Final Report and Feasibility Study
Peterson, Iowa

Program Partners:

Iowa Department of Transportation
Trees Forever
Iowa State University

Iowa's Living Roadways community visioning

Participants

Town Steering Committee

Rebecca Castle
Deb Collingwood
Amy Crouch
Rick Delutri
Charlene Elyea
Greg Johnson
Barb McGee
Denise Riley
Carolyn Roberts
Gloria Terrell

Trees Forever

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

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

Iowa State University

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

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

Iowa State University Community Design Lab

Landscape Architecture Extension
2321 North Loop Drive, Suite 121
Ames, IA 50010
515-294-2213
http://research.design.iastate.edu/communitydesignlab/

Carl Rogers, Director and Chair of Landscape Architecture
Chad Hunter, Design Fellow and Lecturer of Landscape Architecture
isucdl@iastate.edu

Shuang Wu
Landscape Architecture Intern
Iowa State University

Table of Contents

About ISU Community Design Lab

The Iowa State University Community Design Lab (CDL) partners with communities and organizations, combining local knowledge and design research expertise, to create healthy, livable communities. A primary goal of CDL's work is to effectively inform and engage community members in the process of developing design concepts for each community. Our process involves on-the-ground and investigative research to perform a thorough and engaged inventory and analysis with a focus on landscape performance and user experience of the built environment. The analysis aids us in visualizing community goals and concerns and provides a framework for developing community led strategies and designs. Throughout the process the CDL engages with the community members and stakeholders through committee and public meetings as well as through unique interactive strategies out in the community.

The Community Design Lab is a collaborative team, primarily comprised of landscape architects with additional background in architecture, visual art and community food systems. The team is made up of full-time designers, faculty in the landscape architecture department at Iowa State University, and a rotating cast of graduate and undergraduate design research assistants based on project needs.

Carl Rogers, RLA
Director: Community Design Lab
Department Chair and Associate Professor:
Dept. of Landscape Architecture;
Iowa State University

Chad Hunter
Design Fellow: Community Design Lab
Lecturer: Dept. of Landscape Architecture;
Iowa State University

Program Overview

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

- Increase Safety and Accessibility
- Establish a Trail Network
- Strengthen Community Identity

Capturing the Peterson Vision

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

PETERSON VISIONING

Starting in the early spring, Peterson has been working with Iowa's Living Roadways Community Visioning Program. "The Community Visioning Program provides small Iowa communities with the planning and design resources needed to make meaningful transportation improvements to the local landscape".

Through public input sessions, design charettes and regular meetings with the steering committee, a variety of concerns, goals and were identified related to Peterson's transportation planning. Iowa State University Community Design Lab (CDL) was selected as the landscape architects for the project, to provide strategies and a vision to meet these goals and concerns. The following boards represent the culmination of the public input events and the direction of the steering committee. We welcome your feedback on the proposed items.

Peterson, IA
"The Scenic Nest of Iowa's Northwest"

COMMUNITY GOALS

Increase accessibility and safety
- **universal access points on Main Street**
- **develop a vision for improving safe crossings at locations of concern**
- **improved sidewalk condition and greater coverage**
- **more lighting throughout town**

Establish a trail network
- **relate to character of Glacial Trail Scenic Byway**
- **promote community, history, and the surrounding landscape**
- **connect community amenities**

Strengthen community identity
- **introduce new street signs**
- **promote community amenities and history**
- **build on theme of community slogan and connect with scenic byway identity**
- **develop vision for Main Street bank lot and adjacent open lots**

Peterson
Overview

VISIONING PROCESS

Peterson
Project Overview

Iowa State University Community Design Lab
Landscape Architect: Carl Rogers, RLA
Project Designer: Chad Hunter
Iowa State University | Trees Forever | Iowa Department of Transportation

Bioregional Assessment

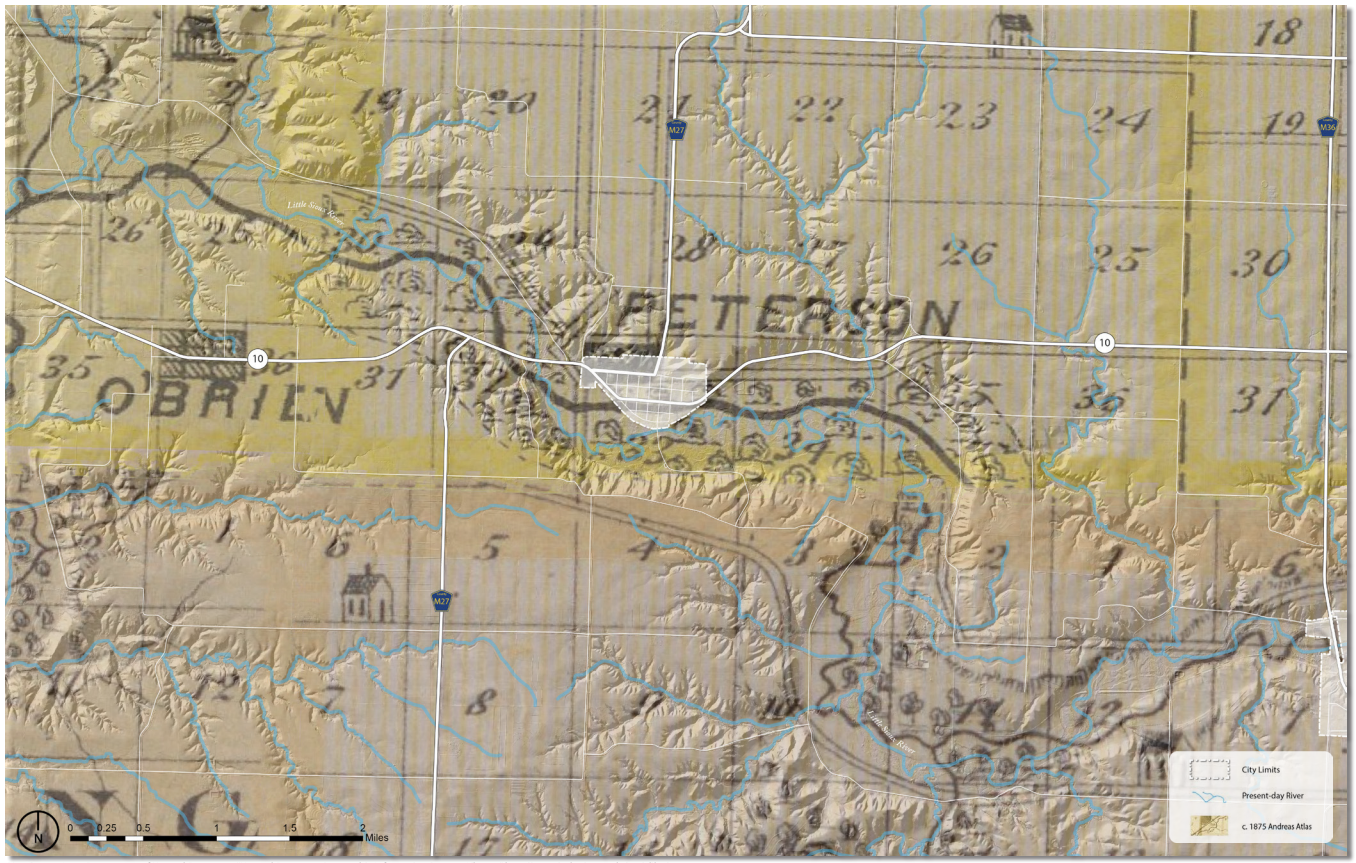
Settlement Patterns

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.

Peterson in Context

Compare the 1875 boundaries of your town to the current boundaries. How much has your town grown?

Compare the course of the rivers in 1875 to their current course. Are there major changes in alignment or location? Are there vegetation patches shown in the 1875 map still in existence?



Map Source: Iowa Department of Natural Resources, "Natural Resources Geographic Information Systems Library," http://www.igsb.uiowa.edu/nrgislibx/.

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.

Peterson 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?

Peterson
Settlement Patterns

Bioregional Context

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

Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

Historical Vegetation

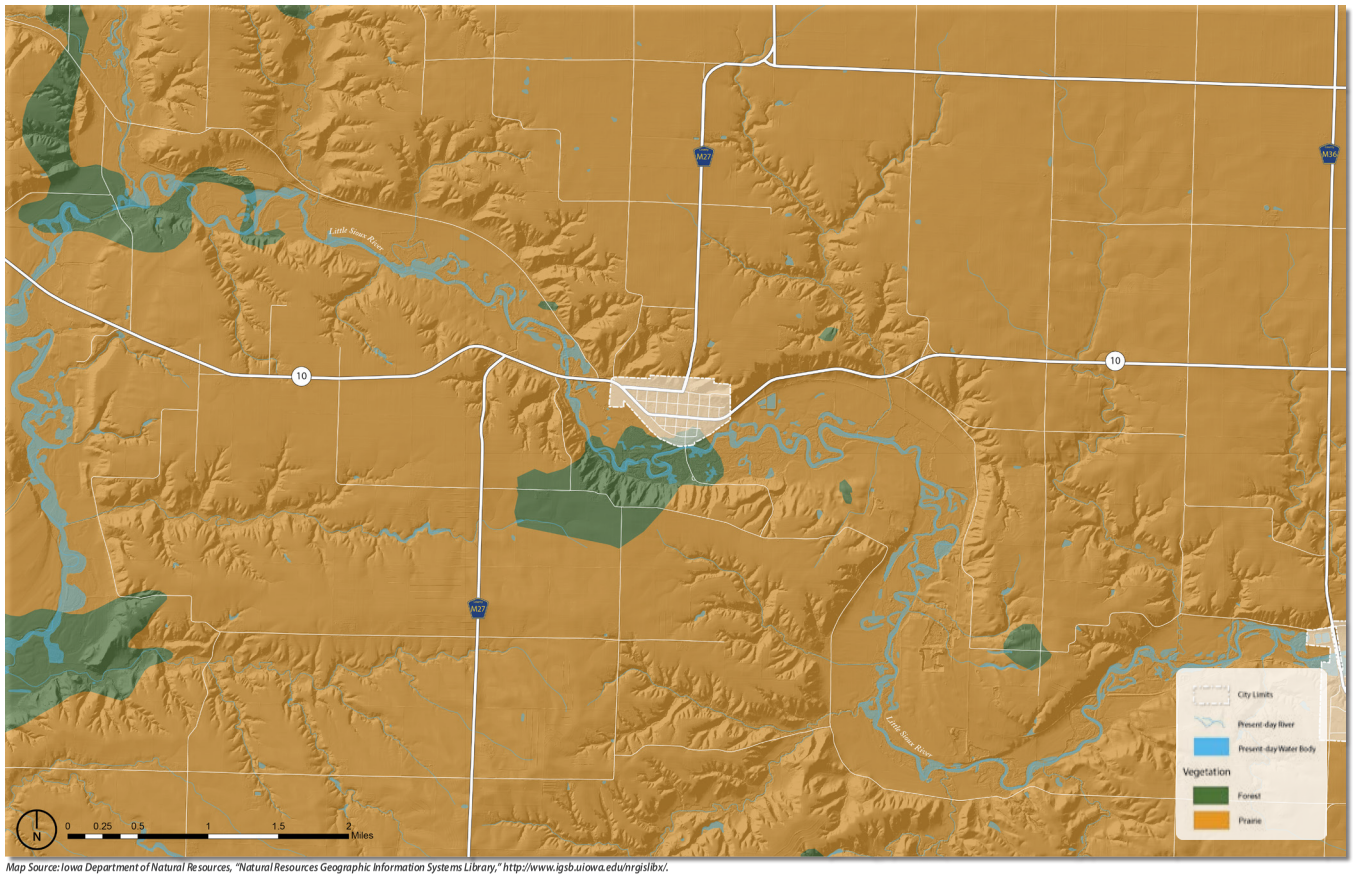
The vegetation information shown here is derived from township maps made by the General Land Office (GLO) surveys beginning in 1836 through 1859. The vegetation information was digitized in 1996 as a resource for natural resource management and is useful "...for the study of long term ecological processes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

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

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

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

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



Map Source: Iowa Department of Natural Resources, "Natural Resources Geographic Information Systems Library," http://www.igsb.uiowa.edu/nrgislibx/.

Historical Vegetation

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

The names of plant communities mapped by the GLO surveyors varied. The original terminology used by the surveyors who made maps has been preserved in the original data, but we have renamed 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 vegetationincluded in the map may include the following:

1. Forest : Trees with mainly closed canopy; ground vegetation shade tolererant. Infrequent fire disturbance.
2. Savana: 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.

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

Peterson
Historical Vegetation

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

Iowa's Living Roadways community visioning

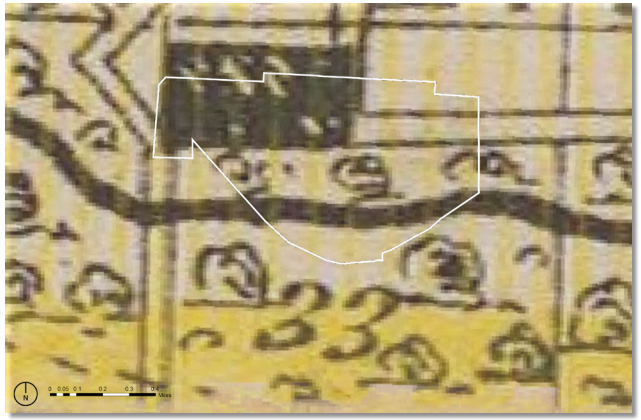
Change Over Time

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

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

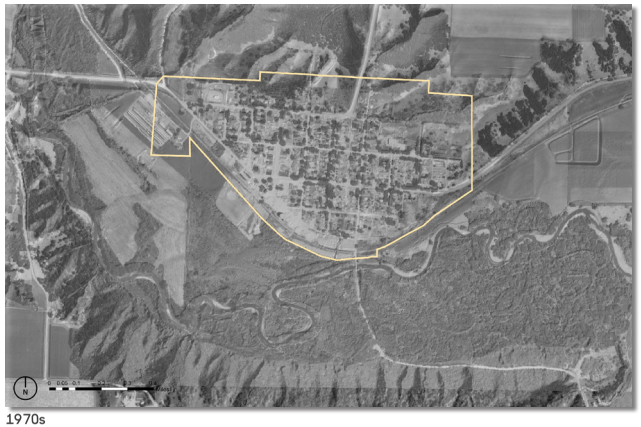
New roads have been developed, usually cutting across the landscape topography on compacted roadbeds. Highways usually have low slopes and more gentle curves to facilitate high-speed movement, while roads targeted to more localized traffic can have steeper slopes and tighter curves. The result of these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

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

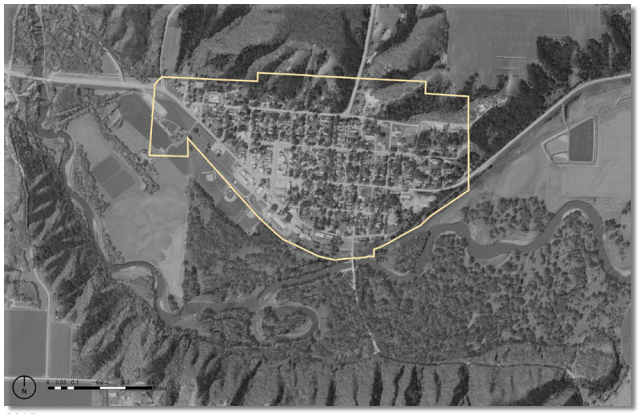


1875 Andreas Atlas

1930s



1970s



2015

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

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 1800's 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 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 40's and 60's, 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.

Peterson

Change Over Time

Bioregional Context

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

Iowa State University | Trees Forever | Iowa Department of Transportation

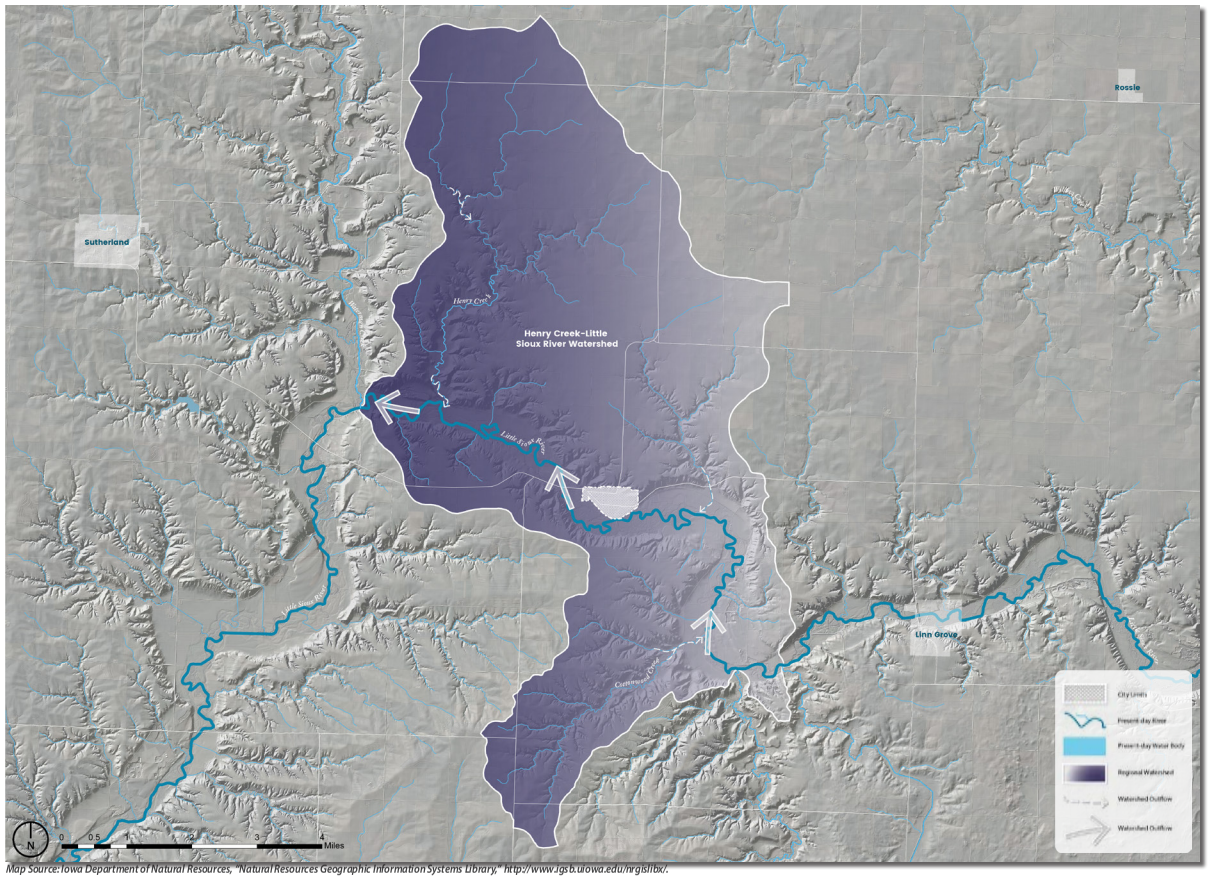
Iowa's Living Roadways community visioning

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.



Map Source: Iowa Department of Natural Resources, "Natural Resources Geographic Information Systems Library," http://www.igsb.uiowa.edu/nrgislibx/.

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 determines 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.

Peterson
Regional Watershed

Bioregional Context

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

Iowa State University | Trees Forever | Iowa Department of Transportation

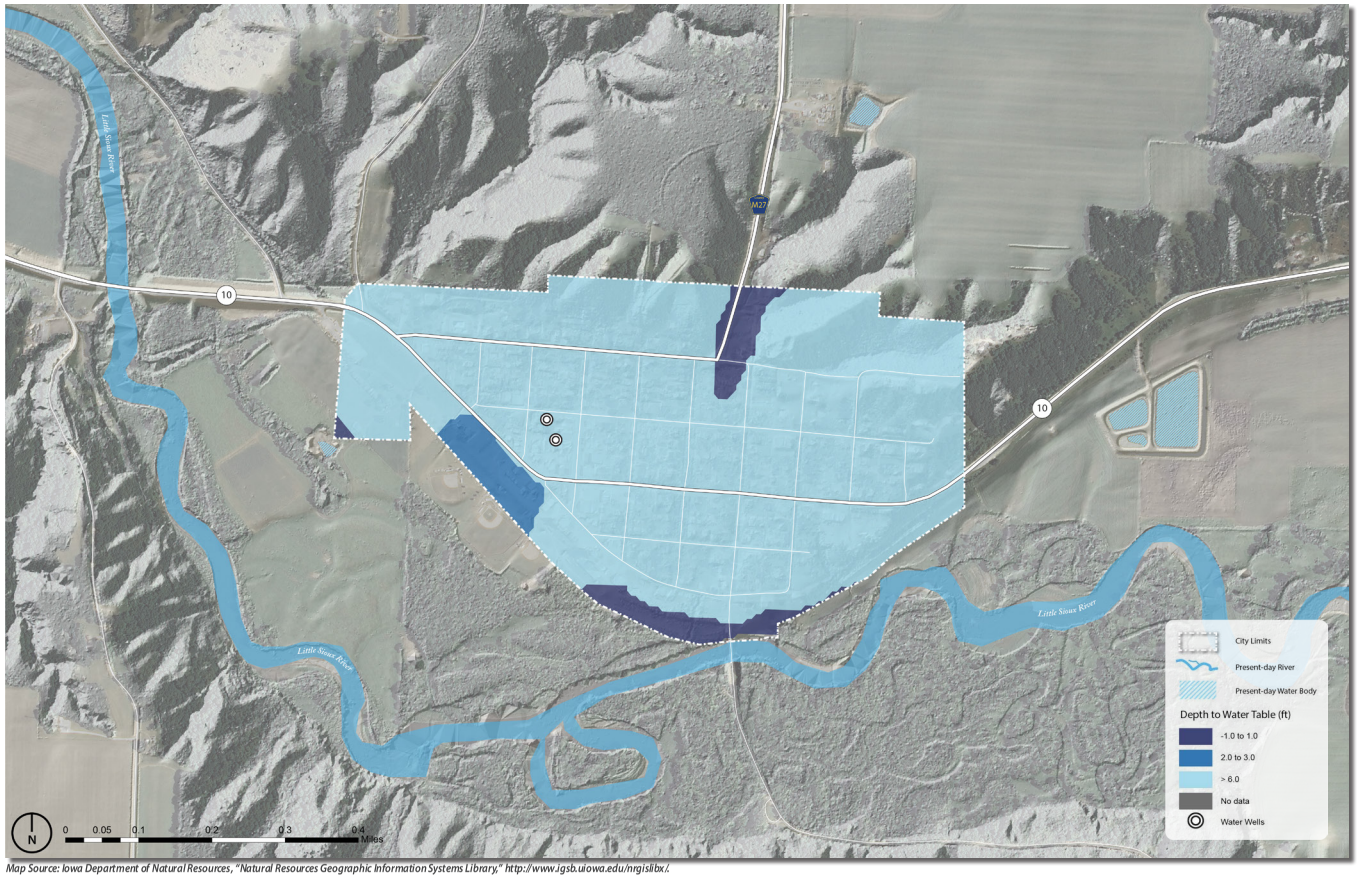
Iowa's Living Roadways community visioning

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.



Map Source: Iowa Department of Natural Resources, "Natural Resources Geographic Information Systems Library," http://www.igsb.uiowa.edu/nrgislibx/.

Depth to Water Table

The water table is defined as the distance below the surface at which the ground is saturated with water. Depth to water table is represented as a range because it varies due to seasonal changes and precipitation volumes. For example, following spring snow-melt 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 0ft, water can well up out of the ground. This causes localized flooding, even if there is no surface water draining to the area.

Peterson

Depth to Water Table

Bioregional Context

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

Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

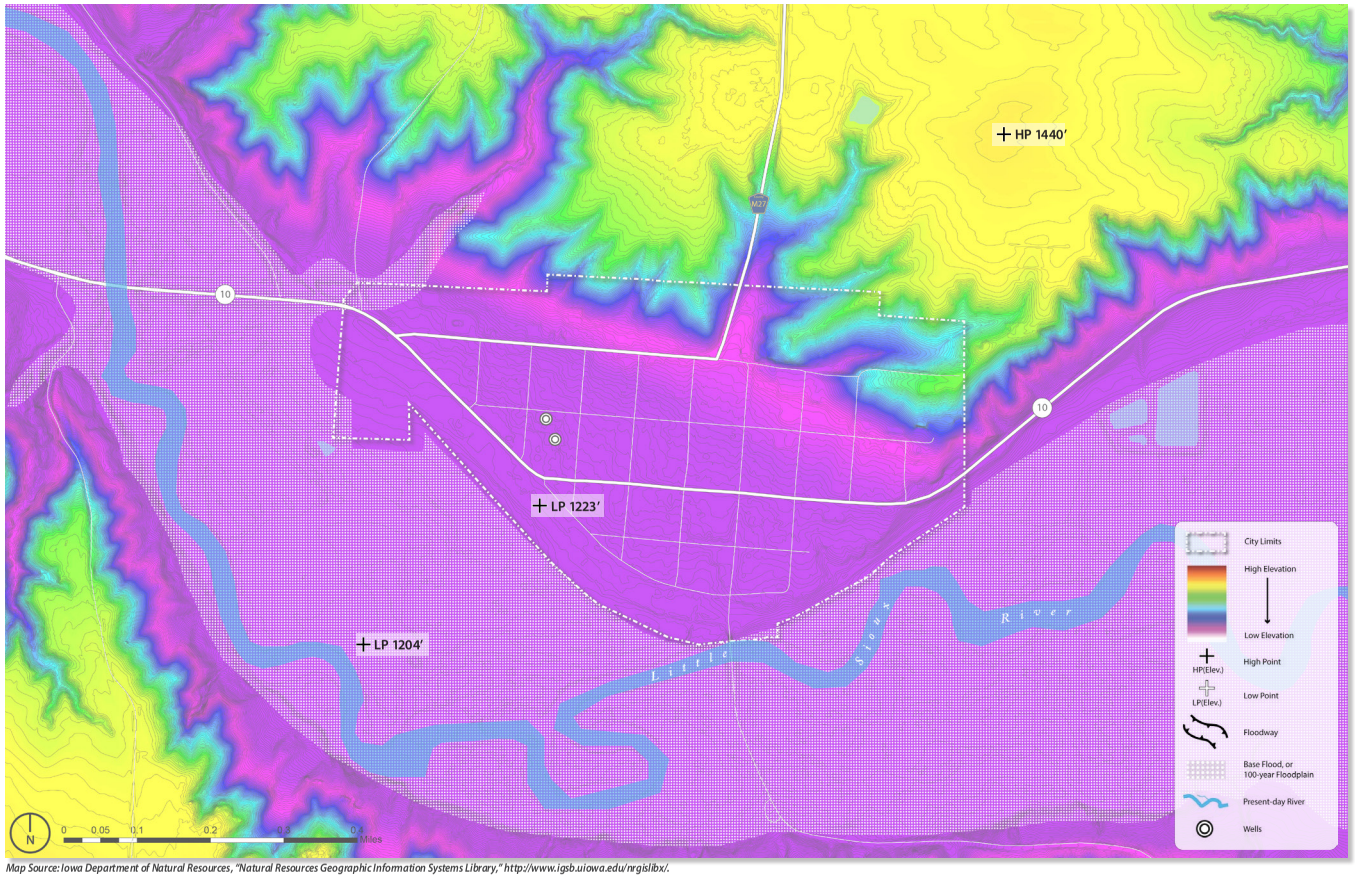
Elevation and Flow

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.



Map Source: Iowa Department of Natural Resources, "Natural Resources Geographic Information Systems Library," http://www.igsb.uiowa.edu/nrgislibx/.

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 reflects these features. Not all communities will have these elements; their absence on this map indicates 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 present, 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 encroachment so that the 1% flood discharge can be accommodated without increasing the base flood elevation.

Peterson

Elevation and Flow

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

Iowa's Living Roadways community visioning

Present Day Land Cover

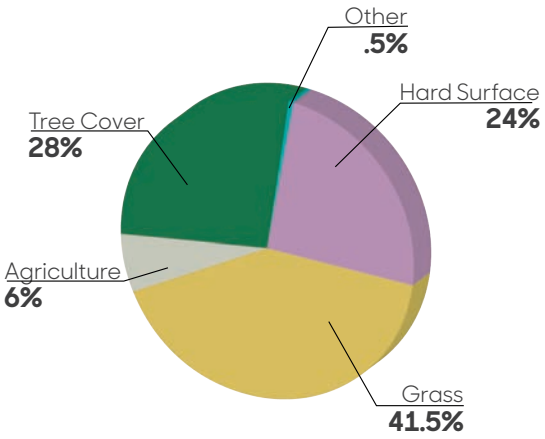
The land cover map depicts both natural and man-made land cover types with aerial imagery. The Iowa DNR created 15 unique classes for this dataset to differentiate land covers. Refer to the legend for a breakdown of land cover types within your community boundaries.

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

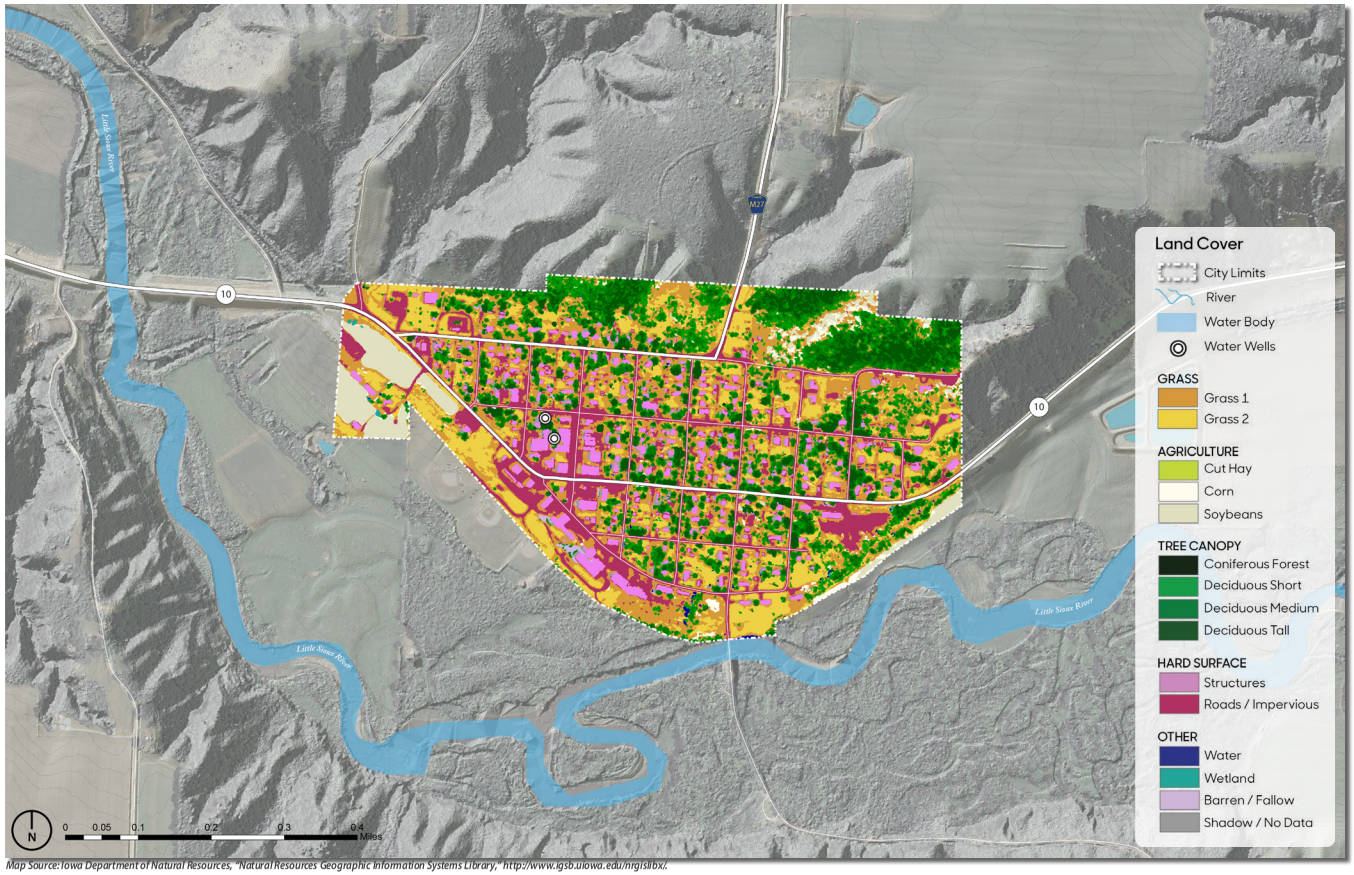
Compare the amount of impervious surfaces (e.g., parking lots, roads, buildings) to the other surfaces (e.g, water, grass, and agriculture.) What does this mean for surface water movement?

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

Percent Land Cover Type



Percent Land Cover Type



Map Source: Iowa Department of Natural Resources, "Natural Resources Geographic Information Systems Library," http://www.igsb.uiowa.edu/nrgislibx/.

Present Day Land Cover

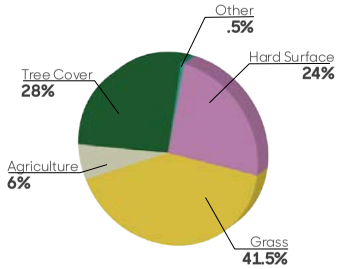
The land cover map depicts both natural and man-made land cover types with aerial imagery. The Iowa DNR created 15 unique classes for this dataset to differentiate land covers. Refer to the legend for a breakdown of land cover types within your community boundaries.

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

Peterson

Present Day Land Cover

Bioregional Context

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

Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

Transportation Assets and Barriers

Overview

Transportation is integral to small-town life and a vibrant economy. In the context of the Community Visioning Program, we recognize walking, biking, and driving as quintessential modes of travel to various destinations important to residents and visitors. Access to these destinations is crucial for many everyday activities—getting to work and school, participating in community events, and providing for basic needs such as food, health care, and healthy activity.

In this participatory assessment, we want to find out which factors and conditions affect transportation use in Peterson 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 Peterson'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 Peterson residents with different transportation needs to participate in focus groups. A total of ## residents attended Peterson's workshop. Participants were separated into five user groups and the Peterson 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.

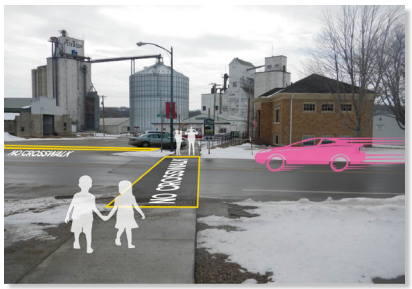
Asset : Scenic trail

Barrier: Uneven sidewalks

Asset: Good lighting and smooth sidewalks

Barrier: Muddy areas

Asset: River access



Barrier: No crosswalk at Main Street and Highway 10 intersection

What Factors Affect Transportation in Peterson?

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 Peterson, 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 Peterson'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 Peterson residents with different transportation needs to participate in focus groups. A total of 49 residents attended Peterson's workshop. Participants were separated into five user groups and the Peterson steering committee.

Actives

(12 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

(3 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

(4 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

(15 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

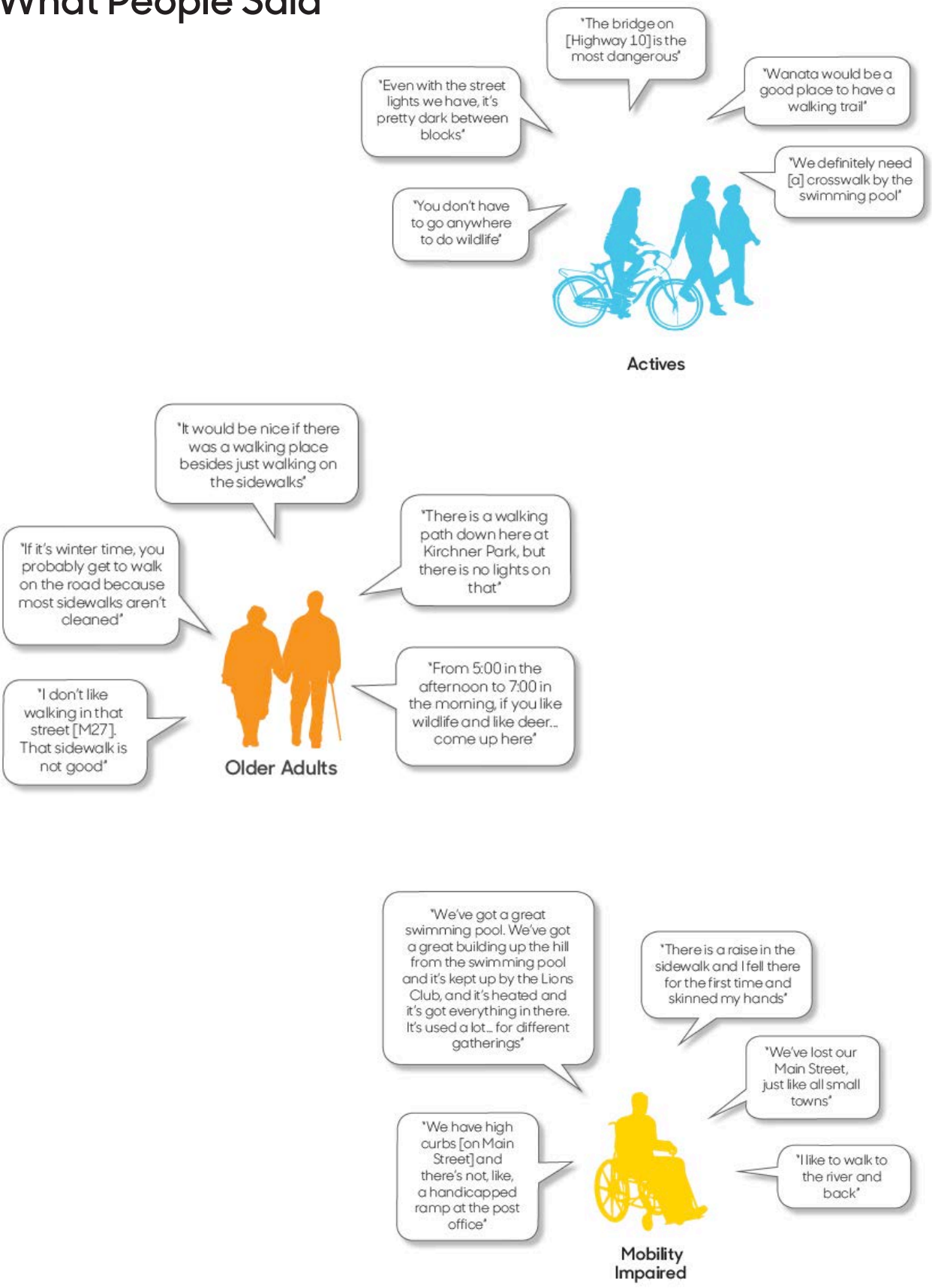
(7 participants): The common denominator for this user group is that their observations are influenced by special knowledge of the transportation system acquired during the Community Visioning assessment process. As a result, this group is more representative of decision makers.

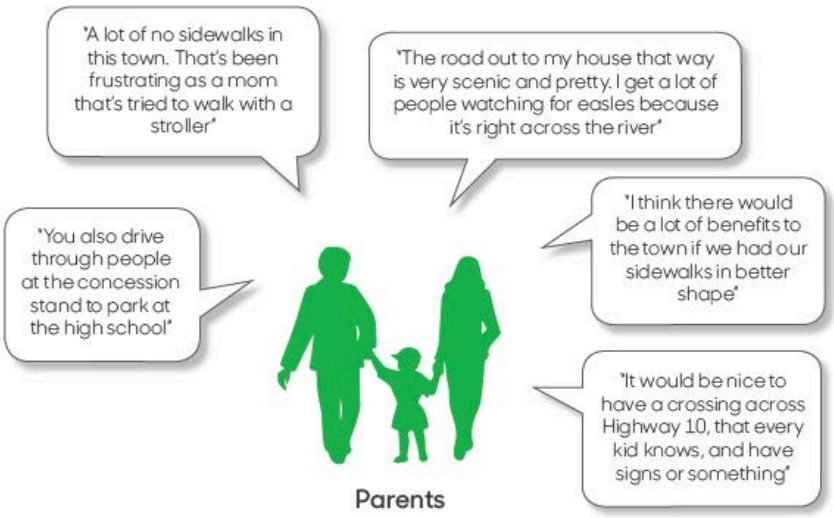
Peterson
Overview

Transportation Assets and Barriers
Julia Badenhope, Sandra Oberbroeckling, Hatvany Gomez- Concepcion
Carol Joella Ustine, Ngoc Ho
Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

What People Said




"A lot of no sidewalks in this town. That's been frustrating as a mom that's tried to walk with a stroller"
"The road out to my house that way is very scenic and pretty. I get a lot of people watching for easles because it's right across the river"
"You also drive through people at the concession stand to park at the high school"
"I think there would be a lot of benefits to the town if we had our sidewalks in better shape"
"It would be nice to have a crossing across Highway 10, that every kid knows, and have signs or something"
Parents


"The Wanata Park...it's really pretty there in the spring because there's all the trees that's blooming, and it's a perfect place to take family pictures"
"Last year, I know this is kind of unsafe, but we did go sledding on the road a little. When a car was coming, we just grabbed our sleds and moved out of they way"
"Speaking about [Kirchner Park], it's kind of bad because little kids could wander really close to the Highway 10"
"I think we should add...a new Peterson sign. I feel like we should add something to it instead of just yellow and green. Because this is a beautiful town and I feel like we should add more onto it"
"The only place that's really lighted up is Main Street"
Youth


"We got in Clay County where you're able to ride side-by-side and four-wheelers around the town, so we can ride them all over the town whenever we want to go"
"There are a lot of sidewalks in this town that are not fun to walk on or they're not there anymore and they have sunk into the ground and been covered with grass and weeds"
"We have got street lights, but they're, likely not that great...I carry a flash light because I have a meeting and I'm going to come home in the dark"
"There's just really no real safe place to ride [a bike] on the highway or the roadways any more"
"I think it would be neat to combine the heritage and the trails and have kind of a walking route between the different museums with signage"
Steering Committee

Emerging Themes

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

Actives: Actives walk, bike, and drive four-wheelers regularly, either as part of a daily commute or as recreational/sports training. They are concerned about the lack of traffic control , lack of sidewalks and lighting around town.

Mobility-impaired individuals: Mobility-impaired individuals often rely on motorized scooters and wheelchairs to get around. They identified the lack of ramps to the post office as a barrier. They would like more accessible buildings, the sidewalks evened out and the entrances to the town cleaned up.

Older adults: Older adults are proud of their town; they appreciate access to wildlife, and their small, friendly community. The major barriers for them are the lack of lighting at Kirchner Park ant the intersection of 4th Street and M27.

Youth: Biking is the main mode of transportation for youth, but lack of sidewalks, bad road surfaces, and traffic on Highway 10 serve as barriers to their safety and access. They would like to see better maintained facilities at parks and at the pool.

Parents: The parents appreciate the peace and safety in Peterson. They are concerned with the lack of parking around town and they perceive Highway 10 as an unsafe road. They would like more opportunities for recreation and exercise.

Steering committee: Steering committee members walk, drive, and drive golf carts or four-wheelers. The traffic on Highway 10 and the lack of safe crossings are concerns. They want the Wanata Park trails cleaned up and clearly marked pedestrian crossings over Highway 10.

User Types
Actives
Mobility Impaired
Older Adults
Youth
Parents
Steering Committee
Destinations and Activities
Little Sioux River
Community Pool
Parks
Desirable Qualities and Features
Local Services
Attractive Landscape
Sense of Community
Undesirable Qualities and Features
Lack of Sidewalks
No Crossing to the Pool
Heavy Traffic on Hwy 10 and M27
Poor Lighting
Lack of Trail Maintenance
Most Desired Improvements and Activities
Sidewalks Improvements
Safe Crossings over Hwy 10
Wanata Park Enhancements
Improved Lighting
Actives walk, bike, and drive four-wheelers regularly, either as part of a daily commute or as recreational/sports training. They are concern about the lack of traffic control, lack of sidewalks and lighting around town.
Mobility-impaired individuals often rely on motorized scooters and wheelchairs to get around. They identified the lack of ramps to the post office as a barrier. They would like more accessible buildings, the sidewalks evened out and the entrances to the town cleaned up.
Older adults are proud of their town; they appreciate access to wildlife, and their small, friendly community. The major barriers for them are the lack of lighting at Kirchner Park and the intersection of 4th Street and M27.
Biking is their main mode of transportation for youth, but lack of sidewalks, bad road surfaces, and traffic on Highway 10 serve as barriers to their safety and access. They would like to see better-maintained facilities at parks and at the pool.
The parents appreciate the peace and safety in Peterson. They are concerned with the lack of activities around town and they perceive Highway 10 as an unsafe road. They would like more opportunities for recreation and exercise.
Steering committee members walk, drive, and drive golf carts or four-wheelers. The traffic on Highway 10 and the lack of safe crossings are concerns. They want the Wanata Park trails cleaned up and clearly marked pedestrian crossings over Highway 10.
The Little Sioux River is a popular destination among all user groups. Users noted the easy access to boat ramps for canoes and boats. It is a suitable place for fishing and the sandbar in the river is a good picnic spot.
The community pool is an important amenity for all the user groups. The diving board at the pool is popular among youth.
All the user types appreciate the access they have to parks (Kirchner Park and Wanata Park), which offer birding, wildflowers, trails, and sports.
Residents value the local facilities available to them in Peterson, such as snow removal, the community center, the library, the bank, and the ambulance crew.
Users of all ages identified the beautiful hills and trees that surround them as assets. Some often admire and appreciate the wildlife that comes to their backyards.
Residents appreciate Peterson as a friendly, family-oriented, quiet, and safe town. Youth like the fact that they have more freedom because they live in a small town.
Incomplete, narrow, inaccessible, broken, and missing sidewalks are major concerns for many groups. Elderly people are afraid to walk on the street and makes them feel unsafe.
Many user groups expressed their concern about the lack of pedestrian-friendly crossing over West 4th Street to the community pool.
All users mentioned heavy traffic on Highway 10 and County Road M27 as a concern about poor visibility at M27 and 4th Street. They perceive the Highway 10 and Walnut Street intersection as unsafe.
Many residents expressed their concern about trees lining around town when it is dark, because of lot of orangy haze to them.
Most of the user groups are concerned about the bad condition of the trails in Wanata Park due to overgrowth. The lack of lighting makes the trail spooky, and dark. In addition, there are no places along the trail to rest.
Many residents expressed the desire for safer crossings over Highway 10. They highlighted the crossing to the community pool as an essential need.
Many residents expressed the desire to have more pedestrian-friendly town with accessible, complete, and better-maintained sidewalk system.
Trail users want better trail maintenance in Wanata Park, as well as renovation of the shelter house, and restrooms and places to rest along the trail.
Several user groups would like better lighting all around town. They specifically mentioned installing street lights.

Transportation Inventory and Analysis

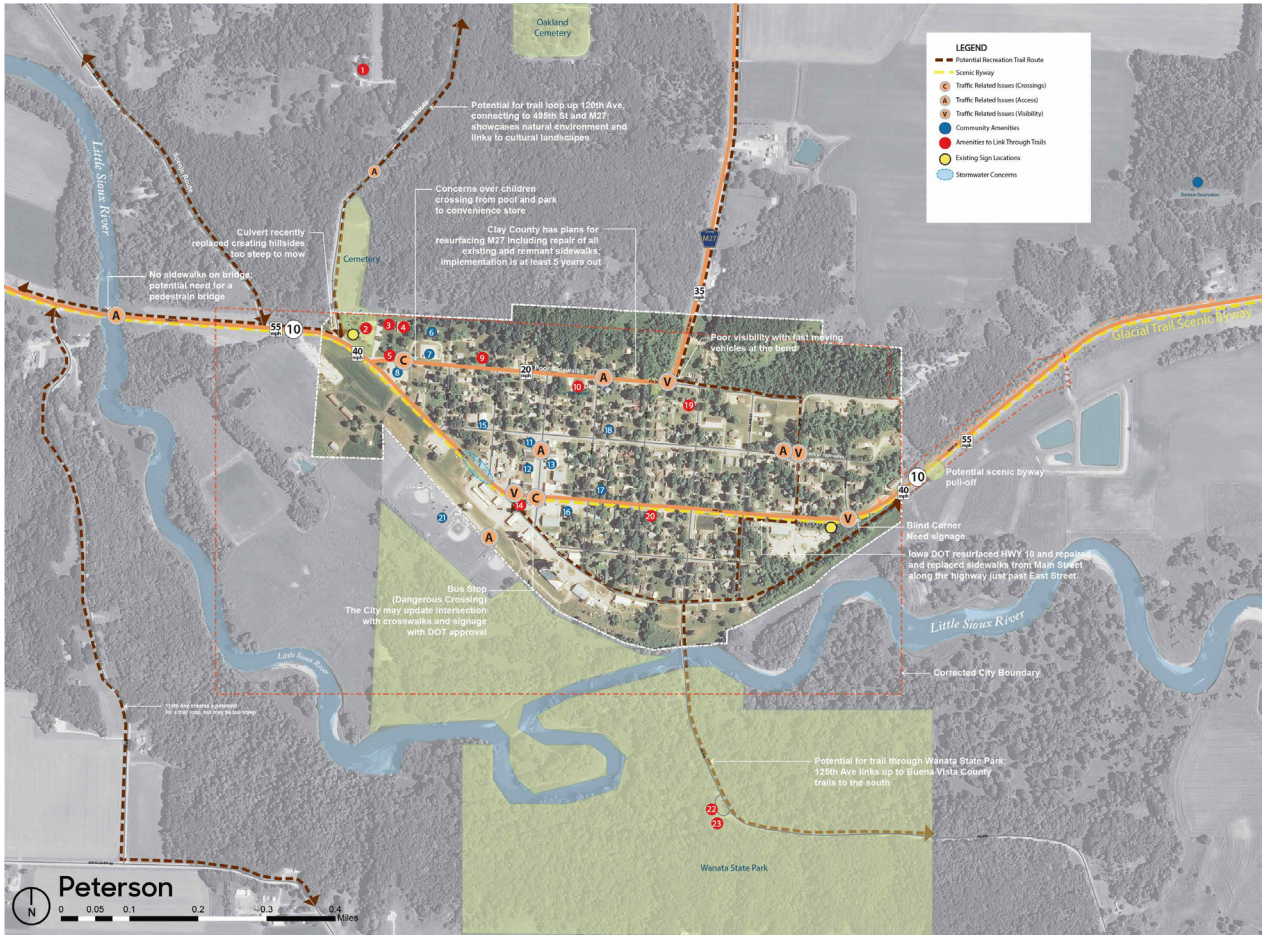
Accessibility and safe crossings, especially for children and the aging population of Peterson, are major concerns. Throughout town sidewalks are hit or miss in terms of condition or not present at all. Lighting is also limited creating conditions that may not be as welcoming or feel unsafe. Residents have expressed the need to walk in the street for safe, consistent and even surfaces.

For the most part, in small rural towns like Peterson, streets are quiet and safe to walk. However, Highway 10 and County Road M27, which are primary roads in town, are prone to faster moving vehicles. Both of these streets also have corners with limited visibility that put drivers and pedestrians at risk. Crossing these streets can also be problematic. The fast moving traffic and blind corners, coupled with a lack of crosswalks and pedestrian crossing warnings, prioritizes the vehicular traffic and diminishes the safety and accessibility to pedestrians.

For a small town Peterson is loaded with cultural and historical amenities and is surrounded by a stunning glacial landscape. Residents have expressed interest in using trails to connect these amenities and tell the story of Peterson. The majority of these amenities lie in the northwest corner of Peterson at Kirchner Park on the north side of 4th Street/M27. Others historic elements and community amenities lie along Park Street and Main Street.

The Glacial Trail Scenic Byway passes through town as Highway 10. The master plan for the byway lays out concepts for identifying key amenities through its interpretive signage. The byway highlights the cultural and the natural environment. Peterson's cultural amenities provide many places for people to stop and engage the community. Identifying locations for pull-offs on Highway 10, will provide places to take in the landscape. The locations identified by the steering committee include a site out east of town at Highway 10 and 450th Street, on the east end of town near the welcome sign, and west of town at Highway 10 and M27.

The Iowa DOT recently resurfaced Highway 10 through town and updated sidewalks from Main Street on the west to East Street on the east. Crosswalks were not put in as part of the updates, however, the DOT suggested that they would grant permission for the city to implement that addition on the highway. Clay County is planning to do similar upgrades to County Road M27, which would include 4th Street. Sidewalks along this route will be updated if in poor condition or replaced if only remnants survive. New sidewalks will not be introduced in locations where there is not currently sidewalks, as part of this plan. The M27 updates are part of Clay County's long-term transportation plan, but would be at least 5 years out.



1 Founding Family Barn
2 Kirchner Park
3 Jacob Kirchner House
4 Machinery Museum
5 Veterans Memorial
6 Lion's Club Shelter House
7 Peterson Public Pool
8 Ampride
9 Gustav Kirchner House
10 Jim's History Barn
11 Crazy Bob's
12 State Bank
13 Post Office
14 Library
15 City Hall
16 American Legion
17 First Congressional Church
18 United Methodist Church
19 French Memorial Museum
20 Historic Block House
21 Sioux Central Baseball & Softball Fields
22 Wanata State Park
23 CCC Shelter

Peterson

Transportation Inventory

Iowa State University Community Design Lab
Landscape Architect: Carl Rogers, RLA
Project Designer: Chad Hunter
Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

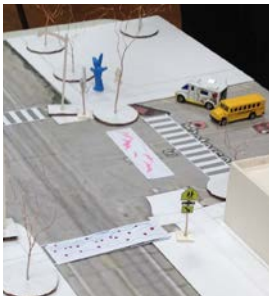
Community Concept Plan

Peterson is a small town of 300 people, nestled in the Little Sioux River valley. The community's slogan is "The scenic nest of Iowa's northwest," a saying which truly describes this quaint rural town. As one drives toward Peterson from any direction they will find themselves descending from the plains of Iowa into a rolling green valley. Peterson is surrounded by the woodlands of the river corridor, agricultural fields and remnant oak savannas. These environments provide a spectacular visual identity for the community, but more importantly they provide diverse habitat for wildlife and attract visitors to see the natural amenities of the region.

A major draw for this region is the landscape and wildlife. Many birders come to this area to observe the diverse and extensive bird populations that this region attracts. The diversity of habitat, remnant wetlands, prairie and oak savannas, the river corridor and rolling landscape, create conditions that make this region a great location for birding in the state. Clay County ranks 10th in the state for bird species count. Multiple key stone species, species of concern and endangered species have been spotted in the region.

Beyond its natural wonders, Peterson is rich with historical and cultural amenities. These features can be found all throughout town, with the greatest concentration of them in the northwest corner of the community. There are historic structures and homes, multiple museums and memorials. The proposals identified as part of this Community Visioning process find inspiration from the town slogan and attempt to build on the strengths of the natural wonders of the region and the rich history of the community itself.

Through public input sessions, design charettes and regular meetings with the steering committee, a variety of concerns, goals and were identified related to Peterson's transportation planning. The design charette involved interactive models, maps and images that allowed community members to take an active role in the design process. Participants were encouraged to set up scenarios related to trail locations, intersection design and planning for future reuse of spaces. Iowa State University Community Design Lab (CDL) was selected as the landscape architects for the project, to provide strategies and a vision to meet these goals and concerns.



COMMUNITY GOALS

Increase accessibility and safety

- universal access points on Main Street
- develop a vision for improving safe crossings at locations of concern
- improved sidewalk condition and greater coverage
- more lighting throughout town

Establish a trail network

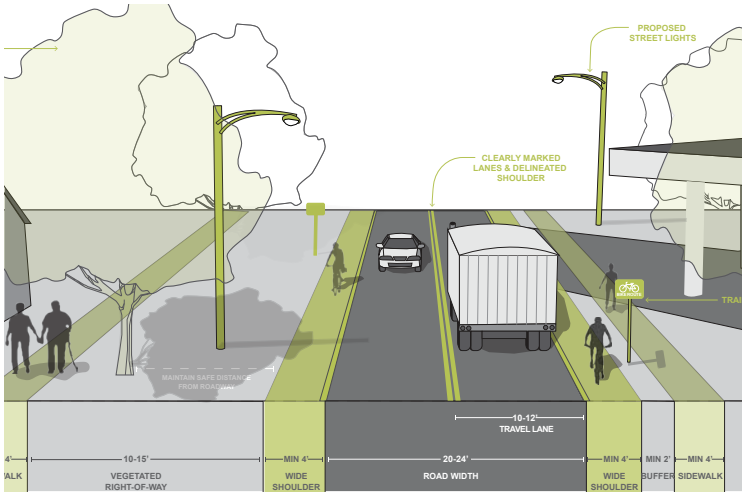
- relate to character of Glacial Trail Scenic Byway
- promote community, history, and the surrounding landscape
- connect community amenities

Strengthen community identity

- introduce new street signs
- promote community amenities and history
- build on theme of community slogan and connect with scenic byway identity
- develop vision for Main Street bank lot and adjacent open lots

The goals are highlighted through the report through the following projects and improvements.

Trail Development
Four categories of trail typologies were identified for different locations within Peterson.



Signage & Wayfinding
This includes designs for new street signs and highlights the Glacial Trail Scenic Byway potential additions.

Main Street Updates
Concepts for a temporary/ long-term park environment re-envision the downtown along with proposals for improving access and character

Intersection & Crossing Design
Improved access at two prominent locations in Peterson was one of the top priorities set out by the committee and public.

OPINION OF PROBABLE COST

Budget Estimates detailed throughout the report are determined based on general cost analysis. Because we are still in a conceptual master plan phase with this work, the budgets are reflective of the big picture view. As the community moves forward with a specific project, further design and engineering will provide greater detail and more accurate cost estimates.

Abbreviations used throughout the cost opinions include:
AL = allotment
CY = cubic yard
EA = each
LF = linear feet
SF = square feet
SY = square yard

TRIAL TYPOLOGY: Sharrow	**$656,837.00**
TRAIL TYPOLOGY: Shoulder	**$563,551.00**
TRAIL TYPOLOGY: Rural Road	**$1,620.00**
TRAIL TYPOLOGY: Shared Use Path & Pedestrian Bridge	**$333,704.00**
SIGNAGE & WAYFINDING	**$10,549.00**
MAIN STREET: Park	**$208,258.00**
MAIN STREET: Character & Access	**$539,639.00**
INTERSECTION (HWY10 & Main St.)	**$84,712.00**
INTERSECTION (M27/ 4ht St)	**$44,298.00**
BUDGET ESTIMATE	**$2,443,168.00**

Trail Network

Regional Trail Networks
Throughout the surrounding counties, trails have been identified that provide scenic routes through the landscape and connect neighboring towns and natural resources. Currently no routes exist within Peterson. Though the surrounding counties have identified these routes, they are not noted along the routes through signage or road markings.

The Glacial Trail Scenic Byway passes through the community via Highway 10 and has planned additional loops that utilize some of the rural roads and county highways that connect into Peterson as well. The scenic byway has recently gone through a master planning process and has identified amenities within Peterson to highlight through its routes and interpretive signage. The byway is a vehicular trail, but could in the future have updates that provide infrastructure for pedestrians and cyclists.

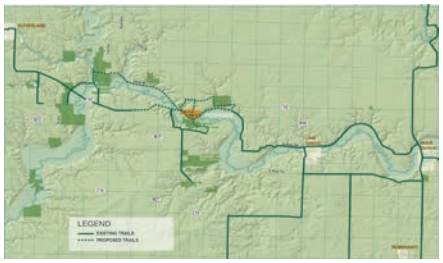
Community Amenities
Peterson sits within an amazing river valley surrounded by the natural beauty of the glacial landscape. The community itself supports another great resource, it rich history. There are many preserved sites and museums to tell the story of the community and its founders. There are also many community spaces both indoor and out that support social engagement among the residents.

The trail network is laid out to connect the key cultural and historical sites in the community. The trails also link the natural areas along the Little Sioux River corridor. This corridor provides the scenic beauty that is an integral part of Peterson's identity.

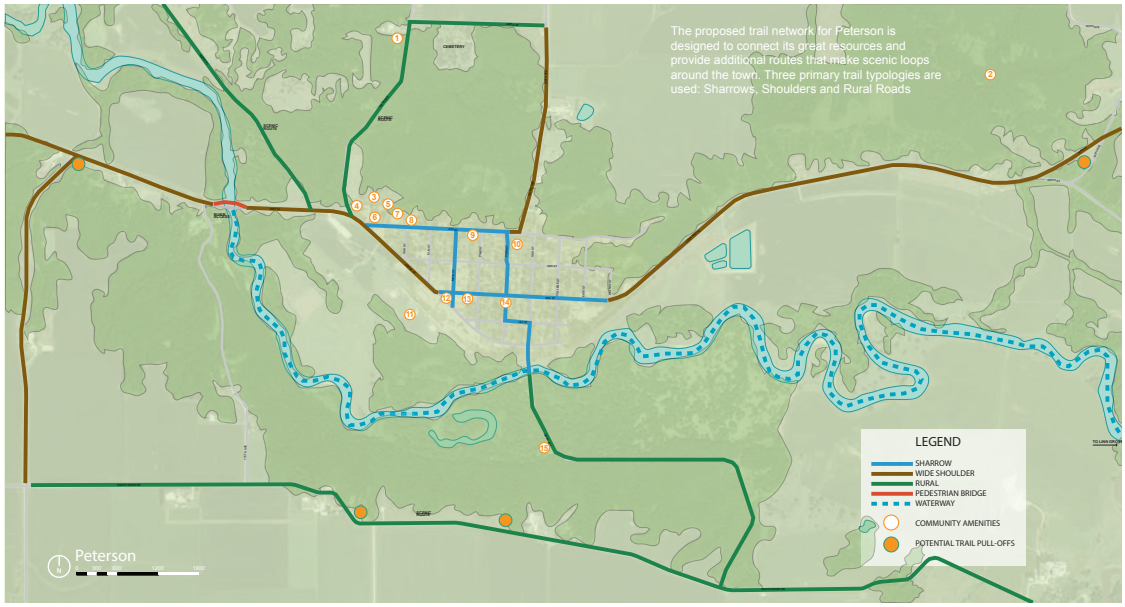
TRAIL NETWORK

REGIONAL TRAIL NETWORKS

Throughout the surrounding counties, trails have been identified that provide scenic routes through the landscape and connect neighboring towns and natural resources. Currently no routes exist within Peterson. Though the surrounding counties have identified these routes, they are not noted along the routes through signage or road markings.



COMMUNITY BIKE & PEDESTRIAN TRAIL NETWORK



COMMUNITY AMENITIES

Peterson sits within an amazing river valley surrounded by the natural beauty of the glacial landscape. The community itself supports another great resource, it rich history. There are many preserved sites and museums to tell the story of the community and its founders. There are also many community spaces both indoor and out that support social engagement among the residents.

1 Founding Family Barn
2 Bertram Reservation
3 Christian Kirchner House
4 Kirchner Park
5 Kirchner Museum
6 Memorial
7 Pool
8 J. A. Kirchner House
9 Jim's History Barn
10 French Memorial Museum
11 Sioux Central Baseball & Softball Fields
12 Kirchner French Memorial Library
13 American Legion
14 Fort Peterson Block House
15 Wanata State Park

Peterson
Trail Network

Iowa State University Community Design Lab
Landscape Architect: Carl Rogers, RLA
Project Designer: Chad Hunter
Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

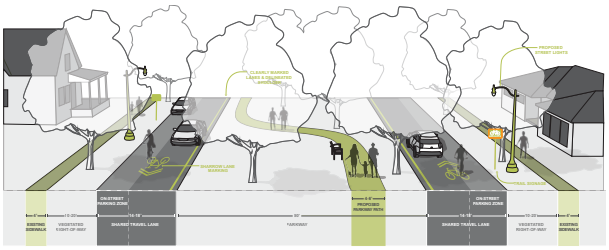
Trail Typologies

To accommodate a trail network within Peterson, a variety of trail typologies will be needed. Each typology provides a different type of experience for pedestrians and cyclists and requires different infrastructure to make them possible. During the design charette community members were asked to identify the roads and places within town where they would most want to see trails. Along with this they were asked what type of trail infrastructure they would prefer along these routes. Based on the input from the charette and analysis of the routes identified, the following typologies were determined as best suited for the current conditions in Peterson: Sharrows, Shoulders (In-town & Rural) and Rural Roads. A very small portion of Shared Use Path will also be required for crossing the Little Sioux River via a pedestrian bridge.

TRAIL TYPOLOGIES

SHARROW

Sharrows provide roads where motorized vehicles and bikes are given equal importance on the roadway. Markings on the pavement alert drivers that bikes may be present and let cyclists know that the road is a designated cycle route. Sidewalks are used to compliment the sharrow and provide a pedestrian path. Sidewalks should be introduced anywhere along these routes where they are not currently present. Additional lighting is needed to make these routes safe and comfortable for use and various times of day.

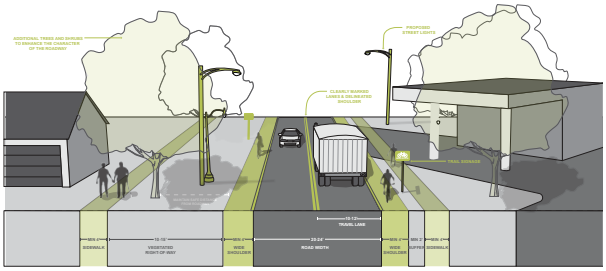


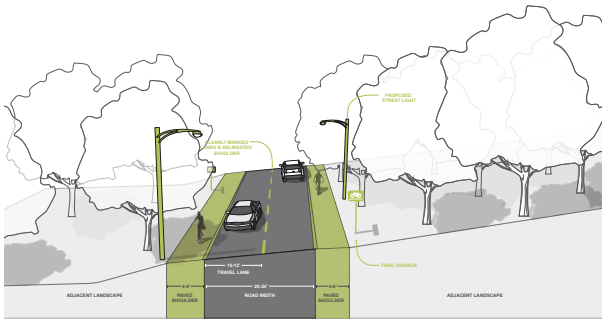
SHOULDER

Increasing **road shoulder** width, whether paved or granular surface, is an important component for bike safety. These paths are typically used for recreation or destination activities, and many races such as RAGBRAI have been increasing activity on highways and rural roads.

Whether in-town or out, the shoulder should meet a minimum of 4' width to give cyclists ample room to ride safely next to traffic. Lighting should be present along these roads to create safe environments for cyclists and vehicles.

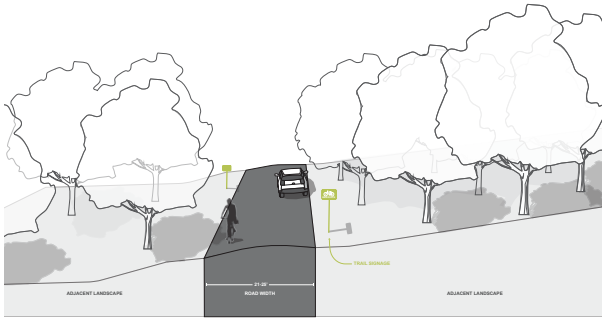
In-town sidewalks and lighting should be introduced anywhere along these routes where they are not currently present.





RURAL

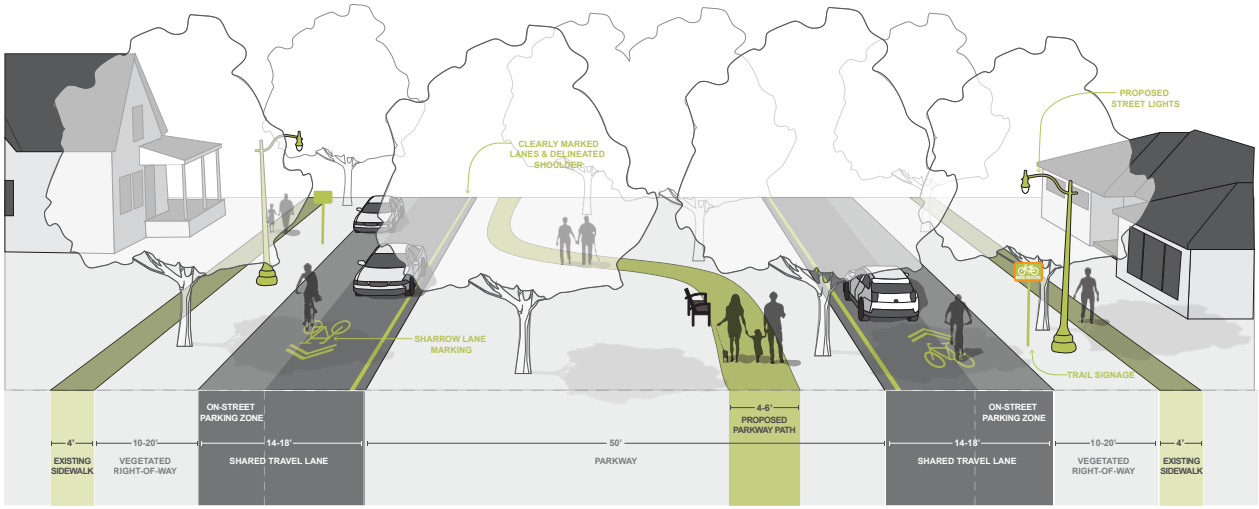
Rural roads are popular because they offer varying terrain, require minimum maintenance, and they offer scenery with obstacles. The routes chosen for rural roads showcase the natural beauty. The addition of signage will increase driver awareness of cyclists along these routes and encourage use by cyclists and pedestrians to explore the community further.



Iowa State University Community Design Lab
Landscape Architect: Carl Rogers, RLA
Project Designer: Chad Hunter
Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

SHARROW



styleweekly.com

Sharrows provide roads where motorized vehicles and bikes are given equal importance on the roadway. Markings on the pavement alert drivers that bikes may be present and let cyclists know that the road is a designated cycle route. Sidewalks are used to compliment the sharrow and provide a pedestrian path. Sidewalks should be introduced anywhere along these routes where they are not currently present. Additional lighting is needed to make these routes safe and comfortable for use and various times of day.

TRAIL TYPOLOGY: Sharrow				
Highway 10 (Walnut St. to Front St.)				
Site Elements / Markings				
Sharrow Pavement Marking	14	EA	$120.00	$1,680.00
Bike Route Signage w/Post	14	EA	$75.00	$1,050.00
Street Scale Lighting (arm & lamp)	7	EA	$600.00	$4,200.00
Main Street*				
Site Elements / Markings				
Sharrow Pavement Marking	6	EA	$120.00	$720.00
Bike Route Signage w/Post	6	EA	$75.00	$450.00
4th Street/ M27 (125th Ave/M27 to Highway 10)**				
Site Elements / Markings				
Sharrow Pavement Marking	10	EA	$120.00	$1,200.00
Bike Route Signage w/Post	10	EA	$75.00	$750.00
Street Scale Lighting (arm & lamp)	6	EA	$600.00	$3,600.00

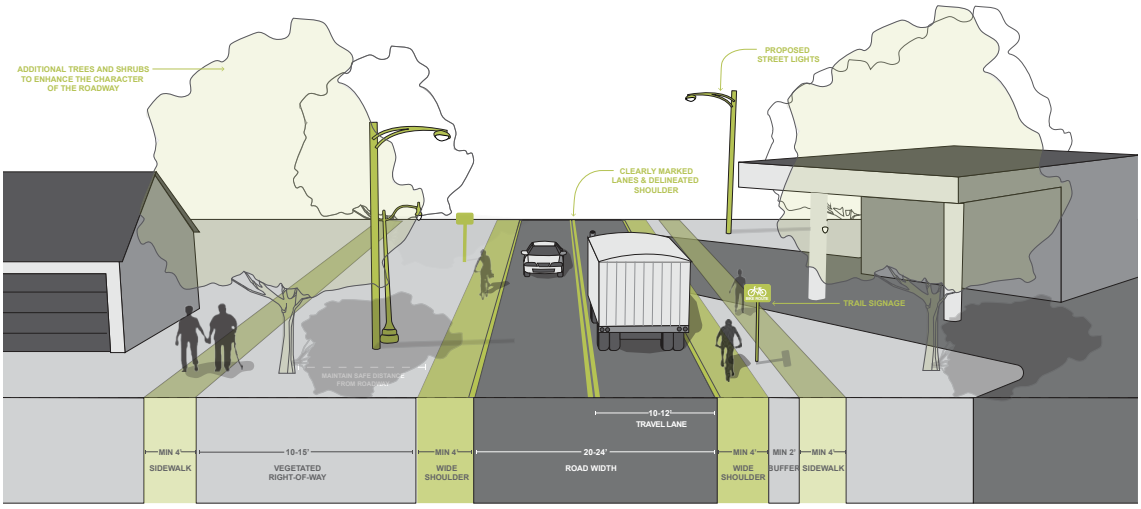
TRAIL TYPOLOGY: Sharrow (continued)				
Park Street	**QTY**	**UNIT**	**UNIT COST**	**SUBTOTAL**
Roadway Replacement (E 1st Street to HWY 10)				
Excavation (12")	548	CY	$14.00	$7,672.00
Paving 8" w/ 8" Gravel Base	1,644	SY	$65.00	$106,860.00
6" Concrete Curb	740	LF	$18.00	$13,320.00
4' Sidewalk Replacement (E 1st Street to HWY 10)				
Excavation (4")	36	CY	$14.00	$504.00
PCC Concrete (4")	2,960.00	SF	$7.00	$20,720.00
Site Elements / Markings				
Sharrow Street Markings	10	EA	$120.00	$1,200.00
Bike Route Signage w/Post	10	EA	$75.00	$750.00
Pedestrian Scale Lighting	12	EA	$2,000.00	$24,000.00
E 1st Street (Park St. to Ash Ave.)				
Roadway Replacement				
Excavation to (10")	366	CY	$14.00	$5,124.00
PCC Concrete 8" w/ 8" Gravel Subbase	1098	SY	$65.00	$71,370.00
New 6' Wide Sidewalk (south side)				
Excavation (10")	66	CY	$14.00	$924.00
PCC Concrete (4")	2160	SF	$7.00	$15,120.00
6" Gravel Subbase	40	CY	$3.00	$120.00
Site Elements / Markings				
Sharrow Street Markings	2	EA	$120.00	$240.00
Bike Route Signage w/Post	2	EA	$75.00	$150.00
Street Scale Lighting (arm & lamp)	1	EA	$600.00	$600.00
Ash Avenue (E 1st St. to Wanata State Park)				
Roadway Replacement				
Road Excavation (10")	512	CY	$14.00	$7,168.00
PCC Concrete 8" w/ 8" Gravel Subbase	1849	SY	$65.00	$120,185.00
New 6' Wide Sidewalk (west side)				
Excavation to (10")	112	CY	$14.00	$1568.00
PCC Concrete (4")	3,666	SF	$7.00	$25,662.00
6" Gravel Subbase	68	CY	$3.00	$204.00
Site Elements / Markings				
Sharrow Street Markings	4	EA	$120.00	$480.00
Bike Route Signage w/Post	4	SF	$75.00	$300.00

Subtotal		**$437,891.00**
Mobilization	15%	$65,684.00
Engineering	15%	$65,684.00
Contingency	20%	$87,578.00
Estimate Total		**$656,837.00**

*Main Street updates to infrastructure and intersections are considered in the Main Street Character & Access and Intersection components within this report.

**Updates to roadway and sidewalk infrastructure to be directed by Clay County. Plans for updates are currently more than 5 years out.

SHOULDER: In-Town



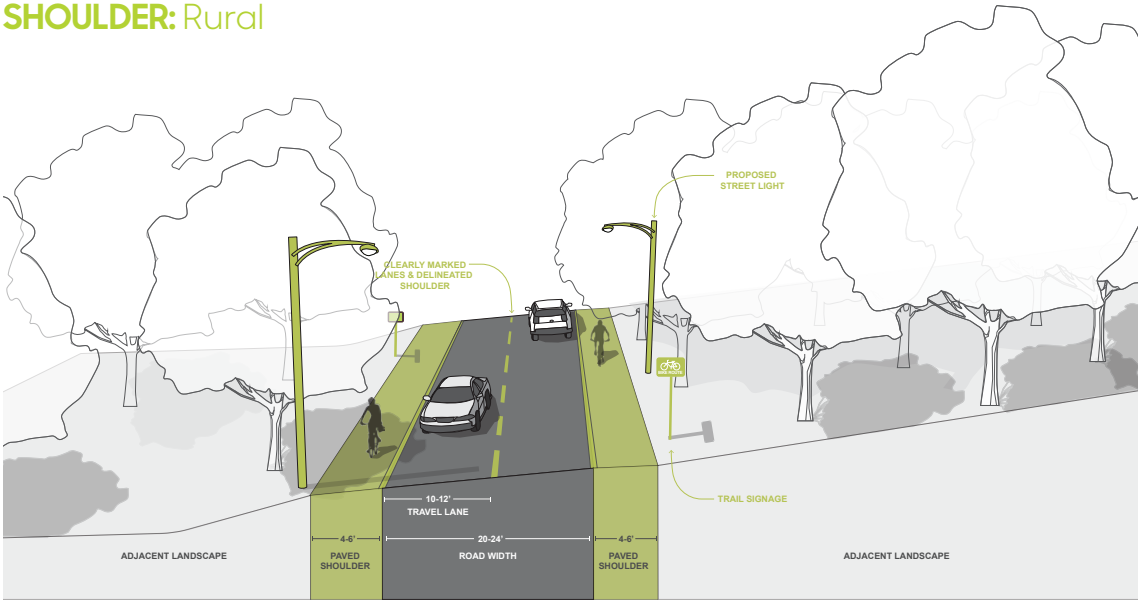
iowadot.gov

Increasing road shoulder width, whether paved or granular surface, is an important component for bike safety. These paths are typically used for recreation or destination activities, and many races such as RAGBRAI have been increasing activity on highways and rural roads.

Whether in-town or out, the shoulder should meet a minimum of 4' width to give cyclists ample room to ride safely next to traffic. Lighting should be present along these roads to create safe environments for cyclists and vehicles.

In-town sidewalks and lighting should be introduced anywhere along these routes where they are not currently present.

SHOULDER: Rural



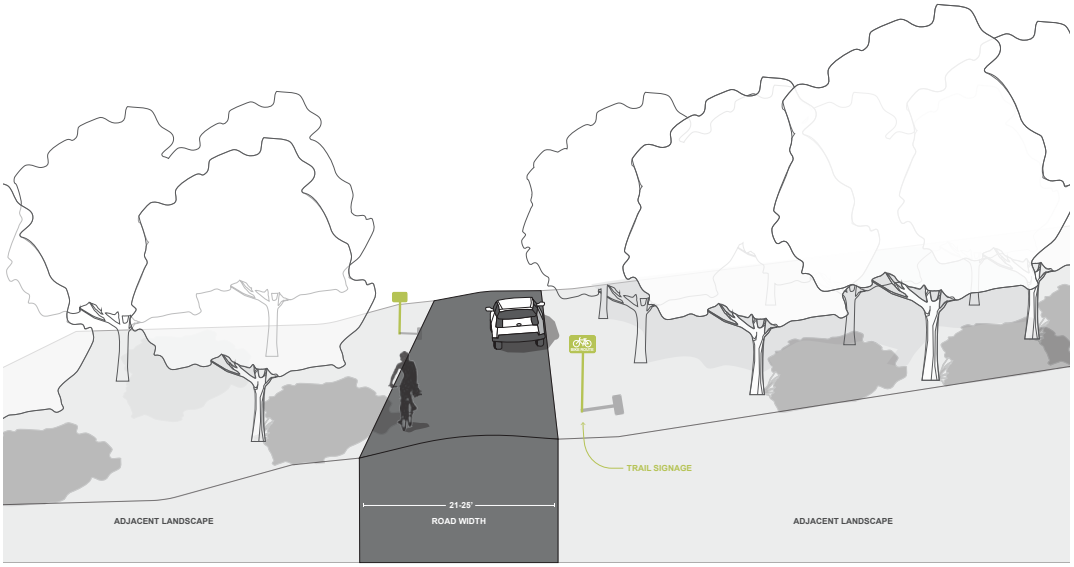
TRAIL TYPOLOGY: Shoulder				
HWY10 (Front St. to Bridge)	**QTY**	**UNIT**	**UNIT COST**	**SUBTOTAL**
Shoulder Surfacing				
Rough Grading	1	AL	$40,000.00	$40,000.00
Asphalt Paving	29,600	SF	$5.50	$162,800.00
New 6' Wide Sidewalk (east side)				
Excavation (10")	630	CY	$14.00	$8,820.00
PCC Concrete (4")	20,400	SF	$7.00	$142,800.00
6" Gravel Base	377	CY	$3.00	$1,131.00
Site Elements / Markings				
Bike Route Signage w/Post	6	EA	$75.00	$450.00
Street Scale Lighting (arm & lamp)**	3	EA	$600.00	$1,800.00
M27 (E 4th St. to 495th St.)*				
Site Elements / Markings				
Striping (to mark shoulder)	6400	LF	$2.00	$12,800
Bike Route Signage w/Post	4	EA	$75.00	$300.00
Street Scale Lighting (arm & lamp)**	8	EA	$600.00	$4,800.00

Subtotal		**$375,701.00**
Mobilization	15%	$56,355.00
Engineering	15%	$56,355.00
Contingency	20%	$75,140.00
Estimate Total		**$563,551.00**

*Updates to roadway and sidewalk infrastructure to be directed by Clay County. Plans for updates are currently more than 5 years out.

**Cost for lighting is for the lamp feature and mounting arm only and does not take into account the potential need for running electrical lines to the specified locations. The quantities needed is based on an average spacing of 200-300 feet and utilizing existing utility poles. The proposed street lights for the identified section of HWY 10 would supplement the existing street lights.

RURAL



mnbiketrailnavigator.blogspot.com

Rural roads are popular because they offer varying terrain, require minimum maintenance, and they offer scenery with obstacles. The routes chosen for rural roads showcase the natural beauty. The addition of signage will increase driver awareness of cyclists along these routes and encourage use by cyclists and pedestrians to explore the community further.

TRAIL TYPOLOGY: Rural Road				
	QTY	UNIT	UNIT COST	SUBTOTAL
Site Elements / Markings				
Bike Route Signage w/ Post (4 per identified road section)	16	EA	$75.00	$1,200.00

Subtotal		**$1,200.00**
Mobilization	15%	$180.00
Contingency	20%	$240.00
Estimate Total		**$1,620.00**

- 495th Street (120th Ave to 125th Ave/M27)
- 120th Avenue (HWY 10 to 495th Street)
- 492nd Street (HWY 10 to Clay/O'Brien County Line)
- 125th Avenue (125th Ave Bridge to 420th Ave)

SHARED USE PATH

atlantabeltline.com

Shared use paths can occur in the right-of-way similar to a wide sidewalk or be independent as recreational trail. These trail types offer comfortable widths that allow for cyclist and pedestrian traffic in both directions. This feature will take users from the expanded shoulder running along HWY 10 to connect to the proposed pedestrian bridge and back.

schefloweng.com

A pedestrian crossing is needed on the west side of town to safely cross the Little Sioux River. The current bridge is not wide enough to accommodate pedestrians or cyclists safely with the vehicular traffic. The bridge could be wood or steel construction or a combination of both. An average price is provided below.

TRAIL TYPOLOGY: Shared Use Path / Pedestrian Bridge				
Little Sioux Crossing (west side)			**QTY**	**UNIT**
Pedestrian Bridge				
Bridge Structure	1	AI	$200,000.00	$200,000.00
10' Wide Shared Use Path				
Excavation to (10")	93	CY	$14.00	$1,302.00
PCC Concrete (4")	3,000	SF	$7.00	$21,000.00
6" Gravel Subbase	56	CY	$3.00	$168.00

Subtotal		**$222,470.00**
Mobilization	15%	$33,370.00
Engineering	15%	$33,370.00
Contingency	20%	$44,494.00
Estimate Total		**$333,704.00**

Signage & Wayfinding

One of the community and steering committee goals was to have updated street markers. A variety of colors and styles were presented for the committee to consider. The historic arced form and landscape shaped signs are intended as branding elements to be utilized along more major thoroughfares like HWY 10 and M27 / 4th St. These signs build on the strengths of the community's rich history and connection with the landscape and nature. To accommodate the shape the top sign would be the unique form indicating the north-south street while the lower sign would indicate the east-west thoroughfare.

In the end the landscape form option paired with a standard green street marker was the desired style. The landscape form sign will be featured along Highway 10 to indicate the north-south streets. These signs could also be utilized on M27/4th Street to indicate those same north-south streets. All other locations will receive the standard green street markers.

As part of the Glacial Trail Scenic Byways master plan, interpretive signage has been identified that would showcase some of Peterson's cultural and landscape amenities. Cost and implementation strategies for these signs will be directed by the Byway master plan and staff.

locations for landscape style street marker

SIGNAGE & WAYFINDING				
	QTY	UNIT	UNIT COST	SUBTOTAL
Street Signs*				
Standard DOT Street Marker w/ Post	67	EA	$75.00	$5,025.00
Custom Landscape Street Marker w/ Post	15	EA	$150.00	$2,250.00

Subtotal		**$7,275.00**
Mobilization	15%	$8,366.00
Design Set Up	10%	$728.00
Contingency	20%	$1,455.00
Estimate Total		**$10,549.00**

* Cost based on estimates from Iowa Prison Industries

Street Sign Concepts

TRADITIONAL DESIGN OPTIONS

HISTORIC STYLE OPTIONS

LANDSCAPE FORM OPTION

The historic arced form and landscape shaped signs are intended as branding elements to be utilized along more major thoroughfares like HWY 10 and M27 / 4th St. These signs build on the strengths of the community's rich history and connection with the landscape and nature. To accommodate the shape the top sign would be the unique form indicating the north-south street while the lower sign would indicate the east-west thoroughfare.

Glacial Trail Scenic Byway Interpretative Media Concepts

Two-Panel Kiosk Example

Intended for more major attractions along the byway. The proposed sites for the kiosks are those where exploration is encouraged and potential for greater quantity of time spent at the site. The kiosks will provide orientation to the site and information about the attraction.

Potential Sites

- Jacob Kirchner Memorial Park
- Wanata State Park

Wayside Exhibit Example

A wayside exhibit is an interpretive panel that helps to relay the stories of the sites and landscapes that create the identity of the region and communities of the byway.

Potential Sites

- Fort Peterson Block House
- Bertram Reservation
- Kirchner Homes
- Rock Forest School House

Visitor Center Exhibit

These interpretive media exhibits are intended for indoor environments and may feature interactive and digital components. The primary visitor center exhibit is planned for the Prairie Heritage Center apx. 5 miles west of Peterson.

Iowa State University Community Design Lab
Landscape Architect: Carl Rogers, RLA
Project Designer: Chad Hunter
Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

Main Street Land Use

The west side of Main Street currently has multiple open lots with more to follow, as the old bank building is taken down. The remaining parcels will provide an open green space that could have a temporary life as a park like space. Future vision for this site would include the development of businesses, but open space could remain in key locations. The steering committee's goal for this site was to develop a landscape treatment that could be temporary or permanent to allow future structures to be built.

POTENTIAL RECONFIGURATION

The design for the main street park utilizes the parcel delineation to create multiple smaller parks that can work together as a larger system or as individual pocket green spaces that can stand on their own between structures. It is intended that the primary space on the corner become a civic building, such as a community center or fire station so that it becomes a permanent fixture of the downtown and community. The park space would utilize native plants to compliment the surrounding environment and attract birds and pollinators. For a list of suggested plants, see the appendix.

OPEN LAWN / EVENT SPACE

- Easy conversion for business development
- Currently being developed as an open space with a memorial sculpture
- Native trees and shrubs
- Potential for some earth mounds to delineate space and create fun terrain for kids to play on

GARDENS, EDIBLE LANDSCAPE & COMMUNITY SHELTER

- This city-owned location would be a permanent open space
- Non-messy edible plants for human or bird consumption
- Perennial plantings to increase aesthetic of Main Street

COMMUNITY GARDEN

- Garden would create additional social gathering opportunities and investment in the downtown district by community members
- Garden can be easily removed
- Access to garden along alley
- Shed and compost located at far edge of park space
- Open lawn area along sidewalk

MEADOW

- Minimal cost in development, maintenance or removal
- Easy conversion for business development
- Pollinator habitat will increase viability of gardens and attract native birds and pollinators

GROVE & SHELTER

- New location for bus stop
- Design for shelter to be incorporated into potential civic building
- Native trees and shrubs

PLAZA GARDENS & TOWER

- Perennial plantings to increase aesthetic of Main Street and tie into design of potential civic structure
- Tower to offer higher vantage point to view the surrounding landscape and attract people to downtown
- Rounded bench could take on nest aesthetic and relate to community slogan

VEGETATED EDGE

- Maintained as streetscape element to strengthen street wall
- Sculpture to mark corner and entrance into park/plaza

MAIN STREET LAND USE

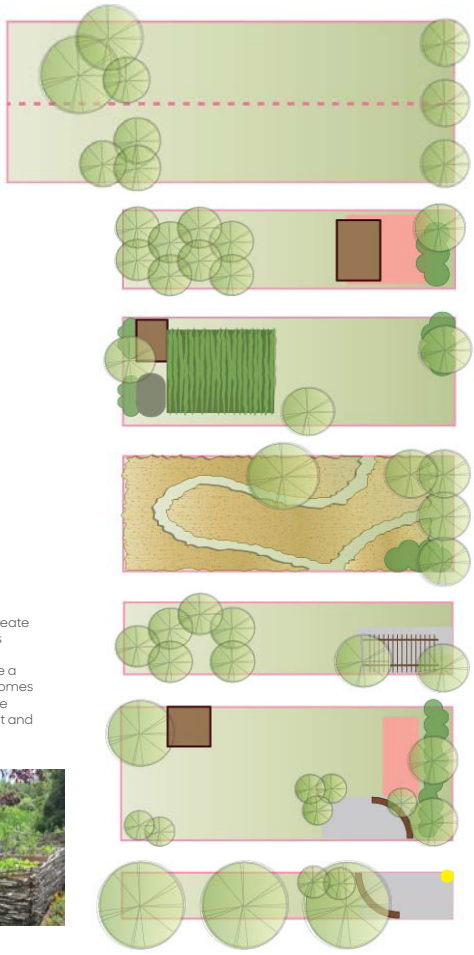
The west side of Main Street currently has multiple open lots with more to follow, as the old bank building is taken down. The remaining parcels will provide an open green space that could have a temporary life as a park like space. Future vision for this site would include the development of businesses, but open space could remain in key locations. The steering committee's goal for this site was to develop a landscape treatment that could be temporary or permanent to allow future structures to be built.

EXISTING CONDITIONS

POTENTIAL RECONFIGURATION

POTENTIAL RECONFIGURATION

The design for the main street park utilizes the parcel delineation to create multiple smaller parks that can work together as a larger system or as individual pocket green spaces that can stand on their own between structures. It is intended that the primary space on the corner become a civic building, such as a community center or fire station so that it becomes a permanent fixture of the downtown and community. The park space would utilize native plants to compliment the surrounding environment and attract birds and pollinators.



OPEN LAWN / EVENT SPACE
- Easy conversion for business development
- Currently being developed as an open space with a memorial sculpture
- Native trees and shrubs
- Potential for some earth mounds to delineate space and create fun terrain for kids to play on

GARDENS, EDIBLE LANDSCAPE & COMMUNITY SHELTER
- This city-owned location would be a permanent open space
- Non-messy edible plants for human or bird consumption
- Perennial plantings to increase aesthetic of Main Street

COMMUNITY GARDEN
- Garden would create additional social gathering opportunities and investment in the downtown district by community members
- Garden can be easily removed
- Access to garden along alley
- Shed and compost located at far edge of park space
- Open lawn area along sidewalk

MEADOW
- Minimal cost in development, maintenance or removal
- Easy conversion for business development
- Pollinator habitat will increase viability of gardens and attract native birds and

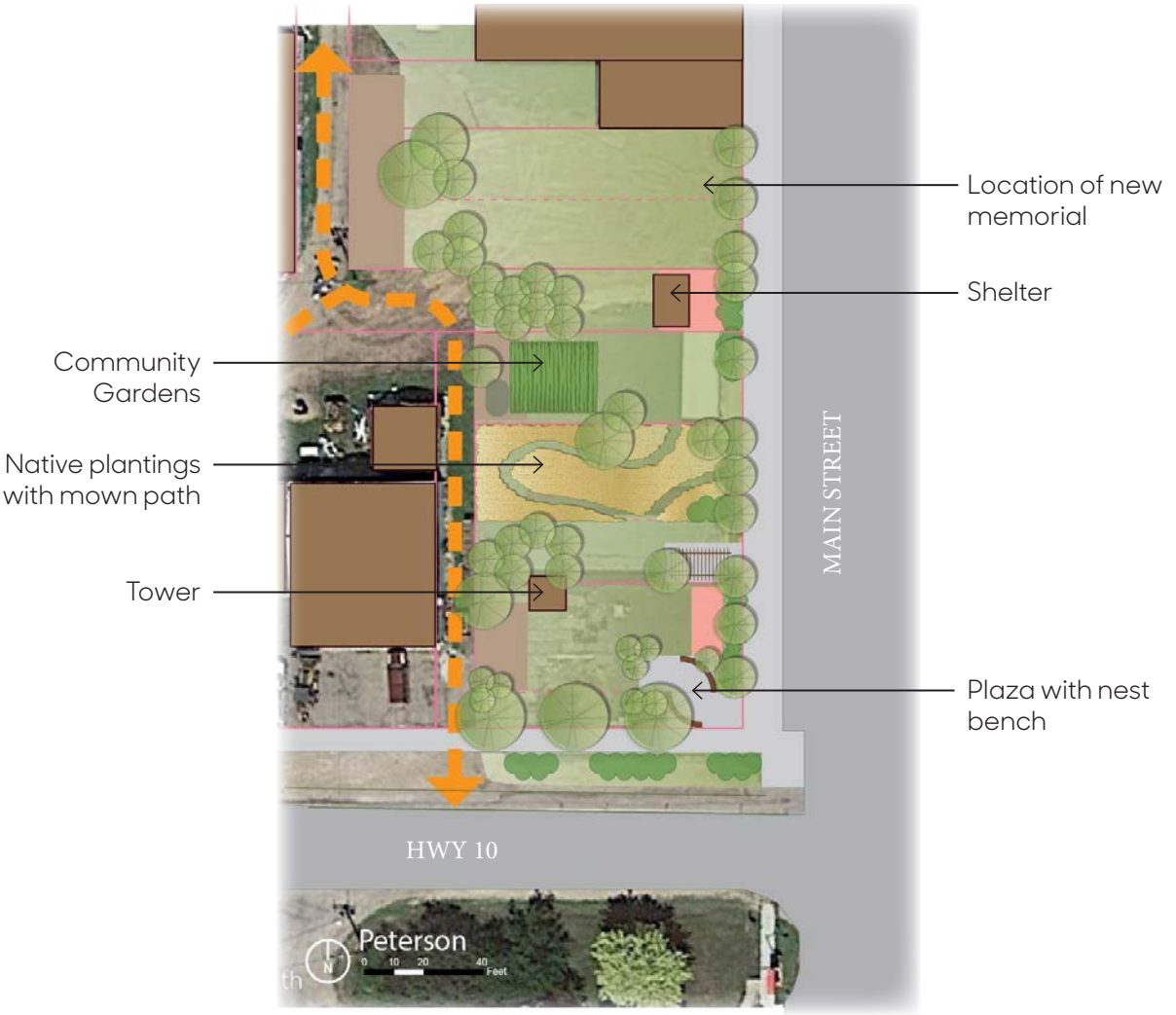
GROVE & SHELTER
- New location for bus stop
- Design for shelter to be incorporated into potential civic building
- Native trees and shrubs

PLAZA GARDENS & TOWER
- Perennial plantings to increase aesthetic of Main Street and tie into design of potential civic structure
- Tower to offer higher vantage point to view the surrounding landscape and attract people to downtown
- Rounded bench could take on nest aesthetic and relate to community slogan

VEGETATED EDGE
- Maintained as streetscape element to strengthen street wall
- Sculpture to mark corner and entrance into park/plaza

Iowa State University Community Design Lab
Landscape Architect: Carl Rogers, RLA
Project Designer: Chad Hunter
Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning



MAIN STREET: Park Plaza Gardens & Tower with Vegetated Edge	QTY	UNIT	UNIT COST	SUBTO-
Excavation(10″) for Hardscape	18.5	CY	$14.00	$259.00
PCC Concrete Paving 4″ w/	600	SF	$7.00	$4,200.00
6″ Gravel Subbase	11	CY	$3.00	$33.00
Bench Custom	1	AL	$3,500.00	$3,500.00
Bed Prep	1	AL	$1000.00	$1000.00
Black Dirt Fill(12″)	11	CY	$25.00	$275.00
Mulch(3″ Depth)	300	SF	$1.00	$300.00
Perennials(Ave 2'x2')	1	AL	$500.00	$500.00
Shrubs(Ave 4'x4')	1	AL	$4,000.00	$4,000.00
Understory(1-1.5″ Cal.)	2	EA	$350.00	$700.00
Overstory(2″ Cal.)	4	EA	$500.00	$2,000.00
Tower Wood Construction w/Stair	1	AL	$30,000.00	$30,000.00
Lawn/Seed Mix +Prep	5,640	SF	$0.15	$846.00
Bike Rack	1	AL	$1000.00	$1,000.00

MAIN STREET: Park (continued)				
Grove & Shelter	**QTY**	**UNIT**	**UNIT COST**	**SUBTOTAL**
Excavation(10″) for Hardscape	20	CY	$14.00	$280.00
PCC Concrete Paving 4″ w/	650	SF	$7.00	$4,550.00
6″ Gravel Subbase	12	CY	$3.00	$36.00
Pergola	1	AL	$12,000.00	$12,000.00
Understory Trees	8	EA	$350.00	$2,800.00
Lawn/Seed Mix+Prep	1,800	SF	$0.15	$270.00
Meadow	**QTY**	**UNIT**	**UNIT COST**	**SUBTOTAL**
Landscape Prep	1	AL	$2000.00	$2,000.00
Pollinator Seed Mix	2700	SF	$.05	$135.00
Understory Trees (1-1.5″ Cal.)	1	AL	$500.00	$1,400.00
Overstory Trees (2″ Cal.)	1	EA	$500.00	$500.00
Community Garden	**QTY**	**UNIT**	**UNIT COST**	**SUBTOTAL**
Excavation (12″)	37	CY	$14.00	$518.00
Black Dirt Fill (12″)	1,000	SF	$25.00	$25,000.00
Shrubs(Ave 4'x4')	1	AL	$1,000.00	$1,000.00
Shed	1	AL	$5,000.00	$5,000.00
Understory Trees (1-1.5″ Cal.)	3	EA	$350.00	$1,050.00
Lawn/Seed Mix + Prep	2790	SF	$0.15	$419.00
Gardens, Edible Landscape& Community Shelter	**QTY**	**UNIT**	**UNIT COST**	**SUBTOTAL**
Shelter	1	AL	$12,000.00	$12,000.00
Landscape Prep	1	AL	$1,000.00	$1,000.0
Excavation (12″)	13	CY	$14.00	$182.00
Black Dirt Fill (12″)	360	SF	$25.00	$9,000.00
Understory Trees (1-1.5″ Cal.)	9	EA	$350.00	$3,150.00
PCC Concrete Paving 4″ w/	360	SF	$7.00	$2,520.00
6″ Gravel Subbase	6.7	CY	$3.00	$20.00
Shrubs(Ave 4'x4')	1	AL	$700.00	$700.00
Lawn/Seed Mix + Prep	1,800	SF	$0.15	$270.00
Open Lawn Event Space	**QTY**	**UNIT**	**UNIT COST**	**SUBTOTAL**
Landscape Prep	1	AL	$2,000.00	$2,000.00
Understory Trees (1-1.5″ Cal.)	7	EA	$350.00	$2,450.00
Overstory Trees (2″ Cal.)	2	EA	$500.00	$1,000.00
Lawn/Seed Mix + Prep	5472	SF	$0.15	$821.00

Subtotal		**$138,838.00**
Mobilization	15%	$20,826.00
Engineering & Design	15%	$20,826.00
Contingency	20%	$27,768.00
Estimate Total		**$208,258.00**

Main Street Character & Access

Establishing the corner of HWY 10 and Main Street as a civic space will ensure its longevity and importance within the community. This could be accomplished through a park space that builds on the community identity and contains a key attraction such as the tower. It could also become a civic building such as a community center, city hall or fire station. Each of these structure concepts could retain the plaza, surrounding gardens and benches. They could also incorporate the tower look out into the structure and provide a sheltered area for students to wait for the bus.

Concepts for the Main Street area pick up on the them from the community's slogan: "The scenic nest of Iowa's Northwest." Features such as benches and trash receptacles could have an ornamentation to them that has a nest like pattern. Their shape and orientation as shown in the land use plan can imply the form of a nest. The tower is intended as a location to take in the surrounding landscape and be a potential observation deck for birding. A feature such as the tower could become a destination for the community and added amenity for the Glacial Trails Scenic Byway.

MAIN STREET: Character & Access				
	QTY	UNIT	UNIT COST	SUBTOTAL
Roadway Improvements				
Traffic Control	1	LS	$5000.00	$5000.00
Excavation(12")	1,458	CY	$14.00	$20,412.00
PCC, 8" Pavement w/8" Gravel	4,375	SY	$65.00	$284,375.00
Concrete Paving 6" Curb	1,150	LF	$18.00	$20,700.00
Pavement Markings				
Striping	2,372	LF	$2.00	$4,744.00
Accessible Ramp/Planter				
Excavation(36")	20.83	CY	$14.00	$292.00
PCC Concrete Paving 4" w/	96	SF	$7.00	$672.00
6" Gravel Subbase	2.4	CY	$3.00	$8.00
Curb Ramp w/ADA Warning Strip	4	EA	$1500.00	$6,000.00
Black Dirt Fill(36")	84	CY	$25.00	$2,100.00
Concrete Paving 6" Curb	150	LF	$18.00	$2,700.00
Street Trees(2"Cal.)	8	EA	$500.00	$4,000.00
Mulch(3" Depth)	756	SF	$1.00	$756.00
Site Elements				
Bench	6	EA	$800.00	$4800,00
Trash Receptacles	4	EA	$800.00	$3200,00

Subtotal		**$359,759.00**
Mobilization	15%	$53,964.00
Engineering & Design	15%	$53,964.00
Contingency	20%	$71,952.00
Estimate Total		**$539,639.00**

MAIN STREET CHARACTER & ACCESS

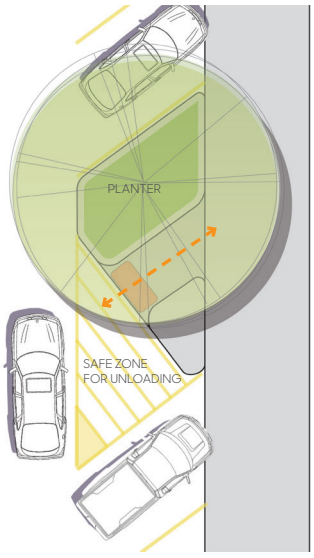
Establishing the corner of HWY 10 and Main Street as a civic space will ensure its longevity and importance within the community. This could be accomplished through a park space that builds on the community identity and contains a key attraction such as the tower. It could also become a civic building such as a community center, city hall or fire station. Each of these structure concepts could retain the plaza, surrounding gardens and benches. They could also incorporate the tower look out into the structure and provide a sheltered area for students to wait for the bus.

MAIN STREET CORNER WITH OPEN PLAZA AND TOWER

MAIN STREET CORNER WITH COMMUNITY BUILDING

IMPROVED ACCESS FOR MAIN STREET

Currently there is minimal universal access points along Main Street. This is of most concern outside of the post office and bank. The proposed access points would provide a ramp right in front of these locations. Additional vegetation would be accommodated in the bump-out increasing the street's visual character and making the street a more pedestrian friendly



Currently there are minimal universal access points along Main Street. This is of most concern for residents, outside of the post office and bank. The proposed access points would provide a ramp right in front of these locations. Additional vegetation would be accommodated in the bump-out increasing the street's visual character and making the street a more pedestrian friendly environment. Four access ramps with planters are proposed for the primary block of Main Street. Bump-outs with a curbed planters at each corner would create a consistent rhythm to the street tree plantings and enhance the character of Main Street. Information related to appropriate street trees is located in the appendix.

Updates to crossings and bike/trail infrastructure are identified in other areas of this report.

Street trees will enhance the character of the street while offering shade and protection to the ramp area and sidewalk

Ramp and planter utilize the space of two parking stalls

Intersections & Crossings

Main Street and Highway 10 is the most prominent intersection in the community. Here there are concerns over fast moving vehicles, curves with low visibility, large truck traffic. A bus pick-up and drop-off is located just north of HWY 10 on Main Street. After school many students then cross HWY 10 to get to the library. Currently there are signs, but no marked crosswalks on HWY 10, so drivers are not prompted to be aware of pedestrians to the level that they could be. Also there is minimal vegetation or vertical edge near the street, which increases the feeling of the open road or highway conditions. This condition often leads to increased speeds.

For this intersection, new, high visibility crosswalks are proposed along with updated crossing signage. Additional street trees will change the character of the street, providing a more downtown feel, and help to slow traffic. Updates to parking areas along these streets will improve the look and feel of this area.

Additional improvements to Main Street and updates related to trail and bike infrastructure are contained in other parts of this report.

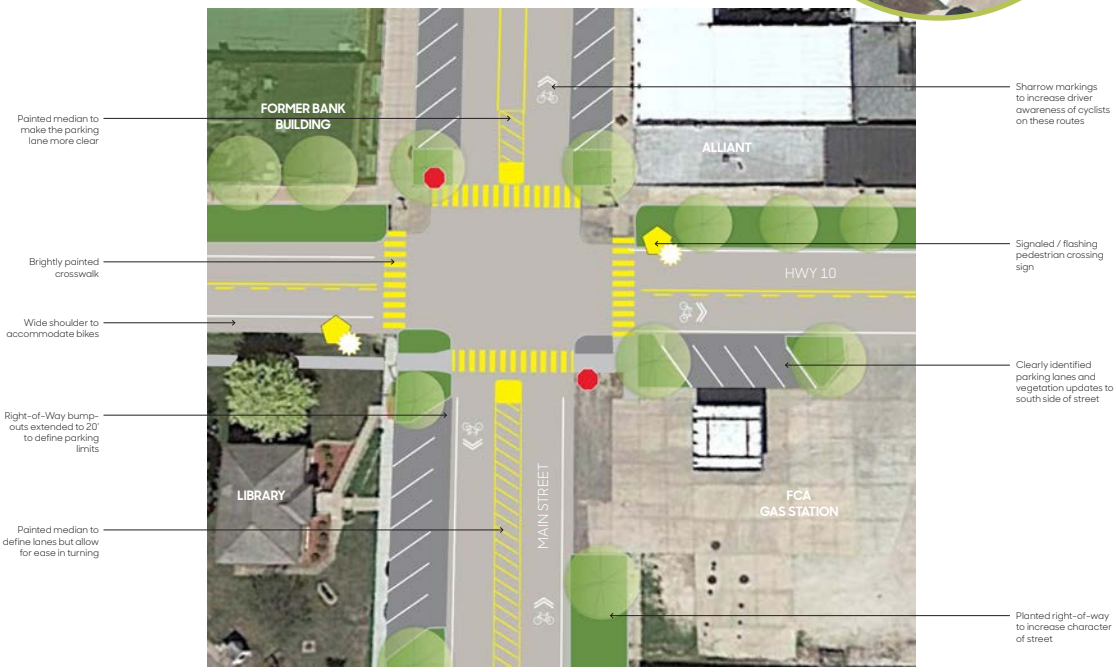
INTERSECTIONS & CROSSINGS				
Highway 10 & Main Street	**QTY**	**UNIT**	**UNIT COST**	**SUBTOTAL**
Site Elements & Markings				
Crosswalks High Visibility	4	EA	$750.00	$3,000.00
14' Pedestrian Crossing Sign (solar panel & push button RRFB)	2	EA	$8500.00	$17,000.00
Standard Pedestrian Yield Sign	4	EA	$250.00	$1,000.00
Adjacent Parking/Landscape Updates				
Excavation (10")	65	CY	$14.00	$910.00
PCC, 6" Pavement w/6" Gravel	233	SY	$50.00	$11,650.00
Pavement Markings / Striping	100	LF	$2.00	$200.00
Excavation (36")	315	CY	$14.00	$4,410.00
Black Dirt Fill (36")	315	CY	$25.00	$7,875.00
Street Trees	6	EA	$500.00	$3,000.00
Concrete Curb 6"	255	LF	$18.00	$4,590.00
Mulch (3" Depth)	2,840	SF	$1.00	$2,840.00

Subtotal		**$56,475.00**
Mobilization	15%	$8,471.00
Engineering & Design	15%	$8,471.00
Contingency	20%	$11,295.00
Estimate Total		**$84,712.00**

INTERSECTIONS & CROSSINGS

MAIN STREET & HWY 10

- Bus stop at this location with many kids crossing the busy highway
- Highway traffic, including large trucks traveling at fast speeds
- Intersection coincides with a corner with low visibility
- Main Street is wide with minimal vertical edge to the street to create an awareness of a more pedestrian district



Street Plan

HWY 10 Looking Northwest

South Side of Main Street Looking East

Iowa State University Community Design Lab
Landscape Architect: Carl Rogers, RLA
Project Designer: Chad Hunter
Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

Intersections & Crossings

M27 / 4th Street passes right by the public pool and Kirchner Park with all of its historical sites. There is also a veteran's memorial and other park features. On the south side of the road is the convenience store, Ampride. Because of its proximity, the convenient store is a popular location for kids when they are at the pool and park. Currently there are no marked crosswalks or intersection to indicate a preferred crossing point and limited sidewalks. This condition creates a situation where kids are crossing at any and multiple points. M27 / 4th Street does have a significant volume of traffic, especially at this point, because it is at the junction with HWY10, it is the primary north-south route into town, and the location of Ampride.

The recommended updates include multiple crosswalks to accommodate pool and park users. A painted median will narrow the lane widths and help reduce traffic speeds and make drivers more aware of roadway conditions at this location. Pedestrian crossing signs, including signaled flashing signs will designate and highlight the crossing points making safer conditions for pedestrians and drivers. Additionally a designated pedestrian zone within the Ampride parking lot, linking to their front sidewalk, would further increase the safety of those crossing between the park and Ampride.

Infrastructural updates to the roadway and sidewalks along M27 is anticipated to be completed by Clay County. There estimate was that it would be beyond 5 years before those updates would be implemented. The process will involve road resurfacing and replacement of failing or any pre-existing sidewalks.

INTERSECTIONS & CROSSINGS				
M27/4th Street @ Public Pool	**QTY**	**UNIT**	**UNIT COST**	**SUBTOTAL**
Site Elements & Markings				
Crosswalks High Visibility	2	EA	$750.00	$1,500.00
14' Pedestrian Crossing Sign	3	EA	$8500.00	$25,500.00
Standard Pedestrian Yield Sign	2	EA	$250.00	$500.00
Painted Median Striping	1016	LF	$2.00	$2,032.00

Subtotal		**$29,532.00**
Mobilization	15%	$4,430.00
Engineering & Design	15%	$4,430.00
Contingency	20%	$5906.00
Estimate Total		**$44,298.00**

INTERSECTIONS & CROSSINGS

4TH ST @ KIRCHNER PARK

- Children crossing at multiple points along the road
- Limited sidewalks and no marked crossings
- Higher volumes of traffic due to park activities and the gas station

Street Plan

4th Street Near Pool Entrance, Looking West

4th Street Looking South to Ampride

Iowa State University Community Design Lab
Landscape Architect: Carl Rogers, RLA
Project Designer: Chad Hunter
Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

Implementation Strategies

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

Step Two
Define a ranking for the projects outlined in the feasibility study. This list will help prioritize goal setting, planning, funding. Remember that each concept outlined in the feasibility study can be broken down in to smaller parts. For example, it may be of more immediate interest to paint bicycle sharrow markings along Park Street to indicate the trail, but updates to the sidewalk and road could be slated as a long-term project, and additional bike route signage may be a mid-range project.

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

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

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

Step Six
Select and contract with a Landscape Architect or Design Professional as your lead design consultant for the identified community improvement project. Allow 3-6 months in the project timeline for design and construction documentation development.

Step Seven
Select and execute a contract with a General Contractor as your construction manager for the identified community improvement project. Allow 6 months in the project timeline for construction administration.

Repeat the steps as each new project is determined.

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
- Iowa Economic Development - Community Development Block Grant (CDBG)
- 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
- Prairie Meadows Community Betterment Grants
- Revitalization Assistance for Community Improvement (RACI) Grant Program
- State Recreational Trails Program
- Transportation Alternatives Program (TAP)

Appendix

Suggested Plants

One of the great features about Peterson is the natural landscape and the preserved native plant communities. In the rural landscape that surrounds the community remnant patches of oak savannas, one of Iowas native landscapes can be found among the rolling hills. This plant community would have been a dominant landscape here in the past. To build on the strengths of that community, the following trees, shrubs and native plant seed mixes are proposed. These plantings are suggested as options for the open space design proposed for Main Street. They can also be utilized in other park areas in the community as updates are needed.

Additionally suggestions for street trees that would be successful and compliment the oak savanna plant community and the trees of the river corridor are provided. These options are intended for the planters and other street trees highlighted in and around Main Street, but are great suggestions for other locations as well.

PLANT LIST		
Overstory Trees		
Common Name	**Scientific Name**	**Mature Size**
Bur Oak	*Quercus macrocarpa*	60-80'
Black Oak	*Quercus velutina*	50-60'
White Oak	*Quercus alba*	50-80'
Shagbark Hickory	*Carya ovata*	70-90'
Chinkapin Oak	*Quercus muehlenbergii*	40-60'
Quaking Aspen	*Populus tremuloides*	40-50'
Red Oak	*Quercus rubra*	50-75'
Swamp White Oak	*Quercus bicolor*	50-60'
Understory Trees		
Common Name	**Scientific Name**	**Mature Size**
Cockspur Hawthorn	*Crataegus crus-galli*	25-35'
Serviceberry	*Amelanchier sp.*	10-20'
Smooth sumac	*Rhus glabra*	9-15'
Staghorn sumac	*Rhus typhina*	15-25'
Wild plum	*Prunus americana*	15-25'
Prairie Crab Apple	*Malus ionensis*	10-25'
Downy Hawthorn	*Crataegus mollis*	20-35'
Native Plant Seed Mixes (available from Prairie Moon Nursery)		
Pollinator-Palooza Seed Mix		
Shortgrass Inexpensive Prairie Seed Mix		
Shortgrass Prairie Seed Mix for Medium-Dry Soils		

Street Trees		
Trees Common Name	Scientific Name	Mature Size
Red Maple	*Acer rubrum*	40–70'
Hackberry	*Celtis occidentalis*	40–60'
Honeylocust	*Gleditsia triacanthos*	30–70'
Elm Cultivars	*Ulmus*	40'
Red Oak	*Quercus rubra*	50–75'
Swamp White Oak	*Quercus bicolor*	50–60'

Bird Friendly Native Plant List	
Common Name	Scientific Name
American Basswood	Tilia americana
American Plum	Prunus americana
Ash-Leaf Maple	Acer negundo
Black Walnut	Juglans nigra
Black Willow	Salix nigra
Burr Oak	Quercus macrocarpa
Choke Cherry	Prunus virginiana
Eastern Red-Cedar	Juniperus virginiana
Northern Red Oak	Quercus rubra
Northern White Oak	Quercus alba
Pussy Willow	Salix discolor

Bird Friendly Conditions in Peterson

- Native plant species
- Diverse natural habitats
- Remnant native landscapes
- Vegetated river corridor
- Rural setting with limited urban or industrial conditions


Northern Harrier

Sources:
http://www.iowadnr.gov/Conservation/Iowas-Wildlife/Threatened-and-Endangered
https://www.homeadvisor.com/r/birdwatching-guide/#.Vt7fg_krK70
http://www.iowabirds.org/Places/Gazetteer.aspx
https://www.audubon.org/conservation/bird-friendly-communities