

IOWA'S LIVING ROADWAYS St. Ansgar Community Visioning Final Report and Feasibility Study



Prepared by:

RITLAND+KUIPER
LANDSCAPE ARCHITECTS

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Program Partners:

Iowa Department of Transportation

Trees Forever

ISU Landscape Architecture

ISU Extension Community and Economic Development



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Participants

St. Ansgar Visioning Committee

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Devin Schwiesow
Brad Mayer

Bonnie Eustice
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Bryan Mayer

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Tara Kramer
Barb Groth

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Chris Diggins (NIACOG)
Richard Brumm (Mitchell County Engineer)
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Sandra Oberbroeckling, Community Relations Specialist
Chris Seeger, PLA, GPSP, Associate Professor of Landscape Architecture

RITLAND+KUIPER Landscape Architects

Craig Ritland, Landscape Architect
Samantha Price, Landscape Architect
Jake Spitz, Intern

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Consultant History and Expertise

RITLAND+KUIPER Landscape Architects Waterloo, Iowa

Founded in 1970 as Craig Ritland Landscape Architect in Waterloo, Iowa, RITLAND+KUIPER Landscape Architects is a full-service landscape architectural firm with registered landscape architects and is LEED accredited. The award-winning firm works interactively with clients in providing design solutions that are innovative, cost effective, site-specific, and environmentally responsible.

Some of their most notable recent projects include Place to Play Inclusive Playground in Cedar Falls, Malcolm Price Lab School Commemorative Plaza at UNI, the Waterloo RiverLoop Expo Plaza (winner of a 2016 Iowa American Society of Landscape Architects Merit Award), the downtown Waterloo RiverLoop Parks and Trails (winner of a 2013 Central States American Society of Landscape Architects Merit Award), and exciting new developments at the Waterloo TechWorks campus (including the Green Hotel and John Deere Tractor and Engine Museum) as well as River Place in downtown Cedar Falls.

Craig Ritland has over 40 years of experience in all phases of landscape architecture including campus and community master planning, site development planning, and detailed site design work. He is well known for participating on multi-disciplinary teams to achieve common goals with creative solutions. Over the years, Craig has earned several design and service awards. In recognition of the quality of landscape architectural services he has provided to clients throughout his career, he was inducted as a Fellow of the American Society of Landscape Architects, one of the highest accomplishments that one can receive in the profession. He is widely regarded for the scale and depth of work he has produced, from park and campus master plans to urban streetscapes and site design to residential projects.

Mark Kuiper, who began working with Craig Ritland in 2001, has also been named a principal in the firm. With over 19 years of experience in projects around the country, Mark has been involved in a diverse array of landscape developments including transportation improvements, educational facilities, corporate campuses, and athletic facilities. His background in civil engineering and diverse experience give him the ability to apply a wide variety of technologies in the industry, including irrigation systems, sports fields, and storm-water systems. His interest in water quality and sustainable design led him to become accredited as a Leadership in Energy and Environmental Design (LEED) professional.

Samantha first joined RKLA as an intern through the Iowa's Living Roadways Community Visioning Program. Her strong work ethic, positive attitude, and adept computer skills led to her joining the RKLA team upon her graduation from Iowa State University. She has become an invaluable asset to the firm as she continues help coordinate projects and develops outstanding graphics for clients. She is particularly skilled in creating photo-realistic renderings and 3D site models. She recently completed her licensure and is now a registered landscape architect.

Introduction

Program Overview

The city of St. Ansgar is one of 10 communities selected to participate in the 2016 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 Landscape Architecture Extension coordinates with private sector landscape architects and supports the research components of Community Visioning. The program is sponsored by the Iowa Department of Transportation.

Program Overview

Community Goals

The St. Ansgar visioning committee identified a number of goals and priority areas during the visioning process:

1. Signage and wayfinding enhancements
2. Park improvements
3. Additional trail systems and enhancements to existing trails
4. Stormwater management
5. Improved pedestrian connections

Capturing the St. Ansgar 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, which is illustrated in the following set of presentation boards:

1. Program Overview
2. Bioregional Assessments
3. Transportation Assets and Barriers Assessment
4. Transportation Inventory and Analysis
5. Concept Overview
6. Signage Enhancements
7. Pedestrian Connections
8. S.T.A.R.T. Trail Conceptual Master Plan
9. Clausen City Park Enhancements
10. Angel Park Enhancements
11. Stormwater Management



Bioregional Mapping Workshop



Design Workshop



Design Workshop



Cedar River

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Clausen City Park Gazebo



Bike Share Program

St. Ansgar Program Overview

Landscape Architects and Intern: Craig Ritland, PLA, FASLA, Samantha Price, PLA, RITLAND+KUIPER Landscape Architects and Jake Spitz, Iowa State University
Iowa Department of Transportation Trees Forever ISU Landscape Architecture Extension ISU Extension Community and Economic Development Summer 2016



Inventory and Analysis

Settlement Patterns

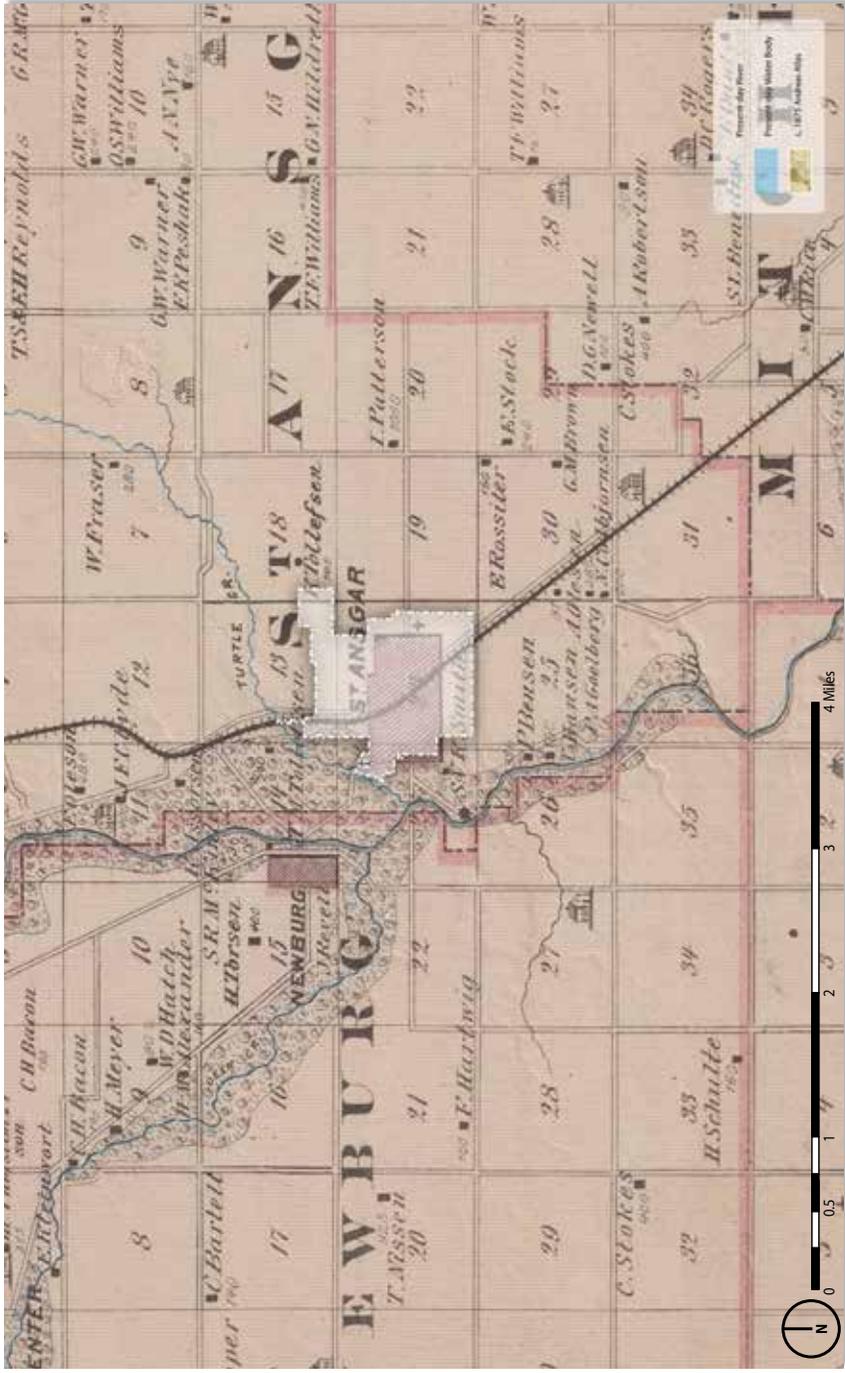
During the 1800s, state atlases were one of the most underdeveloped branches of American cartography. Responding to that need, an entrepreneur named Alfred Andreas joined a group of former military associates to canvass and map counties in the state of Illinois. Using the experience he gained in Illinois, Andreas devised a plan to earn more money from mapping by subdividing the counties into smaller areas and producing more detailed maps. This idea led to Andreas' production of the Illustrated Historical Atlas of the State of Iowa – 1875, which had nearly 23,000 subscribers.

The historic atlas depicts useful information such as administrative boundaries, transportation routes, forest coverage, water bodies, cities, rural family settlements, and so on. Overlaying present-day city boundaries on Andreas' atlas maps reveals how far the city has expanded laterally over time. As with the historic vegetation map, map overlays can be used to reveal where remnant vegetative communities may still exist in the region.

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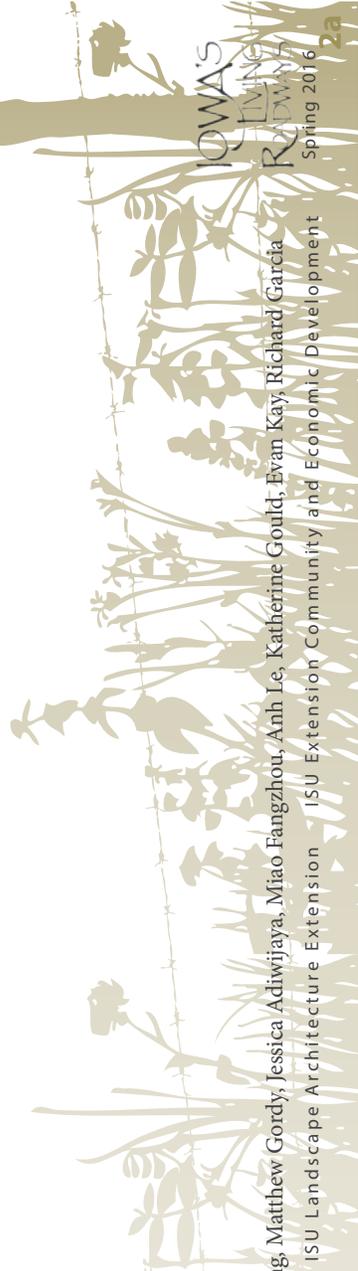


Map Source: Iowa Department of Natural Resources, "Natural Resources Geographic Information Systems Library," <http://www.ipbu.iowa.edu/nrgis/bk/>.

St. Ansgar

Settlement Patterns

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Inventory and Analysis

Historic Vegetation

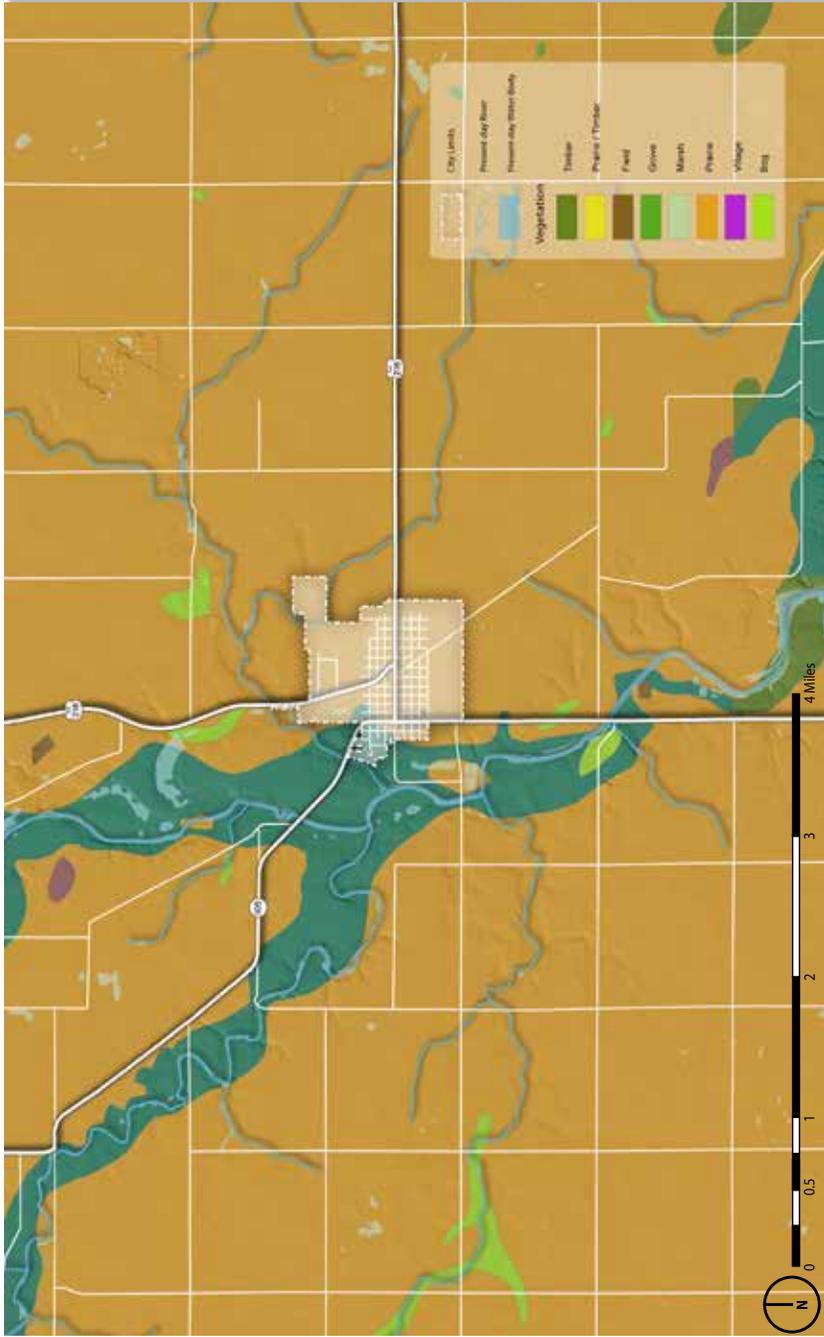
Historic vegetation maps provide insight into vegetative patterns that existed within the landscape prior to significant disturbance associated with non-native settlement. When combined with other maps that depict vegetative conditions from other eras, this map is helpful in predicting where pockets of native vegetation of various types may still exist. When considering future landscape restoration, the maps provide insight into what types of vegetation thrived historically and could thrive again.

The plant communities mapped by the United State General Land Office (GLO) surveyors varied in classification as time went on, and the extent of each surveyor's plant knowledge influenced how they classified vegetation. When faculty and students at Iowa State University interpreted the hand-drawn maps and notes to create a GIS map, they did not recategorize any vegetation types. For example, "slough" and "marsh" appear as separate map units, but both describe similar conditions—herbaceous vegetation on perennially wet to partially flooded land. "Oak barrens," adjacent "timber," and "large expanses of timber" are also identified. "Oak barrens" undoubtedly referenced what is called oak savanna today. Oak savannas are frequently burned woodlands dominated by oak and hickory species with a unique, shade tolerant, prairie community beneath. "Timber" and "prairie," as used by the GLO, are catch-all names that included many vegetation types. Examining water-table data can reveal hydraulic patterns that would have influenced what specific plant communities were present in vast areas of "timber" and "prairie."

Historic Vegetation

Historic vegetation maps provide insight into vegetative patterns that existed within the landscape prior to significant disturbance associated with normative settlement. When combined with other maps that depict vegetative conditions from other eras, this map is helpful in predicting where pockets of native vegetation of various types may still exist. When considering future landscape restoration, the maps provide insight into what types of vegetation thrived historically and could thrive again.

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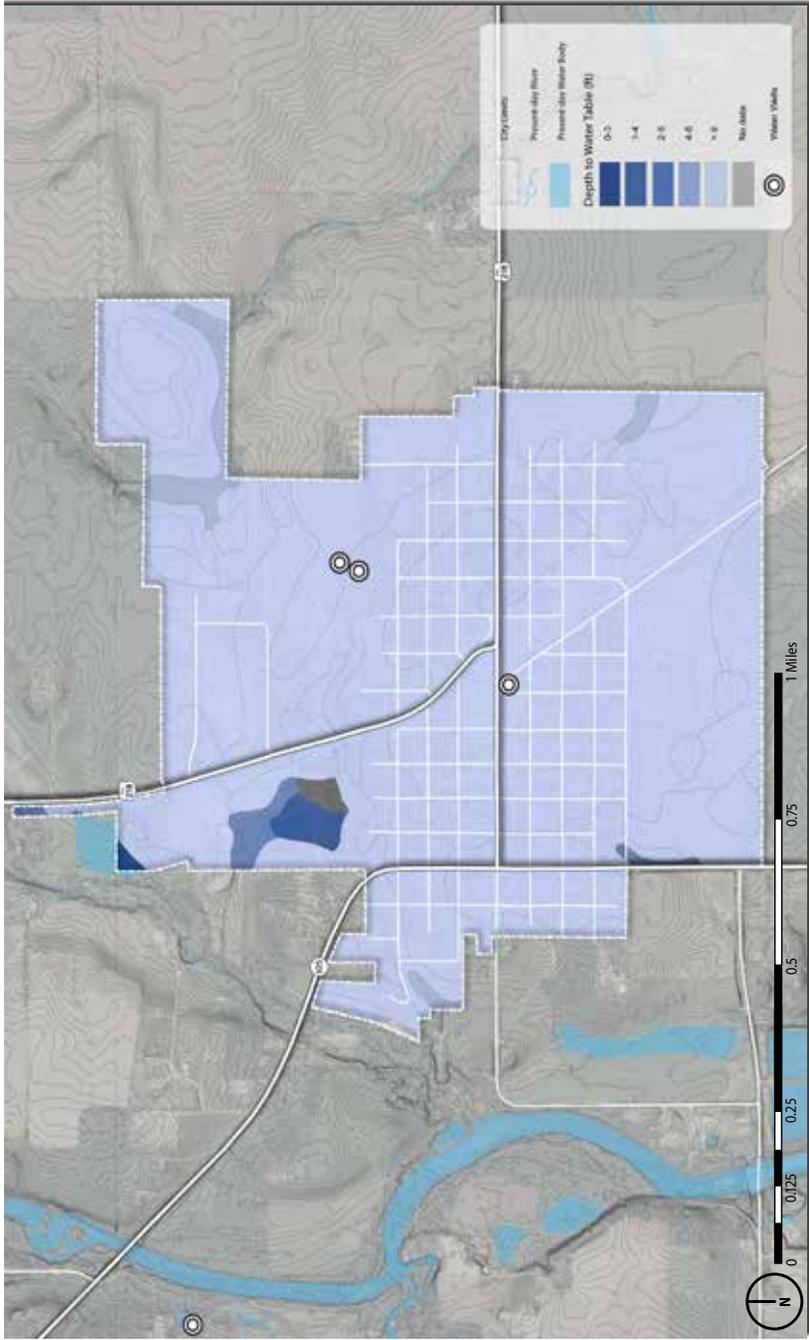
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Inventory and Analysis

Depth to Water Table

The water table is a groundwater-saturated zone in the soil that becomes rivers, springs, and lakes when the water table reaches the surface. The water table generally mimics surface topography, but there are differences depending on the permeability and porosity of soils and bedrock in the area. The water-table depth is typically defined as a range because the depth is constantly changing with the seasons and the weather. For example, an area with a water-table depth ranging from one foot to three feet is closer to one foot below the surface after the spring snowmelt. Impermeable layers such as concrete also affect the water table by preventing precipitation from infiltrating into the soil and contributing to the subsurface water level. As a result, the water table is lower in those areas.

Prior to the significant landscape alterations caused by non-native settlement, the water table was a driving factor that affected vegetation growth in the area. For example, historically a quaking aspen in the landscape would indicate that water is located not far below the surface. Today, quaking aspens are highly sought-after specimen trees and are found in many places they would not have existed historically.



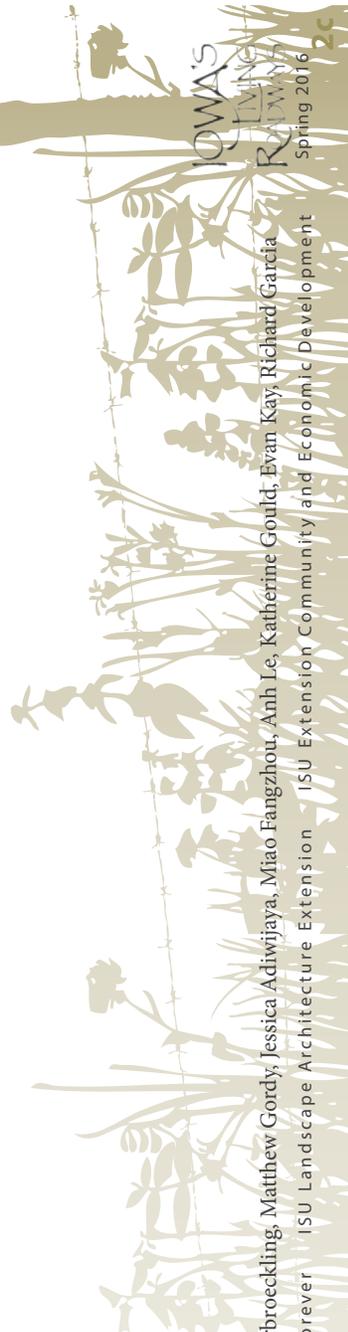
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Inventory and Analysis

Elevation and Flow

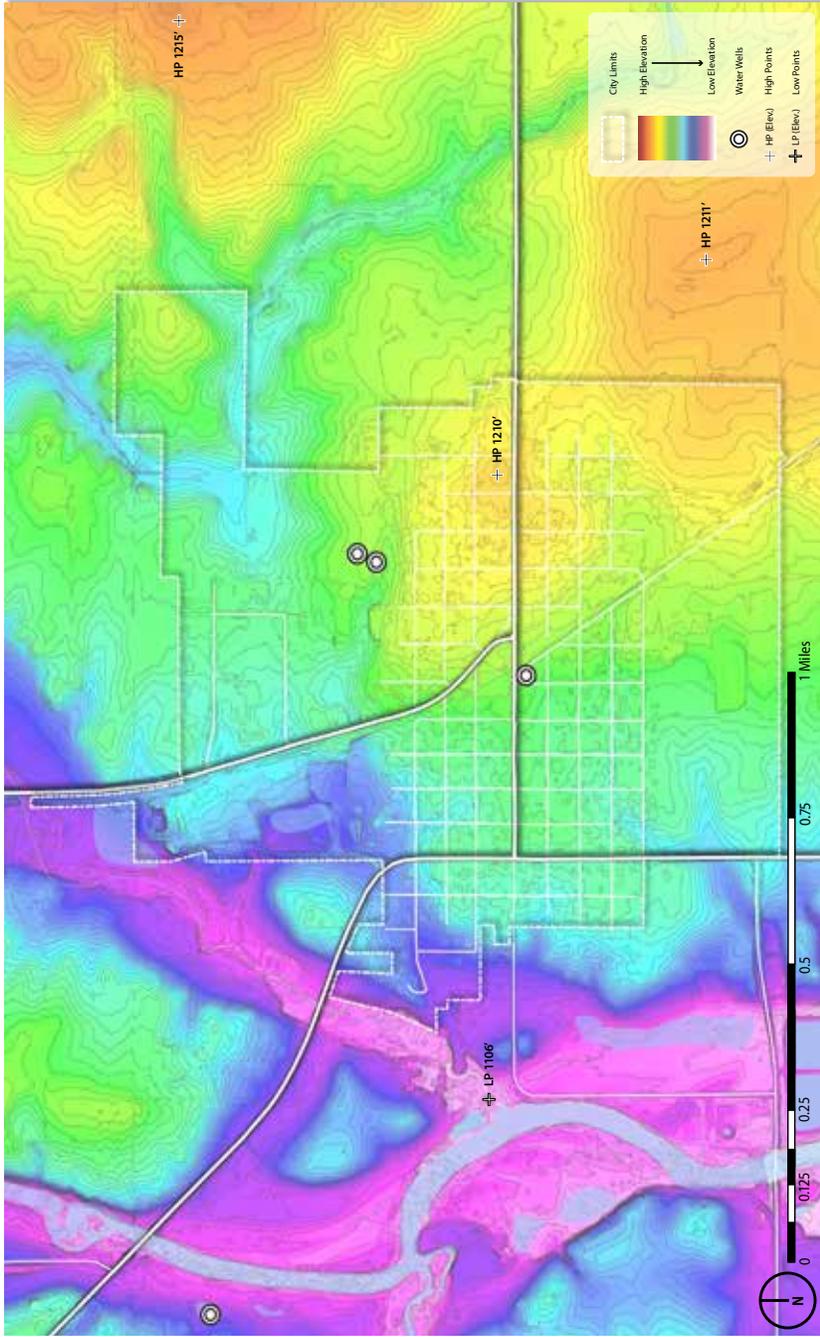
The map to the right displays elevation using warm and cool colors. The warm colors represent higher elevations and the cool colors represent lower elevations. The elevation of the land and how quickly it changes greatly impacts many landscape systems. Areas where the color changes quickly signifies a high slope percentage, which can be a major barrier to transportation access and development.

The colorization also helps reveal the direction of surface runoff. In general, runoff will move from areas with warmer colors to the nearest area with a cooler color. Valleys where runoff is collected are easily identified because they appear as cool-colored veins surrounded by warmer colors.

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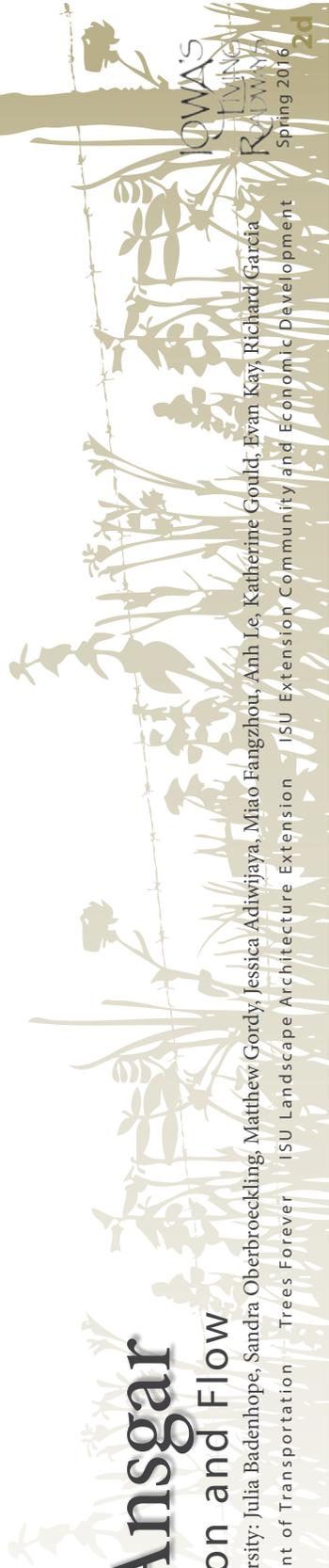


Map Source: Iowa Department of Natural Resources, "Natural Resources Geographic Information Systems Library," <http://www.iowadnr.gov/education/ibox/>.

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Elevation and Flow

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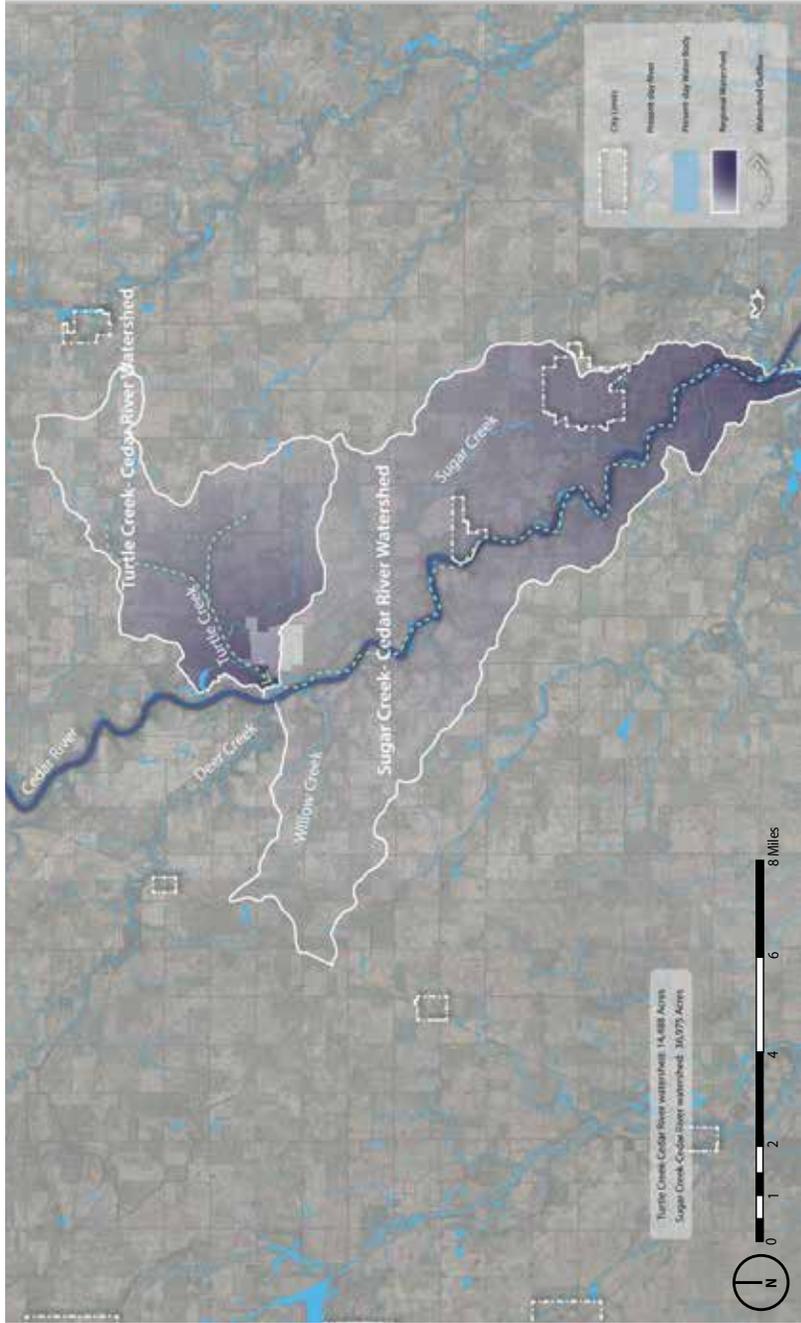
Regional Watersheds

Watersheds are expanses of landscape that are confined by the slope and elevation of the terrain. When in plan view, watershed boundaries show the extent of a drainage area that is flowing to a single outlet. The watershed boundary is defined by the highest ridgelines circling around to the outlet where water flows out of the watershed. The boundary determines whether precipitation is directed into one watershed or an adjacent watershed. It is important to consider scale when identifying and defining watersheds because there are nested features that can be examined at many scales. For example, many sub-watersheds that are smaller than a city block fit together like puzzle pieces to make a watershed encompassing an entire city or more. This puzzle hierarchy builds upward to watersheds that cover thousands of miles, such as the Mississippi River watershed.

Where a community lies within its watershed determines what capacity it has to manage large watershed issues. For example, a community located in a lowland floodplain will have little capacity to reduce the amount of water draining toward it from upland areas. That said, communities always have the power to reduce their contribution to the total runoff production for the watershed.

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St. Ansgar Regional Watersheds

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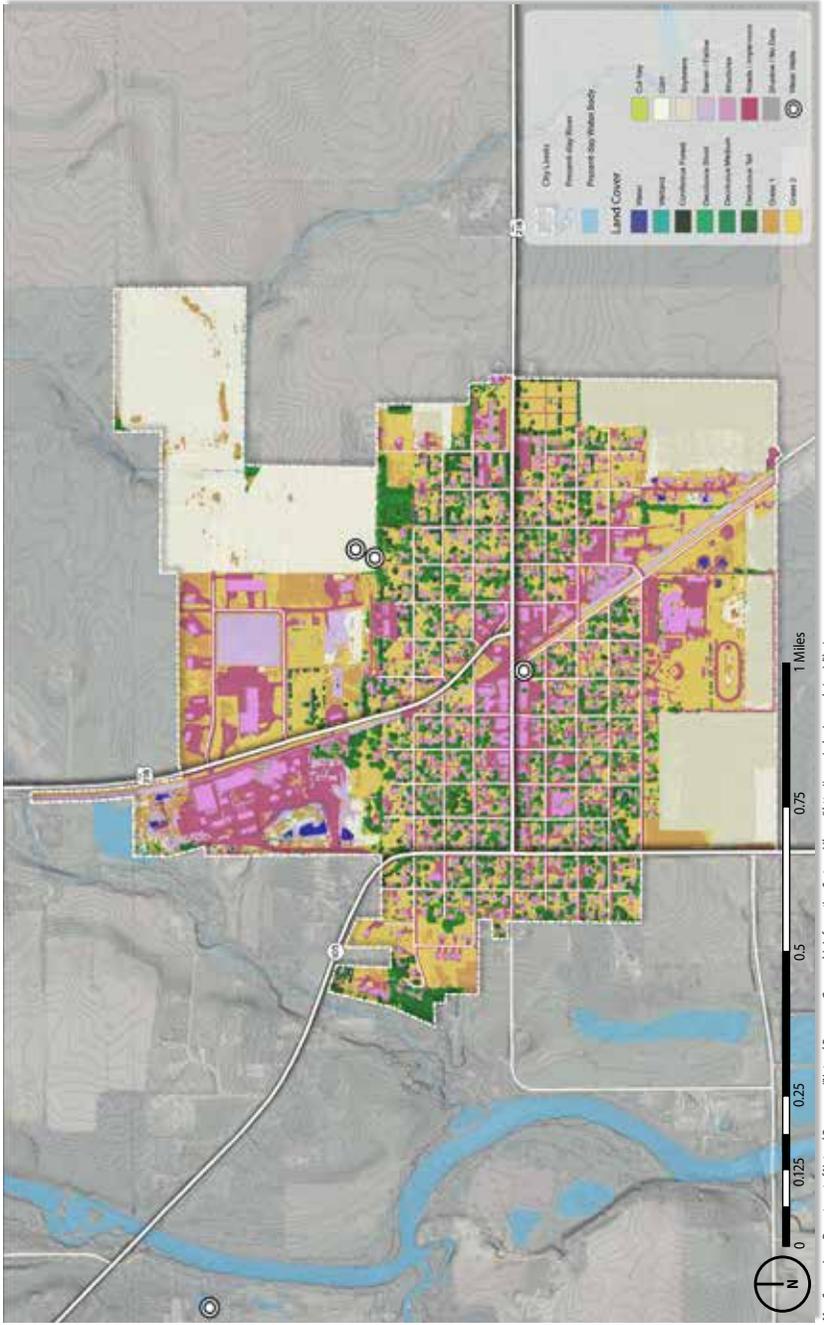
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Inventory and Analysis

Present-Day Land Cover

The land-cover map depicts both natural and man-made surfaces on the landscape based upon aerial imagery. The Iowa DNR created 15 unique classes for this dataset, including water, wetland, coniferous forest, deciduous forest (short, medium, tall), grass (type 1, type 2), cut hay, corn, soybeans, barren/fallow land, structures, roads/impervious, and shadow/no data. These classes are useful in clearly distinguishing different types of landscape features that would otherwise be difficult to discern from an aerial photograph.

For example, the balance of pervious and impervious coverage is clearly evident because impervious areas are represented as pink or magenta. Large expanses of impervious surfaces can cause significant drainage issues without proper planning, because they prevent the infiltration of precipitation and provide little to no friction to slow precipitation that is running off the surface.



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Inventory and Analysis

Present-Day Vegetation

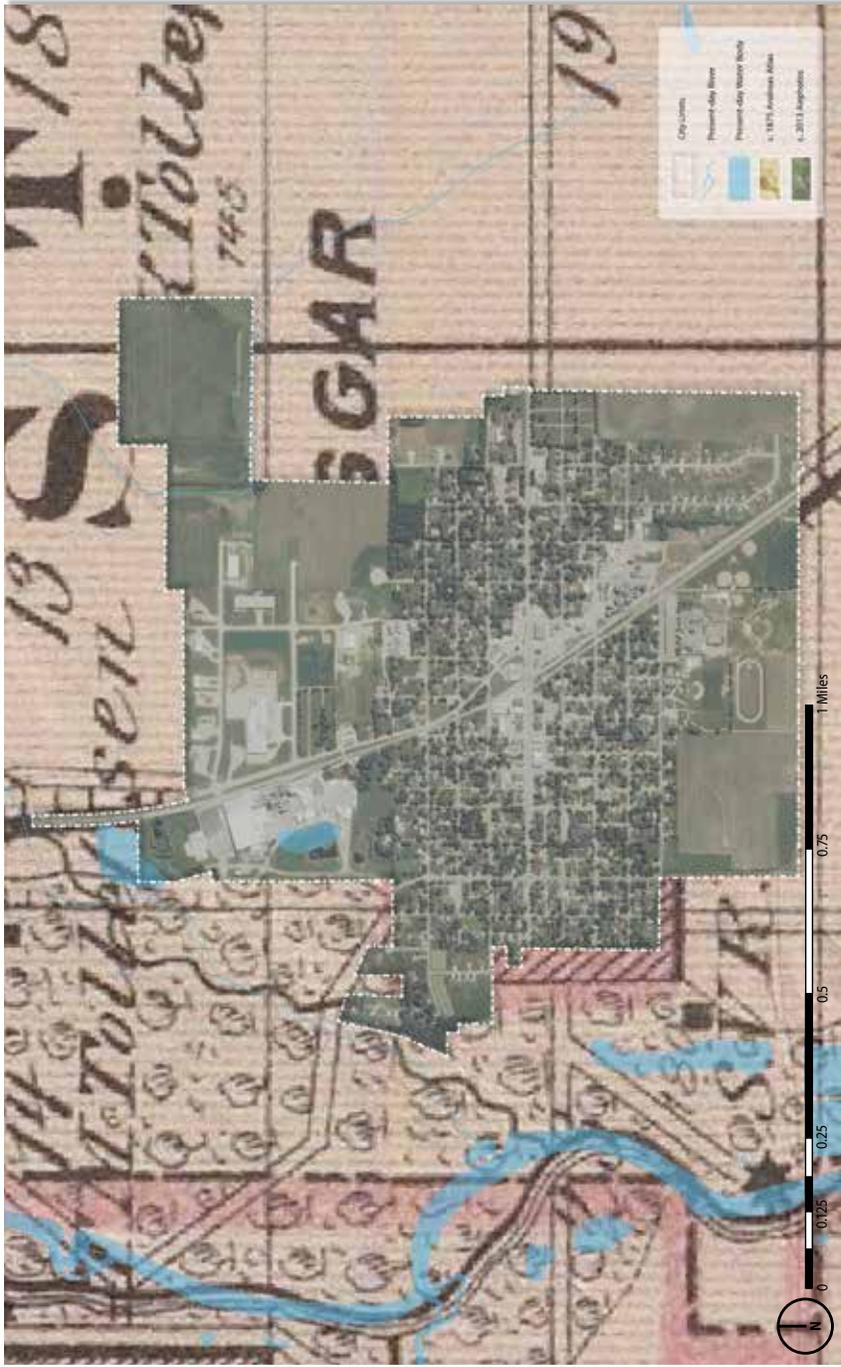
Overlaying a present-day aerial image on the historic, 1875 Andreas Atlas shows how management of the land over several decades has changed the locations of trees and other native vegetation in the landscape.

Interestingly, there are typically no tree markings in close proximity to most communities. Possible causes of this phenomenon are earlier harvesting of forest resources or the fact that community founders may have avoided wet areas. Today, most Iowa communities have a good amount of canopy coverage. Although trees may have been cleared during early settlement, the settlers would have replanted tree species that they found useful and pleasant, which eventually resulted in the establishment of urban forests. Those species would include trees that produce fruits and nuts, as well as others that provide wind protection and shade. These choices may explain the overplanting of maple species across the state. In addition to their pleasant appearance, most maples have a fast growth rate that quickly provides shade and wind protection, as well as the additional benefit of producing the sap required to make maple syrup.

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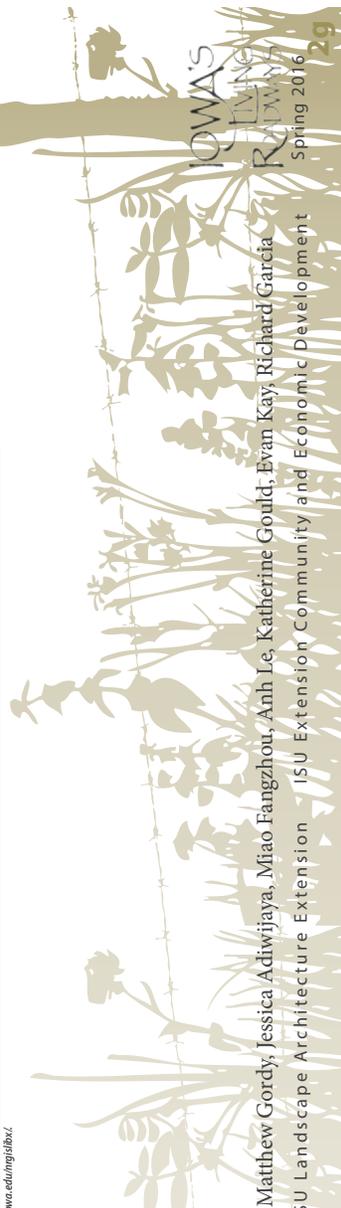


Map Source: Iowa Department of Natural Resources, "Natural Resources Geographic Information Systems Library," <http://www.igsb.iowa.edu/mgislib/>.

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Present-Day Vegetation

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Spring 2016



Dogwood Species
Cornus spp.



Burning Bush
Euonymus atropurpureus



Common Pawpaw
Asimina triloba



Chokecherry
Prunus virginiana



T: Bur Oak *Quercus macrocarpa*
B: White Oak *Quercus alba*



American Elm
Ulmus americana



Sugar Maple
Acer saccharinum



Cottonwood
Populus deltoides



River Birch
Betula nigra



Honey Locust
Gleditsia triacanthos



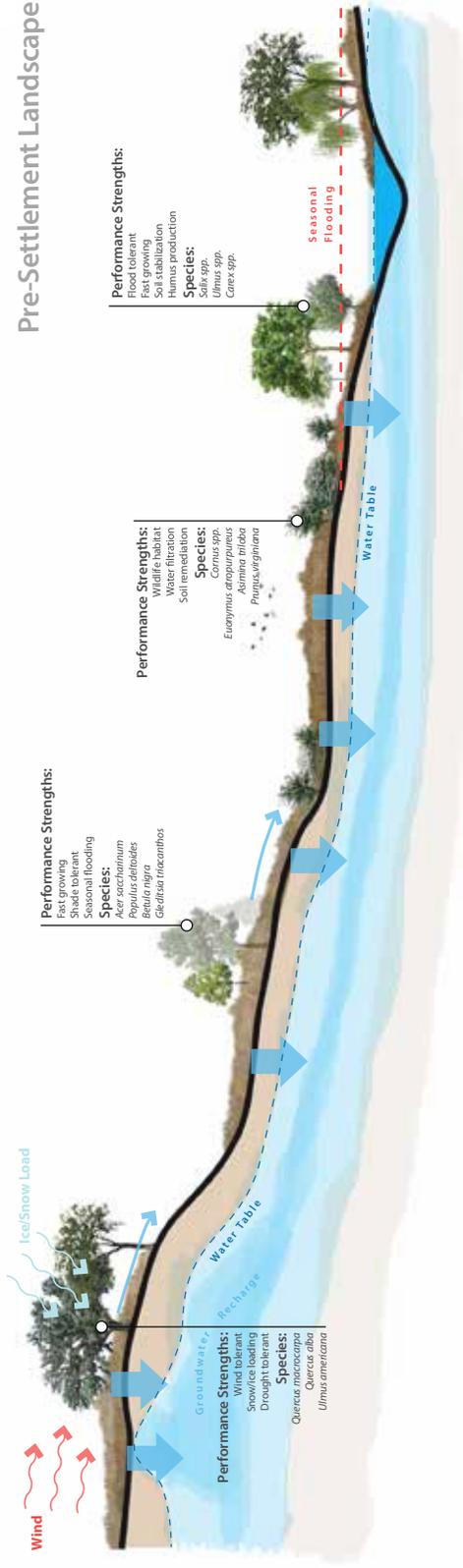
Willow Species
Salix spp.



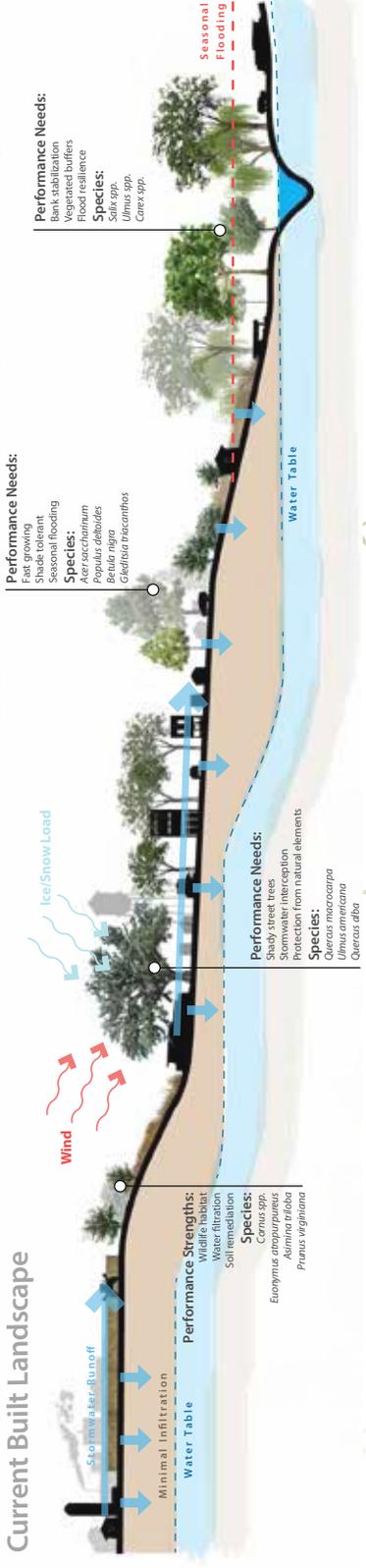
Sedge Species
Carex spp.

Image Credits: plants.usda.gov

Pre-Settlement Landscape



Current Built Landscape



St. Ansgar

Strategies for Using Native Plants

Iowa State University: Julia Badenhope, Sandra Oberbroeckling, Matthew Gordy, Jessica Adiwijaya, Miao Fangzhou, Anh Le, Katherine Gould, Evan Kay, Richard Garcia
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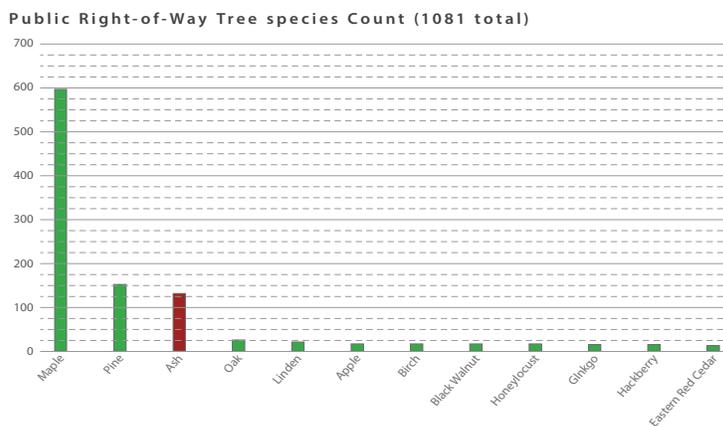


Spring 2016

Inventory and Analysis

Urban Forestry Conditions

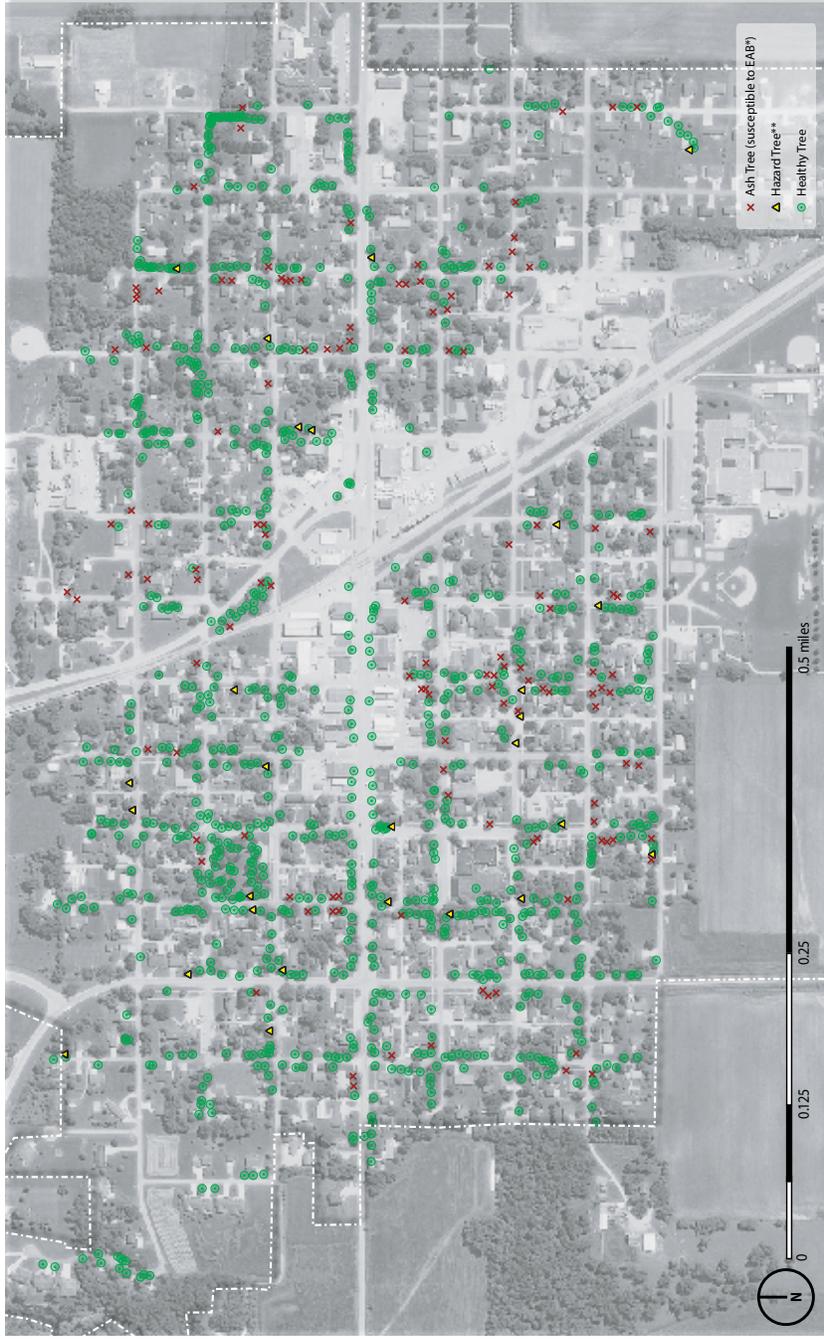
The map on the right depicts public right-of-way trees that have been surveyed in St. Ansgar by the Iowa Department of Natural Resources (Iowa DNR). The trees are divided into three categories: healthy trees, hazard trees, and ash trees. Hazard trees were determined using the Iowa DNR's priority rating. The ratings range from one to seven; trees with a rating of six or seven are classified as hazard trees. A six rating is indicative of a tree that is "dangerous, dead, or dying, and no amount of maintenance will increase longevity or safety." A seven rating means there are "insects, pathogens, or parasites present and detrimental to tree longevity; treatment should be given to maintain longevity." Ash trees have been identified specifically due to imminent threats from the Emerald Ash Borer (EAB), an invasive highly destructive beetle that has already killed tens of millions of ash trees in North America.¹ EAB was first discovered in Iowa in 2010 and has been confirmed in 29 Iowa counties and counting.²



The bar graph above depicts the breakdown of the tree species surveyed in St. Ansgar by the Iowa DNR. Take note of the large number of ash and maple trees. Creating biodiversity—that is, increasing the variety of trees—in the urban forest will make it more resilient should a new exotic bug or plant disease emerge.

¹. EAB is a significant threat to our urban, suburban, and rural forests because it kills stressed and healthy ash trees. EAB is so aggressive that ash trees may die within two or three years after they become infested. Ash trees are as important ecologically as they are economically in the forests of the eastern United States. Emerald Ash Borer the Green Menace, USDA Program Aid No. 1769, 2008, https://www.aphis.usda.gov/publications/plant_health/content/printable_version/EAB-GreenMenace-reprint-June09.pdf.

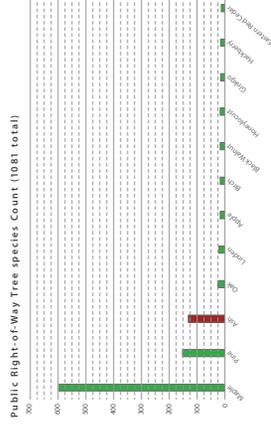
². "Pesticide Safety Education Program, Emerald Ash Borer," Iowa State University Extension and Outreach, last updated October 19, 2015, <http://www.extension.iastate.edu/psep/emeraldashborer.html>.



Map Source: data courtesy of the Iowa Department of Natural Resources Community Tree Inventory program, <http://www.iowadnr.gov/Conservation/Forestry/Urban-Forestry/Community-Tree-Inventory>

The Urban Forest

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St. Ansgar

Urban Forestry Conditions

Iowa State University: Julia Badenhope, Sandra Oberbroeckling, Matthew Gordy, Jessica Adiwijaya, Miao Fangzhou, Anh Le, Katherine Gould, Evan Kay, Richard Garcia
 Iowa Department of Transportation Trees Forever ISU Landscape Architecture Extension ISU Extension Community and Economic Development

Spring 2016



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 St. Ansgar, 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 St. Ansgar'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.

Actives (1 participant): 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.

Seniors and Mobility Impaired (6 participants): Accessibility—both in terms of physical access and proximity—is a major concern for this user group. Handicapped parking, curb ramps, and smooth surfaces are critical transportation features. Because some people in this user group do not or are unable to drive, having goods and services within walking distance is important.

Youth (1 participant): 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 popular destinations on foot or via bicycle. Having goods and services within walking distance is important.

Parents (2 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 (6 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.

What Factors Affect Transportation in St Ansgar?

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

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Different Users = Different Needs

To capture insights about transportation from a variety of perspectives, we invited St. Ansgar residents with different transportation needs to participate in focus groups. A total of 16 residents attended St. Ansgar's workshop. Participants were separated into four user groups and the St. Ansgar visioning committee. The fact that the workshop was scheduled on a day with many competing events may account for low participation. As a result, the analysis presented here focuses primarily on input from the senior and mobility-impaired participants in comparison with that of the visioning committee.



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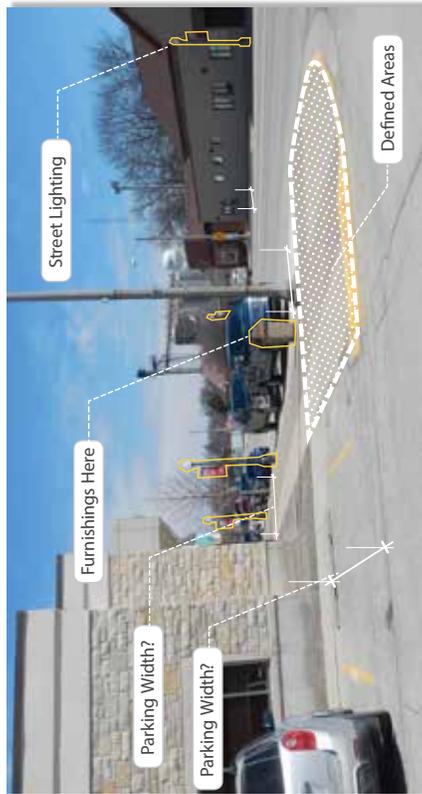
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Elements of a Complete Street



Downtown St. Ansgar Streetscape Components

St. Ansgar Transportation Assets and Barriers | Overview

Iowa Department of Transportation

Trees Forever

ISU Landscape Architecture Extension

ISU Extension Community and Economic Development

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TAB 3a

Transportation Assets and Barriers

Analysis of Barriers

The analysis of barriers is based on feedback received from the seniors and mobility-impaired user type. The steering committee is not considered a user type, as it is usually made up of representatives from the other user types. Although not shown on this map, input from the steering committee is incorporated into the written description, as a point of comparison.

Incomplete Streets

Pedestrian and vehicular movement is impeded in some areas of St. Ansgar where the streets end at the railroad tracks. Incomplete intersections at 1st Street and Highway 218 and at Train Lane and 5th Street are barriers for the senior/mobility-impaired group.

Sidewalk Barriers

A lack of sidewalks throughout town, in addition to poor sidewalk conditions where they exist, lead to unsatisfactory pedestrian accessibility. Both groups noted that Second Street in particular needs sidewalks because it is heavily traveled. A lack of painted crosswalks at 6th Street and Main Street adds to this issue.

Flooding

Flooding at Clausen City Park damages the play equipment and at times makes the park inaccessible. Clogged culverts throughout town sometimes cause flooding.

Railroad

The senior and mobility-impaired group and the steering committee expressed concerns regarding the railroad. Both groups noted that most of the railroad crossings in town are not universally accessible and do not have crossing guards. The steering committee pointed out that fire trucks are only able to cross the tracks on 4th Street because the other crossings are too steep.



What People Said:

"The water and sewer in this town is [as] old as several people, twice as old as several people sitting here. Three times as old."

"Clausen Park is low. It floods. You can't keep a good base under the children's equipment. They need new equipment. They need to figure out a way to divert water."

"We have a terrible problem [with diseased trees]. ... we've got about a hundred-plus trees to be cutting right now."

"All the tracks are bad for bikes."

"We just want them to repair the [railroad] tracks or the approaches."

Analysis of Barriers

The analysis of barriers is based on feedback received from the seniors and mobility impaired user type. The steering committee is not considered a user type, as it is usually made up of representatives from the other user types. Although not shown on this map, input from the steering committee is incorporated into the written description, as a point of comparison.

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St. Ansgar

Transportation Assets and Barriers | Analysis of Barriers

Iowa Department of Transportation

Trees Forever

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Spring 2016

TAB 3B

Transportation Assets and Barriers

Assets and Preferred Routes

The analysis of assets and routes is based on feedback received from the seniors and mobility-impaired users. The steering committee is not considered a user type, as it is usually made up of representatives from the other user types. Although not shown on this map, input from the steering committee is incorporated into the written description, as a point of comparison.

Walking

Both groups walk for recreation. When the weather is cold, people walk shorter distances in town. In the warmer months, people walk on the trail, visit the community garden and visit the children's garden.

Biking

One senior participant bikes a loop that includes the Old Mill Road. The steering community and senior and mobility-impaired groups are proud of the community's bike-share program, noting that it is well used.

Winter Activities

When there is enough snow on the ground, snowmobiling is a popular winter activity. Some walkers continue to walk year-round. The senior and mobility-impaired group noted that people also cross-country ski and snowshoe.

Parks

The senior and mobility-impaired group admires Veterans Memorial Park; they described it as beautiful and well lit. They also appreciate that the trail connects to both the community garden and children's garden. This group values the benches and flagpole at Deer Park. In general, participants in both groups like the appearance of St. Ansgar and wish to maintain it.

Signage

The senior and mobility-impaired group think that the welcome signs are appealing and that other signs in town are helpful resources to people visiting.



What People Said:

"A lot of [my walking route] is picturesque too, because people take such good care of their yards. There [are] beautiful flower beds all along the way, and when you go around the walk trail, it's cool because different times of the day kids are doing activities."

"[Snowmobiling] can be on the streets if the conditions are right. Just depends."

"We are proud of our four signs on each highway."

"When this town was settled by the river...they planted those trees [in Clausen Park], and so since 1853—that's how old they are...I think it's a godsend to the town, really."

"You can rent a bike or take a bike. You borrow. They're well-used."

Assets and Preferred Routes

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St. Ansgar

Transportation Assets and Barriers | Assets and Preferred Routes

Iowa Department of Transportation

Trees Forever

ISU Landscape Architecture Extension

ISU Extension Community and Economic Development

Spring 2016

TAB 13C

Transportation Assets and Barriers

Desired Improvements

The analysis of desired improvements is based on the feedback we received from the senior and mobility-impaired user group. The steering committee is not considered a user group, but rather an amalgamation of all user types. Although not shown on an individual map, input from the steering committee is incorporated into the written description as a point of comparison. The information on this board should in no way be interpreted as design solutions, but rather as a series of suggestions for improvements taken from the focus-group sessions. These are a preliminary sample of what might be explored as the design process moves forward over the next few months.

Improved Railroad

Both the steering committee and the senior and mobility-impaired group agree that improvements made to the railroad would be beneficial for the community. The seniors and mobility-impaired users discussed the importance of having a railroad in town, but wish to have better approaches to the tracks as well as have the tracks repaired. The steering committee brought up having safer railroad crossings and suggested crossing guards.

Trails and Connectivity

The steering committee felt it was important that there be more trails that connect the town to the Hamlin Garland Wildlife Area as well as to the golf course west of town.

Infrastructure

In general, people want many streets in town to be repaired—i.e., patching holes, widening roads, and improving curb and gutter systems. Users noted that these changes would make biking easier. The steering committee would like to have sidewalks on 8th Street.

Clausen City Park Amenities

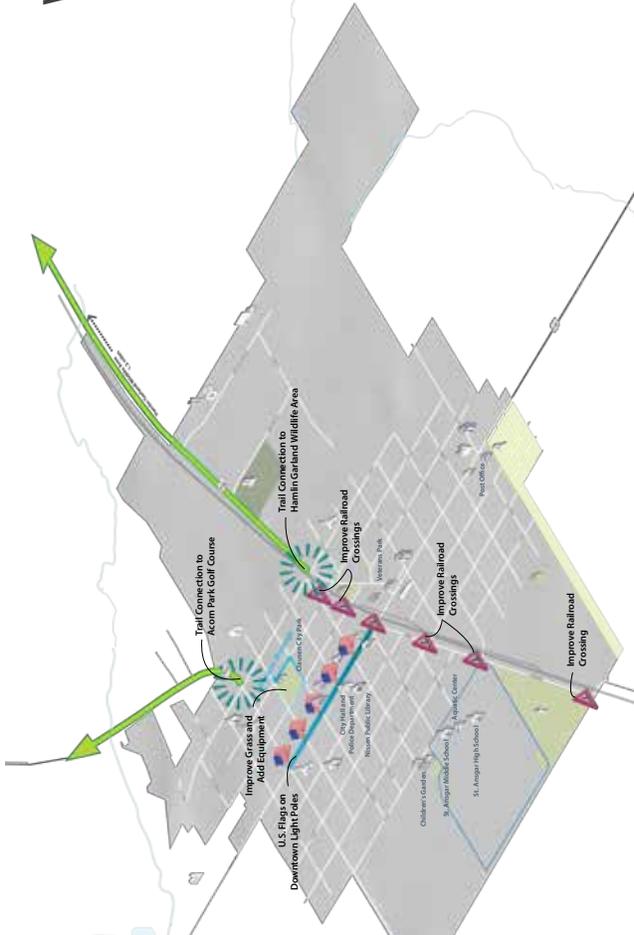
The steering committee suggested an outdoor ice rink in city park. The steering committee and senior and mobility-impaired group both noted the need for new play equipment in the park, as well as the addition of some type of vegetation under the trees and landscaping. Senior or/and mobility-impaired users mentioned the excessive flooding in the park.

Aesthetics

The senior and mobility-impaired group values the trees in town, but acknowledged the need to replace the dying and diseased trees with newer, healthier trees. This group also suggested flying U.S. flags throughout downtown year-round.

Legend

- Desired Trail
- Improved Crossing
- Connection
- Existing Trail



What People Said:

“There should be a [handicapped-accessible] railroad crossing by the end of the summer, I think.”



“Shade [is important]. I like trees.”

“We’d like our city park to be equally as attractive as the people keep their lawns.”

“Personally from an aesthetic value, I think it will be really cool to have the flag, the US flag, flying all the time by our lampposts.”

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St. Ansgar

Transportation Assets and Barriers | Desired Improvements

Iowa Department of Transportation Trees Forever ISU Landscape Architecture Extension ISU Extension Community and Economic Development

IOWA'S
ULTIMATE
ROADWAY
Spring 2016
TAB 130

Transportation Assets and Barriers

How to Use Your Map

In addition to focus-group discussions, participants in the transportation assets and barriers workshops engaged in a photo-mapping activity. Each person was given a GPS-enabled digital camera and a worksheet. They were asked to photograph and describe the three best assets and the three worst barriers in their community.

The Iowa State University research staff uploaded the data from the cameras and entered the information from the worksheets into an online database, which is linked to an interactive online map.

The map showing the images and descriptions is available to the public via the Community Visioning Program website at www.communityvisioning.org. On the homepage, click on the link reading: "Transportation Assets and Barriers Maps for the visioning communities are available [HERE](#)."

The database can be queried to sort the images by the following criteria:

- User Types: Senior & Mobility-Impaired, Youth, Parents, Active, or Steering Committee
- Photo Designation: Asset or Barrier
- Participant Gender
- Participant Age



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The database can be queried to sort the images by the following criteria:

- 1 Use these instructions to navigate the map, view photos, and comments associated with the data points, and save photos as .jpg files.
- 2 Select your **Community** from the dropdown menu.
- 3 Select "Focus Group" from the dropdown list of **Workshop** types.
- 4 You have the option to view a specific **Focus Group** demographic. The default view shows data points from all the demographic groups.
- 5 Select the **Type** of data you wish to view. You have the option to view only assets, only barriers, or both. The default view shows all the data points on the map.
- 6 You have the option to view the data by the **Gender** of the participants. The default view shows data from both male and female participants.
- 7 Finally, you can sort the data by **Age**. Sort options include participants who are exactly, older than or younger than 21-45, or 60 years old.
- 8 When you have selected the desired criteria for the data points you wish to view, click **Reload**.
- 9 When you mouse over the map, the pointer becomes a hand symbol. Use the hand to "grab" the map to move to different areas of the community. To zoom in or out, click on the "+" and "-" symbols.
- 10 When you click on any data point, a thumbnail of the photo along with the description provided by the participant will pop up on the map. If there are multiple data points clustered together, you may need to zoom in to select the desired point.
- 11 Thumbnails of all the photos, along with the descriptions, are shown along the right side of the window under the search criteria. To find out where in the community a photo was taken, click on the photo title, which is a link that will reload the map so that the photo's data points centered on the map.
- 12 To see a larger image, click on the thumbnail of the photo. A new tab with a full-size image will open in your browser. To save the image, right-click on the image and select "Save Image As."



St. Ansgar

Transportation Assets and Barriers | How to Use Your Map

Iowa Department of Transportation Trees Forever

ISU Landscape Architecture Extension

ISU Extension Community and Economic Development

Spring 2016

TAB 36

Transportation Inventory and Analysis

Knowledge of the transportation systems in and around a community is critical for sustainable transportation enhancement planning. Transportation systems include paved and unpaved roadways, pedestrian and bike trails, waterways, airports, and railroad lines or railbeds from abandoned railroad lines.

The St. Ansgar steering committee met with Iowa Department of Transportation (IDOT) personnel and local officials to identify existing, past, and future transportation systems in the area and to discuss possible transportation-related constraints and opportunities that could potentially affect project areas.

A major transportation issue in St. Ansgar revealed in this meeting was the lack of safe pedestrian routes to the school and its aquatic center, the children's garden, and the trailhead for a popular walking trail. Lack of crosswalks within the community, especially along Highway 105 and 4th Street, coupled with discontinuous sidewalks and railroad crossings in poor condition, create hazardous conditions for children.

Future transportation-related projects include repairing the railroad crossing on 4th Street and resurfacing Old Mill Road. Old Mill Road is a popular walking and biking route for residents, however the road is narrow and lacks shoulders. A suggestion was made at both the transportation meeting and the assets and barriers public input session to install "share the road" signage along this route.

"St. Ansgar has complicated and challenging surface water drainage issues that are strongly impacting the community," expressed Meredith Borchardt, Trees Forever Facilitator, during the transportation meeting. The committee expanded on the ways water issues have affected the community. The city has a smorgasbord of drainage ditches, culverts, storm sewers, and a recent installation of a 10-foot buffer strip of native grasses along the southeast edge of town. Unfortunately, attempts at controlling the volume of storm water have not been effective.

The primary source of runoff is a field to the east of the new housing development on the southeast side of the city. Because this is private land, the landowner might be able to enroll the field into the Conservation Reserve Program, which would provide a comparable revenue for this land use as compared to traditional row crops.

Participants expressed a desire for trails connecting the community with popular destinations surrounding St. Ansgar such as Halvorson Park, Hamlin Garland County Conservation area, and the golf course. Past attempts to find a trail route to Halvorson Park through private land were unsuccessful, and the steering committee would like to study some alternative routes.

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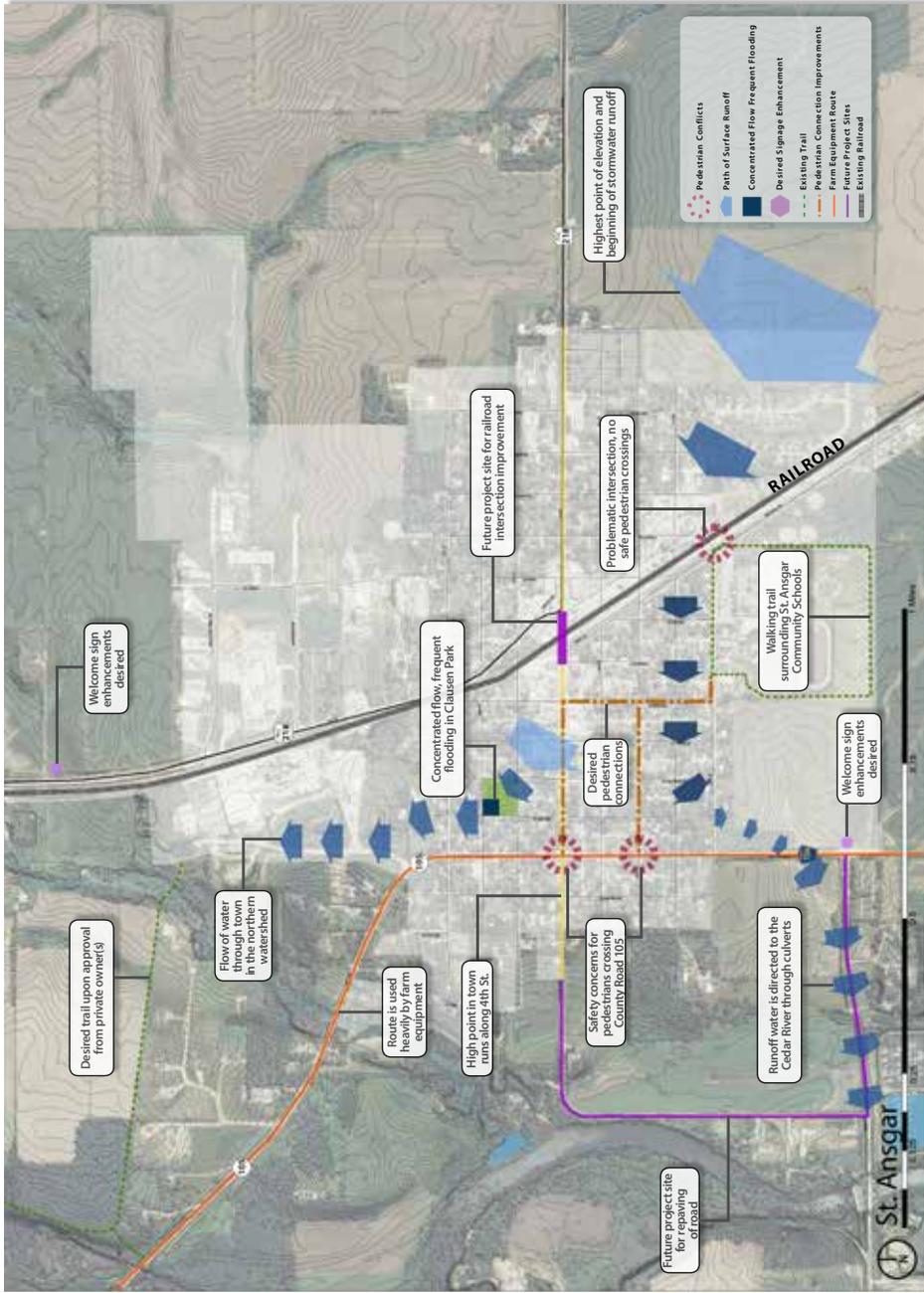
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Map Source: Iowa Department of Natural Resources, "Natural Resources Geographic Information Systems Library," <http://www.gis.iowa.dnr.gov/links>.

St. Ansgar

Transportation Inventory and Analysis

Landscape Architects and Intern: Craig Ritland, PLA, FASLA, Samantha Price, PLA, RITLAND+KUPPER Landscape Architects and Jake Spitz, Iowa State University
 Iowa Department of Transportation | Trees Forever | ISU Landscape Architecture Extension | ISU Extension Community and Economic Development | Summer 2016



Concept Overview

St. Ansgar, population 1,146, is located in Mitchell County on Iowa Highway 105, U.S. Highway 218, and County Roads T38 and A25 near the Cedar River. The town’s charming character comes from the restored architecture of many historic homes and downtown buildings. The community is proud of their welcome signs and have one at each of the four entrances into town. Though the plywood signs are beginning to decay, the existing stone columns are still in good condition and could be reused.

Clausen City Park and Angel Park are two important green spaces in the community, and a number of possible ideas for enhancements were brought out in the visioning process. Committee and community members identified that improving the mulch play surface and providing better accessibility within Clausen City Park would make this historically significant gem in the community even better. Angel Park is a relatively new park that needs signage, additional play equipment, additional shade trees, and improved accessibility. The community longs for trails connecting popular destinations near St. Ansgar. The desired trails would go through private property, so cooperation from private land owners would need to be made before these trail connections could be implemented. St. Ansgar boasts a newly updated school campus that includes pre-K through 12th grade students, an aquatic center, St. Ansgar Recreation Trail (S.T.A.R.T.), community and children’s gardens and sports fields. Safe routes for kids to access this location was a priority for the community.

Neighborhood stormwater is a serious concern in St. Ansgar. Though not a specific project addressed in visioning, stormwater management is a topic that was heavily discussed by committee and community members; educational information discussing a variety of possible strategies to improve stormwater management is included. A comprehensive stormwater engineering study would need to be completed to navigate the complexity of the stormwater issues.

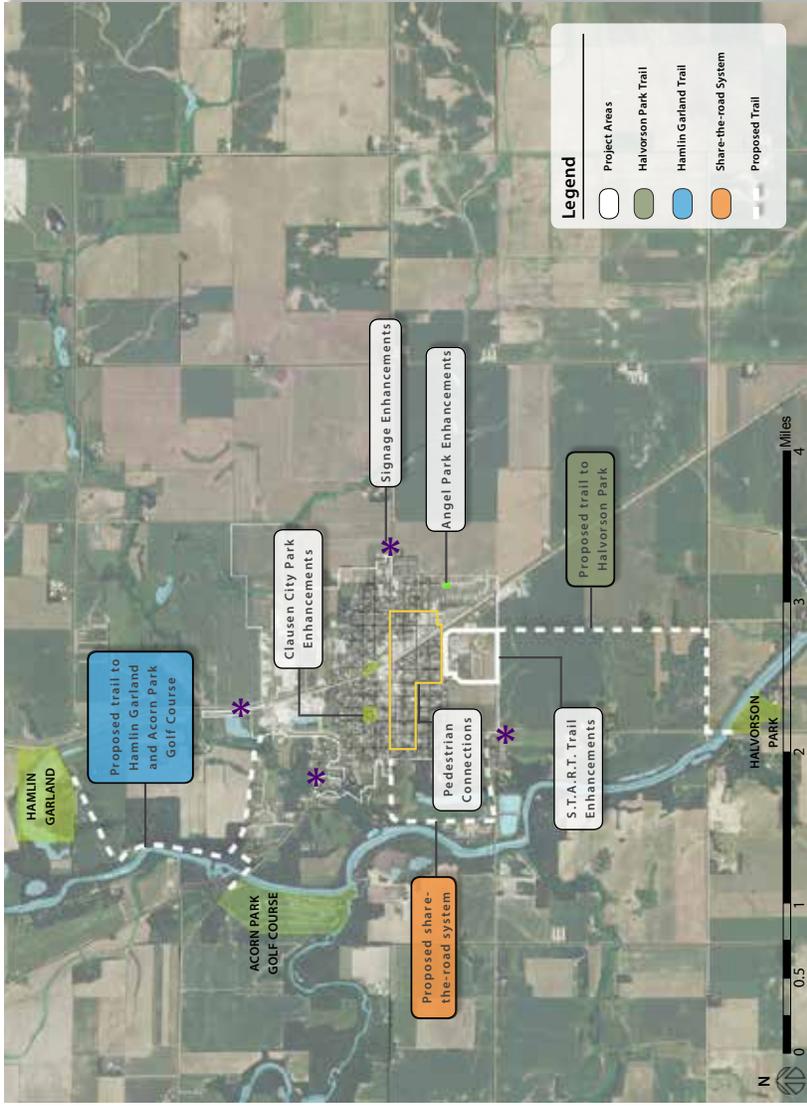
Cost Opinion

Recreational Trails	QTY	Unit	Unit Cost	Subtotal
Hamlin Garland Trail* (1.68 Miles Mowed Trail)				
Signage	2	EA	\$1,500.00	\$3,000.00
Halvorson Park Trail* (1.74 Miles Mowed Trail)				
Signage	2	EA	\$1,500.00	\$3,000.00
Old Mill Road (Share-the-Road)				
Signage	2	EA	\$1,500.00	\$3,000.00
SUBTOTAL				\$9,000.00
			Contingency (10%)	\$900.00
			Mobilization (10%)	\$900.00
			Engineering (15%)	\$1,350.00
TOTAL				\$12,150.00

*Land aquisition costs not included

Design Expertise Recommended

Projects may require help beyond the capability of the visioning committee or available city staff. For the improvement project, the committee should expect to involve the following design professionals: Signage Company and County Engineer.



Proposed trail routes to local destinations

Map Source: Iowa Department of Natural Resources, "Natural Resources Geographical Information Systems Library," <http://www.ispb-iowa.edu/englib/bc/>.

Concept Overview

St. Ansgar, population 1,146, is located in Mitchell County on Iowa Highway 105, U.S. Highway 218, and County Roads T38 and A25 near the Cedar River. The town's charming character comes from the restored architecture of many historic homes and downtown buildings. The community is proud of their welcome signs and have one at each of the four entrances into town. Though the plywood signs are beginning to decay, the existing stone columns are still in good condition and could be reused.

Clausen City Park and Angel Park are two important green spaces in the community, and a number of possible ideas for enhancements were brought out in the visioning process. Committee and community members identified that improving the mulch play surface and providing better accessibility within Clausen City Park would make this historically significant gem in the community even better. Angel Park is a relatively new park that needs signage, additional play equipment, additional shade trees, and improved accessibility.

The community longs for trails connecting popular destinations near St. Ansgar. The desired trails would go through private property, so cooperation from private land owners would need to be made before these trail connections could be implemented.

St. Ansgar boasts a newly updated school campus that includes pre-K through 12th grade students, an aquatic center, St. Ansgar Recreation Trail (S.T.A.R.T.), community and children's gardens and sports fields. Safe routes for kids to access this location was a priority for the community.

Neighborhood stormwater is a serious concern in St. Ansgar. Though not a specific project addressed in visioning, stormwater management is a topic that was heavily discussed by committee and community members; educational information discussing a variety of possible strategies to improve stormwater management is included. A comprehensive stormwater engineering study would need to be completed to navigate the complexity of the stormwater issues.



Pedestrian Connections



S.T.A.R.T. Trail Enhancements



Clausen City Park Enhancements



Angel Park Enhancements



Signage Enhancements

St. Ansgar

Concept Overview

Landscape Architects and Intern: Craig Ritland, PLA, FASLA, Samantha Price, PLA, RITLAND+KUPPER Landscape Architects and Jake Spitz, Iowa State University

Iowa's Living Landscapes

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Signage Enhancements

Renovating the existing welcome signage was the most popular need expressed by the steering committee. They are constructed of two limestone columns supporting a painted plywood sign between. The plywood sign boards show signs of age and decay. The committee would like to keep the limestone columns and use an engraved local limestone face that would be placed between the existing columns.

The use of consistent wayfinding signage throughout the community would direct residents and visitors to the town's amenities using a combination of free-standing and pole-mounted directional signage. The design team used the community's school colors and existing logo to create a signage cap theme that could be used in all future signage. The final concept should follow the Manual of Uniform Traffic Control Devices guidelines and have 3M reflective finishes for visibility at night.

Cost Opinion

Signage Enhancements	QTY	Unit	Unit Cost	Subtotal
Welcome Signs (4)				
Local Limestone Sign with Engraving	4	EA	\$17,500.00	\$70,000.00
Evergreen Trees	12	EA	\$275.00	\$3,300.00
Evergreen Shrubs	60	EA	\$45.00	\$2,700.00
Signage				
Pole-Mounted Directional Signage	6	EA	\$305.00	\$1,830.00
City Amenity Sign	3	EA	\$1,550.00	\$4,650.00
Wayfinding Signage	4	EA	\$2,000.00	\$8,000.00
Pedestrian Sign (School Route Signage)	12	EA	\$287.88	\$3,454.56
			SUBTOTAL	\$93,934.56
			Contingency (10%)	\$9,393.46
			Design (15%)	\$14,090.18
			TOTAL	\$117,418.20

Design Expertise Recommended

Projects may require help beyond the capability of the visioning committee or available city staff. For the improvement project, the committee should expect to involve the following design professionals: Landscape Architect, Signage Company and Graphic Designers.



Existing south entrance sign



Existing north entrance sign



Existing way-finding signage

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Signage cap concept using existing city logo



Wayfinding Signage



City Amenity Sign



Pedestrian Sign



Pole-Mounted Sign

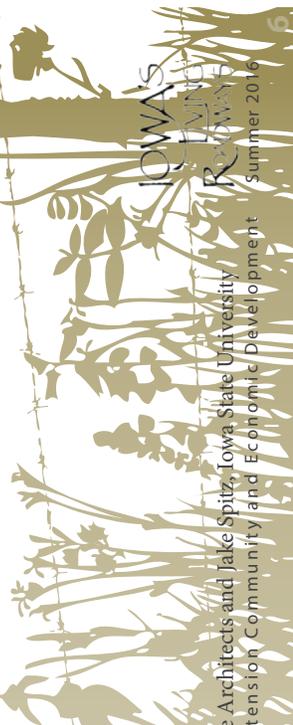


Proposed sign concept using the existing stone columns

St. Ansgar

Signage Enhancements

Landscape Architects and Intern: Craig Ritland, PLA, FASLA, Samantha Price, PLA, RITLAND+KUIPER Landscape Architects and Jake Spitz, Iowa State University
 Iowa Department of Transportation | Trees Forever | ISU Landscape Architecture Extension | ISU Extension Community and Economic Development | Summer 2016



S.T.A.R.T. Trail Conceptual Master Plan

The S.T.A.R.T. (St. Ansgar Recreation Trail) trail is the only designated trail within St. Ansgar and is a popular destination for all ages within the community. The trail has many amenities on and around it including a children’s garden, community garden, and memorial tree plantings and is within close proximity to the St. Ansgar Aquatic Center and St. Ansgar Community Schools. The committee wanted to see additional areas for shade tree plantings along the trail and additional lighting.

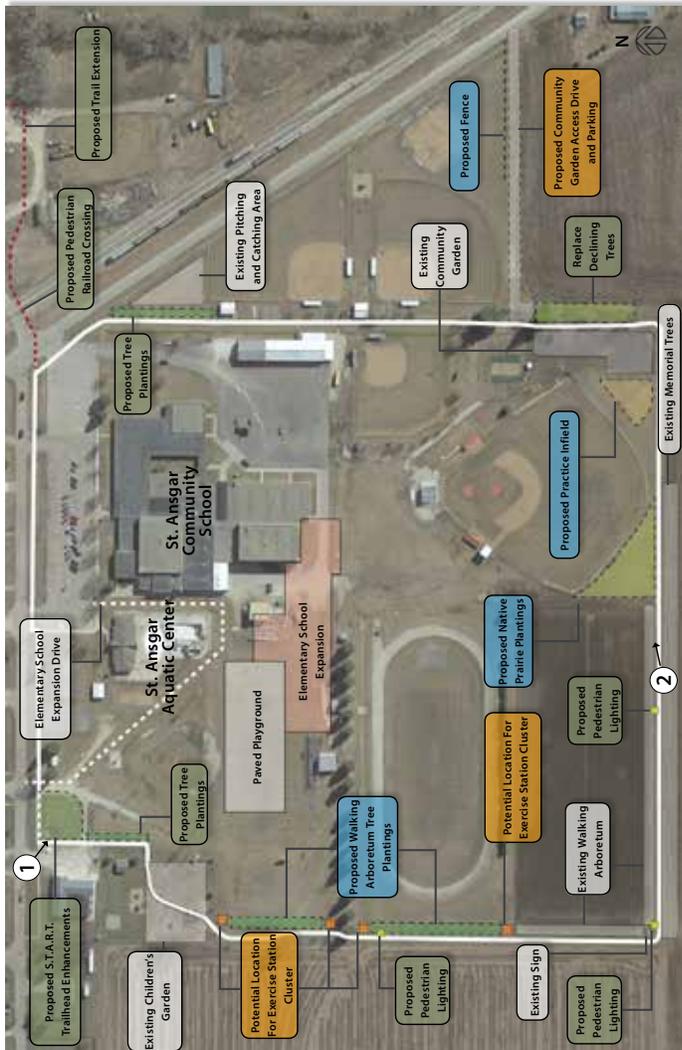
During the workshop, it was brought to our attention that two organizations within the community are proposing additional amenities and changes along the trail. Those include the addition of ten exercise stations clustered around two locations, native prairie plantings, QR-Code signage for the walking arboretum, and a new practice infield. The grass adjacent to the trail used by the cross country team will also influence where additional trees could be planted. Due to all the moving parts of this particular trail, the committee, along with the S.T.A.R.T. trail group, wanted a conceptual master plan that would illustrate all proposed changes to the trail.

Cost Opinion

S.T.A.R.T. Trail Conceptual Master Plan	QTY	Unit	Unit Cost	Subtotal
S.T.A.R.T. Trail Enhancements				
Solar Pedestrian Lighting	3	EA	\$2,500.00	\$7,500.00
Deciduous Shade Trees (2" Cal.)	20	EA	\$350.00	\$7,000.00
SUBTOTAL				\$14,500.00
Contingency (10%)				\$1,450.00
Design (10%)				\$1,450.00
TOTAL				\$17,400.00

Design Expertise Recommended

Projects may require help beyond the capability of the visioning committee or available city staff. For the improvement project, the committee should expect to involve the following design professionals: Landscape Architect.



Map Source: Google Earth

Legend

- Existing Features
- Organization Responsibility:
- Visioning Committee
- St. Ansgar School District
- S.T.A.R.T. Trail Committee

S.T.A.R.T. Trail Master Plan

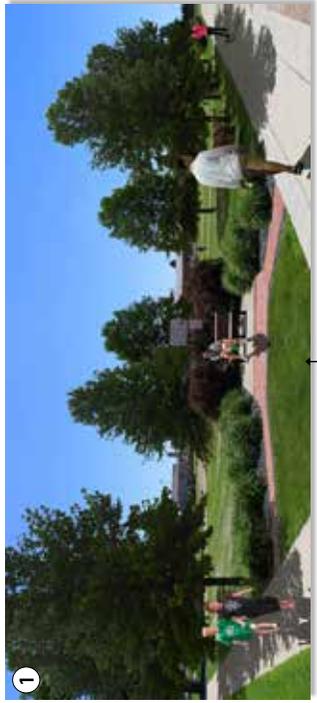
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St. Ansgar

S.T.A.R.T. Trail Conceptual Master Plan

Landscape Architects and Intern: Craig Ritland, PLA, FASLA, Samantha Price, PLA, RITLAND+KUIJPER Landscape Architects and Jake Spitz, Iowa State University
 Iowa Department of Transportation Trees Forever ISU Landscape Architecture Extension ISU Extension Community and Economic Development Summer 2016



Pedestrian Connections

St. Ansgar Community Schools are all conveniently consolidated on the same campus, which also includes the aquatic center, sports fields, community and children's garden, and the S.T.A.R.T Trail. The area is heavily used by the community year-round but does not always have safe and accessible ways for pedestrians and bicyclists to reach this destination. Adjacent to the campus is a multi-track railroad with a deteriorated vehicle crossing, no pedestrian crossing and no warning lights. Many community members labeled areas surrounding the campus as unsafe and not pedestrian friendly.

Utilizing existing sidewalks paired with the preferred routes of the community, the design team created a designated school route loop using the following streets; 4th Street, Pleasant Street, 8th Street, Franklin Street, School Street, 6th Street and Jefferson Street. The designated route would include sidewalk upgrades where needed, crosswalk implementation, and signage. Several adjacent streets have existing sidewalks and are included in the designated school route system.

The design team proposes a designated path to walk or bike a safe distance away from the busy grain elevators on Church Street and continuing on to Pleasant and 7th Streets . This would also benefit the residents of The Seasons subdivision by providing a safe route to school as an alternative to walking and biking on the streets.

Other communities have applied pavement markings designating a "safe route to school" using footprints, school logos, and other graphics painted on the sidewalk. Other whimsical ideas that have been used include graphics depicting different methods of movement such as dancing, running, and skipping to encourage physical activities as children walk to and from school. This concept is something St. Ansgar could adopt to let kids and parents alike know this route is specifically designated as a school route and will have signage, crosswalks and other necessary precautions for pedestrians.



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The City of Des Moines has brightly colored painted footprints on the routes they want kids walking to school. The designated safe routes can be easily monitored and every practice can be utilized, such as crosswalks and signage.



Proposed crosswalk and pedestrian signage across 4th Street



Proposed designated school route enhancements



The safety of pedestrians and bicyclists crossing the railroad tracks can be improved by adding signage, barriers and level pavement transitions. An example of this from Waterloo, Iowa is also shown.



Proposed pedestrian safe railroad crossing and trail extension

St. Ansgar Pedestrian Connections

Landscape Architects and Intern: Craig Ritland, PLA, FASLA, Samantha Price, PLA, RITLAND+KUIPER Landscape Architects and Jake Spitz, Iowa State University
 Iowa Department of Transportation Trees Forever ISU Landscape Architecture Extension ISU Extension Community and Economic Development Summer 2016

Plan Enlargement: Proposed Trail Extension



Enhancements Along the Designated Walk & Bike Route



Cost Opinion

Pedestrian Enhancements	QTY	Unit	Unit Cost	Subtotal
Removal & Demolition				
Removal of Concrete	8,868	SF	\$1.50	\$13,302.00
Sidewalks				
PCC, 4" Sidewalk w/ 6" Gravel Subbase (4')	16,472	SF	\$5.00	\$82,360.00
PCC, 4" Sidewalk w/ 6" Gravel Subbase (8')	7,752	SF	\$5.00	\$38,760.00
Crosswalks (Highly Visible)	3	EA	\$500.00	\$1,500.00
Crosswalks (Double Stripe)	19	EA	\$250.00	\$4,750.00
Signage				
Highly Visible Painted Foot Prints	1	LS	\$3,500.00	\$3,500.00
School Route Signage	12	EA	\$287.88	\$3,454.56
SUBTOTAL				\$144,172.00
			Contingency (10%)	\$14,417.20
			Mobilization (10%)	\$14,417.20
			Engineering (15%)	\$21,625.80
TOTAL				\$194,632.20

Design Expertise Recommended

Projects may require help beyond the capability of the visioning committee or available city staff. For the improvement project, the committee should expect to involve the following design professionals: Civil Engineer, Signage Company and Landscape Architect.

Clausen City Park Enhancements

Clausen City Park is set amongst majestic spruce trees that were planted when the park was founded. Many residents commented on the trees at the assessment meetings stating they were a godsend to the community. The park's name is in honor of Claus Laurits Clausen, a Lutheran pastor who founded St. Ansgar in 1853. The park is a special place for many residents and one community member even said she usually visits it multiple times a day with her kids during the summer.

The committee was eager to discuss what they love about Clausen City Park and what improvements are needed to make this park even more enjoyable. The park lacks accessible sidewalks to its various features that include a shelter, gazebo, restrooms, and play equipment. The wood chip mulch under the play equipment washes away during rain events. The design team is proposing using local limestone ledgestone to replace the earth berm along with a 12" pea gravel safety surface. The stone retaining wall and pea gravel system would allow the play surface to drain and eliminate the mulch problem. The limestone blocks would also create seating and natural play opportunities.

Cost Opinion

Clausen City Park Enhancements	QTY	Unit	Unit Cost	Subtotal
PCC, 4" Sidewalk w/ 6" Gravel Subbase	8,944	SF	\$5.00	\$44,720.00
Grading	1	LS	\$5,000.00	\$5,000.00
Limestone Ledgestone Retaining Walls	657	SF	\$35.00	\$22,995.00
Playground Equipment	1	LS	\$75,000.00	\$75,000.00
Pea Gravel Safety Surface (12")	3,638	SF	\$4.00	\$14,552.00
Play Sand	8	CY	\$14.00	\$112.00
SUBTOTAL				\$162,267.00
Contingency (10%)				\$16,226.70
Mobilization (10%)				\$16,226.70
Design (15%)				\$24,340.05
TOTAL				\$219,060.45

*Does not include subsurface drainage which may be necessary upon study in final design

Design Expertise Recommended

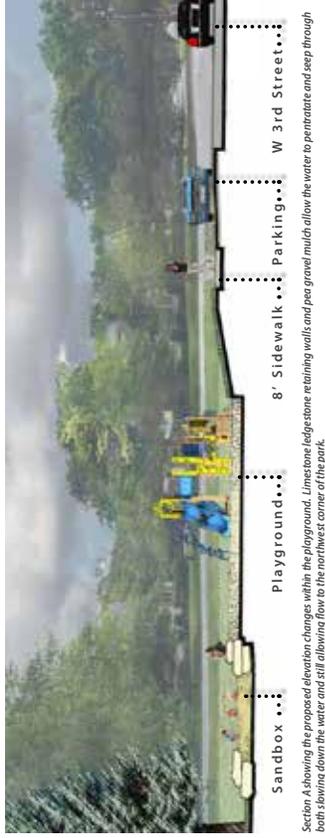
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Section A showing the proposed elevation changes within the playground. Limestone ledge stone retaining walls and pea gravel mulch allow the water to penetrate and seep through both slowing down the water and still allowing flow to the northwest corner of the park.



Proposed limestone ledge stone retaining walls and playground equipment in Clausen Park

St. Ansgar

Clausen City Park Enhancements

Landscaper Architects and Intern: Craig Ritland, PLA, FASLA, Samantha Price, PLA, RITLAND+KUIPER
 Iowa Department of Transportation Trees Forever ISU Landscape Architecture Extension

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Angel Park Enhancements

Angel Park is a small neighborhood park serving the new southeast residential addition. The committee would like to add improvements to increase its usage. The design team is suggesting a paved walking path around the park while connecting the amenities which include a portable toilet, park shelter, parking area, and playground equipment. This would allow the mobility-impaired users to enjoy the park as well. The design team also made suggestions for future park play equipment expansion areas that would include a location for the recently purchased swing set. Street tree plantings have been suggested along Winter Street and should be planted along the back of the ditch so as not to interrupt the flow of stormwater. A park sign matching the proposed community signage palette would identify it as a public park and proposed wayfinding signage would help direct visitors to it.

As a partial stormwater feature and field litter barrier, a 10' prairie buffer strip is being planted along the back lot lines of this new neighborhood in proximity to the park. The committee expressed a desire for interpretive signage for this buffer. The design team is suggesting placing this exhibit in Angel Park. The buffer signage would explain the benefit of native prairie species in stormwater management, including reducing runoff, being less costly to maintain, locally adapted, good pollinators, and beneficial to wildlife.

Cost Opinion

Angel Park Enhancements	QTY	Unit	Unit Cost	Subtotal
PCC, 4" Sidewalk w/ 6" Gravel Subbase	3,112	SF	\$5.00	\$15,560.00
Prairie Interpretive Signage	1	EA	\$3,000.00	\$3,000.00
City Amenity Signage	1	EA	\$1,550.00	\$1,550.00
Deciduous Street Tree Plantings (2" Cal.)	4	EA	\$350.00	\$1,400.00
Stormwater Management				
*Bio-filtration Trench	NA	NA	NA	NA
Bio-filtration Trench Interpretive Signage	1	EA	\$3,000.00	\$3,000.00
Future Playground Expansion				
Playground Equipment	1	EA	\$20,000.00	\$20,000.00
Mulch Safety Surface (9" depth)	40	CY	\$65.00	\$2,600.00
SUBTOTAL				\$47,110.00
Contingency (10%)				\$4,711.00
Mobilization (10%)				\$4,711.00
Engineering (15%)				\$7,066.50
TOTAL				\$63,598.50

*Costs and scope of stormwater bio-filtration trench to be determined in final design

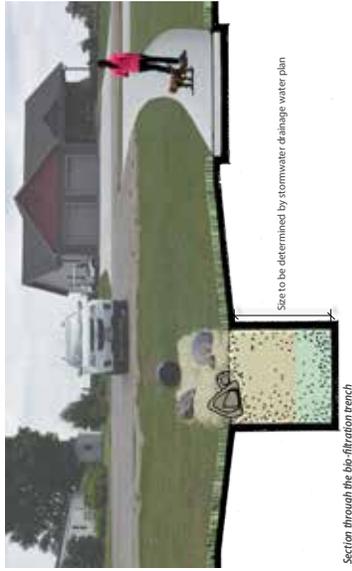
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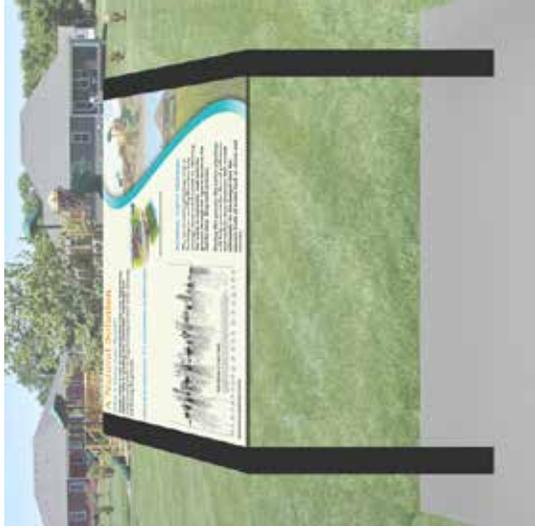
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Section through the bio-filtration trench



Proposed interpretive signage



Concept plan showing enhancements to Angel Park



Proposed stormwater interpretive signage information

St. Ansgar

Angel Park Enhancements

Landscaping Architects and Intern: Craig Ritland, PLA, FASLA, Samantha Price, PLA, RITLAND+KUIPER Landscape Architects and Jake Spitz, Iowa State University
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Stormwater Management

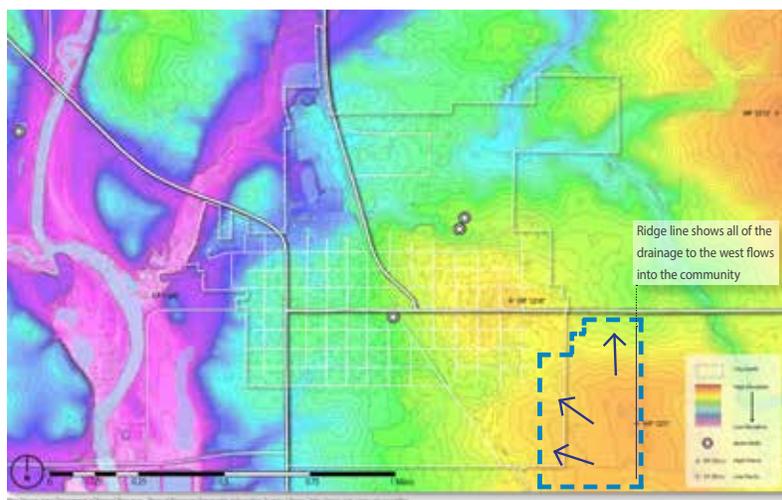
Due to topography as illustrated on the elevation map, a high volume of surface runoff comes through town from outside the community before entering the Cedar River. As weather patterns change, rainfall events become more intense, with increased development and changes in land use, the City's stormwater management system has struggled to handle the runoff. The system consists of mostly open ditches and culverts that become inundated during major rain events. The heavy rains of 2008 and 2013 caused severe flooding, especially in newer residential developments and down Seventh Street.

Addressing this complex issue is challenging, to say the least, and must include multiple strategies. Key to the success will be good public-private partnerships that are able to address stormwater both within and outside of city limits. One landowner has volunteered to lease a 10-foot wide strip of land along the back of The Seasons housing development. The intent is to plant it in native prairie to slow runoff and filter field litter. This will likely be effective for smaller rain events.

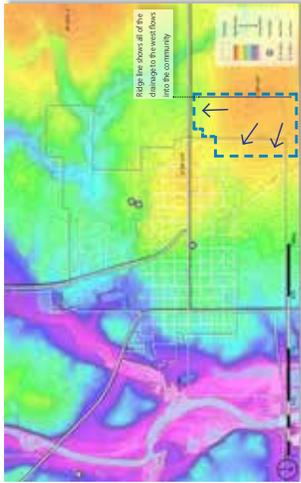
Converting crop land in the watershed to perennial vegetation such as native prairie flowers and grasses is a very effective way to limit the amount of surface runoff. The Conservation Reserve Program (CRP) is a federal U.S.D.A. program that provides financial incentives to landowners to make this change. Deep-rooted native prairie plants build up the soil's structure, create more pore space, and add organic matter to the soil. During a rainfall event, all of these things help more water soak into the ground. Put another way, once established, these plantings transform the land into a large sponge that keeps rain on-site and decreases runoff.

Detention ponds designed to capture this runoff and release it slowly might be another solution but would require a land purchase by the city and costly construction. Retrofitting an adequate stormwater system into existing community infrastructure could be possible but very costly.

Meanwhile, there are opportunities to handle the much more frequent smaller rain events and local runoff. The community and individuals could install stormwater control measures such as rain gardens or buffer strips to treat or infiltrate and rain barrels to capture this runoff. More information about what individual property owners could do can be found at www.rainscapingiowa.org.



Map showing the elevation in and around St. Ansgar



The above map shows the high and low points; topography and high (red) to low (light purple) elevations around St. Ansgar. The blue arrows indicate the direction of the watershed within the outlined area.



The above photo shows what the area could look like if it was part of the CFP program, which adds habitat to cropland, while protecting soil and water quality



The above photo shows what the area could look like if it was part of the CFP program, which adds habitat to cropland, while protecting soil and water quality



Map shows the outlined area with a detention pond



Map shows the outlined area with a detention pond



Creating a detention pond would allow for the run off to be stored on-site and discourage excess water from flowing into the community

Stormwater Management

Due to topography as illustrated on the elevation map on the far left, a high volume of surface runoff comes through town from outside the community before entering the Cedar River. As weather patterns change, rainfall events become more intense, with increased development and changes in land use, the City's stormwater management system has struggled to handle the runoff. The system consists of mostly open ditches and culverts that become inundated during major rain events. The heavy rains of 2008 and 2013 caused severe flooding, especially in newer residential developments and down Seventh Street.

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During a rain event in 2013, corn stalks and crop debris littered the community. Photo Credit: Myrna Jorgensen

St. Ansgar

Stormwater Management

Landscape Architects and Intern: Craig Ritland, PLA, FASLA, Samantha Price, PLA, RITLAND+KUIPER Landscape Architects and Jake Spitz, Iowa State University

Iowa Department of Transportation Trees Forever ISU Landscape Architecture Extension ISU Extension Community and Economic Development Summer 2016

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Implementation Strategies

The Visioning Program is just the beginning of the planning process for implementation of projects that will contribute to an enhanced quality of life in St. Ansgar. Although there is much value in data gathering, analysis, conclusions, and recommendations, the greatest value is providing residents of St. Ansgar with the opportunity to look at their community from different perspectives and to motivate future positive change. It is the design team's intent to provide the community with a framework for significant future development and enhancement of community resources.

Recommendations

It is recommended that projects be approached individually, keeping in mind some may occur at the same time or may require phasing to be completed. Short term projects will be those that are more easily accomplished or address safety issues. Long range projects will need to be implemented based on available funds and in some cases agreements with private land owners.

S.T.A.R.T. Trail Enhancements

Based on the strategy that early success builds momentum, we recommend the first project be one that can be more easily financed and be highly visible. The design team is recommending the planting enhancements to the S.T.A.R.T. Trailhead and trail be that project. Funding sources for projects and an updated funding guide will be made available from your Trees Forever facilitator.

Pedestrian Connections

The second priority for the visioning committee should be one that addresses safety issues identified by the community focus groups and the local transportation officials. This project would address concerns for pedestrians crossing Highway 105, West 4th Street and South Church Street railroad crossing. The design team is recommending highly visible crosswalks be implemented in these locations.

The school campus and its surrounding area are utilized all year and house community amenities such as the aquatic center, S.T.A.R.T. Trail and the community garden. By establishing a designated route with signage, crosswalks, and the painted logo, motorists will be more aware of the route, aiding in the safety of pedestrians and bicyclist. Funding for some of this project would be available through the Safe Routes to School program, now part of the Federal Transportation Alternatives Program. The next priority would be additional and improved sidewalks along the designated school route. According to the committee lack of sidewalks greatly affect persons with limited mobility and children who walk to the school campus. Funding sources for projects and an updated funding guide will be made available from your Trees Forever facilitator.

Wayfinding Signage

Signage is vital for a community trying to capitalize on tourism and showcasing its assets to visitors. The Iowa Department of Transportation will typically provide destination signing associated with the Community Wayfinding Sign Program. The Iowa DOT would need to approve the design for the wayfinding enhancement marker signs and the city would be responsible for purchasing those signs. Funding sources for projects and an updated funding guide will be made available from your Trees Forever facilitator.

Clausen City Park Enhancements

The improvements to Clausen City Park would greatly improve the experience at the park for users of all mobility. Expanding the perimeter sidewalk to connect various park facilities should be the first project. The regrading of the playground area and the installation of the limestone ledgestone walls could be the next project and would alleviate the annoyance of having to constantly replace the mulch safety surface and deal with pooled water after heavy rain. The addition of new playground equipment could be implemented as funding is secured. Funding for this project would be available through a REAP grant. St. Ansgar would qualify for applying for \$75,000 per year through REAP. There is no city match with a successful REAP grant. Additional funding sources and an updated funding guide will be made available from your Trees Forever facilitator.

Angel Park Enhancements

The first step would be to establish wayfinding signage for Angel Park. The committee would like additional signage to improve park attendance. Adding a trail around the park connecting amenities will make it useable for those with limited mobility and an enjoyable stroll in a neighborhood lacking sidewalks. The committee expressed a desire for signage for their newly implemented prairie buffer strip across the street from the park. Stormwater management is a serious concern in St. Ansgar and the addition of the bio-filtration trench in Angel Park would be a learning tool for the community and reduce some of the run-off downstream. This project should be implemented as funding becomes available. Future playground expansion can be implemented as funding becomes available. Funding for some of these projects would be available through a REAP grant. St. Ansgar would qualify for applying for \$75,000 per year through REAP. There is no city match with a successful REAP grant. Additional funding sources and an updated funding guide will be made available from your Trees Forever facilitator.

Recreational Trails

Just outside of the city limits are Hamlin Garland Wildlife Area and Halvorson Park. The community has long desired trails connecting St. Ansgar to these destinations. The visioning committee has suggested two potential routes, both passing through private property as an off-road scenic trail. Both options would need to be evaluated further but would create a link between these important destinations and the community. Both trails would need permission from private property land owners before any further discussion could occur. If permission could be granted, the trails would qualify as projects that could be funded through a REAP grant. Additional funding sources and an updated funding guide will be made available from your Trees Forever facilitator.

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

Funding Source Contact Information

To help implement projects, a list of contacts has been provided below. You can also access the Community Project Funding Guide provided by Trees Forever at http://www.treesforever.org/community_project_funding_guide

General Questions:

North Iowa Area Council of Governments - Chris Diggins, Local Assistance Director

Phone: 641-423-0491

Email: niacog@niacog.org

Statewide Transportation Alternatives Program:

http://www.iowadot.gov/systems_planning/fedstate_rectrails.htm

Office of Systems Planning - Pam Lee

Phone: 515-239-1810 Email: pamella.lee@dot.iowa.gov

Safe Routes to Schools:

<http://www.iowadot.gov/saferoutes>

Office of Systems Planning - Deb Arp

Phone: 515-239-1681 Email: debra.arp@iowa.gov

Appendix A

