesive way-finding palette unifies the town theme and provides an increased sense of place. Way-finding provides awareness of destinations within the community and the scale of signage addresses both vehicular and pedestrian users.

### Way-finding and Signage – Opinion of Probable Cost

The following cost opinion is based on estimated material quantities and contracted installation prices. Project costs can decrease with donated materials, reduced cost materials, and volunteer labor. All quantities are estimated and a site survey should be conducted prior to implementation to verify quantities shown in the cost opinions. A study will need to be conducted to determine the best location for way-finding signage. This study will locate directional signage and determine the number of each type of sign used. The design team has provided a price per sign based on the size and information on the sign for pedestrian and vehicular-scaled signage.

Abbreviations used in the following costs opinions include:

EA = each    TBD = to be determined    LS= lump sum

Way-finding & Signage	QTY	Unit	Unit Cost	Subtotal
<b>Pedestrian-scaled Directional Signage</b>				
One Destination	TBD	EA	\$1,500.00	TBD
Two Destinations with Decorative Cap	TBD	EA	\$2,500.00	TBD
Three Destinations	TBD	EA	\$2,500.00	TBD
<b>Vehicular-scaled Directional Signage</b>				
One Destination	TBD	EA	\$1,500.00	TBD
Two Destinations	TBD	EA	\$2,500.00	TBD
Three Destinations	TBD	EA	\$3,500.00	TBD
<b>Decorative Signage</b>				
Grain Elevator Mural Paintings	1	LS	\$70,000.00	\$70,000.00

### Design Expertise Recommended

Projects may require help beyond the capability of the Forest City Visioning Committee or available city staff. For this improvement project, the visioning committee should expect to engage the services of a landscape architect, sign company or graphic designer, and mural artist.



Looking west towards J Street and the existing elevator at the intersection of US Highway 69 and J Street



Proposed grain elevator enhancements continue the Forest City brand and create an entrance to J Street cultural corridor

# Forest City

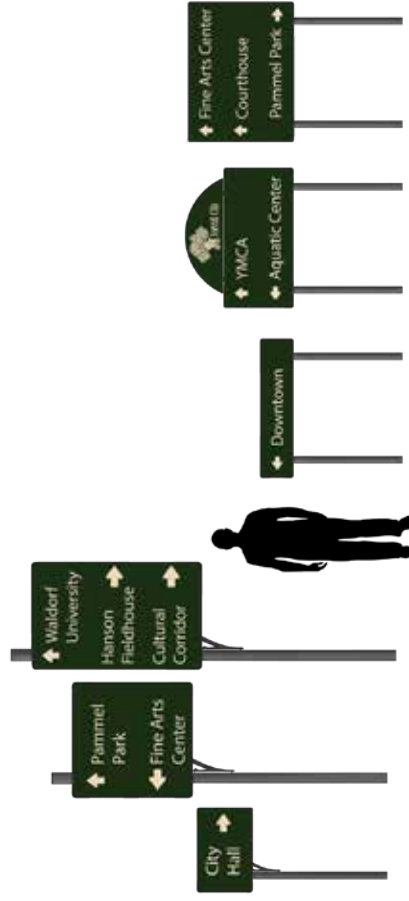
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Existing park signage



Proposed way-finding signage for pedestrian and vehicular use



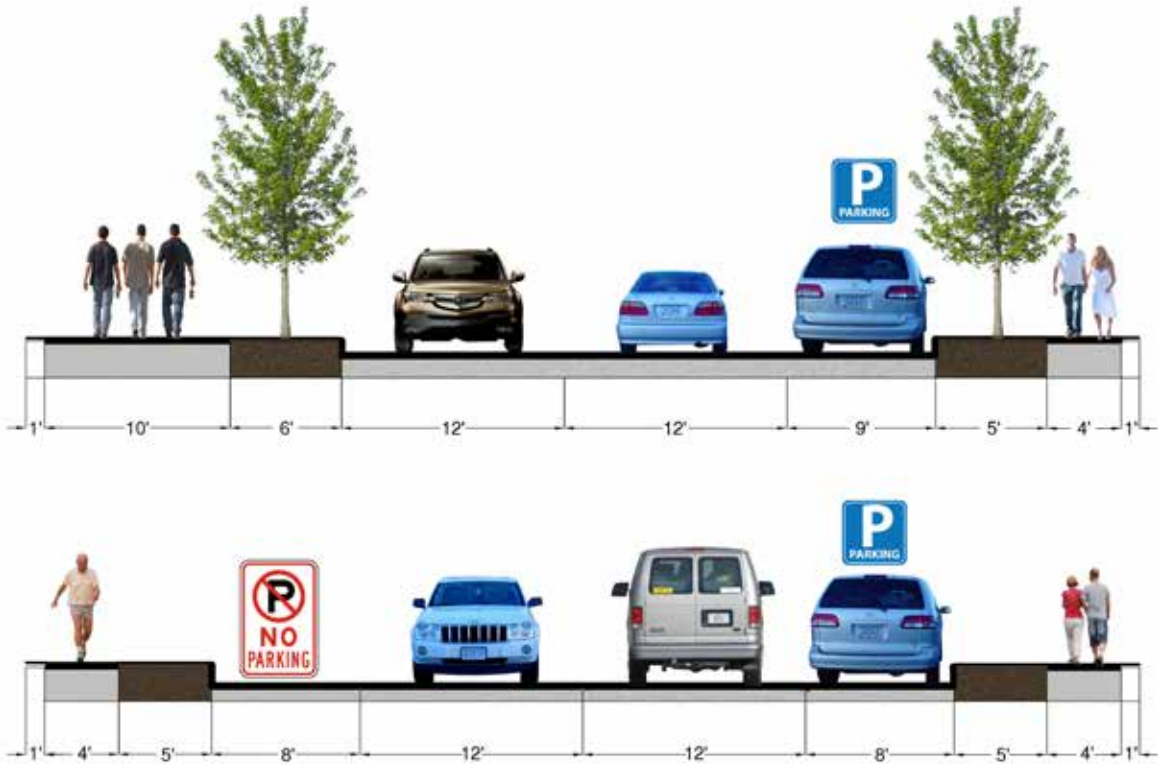
Existing Forest City entrance signage

**RITLAND+KUIPER Landscape Architects**  
 Landscape Architects: Craig Ritland, FASLA & Samantha Price, PLA  
 Landscape Architecture Intern: Jerry Philbin  
 Iowa State University | Trees Forever | Iowa Department of Transportation



## Cultural Corridor

The visioning committee expressed a desire to transform J Street, which runs east to west perpendicular to U.S. Highway 69, into a cultural corridor, showcasing the arts and strong attributes Forest City has to offer both residents and visitors. The J Street corridor highlights Waldorf University, the newly constructed Boman Fine Arts Center, the Winnebago County Courthouse, and Clark Street, which is Forest City's business district. Connectivity is important to Forest City residents, and J Street is a popular route (Re: Walking Routes, 4e). Cultural Corridor plans include reducing the street width along J Street to make room for a 10' trail running from Pammel Park to the intersection with North Best Street where the trail continues south to the Boman Fine Arts Center. The corridor would also feature art pieces such as a gateway arch, pavement murals, colorful banners, and improved lighting.



Top: Cross section shows proposed width reduction of J Street by 7 feet, 10' trail, and vegetated swale and tree plantings in the right-of-way.

Bottom: Cross section shows existing J Street conditions.



Proposed enhancements on J Street include reducing the width of J Street to include a 10' trail on the south side, tree plantings, art, improved lighting and highly visible crosswalks

**Street Tree Recommended Species**

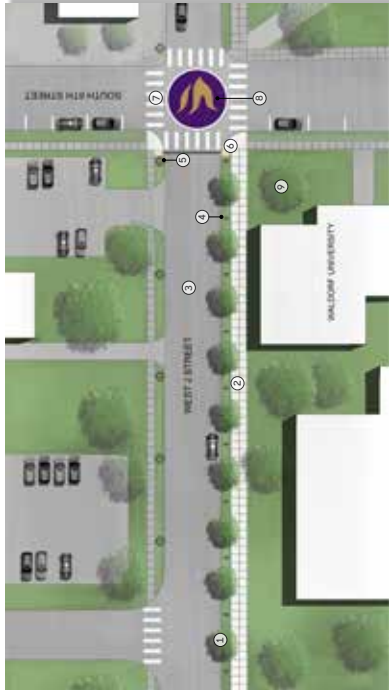
The Iowa Department of Natural Resources conducted a survey of all city owned trees in Forest City. The community has 36% maple, 29% ash, 20% other, 9% oak, and 6% spruce (re: Urban Forest, 2h). The design team recommends the following tree species to improve species diversity throughout Forest City.



**Forest City**  
Cultural Corridor

**RITLAND+KUIPER Landscape Architects**  
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Landscape Architecture Intern: Jerry Philbin  
Iowa State University | Trees Forever | Iowa Department of Transportation

Existing view looking west at intersection of J Street and 5th Street



**Legend**

1. Proposed Street Tree Plantings
2. Proposed 10' Trail
3. Proposed Width Reduction on J Street
4. Proposed Pedestrian Lights
5. Proposed Street Lights with Banners
6. Proposed Gateway Arch Art Piece
7. Proposed Highly Visible Crosswalks
8. Proposed Pavement Mural
9. Existing Trees

**Cultural Corridor**

The visioning committee expressed a desire to transform J Street, which runs east to west perpendicular to U.S. Highway 69, into a cultural corridor; showcasing the arts and the strong attributes Forest City has to offer both residents and visitors. The J Street corridor highlights Waldorf University, the newly constructed Borman Fine Arts Center, the Winneshago County Courthouse, and Clark Street, which is Forest City's business district.

Connectivity is important to Forest City residents, and J Street is a popular route (re: Walking Routes, 4b). Cultural Corridor plans include reducing the street width along J Street to make room for a 10' trail running from Pammel Park to the intersection with North Best Street where the trail continues south to the Borman Fine Arts Center. The corridor would also feature art pieces such as a gateway arch, pavement murals, colorful banners, and improved lighting.



## Cultural Corridor – Opinion of Probable Cost

The following cost opinion is based on estimated material quantities and contracted installation prices. Project costs can decrease with donated materials, reduced cost materials, and volunteer labor. All quantities are estimated and a site survey should be conducted prior to implementation to verify quantities shown in the cost opinions. J Street enhancements for the cultural corridor were calculated by block as a measurement of quantity. The improvements to J Street will require a survey, detailed design and construction documents for proper cost estimating. The cost opinion shows a cost example for a portion of J Street (one city block), an average of 300 linear feet. The overall costs would be dependent on the quantity of items used and would change block by block. The J Street cultural corridor is eleven blocks in length (approximately 3,578 linear feet). The design team recommends phasing the project as construction or repavement efforts occur along the J Street corridor to help reduce costs.

## Design Expertise Recommended

Projects may require help beyond the capability of the Forest City Visioning Committee or available city staff. For this improvement project, the visioning committee should expect to engage the services of a landscape architect, civil engineer, surveyor, artist, and electrical engineer.



Image shows proposed J Street design which includes a gateway arch art piece, pavement murals, enhancements pedestrian crosswalks, and a 10' trail.



Abbreviations used in the following costs opinion include:

LS= lump sum      SF = square foot      LF= linear foot      EA = each  
CY=cubic yard      TBD= to be determined

Cultural Corridor (300 LF)	QTY	Unit	Unit Cost	Subtotal
<b>Roadway with Curb &amp; Gutter</b>				
Traffic Control	1	LS	\$5,000.00	\$5,000.00
Erosion Control	1	LS	\$1,000.00	\$1,000.00
Removals - Pavement	2,100	SF	\$3.50	\$7,350.00
Removals - Curb & Gutter	250	LF	\$12.50	\$3,125.00
*PCC Curb & Gutter Roadway	300	LF	\$35.00	\$10,500.00
<i>*Quantity will be reduced based on linear feet of driveway entrances that occur. A driveway entrance will be poured in place of a new curb and gutter.</i>				
<b>Cultural Corridor Trail - 300 LF (South Side of J Street)</b>				
Removals - Pavement	1,200	SF	\$3.50	\$4,200.00
Excavation (10")	93	CY	\$30.00	\$2,776.67
PCC, 10' wide, 4" Sidewalk w/ 6" Gravel Subbase	3,000	SF	\$8.00	\$24,000.00
*ADA Detectable Warnings at Intersections	4	EA	\$950.00	\$3,800.00
*Highly-visible Crosswalks	4	EA	\$500.00	\$2,000.00
<i>*The quantity of ADA detectable warnings and highly-visible crosswalks will be determined by the location within J Street. A quantity of 4 on the south side of the road is the most any one side of the block would have.</i>				
<b>Lighting</b>				
Pedestrian Lighting	5	EA	\$2,500.00	\$12,500.00
Street Light with Banner Poles	3	EA	\$4,000.00	\$12,000.00
<b>Corridor Amenities</b>				
Benches	2	EA	\$2,000.00	\$4,000.00
Trash Receptacles	1	EA	\$1,500.00	\$1,500.00
Banners for Light Poles (2 per Pole)	6	EA	\$100.00	\$600.00
Tree Plantings with Amended Soil	16	EA	\$400.00	\$6,400.00
*Vegetated Swale with Amended Soil & 1" Plugs	1,600	SF	\$3.00	\$4,800.00
<i>*Best management practices include ways to treat water on site such as vegetated swales. The right-of-way along the cultural corridor could be used as a vegetated swale with amended soil and 1" plug native</i>				
SUBTOTAL				\$100,751.67
Contingency (20%)				\$20,150.33
Mobilization (15%)				\$15,112.75
Design & Engineering (15%)				\$15,112.75
<b>*TOTAL</b>				<b>\$151,127.50</b>
<b>*Based on these budget numbers our cost opinion for all of J Street would be \$1,825,000.</b>				
<b>Special Corridor Amenities</b>				
Gateway Arch Art Piece	1	EA	\$125,000.00	\$125,000.00
*Pavement Mural	2,400	SF	\$15.00	\$36,000.00
<i>*The design team would propose a total of three pavement murals to occur along the cultural corridor.</i>				
Sculptural Art Pieces	TBD	TBD	TBD	TBD
Burying Power Lines	1	LS	TBD	TBD

## Pammel Park Enhancements

To create a safer environment for children the community would like to remove the temptation for them to cross busy Highway 69 at G Street. This will require relocating the baseball fields and closing the G Street access to Pammel Park. Fencing from one of the baseball fields can remain and be repurposed as a dog park for both small and large breeds. Residents expressed an interest for added programming within Pammel Park such as adding an orchard, relocating some of the disc golf holes, improving the camping experience, and adding rental cabins.

The design team is proposing the existing road stop at the campground to improve the camping experience and a new trailhead be implemented near the entrance of Pammel Park. The proposed trailhead would include better access to the river, parking, and improved lighting. This location would also be ideal for way-finding signage directing visitors to local destinations. The proposed entrance road realignment would screen the campground pump station and provide a better user experience when entering the park.



Image shown is the G Street entrance to Pammel Park. The design team is proposing closing this entrance and relocating the baseball fields. Infill tree plantings along Highway 69 are proposed to continue the screening plantings for Pammel Park.

**Pammel Park Enhancements**

To create a safer environment for children the community would like to remove the temptation for them to cross busy Highway 69 at G Street. This will require relocating the baseball fields and closing the G Street access to Pammel Park. Fencing from one of the baseball fields can remain and be repurposed as a dog park for both small and large breeds. Residents expressed an interest for added programming within Pammel Park such as adding an orchard, expanding the disc golf course, improving the camping experience, and adding rental cabins. The design team is proposing the existing road stop at the campground to improve the camping experience and a new trailhead be implemented near the entrance of Pammel Park. The proposed trailhead would include better access to the river, parking, and improved lighting. This location would also be ideal for way-finding signage directing visitors to local destinations. The proposed entrance road realignment would screen the campground pump station and provide a better user experience when entering the park.



**Legend**

- 1. Proposed L0 Trail Connection to Thomas Bearse Park
- 2. Proposed Trailhead & River Access
- 3. Proposed Pammel Park Entrance and Road Realignment
- 4. Existing Campground Pump Stations
- 5. Existing Fire Station
- 6. Proposed Planned Trail Construction
- 7. Proposed Orchard
- 8. Proposed Disc Golf Holes
- 9. Existing Trail
- 10. Existing Swinging Bridge
- 11. Proposed Updated Shower House
- 12. Proposed Updated Campground
- 13. Proposed Removal of Maintenance Building
- 14. Proposed Removal of Access Road
- 15. Proposed Removal of G Street Entrance
- 16. Proposed Rental Cabins
- 17. Existing Tree (Typical)
- 18. Proposed Tree (Typical)
- 19. Proposed Parking Area
- 20. Existing Playground
- 21. Proposed Conversion of Ball Field to Dog Park
- 22. Proposed Removal of Ball Field
- 23. Proposed Crosswalk Enhancements
- 24. Proposed Removal of River Access Road



Image shows existing entrance at G Street. A proposed closure would eliminate this entrance thought unsafe by residents.



Existing entrance is next to the campground pump station. A proposed entrance realignment would screen this area from view as you enter Pammel Park.

**Forest City**

**Pammel Park Enhancements**

**RITLAND+KUIPER Landscape Architects**  
 Landscape Architects: Craig Ritland, FASLA & Samantha Price, PLA  
 Landscape Architecture Intern: Jerry Philbin  
 Iowa State University | Trees Forever | Iowa Department of Transportation



## **Pammel Park Enhancements – Opinion of Probable Cost**

The following cost opinion is based on estimated material quantities and contracted installation prices. Project costs can decrease with donated materials, reduced cost materials, and volunteer labor. All quantities are estimated and a site survey should be conducted prior to implementation to verify quantities shown in the cost opinions.

## **Design Expertise Recommended**

Projects may require help beyond the capability of the Forest City Visioning Committee or available city staff. For this improvement project, the visioning committee should expect to engage the services of a landscape architect, civil engineer, architect, and electrical engineer.

Abbreviations used in the following costs opinion include:

LS= lump sum      SF = square foot      AC= acre      EA = each  
 NA= not available      SY=square yard

Pammel Park Enhancements	QTY	Unit	Unit Cost	Subtotal
<b>Removals &amp; Demolition</b>				
Entrance, River Access Road, Maintenance Building Road, G Street Access	1	LS	\$20,000.00	\$20,000.00
Baseball Field Fencing	1	LS	\$1,500.00	\$1,500.00
Utility Abandonment	1	LS	\$5,000.00	\$5,000.00
Tree Removals	6	EA	\$2,000.00	\$12,000.00
Maintenance Building	TBD	TBD	TBD	TBD
<b>Entrance Road</b>				
New Gravel Road Alignment	27,000	SF	\$1.25	\$33,750.00
<b>Campground &amp; Rental Cabins</b>				
New Loop Road & Campground Spaces	52,000	SF	\$1.25	\$65,000.00
Rental Cabins	3	EA	\$75,000.00	\$225,000.00
Plumbing, Septic, Electrical for Rental Cabins	TBD	TBD	TBD	TBD
<b>Trailhead Parking Area</b>				
PCC, 6" Pavement w/ 6" Gravel (Parking Area)	2,167	SY	\$50.00	\$108,333.33
Signage Kiosk	1	EA	\$3,500.00	\$3,500.00
Bike Rack	1	EA	\$500.00	\$500.00
<b>Trail</b>				
Asphalt 10' Trail	111	SY	\$60.00	\$6,666.67
Crosswalks (Highly Visible Paint)	1	EA	\$500.00	\$500.00
<b>Shower House</b>				
Update Shower House	NA	NA	NA	NA
<b>Dog Park</b>				
6' Chainlink Fence	150	LF	\$20.00	\$3,000.00
Gravel Parking Area	20,000	SF	\$1.25	\$25,000.00
Asphalt 10' Trail Connection to Playground	278	SY	\$60.00	\$16,666.67
Gates	4	EA	\$500.00	\$2,000.00
<b>Plantings</b>				
Deciduous Trees (1" Cal.)	120	EA	\$350.00	\$42,000.00
Orchard Trees	19	EA	\$100.00	\$1,900.00
Lawn/Seed Mix & Prep	1	AC	\$3,500.00	\$3,500.00
<b>Disc Golf Hole Relocation</b>				
Disc Golf Holes: Includes baskets, locking collars, anchor assesmby, concrete pads, tee signs and installation	4	EA	\$750.00	\$3,000.00
SUBTOTAL				\$578,816.67
Contingency (20%)				\$115,763.33
Mobilization (15%)				\$86,822.50
Design & Engineering (15%)				\$86,822.50
TOTAL				\$868,225.00

## Baseball Field Complex

In order to create a safer environment for children the community would like to remove the temptation for them to cross busy Highway 69 at G Street. This will require relocating the baseball fields and closing the G Street access to Pammel Park.

The baseball field complex design features a regulation-sized field and two U-14 fields. Additionally, two Little League fields would be developed south of the aquatic center. A 10' trail along John K Hanson Road would connect to other routes on the Trails Master Plan. The proposed trail also links the baseball complex and the Forest City Family Aquatic Center.



Image shows the regulation-sized field and two U-14 fields

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**Baseball Field Complex**

In order to create a safer environment for children the community would like to remove the temptation for them to cross busy Highway 69 at G Street. This will require relocating the baseball fields and closing the G Street access to Pammel Park.

The baseball field complex would include a regulation-sized field and two U-14 fields. Additionally, two Little League fields would be developed south of the Forest City Family Aquatic Center. A 10' trail along John K Hanson Road would connect to other routes on the Community Assessment Plan. The proposed trail also links the baseball complex and the aquatic center.

**Legend**

- 1. Proposed 10' Trail
- 2. Proposed Entrance Drive
- 3. Proposed Parking Lot
- 4. Existing Location of Cell Tower
- 5. Proposed Restroom/Concessions
- 6. U-14 Field
- 7. Proposed Regulation Field
- 8. Bleachers (Typical)
- 9. Proposed Shade Trees
- 10. Proposed Little League Field
- 11. Existing Trees to Remain (Typical)



Site plan showing proposed baseball fields, circulation routes, trails, concession and restroom building, and shade tree plantings

**Forest City**

Baseball Field Complex

**RITLAND+KUIPER Landscape Architects**  
 Landscape Architects: Craig Rittland, FASLA & Samantha Price, PLA, ASLA  
 Landscape Architecture Intern: Jerry Philbin  
 Iowa State University | Trees Forever | Iowa Department of Transportation



## Baseball Field Complex - Opinion of Probable Cost

The following cost opinion is based on estimated material quantities and contracted installation prices. Project costs can decrease with donated materials, reduced cost materials, and volunteer labor. All quantities are estimated and a site survey should be conducted prior to implementation to verify quantities shown in the cost opinions. Existing bleachers, benches, and fencing may be re-used to further reduce overall costs.

## Design Expertise Recommended

Projects may require help beyond the capability of the Forest City Visioning Committee or available city staff. For this improvement project, the visioning committee should expect to engage the services of a landscape architect, fence company, civil engineer, and architect.



Image shows two Little League fields and trail access to the larger baseball field complex



Abbreviations used in the following costs opinion include:

LS= lump sum      SF = square foot      EA = each

Baseball Field Complex	QTY	Unit	Unit Cost	Subtotal
<b>Demolition &amp; Removals</b>				
Removal of Existing Fields	1	LS	\$5,000.00	\$5,000.00
Site Prep and Grading	1	LS	\$25,000.00	\$25,000.00
<b>Baseball Fields</b>				
<i>Baseball field construction includes native soil, screened topsoil, turf seed, infield lime (6" depth)</i>				
Regulation-sized Baseball Field	1	EA	\$50,000.00	\$50,000.00
20' Backstop Fencing	100	LF	\$100.00	\$10,000.00
8' Chainlink Fence (in front of dugout)	40	LF	\$30.00	\$1,200.00
4' Chainlink Fence (surrounding field)	862	LF	\$15.00	\$12,930.00
15' - 3 Row Bleachers	1	EA	\$1,875.00	\$1,875.00
Dug Out Bench	2	EA	\$1,072.50	\$2,145.00
U-14 Sized Baseball Fields	2	EA	\$45,000.00	\$90,000.00
20' Backstop Fencing	200	LF	\$100.00	\$20,000.00
8' Chainlink Fence (in front of dugout)	80	LF	\$30.00	\$2,400.00
4' Chainlink Fence (surrounding field)	1684	LF	\$15.00	\$25,260.00
15' - 3 Row Bleachers	2	EA	\$1,875.00	\$3,750.00
Dug Out Bench	4	EA	\$1,072.50	\$4,290.00
20' Backstop Fencing	100	LF	\$100.00	\$10,000.00
Little League Sized Baseball Field	2	EA	\$40,000.00	\$80,000.00
20' Backstop Fencing for 3 Fields	300	LF	\$100.00	\$30,000.00
15' - 3 Row Bleachers	1	EA	\$1,875.00	\$1,875.00
Dug Out Bench	2	EA	\$1,072.50	\$2,145.00
<b>Concession Stand &amp; Restrooms</b>				
Concession Stand & Restrooms (800 SF)	800	SF	\$100.00	\$80,000.00
<b>Trails within Baseball Complex</b>				
PCC, 10' wide, 4" Sidewalk w/ 6" Gravel Subbase	1440	LF	\$8.00	\$11,520.00
Highly Visible Crosswalks	1	EA	\$500.00	\$500.00
<b>Trail from Aquatic Center to Baseball Fields</b>				
PCC, 10' wide, 4" Sidewalk w/ 6" Gravel Subbase	285	LF	\$8.00	\$2,280.00
<b>Parking Lot</b>				
PCC, 6" Pavement w/ 6" Gravel (Parking Area)	3,266	SY	\$50.00	\$163,305.56
<b>Tree Plantings</b>				
Tree Plantings with Amended Soil	99	EA	\$400.00	\$39,600.00
SUBTOTAL				\$645,075.56
Contingency (20%)				\$129,015.11
Mobilization (15%)				\$96,761.33
Engineering & Design (15%)				\$96,761.33
TOTAL				\$967,613.33

## 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 Forest City. Although there is much value in data gathering, analysis, conclusions and recommendations, the greatest value is providing the residents of Forest City 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.

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 in some cases 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.

**Where to Start:** The design team is recommending pedestrian and vehicular way-finding signage be implemented throughout the community. A signage study would need to be conducted to assess where signs are needed. This project was chosen because Forest City has many tourists throughout the year for various events. Implementing way-finding would be highly visible, aid in momentum towards other visioning projects and give credibility to the visioning committee.

**Connectivity Assessment Plan:** The connectivity assessment plan is a long-range project, but fundraising should begin immediately. The plan consists of three phases that would connect popular destinations and neighborhoods. The first phase consists of routes students would use to get to school and the university. Phase 1 also includes J Street, which is a high priority project for the visioning committee. The design team also recommends Forest City initiate a sidewalk project to complete important disconnects and repairs where critical.

**Cultural Corridor:** The Cultural Corridor on J Street is a high priority within the visioning committee. The project can be phased, and the committee should begin obtaining funding for the project immediately. An artist will need to be commissioned for the art pieces along the corridor, as well as the gateway arch sculpture.

**Pammel Park Enhancements:** Pammel Park is a popular destination and gathering place within the community and the planned improvements should be implemented as funding can be secured. The park is functioning as is, so this project is lower priority to others. Relocating the baseball fields and closing the G Street entrance should be a priority due to safety concerns for children frequenting the crossing on Highway 69 to the G Street entrance.

**Baseball Field Complex:** The baseball field complex project should be concurrent with the removal of the baseball fields in Pammel Park. The connecting trail between the Little League fields near the aquatic center and the complex should be phased as part of the overall connectivity assessment plan. Since the complex is on private land, an agreement should be made prior to any fundraising efforts.

## Available Resources

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

### Funding Opportunities

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

### Funding Sources

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

### Grant Programs

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

## Appendix A

Refer to the full Community Project Funding Guide at: [http://www.treesforever.org/Community\\_Project\\_Funding\\_Guide](http://www.treesforever.org/Community_Project_Funding_Guide)

Included in this appendix is the list of programs available, more information is located at the link above.

# COMMUNITY PROJECT FUNDING GUIDE



A guide compiled by Trees Forever to assist Iowa communities seeking funding sources for community improvement projects.

Online at: [http://www.treesforever.org/Community\\_Project\\_Funding\\_Guide](http://www.treesforever.org/Community_Project_Funding_Guide)

**October 2017**

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APPENDIX I: Iowa Department of Transportation District Planners, and MPOs and RPAs

APPENDIX II: Iowa Department of Transportation District Engineers

## Appendix B

Refer to the full IDOT funding guide at: [http://www.iowadot.gov/pol\\_leg\\_services/Funding-Guide.pdf](http://www.iowadot.gov/pol_leg_services/Funding-Guide.pdf)

Included in this appendix is the list of programs available, more information is located at the link above.

### **Guide to Transportation Funding Programs of interest to local governments and others**

In this document you will find information regarding state and federal programs that provide transportation project funding of interest to local governments and other entities. This information is intended to serve as a guide for preliminary funding searches. For more detail, we encourage you to contact the Iowa Department of Transportation (DOT) office listed for each program. (In some cases, the DOT district office or a Regional Planning Affiliation/Metropolitan Planning Organization is the recommended contact – maps and information for your area can be found beginning on page 66.)

As always, to help you find as many potential funding sources as possible, we have included some programs under more than one heading.

**February 2018**





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# District Transportation Planners' Areas of Responsibility

## Metropolitan Planning Organizations and Regional Planning Affiliations

