Final Report and Feasibility Study Gilmore City, Iowa



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Table of Contents

HDR Overview	3
Program Overview	4
Bioregional Assessment	6
Historical Settlement Patterns	6
Historical Vegetation	8
Regional Watersheds	10
Depth to Water Table	12
Elevation and Flow	14
Present-day Land Cover	16
Landscape Change Over Time	18
Transportation Assets and Barriers Assessment	20
Overview	20
What People Said	22
Emerging Themes	24
Transportation Inventory and Analysis	26
What, Where, & Why	28
Community Concept Plan	30
Three Rivers Trail	32
On-Street Bike Lanes	36
City Park	40
Downtown Improvements	44
Implementation Strategies	48



About HDR









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While we are most well-known for adding beauty and structure to communities through high performance buildings and smart infrastructure, we provide much more than that. We create an unshakable foundation for progress because our multidisciplinary teams include urban planners, engineers, economists, scientists, landscape architects, builders, analysts, and artists.

HDR is proud to be 100% employee owned.

Today, our expertise spans over 10,000 employees in more than 200 locations around the world. We're leveraging our global resources to improve our local communities and change the world for the better.

Architecture & Design

1917

year established

104

years in business

10.706

global employees

2.414

architecture and building engineering staff

761

sustainable accredited professionals

225

global office locations

38

China

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Notable Rankings

No. 5

Urban Design Building Design Magazine World Architecture 100 Survey, 2021

No. 2

Architecture/Engineering

Building Design+Construction, 2021

No. 3

Top 100 Global Design Firms Building Design World Architecture 100 Survey, 2021

No. 3

Top 300 Architecture Firms Architectural Record, 2021

No. 4

Top 50 Firms in Sustainability Architect 50, 2019

No. 1

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Program Overview

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

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

Capturing the Gilmore City Vision

Based on the needs and desires of the local residents, as well as a detailed inventory of community resources, the design team developed a conceptual transportation enhancement plan. This plan, as well as the inventory information, is illustrated in the following set of presentation boards. These boards include the Program Overview, Bioregional Assessment, Transportation Assets and Barriers Assessment, Transportation Behavior and Needs Assessment, Hispanic Interview, Transportation Inventory and Analysis, Concept Overview, and Community Design Boards.



collage for potential impi

Program Overview

Community Visioning Program. The program, which selects selected to participate in the 2023 lowa's Living Roadways along transportation corridors to small lowa communities communities through a competitive application process, provides professional planning and design assistance The City of Gilmore City is one of 10 communities (populations of fewer than 10,000).

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



Three Rivers Trail and on-street solutions within the community; The Gilmore City visioning committee identified several goals and priority areas during the visioning process, which include trail improvements, routes, and amenities to connect to the and enhancements to City Park and Downtown.

and the design team. In addition, ISU project staff and interns conduct a bioregional assessment and public input sessions, groups, and a random-sample survey. Iowa State University, Community Visioning is part, manage the visioning process including transportation assets and barriers (TAB) focus Architecture and ISU Extension and Outreach, of which along with Trees Forever and the lowa Department Iowa State University's Department of Landscape









'community vision" and transportation enhancement plan. Landscape Architects (PLA) to be part of the design team and work with the various communities in creating their of Transportation, select private-sector Professional

design team developed transportation-based community improvement project concepts, which are illustrated in the

following set of presentation boards:

2. Bioregional Assessments

1. Program Overview

Based on the needs and desires of the local residents, as well as a detailed inventory of community resources, the

Capturing the Gilmore City Vision

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

4. Transportation Inventory & Analysis 3. Transportation Assets and Barriers

Concept Plan Overview 5. What, Where, & Why

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

Community Goals

Downtown Improvements

City Park Enhancements

8. On-street Bike Lanes

7. Three Rivers Trail

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

- Improve pedestrian connectivity and accessibility
- Trail connectivity and access to regional networks
- Improving community amenities to provide opportunities for

HDR Inc.

lowa State University | Trees Forever | Iowa Department of Transportation LA: Jen Cross - PLA, ASLA Intern: Alex Aranas







Bioregional Assessment

Historical Settlement Patterns

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

Gilmore City in Context

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

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





Historical Vegetation

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

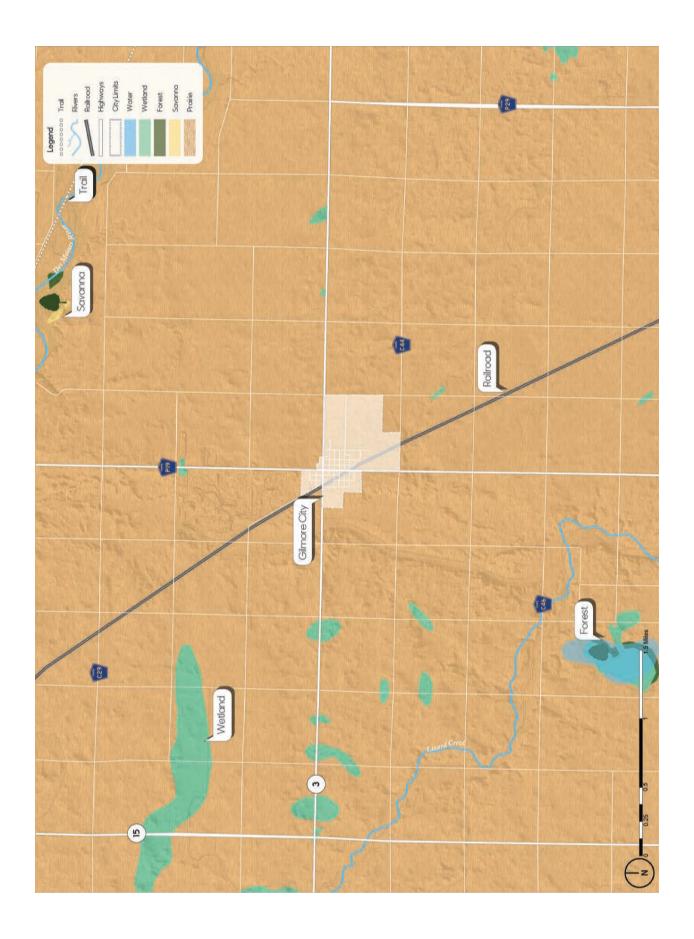
The plant community names mapped by the GLO surveyors varied. The original terminology they used has been preserved in the original data, but we have renamed them on this map to reflect names used to describe contemporary vegetation communities.

Not all communities will have all vegetation types, because various conditions that affect vegetation—such as geology, wind exposure, seasonally high water or groundwater, and frequency of fire—differ from place to place. Early land surveyors mapped the following vegetation types, some of which may not be present in the vicinity of your community:

The vegetation types are defined¹:

- 1. <u>Forest</u>: Tree dominated, with a mostly closed canopy. Ground vegetation shade tolerant, developed under infrequent fire.
- 2. <u>Prairie</u>: Perennial non-woody plants; fire dominated.
- 3. <u>Savanna</u>: Scattered trees, with an open canopy, and prairie below. Fire dominated.
- 4. <u>Wetland</u>: Perennial non-woody plants, water and fire dominated.

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



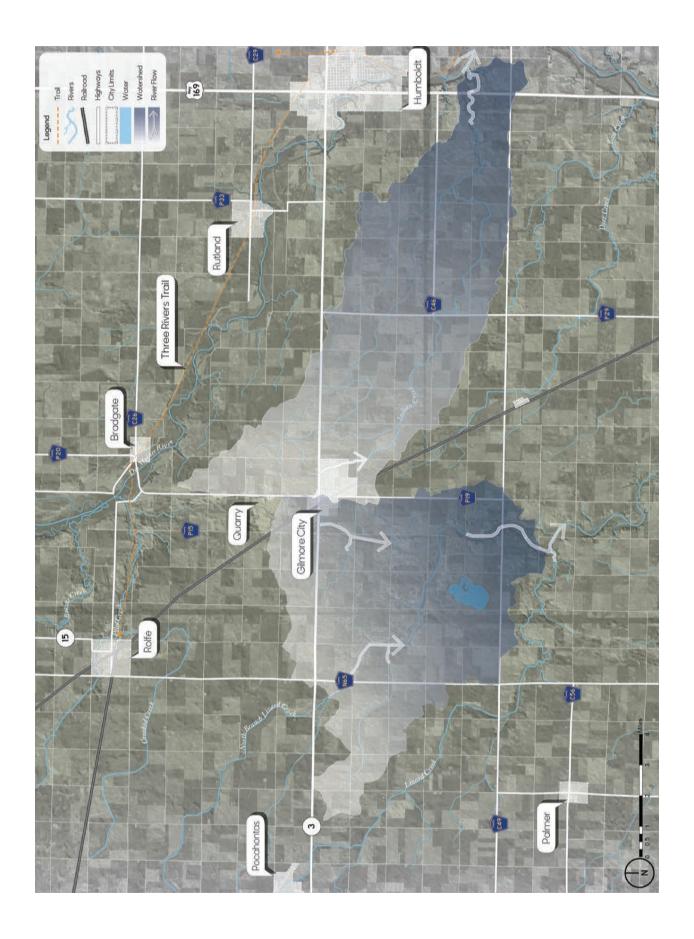


Regional Watershed

A watershed is a defined area or ridge of land with a boundary that separates waters flowing to different rivers, creeks, or basins. Watershed boundaries show the extent of a drainage area flowing to a single outlet point and determine whether precipitation is directed into one watershed or an adjacent watershed.

It is important to note that there are multiple levels of watersheds; for instance, the lowa River watershed is composed of a dozen smaller watersheds, and the lowa River watershed is a sub-basin of the Mississippi River watershed.

Where a community is located in relation to its surrounding watershed(s) determines its capacity to manage regional watershed issues such as flooding. For example, a community located near the end of a watershed (close to the outlet point) will have little capacity to reduce the amount of water draining toward it from upland areas.



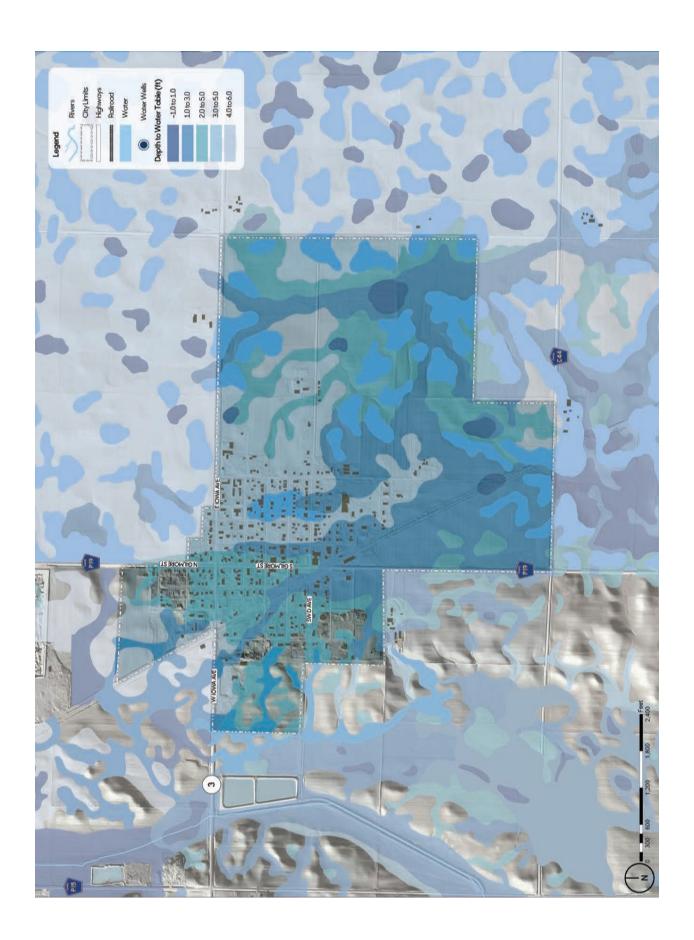


Depth to Water Table

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

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

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



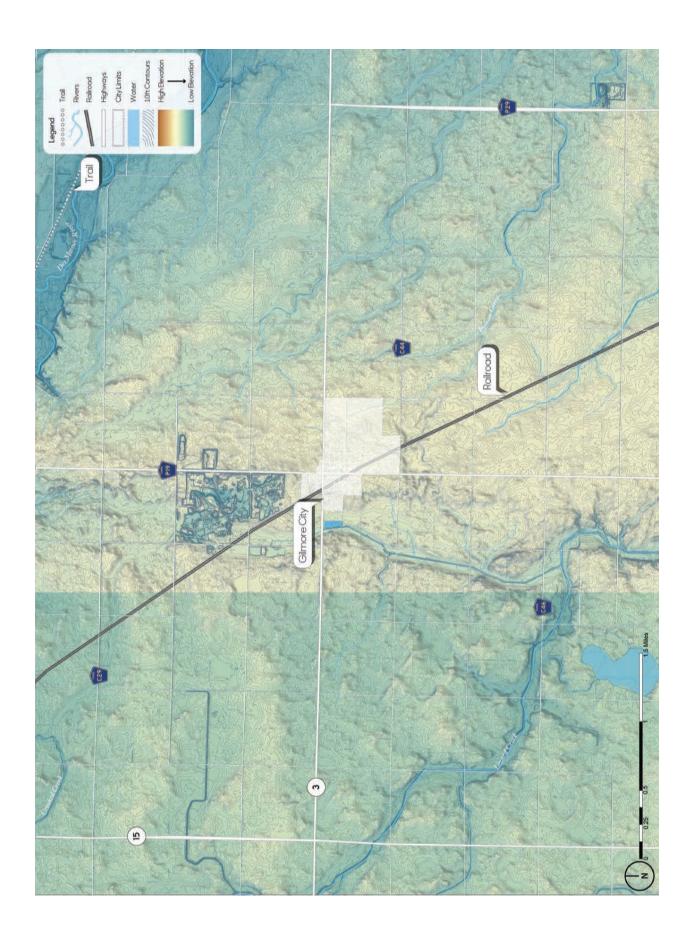


Elevation and Flow

This map displays topographic differences in elevation using a combination of contour lines and the color gradient depicted in the legend. The high and low points have also been located. Note the relationship of your community to the surrounding elevation. Is it located in a valley or on high ground, or is it split between the two?

If your community lies within or near a floodplain or floodway, the map reflects these features. Not all communities will have these elements; if they are absent on this map, none are present.

Flood risk is correlated to low-lying land. This map shows your community's flood risk as defined by the Federal Emergency Management Agency (FEMA) Flood Map Service Center. The map shows the two most important flood zones if present: the Base Flood and the Regulatory Floodway (consult legend). Base Flood is the zone having a 1% chance of being equaled or exceeded in any given year, also referred to as the "100-year floodplain." The Regulatory Floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% flood discharge can be accommodated without increasing the base flood elevation.





Present-day Land Cover

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

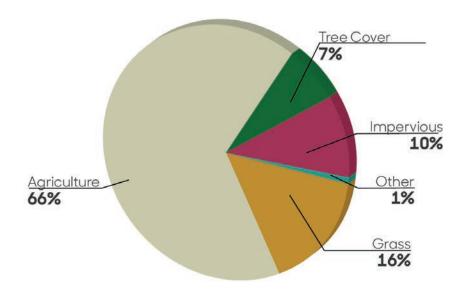
What do you observe about the dominant landcover types in your community?

Where is the tree canopy most concentrated?

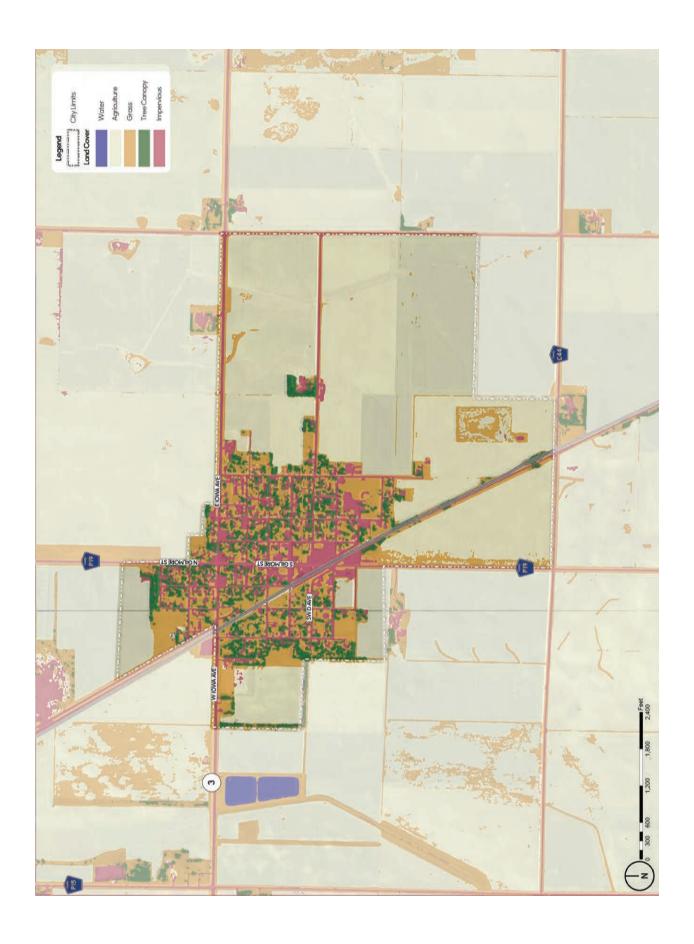
Look at how much of your community consists of impervious surfaces (e.g., parking lots, roads, buildings) compared to the other surfaces (e.g, water, grass, and agriculture). What does this mean for surface-water movement?

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

Percent Land Cover Type









Landscape Change Over Time

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

Trees are invaluable. They clean the air, create shade, and cool the atmosphere. They intercept rainfall and consume groundwater, which helps mitigate stormwater runoff. Carefully chosen and placed trees provide communities identity and residents with a sense of home. In lowa, a prairie state, we increased tree cover to create shade and a sense of enclosure within rural towns. Lack of natural fires and burning has also generally increased tree cover along rivers and floodplains. Other areas of trees have diminished due to clearing for roads, agriculture, or other purposes.

What changes do you see to the tree canopy surrounding your community? Where has the tree canopy decreased? Where might the tree canopy have increased? Consider what changes to the landscape might have led to the increase or decrease of trees in the region (e.g., farming practices, community development, establishing homesteads and windbreaks, preservation of natural resources).

This map also shows current and historical stream and river corridors. Alterations to waterways such as channelization have been made to increase drainage, but can lead to increased erosion, sediment movement, and flooding where the straightened portion ends. Storm sewers also affect streams and waterways where outfalls drop urban runoff into the corridor, which can dramatically decrease water quality. How have streams and rivers changed? Do these changes appear to be man-made or natural?

¹ This map shows the difference between the present day tree canopy gathered from the DNR's Land Cover data and past landscape cover, as defined in the General Land Office (GLO) surveys from 1836 through 1859 and the A.T. Andreas' Illustrated Historical Atlas of the State of Iowa from 1875.





Transportation Assets and Barriers

Overview

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

In this participatory assessment, we want to find out which factors and conditions affect transportation use in Gilmore City, where these factors and conditions are most prevalent, and how they influence route and transportation choices locally. Because residents have the best knowledge of how Gilmore City's transportation system works, we use focused, small-group conversations, mapping, and photos of the best and worst places taken by residents to understand local transportation.

Different Users = Different Needs

To capture insights about transportation from a variety of perspectives, we invited Gilmore City residents with different transportation needs to participate in focus groups. A total of 34 residents attended Gilmore City's workshop. Participants were separated into five user groups and the Gilmore City steering committee.



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.



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.



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.



This group uses primarily non-motorized modes of transportation, so pedestrianand 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.



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.



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.

Steering Committee



Well-maintained sidewalks provide great access to the many recreation amenities and places to rest at City Park.



Old, broken, and uneven sidewalks along Gilmore Street impede access for many users in the downtown.



Walkers, cyclists, and runners enjoy the smooth, even surface and the views of the school grounds and surrounding landscape along SE 4th Street.



The intersection of Gilmore Street and Hwy 3 is prone to heavy traffic and accidents. Residents want signage alerting drivers that highway traffic does not stop. Pedestrian access is challenging due to no crosswalks.

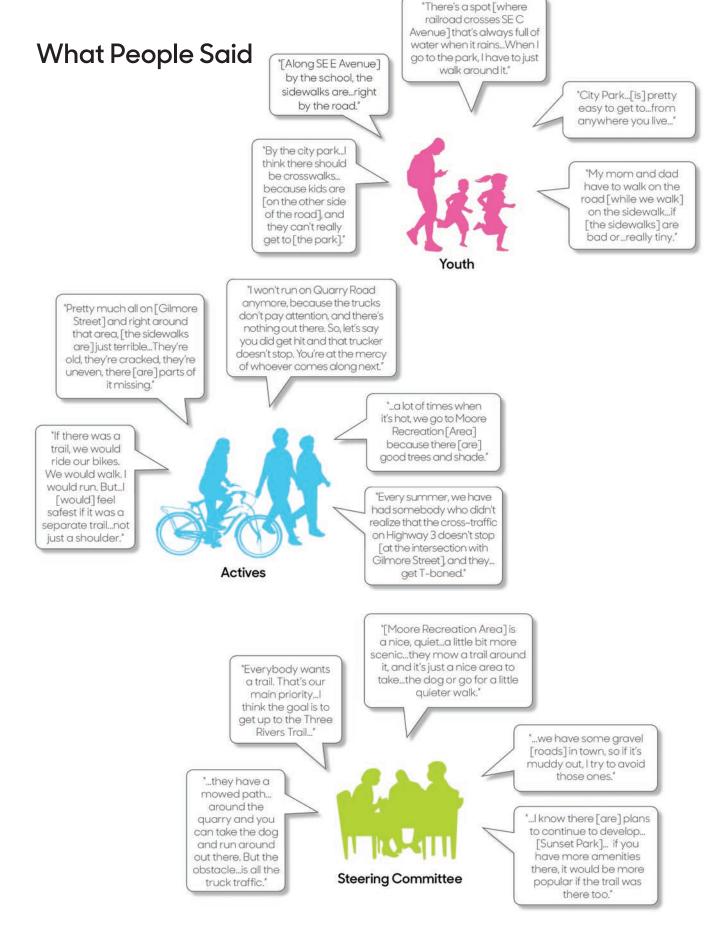


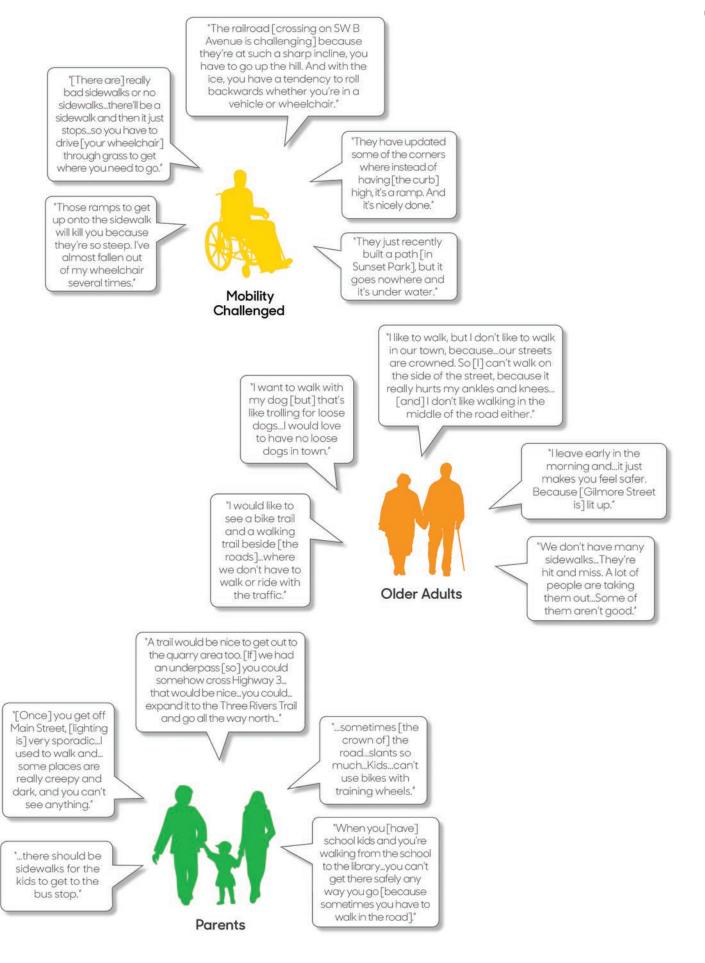
The newly paved trail in Sunset Park wends through the mature trees and connects adjacent open spaces that support a variety of activities.



Dips in the roadway and degraded surface conditions make for a rough railroad crossing on Gilmore Street. Pedestrians do not have dedicated access along this route or for crossing the tracks.









Emerging Themes

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

Actives walk, bike, and run regularly for recreation and/or exercise. Their activity is hindered by the absence of a safe pedestrian/cyclist connection to Moore Recreation Area. This group would like distance markers, trees, and benches along any trails developed.

Mobility-challenged individuals drive, walk, and use a wheelchair to get around town. This group is frustrated by the fact that public parking is not defined and there are virtually no handicapped parking spots. The handicapped parking that does exist is not wide enough. Steep ramps also cause problems for wheelchair users.

Older adults walk, bike, and drive cars and side-by sides. This group would like new, more level streets throughout town. They like to visit the school grounds to enjoy the scenery and "sit back and reflect the good old days from high school."

Youth walk and bike in town and ride the bus to school. Older youth drive cars, side-by-sides, golf carts, and four-wheelers. This group thinks that Sunset Park lacks opportunities for activities and want to see the trail finished. Youth like to go fishing and swimming at the quarry.

Parents walk, bike, and drive cars, side-by-sides, and golf carts. This group is concerned about the safety of their children. They do not feel safe crossing Highway 3 with kids on foot or by bike, and would like a pedestrian overpass or underpass across this busy road.

Steering committee members, walk, bike, and drive cars, golf carts, and side-by-sides. This group would like all the streets in town to be redone. Committee members suggested creating a public recreation venue in the vacant lot next to the new bank on SE C Avenue.

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	User Types	Actives	Mobility Challenged	Older Adults	Youth	Parents	IT-IN-VIIII Steering Committee	



Transportation Inventory and Analysis

Knowledge of the transportation systems in and around a community is critical for sustainable transportation enhancement planning. Gilmore City's transportation system includes roadways, sidewalks, and an active railroad.

The Gilmore City visioning design team met with the local officials to identify existing, past, and future transportation system capital improvements, maintenance activities and issues, and other transportation-related constraints and opportunities in the area.

Understanding the transportation system in and around Gilmore City is critical for placemaking and sustainable transportation improvements. The transportation systems include paved and unpaved roadways, pedestrian and bike trails, waterways, and railroad lines. Working with the lowa Department of Transportation (IDOT), county, and local officials, the visioning design team discussed and identified existing, past, and future transportation systems in and surrounding Gilmore City. The group discussed the systems, constraints, and opportunities to provide enhancements to several key locations within the community. The highest traffic through Gilmore City is along Highway 3 and County Road P19, which is the dividing line between Pocahontas and Humboldt Counties. Existing fourway stops slow traffic; however, residents would like pedestrian crossings and warning signs to improve the pedestrian experience.

- 1. County Road P19 will be reconstructed during fiscal year 2026. The county is responsible for the center 22 feet of roadway width. The county would be in support of a paved shoulder to aid in connecting Gilmore City to the Three Rivers Trail. The Martin Marietta Quarry on P19 is expanding its operations; resulting in increased truck traffic along and crossing P19 creating a conflict for bike/ped traffic if a paved shoulder is implemented for the trail connection.
- 2. Hwy 3 has updated railroad crossing signals/arms within city limits, but does not accommodate pedestrians. The community would like to install a trail crossing at this location to connect to the lagoons west of town, or to the Pits—the county park 1.5 miles from this location.
- 3. The railroad crossing at the intersection of P19 and SW/SE E Avenue needs new signalization and both pedestrian and vehicular crossing improvements. This intersection occurs in tangent with the co-op's large gravel lot and causes confusion for users. The crossing is rough and is at a sharp angle causing safety concerns. The city has submitted a railroad crossing improvement grant application for this location.



- 4. Hometown Pride, Three Rivers Trail, and the city are working on implementing a walking trail around Sunset Park that connects to the lagoons west of town. This trail loop would require a bike/ped trail connection along Hwy 3.
- 5. There are no significant issues with snow removal or drainage in town. Most drainage issues resolve themselves quickly throughout the neighborhoods.





What, Where, & Why

Programming Process

The What, Where, & Why meeting is a critical component in the development of a successful project. Setting and prioritizing goals allows us to focus our efforts and resources more effectively to help the community develop a vision for Gilmore City based on its goals.

The design team and Trees Forever facilitators met with the Gilmore City visioning committee to discuss its goals. The steering committee presented its takeaways from previous discussions about the transportation assets and barriers, focus group findings, transportation analysis, and bioregional information.

Using the nominal group method to organize the meeting and discussion, the committee identified goals and values based on information from the assessments. Each committee member shared their reasoning for specific programming needs in an open discussion format.

The landscape architecture team organized programming for Gilmore City using the improvements identified by the committee during the goal-setting meeting, emphasizing areas discussed during focus groups, and the efforts of the Hometown Pride Committee to develop options for feedback from the public during the open house. The chart on the right reflects these major themes and potential project locations as expressed throughout the goal-setting process.



Pedestrian Amenities



Trails



Community Amenities



Safety and Accessibility

Themes	Broad Goals	Why Change?	What & Where?
Pedestrian Amenities	Provide safe transportation options Recreation Promote healthy lifestyles	Improve pedestrian safety Fills a public need	Bike lanes, B Avenue Sharred bike lane, SE 4th Street On-street trail, D Avenue Trails at Sunset Park
Trails	Connect to larger trail network Provide trail amenities to the surrounding community Improve safety	Opportunities for economic development Improve cyclist and pedestrian safety Eliminate a need to drive to recreation destinations	North along P19 HWY 3 west, north along existing RR corridor West along HWY3, north via the cemetery, The Pits, north to Three Rivers Trail
Community Amenities	Provide places for activities in the community Increase community quality of life Draw people to downtown Connect and build community relationships Promote healthy living	Amenities contribute to improved quality of life Improves opportunities for physical activity and social interaction Provides destinations for community activities and events to improve economic development and housing development	School, ball fields and recreation City Park, playground, courts,etc. Downtown vacant lots Three Rivers Trail Interpretive signage On-street bike lanes
Safety and Accessibility	Improve sidewalks and street lighting Slow vehicular traffic Create equitable and accessible spaces	Improve vehicular/pedestrian crossings Additional lighting increases on-street trail usage and improves safety Increases accessibility to public amenities and enhances usership	HWY 3 traffic corridor enhancements ADA Play Equipment at City Park Sidewalks with curb cuts for accessibility throughout town Street lighting Pedestrian crossings at existing railroad crossings





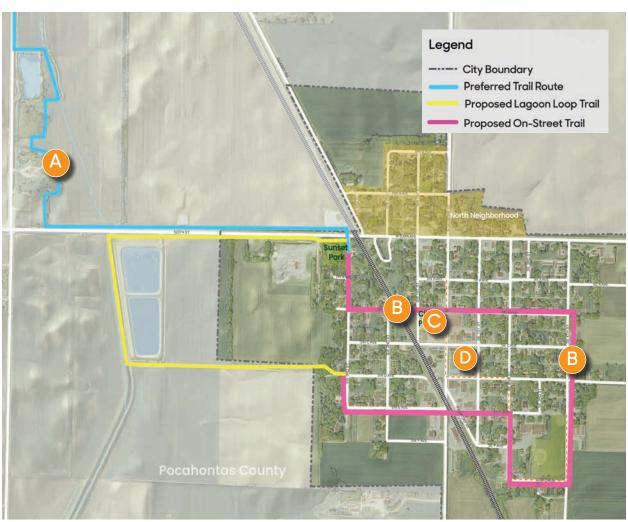
Community Concept Plan

Concept Plan Overview

The committee was very pragmatic in creating goals on which they could build a strong foundation and implement through phasing based on community size and funding available.

The committee gathered additional feedback during a workshop at the farmers market where 30+ individuals from the community commented on possible trail routes, amenities, and enhancements for the community. The design team created a digital survey for distribution online through Gilmore City's Facebook page and at events throughout the community, soliciting several additional responses in support of the proposed design concepts.

The images reflect these major themes and project locations as expressed throughout the project priority-setting process. The committee prioritized project areas based on the What, Where, & Why findings and focused on projects that acheived goal from multiple themes.



Themes identified by the committee include:



Pedestrian Amenities



Community Amenities



Trails



Safety and Accessibility



A) Three Rivers Trail



B) Community Bike Lanes



C) City Park

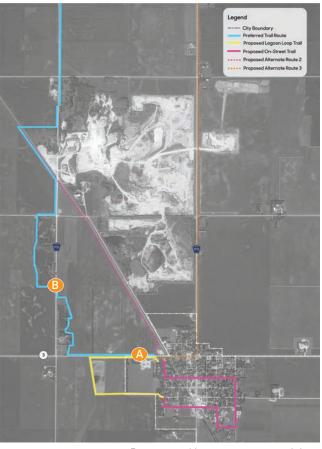


D) Downtown Enhancements



Three Rivers Trail

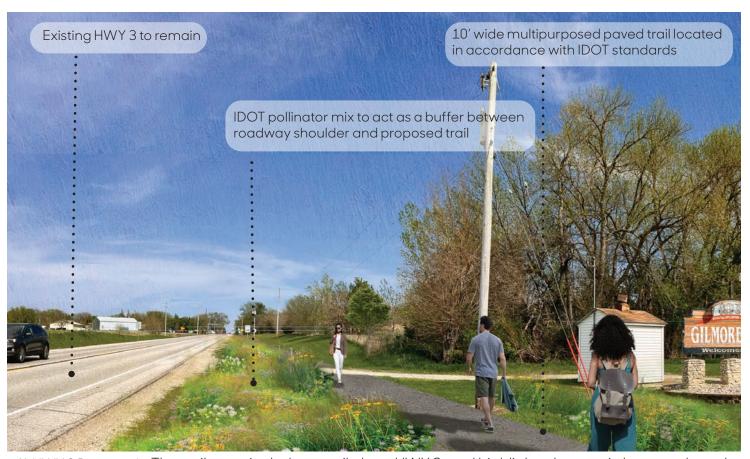
Connecting to the Three Rivers Trail has been a longtime goal for Gilmore City. Previous planning studies and exploration presented the community with three options to connect the trail. Residents offered feedback both in person during the design workshop and online as to which route they would prefer, with the majority of them selecting option A. This option will require coordination with the lowa DOT, existing landowners, and Pocahontas County for access through "The Pits." Option A offers the most scenic route, requires fewer easements, and reduces the number of property owners from whom to gain access for a 20'-wide easement at a minimum (5'-wide buffer, 10'-wide trail, 5'-wide buffer).



Proposed Improvements Map



B) Proposed trailhead - Trailhead amenities and improved trail conditions enhance the user experience were suggested at the design workshop. The image above depicts a new trailhead is outside city limits at the county park known locally as "The Pits".



A) HWY 3 Proposed - The trail route includes a trail along HWY 3, and highlights the scenic beauty along the cemetery, and the existing county park connecting north around the quarry to the Three Rivers Trail.





Opinion of Probable Cost Three Rivers Trail

Description	Quantity	Unit	Unit Cost		Extended Amount	
General Requirements						
Temporary Erosion Control	1	LS	\$	7,500.00	\$	7,500.00
Temporary Utilities	1	LS	\$	5,000.00	\$	5,000.00
Traffic Control	1	LS	\$	10,000.00	\$	10,000.00
Clearing & Grubbing	3	MI	\$	5,000.00	\$	15,000.00
Moblization	1	LS	\$	10,000.00	\$	10,000.00
Demolition						
General Site Preparation / Grading	1	LS	\$	20,000.00	\$	20,000.00
Amenities						
Bike Tune Up Station	1	LS	\$	1,200.00	\$	1,200.00
Trail Signage	12	EA	\$	250.00	\$	3,000.00
Trailhead Signage	2	EA	\$	3,500.00	\$	7,000.00
Tables		EA	\$	3,000.00	\$	12,000.00
Site Benches		EA	\$	1,750.00	\$	7,000.00
Trash Receptical		EA	\$	1,250.00	\$	1,250.00
Hardscape				•		·
10' Concrete Trail Paving - HWY 3	3,740	LF	\$	85.00	\$	317,900.00
10' Crushed Limestone Trail - Pits	80,000	SF	\$	8.50	\$	680,000.00
10' Concrete Trail Paving P15	10,560	LF	\$	85.00	\$	897,600.00
Architecture						
Shelter	1	LS	\$	20,000.00	\$	20,000.00
Landscape						
Native Perennials	1,000		\$	35.00	\$	35,000.00
Overstory Trees		EA	\$	450.00	\$	9,000.00
Prairie Mix Drilled Seed	5	AC	\$	4,200.00	\$	21,000.00
	Subtotal - Base Bid				\$	2,079,450.00
Mobiliza	Mobilization /General Conditions - 5%				\$	103,972.50
	Contingency - 20%				\$	415,890.00
Design	gn / Engineering Services - 12%				\$	299,440.80
	Construction Cost				\$	2,898,753.30

^{*}Savings could be realized by pursuing an asphalt trail system in lieu of concrete

^{*}LS- Lump Sum, SF - Square Foot, LF - Linear Foot, EA - Each, Cy- Cubic Yard, CF - Cubic Foot





A) Existing

and highlights the scenic beauty existing county park connecting Frail Route A was is the preferred north around the quarry to the input sessions. The trail route along the cemetery, and the includes a trail along HWY 3, route based on community workshop and community feedback from the design Three Rivers Trail.



A) HWY 3 Proposed



B) Existing

and improved trail conditions to enhance the user experience Trailhead amenities including were suggested at the design workshop. One location for a shade, bike tune-up stations, new trailhead is outside city imits at the county park.



B) Trailhead Proposed

HDR Inc.

LA: Jen Cross - PLA, ASLA Intern: Alex Aranas

Gilmore City Three Rivers Trail

Iowa State University | Trees Forever

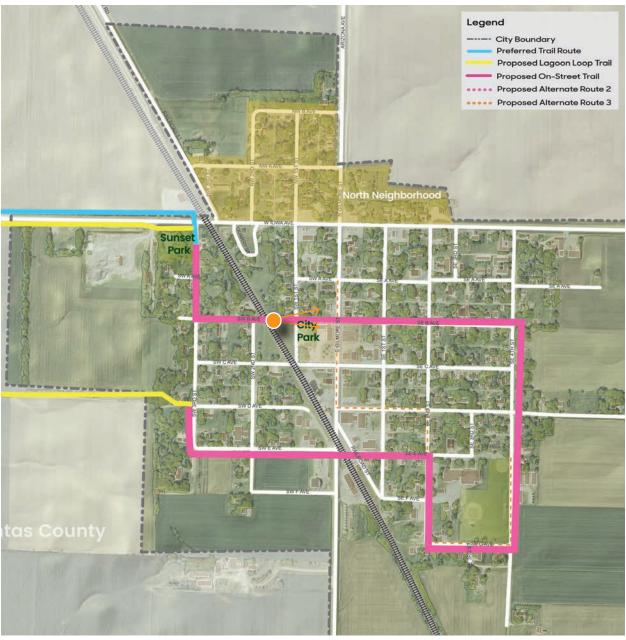






On-street Bike Lanes

On-street walking and biking are key activity for Gilmore City residents to stay active and fit. Improving pedestrian amenities creates safe opportunities to navigate city streets. The combination of on-street 5'-wide painted bike lanes, a 10' wide cycle track, or sharrows with widths less than 34' will provide consistent access. The proposed bioswale can be cut into the existing street. Soils should be excavated to an 18'' depth and amended with sand and organic matter to allow for proper drainage and filtration of stormwater. Planting native perennials will reduce maintenance over time.



Proposed On-street Bike Lane Map



SW B Ave Existing



SW B Ave Proposed



Bioswale e Section



Opinion of Probable Cost On-street Bike Lanes

Description	Quantity	Unit		Unit Cost	Е	xtended Amount
General Requirements						
Traffic Control	1	LS	\$	20,000.00	\$	20,000.00
Temporary Erosion Control	1	LS	\$	10,000.00	\$	10,000.00
Site Demolition, Clearing & Grubbing	1	LS	\$	10,000.00	\$	10,000.00
Stormwater Improvement Allowance	1	LS	\$	100,000.00	\$	100,000.00
Demolition						
Roadway Removal - Full Section- Per Block	3200	SF	\$	4.00	\$	12,800.00
Soil Excavation & Prep & Replacement - Per	4500	CF	\$	30.00	\$	135,000.00
Hardscape - (per block - approximately 32)						
Sharrow - Streets less than 24'	12	EA	\$	229.00	\$	2,748.00
Buffer Strip Planting - Streets 35' or more	3,200	SF	\$	35.00	\$	112,000.00
Bikelane Paint - Streets less than 35'	2,740	LF	\$	2.50	\$	6,850.00
Site Amenities						
Signage	12	EA	\$	350.00	\$	4,200.00
Bike Rack	4	EA	\$	500.00	\$	2,000.00
Bench	4	EA	\$	1,750.00	\$	7,000.00
Landscape						
Native Perennials with topsoil/mulch	10,960	SF	\$	20.00	\$	219,200.00
Overstory Street Trees	24	EA	\$	550.00	\$	13,200.00
	Subtotal - Base Bid			\$	654,998.00	
Mobilization /General Conditions - 5%					\$	32,749.90
	Contingency - 20%			\$	130,999.60	
Design / Engineering Services - 12%				\$	94,319.71	
	Construction Cost				\$	913,067.21

^{*}LS- Lump Sum, SF - Square Foot, LF - Linear Foot, EA - Each, Cy- Cubic Yard, CF - Cubic Foot

^{*}Street improvements are based on a singular average block length





SW B Ave Existing



SW B Ave Proposed



Improving pedestrian amenities creates safe opportunities to navigate city streets.

The combination of on-street 5'-wide painted bike lanes, a 10' wide cycle track, or sharrows with widths less than 34' will provide consistent access. The proposed bioswale can be cut into the existing street and amended with sand and organic matter to allow for proper drainage and filtration of stormwater. Planting native perennials will reduce maintenance over

HDR Inc.

Gilmore City On-street Bike Lanes

LA: Jen Cross – PLA, ASLA Intern: Alex Aranas

Intern: Alex Aranas Iowa State University | Trees Forever | Iowa Department of Tran







City Park

City Park is in the heart of the community. The park will feature a bike tune-up station as well as interpretive trail signage. The park is compact and currently needs upgrades to improve accessibility and provide additional amenities for park users. Proposed improvements add accessible walks and rubberized surfacing under the existing swings and play structure. A new climbing structure is proposed to replace the existing one for increased inclusive play opportunities. Also proposed is an upgraded shelter with a new roof, lighting, furnishings, an ADA-accessible ramp and terraced deck to the south that connects to the proposed water play area.

The water play area features a water skin that keeps depth below 1/2" for user safety, a time-controlled activation device, rubberized surfacing, and limestone rock outcroppings. The splash pad maintains two zones – one with a rock bubbler, naturalized stream, water gates, and rock outcroppings all draining to a concealed drain under an at-grade bridge crossing. The second zone, located east of the foot bridge, is a more traditional splash



pad with larger spray elements, including a separate activator switch, in-grade spray jets, and limestone outcroppings for seating. The existing sports court will be relocated south of the maintenance shop to create a semi-fenced-in athletic zone that accommodates basketball, pickleball, volleyball, four square, etc., for extended use.



Existing



Proposed



Opinion of Probable Cost - City Park

Description	Quantity	Unit	_	Unit Cost	-	Extended Amount
General Requirements	Quantity	UIIIL		Utili Cost		Extended Amount
Temporary Erosion Control	1	LS	\$	20,000.00	\$	20,000.00
Temporary Utilities		LS	\$	15,000.00	\$	15,000.00
Road /Parking Lot Paving	12,520		_	12.00		150,240.00
			\$		\$	
Sidewalk Repaving	13,248		\$	8.00	\$	105,984.00
Curb Curb and Gutter	1350	LF	\$	45.00	\$	60,750.00
Demolition	4	1.0	•	00 000 00	•	00 000 00
General Site Preparation / Grading	1	LS	\$	20,000.00	\$	20,000.00
Háliáica						
Utilities Floating Coming	1	1.0		15000	Φ.	45,000,00
Electrical Service		LS		15000	\$	15,000.00
Water Line Service		LS	Φ.	10000	\$	10,000.00
Site Light Pole		EA	\$	5,000.00	\$	40,000.00
Mechanical Pump / Service Splash Pad	1	LS	\$	75,000.00	\$	75,000.00
Hardscape						
Concrete Paving - Walks	4,951	SF	\$	8.00	\$	39,608.00
Plaza Pavers	1,060		\$	20.00	\$	21,200.00
Splashpad Surface	1,628		\$	24.00	\$	39,072.00
Playground surface	3,885		φ	24.00	\$	93,240.00
Site Features	3,000	SF		24	Ф	93,240.00
Shelter Renovations + Decking/ADA entry	1	1.0	4	25 000 00	¢	25 000 00
		LS LS	\$	25,000.00	\$	25,000.00
Trex At-grade Bridge			\$	3,500.00	\$	3,500.00
Bike Tune-up Station		EA	\$	1,250.00	\$	1,250.00
Rock Climing Structure		EA	\$	24,000.00	\$	24,000.00
Rock bubbler		EA	\$	3,200.00	\$	3,200.00
Water Gates		EA	\$	2,000.00	\$	6,000.00
Limestone Outcroppings		EA	\$	500.00	\$	12,000.00
Splash Pad Spray Jets/activator switch		LS		250,000.00	\$	250,000.00
Color Concrete for water skin	800		\$	14.00	\$	11,200.00
Custom Mural	1	LS	\$	10,000.00	\$	10,000.00
Landscape						
Trees Decidious		EA	\$	450.00	\$	4,950.00
Tree Ornamental		EA	\$	300.00	\$	2,400.00
Sod	34,717				\$	69,434.00
Perennail Plantings + topsoil / mulch	2,194	SF	\$	35.00	\$	76,790.00
Site Amenities						
Benches		EA	\$	1,750.00	\$	7,000.00
Litter Receptacles		EA	\$	1,250.00	\$	2,500.00
Sports Courts	8500	SF	\$	12.00	\$	102,000.00
Basketball Hoop	2	EA	\$	1,500.00	\$	3,000.00
Net System	1	EA	\$	5,000.00	\$	5,000.00
Bike Rack		EA		500	\$	1,000.00
Park Sign	1	EA		3500	\$	3,500.00
Fencing	320			50	\$	16,000.00
Fabric Shade Structures		EA		1350	\$	2,700.00
Stone Benches		EA		2500	\$	10,000.00
		tal - Base Bid			\$	1,214,318.00
Mobilizat	ion /General Co	nditions - 5%			\$	60,715.90
	Conti	ngency - 20%			\$	242,863.60
Design .	Engineering Se				\$	174,861.79
		struction Cost			\$	1,692,759.29

^{*}LS- Lump Sum, SF - Square Foot, LF - Linear Foot, EA - Each, Cy- Cubic Yard, CF - Cubic Foot





Existing



Proposed City Park Improvements

to the south with a multipurpose court, a pickelball/ existing playground with rubberized surfacing and existing shelter. The sport courts will be relocated regrading/additional ramps and upgrades to the programming and community access. The park Improving the amenities at City Park will expand volleyball court, shade sails, seating, and fencing. will boast a trailhead with bike tune-up station, and provide accessibility improvements to the

committee. The proposed water feature will include play elements. The splash pad will utilize a mixture natural water play with rock outcroppings, a rock maintenance facility for restroom access and a Providing water play was a key amenity for the bubbler, a stream, a footbridge and traditional of surfaces, and is located adjacent to the city potential artistic mural.



lowa State University | Trees Forever | Iowa Department of Transportation LA: Jen Cross - PLA, ASLA Intern: Alex Aranas

City Park







Downtown Improvements

The city acquired vacant lots with the goal of enhancing the downtown business district. In the process, the city would improve accessibility to the street adjacent to the lots and develop opportunities for additional public space. The proposed design reconfigures the existing curb to reduce it to a standard 6" height and adds bump-outs to provide accessible curb cuts for ease of access. Stormwater plantings will link from the streetscape improvements into the planting areas of the park space. Creating an open lawn area with a multi-use shelter/stage will serve residents year-round, while offering a new green space for active play. A flexible plaza with a vendor court and yard games are located near the street to accommodate programming for Gilmore City Fun Days as well as year-round use. A six-foot-wide concrete walk or decomposed limestone walking trail provides an accessible ¼-mile loop with limestone outcroppings providing seating for visitors. The open lawn is adaptable for events year-round and will provide much needed open green space for a pick-up game of soccer, frisbee, or kite flying.





Existing View South



Proposed View From the Flexible Plaza



Opinion of Probable Cost Downtown Improvements

Description	Quantity	Unit		Unit Cost	Е	xtended Amount
General Requirements						
Curb Bumpout	388	LF	\$	40.00	\$	15,520.00
Temporary Erosion Control	1	LS	\$	10,000.00	\$	10,000.00
Temporary Utilities	1	LS	\$	15,000.00	\$	15,000.00
Street Repaving	15,952	SF	\$	15.00	\$	239,280.00
Sidewalk Repaving	5,158	SF	\$	8.00	\$	41,264.00
Demolition						
General Site Preparation / Grading	1	LS	\$	15,000.00	\$	15,000.00
Utilities						
Electrical Service	1	LS	\$	15,000.00	\$	15,000.00
Stage Electrical	1	LS	\$	10,000.00	\$	10,000.00
Site Light Pole	10	EA	\$	5,000.00	\$	50,000.00
Hardscape						
Concrete Paving - 6' Walks	2,050	SF	\$	8.00	\$	16,400.00
Plaza Pavers	1,060	SF	\$	20.00	\$	21,200.00
Architecture						
Custom Shelter	1	EA	\$	30,000.00	\$	30,000.00
Landscape						
Decidious Trees		EA	\$	400.00	\$	7,200.00
6' Evergreen Trees		EA	\$	350.00	\$	2,800.00
Ornamental Trees		EA	\$	300.00	\$	3,300.00
Sod	15,960	SF	\$	2.00	\$	31,920.00
Site Amenities						
Stone Benches		EA	\$	2,500.00	\$	20,000.00
Litter Receptacles		EA	\$	800.00	\$	3,200.00
Tables		EA	\$	3,000.00	\$	12,000.00
Limestone Rock Outcroppings		EA	\$	550.00	\$	2,200.00
Bike Rack		EA	\$	500.00	\$	1,000.00
Yard Games - Cornhole	6	EA	\$	1,000.00	\$	6,000.00
	Subtotal - Base Bid				\$	561,284.00
Mobilization /General Conditions - 5%				\$	28,064.20	
Contingency - 20%				\$	112,256.80	
Design / Engineering Services - 12%				\$	80,824.90	
	Construction Cost				\$	782,429.90

^{*}LS- Lump Sum, SF - Square Foot, LF - Linear Foot, EA - Each, Cy- Cubic Yard, CF - Cubic Foot





Existing



Proposed Downtown Improvements

multiple uses, including a stage for events during Gilmore City Fun Days. Adjacent to the flexible plaza are spaces for vendors the existing curb to reduce it to a standard 6" height and adds bump-outs to provide accessible curb cuts for ease of access and lawn games. The open lawn is adaptable for events year-round and will provide much needed open green space for a Stormwater plantings will link from the streetscape improvements into the planting areas of the park space. The program Gilmore Ave are prime candidates for a flexible space for multiple community events. The proposed design reconfigures Vacant lots in downtown Gilmore City are a top priority for improvements for the community. The vacant lots just east of features a flexible plaza, stone outcroppings, seating, and a loop pedestrian walk. A stage/shelter will accomodate for pick-up game of soccer, frisbee, or kite flying.

Gilmore CityDowntown Enhancements



LA: Jen Cross - PLA, ASLA Intern: Alex Aranas

lowa State University | Trees Forever | Iowa Depart







Implementation Strategies

The Visioning Program is just the first step of the planning process for the implementation of the projects that will contribute to an enhanced quality of life in Gilmore City. It is the Design Team's intent to provide Gilmore City with a framework for future enhancements to community development and resources. Although there is value in data gartering, analysis, conclusions, and recommendations, the greatest value is providing Gilmore City residents with the opportunity to look at their community with new perspectives and to motivate future change within their community.

The steering committee has been very pragmatic with its goals and vision for this master plan. Each element has the ability to draw funding from various sources and can be implemented in a phased approach. Gilmore City has had great success with past projects – including enhancing Sunset Park and creating a walking trail. Collaboration with Hometown Pride will be beneficial for acquiring additional funding and resources for local and regional grants. Utilizing resources in both Pocahontas and Humboldt Counties will aid in speeding up the implementation process.

Based on economic return and increased quality of life, projects should be approached individually, keeping in mind that some may run concurrently and others may require additional phasing.

City Park: This is a top priority for the community, and leveraging the resources available through Hometown Pride, Pocahontas County Funds, and local donations will create a great match for community improvement grants that may be available. The city should focus on partnerships with Martin Marietta and the concrete plant to obtain some of the locally identified materials at reduced costs. Utilizing the park to provide a public health benefit to residents by creating accessible spaces for all to enjoy and to create an intown trail hub that connects to the Three Rivers Trail will expand opportunities for funding. Relocating the existing multi-use courts to provide the space for the splash pad, and planting new trees to the south of the maintenance building will be critical first steps in realizing the overall vision.





Downtown Improvements: The city is planning to replace the existing curb and gutter along the street adjacent to downtown. This project provides a great opportunity to implement accessible curb ramps, the plaza, and stormwater planters with at-grade curb cuts that allow water infiltration. Partnering with Trees Forever, the local nursery, and County Conservation is a low-cost strategy for starting to establish a tree canopy and defining to the space. The stage/shelter will take more investment and planning to install electricity and ensure the size of flexible space meets the programming needs of the community. This project could utilize some of the city's existing resources for improvements as a potential match for grant programs. In addition, the shelter project would present a good opportunity to develop a partnership with a donor group for naming the space and creating a sense of identity.

On-Street Bike Lanes: An in-depth study of the entire route is needed to assess the road crown and to document street width and existing right-of-way needs. Once this study is completed, the community will know what types of implementation strategies are required, whether it is painting lines on the roadway, cutting into the street, or adding a widened sidewalk. Adding street paint to areas to test the system is a low-cost solution to determine the level of use throughout the community and make modifications prior to street enhancements.

Three Rivers Trail Connection: Coordinating with the existing efforts will be key to this project's success. It will take some time to work with lowa DOT, the railroad, the quarry, and county parks to obtain written approval to begin to acquiring any easements that may be needed, or to purchase any additional land from adjacent landowners. Implementing the project using a phased approach will make it less daunting. Grants are available for trail connections and their associated amenities and finding local funding sources to utilize as a percent match will be critical to the success of these grant applications.





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)





Images From the Final Presentation in Glimore City

