Final Report and Feasibility Study

Morning Sun, Iowa

Summer 2017

Prepared By:

Flenker Land Architecture Consultants

Long Grove, Iowa PH: 563.225.2255

Program Partners:

- Iowa Department of Transportation
- Trees Forever
- Iowa State University

Iowa's Living Roadways community visioning

Participants

Town Steering Committee

Devon Bell	Paula Buckman	Joan Delzell-Bausch
Doug Elam	Alan Giese	Kyle Giese
Rob Hobbs	Kim Robb	Kelse Truitt
Dallas Tuttle	Kathy Vance	Terry Wallace

Other Participants

Larry Roehl, Lousia County Engineer
Jarred Lassiter, Southeast Iowa Regional Planning Commission
Aaron Giese, Morning Sun Public Works
Rich Cooley, Morning Sun Public Works

Trees Forever

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Sandra Oberbroeckling, Project Manager and Extension Program Specialist

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Richard Garcia, Landscape Architect Intern
Iowa State University

Table of Contents

About Flenker Land Architect Consultants,

Founded in 1997 by Meg Flenker, Flenker Land Architecture Consultants, LLC (FLAC) is a full service professional planning and design firm that is located just 20 minutes north of Davenport, Iowa. FLAC works with both public and private sector clients throughout all phases of their projects - from the initial conceptual stages of selecting a site, assessing project feasibility and evaluating alternatives, to the preparation of design and construction documents for the final project including the providing of construction observation and project administration services.

FLAC is pre-qualified with the Iowa Department of Transportation in various categories including Landscape Architecture, Recreational Trails, and Wetlands. FLAC is also certified with the Iowa DOT as a Disadvantaged Business Enterprises (DBE), and with the state of Iowa as a Targeted Small Business (TSB).

FLAC's professionals and associates are registered in their respective professions as well as bring expertise through additional specific technical certification in environmental and sustainable practices such as: LEED (Leadership in Energy and Environmental Design), CPESC (Certified Professional in Erosion & Sediment Control), Wetland Delineation (US Army Corps of Engineers Certification Training), and the only Certified Professional in Storm Water Quality (CPSWQ) located in Iowa.

FLAC's landscape architects are professionally trained to consider aesthetics, detail, scale, pedestrian and vehicular circulation and interaction, project context, environmental impact, user safety, functionality, and how humans interact with their surroundings - all things that FLAC considers inherent to the success and value of each project.

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

North Scott Community School District's Soccer & Tennis Court Complex - winner of both state and national awards. FLAC was the design consultant for this project, providing the planning, design, and project administration services.

Services offered by FLAC include:

Urban Planning & Design

- Streetscapes
- Plazas
- View Corridor Preservation
- Design Guidelines

Site Planning & Design

- Site Selection & Analysis
- Concept Development
- Final Design
- Preparation of Construction Documents

Community Planning & Design

- Recreational Trails
- Parks & Greenways
- Sports Fields and Athletic Complexes
- Community Visioning
- Corporate & Educational Campuses
- Riverfront Development & Redevelopment

Environmental Planning & Design

- Wetland Delineations
- Wetland & Stream Mitigation & Monitoring
- Native Landscape & Habitat
- Storm Water Management & SWPP's
- Corporate & Educational Campuses
- Riverfront Development &

SABULA
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Other Related Services

-Project Management & Administration
- Feasibility Studies
- Graphic Design
- Grant Writing
- G.I.S. Services
- Construction Cost Estimates

Program Overview

The City of Morning Sun is one of 10 communities selected to participate in the 2017 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 Morning Sun visioning committee identified a number of goals and priority areas during the visioning process, which are included below:

1) Improve pedestrian accessibility/connectivity throughout town.

There is a need for accessible and complete sidewalk segments throughout town, especially to the downtown district, Morning Sun School/Lion's Locust Grove Park, Hoover Nature Trail, the Morning Sun Care facility, and businesses along Highway 78

2) Enhance the downtown streetscape.

With few businesses left in the downtown area there is the need to improve its marketability and draw businesses and people back into the downtown area.

3) Integrate the Hoover Nature Trail into the community.

The Hoover Nature Trail is an asset to the community but is not highly visible to visitors and it should be better identified and integrated into the community

4) Create more play opportunities.

There needs to be more opportunities for play, especially for the pre-K aged children and the physically disabled. The parks need to be sustainable and provide shade and parking. There should also be an attraction for the community such as a splash pad.

Addressing the Goals

In developing concepts to address the goals and concerns identified by community members, the design team followed the "Complete Streets" model which balances convenience with safety for everyone using the road. By definition, "Complete Streets" is the planning and design approach that requires street corridors to be planned, designed, operated and maintained to enable safe, convenient and comfortable travel and access for users of all ages and abilities regardless of their mode of transportation, including bicyclists and pedestrians.

Other guiding principles for the development of the concepts, most of which fall under the "Complete Streets" model or are an indirect result of it, were the following:

1) Creating a sense of place;
2) Strengthening the main transportation corridors;
3) Improving accessibility and connectivity;
4) Incorporating sustainability;
5) Enhancing community and public spaces;
6) Creating inclusive outdoor recreation activities for all ages and abilities;
7) Identifying and highlighting opportunities within the com

Capturing the Morning Sun 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, is illustrated in the following set of presentation boards.

1. Program Overview
2. Bioregional Assessments
3. Transportation Assets and Barriers Assessment (TAB)
4. Transportation Inventory
5. Concept Plan Overview
6. Pedestrian Connectivity Overview
7. Pedestrian Connectivty
8. Proposed Geenspace: South Park
9. Proposed Greenspace: City Park
10. Proposed Greenspace: Hoover Park
11. Gateways & Way-finding
12. Primary Corridors & Stormwater Management
13. Downtown Enhancements 1
14. Downtown Enhancements 2

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Community members write down what enhancements they would like incorporated into the parks.

Community Goals

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Community members review the TAB boards at the design workshop.

Community members look over playground equipment books with one of the visioning committee members during the design workshop.

Community and committee members had the opportunity to work with the design team to develop concept plans that reflected their community needs and desires during the design workshop.

Morning Sun
Program Overview

Flenker Land Architecture Consultants, LLC
LA: Meg K. Flenker, PLA, CPESC, CPSWQ
Intern: Richard Garcia
Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

Bioregional Assessment

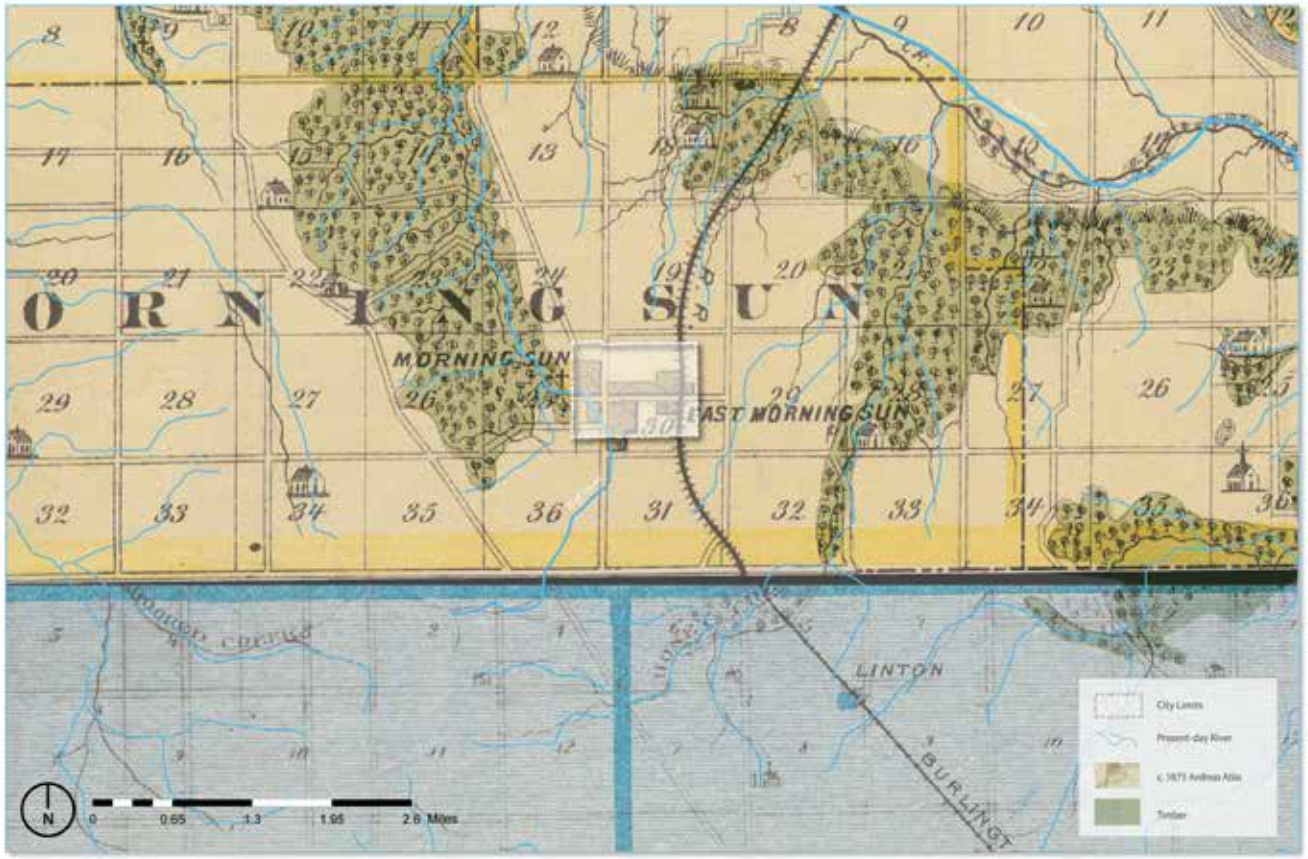
Settlement Patterns

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.

Morning Sun in Context

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

Compare the course of rivers in 1875 to their current course, are there major changes in alignment or location? Are 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/.

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Morning Sun
Settlement Patterns

Bioregional Context
Julia Badenhope, Matthew Gordy, Colby Fangman, Riley Dunn
Iowa State University | Trees Forever | Iowa Department of Transportation

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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

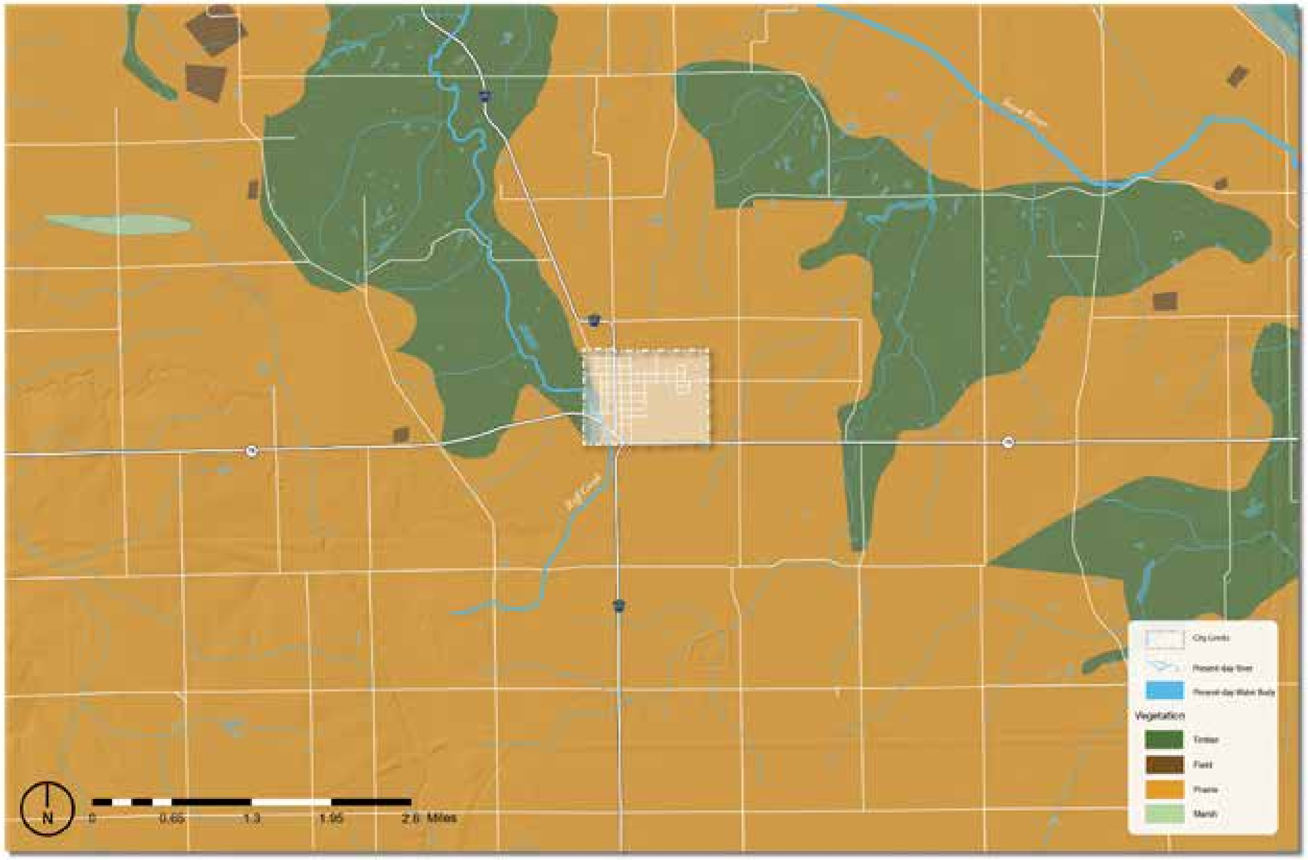
The plant communities mapped by the GLO surveyors varied in classification and the terminology from the original maps has been preserved.

The vegetation types are defined[2]:

1. Field: Cultivated lands of early pioneers.
2. Grove: Isolated dense young stand of trees.
3. Marsh: Perennial wetlands, basins of irregular shape.
4. Prairie: Dominated by prairie grasses with individual or few scattered trees.
5. Thicket: Impenetrable blocks of young trees, often thorny.
6. Timber: Contiguous blocks of trees extending to the horizon in at least one direction.
7. Slough: Like marsh but more linear in shape.

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.

2 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), 134-135.



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Historical Vegetation

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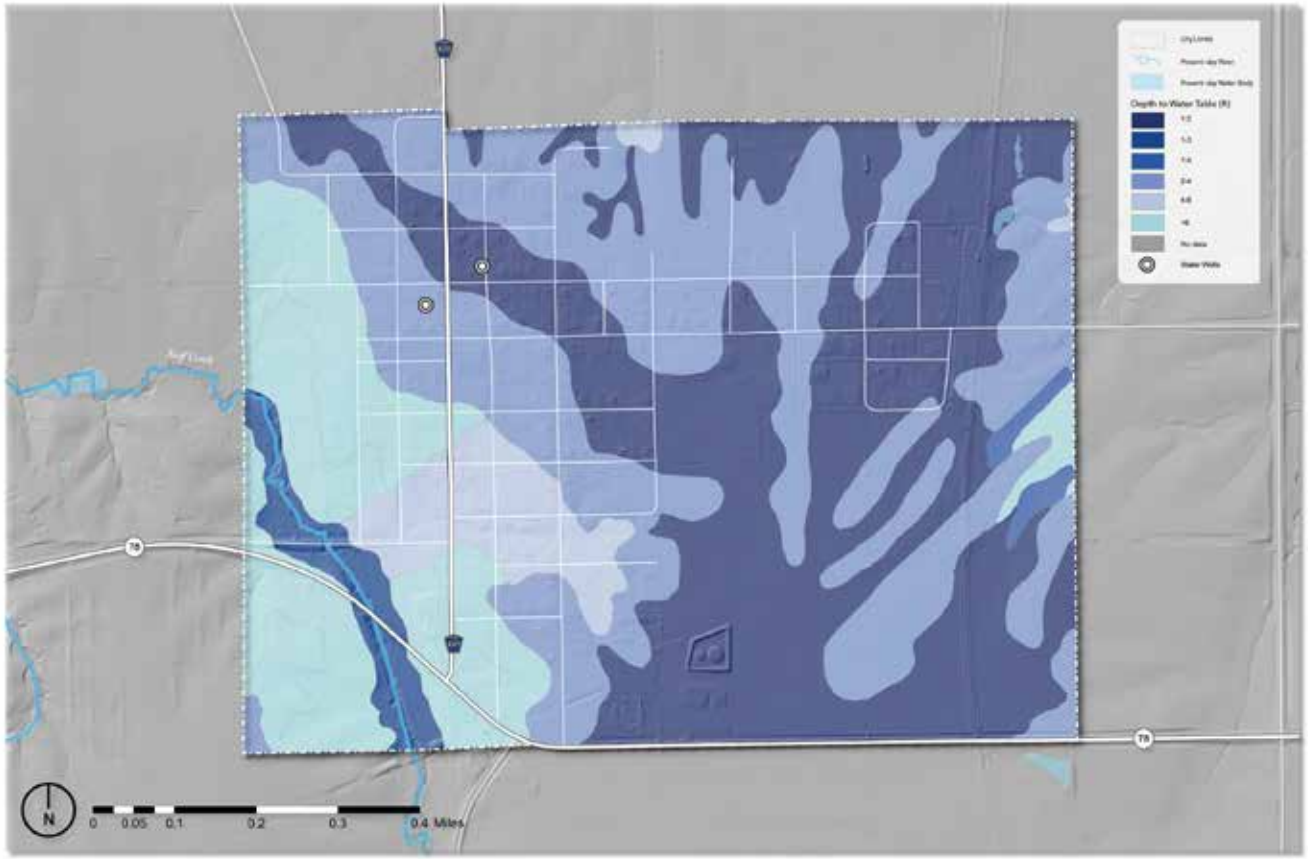
Depth to Water Table

The water table is defined as the level below which the ground is saturated with water. The water table generally mimics surface topography, but there are differences depending on localized conditions such as the permeability and porosity of soils and depth to bedrock. 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. Impermeable layers such as concrete also affect the depth to water table by preventing precipitation from infiltrating into the soil which could result in a lowered water table.



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Depth of Water Table

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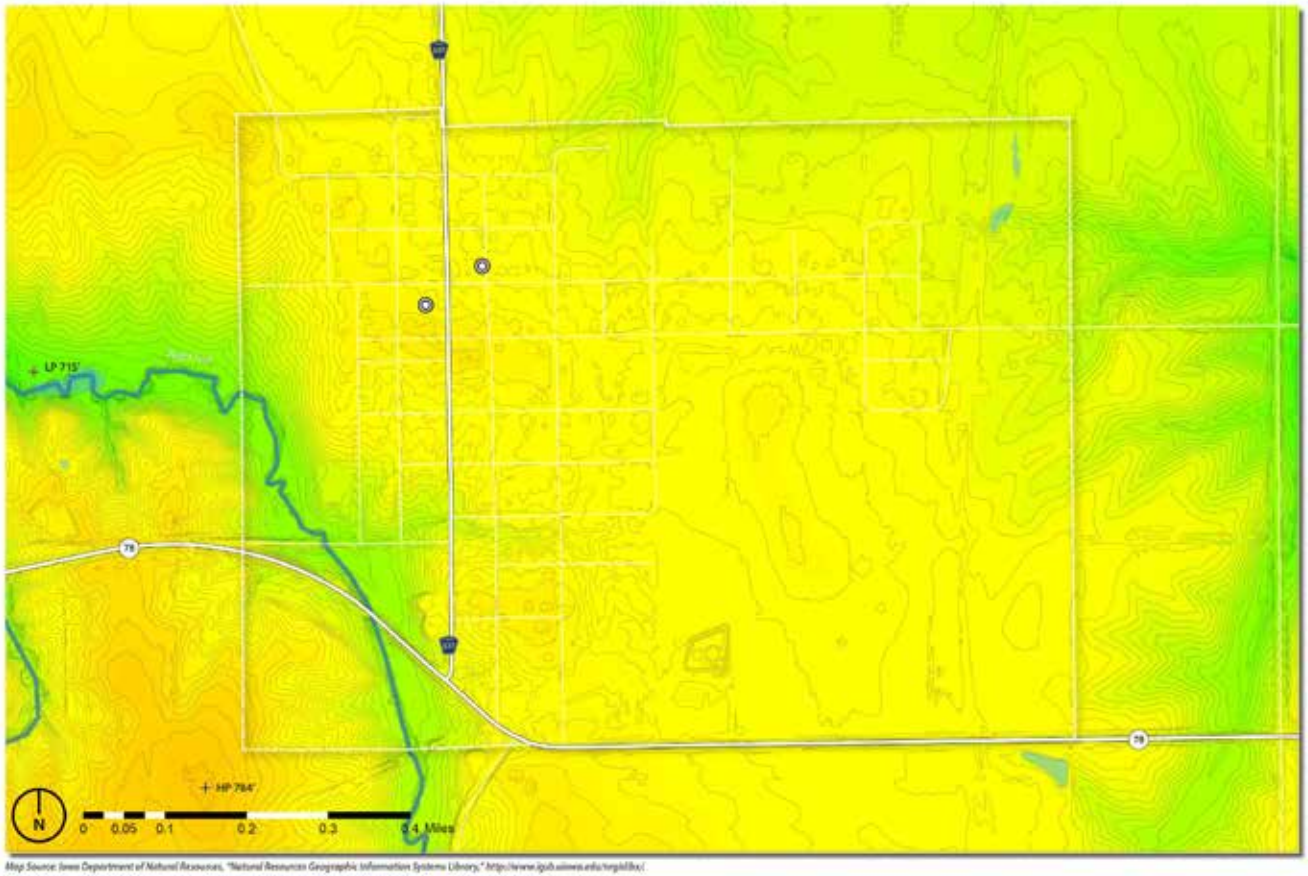
Elevation and Flood Risk

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? 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. This map shows 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.



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

Elevation and Topographic Features

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.

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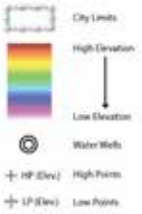

Morning Sun
Elevation

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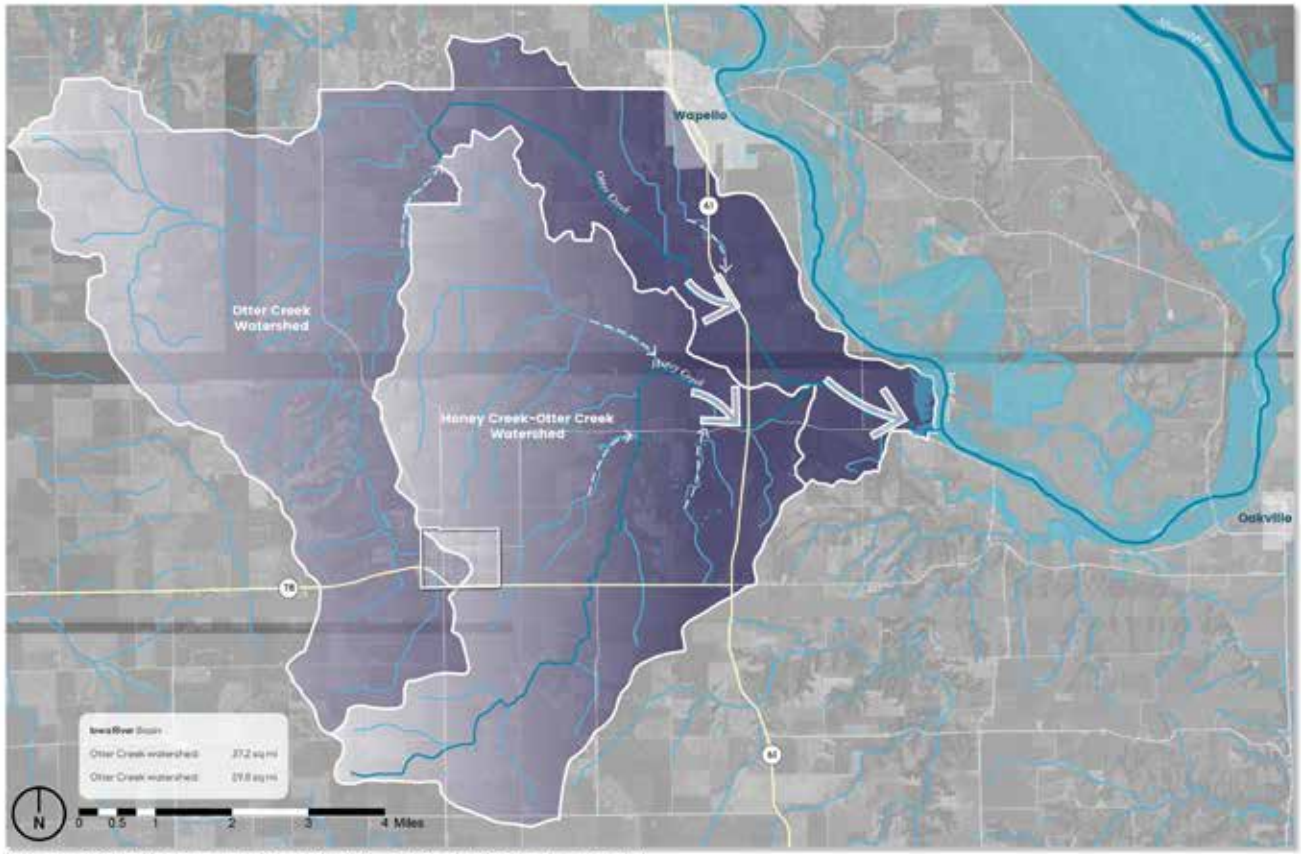
Regional Watershed

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 has 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.



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Regional Watershed

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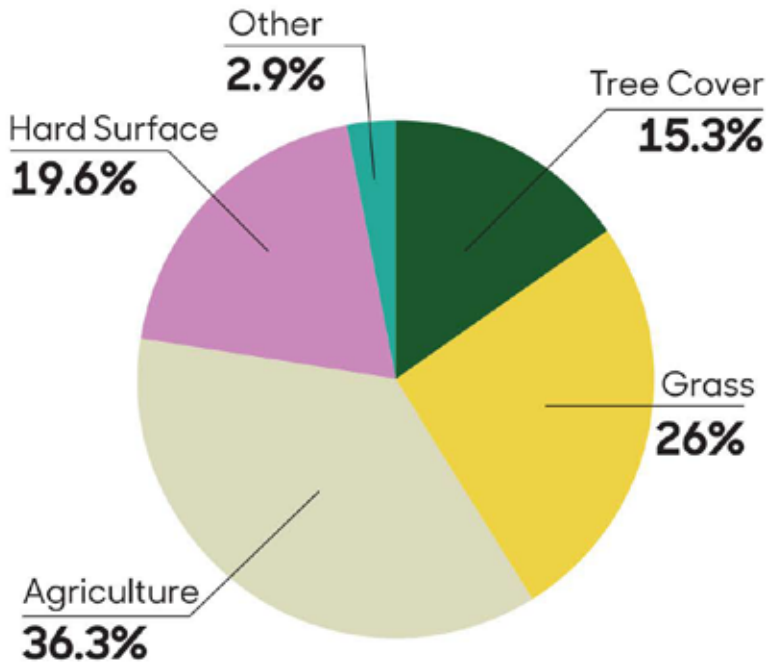
Iowa's Living Roadways community visioning

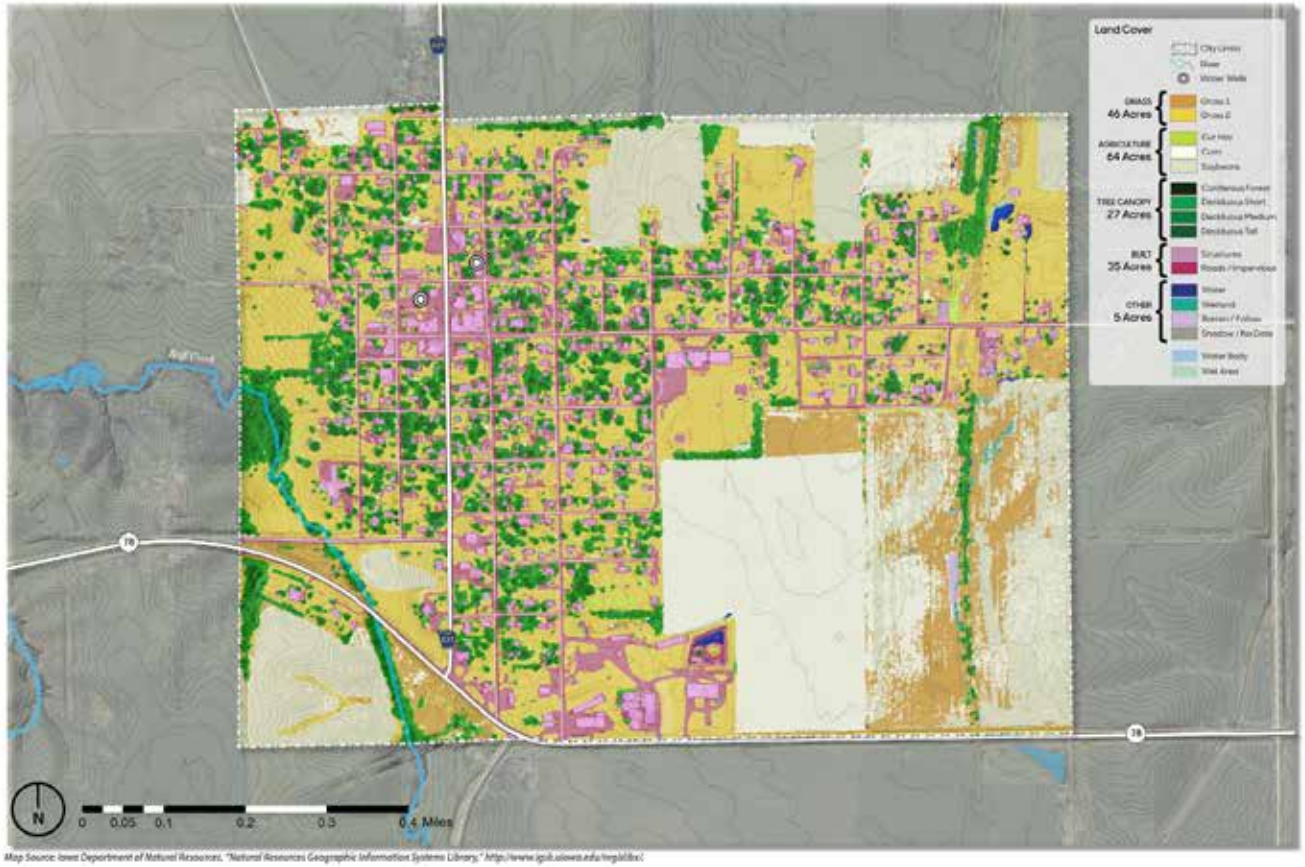
Present Day Land Cover

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.

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 parts of town are covered with the most impervious surfaces and what patterns do you observe about these locations?

Percent Land Cover Type





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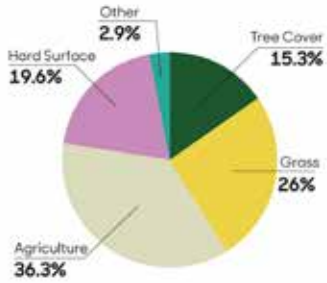

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Present Day Land Cover

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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. Notice how rivers have shifted or vegetation has been eliminated in certain areas.

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

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Present Day Vegetation

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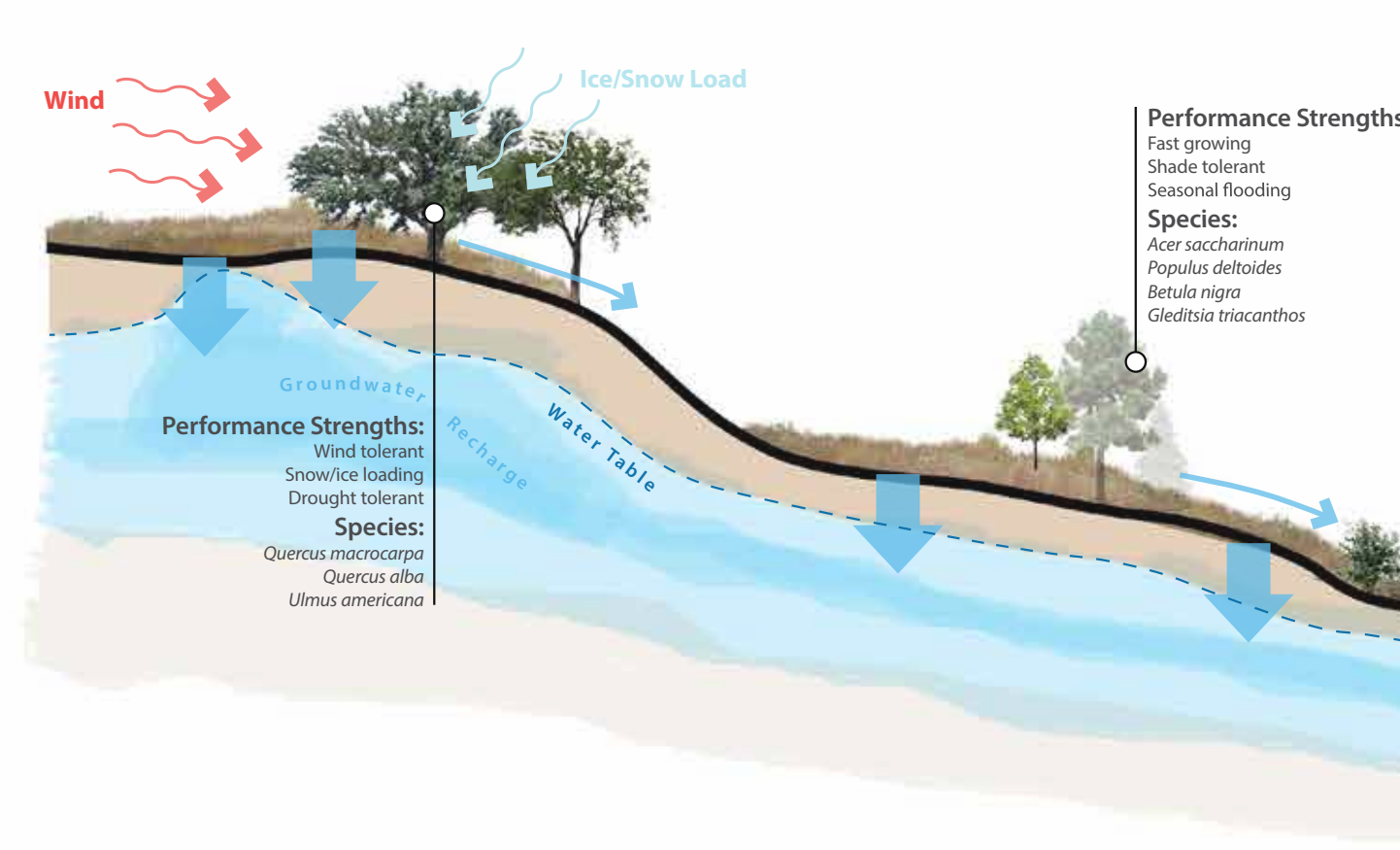
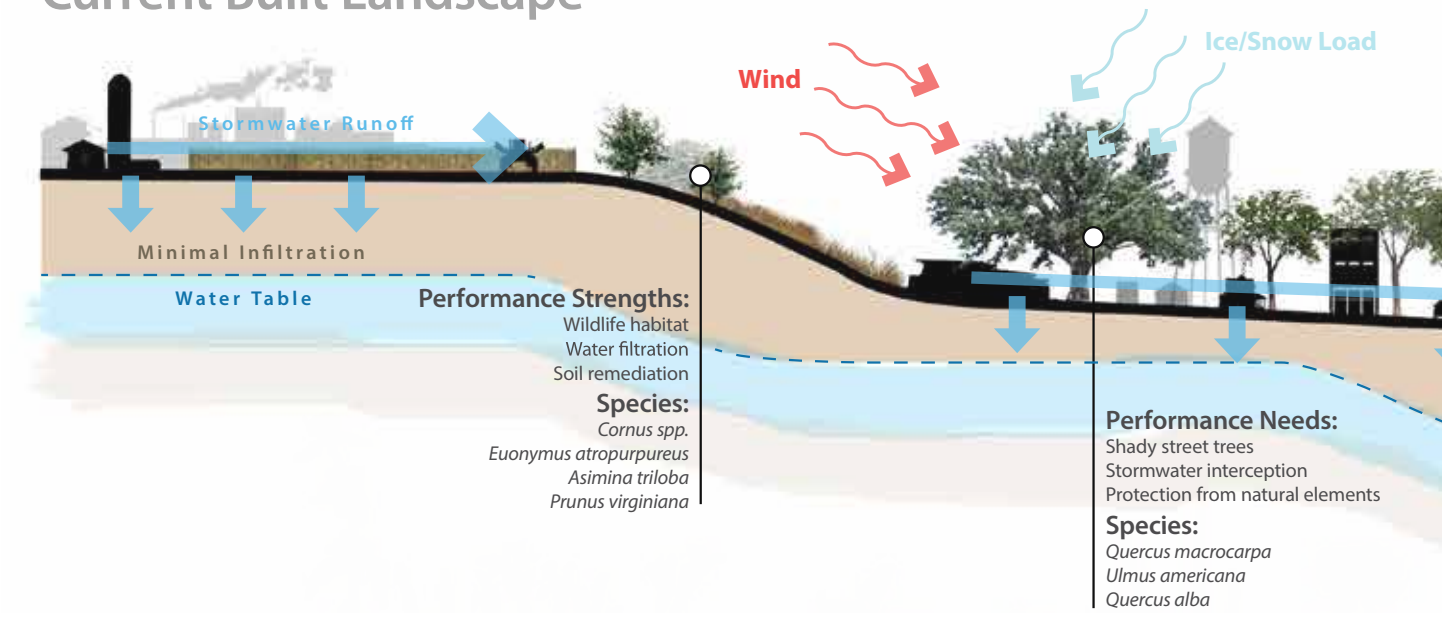
Iowa's Living Roadways community visioning

Using Native Plants



Current Built Landscape



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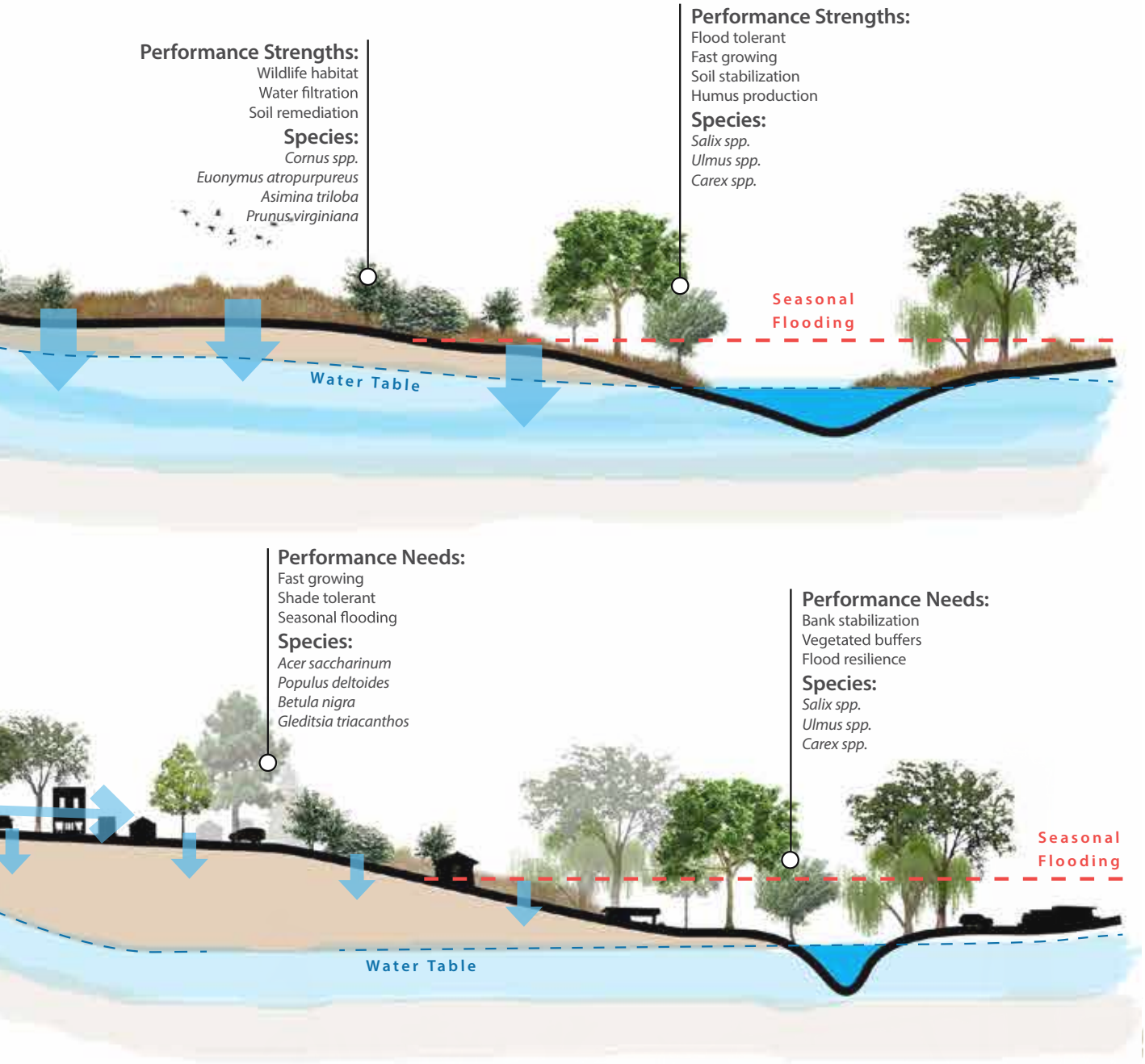
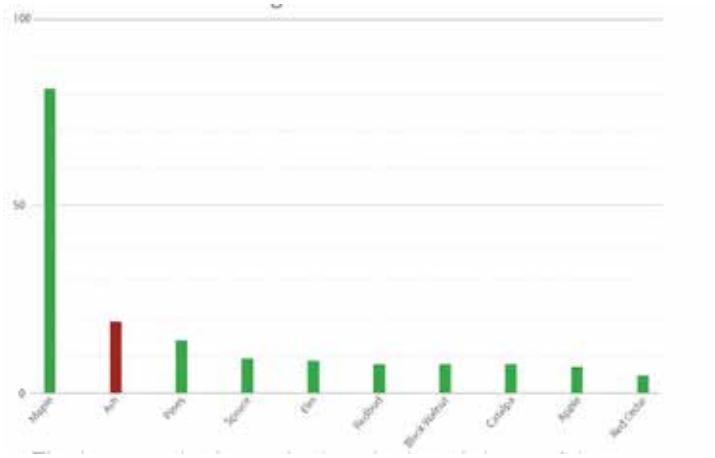
Pre-Settlement Landscape



The Urban Forest

The map on the board to the right depicts public right-of-way trees that have been surveyed by the Iowa Department of Natural Resources (Iowa DNR).[1] 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 were 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.[2] EAB was first discovered in Iowa in 2010 and has been confirmed in 30 Iowa counties and counting.[3]

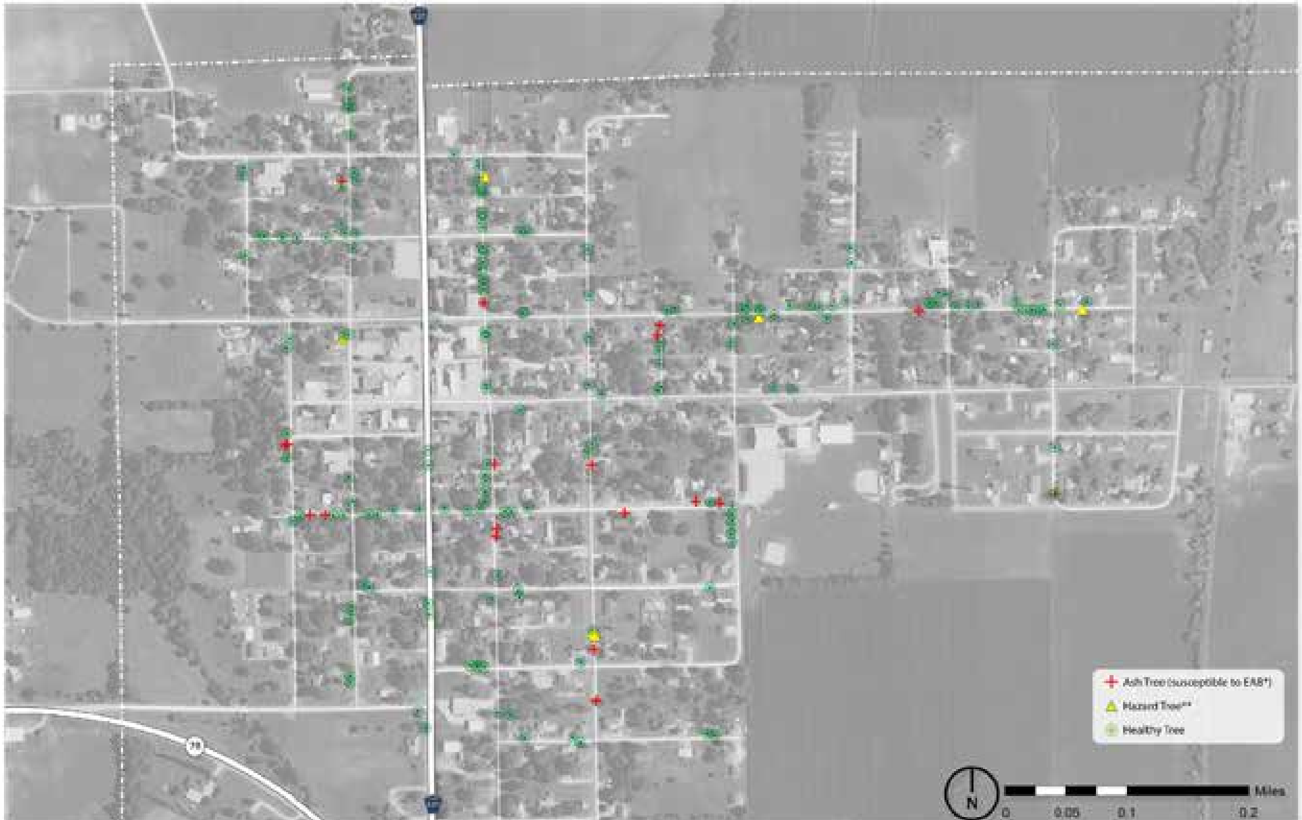


The bar graph above depicts the breakdown of tree species surveyed by the Iowa DNR. Take note of the high number of ash and maple trees. Increasing species diversity in the urban forest will make the urban forest more resilient should a new bug or plant disease emerge. There's a strong possibility that 10% (19 ash trees) of Morning Sun's city owned trees will die once EAB becomes established in the community. With proper planning and management, the cost of removing dead and dying trees can be extended over years, mitigating public safety issues.

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

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

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



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

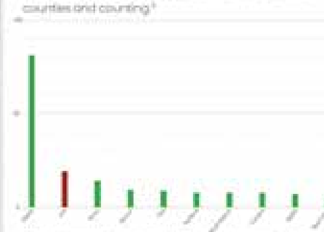
Morning Sun
Urban Forest Conditions

Bioregional Context

Julia Badenhope, Matthew Gordy, Colby Fangman, Riley Dunn
Iowa State University | Trees Forever | Iowa Department of Transportation

The Urban Forest

The map on the left depicts public right-of-way trees that have been surveyed by the Iowa Department of Natural Resources (Iowa DNR).[1] 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 were 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.[2] EAB was first discovered in Iowa in 2010 and has been confirmed in 30 Iowa counties and counting.[3]



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1. [illegible]
2. [illegible]
3. [illegible]

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 Morning Sun, 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 Morning Sun'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 Morning Sun residents with different transportation needs to participate in focus groups. A total of 34 residents attended Morning Sun's workshop. Participants were separated into five user groups and the Morning Sun steering committee.

Actives

(3 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

(2 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

(17 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

(2 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

(3 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.

Asset : Hoover Nature Trail

Barrier: Bad Sidewalk on Division Street


Asset: E Division Street


Barrier: Broken Sidewalk on SE 2nd Street

Asset: Morning Sun Park


Barrier: Old Equipment in Community School

What Factors Affect Transportation in Morning Sun?

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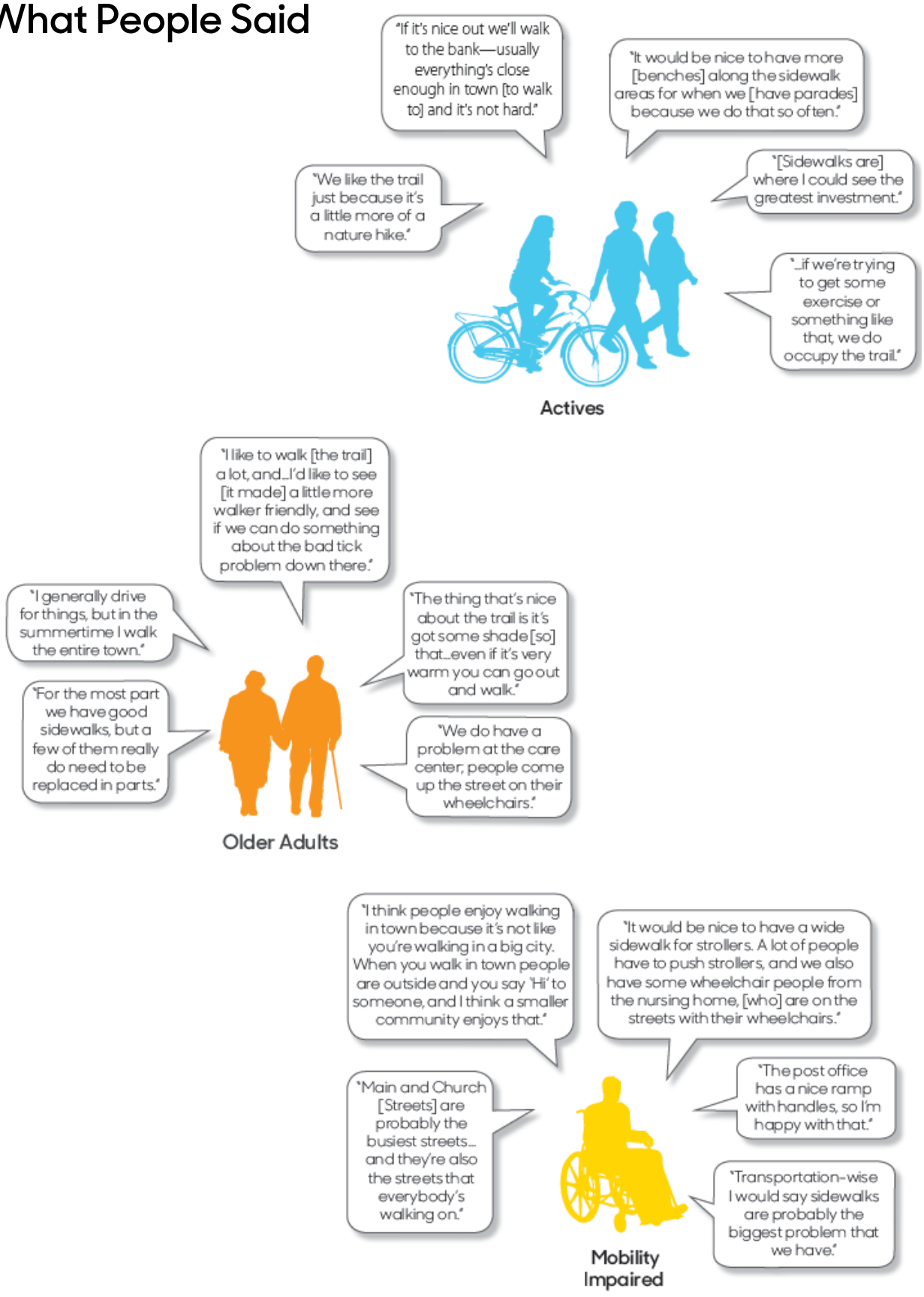
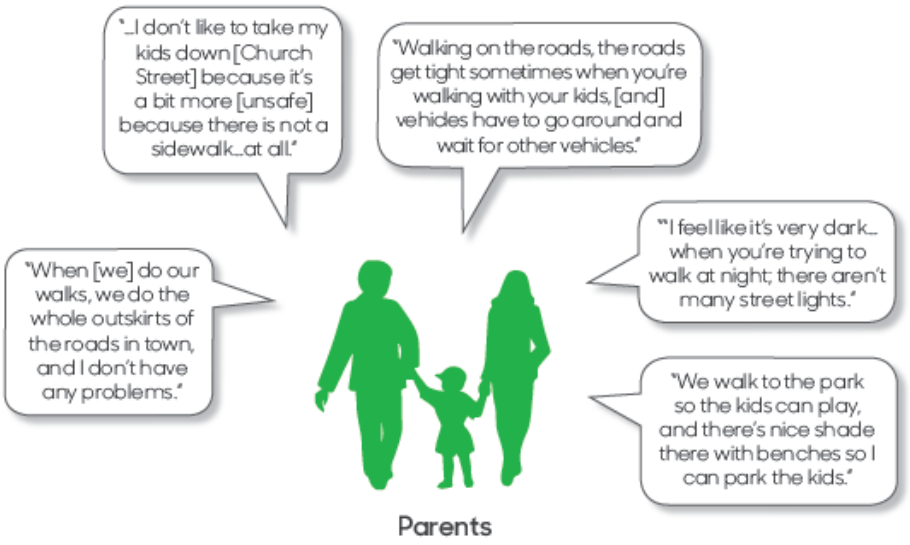
Morning Sun
Overview

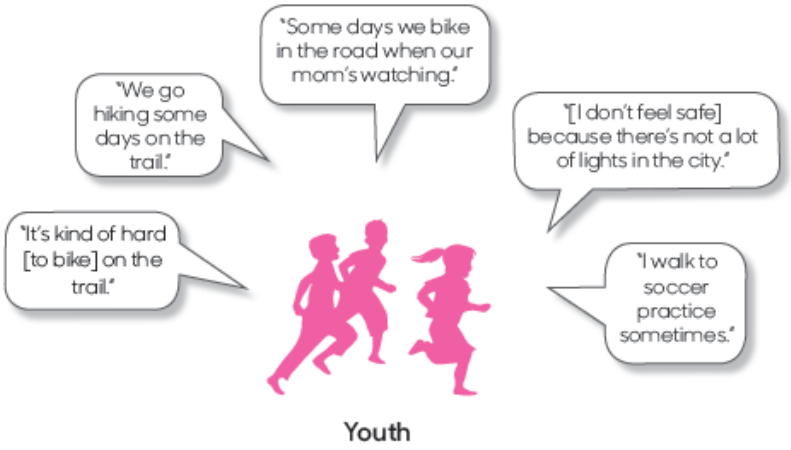
Transportation Assets and Barriers
Julia Badenhope, Sandra Oberbroeckling, Matthew Gordy, Zhi Chen
Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

What People Said




"...I don't like to take my kids down [Church Street] because it's a bit more [unsafe] because there is not a sidewalk...at all."
"Walking on the roads, the roads get tight sometimes when you're walking with your kids, [and] vehicles have to go around and wait for other vehicles."
"When [we] do our walks, we do the whole outskirts of the roads in town, and I don't have any problems."
"I feel like it's very dark... when you're trying to walk at night; there aren't many street lights."
"We walk to the park so the kids can play, and there's nice shade there with benches so I can park the kids."
Parents


"Some days we bike in the road when our mom's watching."
"We go hiking some days on the trail."
"[I don't feel safe] because there's not a lot of lights in the city."
"It's kind of hard [to bike] on the trail."
"I walk to soccer practice sometimes."
Youth


"As someone who actually spends a lot of time walking around town... we don't have sidewalks in a lot of high-traffic areas."
"[Highway] 78 is the area that sees the most expansion and the most growth, especially in the last five years, but it's probably the least connected to the other two areas in the community."
"There's not enough interconnectivity between the...older area of town and the new area of town."
"I run on the trail because I like how it's just nice out there, and I don't like people watching me run."
"I like to walk around town... at night actually because it's really relaxing and there's not a lot of traffic..."
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 walk, drive, and bike regularly, either as part of a daily commute or as recreational/sports training. This group enjoys the trail because using it feels "like a nature hike."

Mobility-impaired individuals often rely on motorized scooters and wheelchairs to get around. Therefore, smooth, wide surfaces that are accessible are important. The poor sidewalks and unpaved parking lots are issues.

Older adults primarily drive and walk to destinations. They also bike. This group enjoys the natural areas in Morning Sun such as the trail and the cemetery and would like to see them improved.

Youth mainly walk, bike, and run to get around the community. Some ride the bus to school. This group is interested in having more outdoor recreation opportunities.

Parents drive, walk, and bike. They are concerned about their children's safety as they travel throughout town. Of particular concern is the lack of sidewalks along busy streets and poor lighting.

Steering committee members walk, drive, bike and run. This group is interested in connecting the three main "hubs" in town: the school, the businesses along Highway 78, and downtown.

User Types	Destinations and Activities: School	Destinations and Activities: Locust Grove Park	Destinations and Activities: Hoover Nature Trail	Destinations and Activities: Library	Desirable Qualities and Features: Benches	Desirable Qualities and Features: Good Mix of Businesses	Desirable Qualities and Features: Nice Cemetery	Undesirable Qualities and Features: Poor, Incomplete Sidewalks	Undesirable Qualities and Features: Poor Lighting	Undesirable Qualities and Features: Unpaved Parking Lots	Most Desired Improvements and Activities: Better, Connected Sidewalks	Most Desired Improvements and Activities: Downtown Revitalization	Most Desired Improvements and Activities: More Benches	Most Desired Improvements and Activities: More Park Activities	Most Desired Improvements and Activities: Trail Enhancements	
Actives	●	●	●	●	●	●	●	●			●	●	●			Actives walk, drive, and bike regularly either as part of a daily commute or as recreational/sports training. This group enjoys the trail because using it feels "like a nature hike."
Mobility Impaired	●	●	●	●		●		●		●	●	●	●	●	●	Mobility-impaired individuals often rely on motorized scooters and wheelchairs to get around. Therefore, smooth, wide surfaces that are accessible are important. The poor sidewalks and unpaved parking lots are issues.
Older Adults	●	●	●	●	●	●	●	●	●		●	●	●	●	●	Older adults primarily drive and walk to destinations. They also bike. This group enjoys the natural areas in Morning Sun such as the trail and the cemetery and would like to see them improved.
Youth	●	●	●	●		●			●					●		Youth mainly walk, bike, and run to get around the community. Some ride the bus to school. This group is interested in having more outdoor recreation opportunities.
Parents	●	●	●	●	●	●	●	●	●		●	●	●	●	●	Parents drive, walk, and bike. They are concerned about their children's safety as they travel throughout town. Of particular concern is the lack of sidewalks along busy streets and poor lighting.
Steering Committee	●	●	●	●	●	●	●	●	●		●	●	●		●	Steering committee members walk, drive, bike and run. This group is interested in connecting the three main "hubs" in town: the school, the businesses along Highway 78, and downtown.

- School: Participants in all the focus groups identified the school as a major asset to Morning Sun. One person described it as "probably the heart of the community."
- Locust Grove Park: Locust Grove Park is well used by both adults and youth. A number of community events are held there, including soccer, the Easter egg hunt, and the July 4th celebration.
- Hoover Nature Trail: All users appreciate the Hoover Nature Trail. Participants noted that the trail offers shade and access to wildlife such as rabbits, squirrels, deer and eagles.
- Library: Adult users identified the library as a significant asset for a community the size of Morning Sun. The library is frequented by youth, as well as [illegible] residents.
- Benches: People like the benches located throughout town because they provide seating [illegible] maintenance.
- Good Mix of Businesses: Residents of all ages appreciate the variety of businesses and services available in Morning Sun, particularly the fire department and ambulance service.
- Nice Cemetery: Adults appreciate the cemetery because it is well kept, with nice landscaping and signage. [illegible] People walk there because it is quiet.
- Poor, Incomplete Sidewalks: All groups noted that the sidewalk system in Morning Sun is incomplete, and that some of the existing sidewalks are in poor condition. Some sidewalks have been removed but not replaced.
- Poor Lighting: Poor lighting throughout town makes youth and some adult users feel unsafe.
- Unpaved Parking Lots: Unpaved parking lots make some businesses difficult to access for mobility-impaired individuals.
- Better, Connected Sidewalks: Adult users would like the sidewalk system to be improved, with wider sidewalks and curb cuts to make it more accessible for wheelchairs and strollers.
- Downtown Revitalization: Downtown revitalization is a top priority among adult residents, particularly older adults and parents.
- More Benches: Adult users value the benches in town and would like to have more, particularly along the [illegible].
- More Park Activities: Parents would like more recreation opportunities for youth at the park, such as a splash pad, swings, and monkey bars. Existing play equipment needs to be updated.
- Trail Enhancements: Desired improvements to the trail include more lighting, better maintenance, benches, and better signage.

Analysis of Barriers

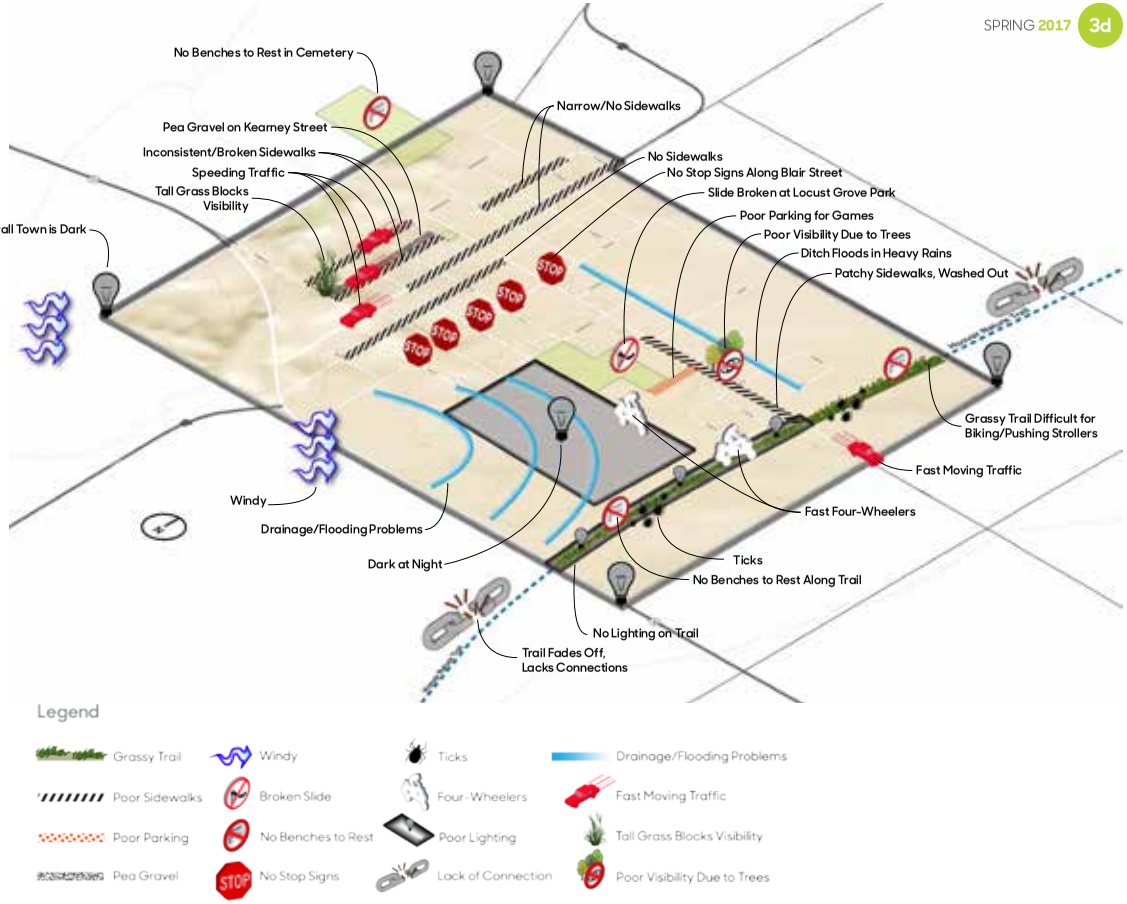
The analysis of barriers synthesizes the feedback we received from the five transportation user groups. Although not summarized below, input from the steering committee is incorporated into the map of all five user groups.

Barriers that emerged across user groups are related to the sidewalks system in town, as well as the Hoover Nature Trail. In terms of poor or missing sidewalks, the streets most frequently mentioned were Washington and Keamey. Although the nature trail is considered an asset to the community, participants noted that it is often overgrown, buggy, and difficult to bike or push a stroller on.

Morning Sun's Barriers: Common Factors

The analysis of barriers synthesizes the feedback we received from the five transportation user groups. Although not summarized below, input from the steering committee is incorporated into the map of all five user groups.

Barriers that emerged across user groups are related to the sidewalk system in town, as well as the Hoover Nature Trail. In terms of poor or missing sidewalks, the streets most frequently mentioned were Washington and Kearney. Although the nature trail is considered an asset to the community, participants noted that it is often overgrown, buggy, and difficult to bike or push a stroller on.



Actives

Active recreationists noted that because of poor sidewalks and the grass trail, people have to walk and bike in the streets. They pointed out that many side streets are covered in pea gravel, making it difficult to ride motorcycles. The also mentioned traffic congestion at the school.

Mobility Impaired

Mobility-impaired individuals find a lack of benches along the trail and in the cemetery as barriers. The fact that the trail ends just north and south of town is also an impediment. This group also mentioned drainage issues and flooding in Locust Grove Park.

Older Adults

In addition to poor sidewalks, older adults mentioned speeding traffic as a problem on Washington and Kearney Streets. They also identified strong winds from the south and visibility issues caused by vegetation as barriers.

Youth

The primary barrier mentioned by youth is the fact that most of the town is dark at night, making them feel unsafe. This group also mentioned the broken slide at Locust Grove Park and the difficulty of biking along the trail.

Parents

The barriers identified by parents are related to the safety of their children. For example, they noted heavy or speeding traffic on a number of streets. They also pointed out the lack of lighting both in town and along the trail.

Morning Sun
Barriers

Transportation Assets and Barriers
Julia Badenhope, Sandra Oberbroeckling, Matthew Gordy, Richard Garcia
Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

Analysis of Assets

The analysis of assets synthesizes the feedback we received from the five transportation user groups. Although not summarized below, input from the steering committee is incorporated into the map of all five user groups.

Outdoor recreation venues are valued by all user types. For example, both youth and adults enjoy the Hoover Nature Trail because provides a venue for walking, biking, running, and viewing wildlife. All user groups also appreciate Locust Grove Park, which not only offers a venue for community events, but also serves as the school playground. Adult users commented that the large sledding hill southwest of town is heavily used. The elementary school is considered an important asset to the community as well.

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Actives

Active recreationists value the Hoover Nature Trail and the cemetery because they provide a natural environment for walking and biking. This group appreciates nice landscaping, such as that at the cemetery and the community center.

Mobility Impaired

Mobility-impaired individuals appreciate the accessibility offered at some businesses, such as the ramp at the post office and the lift system at the library. They also like the services available in town, such as the fire department, ambulance, the care center, and the vet clinic.

Older Adults

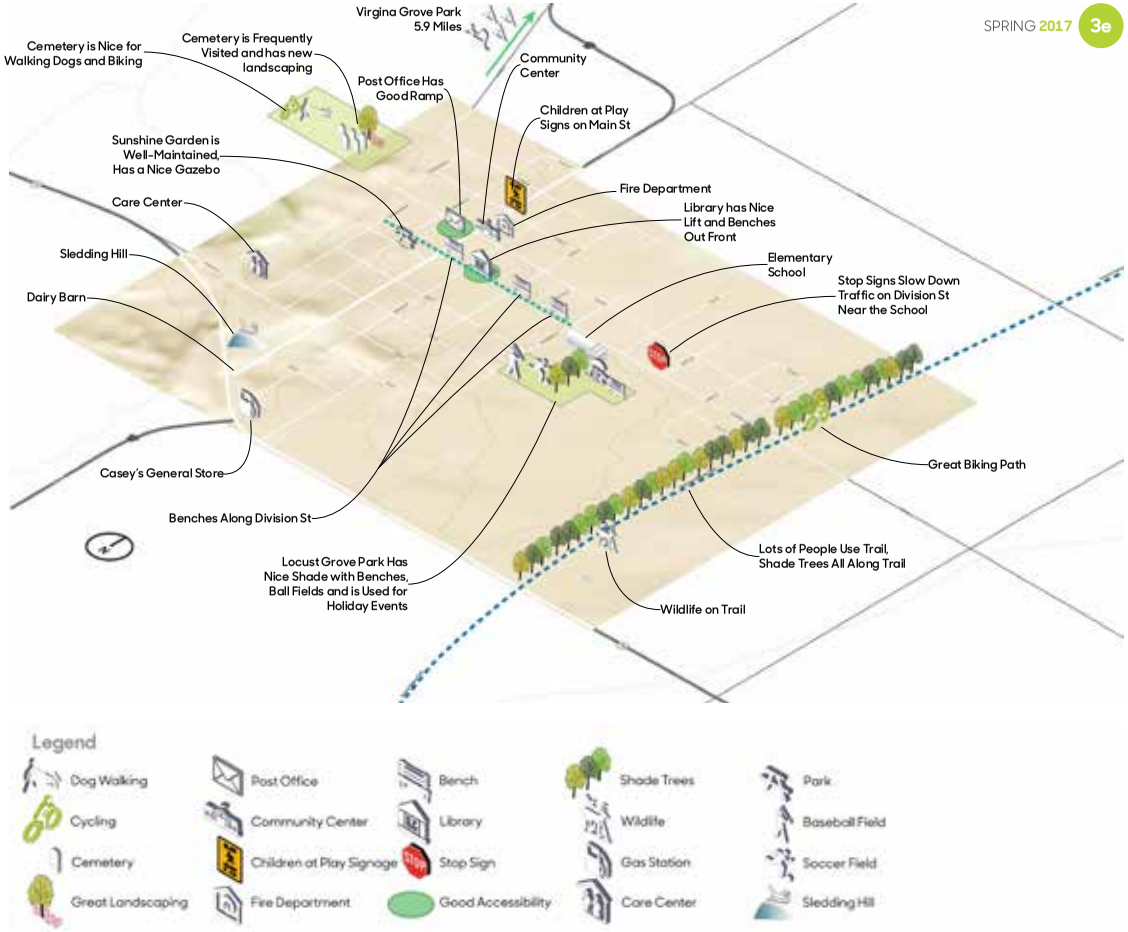
Like the mobility-impaired group, older adults consider the variety of services available in town as assets. They use the community center in winter for indoor recreation. This group also values good infrastructure.

Youth

Morning Sun's outdoor recreation opportunities are important to youth. They engage in activities such as camping behind the care center, playing in Locust Grove Park, and hiking the "timber" along the nature trail.

Parents

Parents appreciate the trail, the park, and the sledding hill because these venues provide activities for them and their children. They value safety, and identified the "slow down for children" signs on Main Street as assets.



Morning Sun
Assets

Transportation Assets and Barriers

Julia Badenhope, Sandra Oberbroeckling, Matthew Gordy, Richard Garcia

Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

Desired Improvements

The analysis of desired improvements synthesizes the feedback we received from the five transportation user groups. Although not summarized below,input from the steering committee is incorporated into the maps of all five user groups.

Improving the sidewalk system and maintaining and updating the trail are desired enhancements that emerged across user types. Proposed updates to the trail include creating proper entrances at the trailheads, providing rest areas along the trail, and paving the surface. The adult user groups would like the downtown area to be revitalized.

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Actives

Active recreationists are interested in expanding opportunities for outdoor recreation by creating a Frisbee golf course, adding fishing and camping at the park, and building a skate park. Actives would also like to see more benches throughout town.

Mobility Impaired

Mobility-impaired individuals would like a connection between downtown and the Highway 78 businesses such as Casey's. They also want to connect the trail to the rest of the community and marketing the trail to attract visitors.

Older Adults

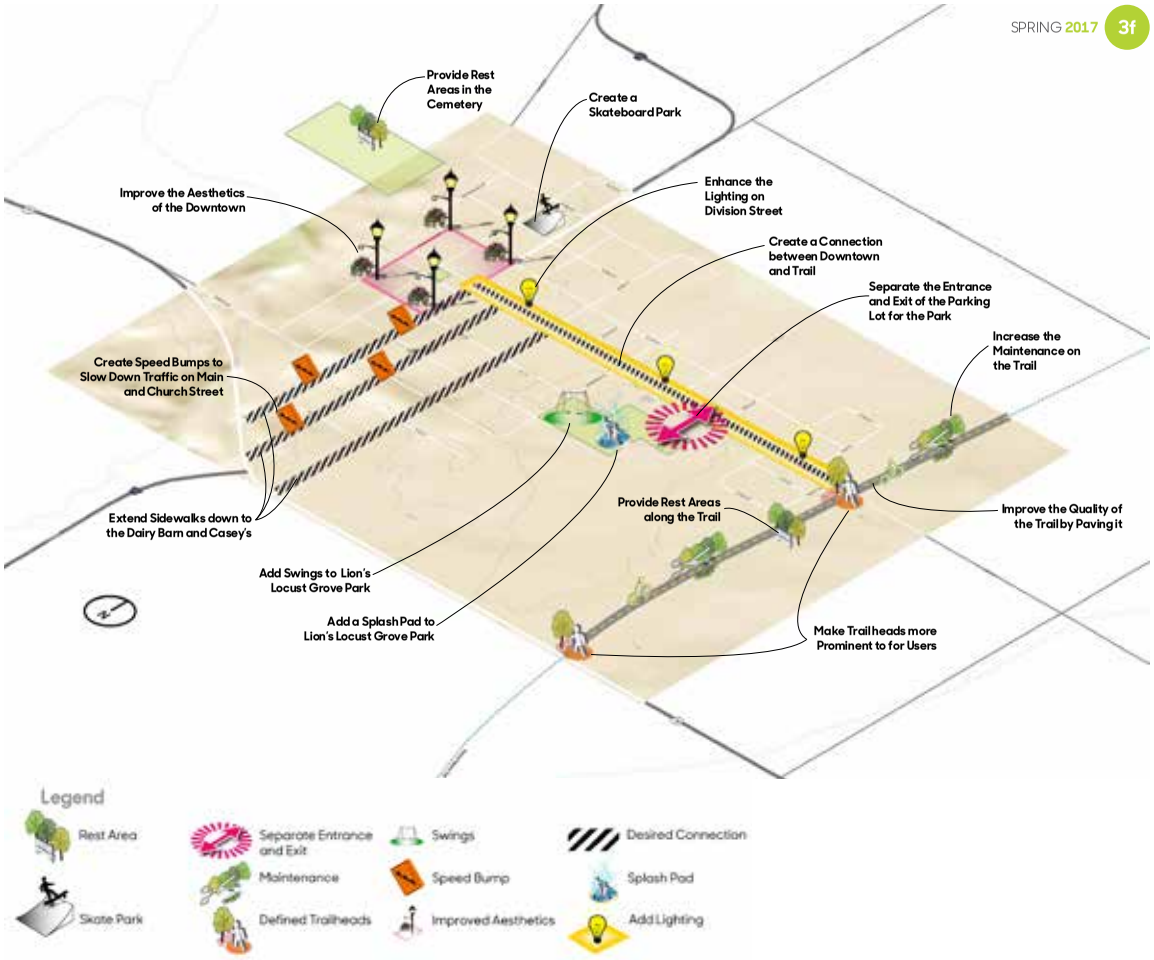
Improving the trail by paving it and maintaining it more effectively is a priority among older adults. Slowing traffic on Main Street by installing speed bumps is another desired improvement this group identified.

Youth

The youth group focused it's desired improvements on outdoor recreation opportunities. Like the active recreationists, they want a skate park. They would also like swings at Lions Park.

Parents

Parents also prioritized trail improvements, including establishing entrances at the trailheads. This group would also like benches in the cemetery and better lighting on Division Street. Parents also want a splash pad at the park.



Morning Sun

Desired Improvements

Transportation Assets and Barriers
Julia Badenhope, Sandra Oberbroeckling, Matthew Gordy, Sam Thompson
Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

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, operational railroads or abandoned rail beds, and airports.

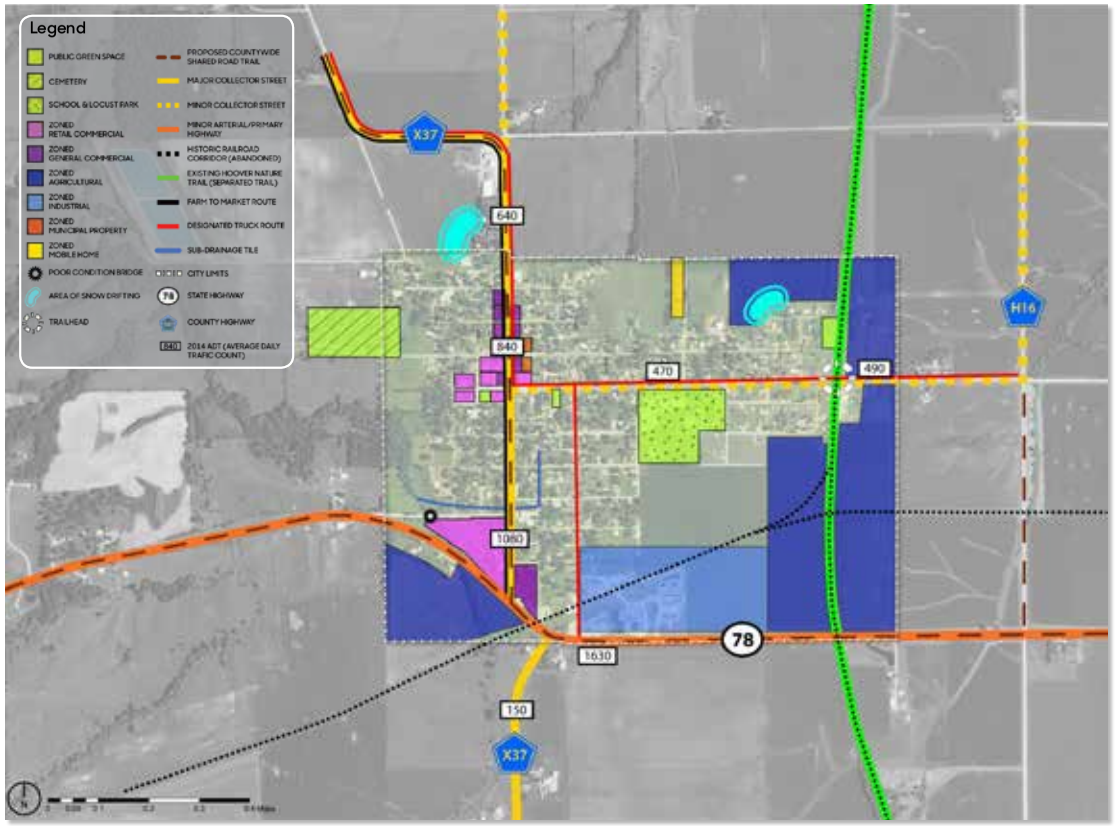
The Morning Sun visioning design team met with the Louisa County Engineer, a representative from the Southeast Iowa Regional Planning Commission, Morning Sun public works personnel and local officials to identify existing, past, and future transportation systems in the area. Also discussed were possible transportation related restraints and opportunities that could potentially affect project areas.

The primary north-south streets through Morning Sun are Main Street and Church Street. Main Street is also a farm-to-market road. The main east-west street is Division Street. Church Street, Division Street and Main Street from Division Street north are the designated truck routes.

The existing bridge on Manor Road is designated as poor (structurally deficient) for vehicular traffic and will be abandoned in the near future. There is the possibility, however, that the City of Morning Sun could keep it and maintain it as a pedestrian bridge only for which it would be safe. Keeping the bridge would provide the city with the opportunity to create a "looped" recreational trail system around the community that could tie into the existing Hoover Nature Trail, as well the countywide shared-use trail network.

County Highway 78 runs along the south edge of town and is the highest traveled roadway within the city limits, making it one of the primary gateways to the community. Highway 78 is also part of the county's shared-use trail network. Any projects along this highway corridor, as well as along any roadways outside of the city limits, will require the review and approval of the Louisa County engineering office.

There are sidewalks throughout town; however, no continuous accessible network exists as many are steep at the intersections, are old and in need of repair, and/or are missing segments. These issues make it difficult for pedestrians, especially the mobility challenged, elderly, and young children, to safely move throughout town and access key destinations such as Casey's, the library and the school. A valued amenity to the community is the Hoover Nature Trail that transects the east side of the town. This trail, which is on an old abandoned railway, is primarily located on privately owned property and is maintained by the Louisa County Conservation Board.



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

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Morning Sun

Transportation Inventory

Flenker Land Architecture Consultants, LLC
LA: Meg K. Flenker, PLA, CPESC, CPSWQ
Intern: Richard Garcia
Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

Community Concept Plan

The community visioning process utilizes a grass roots and collaborative approach to planning and developing solutions for a variety of issues that rural communities face along transportation corridors. These issues typically involve safety, pedestrian and vehicular circulation and connectivity, accessibility, way-finding, stormwater management, green infrastructure, and aesthetics, as well as a host of others concerns.Whilemanycommunitiesfacesimilarchallenges,thebestsolutionforonecommunitymay not be the best for another.

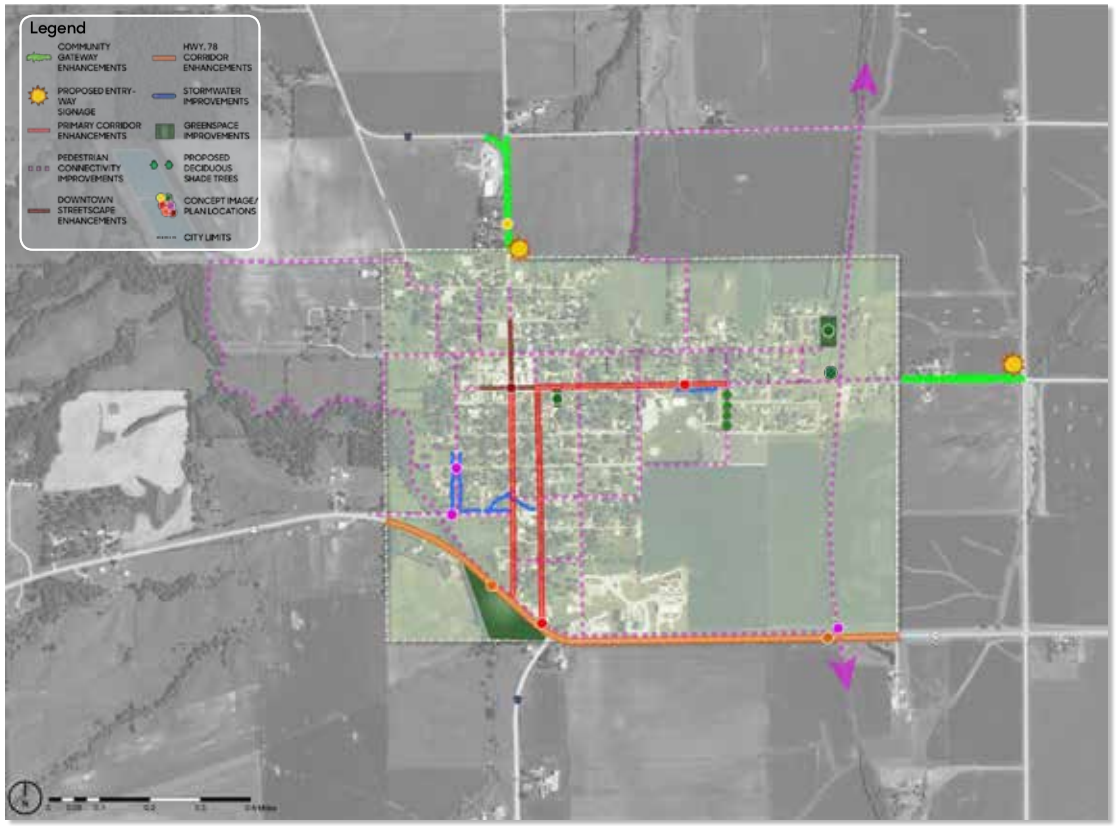
Through the visioning process community members collaborate with the visioning design team and officials from various regulatory, planning and transportation agencies. This collaboration is instrumental in developing solutions that are not only specific to each individual community and highlight their own unique qualities, needs, assets and desires, but are also feasible, effective and compliant with various requirements.

The concept plan shown on this board graphically illustrates the locations and corridors identified by the Morning Sun visioning committee during the visioning process as priority areas in need of enhancements and for which concepts were developed. The goal of the proposed concept plan and associated concepts proposed on the following presentation boards is to integrate the visions and goals of the community into a cohesive, overall master plan that can be implemented in
phases over time.

Sustainable planning and design encompasses a holistic and integrative approach to developing solutions. As such, while the concept plan shown identifies specific areas/zones of improvements and enhancements, most of the individual concepts presented in the following presentation boards actually address multiple issues raised by the community. An example of this is the Division Street concept which addresses connectivity, accessibility, safety, aesthetics and stormwater
management.

Proposed concepts illustrating components of the master plan are found on the following presentation boards:

- Pedestrian Connectivity Enhancements: Refer to Boards 6 - 8.
- Greenspace Improvements: Refer to Boards 8-10.
- Community Gateway Enhancements: Refer to Board 11.
- Hwy. 78 Corridor Enhancements: Refer to Board 11.
- Primary Corridor Enhancements: Refer to Board 12.
- Downtown Streetscape Enhancements: Refer to Boards 13 & 14



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

Concept Plan Overview

The community visioning process utilizes a grass roots and collaborative approach to planning and developing solutions for a variety of issues that rural communities face along transportation corridors. These issues typically involve safety, pedestrian and vehicular circulation and connectivity, accessibility, way-finding, stormwater management, green infrastructure, and aesthetics, as well as a host of others concerns. While many communities face similar challenges, the best solution for one community may not be the best for another.

Through the visioning process community members collaborate with the visioning design team and officials from various regulatory, planning and transportation agencies. This collaboration is instrumental in developing solutions that are not only specific to each individual community and highlight their own unique qualities, needs, assets and desires, but are also feasible, effective and compliant with various requirements.

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Morning Sun

Concept Plan Overview

Flenker Land Architecture Consultants, LLC
LA: Meg K. Flenker, PLA, CPESC, CPSWQ
Intern: Richard Garcia
Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

Project Scope and Preliminary Opinion of Probable Construction Cost

Following is a summary of the preliminary opinion of probable construction costs prepared for the concepts developed through the visioning program. These opinions of cost and the major elements of each concept are further detailed in this report. Due to the lack of design detail and specific field data, which is inherent of concept plans, many assumptions had to be made when developing the preliminary cost estimates which are included in this report. As such, ***all costs provided in this report are for preliminary planning and general ball park budgetary information only and will need to be refined and updated as the concepts are further developed and the final project specifics and scope of work are determined.***

The costs used to determine the cost estimates provided in this report are based on nationwide averages taken from RSMeans cost data, various manufacturer's pricing, as well as actual bid opening data for the general components anticipated to be part of the final projects. Costs include both the material and installation. These costs may be reduced with materials donated or provided at reduced cost and volunteer labor for appropriate projects.

Project construction costs can vary due to a variety of factors, including bidding climate, final scope of work (both in terms of project components and professional services), material selection, quantities, phasing, project size, final design and specifications, special requirements, field conditions, regulatory requirements and the types of funding involved.

The cost estimates that are included in this feasibility report are based on preliminary concept plans and will need to be refined as the project scope is defined and the concepts are further developed during the subsequent design phase.

Concept Plan: Summary of Estimated Costs	10/2/2017
Description	***Estimated Totals***
Pedestrian Connectivity	
ADA Accessible Sidewalks	TBD
Community Trail System	TBD
Hoover Nature Trail Entryway	TBD
South Park	$ 334,650.00
Greenspace Improvements	
City Park	$ 786,200.00
Hoover Park	$ 384,800.00
Hoover Trail Trailhead	$ 52,400.00
Community Gateway Improvements	
North Community Entryway	$ 42,800.00
East Community Entryway	TBD
Hwy. 78 Corridor Enhancements	
Hwy. 78 Corridor (segment between S. Blair St. and eastern corporate limits)	$ 349,800.00
Primary Corridor Enhancements	
Community Caps	TBD
Main St. from Highway 78 to E. Division St.	TBD
Church St. from Highway 78 to E. Division St.	TBD
E. Division St. to Maple St.	TBD
Downtown Streetscape Enhancements	
E. Division St. & Kearney St. Intersection	$ 147,200.00
E. Division St. & Main St. Intersection	$ 176,000.00
E. Division ST. & Church St. Intersection	$ 175,100.00
Main St. from E. Division St. to 2nd St.	*$ 239,800.00*

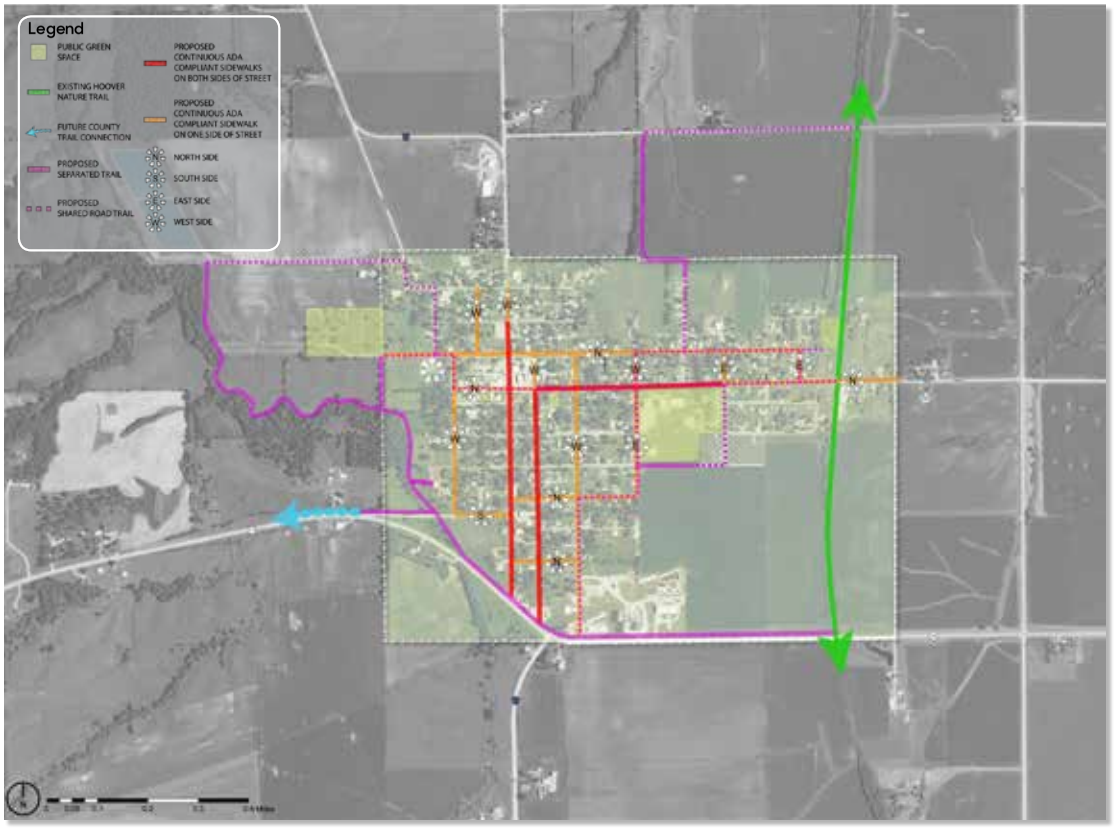
TBD = To Be Determined

Pedestrian Connectivity Overview

Pedestrian connectivity was repeatedly discussed and cited as a major concern of residents and committee members during the community visioning process (re: Emerging Themes, Board 3C). Missing sidewalk segments, steep sidewalk grades at street crossings, broken and uneven sidewalks, narrow or sidewalks overgrown with vegetation, and raised sidewalks with drop-offs were all identified as being problematic for safe and accessible use. Of special concern was the lack of sidewalks leading to and from the retirement home on S. Washington Street, where residents are forced to walk or use their wheelchairs in the street.

While all user groups rely on sidewalks for safe and accessible travel, it is the elderly, mobility-challenged or impaired, and school-age children who are impacted the most by the condition of the sidewalk system. These groups have the greatest dependence on sidewalks due to their reliance on non-vehicular modes of transportation to get to places within and around the community.

In addition to sidewalks, pedestrian connectivity also encompasses recreational trails. A holistic pedestrian connectivity system utilizes both recreational trails and sidewalks to provide a complete looped system that provides uninterrupted access to important community and public destinations. This type of integrated system is essential to the vitality of the community and well-being of its residents; in addition, it also satisfies the needs of both recreational and non-recreational users



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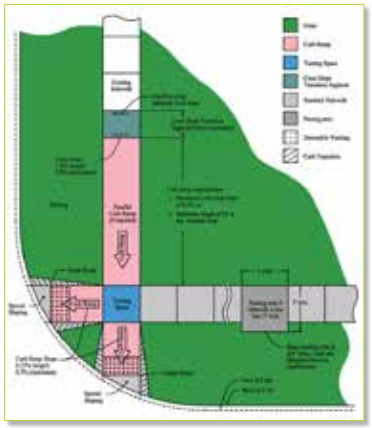

"Standard Sidewalk and Curb Ramp Elements" figure taken from the Iowa Department of Transportation Design Manual, Chapter 12, Accessible Sidewalk Requirements.

Morning Sun

Pedestrian Connectivity Overview

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Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

Pedestrian Connectivity

Typical Sections
The typical sections on board 7 show the recommended dimensions for sidewalks and separated trails as well as the recommended clearances. These are generalized, as there may be other specific requirements set forth by funding or regulatory agencies that have jurisdiction over specific sidewalk and recreational trail projects.

Pedestrian Connectivity
The concepts presented on this board 7 illustrate how sidewalks and recreational trails can be integrated into the existing landscape to improve pedestrian circulation and accessibility as well as incorporate enhancements that target other community goals.

The S. Washington Street concept above illustrates how bio-swales, a 5-foot-wide ADA (American with Disabilities Act) compliant sidewalk, and a decorative retaining wall can change the aesthetics of the landscape while addressing important issues, including: stormwater quality and infiltration, pedestrian accessibility, grade transitions, and habitat improvement.

In various areas throughout Morning Sun the sidewalk grades or ground leading up to the street crossings are steep. The use of retaining walls is an effective tool in helping transform these steep areas into slopes where ADA-compliant sidewalks and pedestrian crossings can be constructed when there is not enough room available to change the grade through simple grading techniques.

The Hoover Nature Trail concept above highlights the trail entrance to the city's segment to passersby while providing the opportunity to employ identity signage that can serve as an artistic feature. The signage incorporates elements to reflect the heritage of the trail: the railroad, nature and freedom. In addition to the artistic features, the arched signage also symbolizes and functions as a physical and visual threshold to the city's segment of the regional trail (re: Desired Improvements, Board 3f).

Using limestone and native prairie plantings in both formal and informal plantings contributes to the naturalness of the trail corridor, providing color with less maintenance needs than non-native plantings.

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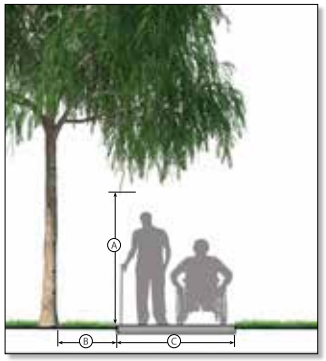

Legend

- A 8' MINIMUM VERTICAL CLEARANCE
- B 2' MINIMUM HORIZONTAL CLEARANCE
- C 5' WIDE SIDEWALK (RECOMMENDED MINIMUM)
- D 10' WIDE RECREATIONAL TRAIL
- E 2' MINIMUM MOWED AREA BETWEEN NON-MAINTAINED/NATURAL AREAS AND RECREATIONAL TRAIL

Proposed Typical Sidewalk Section

Proposed Typical Separated Recreational Trail Section

Existing S. Washington Street

Existing Hoover Nature Trail Entrance along Hwy. 78

Proposed Concept: S. Washington Street north of retirement home, looking northerly

Proposed Concept: City entrance to Hoover Nature Trail along Highway 78, looking northerly

Pedestrian Connectivity

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Morning Sun

Pedestrian Connectivity

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Iowa's Living Roadways community visioning

Proposed Greenspace: South Park

In addition to improving connectivity, a primary goal identified by the Morning Sun community was to create more opportunities for play, with an emphasis on inclusive play (re: Emerging Themes, Board 3c).

With the future abandonment of a segment of Manor Road and the associated bridge, the area south of the retirement home at Manor Road and Washington St. presented an opportunity for the city to create a public greenspace and explore opportunities for a looped recreational trail system around the city. While a significant portion of the proposed concept plan takes advantage of existing public right-of-way, it also includes some adjacent privately-owned property. Since the city of Morning Sun does not own any extra unused land, in order to expand its current recreational system and create more opportunities for public spaces, the city will need to work closely with private landowners.

The concept plan illustrated on this board provides play opportunities for all ages and abilities. The elements proposed are targeted to appeal to a wide range of people and offer something different and unique from what is offered elsewhere in Morning Sun. By creating something memorable and different, the park will draw more users.

The importance of getting outside to play is not only important for the community's youth, but also for the adults. Scientific studies show that getting outside can ease depression, lower the risk of poor mental health, improve a person's focus, and strengthen their immunity. With the retirement home adjacent to the site it is anticipated that the area will be well utilized by the employees, residents and their families in addition to the rest of the community.

Design Expertise Recommended

Projects may required help beyond the capability of the visioning committee or available city staff. For this project the committee should expect to involve the following design professionals: landscape architect. The landscape architect may bring other specialized design professionals onto the team or recommend their involvement as the scope of work is finalized.

This project will require coordination and communication throughout the planning and designing process with the Louisa County Engineer..

Existing aerial of Manor Rd. & S. Washington St. south of the retirement home

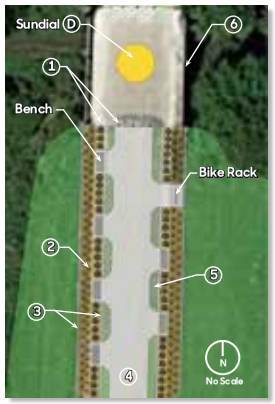
Ⓐ "Oodle Swing" by Landscape Structures

Ⓑ "Pulse Table Tennis Multisensory Interactive Game" by Landscape Structures

Ⓒ Example of proposed shelter. Photo courtesy of Colton Point State Park (Pennsylvania).

Ⓓ Example of proposed interactive sundial; photo by others (unknown).

Concept plan for a new park and trailhead for a proposed city recreational trail. This park and trailhead are referred to on this board and in this board set as "South Park."



Enlargement Plan of Seating Area

Enlargement Plan Notes

1. RAIL FENCE AND COLLAPSIBLE BOLLARDS
2. NATIVE PLANTINGS IN FORMAL LANDSCAPE DESIGN
3. MOWING EDGE
4. RECREATIONAL TRAIL
5. 2' WIDE MAINTAINED GRASS SHOULDER
6. INTERPRETIVE SIGNAGE LOCATED ON BRIDGE DECK RAILINGS

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Morning Sun

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Iowa's Living Roadways community visioning

SOUTH PARK Concept (See Board #8 for Visual)					10/2/2017
Description	***Estimated Quantity***	***Unit***	***Estimated Unit Cost***	***Estimated Line Total***	***Estimated Totals***
Site Grading & Earthwork					***$41,000.00***
Demolition and removal of existing road from S. Washington to Bridge	660	SY	$ 9.60	$ 6,336.00	
Site Grading and Earthwork for improvements	1	LS	$ 18,000.00	$ 18,000.00	
Bio-swale Complete Excluding plantings	1303	SF	$ 12.75	$ 16,613.25	
Utilities					*
*Potential Utility and Structure Adjustment and Added Service				*	
Pavement & Markings/Signage					***$69,500.00***
Pedestrian Pavement (Sidewalk and Trail)	10,339	SF	$ 6.00	$ 62,034.00	
PCC Mowing Edge, 8" Wide	260	LF	$ 12.50	$ 3,250.00	
Asphalt Parking Lot	285	SF	$ 4.45	$ 1,268.25	
Pavement Markings for Parking Lot	156	LF	$ 1.75	$ 273.00	
Handicap Logo Pavement Marking	2	EA	$ 60.00	$ 120.00	
Handicap Parking Sign and Post	2	EA	$ 300.00	$ 600.00	
Relocated Retirement Home Entryway Sign	1	LS	$ 750.00	$ 750.00	
Painted Interactive Sundial on Bridge	1	LS	$ 1,200.00	$ 1,200.00	
Park Equipment (*** Product Cost Only, No Labor Included)					***$78,000.00***
***Benches	6	EA	$ 1,425.00	$ 8,550.00	
***Trash Receptacles	3	EA	$ 1,200.00	$ 3,600.00	
***Picnic Tables	7	EA	$ 705.00	$ 4,935.00	
***Wave Bike Rack (5 Stall Parking)	1	EA	$ 500.00	$ 500.00	
***Wave Bike Rack (9 Stall Parking)	2	EA	$ 760.00	$ 1,520.00	
***Oodle Swing	1	EA	$ 5,700.00	$ 5,700.00	
***Pulse Table Tennis Multisensory Game	1	EA	$ 18,000.00	$ 18,000.00	
Shelter (20' x 30')	1	LS	$ 35,000.00	$ 35,000.00	
Playground Surfacing					***$10,000.00***
Playground ADA Compliant Wood Mulch Surfacing	45	CY	$ 125.00	$ 5,625.00	
Filter Fabric for Playground Mulch	962	SF	$ 2.00	$ 1,924.00	
Edging For Surfacing	160	LF	$ 12.50	$ 2,000.00	
Landscaping					***$23,600.00***
Deciduous Overstory Trees	16	EA	$ 350.00	$ 5,600.00	
Deciduous Understory Trees	6	EA	$ 275.00	$ 1,650.00	
Native Grasses (for formal planting)	170	EA	$ 40.00	$ 6,800.00	
BioSwale Plantings	1303	EA	$ 5.00	$ 6,515.00	
Shredded Hardwood Mulch (Planting area with Native Grasses)	8	CY	$ 65.00	$ 520.00	
Seeding Lawn Area	0.7	Acre	$ 3,500.00	$ 2,450.00	
Miscellaneous					***$30,900.00***
Rail Fence (both ends of bridge)	24	LF	$ 50.00	$ 1,200.00	
Collapsible Bollards	6	EA	$ 950.00	$ 5,700.00	
Park Entrance/Identity Signage	1	EA	$ 3,000.00	$ 3,000.00	
Interpretive Singage	2	EA	$ 1,500.00	$ 3,000.00	
Traffic Control, Mobilization, Erosion and Sediment Control	1	LS	$ 18,000.00	$ 18,000.00	
**Land Acquisition Costs				**	
Sub-Total					***$253,000.00***
Preliminary Concept Phase Contingency (15%)					***$37,950.00***
Professional Design Fees (+/- 15%)					$43,700.00
Total Preliminary Opinion of Probable Cost					***$334,650.00***

* = Utility needs and associated costs will need to be determined during final design and are not included in cost estimate
** = Land acquisition needs and costs will need to be determined during final design and are not included in cost estimate

CY = Cubic Yard EA = Each LF = Lineal Foot LS = Lump Sum SF = Square Foot SY = Square Yard

Proposed Greenspace: City Park

The proposed park shown on this board is located on property owned by the local telephone company and is conveniently and centrally located on the south side of Division Street, between Church Street and S. Blaire Street. It is within a short walking distance of the downtown, public library and Morning
Sun School.

To address the needs and goals identified by the community during the community visioning process, this park incorporates the following elements:
- Pre-K (ages 2 to 5) play equipment
- Splash Pad - one for tots/young children and one for youth/adults
- Restroom with utility room
- Micro picnic shelters with picnic tables and benches located throughout the park and placed to allow for strategic viewing of play areas
- Handicapped-accessible swing
- Deciduous trees to provide shade
- Bermed areas with both native prairie and maintained lawn to provide imaginative play opportunities and create visual interest
- Limestone retaining/seatwall to naturalize the area and allow berming
- Wide sidewalks to allow for ease of accessibility and circulation
- Parking lot for vehicles and bike parking to accommodate users
- Climbing cube to provide play opportunities for Pre-K to 12 age group

Design Expertise Recommended
Projects may required help beyond the capability of the visioning committee or available city staff. For this project the committee should expect to involve the following design professionals: landscape architect, electrical engineer, civil engineer, and surveyor.

CITY PARK Concept (See Board #9 for Visual)					10/2/2017
Description	***Estimated Quantity***	***Unit***	***Estimated Unit Cost***	***Estimated Line Total***	***Estimated Totals***
Site Grading & Earthwork					***$23,200.00***
Demolition (Existing Pavement Removal)	1	LS	$ 6,500.00	$ 6,500.00	
Site Grading and Earthwork for improvements	1	LS	$ 12,000.00	$ 12,000.00	
Earthen Berms	220	CY	$ 21.00	$ 4,620.00	
Utilities					*
*Potential Utility and Structure Adjustment and Added Service				*	
Pavement & Markings/Signage					***$101,900.00***
PCC Pedestrian Pavement (Sidewalk)	5,870	SF	$ 8.00	$ 46,960.00	
Asphalt Parking Lot & Entrance Drive	5790	SF	$ 4.45	$ 25,765.50	
Splash Pad Pavement	1840	SF	$ 12.00	$ 22,080.00	
Pavement Markings for Parking Lot	258	LF	$ 1.75	$ 451.50	
Handicap Logo Pavement Marking	2	EA	$ 60.00	$ 120.00	
Handicap Parking Sign and Post	2	EA	$ 300.00	$ 600.00	
Pavement Pad for Shelter	300	SF	$ 8.00	$ 2,400.00	
Pavement Pads for Micro-Shelters	440	SF	$ 8.00	$ 3,520.00	
Park Equipment (*** Product Cost Only, No Labor for Installation Included)					***$385,800.00***
***Benches	11	EA	$ 1,425.00	$ 15,675.00	
***Picnic Tables	4	EA	$ 705.00	$ 2,820.00	
***Wave Bike Rack (13 Stall Parking)	2	EA	$ 965.00	$ 1,930.00	
***Climbing Cube	1	EA	$ 5,200.00	$ 5,200.00	
***Oodle Swing	1	EA	$ 5,700.00	$ 5,700.00	
***Made in the Shade Playground Playground Set (Pre-K)	1	EA	$ 27,300.00	$ 27,300.00	
Tot splash pad & recirculation equipment	1	LS	$ 79,875.00	$ 79,875.00	
Adult/youth splash pad & recirculation equipment	1	LS	$ 175,000.00	$ 175,000.00	
Pre-Engineered Restroom with Utility Room (16' x 16'-8")	1	EA	$ 52,500.00	$ 52,500.00	
Micro-Shelter (8' x 9' with Gable Metal Roof)	4	EA	$ 4,950.00	$ 19,800.00	
Playground Surfacing					***$19,900.00***
Playground ADA Compliant Wood Mulch Surfacing	114	CY	$ 125.00	$ 14,250.00	
Filter Fabric for Playground Mulch	2424	SF	$ 2.00	$ 4,848.00	
Edging for Surfacing	58	LF	$ 12.50	$ 725.00	
Landscaping					***$23,600.00***
Deciduous Overstory Trees	11	EA	$ 350.00	$ 3,850.00	
Deciduous Understory Trees	8	EA	$ 275.00	$ 2,200.00	
Native Prairie Grass Planting	1925	EA	$ 5.00	$ 9,625.00	
Shredded Hardwood Mulch (Planting area with Native Grasses)	23	CY	$ 65.00	$ 1,495.00	
Seeding Lawn Area	0.25	Acre	$ 4,500.00	$ 1,125.00	
Sodding of Mounded Lawn Area	782	SF	$ 1.50	$ 1,173.00	
PCC Mow Edge for Planting Areas	330	LF	$ 12.50	$ 4,125.00	
Miscellaneous					***$40,000.00***
Perimeter Stockade Fence (Wood Privacy), 6'	652	LF	$ 26.00	$ 16,952.00	
Limestone Retaining Wall	200	SF	$ 22.00	$ 4,400.00	
Bollards	7	EA	$ 800.00	$ 5,600.00	
Park Entrance/Identity Signage	1	EA	$ 3,000.00	$ 3,000.00	
Traffic Control, Erosion and Sediment Control and Mobilization	1	LS	$ 10,000.00	$ 10,000.00	
**Land Acquisition Costs				**	
Sub-Total					***$594,400.00***
Preliminary Concept Phase Contingency (15%)					$89,200.00
Professional Design Fees (+/- 15%)					$102,600.00
Total Preliminary Opinion of Probable Cost					***$786,200.00***

* = Utility needs and associated costs will need to be determined during final design and are not included in cost estimate
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Existing property owned by Mutual Telephone Company of M.S.

(A) "Poseidon" splash pad by Spray and Play

(A) Examples of some of the "Poseidon" splash pad components

Proposed concept plan for a new proposed park (referred to on this board and in this board set as "City Park")

Concept Plan Notes

1. BIKE RACKS; SEE PHOTO B
2. MICRO PICNIC SHELTER WITH TABLE; SEE PHOTO C
3. BENCH
4. YOUTH/ADULT SPLASH PAD; SEE PHOTO A
5. ADA-COMPLIANT SIDEWALK
6. NATIVE PRAIRIE GRASS PLANTING
7. LIMESTONE RETAINING/SEATWALL
8. LANDSCAPE STRUCTURES CLIMBING CUBE (AGES 2 - 12); SEE PHOTO F
9. VEHICULAR PARKING AREA WITH DELINEATED AND SIGNED HANDICAPPED STALLS
10. PERIMETER PRIVACY FENCE
11. BOLLARDS TO PREVENT VEHICULAR ENCROACHMENT
12. LANDSCAPE STRUCTURES MULTIPLE USER "OODLE SWING" (AGES 5 TO 12); SEE PHOTO E
13. LANDSCAPE STRUCTURES "MADE IN THE SHADE" PRE-K PLAYGROUND; SEE PHOTO G
14. RESTROOM WITH UTILITY ROOM; SEE PHOTO D

(B) "Wave" Bike Rack

(C) Micro Picnic Shelter & Table

(D) Restroom with Utility Room

(E) ADA accessible "Oodle Swing"

(F) Climbing Cube

(G) "Maid in the Shade" Playground for Pre-K by Landscape Structures

(G) Additional views of "Maid in the Shade" Playground for Pre-K

Proposed Greenspace: City Park

The proposed park shown on this board is located on property owned by the local telephone company and is conveniently and centrally located on the south side of Division Street, between Church Street and S. Blaire Street. It is within a short walking distance of the downtown, public library and Morning Sun School.

To address the needs and goals identified by the community during the community visioning process, this park incorporates the following elements:

- Pre-K (ages 2 to 5) play equipment
- Splash Pad - one for tots/young children and one for youth/adults
- Restroom with utility room
- Micro picnic shelters with picnic tables and benches located throughout the park and placed to allow for strategic viewing of play areas
- Handicapped-accessible swing
- Deciduous trees to provide shade
- Bermed areas with both native prairie and maintained lawn to provide imaginative play opportunities and create visual interest
- Limestone retaining/seatwall to naturalize the area and allow berming
- Wide sidewalks to allow for ease of accessibility and circulation
- Parking lot for vehicles and bike parking to accommodate users
- Climbing cube to provide play opportunities for Pre-K to 12 age group

Morning Sun

Proposed Greenspace: City Park

Flenker Land Architecture Consultants, LLC
LA: Meg K. Flenker, PLA, CPESC, CPSWQ
Intern: Richard Garcia
Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

Proposed Greenspace: Hoover Park

The proposed park referenced to in this set of boards as "Hoover Park" is located primarily on property that is owned by the Louisa County Conservation Board (LCCB), or within existing public right-of-way. A small portion of the eastern section of the woodland trail and the connections to Hoover Nature Trail are on privately-owned property. The property owned by the LCCB was once the site of the old railroad depot; however, today it sits fallow, overgrown primarily with herbaceous and woody volunteer species.

This site has the potential to be transformed into a well used and sustainable park. It can serve as a much needed rest area for trail users, as well as a destination for interpretive learning, observing nature, relaxing and reflecting. The enhancements proposed for this park complement the functions and offerings of the existing parks as well as those that are proposed.

In addition to general public use, it is anticipated that the proposed park would be a valuable resource to the nearby Morning Sun School, which is within walking distance. The proposed park can be utilized as an outdoor classroom - allowing students to enhance their learning experiences and providing them with the opportunity to help care for the prairie and woodland ecosystems.

The concept plan for the trailhead illustrates enhancements proposed for the existing Hoover Nature Trail parking area. The goals were to make it more inviting, accessible, and noticeable and "tie" the trail into the community (re: Desired Improvements, Board 3f).
- Deciduous trees to shade and buffer the parking lot
- ADA-compliant sidewalk along Division Street to the trail and parking lot for enhanced safety and better connectivity to Morning Sun
- Bench, trash receptacle and bike rack for added user convenience
- Crosswalk markings across Division St. with the associated signage for enhanced safety and trail identification
- Paved parking with designated handicapped parking stalls; parking lot shifted farther from trail - all for improved accessibility and safety

Design Expertise Recommended
Projects may required help beyond the capability of the visioning committee or available city staff. For this project the committee should expect to involve the following design professionals: landscape architect. The landscape architect may bring other specialized design professionals onto the team or recommend their involvement as the scope of work is finalized.

These two projects will require coordination and communication throughout the planning and designing process with the Louisa County Conservation Board and property owners.

Existing property owned by the Louisa County Conservation Board

Overview of proposed concept plan for enhancements to county-owned land and to the existing parking lot for Hoover Nature Trail

Enlargement of proposed concept plan for county-owned land and public right-of-way located east of the Hoover Nature Trail between NE 1st Street and NE 2nd Street

Greenspace: Hoover Park & Trail Parking

The proposed park referenced to in this set of boards as "Hoover Park" is located primarily on property that is owned by the Louisa County Conservation Board (LCCB), or within existing public right-of-way. A small portion of the eastern section of the woodland trail and the connections to Hoover Nature Trail are on privately-owned property. The property owned by the LCCB was once the site of the old railroad depot; however, today it sits fallow, overgrown primarily with herbaceous and woody volunteer species.

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The concept plan below illustrates enhancements proposed for the existing Hoover Nature Trail parking area. The goals were to make it more inviting, accessible, and noticeable and "tie" the trail into the community (re: Desired Improvements, Board 3f).

- Deciduous trees to shade and buffer the parking lot
- ADA-compliant sidewalk along Division Street to the trail and parking lot for enhanced safety and better connectivity to Morning Sun
- Bench, trash receptacle and bike rack for added user convenience
- Crosswalk markings across Division St. with the associated signage for enhanced safety and trail identification
- Paved parking with designated handicapped parking stalls; parking lot shifted farther from trail - all for improved accessibility and safety

Enlargement of proposed concept plan for enhancements to the existing Hoover Nature Trail parking area on Division Street with proposed trees shown in outline only (no color)

Morning Sun

Proposed Greenspace: Hoover Park

Flenker Land Architecture Consultants, LLC
LA: Meg K. Flenker, PLA, CPESC, CPSWQ
Intern: Richard Garcia
Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

HOOVER PARK Concept (See Board #10 for Visual)					10/2/2017
Description	***Estimated Quantity***	***Unit***	***Estimated Unit Cost***	***Estimated Line Total***	***Estimated Totals***
Site Grading & Earthwork					***$17,000.00***
Demolition (Selective Tree Removal)	1	LS	$ 5,000.00	$ 5,000.00	
Site Grading and Earthwork for improvements	1	LS	$ 12,000.00	$ 12,000.00	
Utilities					*
*Potential Utility and Structure Adjustment and Added Service				*	
Pavement & Markings/Signage					***$137,000.00***
PCC Pedestrian Pavement (Sidewalk & Trail)	11,293	SF	$ 8.00	$ 90,344.00	
Asphalt Parking Lot & Entrance Drive	8720	SF	$ 4.45	$ 38,804.00	
Pavement Markings for Parking Lot	176	LF	$ 1.75	$ 308.00	
Handicap Logo Pavement Marking	2	EA	$ 60.00	$ 120.00	
Handicap Parking Sign and Post	2	EA	$ 300.00	$ 600.00	
Pavement Pad for Shelter	744	SF	$ 8.00	$ 5,952.00	
PCC Mowing Edge, 8" Wide	62	LF	$ 12.50	$ 775.00	
Park Equipment (*** Product Cost Only, No Labor for Installation Included)					***$59,400.00***
***Benches	5	EA	$ 1,425.00	$ 7,125.00	
***Wave Bike Rack (9 Stall Parking)	3	EA	$ 760.00	$ 2,280.00	
***Picnic Tables	6	EA	$ 705.00	$ 4,230.00	
***Trash Receptacles	3	EA	$ 1,200.00	$ 3,600.00	
Shelter (16' x 46')	1	LS	$ 42,120.00	$ 42,120.00	
Hardscape					***$38,900.00***
Outdoor Fireplace with integrated PCC Colored Seatwall	1	LS	$ 21,300.00	$ 21,300.00	
PCC Colored Seatwall around Labyrinth	40	LF	$ 350.00	$ 14,000.00	
Decorative Brick Paver Labyrinth	284	SF	$ 12.50	$ 3,550.00	
Landscaping					***$11,000.00***
Deciduous Overstory Trees	22	EA	$ 350.00	$ 7,700.00	
Native Prairie Seeding	0.25	Acre	$ 5,500.00	$ 1,375.00	
Seeding Lawn Area	0.2	Acre	$ 3,500.00	$ 700.00	
Shredded Hardwood Mulch (planting area by labyrinth)	4	CY	$ 65.00	$ 260.00	
Plants (for planting area by labyrinth)	24	EA	$ 40.00	$ 960.00	
Miscellaneous					***$27,600.00***
Park Entrance/Identity Signage - Primary @ Vehicle Entrance	1	EA	$ 3,000.00	$ 3,000.00	
Park Entrance/Identity Signage - Secondary @ Trail	2	EA	$ 1,800.00	$ 3,600.00	
Interpretive Signage	4	EA	$ 1,500.00	$ 6,000.00	
Traffic Control, Erosion and Sediment Control and Mobilization	1	LS	$ 15,000.00	$ 15,000.00	
**Land Acquisition Costs				**	
Sub-Total					***$290,900.00***
Preliminary Concept Phase Contingency (15%)					$43,700.00
Professional Design Fees (+/- 15%)					$50,200.00
Total Preliminary Opinion of Probable Cost					***$384,800.00***

* = Utility needs and associated costs will need to be determined during final design and are not included in cost estimate
** = Land acquisition needs and costs will need to be determined during final design and are not included in cost estimate

CY = Cubic Yard EA = Each LF = Lineal Foot LS = Lump Sum SF = Square Foot SY = Square Yard

HOOVER TRAIL HEAD PARKING Concept (See Board #10 for Visual)					10/2/2017
Description	***Estimated Quantity***	***Unit***	***Estimated Unit Cost***	***Estimated Line Total***	***Estimated Totals***
Site Grading & Earthwork					***$1,700.00***
Demolition (removal of timbers and gravel)	1	LS	$ 500.00	$ 500.00	
Site Grading and Earthwork for improvements	1	LS	$ 1,200.00	$ 1,200.00	
Utilities					*
*Potential Utility and Structure Adjustment and Added Service				*	
Pavement & Markings/Signage					***$23,600.00***
PCC Pedestrian Pavement (shown in concept adjacent to parking lot)	1,914	SF	$ 8.00	$ 15,312.00	
Asphalt Parking Lot	1452	SF	$ 4.45	$ 6,461.40	
Pavement Markings for Parking Lot	200	LF	$ 1.75	$ 350.00	
Handicap Logo Pavement Marking	2	EA	$ 60.00	$ 120.00	
Handicap Parking Sign and Post	2	EA	$ 300.00	$ 600.00	
Crosswalk Pavement Markings and Associated Signage	1	LS	$ 750.00	$ 750.00	
Park Equipment (*** Product Cost Only, No Labor for Installation Included)					***$3,400.00***
***Benches	1	EA	$ 1,425.00	$ 1,425.00	
***Wave Bike Rack (9 Stall Parking)	1	EA	$ 760.00	$ 760.00	
***Trash Receptacles	1	EA	$ 1,200.00	$ 1,200.00	
Landscaping					***$2,800.00***
Deciduous Overstory Trees	7	EA	$ 350.00	$ 2,450.00	
Seeding Lawn Area	0.1	Acre	$ 3,500.00	$ 350.00	
Miscellaneous					***$8,000.00***
Trail Head Identity Signage	1	EA	$ 3,000.00	$ 3,000.00	
Traffic Control, Erosion and Sediment Control and Mobilization	1	LS	$ 5,000.00	$ 5,000.00	
**Land Acquisition Costs				**	
Sub-Total					***$39,500.00***
Preliminary Concept Phase Contingency (15%)					$6,000.00
Professional Design Fees (+/- 15%)					$6,900.00
Total Preliminary Opinion of Probable Cost					***$52,400.00***

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** = Land acquisition needs and costs will need to be determined during final design and are not included in cost estimate

CY = Cubic Yard EA = Each LF = Lineal Foot LS = Lump Sum SF = Square Foot SY = Square Yard

Gateways & Way-finding

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

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

The concept illustrates the use of native prairie in the ditches, an entrance sign to match the existing entrance sign along Hwy. 78, and the use of a limestone base to elevate the sign to a better visual height and to allow for landscaping (with year-round interest) to "frame" and highlight the sign. The sign is located outside of the road right-of-way, which is in accordance with safety requirements.

Design Expertise Recommended
Projects may required help beyond the capability of the visioning committee or available city staff. For this project the committee should expect to involve the following: sign fabrication company and landscaping company.

This project will require coordination and communication throughout the planning and designing process with the Louisa County Engineer as well as the property owners.

NORTH COMMUNITY ENTRYWAY Concept (See Board #11 for Visual)					10/2/2017
Description	***Estimated Quantity***	***Unit***	***Estimated Unit Cost***	***Estimated Line Total***	***Estimated Totals***
Site Grading & Earthwork					***$3,000.00***
Site Prep for Native Seeding	1	LS	$ 3,000.00	$ 3,000.00	
Utilities					*
*Potential Utility and Structure Adjustment and Added Service				*	
Signage					***$15,000.00***
Entryway Monument Sign	1	LS	$ 15,000.00	$ 15,000.00	
Landscaping					***$9,300.00***
Native Prairie Seeding In Ditch (30th Street to proposed sign)	1	Acre	$ 7,500.00	$ 7,500.00	
Sign Foundation Plantings (Plants, Mulch, Aluminum Edging)	1	LS	$ 1,800.00	$ 1,800.00	
Miscellaneous					***$5,000.00***
Traffic Control, Erosion and Sediment Control and Mobilization	1	LS	$ 5,000.00	$ 5,000.00	
**Land Acquisition Costs				**	**
Sub-Total					***$32,300.00***
Preliminary Concept Phase Contingency (15%)					$4,900.00
Professional Design Fees (+/- 15%)					$5,600.00
Total Preliminary Opinion of Probable Cost					***$42,800.00***

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** = Land acquisition needs and costs will need to be determined during final design and are not included in cost estimate

CY = Cubic Yard EA = Each LF = Lineal Foot LS = Lump Sum SF = Square Foot SY = Square Yard

Way-finding
Way-finding signage helps visitors navigate a community and strengthens a community's branding efforts. Four possible options are shown for the community caps. It is important that the same graphics/logo used on the community cap is utilized on all other community signage and branding efforts in order to be effective

Gateways: Highway 78 Corridor
The above concept takes advantage of Highway 78's existing wide public right-of-way and of the overhead utility being located on only one side of the roadway.

As illustrated, a separated recreational trail which is part of the proposed Morning Sun trail) is proposed for the north side of the roadway along with overstory deciduous trees. Native prairie, as proposed for the north community entryway, is proposed for both sides of the roadway with the field entrances, trail shoulders, and a swath next to the road shoulders remaining as mowed grass or in their present condition.

The trees create an implied buffer between the roadway and trail, provide shade for trail users, and help calm traffic. The trees, along with the prairie and trail, also strengthen the visual importance of the corridor. All improvements would be within the existing road right-of-way; the trail would join with the Hoover Nature Trail to create a community looped trail system.

Design Expertise Recommended
Projects may required help beyond the capability of the visioning committee or available city staff. For this project the committee should expect to involve the following design professionals: landscape architect. The landscape architect may bring other specialized design professionals onto the team or recommend their involvement as the scope of work is finalized.

This project will require coordination and communication throughout the planning and designing process with the Louisa County Engineer and adjacent landowners.

Existing North Entryway via Main Street

Existing Highway 78 Corridor

Existing Highway 78 Corridor

Proposed Concept: North Entryway via Main Street, looking south

Proposed Concept: Highway 78 Corridor Near Hoover Nature Trail Entrance, looking west

Proposed Concept: Highway 78 curve between Kearny and Main Streets, looking easterly

Proposed Community Caps for Way-finding Signage

Gateways: North Community Entryway

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

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

The concept above illustrates the use of native prairie in the ditches, an entrance sign to match the existing entrance sign along Hwy. 78, and the use of a limestone base to elevate the sign to a better visual height and to allow for landscaping (with year-round interest) to "frame" and highlight the sign. The sign is located outside of the road right-of-way, which is in accordance with safety requirements.

Gateways: Highway 78 Corridor

The above concept takes advantage of Highway 78's existing wide public right-of-way and of the overhead utility being located on only one side of the roadway.

As illustrated, a separated recreational trail which is part of the proposed Morning Sun trail) is proposed for the north side of the roadway along with overstory deciduous trees. Native prairie, as proposed for the north community entryway, is proposed for both sides of the roadway with the field entrances, trail shoulders, and a swath next to the road shoulders remaining as mowed grass or in their present condition.

The trees create an implied buffer between the roadway and trail, provide shade for trail users, and help calm traffic. The trees, along with the prairie and trail, also strengthen the visual importance of the corridor. All improvements would be within the existing road right-of-way; the trail would join with the Hoover Nature Trail to create a community looped trail system.

Way-finding

Way-finding signage helps visitors navigate a community and strengthens a community's branding efforts. Four possible options are shown for the community caps. It is important that the same graphics/logo used on the community cap is utilized on all other community signage and branding efforts in order to be effective.

The photo edit illustrates how simply replacing a fallow area with a maintained native prairie and utilizing way-finding signage with a community cap can change a view.

Morning Sun

Gateways & Way-finding

Flenker Land Architecture Consultants, LLC
LA: Meg K. Flenker, PLA, CPESC, CPSWQ
Intern: Richard Garcia
Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

HIGHWAY 78 CORRIDOR**** Concept (See Board #11 for Visual)					10/2/2017
Description	*Estimated Quantity*	*Unit*	*Estimated Unit Cost*	*Estimated Line Total*	*Estimated Totals*
Site Grading & Earthwork					***$12,000.00***
Site Prep for Native Seeding	1	LS	$ 12,000.00	$ 12,000.00	
Pavement					***$212,400.00***
PCC Pedestrian Pavement (Trail), 10' Wide	26,550	SF	$ 8.00	$ 212,400.00	
Utilities					*
*Potential Utility and Structure Adjustment				*	
Landscaping					***$30,000.00***
Native Prairie Seeding In Ditch	5.25	Acre	$ 3,500.00	$ 18,375.00	
Deciduous Overstory Trees (+/- Avg. 100' O.C. Spacing)	33	EA	$ 350.00	$ 11,550.00	
Miscellaneous					***$10,000.00***
Way-finding Signage with Community Cap				***TBD***	
Traffic Control, Erosion and Sediment Control and Mobilization	1	LS	$ 10,000.00	$ 10,000.00	
Sub-Total					***$264,400.00***
Preliminary Concept Phase Contingency (15%)					$39,700.00
Professional Design Fees (+/- 15%)					$45,700.00
Total Preliminary Opinion of Probable Cost					***$349,800.00***

* = Utility needs and associated costs will need to be determined during final design and are not included in cost estimate

CY = Cubic Yard EA = Each LF = Lineal Foot LS = Lump Sum SF = Square Foot SY = Square Yard

**** Cost estimate for corridor segment between S. Blair Street and eastern corporate limits

Primary Corridors & Stormwater Management

The concepts presented on board 12 illustrate some of the treatments/methods that can be utilized to address a variety of issues identified by the community.

Bio-swales are a sustainable method to help manage stormwater, improve water quality, and create microhabitats. Deciduous trees planted along the eastern border of Locust Grove Park define the park boundary and provide some buffering to the adjacent residences while also providing shade and creating a more "park like" feel. Trees planted along the road corridor (as shown in the Church Street concept) provide shade, visually strengthen the corridor, improve the streetscape aesthetics and help improve air quality.

ADA-compliant sidewalks improve accessibility, enhance safety, and visually strengthen the primary corridors while providing important connectivity. Sidewalks on both sides of the primary corridors also help visually imply their importance.

Providing separate pedestrian and vehicular entrances to Locust Grove Park assist in improving circulation and safety as well as improve the parks appeal to users. Changing the color of the lettering on the park sign to one with more contrast improves the readability of the sign and allows for easier identification by motorists.

Access control along roadways helps improve circulation and safety as well as reduces the amount of unnecessary pavement and/or gravel. This in turn reduces stormwater runoff, improves stormwater quality and creates a more organized and aesthetically pleasing streetscape.

Access control simply means that the city would require that access drives be located a safe distance from intersections, and that the widths of the drives and radii are designed to accommodate the intended types of vehicles.

Design Expertise Recommended

Projects may required help beyond the capability of the visioning committee or available city staff. For this project the committee should expect to involve the following design professionals: landscape architect. The landscape architect may bring other specialized design professionals onto the team or recommend their involvement as the scope of work is finalized.

SIDEWALK & BIO-SWALE BY LOCUST PARK**** Concept (See Board #12 for Visual)					10/2/2017
Description	***Estimated Quantity***	***Unit***	***Estimated Unit Cost***	***Estimated Line Total***	***Estimated Totals***
Site Grading & Earthwork					***$33,300.00***
Demolition and Site Prep for Improvements	1	LS	$ 6,500.00	$ 6,500.00	
Bio-swale Complete excluding plantings	2100	SF	$ 12.75	$ 26,775.00	
Utilities					***$0.00***
*Potential Utility and Structure Adjustment				*	
Pavement					***$16,500.00***
Pedestrian Pavement, 6' Wide (Sidewalk)	2,750	SF	$ 6.00	$ 16,500.00	
Landscaping					***$14,900.00***
Deciduous Overstory Trees (East side of park)	11	EA	$ 350.00	$ 3,850.00	
BioSwale Plantings	2100	EA	$ 5.00	$ 10,500.00	
Seeding Lawn Area	0.12	Acre	$ 4,500.00	$ 540.00	
Miscellaneous					***$9,000.00***
Interpretive Singage	1	EA	$ 1,500.00	$ 1,500.00	
Chain Link Fence Pedestrian Entrance Gate	1	LS	$ 1,200.00	$ 1,200.00	
Repainting of Park Sign	1	LS	$ 250.00	$ 250.00	
Traffic Control, Mobilization, Erosion and Sediment Control	1	LS	$ 6,000.00	$ 6,000.00	
Sub-Total					***$73,700.00***
Preliminary Concept Phase Contingency (15%)					***$11,100.00***
Professional Design Fees (+/- 15%)					$12,800.00
Total Preliminary Opinion of Probable Cost					***$97,600.00***

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CY = Cubic Yard EA = Each LF = Lineal Foot LS = Lump Sum SF = Square Foot SY = Square Yard

**** South side of street between eastern most school ingress/egress drive and entrance drive to Lion's Locust Park

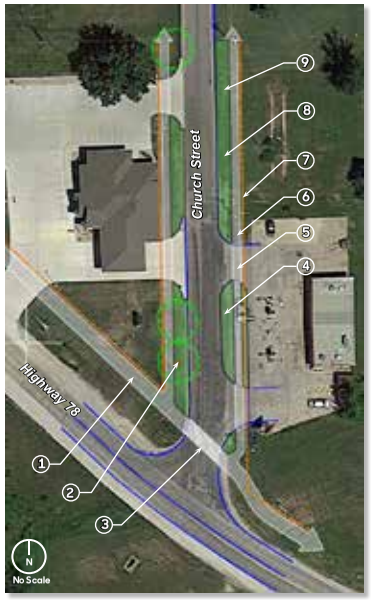
Existing Division Street

Existing Lion's Locust Grove Park Sign

Existing Church Street

Proposed Concept: E. Division Street between School and Lion's Locust Park entrance, looking east

Proposed Concept: Church Street at Highway 78, looking northerly



Thumbnail Sketch of Proposed Concept for Church Street at Higway 78

Notes For Church St. Plan

1. PROPOSED MORNING SUN TRAIL
2. DECIDUOUS STREET TREES
3. CROSSWALK
4. EXCESS PAVEMENT REPLACED WITH MAINTAINED GRASS
5. ACCESS DRIVE
6. ADA-COMPLIANT SIDEWALK
7. EXISTING ROAD RIGHT-OF-WAY
8. MAINTAINED GRASS
9. WAY-FINDING SIGNAGE

Notes For E. Division Street Proposed Concept

1. EXISTING PARK SIGN WITH DIFFERENT COLOR OF LETTERING (SEE ENLARGED EDIT)
2. NATIVE PLANTS SUITABLE FOR SITE CONDITIONS AND WINTER STREET TREATMENTS
3. EXISTING MAINTAINED LAWN AND SUBSOIL
4. MULCH
5. AMENDED/ENGINEERED SOIL MATRIX
6. PERFORATED SUBDRAIN, IF NECESSARY
7. DRAINAGE STONE
8. ADA -COMPLIANT SIDEWALK
9. PEDESTRIAN ACCESS TO PARK; LOCKABLE GATE
10. DECIDUOUS TREES ALONG PERIMETER OF PARK FOR BUFFER

Proposed Enhancement to Lion's Locust Grove Park Sign

Primary Corridors & Stormwater Management

The concepts presented on this board illustrate some of the treatments/methods that can be utilized to address a variety of issues identified by the community.

Bio-swales are a sustainable method to help manage stormwater, improve water quality, and create microhabitats.

Deciduous trees planted along the eastern border of Locust Grove Park define the park boundary and provide some buffering to the adjacent residences while also providing shade and creating a more "park like" feel. Trees planted along the road corridor (as shown in the Church Street concept) provide shade, visually strengthen the corridor, improve the streetscape aesthetics and help improve air quality.

ADA-compliant sidewalks improve accessibility, enhance safety, and visually strengthen the primary corridors while providing important connectivity. Sidewalks on both sides of the primary corridors also help visually imply their importance.

Providing separate pedestrian and vehicular entrances to Locust Grove Park assist in improving circulation and safety as well as improve the parks appeal to users. Changing the color of the lettering on the park sign to one with more contrast improves the readability of the sign and allows for easier identification by motorists.

Access control along roadways helps improve circulation and safety as well as reduces the amount of unnecessary pavement and/or gravel. This in turn reduces stormwater runoff, improves stormwater quality and creates a more organized and aesthetically pleasing streetscape.

Access control simply means that the city would require that access drives be located a safe distance from intersections, and that the widths of the drives and radii are designed to accommodate the intended types of vehicles.

Morning Sun

Primary Corridors & Stormwater Management

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Iowa's Living Roadways community visioning

Downtown Enhancements

The concept plans presented on this boards 13 and 14 illustrate methods for improving accessibility, connectivity, safety, way-finding, circulation and the overall aesthetics of the downtown area (re: Emerging Themes, Board 3c). Also addressed are ways that the city can incorporate public art and more greenspace.

Implementing the proposed enhancements should be part of the city's overall revitalization plan and efforts for attracting businesses and people to Morning Sun. Improvements proposed for the downtown can be retrofitted into the existing streetscape as illustrated and they can be staged/phased in over a period of time.

Following are some of the elements of the downtown enhancement plans:

- ADA-compliant sidewalks on both sides of the street and ADA-compliant crosswalks - all to encourage pedestrian traffic
- Curbed bump-outs on the corners of intersections along Division Street to help calm traffic and incorporate more greenspace into the downtown area as well as provide a place for street trees. The street trees will provide some much needed shade to the downtown
- Way-finding signage
- Delineated parking stalls to maximize parking spaces
- Designated handicapped stalls placed in each block of the downtown to comply with governmental regulatory requirements
- Decorative lighting and site amenities such as benches and trash receptacles
- Seating area in the NW corner of Main St. and Division St. intersection

The image edit shown on board 14 provides a visual of how the aesthetics of the downtown area would be changed if the proposed concept plan was implemented.

The changes include: landscaped bump-outs; murals; decorative lighting; delineated crosswalks; access control; way-finding signage; ADA compliant sidewalks and street crossings; street trees; and well defined roadways due to the removal of excess pavement/gravel and replacement with maintained grass.

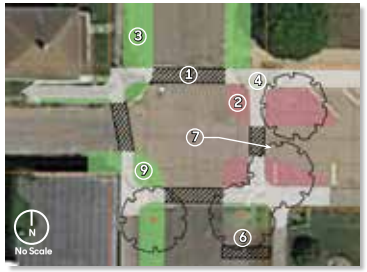
Design Expertise Recommended

Projects may required help beyond the capability of the visioning committee or available city staff. For this project the committee should expect to involve the following design professionals: landscape architect civil engineer, electrical engineer, and surveyor.

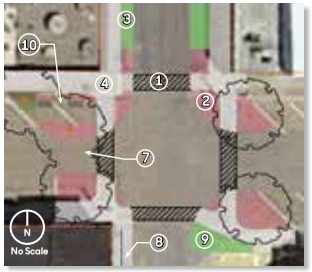
This project will require coordination and communication throughout the planning and designing process with the Louisa County Engineer.

Existing aerial of Division Street

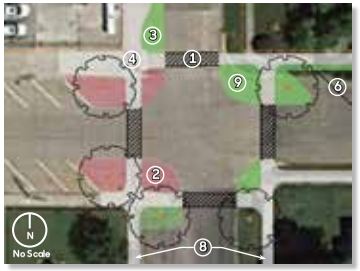
Proposed concept plan for downtown streetscape enhancement along Division St. from Kearny St. to Church St.



Enlarged concept plan of Kearny St. & Division St. intersection with proposed trees outlined (no color)



Enlarged concept plan of Main St. & Division St. intersection with proposed trees outlined (no color)



Enlarged concept plan of Church St. & Division St. intersection with proposed trees outlined (no color)

Downtown Enhancements:

The concept plans presented on this board and Board 14 illustrate methods for improving accessibility, connectivity, safety, way-finding, circulation and the overall aesthetics of the downtown area (re: Emerging Themes, Board 3c). Also addressed are ways that the city can incorporate public art and more greenspace .

Implementing the proposed enhancements should be part of the city's overall revitalization plan and efforts for attracting businesses and people to Morning Sun. Improvements proposed for the downtown can be retrofitted into the existing streetscape as illustrated and they can be staged/phased in over a period of time.

Following are some of the elements of the downtown enhancement plans:

- ADA-compliant sidewalks on both sides of the street and ADA-compliant crosswalks - all to encourage pedestrian traffic
- Curbed bump-outs on the corners of intersections along Division Street to help calm traffic and incorporate more greenspace into the downtown area as well as provide a place for street trees. The street trees will provide some much needed shade to the downtown
- Way-finding signage
- Delineated parking stalls to maximize parking spaces
- Designated handicapped stalls placed in each block of the downtown to comply with governmental regulatory requirements
- Decorative lighting and site amenities such as benches and trash receptacles
- Seating area in the NW corner of Main St. and Division St. intersection

Notes For Concept Plans

1. DELINEATED CROSSWALK
2. MULCHED PLANTING AREA IN BUMP-OUT WITH SHORT PLANTINGS TO ALLOW VISIBILITY. PLANTINGS USED TO HIGHLIGHT THE DOWNTOWN AREA
3. PAVEMENT/ GRAVEL REPLACED WITH MAINTAINED GRASS OR GRASS AREA WIDENED TO STANDARDIZE TWO-WAY STREET WIDTH TO ENHANCE SAFETY, CIRCULATION AND STREETSCAPE
4. ADA-COMPLIANT SIDEWALK AND RAMP AT STREET CROSSINGS
5. DECIDUOUS STREET TREES PLANTED IN BUMP OUT TO HIGHLIGHT INTERSECTIONS, PROVIDE SHADE AND IMPROVE AESTHETICS; TREES PLANTED OUTSIDE OF THE SIGHT TRIANGLE
6. DELINEATED PARKING STALLS WITH REQUIRED NUMBER OF DESIGNATED HANDICAPPED STALLS
7. NARROWED STREET ENTRANCE TO VISUALLY ALERT VISITORS DRIVING THAT THIS SECTION OF DIVISION STREET IS A ONE-WAY
8. CONTINUE ADA-COMPLIANT SIDEWALK ALONG PRIMARY CORRIDOR TO HWY. 78
9. GRASSED AREA IN BUMP-OUT MAINTAINED LAWN
10. SEATING AREA WITH BENCHES, RAISED PLANTER AND DECORATIVE PAVING
11. WAY-FINDING SIGNAGE

Morning Sun

Downtown Enhancements 1

Flenker Land Architecture Consultants, LLC
LA: Meg K. Flenker, PLA, CPESC, CPSWQ
Intern: Richard Garcia
Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

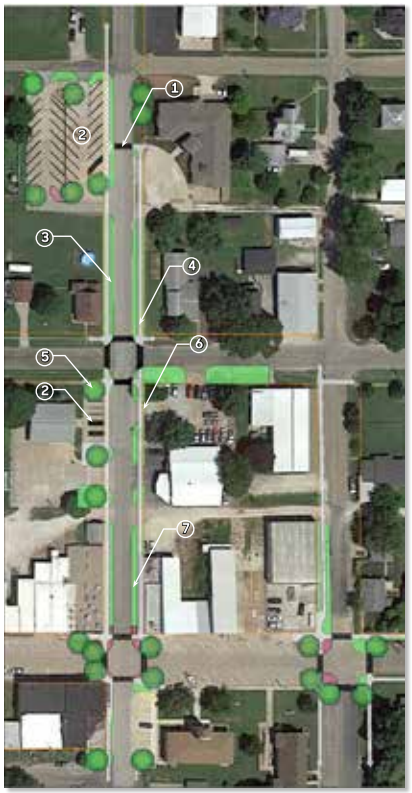
DOWNTOWN STREETSCAPE Concept (See Boards #13 for Visual)					10/2/2017
Description	***Estimated Quantity***	***Unit***	***Estimated Unit Cost***	***Estimated Line Total***	***Estimated Totals***
E. Division St. & Kearney St. Intersection					***$111,300.00***
Demolition and removal of existing pavement/surface for improvements	8702	SF	$ 2.00	$ 17,404.00	
Potential Utility Adjustments	1	LS	$ 10,000.00	$ 10,000.00	
Concrete Paving - Curbs	338	LF	$ 20.00	$ 6,760.00	
Concrete Paving - Sidewalk	2055	SF	$ 8.00	$ 16,440.00	
Asphalt Paving - Street Repairs (figured 25% of adjacent roadway)	2492	SF	$ 4.45	$ 11,089.40	
Pavement Marking for Crosswalks and Parking Stalls	804	LF	$ 1.50	$ 1,206.00	
Handicap Logo Pavement Marking	2	EA	$ 60.00	$ 120.00	
Handicap Parking Sign and Post	2	EA	$ 300.00	$ 600.00	
Permanent Traffic Control Signage	1	LS	$ 750.00	$ 750.00	
Seeding Lawn	2381	SF	$ 0.50	$ 1,190.50	
Site Grading/Amended Soil for Tree Wells, lawn and planting areas	115	CY	$ 65.00	$ 7,475.00	
Deciduous Trees	4	EA	$ 350.00	$ 1,400.00	
Perennial Planting in Bump Outs	1	LS	$ 10,000.00	$ 10,000.00	
Shredded Hardwood Mulch for Perennial Plantings	10	CY	$ 65.00	$ 650.00	
Decorative Street Lighting	6	EA	$ 2,700.00	$ 16,200.00	
Traffic Control, Mobilization, and Erosion and Sediment Control	1	LS	$ 10,000.00	$ 10,000.00	
Sub-Total					***$111,300.00***
Preliminary Concept Phase Contingency (15%)					***$16,700.00***
Professional Design Fees (+/- 15%)					$19,200.00
Total Preliminary Opinion of Probable Cost					***$147,200.00***

CY = Cubic Yard EA = Each LF = Lineal Foot LS = Lump Sum SF = Square Foot SY = Square Yard TBD = To Be Determined

DOWNTOWN STREETSCAPE Concept (See Boards #13 & 14 for Visual)					10/2/2017
Description	***Estimated Quantity***	***Unit***	***Estimated Unit Cost***	***Estimated Line Total***	***Estimated Totals***
E. Division St. & Main St. Intersection (* Product Cost Only, No Labor for Installation Included)**					***$133,000.00***
Demolition and removal of existing pavement/surface for improvements	5205	SF	$ 2.00	$ 10,410.00	
Potential Utility Adjustments	1	LS	$ 15,000.00	$ 15,000.00	
Concrete Paving - Curbs	570	LF	$ 20.00	$ 11,400.00	
Concrete Paving - Sidewalk	2215	SF	$ 8.00	$ 17,720.00	
Decorative Pedestrian Paving (Seating Area)	200	SF	$ 12.00	$ 2,400.00	
Asphalt Paving - Street Repairs (figured 25% of adjacent roadway)	1300	SF	$ 4.45	$ 5,785.00	
Pavement Marking for Crosswalks and Parking Stalls	1240	LF	$ 1.50	$ 1,860.00	
Decorative Cast-In-Place Planter (Seating Area)	2	EA	$ 6,400.00	$ 12,800.00	
Handicap Logo Pavement Marking	2	EA	$ 60.00	$ 120.00	
Handicap Parking Sign and Post	2	EA	$ 300.00	$ 600.00	
Permanent Traffic Control Signage	1	LS	$ 750.00	$ 750.00	
Seeding Lawn	664	SF	$ 0.50	$ 332.00	
Site Grading/Amended Soil for Tree Wells, lawn and planting areas	150	CY	$ 65.00	$ 9,750.00	
Deciduous Trees	7	EA	$ 350.00	$ 2,450.00	
Perennial Planting in Bump Outs	1	LS	$ 10,500.00	$ 10,500.00	
Shredded Hardwood Mulch for Perennial Plantings	12	CY	$ 65.00	$ 780.00	
Decorative Street Lighting	6	EA	$ 2,700.00	$ 16,200.00	
***Benches	2	EA	$ 1,425.00	$ 2,850.00	
*** Trash Receptacle	1	EA	$ 1,200.00	$ 1,200.00	
Traffic Control, Mobilization, and Erosion and Sediment Control	1	LS	$ 10,000.00	$ 10,000.00	
Sub-Total					***$133,000.00***
Preliminary Concept Phase Contingency (15%)					***$20,000.00***
Professional Design Fees (+/- 15%)					$23,000.00
Total Preliminary Opinion of Probable Cost					***$176,000.00***

CY = Cubic Yard EA = Each LF = Lineal Foot LS = Lump Sum SF = Square Foot SY = Square Yard TBD = To Be Determined

Existing areal of Main St. corridor from Division St. north to 2nd Street.



Proposed concept plan for downtown streetscape enhancement along Main Street.

Notes For Concept Plan

1. DELINEATED CROSSWALK
2. PARKING LOT WITH STALLS DELINEATED; INCLUDES THE REQUIRED NUMBER OF DESIGNATED HANDICAP STALLS AND INCORPORATION OF ISLANDS FOR GREENSPACE
3. WAY-FINDING SIGNAGE
4. ADA COMPLIANT SIDEWALK AND RAMP AT STREET CROSSINGS
5. DECIDUOUS STREET TREES TO PROVIDE SHADE AND IMPROVE AESTHETICS
6. ACCESS CONTROL TO IMPROVE SAFETY, CIRCULATION AND AESTHETICS WHILE ENHANCING STORM WATER QUALITY AND MINIMIZING STORM WATER RUNOFF
7. PAVEMENT/GRAVEL REPLACED WITH MAINTAINED GRASS OR GRASS AREA WIDENED TO STANDARDIZE TWO-WAY STREET WIDTH TO ENHANCE SAFETY, CIRCULATION AND STREETSCAPE

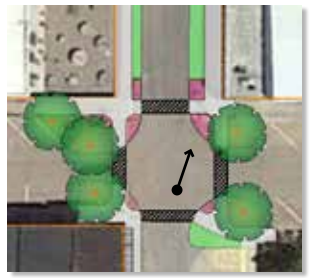
Existing NE Corner of Main St. & Division Intersection

Proposed Concept: Main St. & Division Intersection, looking Northeast

Downtown Enhancements

The image edit above provides a visual of how the aesthetics of the downtown area would be changed if the proposed concept plan was implemented.

The changes include: landscaped bump-outs; murals; decorative lighting; delineated crosswalks; access control; way-finding signage; ADA compliant sidewalks and street crossings; street trees; and well defined roadways due to the removal of excess pavement/gravel and replacement with maintained grass.



Enlarged conecept plan showing location and direction that photo was taken for the image edit shown to the upper left.

Morning Sun

Downtown Enhancements 2

Flenker Land Architecture Consultants, LLC
LA: Meg K. Flenker, PLA, CPESC, CPSWQ
Intern: Richard Garcia
Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

DOWNTOWN STREETSCAPE Concept (See Boards #13 & 14 for Visual)					10/2/2017
Description	***Estimated Quantity***	***Unit***	***Estimated Unit Cost***	***Estimated Line Total***	***Estimated Totals***
E. Division St. & Church St. Intersection (See Note 1)					***$132,300.00***
Demolition and removal of existing pavement/surface for improvements	6592	SF	$ 2.00	$ 13,184.00	
Potential Utility Adjustments	1	LS	$ 1,000.00	$ 1,000.00	
Concrete Paving - Curbs	465	LF	$ 20.00	$ 9,300.00	
Concrete Paving - Sidewalk	3855	SF	$ 8.00	$ 30,840.00	
Asphalt Paving - Street Repairs (figured 25% of adjacent roadway)	1650	SF	$ 4.45	$ 7,342.50	
Pavement Marking for Crosswalks and Parking Stalls	10631	LF	$ 1.50	$ 15,946.50	
Handicap Logo Pavement Marking	1	EA	$ 60.00	$ 60.00	
Handicap Parking Sign and Post	1	EA	$ 300.00	$ 300.00	
Permanent Traffic Control Signage	1	LS	$ 750.00	$ 750.00	
Seeding Lawn	1864	SF	$ 0.50	$ 932.00	
Site Grading/Amended Soil for Tree Wells, lawn and planting areas	126	CY	$ 65.00	$ 8,190.00	
Deciduous Trees	6	EA	$ 350.00	$ 2,100.00	
Perennial Planting in Bump Outs	1	LS	$ 5,255.00	$ 5,255.00	
Shredded Hardwood Mulch for Perennial Plantings	10	CY	$ 65.00	$ 650.00	
Decorative Street Lighting	10	EA	$ 2,700.00	$ 27,000.00	
Traffic Control, Mobilization, and Erosion and Sediment Control	1	LS	$ 10,000.00	$ 10,000.00	
Sub-Total					***$132,300.00***
Preliminary Concept Phase Contingency (15%)					***$19,900.00***
Professional Design Fees (+/- 15%)					$22,900.00
Total Preliminary Opinion of Probable Cost					***$175,100.00***

CY = Cubic Yard EA = Each LF = Lineal Foot LS = Lump Sum SF = Square Foot SY = Square Yard TBD = To Be Determined

DOWNTOWN STREETSCAPE Concept (See Boards #13 & 14 for Visual)					10/2/2017
Description	***Estimated Quantity***	***Unit***	***Estimated Unit Cost***	***Estimated Line Total***	***Estimated Totals***
Main St. (See Note 1)					***$181,300***
Demolition and removal of existing pavement/surface for improvements	11700	SF	$ 2.00	$ 23,400.00	
Potential Utility Adjustments	1	LS	$ 10,000.00	$ 10,000.00	
Concrete Paving - Sidewalk	8262	SF	$ 8.00	$ 66,096.00	
Asphalt Paving - Street Repairs (figured 25% of adjacent roadway)	3000	SF	$ 4.45	$ 13,350.00	
Pavement Marking for Crosswalks and Parking Stalls	1037	LF	$ 1.50	$ 1,555.50	
Permanent Traffic Control Signage	1	LS	$ 1,200.00	$ 1,200.00	
Seeding Lawn	3365	SF	$ 0.50	$ 1,682.50	
Site Grading/Amended Soil for lawn	84	CY	$ 65.00	$ 5,460.00	
Deciduous Trees	2	EA	$ 350.00	$ 700.00	
Decorative Street Lighting	14	EA	$ 2,700.00	$ 37,800.00	
Traffic Control, Mobilization, and Erosion and Sediment Control	1	LS	$ 20,000.00	$ 20,000.00	
Sub-Total					***$181,300.00***
Preliminary Concept Phase Contingency (15%)					***$27,200.00***
Professional Design Fees (+/- 15%)					$31,300.00
Total Preliminary Opinion of Probable Cost					***$239,800.00***

CY = Cubic Yard EA = Each LF = Lineal Foot LS = Lump Sum SF = Square Foot SY = Square Yard TBD = To Be Determined

Note 1: Cost estimate is for proposed enhancements for Main St. from 1st alley north of Main St. & E. Division St. intersection.
Estimate does not improvements or plantings outside of the road right-of-way limits (i.e.: post office and community center parking lots)

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 Morning Sun. Although there is much value in data gathering, analysis, conclusions, and recommendations, the greatest value is providing residents of Morning Sun 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

The design team believes and recommends that projects that address and resolve safety and accessibility issues should be the highest priority, especially those that target children, the elderly, the disabled and the mobility impaired. Unfortunately, the reality is that outside funding sources and opportunities are not always available for projects that specifically address such issues. In these cases, integrating such improvements with other elements, such as a recreational trail, can garner better outside funding support while still addressing the safety and accessibility issues.

While there are many factors that go into determining project implementation priority order, the primary factors can be summarized as:

- Improvement to safety and accessibility
- Greatest return on investment
- Impact by or to other potential projects
- Funding availability
- Level of complexity
- Needs and desires expressed by residents

Project importance may also shift based on available funding sources and opportunities, thus, all project priority lists should be considered a "living" list.

It is important to remember that when phasing projects that the hardscape (i.e.: pavements), drainage and earthwork (if necessary) need to be phased BEFORE the landscaping. Too many times people install the landscape in beginning phases because they are able to secure funding for it right away. This is not the recommended way to phase. Phasing is done by completing one task at a time (i.e.: utility adjustment, then earthwork, then hardscape, then landscape) for all or a certain portion of the project. The reason for this is to ensure the best performing and functioning project, while minimizing waste. Ultimately, landscaping is the final thing done for project sites.

Available Resources

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

Funding Opportunities

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

Funding Sources

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

Grant Programs

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

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ENVIRONMENTAL, URBAN & RECREATIONAL
PLANNING & DESIGN

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