

Final Report and Feasibility Study Tama, Iowa



Program Partners:

Iowa Department of Transportation
Trees Forever
Iowa State University



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About site design group

Founded in 1990, *site* is an award-winning landscape architecture and urban design firm based in Chicago, Illinois. The firm is led by four principals, Ernest Wong, Robert Sit, Bradley McCauley, and Hana Ishikawa. As landscape architects, urban designers, planners, horticulturalists, architects, arborists, construction administrators, and creative thinkers, we are a staff of nearly 40 diverse and innovative professionals. We are enlivened by our surroundings and strive to produce creative spaces that inspire, restore, and bring communities together.

site is often engaged to collaborate and coordinate efforts with other architects, engineers, and design professionals. Effective communication with the design team and client ensures successful coordination of projects from concept through construction. We transform complex design challenges into places that clearly reflect identity and are strong statements of beautiful and functional spaces.

As designers, creative thinkers, and engaged citizens, we understand the value of exterior environments that create a sense of place. Successful placemaking leads to the long-term care and use of these spaces by the public. At *site* this is our goal in all we do: create spaces that are well-loved and well-utilized by the communities they reside within.



Hana Ishikawa, AIA, ASLA Affiliate

Hana Ishikawa is the Design Principal at *site*, often leading the design process with complex, yet thoughtful ideas. Hana's projects, more than 100 of them throughout her tenure, have ranged from master planning of modern entertainment complexes, traditional commercial interiors, and historic streetscapes to contemporary urban parks. Constantly looking for visually enticing environments from the rigid structure of classical aesthetics to cutting-edge modern design, whether it is conceptual design or construction details, she enjoys merging innovation and logic into all aspects of design.



Cassandra Rice, PLA, AICP, ASLA

Cassandra Rice is a landscape architect and planner at *site* whose work focuses on synthesizing environmental, economic, and cultural influences to create evidence-based, sustainable strategies for clients. Her work spans a variety of scales and project types—from parks, playgrounds, and plazas to design guidelines and strategic planning. She effectively guides her clients through the design and planning process from site analysis to ribbon cuttings, and she has worked with a number of her clients to secure grants and additional funding for implementation. Cassandra is passionate about participatory planning and design, and brings exciting and innovative public outreach strategies to her projects.



Richard Meagher, Project Designer

Richard Meagher is a project designer at *site* with a Bachelor of Landscape Architecture at Ball State University. He has a passion for designing spaces that are naturally and socially empathetic, and hopes to help create placemaking projects. He also hopes to engage the community by designing in a context-sensitive manner, with a respect for the context of the Chicagoland area.



Paul Hsu, Student Intern

Paul (Wen-Po) Hsu, recently graduated with a Bachelor of Landscape Architecture from the University of Oregon. He is currently an intern at *site*. Despite being Taiwanese, Paul grew up on an island in Malaysia. On the island Borneo, known for its biodiverse beaches and rainforest, life was hot, humid, and without seasons.. He is passionate about improving people's lives through the design of urban spaces, with special interest in the relationships between buildings and outdoor spaces. He is seeking to create spatial sequences that provide experiences and this has been driven by his interest in the art of storytelling and animation.

Program Overview

Tama is one of 10 communities selected to participate in the 2021 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 Tama visioning committee identified a number of goals and priority areas during the visioning process, which are included below:

- Improving downtown Tama using wayfinding, on-street parking, and community projects.
- Connecting the Tama Rec Trail and Cherry Lake for improved community walkability.
- Re-thinking Oak Park to better accommodate residents and children.

Capturing the Tama 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.

SUMMER 2021 1



Images from the Tama-Toledo Design Day and Steering Committee Goal Setting Workshops

Community Goals

The two communities have worked together closely to identify common goals and formulate ideas and solutions. Each community's steering committee also worked to identify goals and priority areas for each of their respective communities as well. The common goals identified during the visioning process include:

- Create safe pedestrian routes between the two communities.
- Implement traffic calming measures and signage for increased pedestrian and vehicular safety.
- Balance pedestrian safety and traffic calming needs with regional truck and freight routes.
- Connect existing sidewalks to provide better connections between existing amenities such as the Tama-Toledo Water Park, STC High School and Elementary School, and both Tama and Toledo's downtown areas.

Priority areas identified for improvements include:

- Trail system: connect Tama Rec Trail and Cherry Lake Trail
- Key US 63 Intersection Safety and Placemaking Improvements: High Street, 2nd Street, 17th Street (at STC High School), Harding, and State
- Placemaking Improvements: Oak Park, Downtown Tama, Downtown Toledo

Capturing the Vision

1. Program Overview
 - 9a. Oak Park
 - 10a. Broadway St + Lincoln Hwy
 - 10b. Connection Plans
 - 10c. 2nd St + US 63
 - 10d. High St + US 63
 - 10e. Downtown Toledo
 - 11a. Plant Palette
 - 11b. Wayfinding + Identity
 12. Implementation Plan
- 6a. Transportation Inventory - Tama
- 6b. Transportation Inventory - Toledo
7. Feedback Summary
- 8a. Concept Overview
- 8b. Concept Detail
- 8c. South Tama Rec Trail
- 9a. Downtown Tama
- 9b. State St + US 63
- 9c. Harding St + US 63
- 9d. 17th St + US 63

site design group

LA: Cassandra Rice, PLA, ASLA, Hand Ishikawa, AIA
 Landscape Designer: Richard Meagher
 Intern: Paul Hisu

Iowa State University | Trees Forever | Iowa Department of Transportation

Tama + Toledo Program Overview

Community Visioning

Tama and Toledo are two of 10 communities selected to participate in the 2021 Iowa's Living Roadways Community Visioning Program. The Community Visioning Program integrates landscape planning and design with sustainable action to empower community leaders and volunteers in making sound, meaningful decisions about the local landscape. Throughout the process, the committee identifies and investigates the physical and cultural dimensions of landscape issues, sets goals for change, and develops implementation strategies for meeting community goals.

Successful completion of the visioning process results in a transportation enhancement plan and implementation strategies that empower communities to build meaningful townscapes, step by step, as resources become available.

Goals for the Visioning Program include:

- Develop conceptual plan and implementation strategies with local communities;
- Enhance the natural, cultural, and visual resources of small Iowa communities; and,
- Assist local communities in using external funds as leverage for transportation corridor enhancement.

Program Overview

Both Tama and Toledo are represented by steering committees that include residents and stakeholders who have been actively participating in a series of meetings facilitated by a field coordinator from Trees Forever. Iowa State University organizes design teams of professional landscape architect, design interns, and ISU faculty and staff. The program is sponsored by the Iowa Department of Transportation.

Throughout this process, each community participates in a planning process consisting of four phases of conceptual development.



Bioregional Assessment

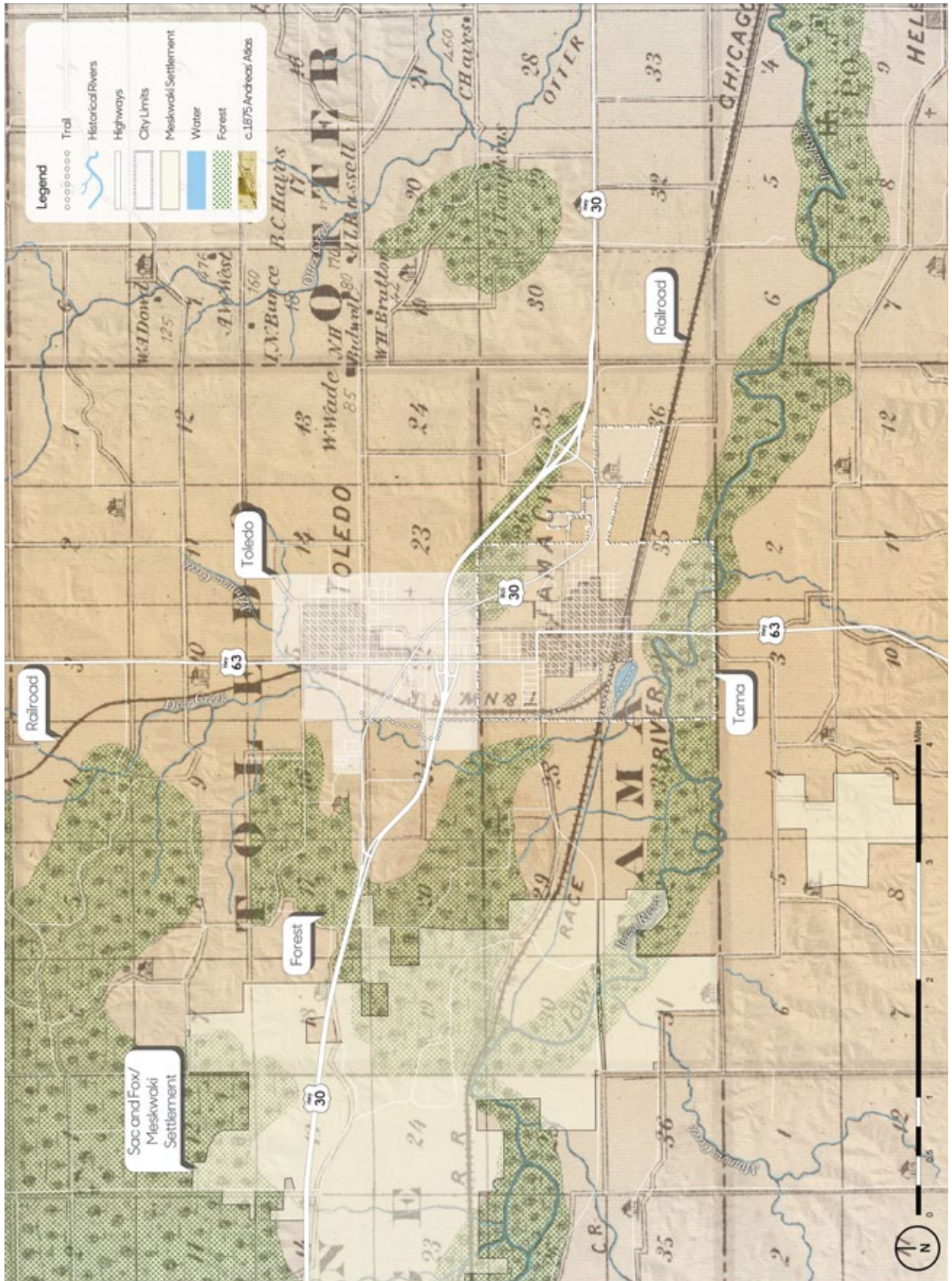
Historical Settlement Patterns

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.

Tama 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. Forest: Tree dominated, with a mostly closed canopy. Ground vegetation shade tolerant. developed under infrequent fire.
2. Wetland: Perennial, non-woody plants; water and fire dominated.
3. Prairie: Perennial non-woody plants; fire dominated.

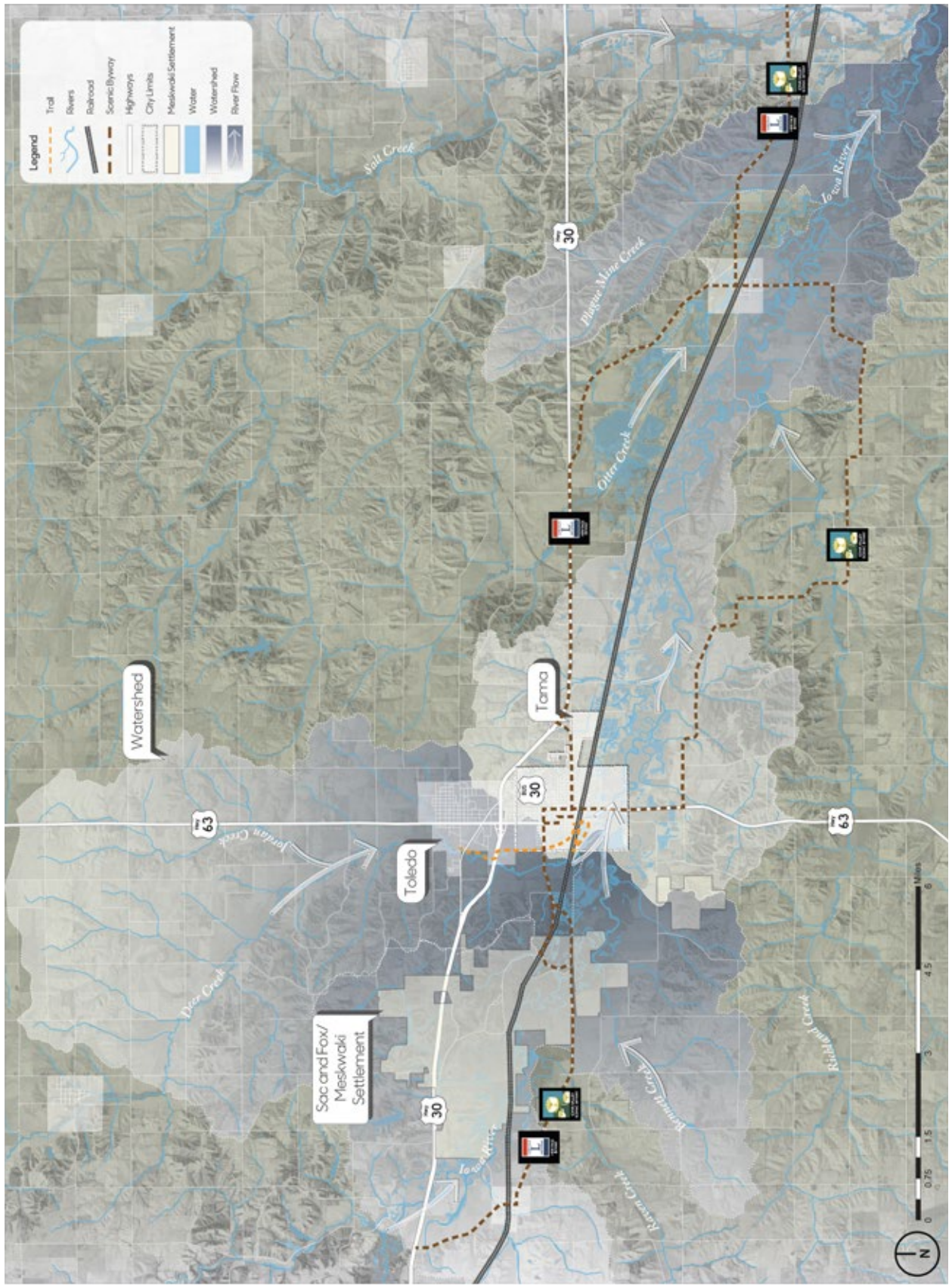
¹ J.E. Ebinger, "Presettlement Vegetation of Coles County, Illinois," Transactions of the Illinois Academy of Science (1987): 15-24, quoted in Michael Charles Miller, "Analysis of historic vegetation patterns in Iowa using Government Land Office surveys and a Geographic Information System" (master's 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 Iowa River watershed is composed of a dozen smaller watersheds, and the Iowa River watershed is a sub-basin of the Mississippi River watershed.

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

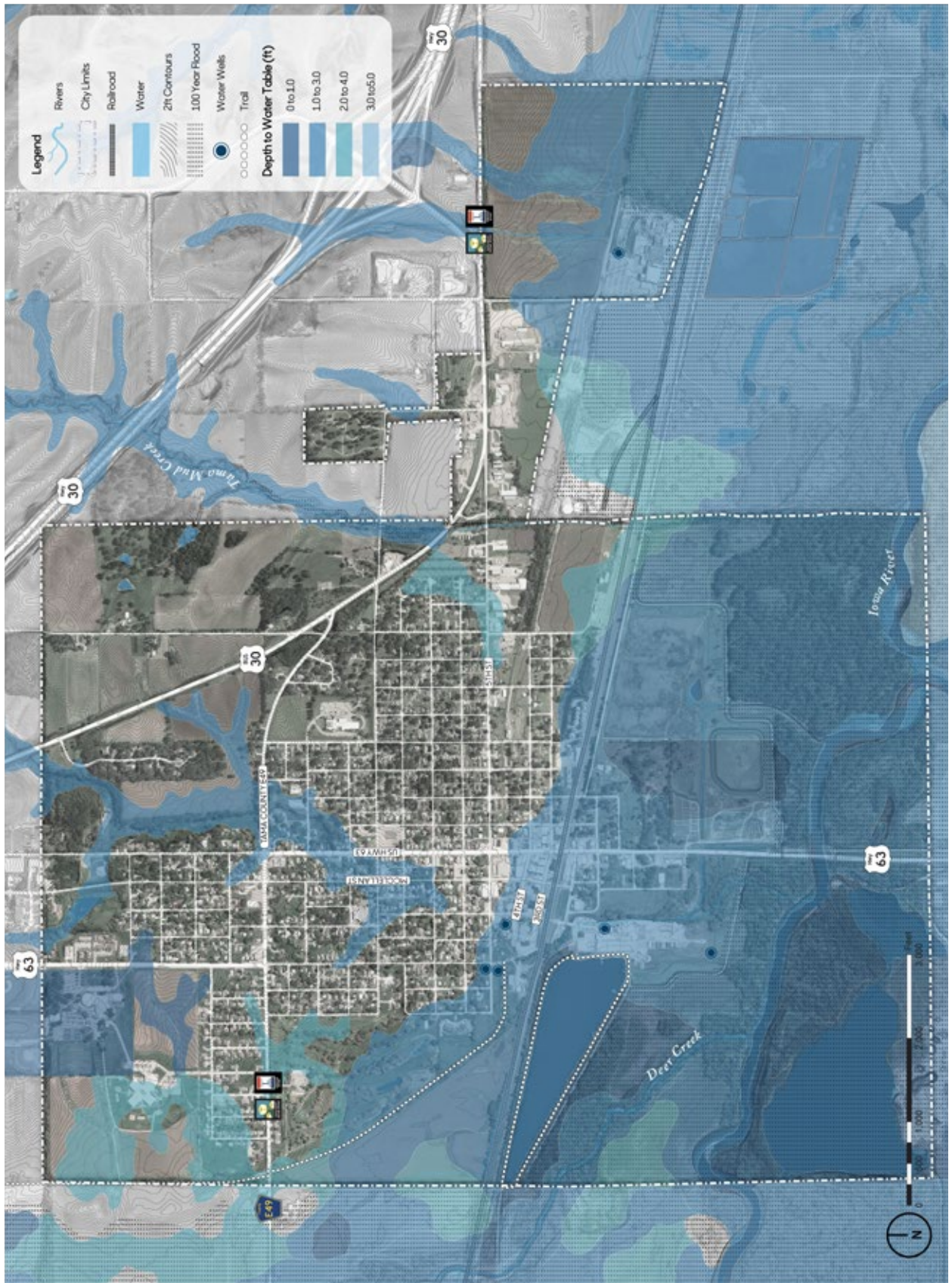


Depth to Water Table

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.

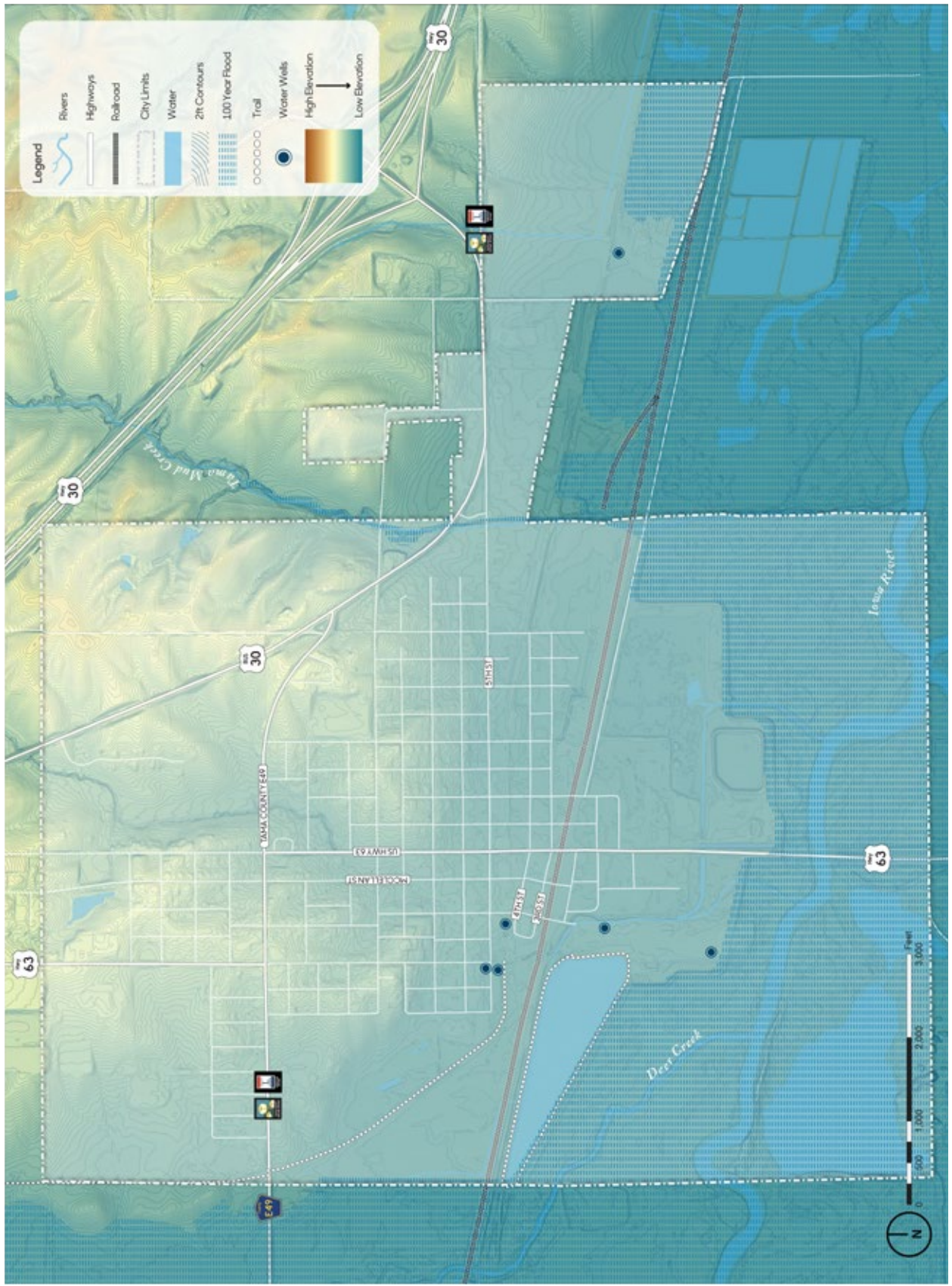


Elevation and Flow

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 Iowa DNR created 15 unique classes for this dataset to differentiate land covers. Refer to the legend for a breakdown of land-cover types within your community boundaries.

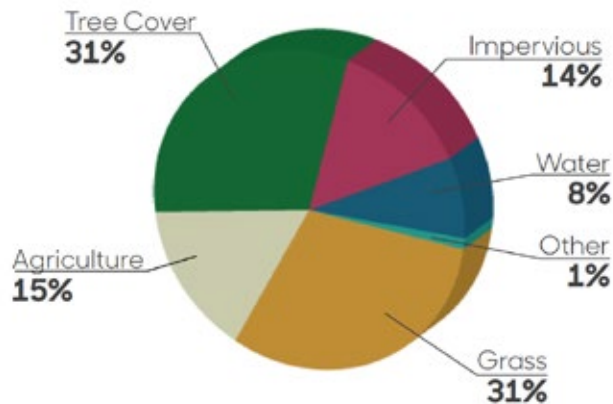
What do you observe about the dominant landcover types in your community?

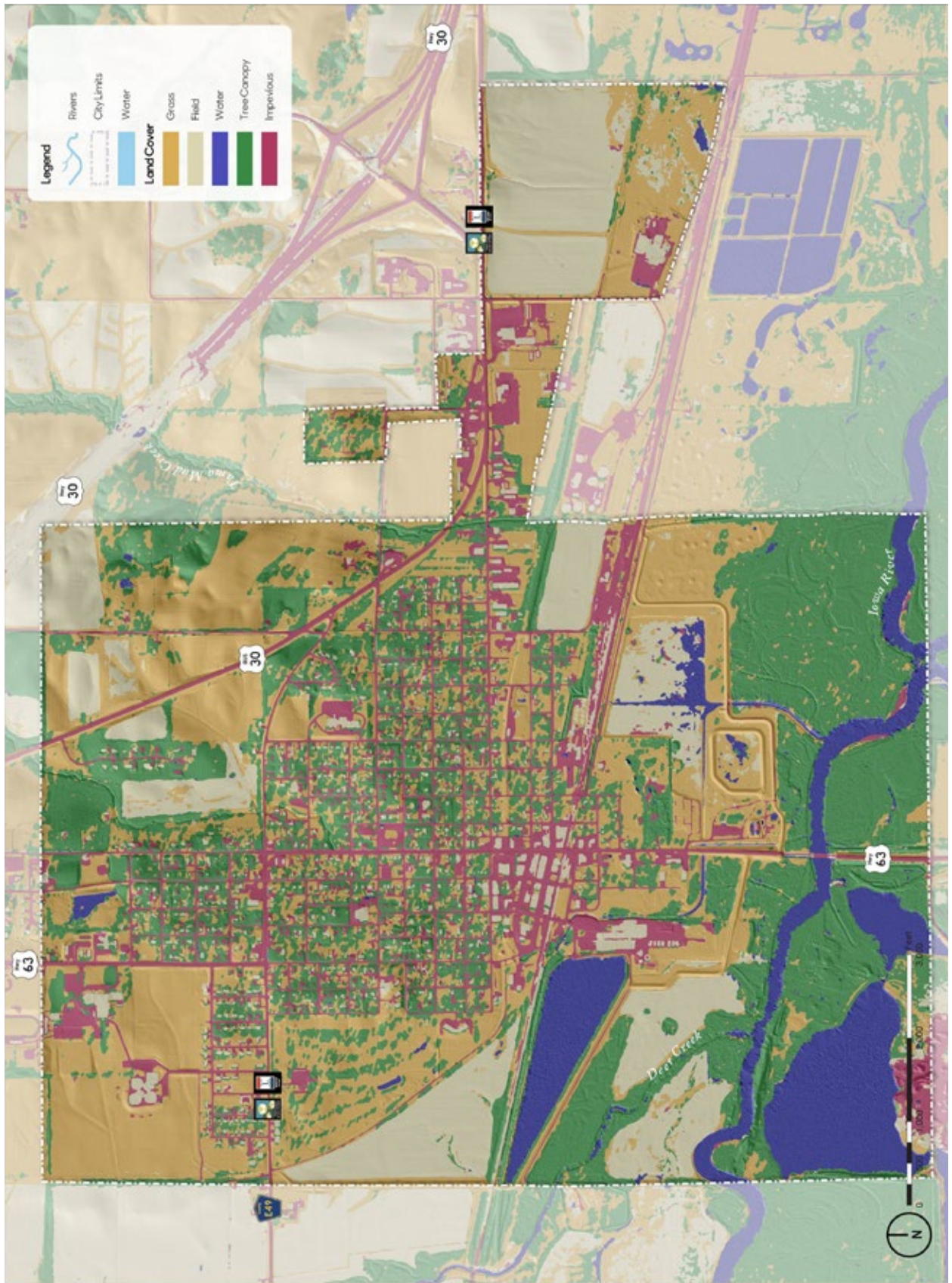
Where is the tree canopy most concentrated?

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

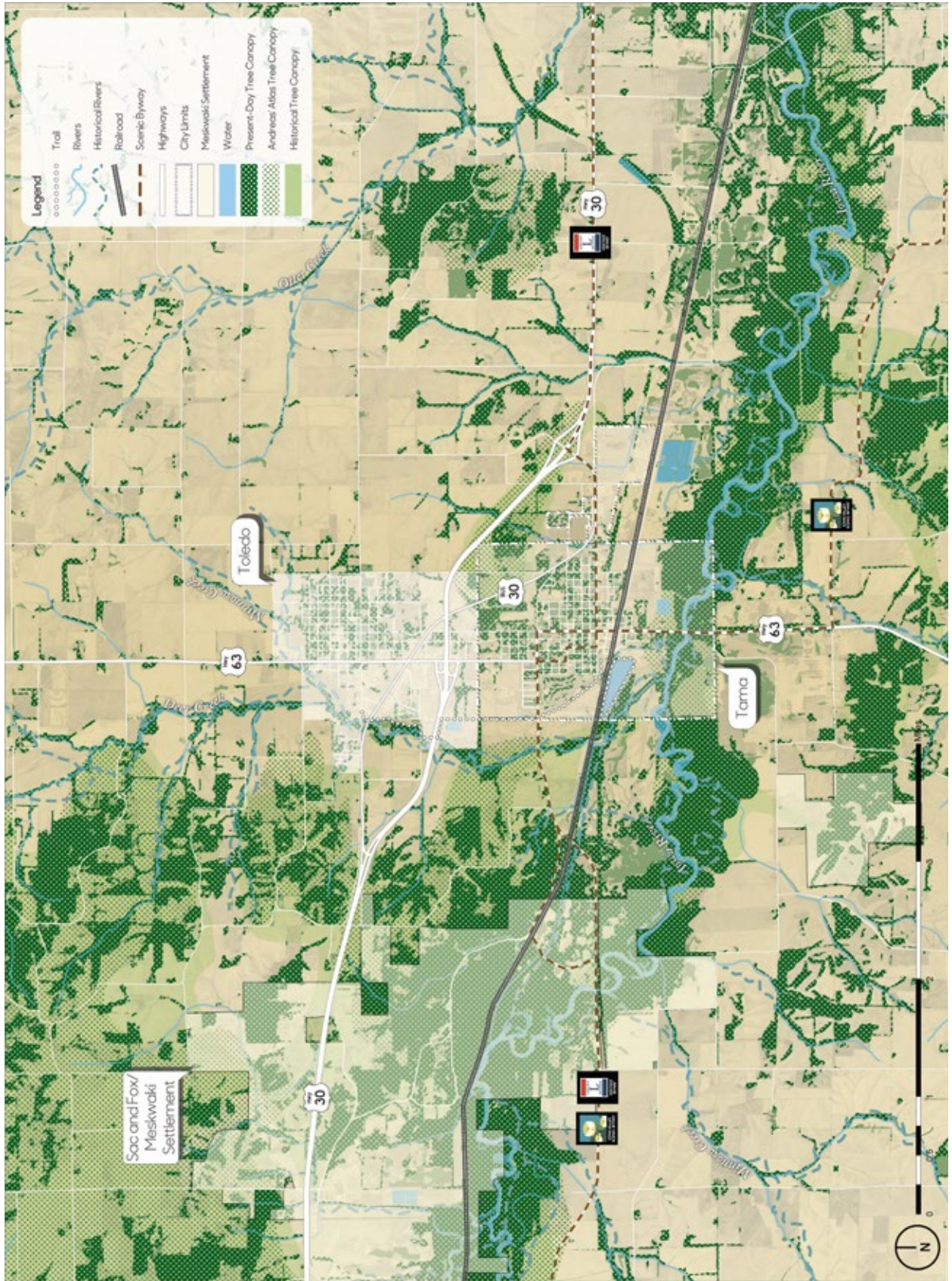
The map on this page shows how the landscape has changed over time, with an emphasis on vegetation and drainageways.¹ The map is helpful for understanding how landscapes change and considering how these changes might affect how well the landscape works to support human and ecological needs.

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 Iowa, 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 Tama, 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 Tama'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 Tama residents with different transportation needs to participate in focus groups. A total of 17 residents attended Tama's workshop. Participants were separated into five user groups and the Tama steering committee.



Actives

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



Mobility Impaired

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



Older Adults

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



Youth

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



Parents

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



Steering Committee

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



Residents appreciate the trail around Cherry Lake for its connections to nature, scenic views, and safety.



Heavy traffic and the lack of sidewalks and crosswalks make it difficult to get to the highschool on foot.



The smooth surface and curb ramps on E 5th Street allows easy access for bikers and walkers.



There are no sidewalks along State Street from Tama to Toledo. The narrow street is heavily used and feels unsafe for pedestrians and drivers.




Pedestrians and cyclists enjoy the South Tama Recreation Trail for its nicely graded surface, scenic views, tree canopy and benches.



The road connections to the school are narrow. Bus traffic and the lack of sidewalks creates an unsafe path for people walking to and from school.

What People Said



Actives

"There [have] been many accidents going in and out of the high school, and [a traffic signal] would allow people to get across 63 and access that part of town to get to the rec trail. It would also let people get to both the high school and the elementary school."

"Crossing the four-lane highway, at times of day...can be difficult. There used to be a push button stoplight at the corner of...Ninth [and] State Street in Tama. Once the schools, in that area went away, that push button stoplight went away as well."

"I go down to Cherry Lake a lot. The rec trail goes around Cherry Lake...From my house, it's an easy walk."

"Kids go to the pool up State Street...in Tama and the sidewalk ends...at 16th and State... There's no sidewalk from there, so kids are walking in the street all the time to the pool."

"Cherry Lake in the winter, it's a challenge because...they don't clear the trail in the winter, so you're walking in deep snow...Parking down there...[is] low lying...so...I won't say it's flooded, but it definitely puddles and gets muddy."



Mobility Challenged


"There [are] absolutely no sidewalks around the school, except for the one that runs on the highway...Just crossing Fourth Street to get to the school is quite hazardous for the kids in the morning and in the afternoon. There [are] only a couple stop signs and a lot of traffic, and there [are] no sidewalks for the most part."

"...Woodlawn Cemetery [has] nice paths...For the most part, they keep them cleaned off...It's got some decent hills...It's easy walking and it's pretty safe."

"Most of the time, we end up...on the...street, because...especially when the weather is not very good...the sidewalks aren't complete and it's really hard...for me because I had a knee replacement."

"There are no sidewalks [along State and McClellan Streets] and it is a very narrow pathway, so there's definitely concerns for people walking there."

"The corner of State Street and Highway 63 looking south... has some great sidewalks that were recently repaired and made ADA [accessible]."



Older Adults


"Our biggest situation is [that the] sidewalks are not big enough... if you're walking two people...so we end up being in the street a lot."

"They fixed all the entrances to the sidewalks [along East 5th Street]. They're all handicapped-accessible now, which is really great, especially if you are riding [a bike] and you need to get on the sidewalk."

"A lot of people complain we're in the street, but that's a little bit safer to walk than it is on sidewalks so that is a problem."

"I enjoy [Cherry Lake] because I do bike. I enjoy the nature, the wildlife you see there in the water and out around the lake. I think it's really pretty."

"Put sidewalk on both sides of Highway 63... all the way to Toledo. There's some on both sides, but you've got to cross over the highway, so let's just get sidewalks on both sides."



Parents


"It's a nice trail. It goes by the golf course, which is pretty, and it also has a canopy of trees. After you go north to the golf course, it's trees from there and it's shaded."

"There [are] no sidewalks at all [on Vine Street], and at the end of Church Street, the bus drops off the children to walk up Vine Street. Now, these are some really young children walking in the street to get to their houses and when there's snow on the ground, the streets are even more narrow."

"In Tama we have Cherry Lake, and there's a real nice path that goes around that the children and I will drive down to it, and then we can walk around the path."

"I would really like to see something done to create a safe walkway across Highway 63 for kids [who] are walking from the schools to the opposite side of the highway."

"There is lack of walkability, on [Highway] 63, even if there is a sidewalk, you fear that [a] car is going to come at you. There is no barrier, whether it be vegetative or some sort of trash cans or something."



Youth

"One place I like to go in Tama is the skate park. I like to ride my skateboard over there because there aren't too many people."

"I like going to the middle school because there's a big open blacktop area so you can ride your bike in it and play basketball or play four square."

"There's a park by my house and it's on Third Street and I like to go to it."

"In winter the roads are always really slick"

"We ride our golf cart [to the swimming pool]"



Steering Committee

"A lot of people go over to St. Pat's Church and walk around because it's got a great flat sidewalk and parking lot all the way around, so it's a really good place for people to exercise."

"I think Cherry Lake would be an asset. It's a nice walk, and it's a park-like setting walk, so you're not walking the neighborhoods."

"We do have about ten miles of trail system within the communities if you include the cutoff to get over to Cherry Lake and do Tama-Toledo and go around the park in Toledo. You can get about a ten-mile bike ride, which is pretty nice."

"[People] can get to [the swimming pool] from Toledo with a beautiful paved path, but from Tama, there's nothing, and so the children are walking on the streets."

"...the [sidewalk] from the north is on one side of the highway and the one from south is on the opposite side, so they don't coordinate. You will see people with bags of groceries walking alongside a four-lane highway"

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 drive to local destinations. This group enjoys using the South Tama Recreation Trail and walking at Toledo Heights Park for recreation and exercise. Actives desire additional walking, biking, and hiking paths throughout the community.

Mobility-challenged individuals use golf carts and drive to get around town. They appreciate smooth, wide walking surfaces and want a sidewalk stretching from the new retirement center to the business district, creating easier access for this group to walk to Dollar General, Hy-Vee, and the bank.

Older adults walk, drive, or bike to get to most destinations. They enjoy fishing at Cherry Lake. This user group appreciates watching the vegetation change through each season. Older adults want additional public transportation options that are easily accessible and more affordable in Tama.

Youth enjoy activities in town such as swimming at the pool, going to the library, and biking at Cherry Lake. During the winter months this group likes to go sledding at the old football field in Toledo.

Parents primarily walk and drive in town. This group enjoys going to Oak Park with their kids to use the playground and baseball diamonds. Parents want more sidewalks throughout town and better connections to Tama Park to improve safety.

Steering committee members bike, walk, and drive for transportation. They would like additional pedestrian crossings along Highway 63. They also want Cherry Lake to be better recognized throughout the community for bird watching and natural scenery.

User Types	Destinations and Activities				Desired Qualities and Features				Undesirable Qualities and Features				Most Desired Improvements and Activities			
	Cherry Lake	Recreation Trail	Oakhill Park	Outdoor Recreation Venues	Safety	Natural Areas and Vegetation	Incomplete & Poor Sidewalks	Unsafe Crossings	Poor Visibility	Winter Weather Conditions	Trail Conditions	Better Connectivity	Cherry Lake Trail	Complete Sidewalk System	Trail Improvements	
	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
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User Types



Cherry Lake is a popular destination among all user types. Older adults appreciate seeing staff while on the Recreation Trail. Steering committee members and active users enjoy the beauty and park-like setting. Mobility-challenged people, parents, and active users enjoy picnics, barbecues, and sand on the volleyball courts. Parents and active adults find the park to be picturesque. All groups appreciate outdoor recreation venues such as Cherry Lake, Youth and active adults enjoy the swimming pool, while parents, mobility-challenged people, and older adults use Oakhill Park and the fee-free trail. Safety is a priority among parents, older adults, and mobility-challenged people. The mobility-challenged and older adults use Oakhill Park and the fee-free trail because they are well-maintained. The older adults appreciate the trail and around town. Youth and active users enjoy the wooded area behind Cherry Lake. The recreation trail that provides shade. The canopy along Highway 63. The lack of sidewalks along Church Ave and other streets make it difficult for residents to get to the pool. Steering committee members, older adults, and active users feel unsafe when trying to cross Highway 63 and about children trying to cross these streets. Steering committee members said the dense tree intersection. Show signs at the crossing. The dense trees and lack of sidewalks are not desired. Older adults and youth are concerned about the road. The road gets washed out, muddy, and visibility issues caused by snow, sleet, and along Highway 63. Youth talked about the path being covered in sticks. Many groups said that during the winter they have to park their cars and avoid the road. The road is not paved. The South Tama Recreation area was a popular destination among all user types. Active users, parents, and youth think that the trail is a good and the active trail and parking. Parents and other adults at Cherry Lake could be better. Parents and other adults along major roads and highways mentioned year-round. All user types want continuous and smooth sidewalks around town, especially in front of the high school and along Highway 63. Parents and youth said that a new sidewalk would make it easier to get to the pool facility. The steering committee, parents, and active adults want a new sidewalk trail. The steering committee and other adults along the trail, especially equipment for winter trail. The steering committee, parents, and active adults mentioned distance signage along the South Tama Recreation Trail.

Transportation Behaviors and Needs

Overview

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

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

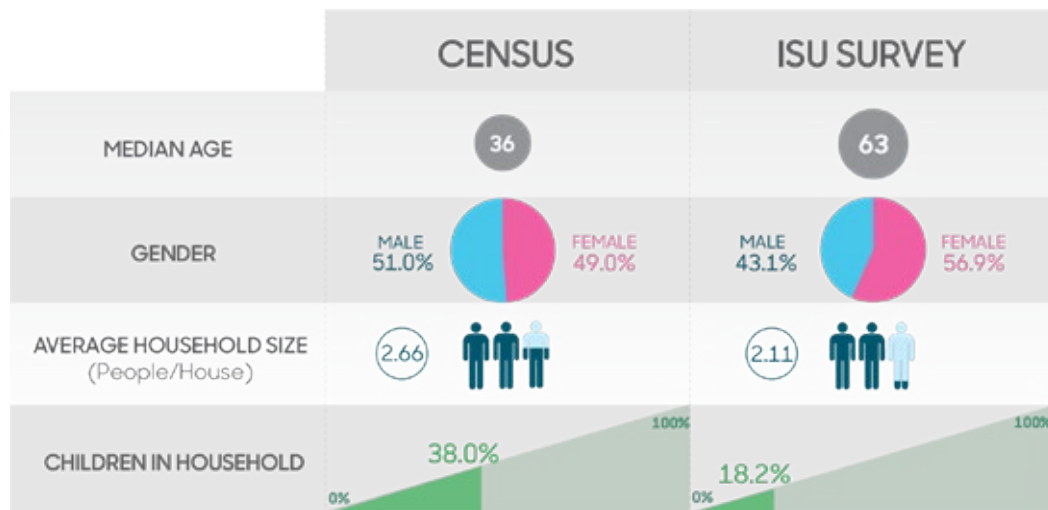
With assistance from Iowa State University's Survey Research Services staff in the Center for Survey Statistics and Methodology (CSSM-SRS), ISU visioning program staff conducted a survey to better understand the transportation patterns, behaviors, needs, and desires of Tama residents. Surveys were mailed to 280 randomly selected residents living in Tama and the surrounding area. To increase the response rate, the study was publicized through the local media and follow-up packets were mailed to nonrespondents. With adjustments for ineligible respondents (e.g., incorrect addresses, no longer living in the community), the final sample size was 252. A total of 67 people returned surveys, for a response rate of 26.6%. (A response rate of 20% is considered valid.)

We asked survey recipients what routes they use most often for going to work, walking, and biking. In addition, we asked what qualities and features are important during these activities. We also discovered what residents think is most important in terms of transportation enhancements that address issues such as accessibility, mobility, and safety. Finally, we learned whether or not residents are willing to contribute their time or their financial resources to making enhancements to Tama. This series of boards summarizes the results of the survey as follows:

- Willingness to Help
- Enhancement Priorities
- Commuting Routes
- Walking Routes
- Biking Routes
- Regional Biking Routes

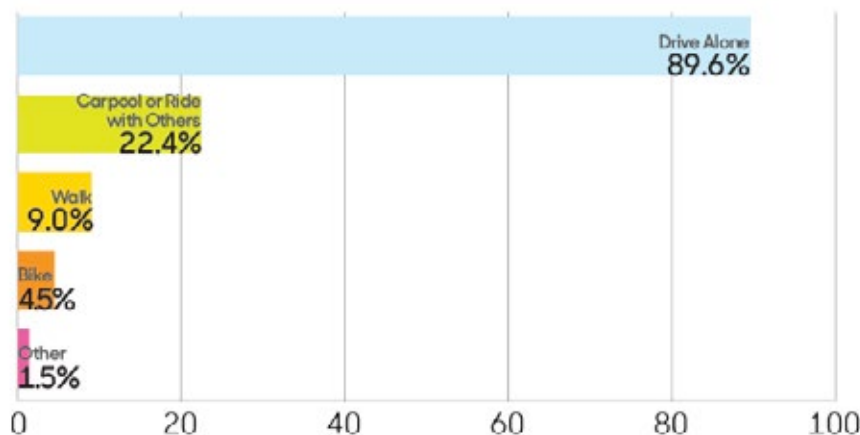
How We Did

The demographics of the respondents are quite different from those obtained from the 2019 American Community Survey Five-Year Estimate and the World Population Review. For example, the survey respondents median age of 63 is nearly twice that of the 2019 estimated average age for Tama residents of 36. In terms of gender, the percentage of female survey respondents is significantly higher than that of the census. Average household size of survey respondents is much lower than the 2019 estimate, as is the percentage of households with children among survey respondents compared to census data.



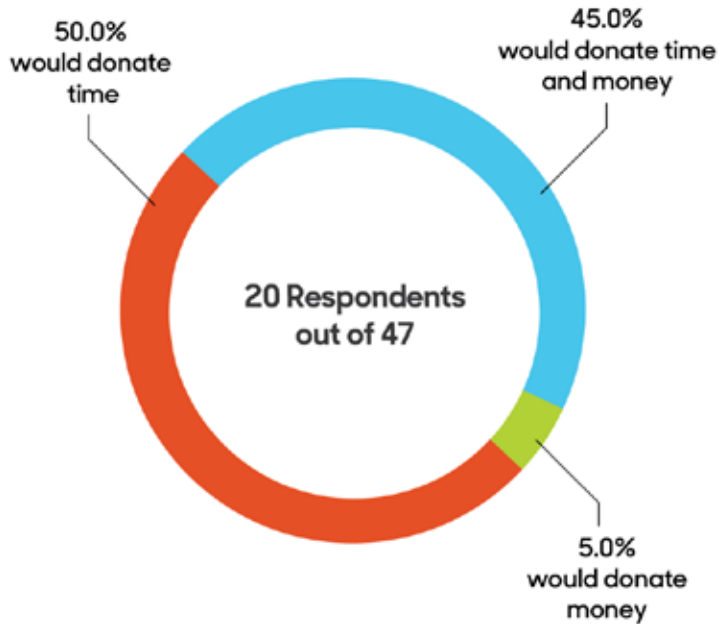
How Tama Residents Travel

Most survey respondents drive to important destinations such as the convenience store, the post office, school, and church (89.6%). More than 22% car pool or ride with someone else. Nine percent of participants indicated that they walk, 4.5% bike, and 1.5% use another form of transportation.



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

Willingness to Help



Of the survey participants who answered yes to this question, 50% are willing to contribute their time to community improvements, while 45% would contribute their time and money. Five percent of respondents indicated that they would be willing to contribute financially. Tama residents are comparable to other small towns in Iowa in terms of willingness to become involved in improving their community. In 2014, on average, 43% of residents in small, rural towns volunteered to help with a community project.¹ Tama is only 1% below this average.

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

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

Survey Participants Said...



"[I] love the walk trail in Tama, [but] snow cover minimizes use during winter months."

"[I] would like to see more assistance for the elderly, [and] better ways to get to the bike trails."



"[The] sidewalk system can be greatly improved, especially around and to schools, businesses."

How Do You Get People to Help?

Ask, Show, and Advertise Opportunities

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

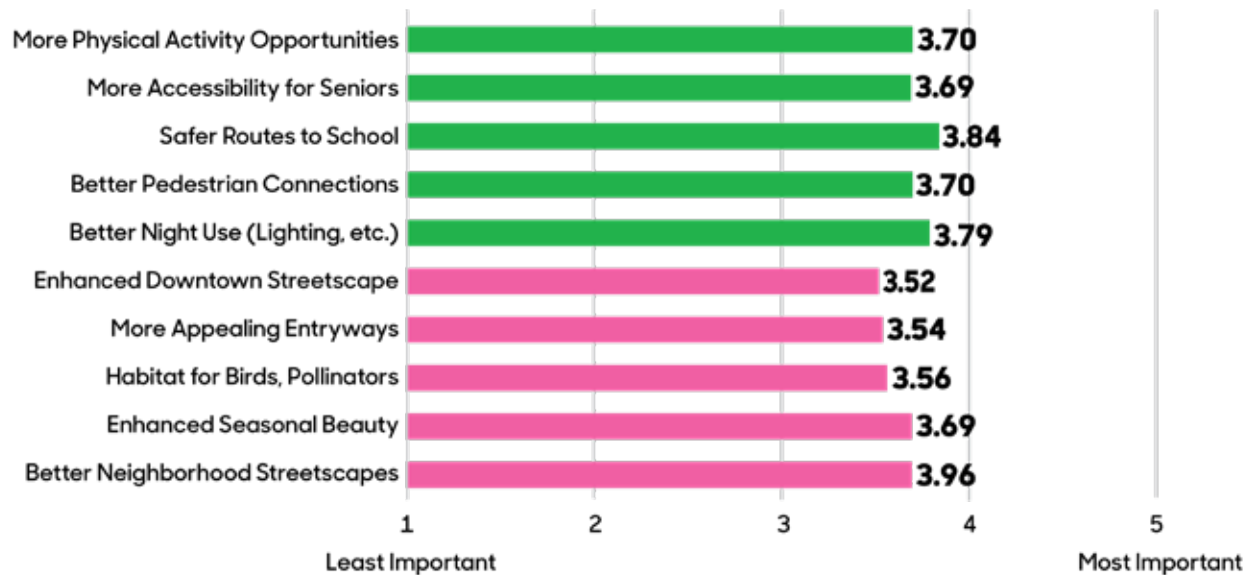
¹ *Sigma: A Profile of Iowa Small Towns 1994 to 2014* (Ames, IA: Iowa State University College of Agriculture and Life Sciences, 2015).

Priorities

On a scale of 1 to 5, with 5 being the most important, participants in Tama ranked better neighborhood streetscapes as most important, with a mean value of 3.96. Transportation enhancements that address pedestrian mobility, health, and safety are also considered important, such as creating safer routes to school (3.84), improving night use (3.79), and providing better pedestrian connections and creating more opportunities for physical activity (3.70 each). Other transportation enhancements that impact the quality of the built environment, such as enhanced seasonal beauty (3.69) and habitat for birds and pollinators (3.56) are also somewhat significant.

Transportation Enhancement Issues

- Pedestrian Mobility, Safety, and Health
- Quality of the Built Environment



Survey Participants Said...



"I only bike on low-traveled streets and routes... Biking old 30 (Lincoln Hwy) to [the] Settlement and back is lovely, but extremely hazardous as there is no bike lane and it's a narrow blacktop. It would be wonderful if a bike lane could be made on that stretch of old 30..."

"There [are] hardly any walkways in Tama and the sidewalks are in bad shape and a safety hazard for a disabled person. [I am] afraid of falling on bad sidewalks, and you have to walk on the highway."



"...[the] temporary stop signs on 63 through Tama are short and not 'showy' enough to see until you come up on them."

"Just because I no longer can walk any distance, I believe very strongly that walking is important. Our rec trail is excellent for this."



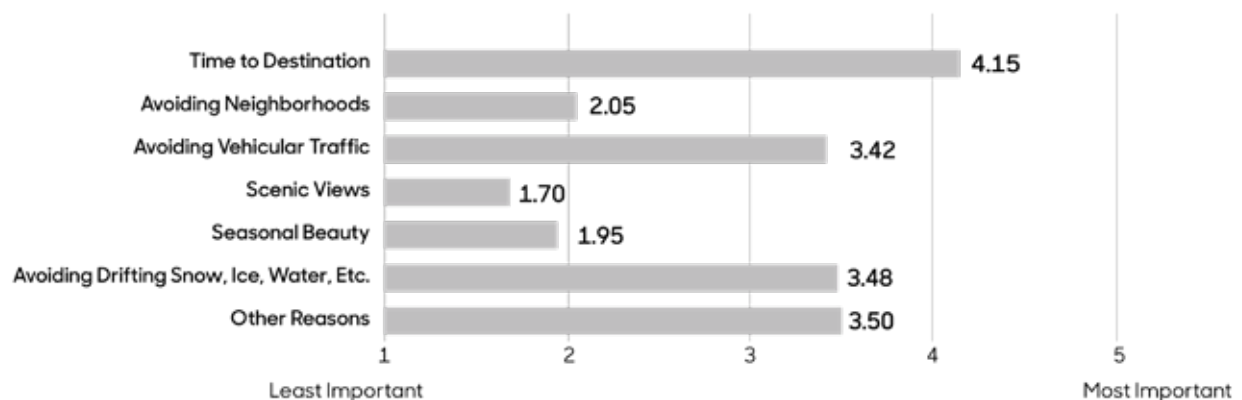
Commuting Routes

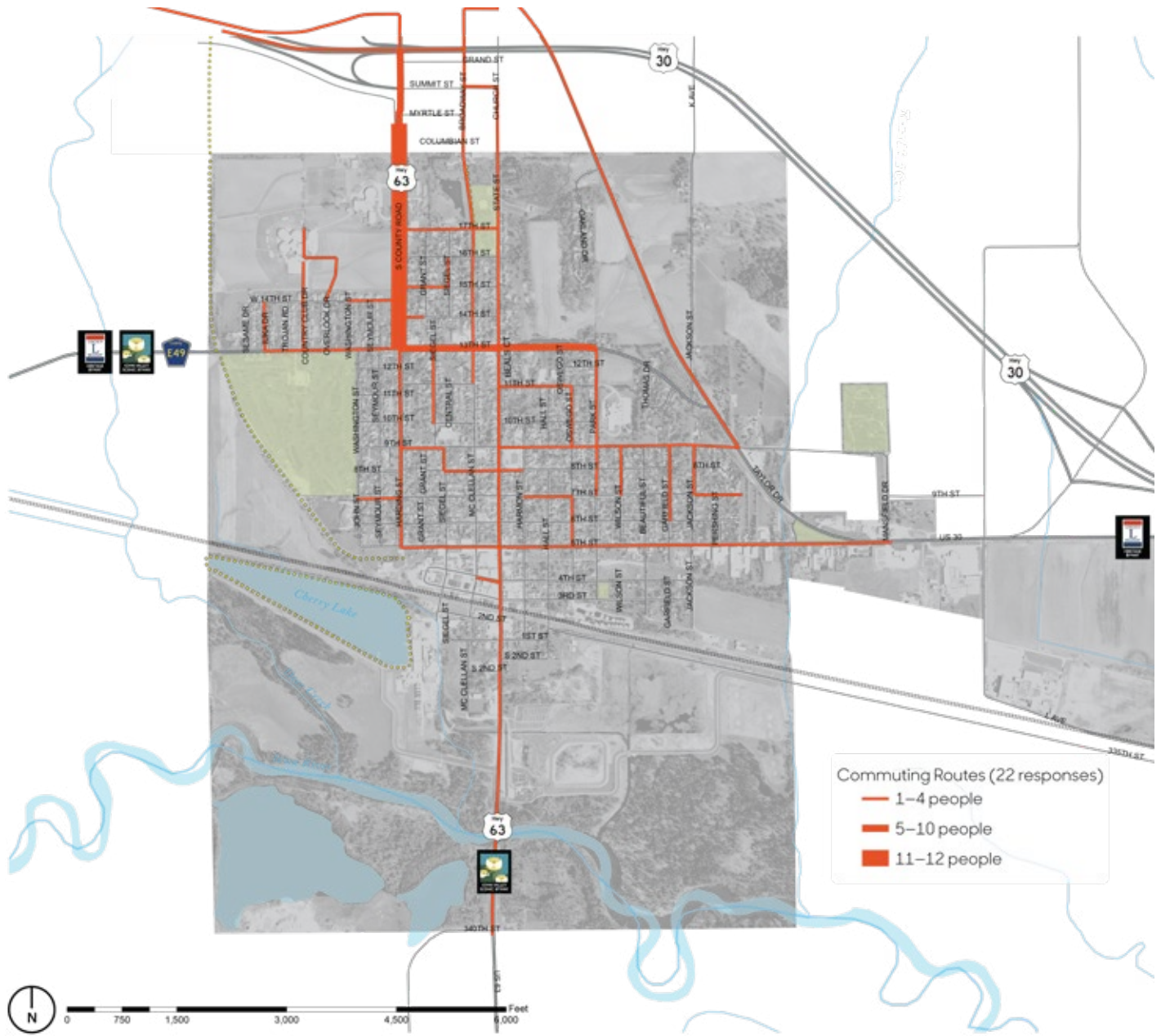
This map shows the commuting routes identified by 22 survey respondents. The frequency that the routes are used is depicted by their width, with most frequently used routes being the thickest. The primary commuting corridor in Tama is Highway 63 from 13th Street north to US 30. Some people travel on US 30 Business, and some take the Lincoln Highway Historic Byway. East-west travel takes place mainly on 13th, 9th, and 5th Streets.

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

Why They Go That Way

On a scale of 1 to 5, with 5 being the most important, survey participants ranked the characteristics and features that factored into their choice of commuting route. Among Tama participants, time to destinations is the most important factor, with a mean value of 4.15. Other reasons (3.50) include visibility, road conditions, and avoiding trains are also significant factors. Avoiding weather-related issues such as snow and ice is considered somewhat important, with a mean value of 3.48, followed by avoiding vehicular traffic (3.42). Scenic views, seasonal beauty, and avoiding neighborhoods are not critical factors in determining commuting routes.



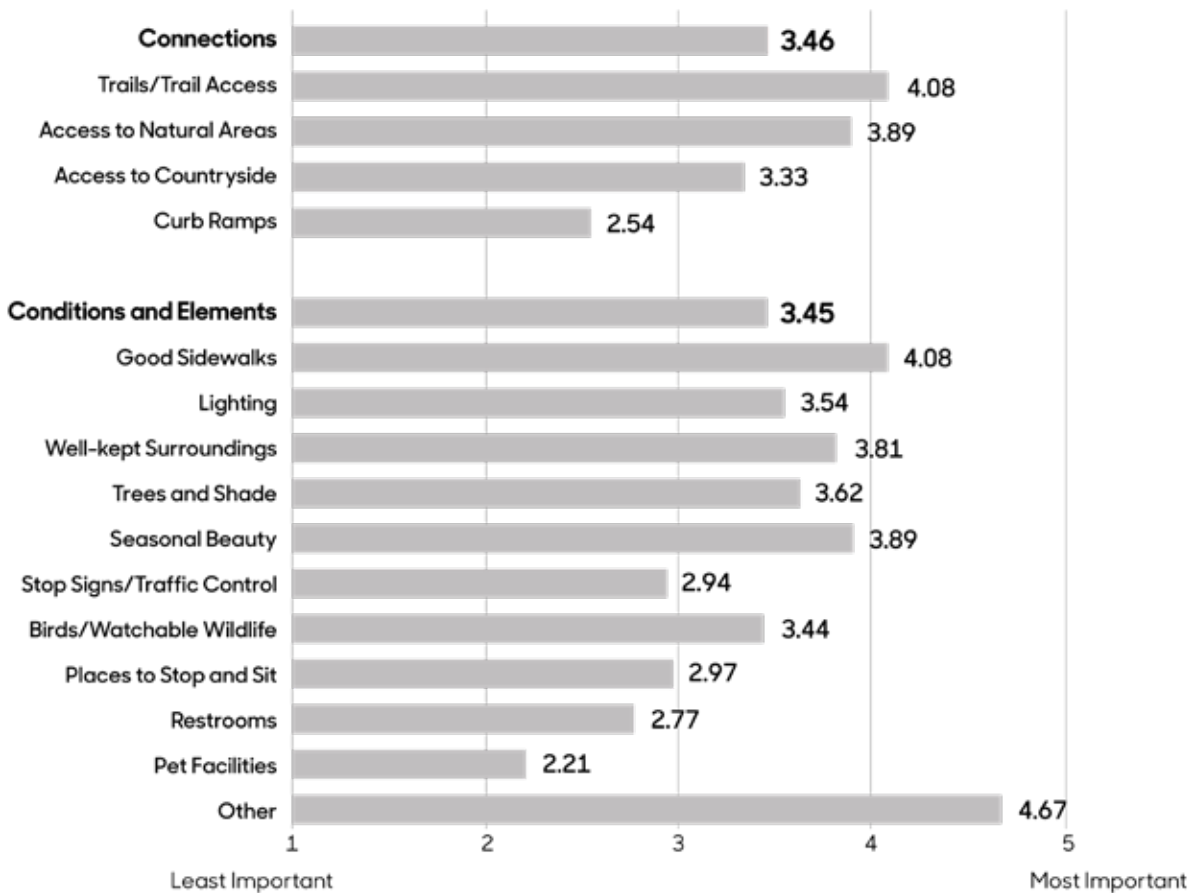


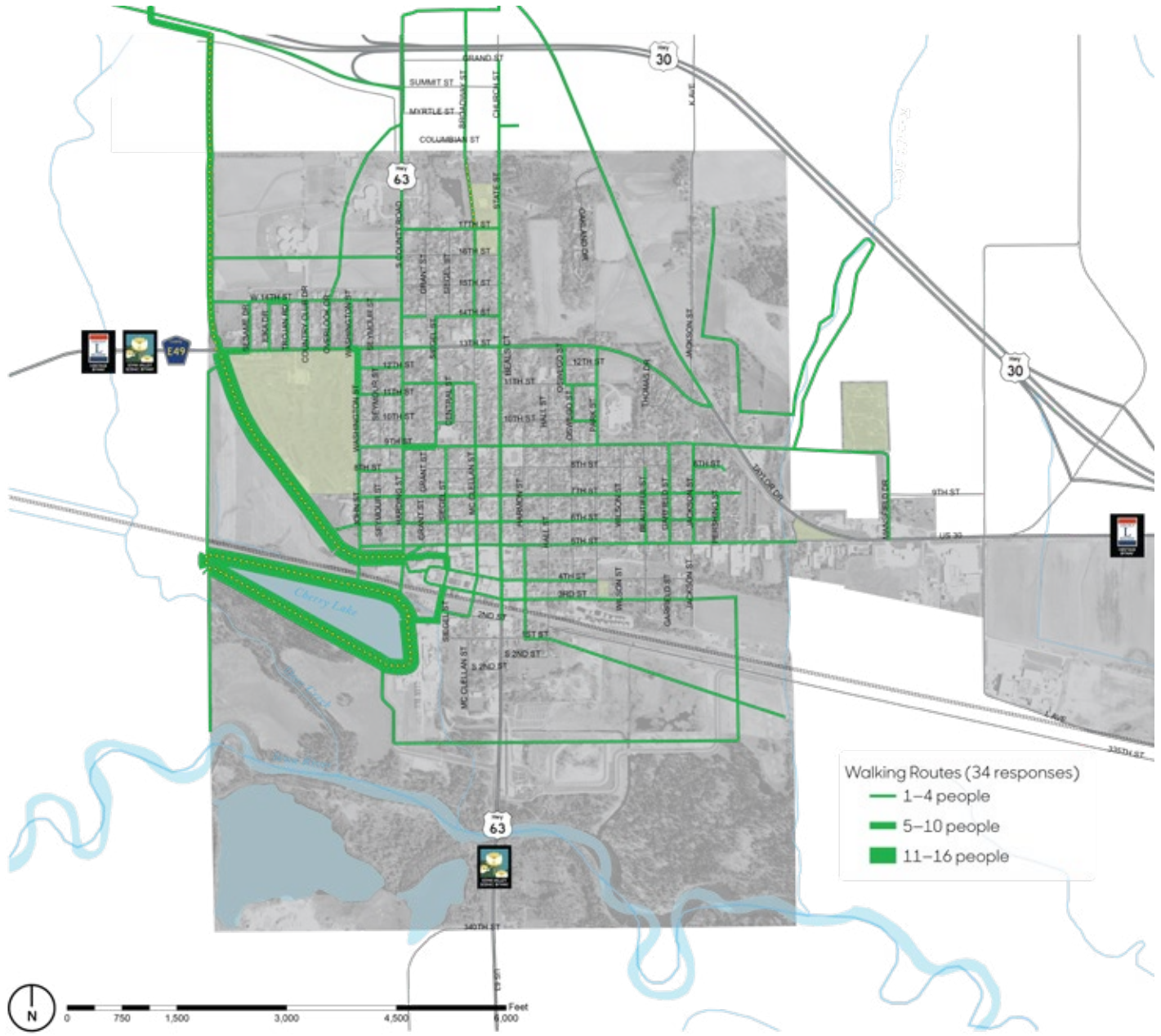
Walking Routes

This map shows the walking routes identified by 34 survey respondents. The frequency that the routes are used is depicted by their width, with most frequently used routes being the thickest. The Cherry Lake trail and the South Tama Recreation Trail, especially between the country club and the lake, are the most popular walking venues among survey participants. Streets near Cherry Lake and the rec trail, such as Siegel Street, are more heavily used than other city streets.

Why They Go That Way

On a scale of 1 to 5, with 5 being the most important, survey participants ranked the characteristics and features that made their walking experience better. These features are categorized as either "connections" or "conditions and elements." Among Tama participants, connections are roughly the same in importance as conditions/elements, with mean values of 3.46 and 3.45, respectively. In terms of connections, access to trails is most important with a mean value of 4.08. In terms of conditions and elements, other factors (4.67)—such as low traffic, proximity to shopping or parks, and safety—are most important. Good sidewalks (4.08) are the next most important element to walkers, followed by seasonal beauty (3.89) and well-kept surroundings (3.81).



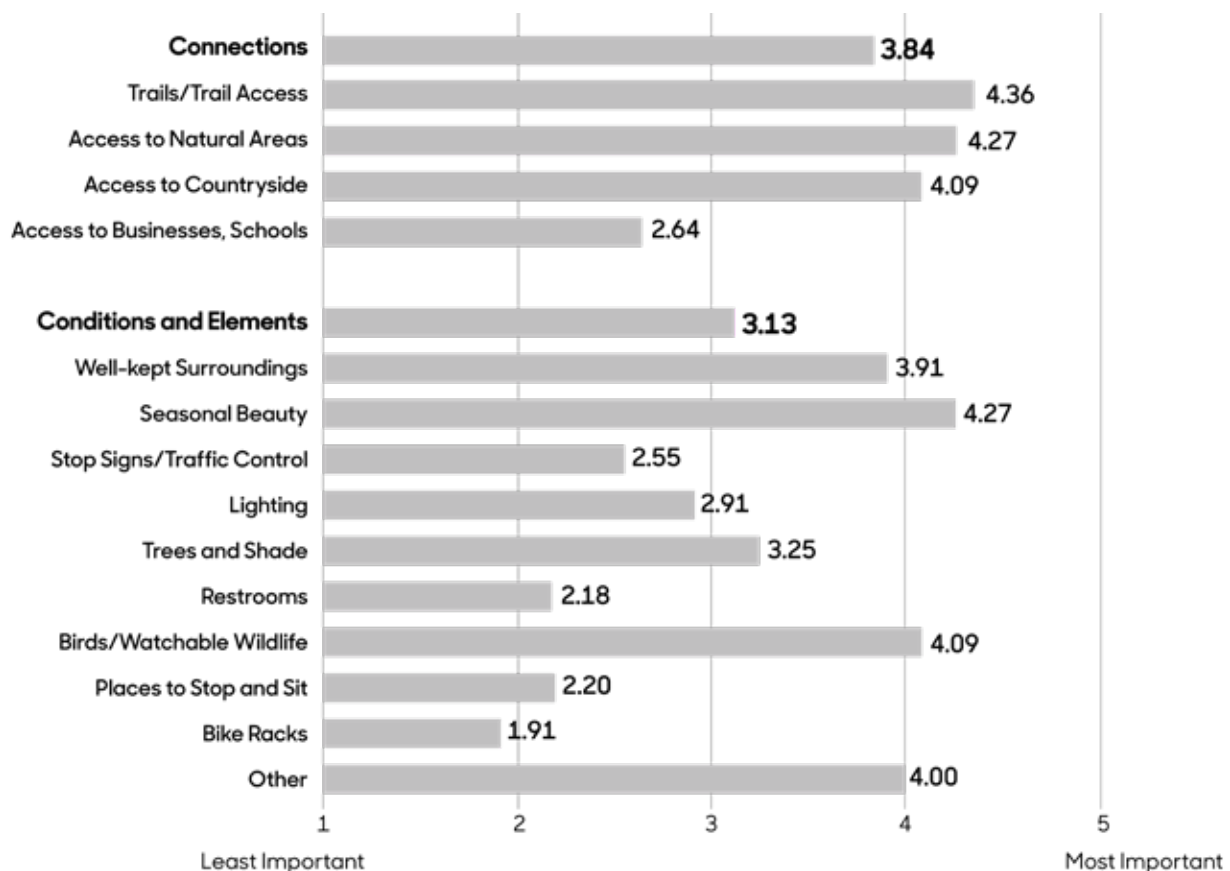


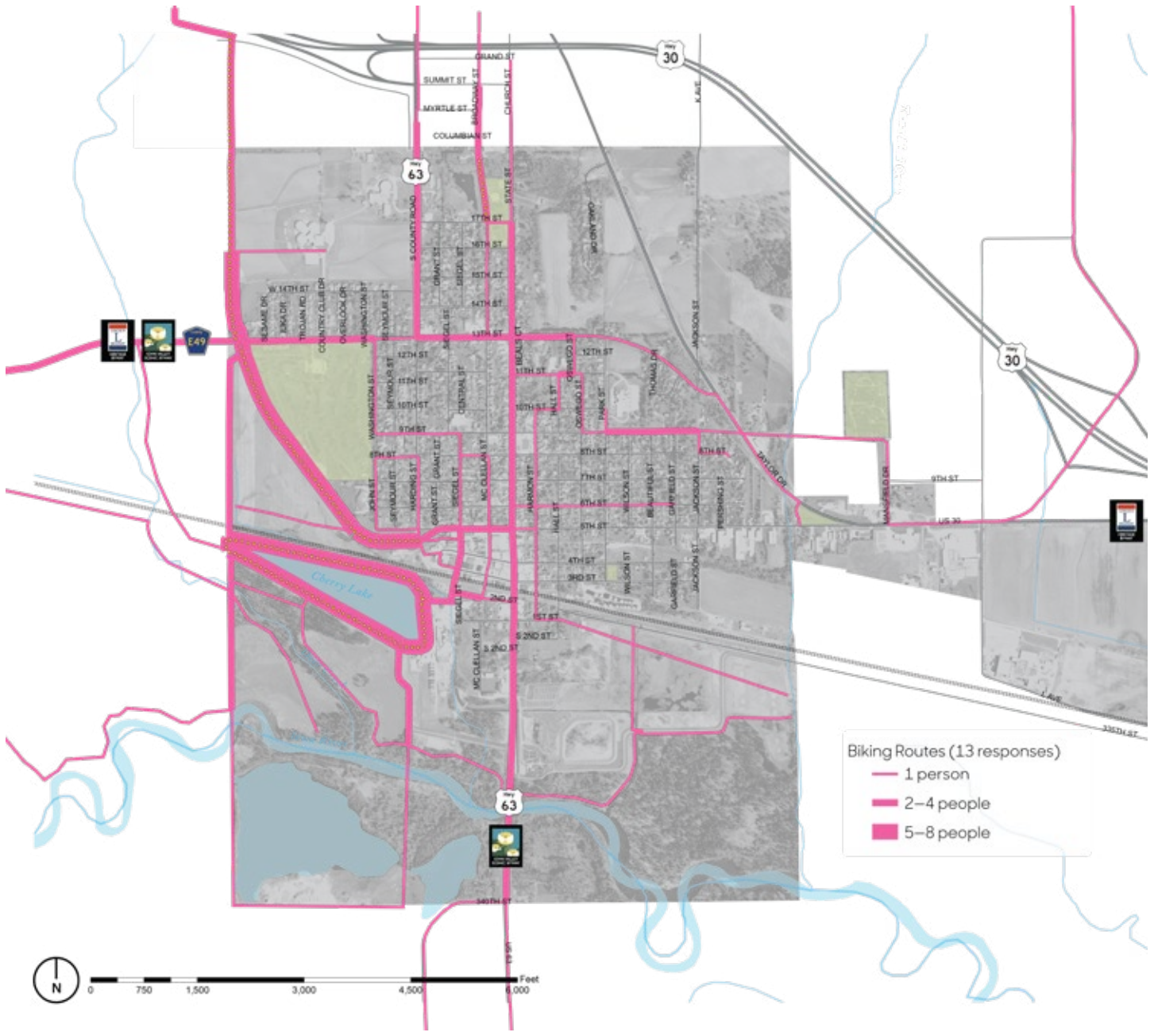
Biking Routes

This map shows the biking routes identified by 13 survey respondents. The frequency that the routes are used is depicted by their width, with most frequently used routes being the thickest. Like walkers, cyclist most frequently use the South Tama Recreation Trail and the trail at Cherry Lake. People also bike on the Iowa Valley Scenic Byway (Highway 63) and west out of town on the Lincoln Highway Heritage Byway. Broadway and State Street are the primary north-south routes in town, and 13th Street, 9th Street, and 5th Street are the most frequently used east-west routes.

Why They Go That Way

On a scale of 1 to 5, with 5 being the most important, survey participants ranked the characteristics and features that made their biking experience better. These features are categorized as either "connections" or "conditions and elements." Among Tama participants, connections are significantly more important than conditions/elements, with mean values of 3.84 and 3.13, respectively. In terms of connections, access to trails is most important with a mean value of 4.36, followed by access to natural areas (4.27). In terms of conditions and elements, seasonal beauty is most important (4.27), followed by birds/watchable wildlife (4.09), and well-kept surroundings (3.91). Other factors (4.00)—including designated trails or paths and safety—are also significant.



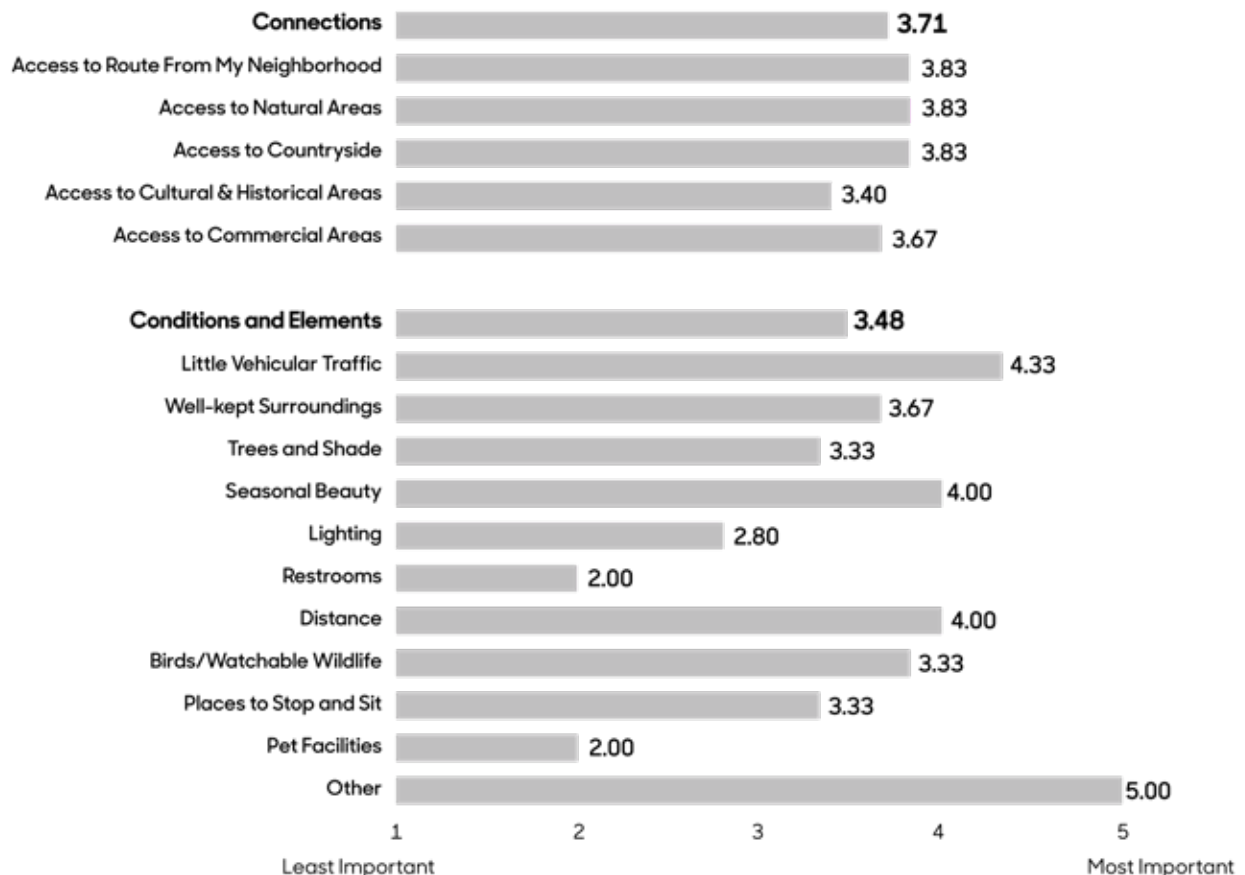


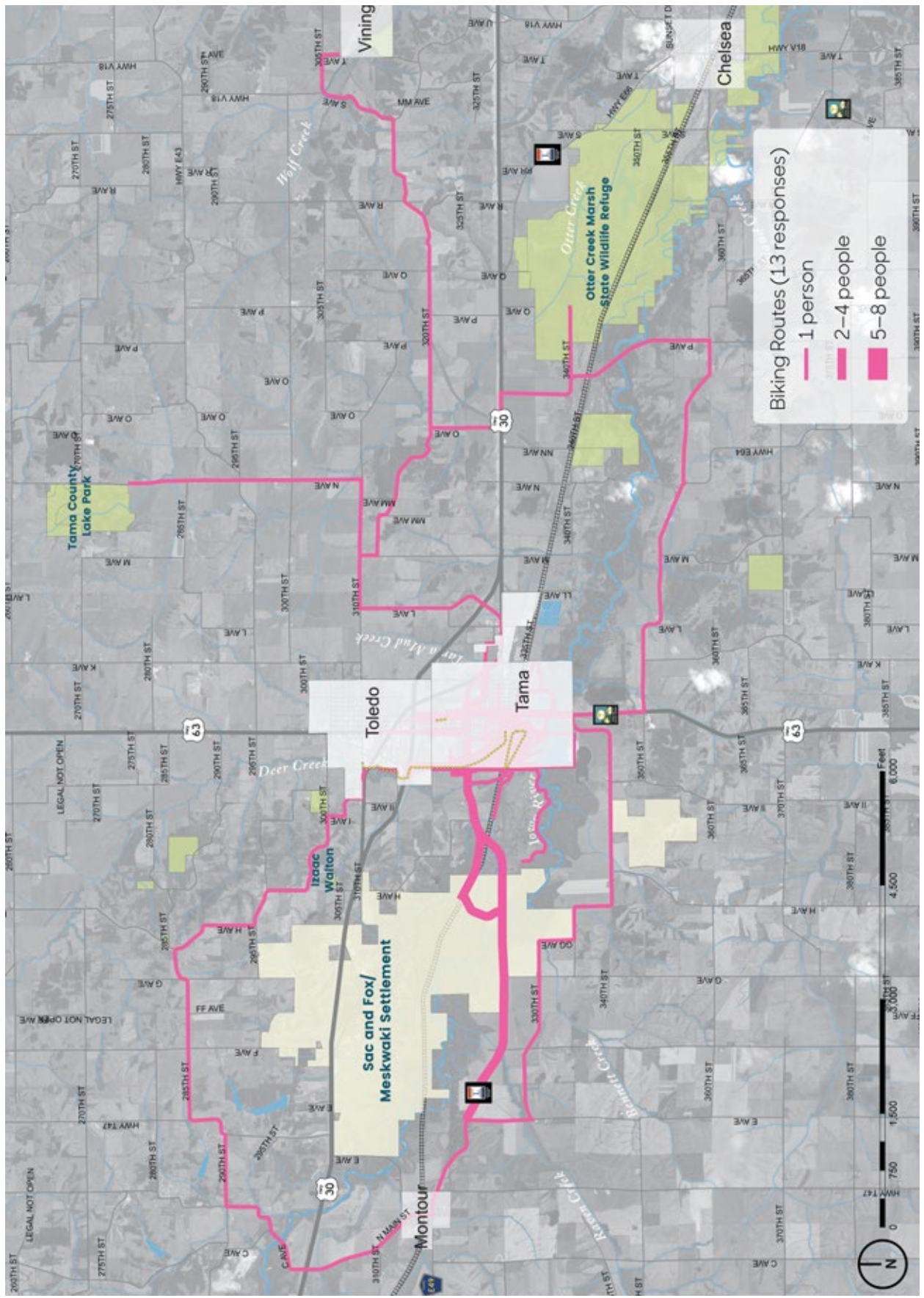
Regional Bike Routes

This map shows the out-of-town biking routes identified by 13 survey respondents. The frequency that the routes are used is depicted by their width, with most frequently used routes being the thickest. The most popular out-of-town biking route is east on the Lincoln Highway Heritage Byway into and beyond the Sac and Fox/Meskwaki Settlement. Some cyclists make a loop around the settlement. People also like to bike to the many natural areas in the region, including the West Salt Creek Wildlife Area in Vining, the Otter Creek Marsh State Wildlife Refuge, and the Izaak Walton Tract Recreation Area.

Why They Go That Way

On a scale of 1 to 5, with 5 being the most important, survey participants ranked the characteristics and features that made their out-of-town biking experience better. These features are categorized as either "connections" or "conditions and elements." Among Tama participants, connections are more important than conditions/elements, with mean values of 3.71 and 3.48, respectively. In terms of connections, access to the route from one's neighborhood, access to the countryside, and access to natural areas are considered equally important, each with a mean value of 4.33. In terms of conditions and elements, other factors (5.00)—namely safety from vehicles—are most important, followed by little vehicular traffic (4.33), and route distance and seasonal beauty (4.00 each).





Interview with Hispanic Residents

The Hispanic population in Tama and Toledo is significantly higher than that of the state of Iowa, which is only 6.3%. In Tama and Toledo, 34.6% and 14.2%, respectively, of the populations are Hispanic.¹ The Tama and Toledo visioning committees recognized the importance of engaging with this substantial group of residents. To capture the transportation behaviors, needs, and desires of this demographic group, the ISU research team conducted an interview with two members of the Hispanic community, one from Tama and the other from Toledo. The interview was conducted via Zoom, and, like with the focus groups, the team annotated interviewees' comments on an aerial map.



Hispanic residents like to walk on the trail around Cherry Lake because it is safe and they enjoy the natural scenery.



Because many Hispanic residents do not drive, they have to walk to basic services, many of which are located along Highway 63.

¹ "American Community Survey (ACS)," accessed May 21, 2021. <https://www.census.gov/programs-surveys/acs>.

Emerging Themes

Desirable Qualities and Features

Members of the Hispanic community walk and bike for recreation. Safety is the primary factor affecting their choice of walking and biking routes. Hispanic residents like Toledo Heights Park because there is no traffic, the drive is paved, and the park layout allows parents to keep an eye on their kids. Interviewees also identified Cherry Lake and the South Tama Recreation Trail as both safe and scenic places to go. Tama and Toledo focus-group participants and survey respondents also value these recreation venues for similar reasons.

Undesirable Qualities and Features

The absence of sidewalks and designated pedestrian crossings throughout Tama and Toledo is the most significant barrier to Hispanic residents in the two communities. Specifically, interviewees cited the Highway 63 corridor, from which people access Fareway and Dollar General in Toledo and the elementary and high schools in Tama, as particularly hazardous for pedestrians. One interviewee shared that they had seen parents pushing a stroller through the grass, trying to manage kids, and carrying groceries along Highway 63. Interviewees also talked about frequent car accidents at the entrance to the high school. Focus-group participants in both Tama and Toledo share this view, particularly parents and older adults.

Desired Improvements

Hispanic residents would benefit most from additional sidewalks and controlled pedestrian crossings, according to interviewees. Specifically, they would like sidewalks along the Highway 63 corridor to provide better pedestrian access to the Toledo business district and the elementary and high schools in Tama. Interviewees also suggested several stoplights, primarily to make it safer for kids walking to school, including at the entrance to the high school, at 12th and Harding Street, 9th and State Street, and 5th and State Street. These suggestions are consistent with the priorities expressed by survey respondents, which include creating safer routes to school.

Interviewees said that a bus or taxi service would be beneficial to Hispanic residents, many of whom do not drive. Older-adult focus-group participants would also like some sort of public transportation.

Finally, Hispanic residents would like the South Tama Recreation Trail to be paved, a view expressed by participants in the Toledo parents and actives focus groups.

Transportation Inventory and Analysis

Knowledge of the transportation systems in and around a community is critical for sustainable transportation enhancement planning. Tama's transportation system includes roadways, sidewalks, an active railroad and a multi-use trail.

The Tama 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.

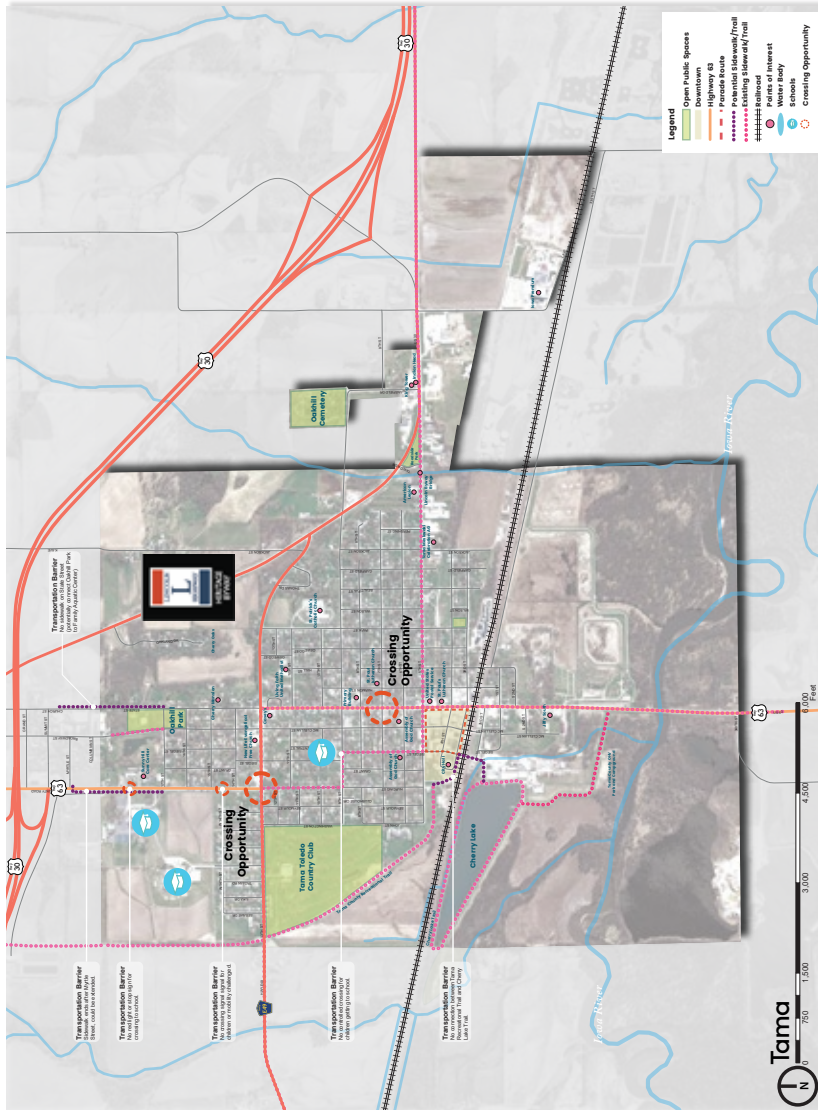
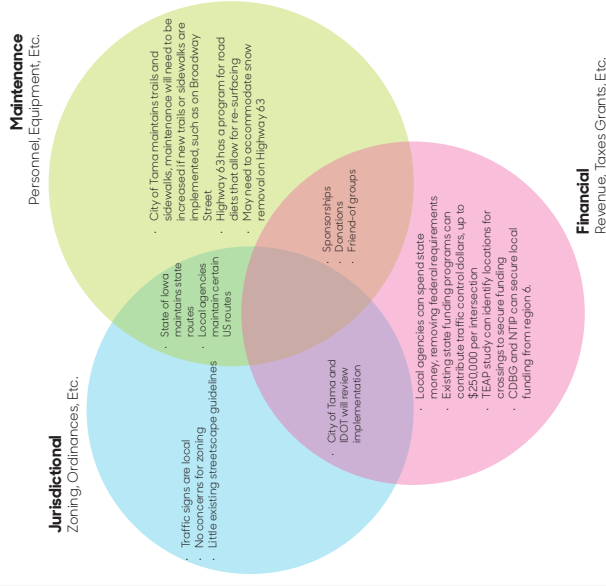
The design team met with local community members and officials to determine which factors and existing conditions would affect the implementation of proposed designs, as well as the strengths and liabilities of current transportation systems in Tama.

Tama officials were largely concerned with the jurisdictional, maintenance, and financial aspects of any proposed improvements and provided the design team with insights for potential existing funding sources. They also identified the limited existing streetscape guidelines and maintenance costs as transportation-related threats.

Tama residents cited incomplete sidewalk networks as transportation threats while praising the existing recreation opportunities such as Oak Park, Toledo Heights Park, the South Tama Recreation Trail, and the Cherry Lake Trail. However, pedestrian access to these recreation opportunities is limited, and the community feels strongly about providing a safe transportation network connecting these strengths.

Community Influences

The design team met with Tama residents to understand the larger community influences that will affect any proposed planning and design projects. These are jurisdictional, maintenance, and financial aspects of implementation that will need to be considered by the Community Visioning team.



Tama

Transportation Inventory

site design group

LA: Cassandra Rice, PLA, A SLA, Hana Ishikawa, AIA
Landscape Designer: Richard Meagher
Intern: Paul Hsu

Iowa State University | Trees Forever | Iowa Department of Transportation



Community Concept Plan

Based on review of the bioregional assessment, feedback from survey respondents and focus group participants, and input from the Tama and Toledo Community Visioning steering committees, the design team proposed the following transportation improvement concepts:

- Traffic calming measures and signage for increased pedestrian and vehicular safety.
- Connect existing sidewalks to provide better connections between existing amenities such as the Tama-Toledo Water Park, STC High School and Elementary School, and both Tama and Toledo's downtown areas.
- Improving downtown Tama with better wayfinding, on-street parking, and community projects such as pocket parks and wall murals.
- Connecting the Tama Rec Trail and Cherry Lake.
- Rethinking Oak Park between State and McClellan Street to better accommodate residents and their children.
- Improving downtown Toledo with better wayfinding, pop-up outdoor spaces for businesses and activities, and increased on-street parking.
- Increasing access to existing amenities such as Toledo Heights Park and South Tama Recreational Trail.
- Improve existing sidewalks within the areas south of downtown Toledo.

These concepts seek to improve community identity, aesthetics, way-finding, and walkability throughout Tama and Toledo, addressing a range of community issues that were identified in the information gathering and analysis phase.

Tama and Toledo Community Concept Plan

The two communities of Tama and Toledo have integrated transportation networks, and to address the issues facing both cities the design team decided to look at these systems as a whole rather than separately. Various improvement projects will require collaborative efforts between Tama and Toledo, and certain design concepts may technically be located within another town's borders but will affect the residents of both communities.

TAMA-TOLEDO JOINT PROJECTS	CONCEPT 1	CONCEPT 2	RESPONSIBLE PARTY	POTENTIAL PARTNERS
17TH STREET AND US 63	\$123,178	\$1,563,848	Tama and Toledo	Iowa DOT, South Tama Community School District, Local Artists
SOUTH TAMA REC TRAIL	\$1,321,820		Tama and Toledo	Tama County Parks
BROADWAY AND LINCOLN AVE	\$42,775		Tama and Toledo	Iowa DOT
ENHANCED PEDESTRIAN NETWORK	\$5,284,200		Tama and Toledo	Iowa DOT
JOINT PROJECTS TOTAL	\$6,771,973	\$1,563,848		

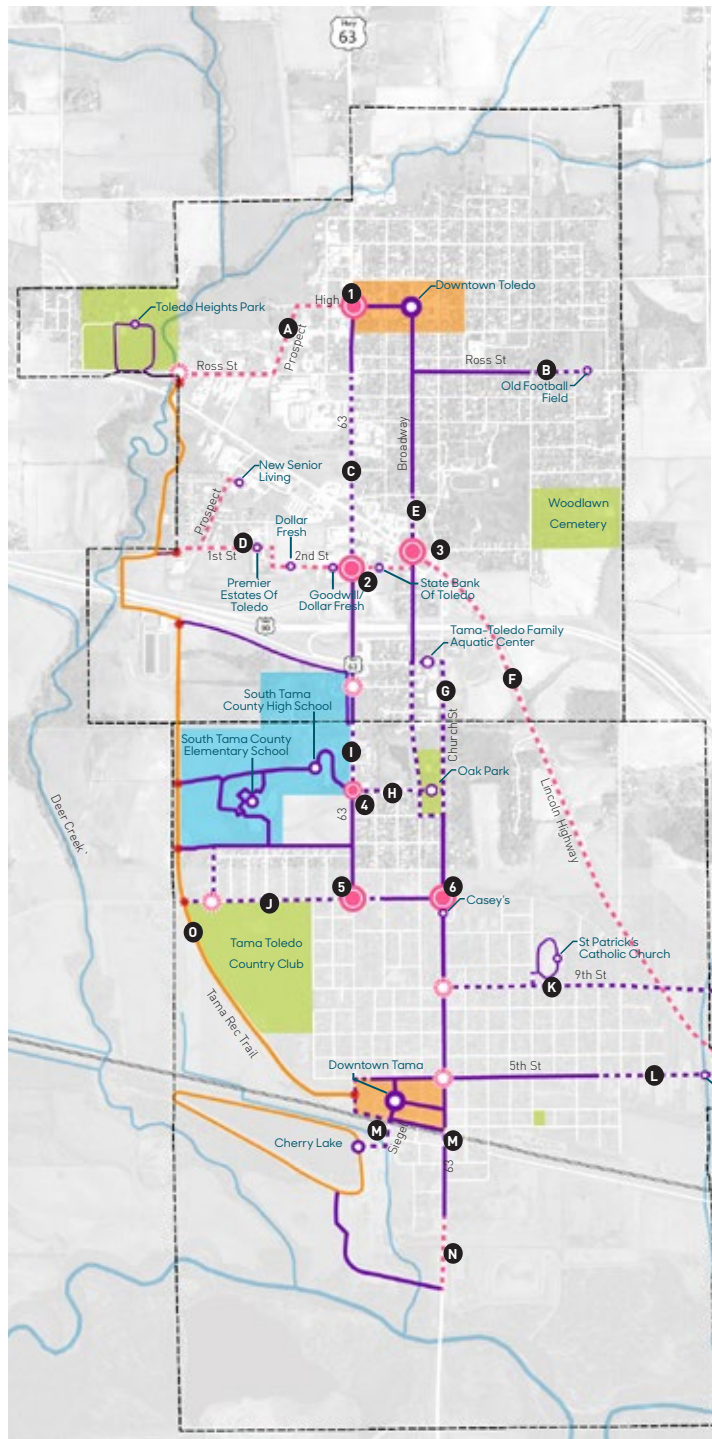
TAMA PROJECT	CONCEPT 1	CONCEPT 2	RESPONSIBLE PARTY	POTENTIAL PARTNERS
DOWNTOWN TAMA	\$438,770	\$841,653	City of Tama	Local Business Owners, Local High School Students (art competition), Main Street USA
STATE STREET AND US 63	\$113,100	\$82,900	City of Tama	Iowa DOT, Casey General Store, South Tama Community School District, Local Artists
HARDING AND US 63	\$75,400	\$85,057	City of Tama	Iowa DOT, South Tama Community School District, Local Artists
OAK PARK	\$1,405,520		City of Tama	Tama County Parks, Local Business Owners, Lions / Kiwanis / Community Organizations
TAMA PROJECTS TOTAL	\$2,032,790	\$1,009,610		

TOLEDO PROJECT	CONCEPT 1	CONCEPT 2	RESPONSIBLE PARTY	POTENTIAL PARTNERS
DOWNTOWN TOLEDO	\$655,400	\$799,516	City of Toledo	Local Business Owners, Local High School Students (art competition), Main Street USA
2ND STREET AND US 63	\$98,159		City of Toledo	Iowa DOT, Local Businesses Owners/Banks, Artists
HIGH STREET AND US 63	\$54,504	\$70,174	City of Toledo	Iowa DOT, Downtown Business Owners, Cultural Institutions, Local Artists
TOLEDO HEIGHTS CONNECTION PLAN (Segment A)	\$361,485		City of Toledo	Tama County Parks
2ND AND PROSPECT CONNECTION PLAN (Segment D)	\$237,075		City of Toledo	Iowa DOT, Downtown Business Owners, Senior/Assisted Living Institutions, Cultural Institutions, Local Artists
TOLEDO PROJECTS TOTAL	\$1,406,623	\$869,690		

GRAND TOTAL COSTS:	\$10,211,386	\$3,443,147		
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Proposed Trail Network + Project Sites



Visioning Process + Projects

- Based on review of the bioregional assessment, feedback from survey respondents and focus group participants, and input from the Tama and Toledo Community Visioning steering committees, the design team proposed the following transportation improvement concepts:
- Traffic calming measures and signage for increased pedestrian and vehicular safety.
 - Connect existing sidewalks to provide better connections between existing amenities such as the Tama-Toledo Water Park, STC High School and Elementary School, and both Tama and Toledo's downtown areas.
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 - Rethinking Oakhill Park between State and McClellan Street to better accommodate residents and their children.
 - Improving downtown Toledo with better wayfinding, pop-up outdoor spaces for businesses and activities, and increased on-street parking.
 - Increasing access to existing amenities such as Toledo Heights Park and South Tama Recreational Trail.
 - Improve existing sidewalks within the areas south of downtown Toledo.

These concepts seek to improve community identity, aesthetics, way-finding, and walkability throughout Tama and Toledo, addressing a range of community issues that were identified in the information gathering and analysis phase.

Proposed Trails + Sidewalks

- A Segment A: Toledo Heights Park to High/63 via Prospect and Ross
- B Segment B: Old Football Field to Elm Street via Ross Street (one block)
- C Segment C: Ross Street to the Business District via 63
- D Segment D: Tama Rec Trail and Toledo City Hall to the Business District and Broadway Street via 1st/2nd Street and Prospect Drive
- E Segment E: Mill Street to 2nd Street via Broadway Street
- F Segment F: Lincoln Highway Trail - continues into Tama
- G Segment G: Park Loop Trail (Summit to Church to 16th to Broadway, loops around the Tama-Toledo Family Aquatic Center and Oak Park
- H Segment H: Oakhill Park to STC High School via 17th Street
- I Segment I: STC High School to Toledo via 63
- J Segment J: 13th Street to Sesame Drive
- K Segment K: 63 to Oakhill Cemetery via 9th Street
- L Segment L: Garfield Street to Iowa Beef via 5th Street and Lincoln Highway
- M Segment M: Tama Rec Trail to Cherry Lake Trail via Siegel and the City Hall Parking Lot
- N Segments N: Downtown Tama to Cherry Lake Trail via 6
- O Segment O: Pave the Tama Rec Trail

Primary Intersection Safety Improvements

- 1 High Street and 63
- 2 2nd Street and 63
- 3 Broadway and Lincoln Highway
- 4 17th Street and 63
- 5 Harding and 63
- 6 State and 63

Tama + Toledo Concept Overview

site design group
 LA: Cassandra Rice, PLA, ASLA, Hana Ishikawa, AIA
 Landscape Designer: Richard Meagher
 Intern: Paul Hsu
 Iowa State University | Trees Forever | Iowa Department of Transportation



Enhanced Pedestrian Network

The primary goals of the improved pedestrian network and enhanced connections include:

- Establish a functional, safe pedestrian network that links the two communities, their downtowns, the Tama-Toledo Aquatic Park, Oak Park, and STC High School;
- Establish a functional safe pedestrian network that provides residents and community members with limited mobility options (i.e. lack of car) to access basic goods and services;
- Selectively upgrade sidewalks, targeting portions with heavy use, evident mud/ice issues, and conditions that limit accessibility or fail to adhere to ADA standards; strengthen Tama and Toledo community identities through wayfinding, signage, and environmental graphics (e.g., gateways, follies, etc.) ; enhance pedestrian safety through painted or constructed bump outs, pedestrian refuge islands, painted / enhanced crosswalks, and signage; and, create an iconic and uniquely Tama/Toledo space at Oak Park, establishing it as the "Central Park" of the communities.

Tama and Toledo Enhanced Pedestrian Network

The two communities of Tama and Toledo have integrated transportation networks, and to address the issues facing both cities the design team decided to look at these systems as a whole rather than separately. Various improvement projects will require collaborative efforts between Tama and Toledo, and certain design concepts may technically be located within another town's borders but will affect the residents of both communities.

CONCEPT PLAN - TRAIL SEGMENTS	CONCEPT 1	RESPONSIBLE PARTY	POTENTIAL PARTNERS
SEGMENT A	\$237,075	City of Toledo	Iowa DOT, South Tama Community School District, Local Artists
SEGMENT B	\$136,155	City of Toledo	Iowa DOT, South Tama Community School District, Local Artists
SEGMENT C	\$445,875	City of Toledo	Tama County Parks
SEGMENT D	\$361,485	City of Toledo	Iowa DOT, Local Businesses Owners/Banks, Artists
SEGMENT E	\$139,035	City of Toledo	Local Business Owners, Local High School Students (art competition), Main Street USA
SEGMENT F	\$932,814	City of Toledo	Iowa DOT, Local Businesses Owners/Banks, Artists
SEGMENT G	\$798,370	Tama and Toledo	Tama County Parks
SEGMENT H	\$159,152	City of Tama	Tama County Parks
SEGMENT I	\$93,830	Tama and Toledo	Iowa DOT, South Tama Community School District
SEGMENT J	\$484,735	City of Tama	Tama County Parks
SEGMENT K	\$796,050	City of Tama	Iowa DOT, Downtown Business Owners, Senior/Assisted Living Institutions
SEGMENT L	\$282,750	City of Tama	Iowa DOT, Downtown Business Owners, Cultural Institutions, Local Artists
SEGMENT M	\$245,775	City of Tama	Tama County Parks
SEGMENT N	\$171,100	City of Tama	Iowa DOT, Downtown Business Owners,
TRAIL SEGMENT TOTAL	\$5,284,200		

GRAND TOTAL COSTS: \$5,284,200

ENHANCED PEDESTRIAN NETWORK SEGMENT COSTS

TAMA-TOLEDO JOINT PROJECTS	
SEGMENT B	
Site Prep and Demolition	
6' Concrete Trail (SF)	
Landscape Enhancements	
Turf Seed	
Grading, Drainage, and Erosion Control	
Indirect Costs	
TOTAL	

CONCEPT 1			
QTY	UNIT	COST	TOTAL
1	ALLOW	\$7,500	\$7,500
4600	SF	\$8	\$36,800
3800	SF	\$5	\$19,000
7700	SF	\$3	\$23,100
1	ALLOW	\$7,500	\$7,500
1	ALLOW	45%	\$42,255
			\$136,155

SEGMENT C	
Site Prep and Demolition	
6' Concrete Trail (SF)	
Landscape Enhancements	
Turf Seed	
Grading, Drainage, and Erosion Control	
Indirect Costs	
TOTAL	

QTY	UNIT	COST	TOTAL
1	ALLOW	\$7,500	\$7,500
17000	SF	\$8	\$136,000
14200	SF	\$5	\$71,000
28500	SF	\$3	\$85,500
1	ALLOW	\$7,500	\$7,500
1	ALLOW	45%	\$138,375
			\$445,875

SEGMENT E	
Site Prep and Demolition	
6' Concrete Trail (SF)	
Landscape Enhancements	
Turf Seed	
Grading, Drainage, and Erosion Control	
Indirect Costs	
TOTAL	

QTY	UNIT	COST	TOTAL
1	ALLOW	\$7,500	\$7,500
4722	SF	\$8	\$37,776
3900	SF	\$5	\$19,500
7870	SF	\$3	\$23,610
1	ALLOW	\$7,500	\$7,500
1	ALLOW	45%	\$43,149
			\$139,035

SEGMENT F	
Site Prep and Demolition	
8' Concrete Trail (SF)	
Landscape Enhancements	
Turf Seed	
Grading, Drainage, and Erosion Control	
Indirect Costs	
TOTAL	

QTY	UNIT	COST	TOTAL
1	ALLOW	\$7,500	\$7,500
42240	SF	\$8	\$337,920
26400	SF	\$5	\$132,000
52800	SF	\$3	\$158,400
1	ALLOW	\$7,500	\$7,500
1	ALLOW	45%	\$289,494
			\$932,814

SEGMENT F
Site Prep and Demolition
8' Concrete Trail (SF)
Landscape Enhancements
Turf Seed
Grading, Drainage, and Erosion Control
Indirect Costs
TOTAL

QTY	UNIT	COST	TOTAL
1	ALLOW	\$7,500	\$7,500
42240	SF	\$8	\$337,920
26400	SF	\$5	\$132,000
52800	SF	\$3	\$158,400
1	ALLOW	\$7,500	\$7,500
1	ALLOW	45%	\$289,494
			\$932,814

SEGMENT G
Site Prep and Demolition
6' Concrete Trail (SF)
Landscape Enhancements
Turf Seed
Grading, Drainage, and Erosion Control
Indirect Costs
TOTAL

QTY	UNIT	COST	TOTAL
1	ALLOW	\$7,500	\$7,500
31200	SF	\$8	\$249,600
26000	SF	\$5	\$130,000
52000	SF	\$3	\$156,000
1	ALLOW	\$7,500	\$7,500
1	ALLOW	45%	\$247,770
			\$798,370

SEGMENT H
Site Prep and Demolition
6' Concrete Trail (SF)
Landscape Enhancements
Turf Seed
Grading, Drainage, and Erosion Control
Indirect Costs
TOTAL

QTY	UNIT	COST	TOTAL
1	ALLOW	\$7,500	\$7,500
5520	SF	\$8	\$44,160
4600	SF	\$5	\$23,000
9200	SF	\$3	\$27,600
1	ALLOW	\$7,500	\$7,500
1	ALLOW	45%	\$49,392
			\$159,152

SEGMENT I
Site Prep and Demolition
6' Concrete Trail (SF)
Landscape Enhancements
Turf Seed
Grading, Drainage, and Erosion Control
Indirect Costs
TOTAL

QTY	UNIT	COST	TOTAL
1	ALLOW	\$7,500	\$7,500
2900	SF	\$8	\$23,200
2410	SF	\$5	\$12,050
4820	SF	\$3	\$14,460
1	ALLOW	\$7,500	\$7,500
1	ALLOW	45%	\$29,120
			\$93,830

SEGMENT J
Site Prep and Demolition
6' Concrete Trail (SF)
Landscape Enhancements
Turf Seed
Grading, Drainage, and Erosion Control
Indirect Costs
TOTAL

QTY	UNIT	COST	TOTAL
1	ALLOW	\$7,500	\$7,500
18600	SF	\$8	\$148,800
15500	SF	\$5	\$77,500
31000	SF	\$3	\$93,000
1	ALLOW	\$7,500	\$7,500
1	ALLOW	45%	\$150,435
			\$484,735

SEGMENT K
Site Prep and Demolition
6' Concrete Trail (SF)
Landscape Enhancements
Turf Seed
Grading, Drainage, and Erosion Control
Indirect Costs
TOTAL

QTY	UNIT	COST	TOTAL
1	ALLOW	\$7,500	\$7,500
28500	SF	\$8	\$228,000
32700	SF	\$5	\$163,500
47500	SF	\$3	\$142,500
1	ALLOW	\$7,500	\$7,500
1	ALLOW	45%	\$247,050
			\$796,050

SEGMENT L
Site Prep and Demolition
6' Concrete Trail (SF)
Landscape Enhancements
Turf Seed
Grading, Drainage, and Erosion Control
Indirect Costs
TOTAL

QTY	UNIT	COST	TOTAL
1	ALLOW	\$7,500	\$7,500
10500	SF	\$8	\$84,000
8700	SF	\$5	\$43,500
17500	SF	\$3	\$52,500
1	ALLOW	\$7,500	\$7,500
1	ALLOW	45%	\$87,750
			\$282,750

SEGMENT M
Site Prep and Demolition
6' Concrete Trail (SF)
Landscape Enhancements
Turf Seed
Grading, Drainage, and Erosion Control
Indirect Costs
TOTAL

QTY	UNIT	COST	TOTAL
1	ALLOW	\$7,500	\$7,500
9000	SF	\$8	\$72,000
7500	SF	\$5	\$37,500
15000	SF	\$3	\$45,000
1	ALLOW	\$7,500	\$7,500
1	ALLOW	45%	\$76,275
			\$245,775

Site Prep and Demolition	1	ALLOW	\$7,500	\$7,500
6' Concrete Trail (SF)	6000	SF	\$8	\$48,000
Landscape Enhancements	5000	SF	\$5	\$25,000
Turf Seed	10000	SF	\$3	\$30,000
Grading, Drainage, and Erosion Control	1	ALLOW	\$7,500	\$7,500
Indirect Costs	1	ALLOW	45%	\$53,100
TOTAL				\$171,100

GRAND TOTAL COSTS:	\$4,685,640
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NOTES:

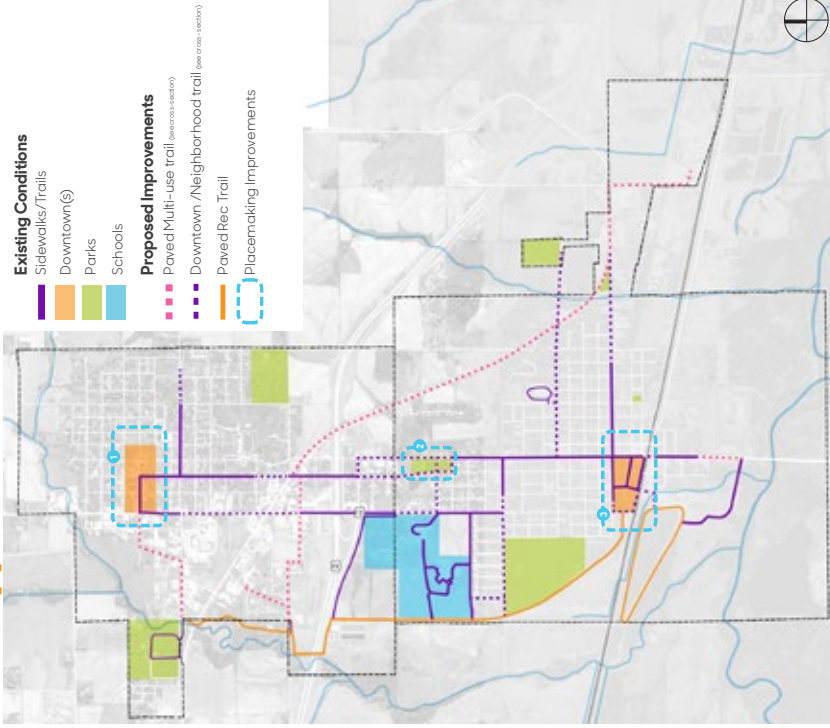
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EXCLUSIONS:

1. All *site* and subconsultant fees, Permitting and/or Expediting Fees, All Removals and/or Demolition of Existing Materials, Utility scope, Lighting System Scope, Security System Scope, Audio System Scope, Water Feature Scope, Signage and/or Wayfinding Scope, Site furnishings Scope and All "NIC" items noted in Deetail or Summary Sheets. (Unless Inlcuded Herein)

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Trail Types and Connections

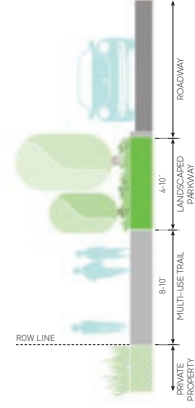


Enhanced Pedestrian Network

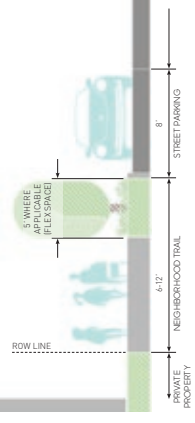
Primary goals of the improved pedestrian network and enhanced connections include:

- Establish a functional, safe pedestrian network that links the two communities, their downtowns, the Tama-Toledo Aquatic Park, Oak Park, and STC High School
- Establish a functional, safe pedestrian network that provides residents and community members with limited mobility options (i.e. lack of car) to access basic goods and services;
- Selectively upgrade sidewalks, targeting portions with heavy use, evident mud/ice issues, and conditions that limit accessibility or fail to adhere to ADA standards
- Strengthen the Tama and Toledo community identities through wayfinding, signage, and environmental graphics (e.g., gateways, folly's, etc)
- Enhance pedestrian safety through painted or constructed bump outs, pedestrian refuge islands, painted / enhanced crosswalks, and signage.
- Create an iconic and uniquely Tama/Toledo space at Oak Park, establishing it as the 'Central Park' of the communities.

Cross Section - Multi-use Trails



Cross Section - Downtown/Neighborhood Trails



Tama + Toledo Concept Detail

site design group

LA: Cassandra Rice, PLA, ASLA, Hana Ishikawa, AIA
Landscape Designer: Richard Meagher
Intern: Paul Hsu

Iowa State University | Trees Forever | Iowa Department of Transportation



South Tama Recreational Trail

The South Tama Rec Trail is another joint project that will need to be accomplished with the cooperation of both Tama and Toledo, and may not be the first project either town decides to tackle due to the existing, workable conditions of the current South Tama Rec Trail. However, laying a concrete path along the current trail would better accommodate elderly or mobility-challenged residents, as well as improve the current conditons for biking and running.

SOUTH TAMA REC TRAIL

TAMA-TOLEDO JOINT PROJECTS	
ITEM:	
Site Prep and Demolition	
8' Concrete Trail (SF)	
Grading, Drainage, and Erosion Control	
TOTAL	

CONCEPT 1			
QTY	UNIT	COST	TOTAL
1	ALLOW	\$ 75,000	\$75,000
107700	SF	\$ 8	\$861,600
1	ALLOW	\$ 50,000	\$50,000
TOTAL			\$911,600

INDIRECT COSTS	
GENERAL CONDITIONS AND SUPERVISION	
PERMITS, INSURANCE AND BONDS	
OVERHEAD AND PROFIT	
DESIGN AND ESTIMATION CONTINGENCY	
ESCALATION CONTINGENCY	
DESIGNERS FEES (15%)	
OWNER'S CONSTRUCTION CONTINGENCY (5%)	
TOTAL INDIRECT COSTS	

\$36,464
\$9,116
\$27,348
\$136,740
\$18,232
\$136,740
\$45,580
\$410,220

GRAND TOTAL COSTS

\$1,321,820

NOTES:

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EXCLUSIONS:

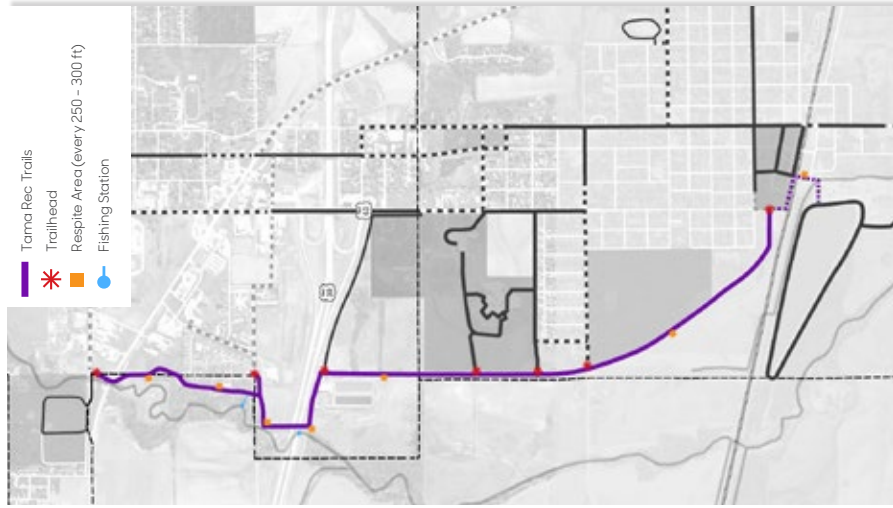
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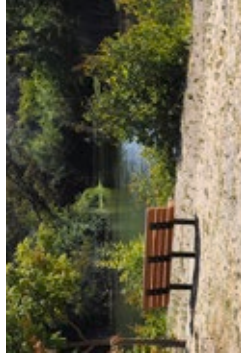
312.427.7240



Trailhead



Respite Area



Fishing Station



COMMUNITY FEEDBACK

The Tama and Toledo Steering Committee would like a concrete trail to allow for easier biking and running, as well as a pedestrian path for mobility challenged and elderly individuals.

Older Toledo residents said that they appreciated the South Tama Rec Trail for its safety, seating, and landscaping, but would prefer more habitat for birds and insects.

Tama parents and active adults would like the South Tama Rec Trail to not flood in certain areas, as well as a parking lot that doesn't experience these flooding issues.

COMMUNITY ENGAGEMENT RESPONSE

"Better Pedestrian Connections"

While the South Tama Rec Trail already serves as a great pedestrian connection, a paved connection between both downtown Tama and Toledo creates an easier route for runners, bikers, and children to use. The improvements to the trail also allow for a nearly uninterrupted 2.5 mile stretch paved trail, greatly increasing the safety of pedestrians looking to safely move from Tama to Toledo or vice versa. The Downtown Tama concept also extended the path to connect to the existing Cherry Lake Trail, allowing for even more pedestrian paths for all community members to use.

"More Accessibility for Seniors"

Creating a paved connection along the existing South Tama Rec Trail also gives increased access to both seniors and the mobility challenged. This is particularly beneficial to older Toledo residents living in the senior homes closer to the South Tama Rec Trail, who will be able to access either downtown Tama or Toledo either on their own or with the assistance of a helper.

Tama
South Tama Rec Trail

site design group

LA: Cassandra Rice, PLA, ASLA, Hana Ishikawa, AIA
Landscape Designer: Richard Meagher
Intern: Paul Hsu

Iowa State University | Trees Forever | Iowa Department of Transportation



Downtown Tama

Overview

Downtown Tama is recognized as a destination by residents and visitors, but can be improved by celebrating its unique sense of place. The design team created two different concepts to accomplish this goal, one focusing on tactical urbanism which can be deployed quickly with low costs, while the second concept features permanent, but higher cost improvements. This gives the city of Tama a degree of flexibility in how they approach and accomplish the goals listed by community residents. Both concepts also accomplish two of Tama's listed goals, connecting the existing Cherry Lake Trail and South Tama Rec Trail, as well as unique wayfinding and identity signage to help attract both residents and visitors to downtown Tama.

1. Concept One: Tactical Urbanism Approach

The first concept uses quick-to-employ methods such as paint, chalk and potted street trees to reclaim space for pedestrians. "People spots" are traced over existing asphalt to create areas for outdoor dining, gathering places, and sidewalk retail for local businesses. Murals are drawn by local artists and students on vacant building walls add color and vibrancy, and the current crosswalks will be improved with more creative designs that make walking area more noticeable to both pedestrians and vehicular traffic.

2. Concept Two: Enhanced Connections and Streetscape Improvements

The second concept for downtown Tama focuses on more permanent improvements to downtown Tama's streetscapes, albeit more costly. Curbs are extended into the street for seating areas and planted street trees, giving the downtown area a more classic 'Main Street' feel. The connection between Cherry Lake Trail and Tama Rec Trail is more formalized with a paved trail that forks towards the enhanced Civic Plaza behind Tama's City Hall with a larger gathering space for events, giving visitors and residents another reason to come celebrate in the downtown. The existing Gateway Park, which currently has an ice cream stand and small play area is re-designed and given a new city sign, welcoming drivers traveling on US Highway 63. Finally, festoon lights help provide night-time atmosphere but also address community concerns about safety at night due to lack of lighting.

Design Expertise Recommended

Projects may require help beyond the capability of the Tama Visioning Steering Committee or available city staff. For this improvement project, the steering committee should expect to engage the services of a Landscape Architect and a Civil Engineer.

DOWNTOWN TAMA

TAMA PROJECT					CONCEPT 1				CONCEPT 2			
ITEM	QTY	UNIT	COST	TOTAL	QTY	UNIT	COST	TOTAL	QTY	UNIT	COST	TOTAL
Site Prep and Demolition	1	ALLOW	\$ 50,000	\$50,000	1	ALLOW	\$ 100,000	\$100,000	1	ALLOW	\$ 100,000	\$100,000
6' Downtown Concrete Trail (SF)	3200	SF	\$ 7	\$22,400	3200	SF	\$ 7	\$22,400	3200	SF	\$ 7	\$22,400
B6-12 Concrete Curb		LF	\$ 28		5200	LF	\$ 28	\$145,600	5200	LF	\$ 28	\$145,600
Pavement Painting	19	EA	\$ 2,500	\$47,500		EA	\$ 5,000			EA	\$ 5,000	
6'-wide Crosswalk Striping	18	EA	\$ 2,500	\$45,000	18	EA	\$ 2,500	\$45,000	18	EA	\$ 2,500	\$45,000
Downtown Catenary Lighting	1	ALLOW	\$ 30,000	\$30,000	1	ALLOW	\$ 30,000	\$30,000	1	ALLOW	\$ 30,000	\$30,000
Murals	4	EA	\$ 2,500	\$10,000	4	EA	\$ 2,500	\$10,000	4	EA	\$ 2,500	\$10,000
Downtown Tama Welcome Gateway	1	ALLOW	\$ 20,000	\$20,000	1	EA	\$ 20,000	\$20,000	1	EA	\$ 20,000	\$20,000
Signage - Trail Wayfinding	2	EA	\$ 500	\$1,000	2	EA	\$ 500	\$1,000	2	EA	\$ 500	\$1,000
Outdoor Dining Sets	28	EA	\$ 2,000	\$56,000	22	EA	\$ 2,000	\$44,000	22	EA	\$ 2,000	\$44,000
Shade Tree	26	EA	\$ 750	\$19,500	43	EA	\$ 750	\$32,250	43	EA	\$ 750	\$32,250
Turf Seed		SF	\$ 3		9200	SF	\$ 3	\$27,600	9200	SF	\$ 3	\$27,600
Proposed Roadway		SF	\$ 8		12200	SF	\$ 8	\$97,600	12200	SF	\$ 8	\$97,600
Grading, Drainage, and Erosion Control	1	ALLOW	\$ 1,200	\$1,200	1	ALLOW	\$ 5,000	\$5,000	1	ALLOW	\$ 5,000	\$5,000
TOTAL				\$302,600								\$580,450

INDIRECT COSTS			
GENERAL CONDITIONS AND SUPERVISION		\$12,104	\$23,218
PERMITS, INSURANCE AND BONDS		\$3,026	\$5,805
OVERHEAD AND PROFIT		\$9,078	\$17,414
DESIGN AND ESTIMATION CONTINGENCY		\$45,390	\$87,068
ESCALATION CONTINGENCY		\$6,052	\$11,609
DESIGNERS FEES (15%)		\$45,390	\$87,068
OWNER'S CONSTRUCTION CONTINGENCY (5%)		\$15,130	\$29,023
TOTAL INDIRECT COSTS		\$136,170	\$261,203

GRAND TOTAL COSTS	\$438,770	\$841,653
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NOTES:

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EXCLUSIONS:

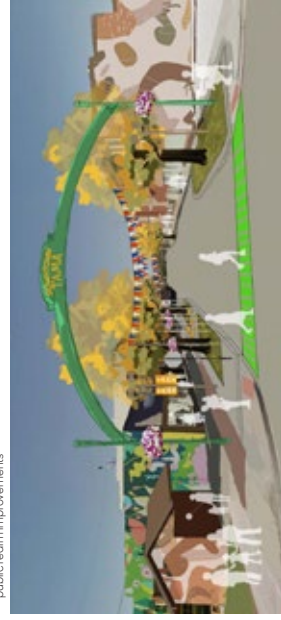
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SUMMER 2021 9a

CONCEPT TWO - Enhanced Connections & Permanent Streetscape Improvements



- LEGEND:**
- 1 Existing Tama Rec Trail
 - 2 Roadway Improvements - Consolidate back-of-house access roads and connect to the Civic Drive once access roads.
 - 3 Enhanced Street Trees
 - 4 Crosswalk - Enhanced pedestrian crosswalk connection to City Hall
 - 5 Enhanced Civic Plaza / Trailhead
 - 6 Enhanced Crosswalks
 - 7 Curb Extensions - Place curbs to step-out with spaces for outdoor dining spaces, seating, public art, and other public realm improvements
 - 8 Downtown Tama Entry Gateway - vertical element creates a sense of arrival
 - 9 Downtown Tama Gateway Park - new signage and enhance the open space near the Sugar Shack and US Highway 63.
 - 10 Proposed Trail Connection - signage, wayfinding, pavement markings that emphasize both the visual parking lot, and pedestrian connections at both side of enhanced pedestrian connection
 - 11 Existing Cherry Lake Trail
 - 12 Existing Pocket Park
 - 13 Existing Pocket Park
 - 14 Signed Railroad Crossing and Yield Signage for enhanced pedestrian connection
 - 15 Existing Cherry Lake Trail



Iowa's Living Roadways
community
visioning

CONCEPT ONE - Tactical Urbanism Approach



- LEGEND:**
- 1 Existing Tama Rec Trail
 - 2 Existing Pocket Park
 - 3 "Pocket Parks" - replacement of parking spaces with trees, raised planters, and other pedestrian-focused amenities that activate and enhance the public realm.
 - 4 Mural Opportunities
 - 5 Enhanced Crosswalk - painted crosswalk with creative design to emphasize pedestrian connection while creating placemaking and branding opportunities.
 - 6 Pedestron Lights - overhead lights that highlight outdoor seating opportunities.
 - 7 Downtown Tama Entry Gateway - vertical element creates a sense of arrival
 - 8 Downtown Tama Gateway Park - new signage and enhance the open space near the Sugar Shack and US Highway 63.
 - 9 Proposed Trail Connection - signage, wayfinding, pavement markings that emphasize both the visual parking lot, and pedestrian connections at both side of enhanced pedestrian connection
 - 10 Existing Cherry Lake Trail



site design group
LA: Cassandra Rice, PLA, ASLA, Hana Ishikawa, AIA
Intern: Paul Hsu

Iowa State University | Trees Forever | Iowa Department of Transportation

COMMUNITY FEEDBACK

The Tama Steering Committee has asked to Enhance Downtown Streetscapes, and try to bring both visitors and residents to downtown Toledo.

Mobility-challenged people in Tama said that the streetscape in downtown one difficult to traverse due to lack of curb cuts or ADA accessibility.

COMMUNITY ENGAGEMENT RESPONSE

"Heavy Traffic"

The Harding Street and Highway 63 intersection were identified by community members as a danger to cross on the Tama Matrix due to vehicular speeding and lack of crosswalks, but also because the US Highway 63 trucking route travels through this crossing. The goal of both concepts is to slow down truck traffic without stopping it, addressing the concerns of Tama officials that DOT would re-route this traffic through another town.

"Better Pedestrian Connections"

According to the Toledo Priorities, residents felt that better pedestrian connections was the third most important Transportation Enhancement Issue. Both concepts provide safe crossing across both streets by providing crosswalks, slowing traffic, and shortening the distance for pedestrians to cross. The proposed sidewalks along US Highway 63 and High Street will help to provide a more complete pedestrian network, satisfying the priorities identified by Toledo community members including Better Pedestrian Connections and Better Downtown Streetscapes.

"More Accessibility for Seniors"

The Toledo Priorities also identified lack of access for seniors and the mobility challenge as a Transportation Enhancement Issue, and both concepts for Downtown Toledo address this issue by providing ADA curb ramps with detectable warning strips at the end of proposed crosswalks. Yield and stop signs are also proposed to slow incoming traffic and make drivers more aware of potential pedestrian presence, creating a safer crossing environment.

Tama
Downtown

State Street + Highway 63 Intersection

Overview

The State Street and Highway 63 intersection was identified by community members as dangerous for pedestrians due to cross due to vehicular speeds and lack of crosswalks, but also because the US Highway 63 trucking route travels through this crossing southbound right turns do not stop. The goal of both concepts is to slow down truck traffic without stopping it, addressing the concerns of Tama officials that IDOT would re-route this traffic through another town.

1. Concept One: Yield for Highway 63

The first concept uses yield signs for right turning traffic onto Highway 63, allowing for vehicles to turn without stopping. Pedestrians are given crosswalks at the north and east crossings, allowing them to continue north along State Street towards both Oak Park and the Tama/Toledo Aquatic Center using the proposed extended sidewalk network. A painted curb bump out is also used to shorten the distance pedestrians need to cross along State Street while also narrowing State Street, making drivers more aware of pedestrian crossing.

2. Concept Two: Stop Except for Right Turn

In the second concept, eastbound traffic stops while southbound traffic does not, although vehicles using this route still need to slow down as if turning right on a red light. Crosswalks are also provided at every crossing opportunity, and a more permanent, planted curb bump-out is used to again shorten the distance to cross State Street. The planted curb bump-out also avoids the snow plow maintenance issues that a painted curb bump out with reflective stakes poses, depending on how the city of Tama chooses to address the issue.

Design Expertise Recommended

Projects may require help beyond the capability of the Tama Visioning Steering Committee or available city staff. For this improvement project, the steering committee should expect to engage the services of a Landscape Architect and a Civil Engineer.

STATE STREET AND US 63

TAMA PROJECT					CONCEPT 1				CONCEPT 2			
ITEM	QTY	UNIT	COST	TOTAL	QTY	UNIT	COST	TOTAL	QTY	UNIT	COST	TOTAL
Site Prep and Demolition	1	ALLOW	\$ 25,000	\$25,000	1	ALLOW	\$ 25,000	\$25,000	1	ALLOW	\$ 25,000	\$25,000
8' Concrete Trail (SF)	3500	SF	\$ 7	\$24,500	5000	SF	\$ 7	\$35,000	5000	SF	\$ 7	\$35,000
B6-12 Concrete Curb		LF	\$ 28			LF	\$ 28			LF	\$ 28	
Pavement Painting	1	ALLOW	\$ 7,500	\$7,500		ALLOW	\$ 7,500			ALLOW	\$ 7,500	
6'-wide Crosswalk Striping	1	ALLOW	\$ 5,000	\$5,000	1	ALLOW	\$ 5,000	\$5,000	1	ALLOW	\$ 5,000	\$5,000
ADA Curb Ramp	4	EA	\$ 1,000	\$4,000	8	EA	\$ 1,000	\$8,000	8	EA	\$ 1,000	\$8,000
Signage - Stop Sign	4	EA	\$ 500	\$2,000	4	EA	\$ 500	\$2,000	4	EA	\$ 500	\$2,000
Signage - Yield Sign		EA	\$ 500		3	EA	\$ 500	\$1,500	3	EA	\$ 500	\$1,500
Flexible Delineators	10	EA	\$ 100	\$1,000		EA	\$ 100			EA	\$ 100	
Shade Tree		EA	\$ 900		3	EA	\$ 900	\$2,700	3	EA	\$ 900	\$2,700
Turf Seed	2600	SF	\$ 3	\$7,800	2600	SF	\$ 3	\$7,800	2600	SF	\$ 3	\$7,800
Grading, Drainage, and Erosion Control	1	ALLOW	\$ 1,200	\$1,200	1	ALLOW	\$ 5,000	\$5,000	1	ALLOW	\$ 5,000	\$5,000
TOTAL				\$78,000				\$92,000				\$92,000

INDIRECT COSTS			
GENERAL CONDITIONS AND SUPERVISION		\$3,120	\$3,680
PERMITS, INSURANCE AND BONDS		\$780	\$920
OVERHEAD AND PROFIT		\$2,340	\$2,760
DESIGN AND ESTIMATION CONTINGENCY		\$11,700	\$13,800
ESCALATION CONTINGENCY		\$1,560	\$1,840
DESIGNERS FEE (15%)		\$11,700	\$13,800
OWNER'S CONSTRUCTION CONTINGENCY (5%)		\$3,900	\$4,600
TOTAL INDIRECT COSTS		\$35,100	\$41,400

GRAND TOTAL COSTS	\$113,100	\$133,400
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NOTES:

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EXCLUSIONS:

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COMMUNITY FEEDBACK

The Tama Steering Committee has asked to prioritize safer connections for both bikers and pedestrians crossing US Highway 63.



Mobility challenged individuals said that the lack of complete sidewalks along Church, Am and State Street makes it difficult to safely navigate this intersection.



Tama parents mentioned that a sidewalk along State Street would make it easier for children to safely reach the Tama Toledo Family Aquatic Center.



COMMUNITY ENGAGEMENT RESPONSE

"Heavy Traffic"

The State Street and Highway 63 intersection were identified by community members as a danger to cross on the Tama Matrix due to vehicular speeding and lack of crosswalks, but also because the US Highway 63 trucking route travels through this crossing. The goal of both Steering Committee concepts is to slow down truck traffic without stopping it, addressing the concerns of Tama officials that IDOT would re-route this traffic through another town.



"Better Pedestrian Connections"

According to the Tama Priorities, residents felt that better pedestrian connections was the third most important Transportation Enhancement Issue. Both concepts provide safe crossing across both streets by providing crosswalks, slowing traffic, and shortening the distance for pedestrians to cross. The proposed sidewalks along US Highway 63 and State Street will help to provide a more complete pedestrian network, satisfying the priorities identified by Tama community members including Better Pedestrian Connections and Better Neighborhood Streetscapes.



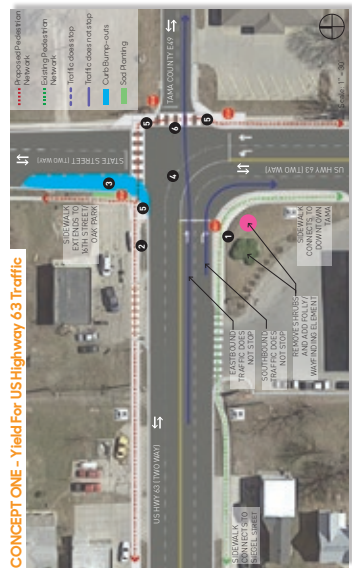
"More Accessibility for Seniors"

The Tama Priorities also identified lack of access for seniors and the mobility challenged as a Transportation Enhancement Issue, and both concepts for State Street and US Highway 63 address this issue by providing ADA curb ramps with detectable warning strips at the end of all proposed crosswalks. Yield and stop signs are also proposed to slow incoming traffic and make drivers more aware of potential pedestrian presence, creating a safer crossing environment.



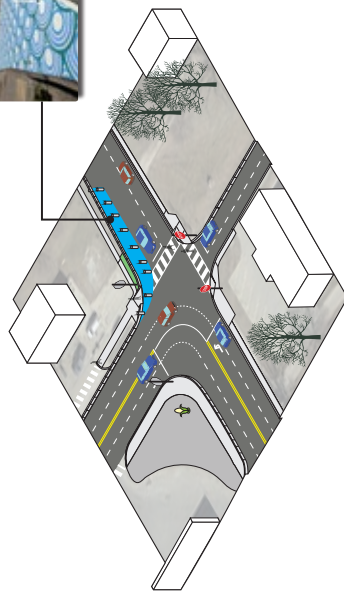
Tama
State St + US 63

CONCEPT ONE - Yield For US Highway 63 Traffic



LEGEND:

- 1 Flashing Yield Sign - Slightly slows down US Highway 63 traffic, making drivers aware of potential pedestrians while not requiring a stop to continue onto Highway 63.
- 2 New Sidewalk - 6 wide (minimum) concrete sidewalk connection.
- 3 Curb Bump-outs - Painted area on the existing street that shortens the distance pedestrians have to walk while crossing the street, increasing safety. Limit bumpouts to one curb cut on 65.
- 4 Lane Markings - Painted lane markings to guide turning movements.
- 5 ADA Curb Ramp - Curb ramp with ADA detectable warnings.
- 6 Crosswalk - Ladder style, white crosswalk no less than 5' wide.

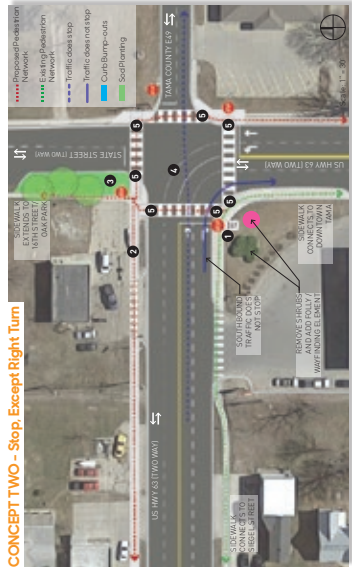


site design group

LA: Cassandra Rice, PL.A, ASLA, Hana Ishikawa, AIA
Landscape Designer: Richard Meagher
Intern: Paul Hsu

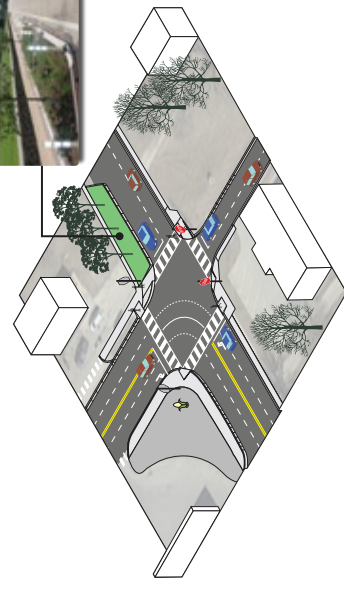
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CONCEPT TWO - Stop Except Right Turn



LEGEND:

- 1 Stop Except Right Turn Sign - Eastbound traffic stops while southbound right turns do not stop.
- 2 New Sidewalk - 6 wide (minimum) concrete sidewalk connection.
- 3 Curb Extensions/Parklet - permanent curb extensions on the existing street that shortens the distance pedestrians have to walk while crossing the street, increasing safety. Opportunity for parklet or a resting spot.
- 4 Lane Markings - Painted lane markings to guide turning movements.
- 5 ADA Curb Ramp - Space perpendicular ramp on both sides with detectable warnings.
- 6 Crosswalk



Harding Street + US Highway 63 Intersection

Overview

The Harding Street and Highway 63 intersection has similar issues with vehicular speeding and pedestrian safety as State Street and Highway 63, but South Tama County High School is located along this stretch of Highway 63. Students of all ages walk across this intersection to school, and Tama community members identified this crossing as particularly dangerous for pedestrians. To address these concerns, both concepts attempt to slow down Highway 63 traffic without stopping, and shorten the distance on Tama County E49 with a crossing island for pedestrians to cross the street safely. Both concepts also take advantage of the extended sidewalk network that safely takes Tama students to both the elementary and high school.

1. Concept One: Yield for Highway 63

The first concept uses a yield sign to allow for north and westbound traffic to continue without stopping. Crosswalks are used along Harding Street and Tama County E49 to provide students with an uninterrupted route towards school, and stop signs at all crosswalk locations. This concept also uses painted curb bump-outs for a low-cost, quickly-implementable solution to address community concerns about pedestrian safety.

2. Concept Two: Stop Except for Right Turn

Concept Two uses the Stop except for Right Turn sign to allow northbound traffic to continue without stopping, while eastbound traffic is stopped to increase awareness of pedestrians crossing along Tama County E49. More permanent curb bump-outs are used instead of paint to physically narrow the size of the roads and reduce speeding, as crosswalks are provided at all crossing opportunities. The sidewalks on the north and east side of Highway 63 is also extended to Siegel Street in this concept, expanding the sidewalk network further and giving pedestrians a more direct route to wherever they are going.

Design Expertise Recommended

Projects may require help beyond the capability of the Tama Visioning Steering Committee or available city staff. For this improvement project, the steering committee should expect to engage the services of a Landscape Architect and a Civil Engineer.

HARDING AND US 63

TAMA PROJECT		CONCEPT 1				CONCEPT 2			
ITEM	QTY	UNIT	COST	TOTAL	QTY	UNIT	COST	TOTAL	
Site Prep and Demolition	1	ALLOW	\$ 25,000	\$25,000	1	ALLOW	\$ 25,000	\$25,000	
6' Concrete Trail (SF)	3200	SF	\$ 8	\$25,600	3200	SF	\$ 8	\$25,600	
B6-12 Concrete Curb	100	LF	\$ 28	\$2,800	270	LF	\$ 28	\$7,560	
Pavement Painting	1	ALLOW	\$ 10,000	\$10,000		ALLOW	\$ 7,500		
6'-wide Crosswalk Striping	1	ALLOW	\$ 5,000	\$5,000	1	ALLOW	\$ 10,000	\$10,000	
ADA Curb Ramp	4	EA	\$ 1,000	\$4,000	8	EA	\$ 1,000	\$8,000	
Signage - Stop Sign	3	EA	\$ 500	\$1,500	4	EA	\$ 500	\$2,000	
Signage - Yield Sign	1	EA	\$ 500	\$500		EA	\$ 500		
Signage - Pedestrian Crossing	1	EA	\$ 500	\$500	1	EA	\$ 500	\$500	
Flexible Delineators	9	EA	\$ 100	\$900		EA	\$ 100		
Grading, Drainage, and Erosion Control	1	ALLOW	\$ 1,200	\$1,200	1	ALLOW	\$ 5,000	\$5,000	
TOTAL				\$52,000				\$58,660	
INDIRECT COSTS									
GENERAL CONDITIONS AND SUPERVISION				\$2,080				\$2,346	
PERMITS, INSURANCE AND BONDS				\$520				\$587	
OVERHEAD AND PROFIT				\$1,560				\$1,760	
DESIGN AND ESTIMATION CONTINGENCY				\$7,800				\$8,799	
ESCALATION CONTINGENCY				\$1,040				\$1,173	
DESIGNERS FEE (15%)				\$7,800				\$8,799	
OWNER'S CONSTRUCTION CONTINGENCY (5%)				\$2,600				\$2,933	
TOTAL INDIRECT COSTS				\$23,400				\$26,397	
GRAND TOTAL COSTS				\$75,400				\$85,057	

NOTES:

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3. All "Landscape" scope on-structure opinion of probable costs are limited to components above waterproofing.
4. This opinion of probable costs is based on information and the accuracy of that information available at the time of the execution of this document.

EXCLUSIONS:

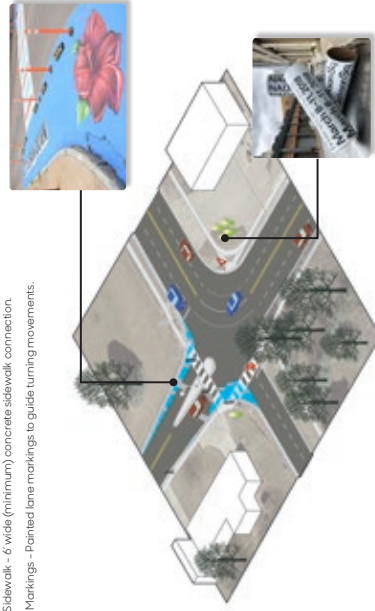
1. All *site* and subconsultant fees, Permitting and/or Expediting Fees, All Removals and/or Demolition of Existing Materials, Utility scope, Lighting System Scope, Security System Scope, Audio System Scope, Water Feature Scope, Signage and/or Wayfinding Scope, Site furnishings Scope and All "NIC" items noted in Deetail or Summary Sheets. (Unless Included Herein)

CONCEPT ONE - Slowing Down US Highway 63



LEGEND:

- 1 Painted Curb Bump Out / Curb Extension - painted area with flexible delineators that both physically and visually narrow the roadway, creating safer pedestrian crossings. Enhances visibility and reduces speeds of approaching vehicles.
- 2 Pedestrian Crossing Sign - Provides advance notice of areas of high pedestrian activity so drivers can be prepared to slow or stop.
- 3 Crosswalk - Ladder style, white crosswalk no less than 5' wide.
- 4 ADA Curb Ramp - ADA ramp on both sides with detectable warnings.
- 5 Yield Sign
- 6 New Sidewalk - 6' wide (minimum) concrete sidewalk connection.
- 7 Lane Markings - Painted lane markings to guide turning movements.



site design group

LA: Cassandra Rice, PLA, ASLA, Hana Ishikawa, AIA
Landscape Designer: Richard Meagher
Intern: Paul Hsu

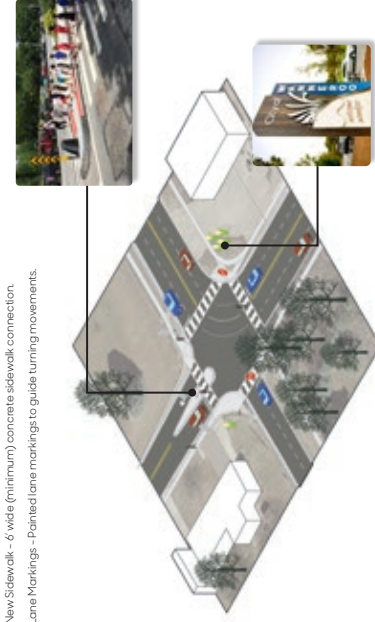
Iowa State University | Trees Forever | Iowa Department of Transportation

CONCEPT TWO - Stop, Except For Right Turn



LEGEND:

- 1 Constructed Curb Bump Out / Curb Extension - painted area with flexible delineators that both physically and visually narrow the roadway, creating safer pedestrian crossings. Enhances visibility and reduces speeds of approaching vehicles.
- 2 Pedestrian Crossing Sign - Provides advance notice of areas of high pedestrian activity so drivers can be prepared to slow or stop.
- 3 Crosswalk - Ladder style, white crosswalk no less than 6' wide.
- 4 ADA Curb Ramp - ADA ramp on both sides with detectable warnings.
- 5 Stop, Except Right Turns Sign
- 6 Lane Markings - Painted lane markings to guide turning movements.



COMMUNITY FEEDBACK

The Tama Steering Committee has asked to prioritize safer connections for both bikers and pedestrians crossing US Highway 63.

Mobility-challenged people in Tama said that dense trees and barriers impede sightlines at the Harding Street and E49 Mobility-Challenged Intersection.

Tama parents wished for safer routes to Tama County schools, and the Harding Street + US Highway 63 intersection is a high traffic, pedestrian route for students of all ages.

COMMUNITY ENGAGEMENT RESPONSE

"Heavy Traffic"

The Harding Street and Highway 63 intersection were identified by community members as a danger to cross on the Tama Matrix due to vehicular speeding and lack of crosswalks, but also because the US Highway 63 trucking route travels through this crossing. The goal of both concepts is to slow down truck traffic, without stopping it, would re-route this traffic through another town.

"Better Pedestrian Connections"

According to the Tama priorities, residents felt that better pedestrian connections were the third most important Transportation Enhancement Issue. Both concepts provide safe crossing across both streets by providing crosswalks, slowing traffic, and shortening the distance for pedestrians to cross. The proposed sidewalks along US Highway 63 and Harding Street will help to provide a more complete pedestrian network, satisfying the priorities identified by Tama community members including Better Pedestrian Connections and Better Neighborhood Streetscapes.

"More Accessibility for Seniors"

The Tama priorities also identified lack of access for seniors and the mobility challenged as a Transportation Enhancement Issue, and both concepts for State Street and US Highway 63 address this issue by providing ADA curb ramps with detectable warning strips at the end of all proposed crosswalks. Yield and stop signs are also proposed to slow/incoming traffic and make drivers more aware of potential pedestrian presence, creating a safer crossing environment.



Harding St + US 63

17th Street + US Highway 63 Intersection

Overview

Community members identified the 17th Street and US Highway 63 intersection as another threat to pedestrian safety, citing its location along Highway 63 as a source of speeding and truck traffic near where students are crossing the street to get to school. Seventeenth Street also connects to Oak Park, a key community destination, but there are no sidewalks on either side of this street. To address this and provide pedestrian access to Oak Park, both concepts propose a road diet along 17th Street, narrowing the street down to a one way heading east and proposing a sidewalk that connects to Oak Park. The sidewalk network is also extended on both concepts to connect to an existing dead-end sidewalk at Myrtle Street, giving students coming from the neighboring community of Toledo a safe way to school. However, this intersection also faces the issues associated with the Highway 63 truck route, and Tama city officials feel strongly that traffic along this route should not be brought to a stop. The design team proposed two different strategies for prioritizing pedestrian safety, allowing the this community to decide on how to address these issues.

1. Concept One: Yield for Highway 63

The first concept attempts to stop both north and southbound traffic along Highway 63 using a push-button stop sign for northbound traffic that students can use to signal drivers to a stop while they are crossing 17th Street. A blinking yield sign cautions southbound drivers, slowing down traffic to a stop when there are pedestrians actively trying to cross the street. An ADA ramp is also provided, connecting the proposed crosswalk along Highway 63 to the existing sidewalk which currently only has concrete stairs to navigate the grade change, preventing ADA access to both schools. The ADA ramp also provides the opportunity for a small planting space and identity signage location.

2. Concept Two: Stop Except for Right Turn

Tama city officials felt that it would not be in the city's best interest to bring Highway 63 truck traffic to a stop, and were interested in exploring the idea of a pedestrian overpass to accomplish both goals of keeping pedestrians safe and allowing the truck route to continue unobstructed. The overpass creates a potential location for identity signage as well, and murals could be placed on either side, greeting drivers going to both Tama and Toledo depending on which direction they are driving. Both sides of the overpass are also ADA accessible, creating a unique structure that leaves an impression on both visitors to either town as well as commuters just driving along Highway 63.

Design Expertise Recommended

Projects may require help beyond the capability of the Tama Visioning Steering Committee or available city staff. For this improvement project, the steering committee should expect to engage the services of a Landscape Architect and a Civil Engineer.

17TH STREET AND US 63

TAMA-TOLEDO JOINT PROJECTS	
ITEMS	
Site Prep and Demolition	
8' Concrete Trail (SF)	
B6-12 Concrete Curb	
Pavement Painting	
6'-wide Crosswalk Striping	
ADA Curb Ramp	
ADA Access Ramp	
Signage - Stop Sign	
Signage - Yield Sign	
Wayfinding Signage	
Turf Seed	
Landscape Enhancements	
Pedestrian Overpass	
TOTAL	

CONCEPT 1			
QTY	UNIT	COST	TOTAL
1	ALLOW	\$ 25,000	\$25,000
4500	SF	\$ 8	\$36,000
40	SF	\$ 30	\$1,200
	SF	\$ 28	
1	ALLOW	\$ 5,000	\$5,000
3	EA	\$ 1,000	\$3,000
1	ALLOW	\$ 10,000	\$10,000
1	EA	\$ 500	\$500
1	EA	\$ 500	\$500
1	ALLOW	\$ 2,000	\$2,000
250	SF	\$ 3	\$750
1	ALLOW	\$ 1,000	\$1,000
	SF	\$ 250	
TOTAL			\$84,950

CONCEPT 2			
QTY	UNIT	COST	TOTAL
4500	SF	\$ 25,000	\$25,000
4500	SF	\$ 8	\$36,000
40	LF	\$ 28	\$1,120
32	LF	\$ 28	\$896
1	ALLOW	\$ 2,500	\$2,500
3	EA	\$ 1,000	\$3,000
	ALLOW	\$ 10,000	
	EA	\$ 500	
	EA	\$ 500	
1	ALLOW	\$ 10,000	\$10,000
	SF	\$ 3	
	ALLOW	\$ 1,000	
4000	SF	\$ 250	\$1,000,000
TOTAL			\$1,078,516

INDIRECT COSTS	
GENERAL CONDITIONS AND SUPERVISION	
PERMITS, INSURANCE AND BONDS	
OVERHEAD AND PROFIT	
DESIGN AND ESTIMATION CONTINGENCY	
ESCALATION CONTINGENCY	
DESIGNERS FEE (15%)	
OWNER'S CONSTRUCTION CONTINGENCY (5%)	
TOTAL INDIRECT COSTS:	
GRAND TOTAL COSTS:	

\$3,398
\$850
\$2,549
\$12,743
\$1,699
\$12,743
\$4,248
\$38,228
\$123,178

\$43,141
\$10,785
\$32,355
\$161,777
\$21,570
\$161,777
\$53,926
\$485,332
\$1,563,848

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EXCLUSIONS:

1. All *site* and subconsultant fees, Permitting and/or Expediting Fees, All Removals and/or Demolition of Existing

COMMUNITY FEEDBACK

The Tama Steering Committee has asked to prioritize safer connections for pedestrians crossing US Highway 63.

Hispanic residents of Tama were interviewed and cited the unsafe pedestrian connections along Highway 63, which makes accessing schools and essentials such as groceries difficult.

Active Tama adults also asked for a pedestrian overpass to make access to Oak Park from the South Tama Rec Trail easier and safer.

COMMUNITY ENGAGEMENT RESPONSE

"Heavy Traffic"

The 17th Street and Highway 63 intersection were identified by community members as a danger to cross on the Tama and Toledo Matrix due to vehicular speeding and lack of crosswalks, but also because the US Highway 63 trucking route travels through this crossing. The two Steering Committee concepts address this issue differently, and Concept One prioritizes pedestrian safety over truck traffic, while Concept Two satisfies both conditions but will require more money for implementation.

"Safer Routes to Schools"

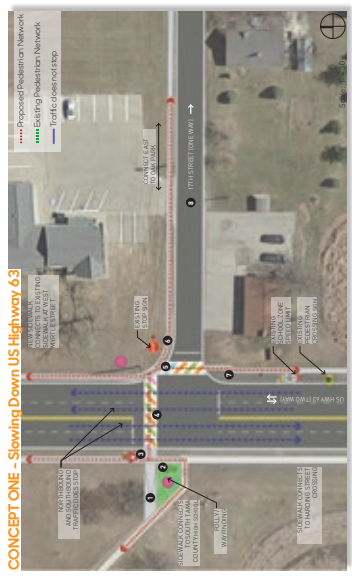
According to the priorities of Tama and Toledo, Better Pedestrian Connections and Safer Routes to Schools were both in the top three of both communities surveyed create safer connections for pedestrians by either slowing down traffic or providing an accessible pedestrian overpass over Highway 63, allowing traffic to move unimpeded.

"More Accessibility for Seniors"

The Tama Priorities also identified lack of access for seniors and the mobility challenged as a Transportation Enhancement Issue, and both concepts for 17th Street and US Highway 63 address this issue by providing ADA curb ramps with detectable warning strips at the end of all proposed crosswalks. Concept One includes an accessible ramp next to the existing concrete stairs, allowing all students to use the sidewalk to Tama County North-Oakwood schools. The pedestrian overpass in Concept Two is also ADA accessible, allowing for mobility-challenged students and pedestrians to safely cross US Highway 63.

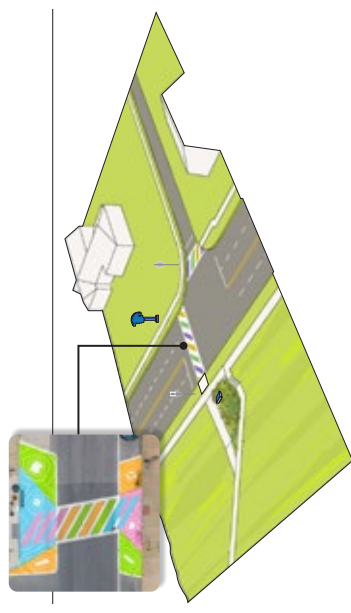
Tama + Toledo
17th St + US 63

CONCEPT ONE - Slowing Down US Highway 63

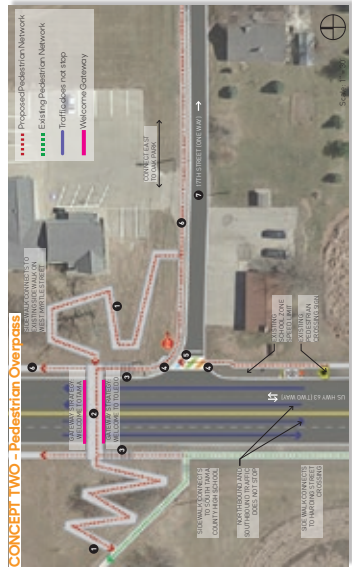


LEGEND:

- 1 ADA Ramp - Ramp for access to existing sidewalk to South Tama County High School
- 2 Planting Space
- 3 Blinking Yield Sign - Push button stop sign could be implemented instead of yield sign
- 4 Crosswalk
- 5 ADA Curb Ramp - Curb ramp with ADA detectable warnings.
- 6 New Sidewalk - 6' min. sidewalk connects north to Toledo and the Business District.
- 7 Push-Button Stop Sign - Stop sign that lights up when button underneath is pressed, signaling traffic to stop.
- 8 Roadway Configuration - Provide sidewalk on North side of 17th Street to Oak Park, convert street to one-way

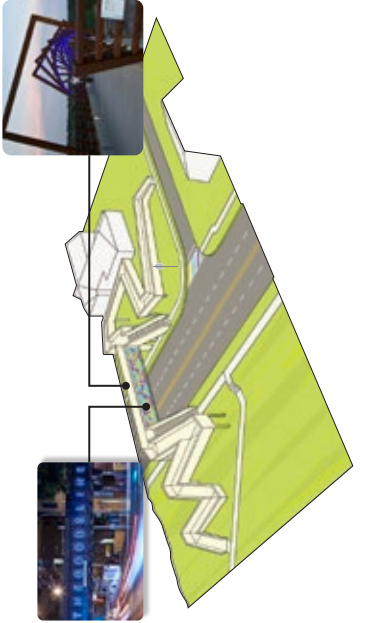


CONCEPT TWO - Pedestrian Overpass



LEGEND:

- 1 ADA Accessible Ramp for pedestrian overpass
- 2 Pedestrian Overpass - over head bridge connection with gateway signage opportunity for both communities
- 3 Stairs for pedestrian overpass
- 4 ADA Curb Ramp - Curb ramp with ADA detectable warnings.
- 5 Crosswalk
- 6 New Sidewalk - 6' wide (minimum) concrete sidewalk connection.
- 7 Convert 17th Street into a one-way street and provide sidewalk on the north side of the street that connects to Oak Park.



site design group

LA: Cassandra Rice, PLA, ASLA, Hana Ishikawa, AIA
Landscape Designer: Richard Meagher
Intern: Paul Hsu

Iowa State University | Trees Forever | Iowa Department of Transportation



Oak Park

Overview

Oak Park is an existing community asset within Tama that has become outdated over time, and community members had plenty of ideas for updated facilities and amenities that would bring more residents to the park. Existing facilities no longer meet code or safety requirements (ADA, ASTM, CPSC, etc) and there have been regular maintenance complaints about existing bathrooms. Community members also find it difficult to get to the park, as sidewalks in Tama do not extend to Oak Park and there is no connection for Toledo residents from the north. However, there is plenty of space for re-programming, large trees provide plenty of shade to relax in, and the topography on the north end of the park presents interesting opportunities.

1. Design Concept

Community members felt that the park would be greatly improved if new amenities were provided such as a skate park, a bandshell for small music events, and a dog park. They also hoped that the existing playground could be improved and that the bathrooms could be updated and better maintained. The programming concept tries to find ways to fit these new elements within the existing park while taking advantage of the sloped terrain and existing facilities to create a more fully featured community resource.

Design Expertise Recommended

Projects may require help beyond the capability of the Tama Visioning Steering Committee or available city staff. For this improvement project, the steering committee should expect to engage the services of a Landscape Architect and a Civil Engineer.

OAK PARK

TAMA PROJECT		CONCEPT 1			
ITEM	QTY	UNIT	COST	TOTAL	
Site Prep and Demolition	1	ALLOW	\$ 150,000		\$150,000
6' Asphalt Trail (SF)	18400	SF	\$ 6		\$110,400
Topo Play Area	1	ALLOW	\$ 120,000		\$120,000
Splash Pad	1	ALLOW	\$ 35,000		\$35,000
Bandshell	1	ALLOW	\$ 35,000		\$35,000
Skatepark	1	ALLOW	\$ 50,000		\$50,000
Volleyball Improvements	1	EA	\$ 10,000		\$10,000
Restroom Improvements	1	EA	\$ 350,000		\$350,000
Parking Lot	1	ALLOW	\$ 150,000		\$150,000
Landscape Enhancements	1	ALLOW	\$ 75,000		\$75,000
Turf Seed	30000	SF	\$ 3		\$90,000
Grading, Drainage, and Erosion Control	1	ALLOW	\$ 15,000		\$50,000
TOTAL					\$1,075,400

INDIRECT COSTS	
GENERAL CONDITIONS AND SUPERVISION	\$43,016
PERMITS, INSURANCE AND BONDS	\$10,754
OVERHEAD AND PROFIT	\$32,262
DESIGN AND ESTIMATION CONTINGENCY	\$161,310
ESCALATION CONTINGENCY	\$21,508
DESIGNERS FEE (15%)	\$7,500
OWNER'S CONSTRUCTION CONTINGENCY (5%)	\$53,770
TOTAL INDIRECT COSTS	\$330,120

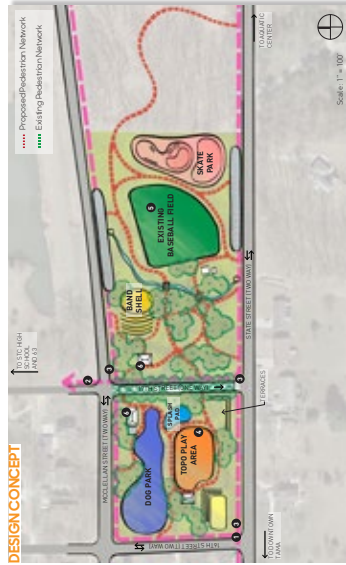
GRAND TOTAL COSTS	\$1,405,520
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NOTES:

1. The unit pricing in the above opinion of probable costs represents in part, both historical average contractor price ranges from similarly sized projects of similar scope along with our opinion of costs for unique or custom items as compiled by *site design group, ltd. [site]* and our subconsultants base don our experience. Therefore, our opinion of probable costs should not be interpreted as a representation of what to expect during a contractor bid process but simply as our opinion of costs based on our experience on similar projects and scope. Our opinion of probable costs are based on the work scope of this project and all associated finishes and components at the time of the execution of this document. Our opinion of probable costs may fluctuate further than factored above if the work scope increases or decreases, material choices are modified, the project is phased or if the project is delayed based on the assumed schedule at the time of execution of this document.
2. Contractors General Conditions may include, but are not limited to, items such as project management, trucking and deliveries, toilets, dumpsters, final cleaning and document reproduction.
3. All "Landscape" scope on-structure opinion of probable costs are limited to components above waterproofing.
4. This opinion of probable costs is based on information and the accuracy of that information available at the time of the execution of this document.

EXCLUSIONS:

1. All *site* and subconsultant fees, Permitting and/or Expediting Fees, All Removals and/or Demolition of Existing Materials, Utility scope, Lighting System Scope, Security System Scope, Audio System Scope, Water Feature Scope, Signage and/or Wayfinding Scope, Site furnishings Scope and All "NIC" items noted in Deetail or Summary Sheets. (Unless Included Herein)

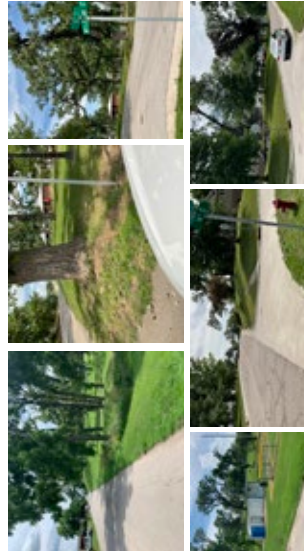


DESIGN CONCEPT

- LEGEND:**
- 1 New Asphalt Sidewalk - Connection to provide direct pedestrian route to park site from Tama, and create stronger connection to Aquatic Center.
 - 2 Road Diet - Convert 17th Street into a one-way street to limit traffic and increase pedestrian safety. See concept for 17th Street for more information on proposed ideas.
 - 3 Crosswalk - Ladder style painted crosswalks to enhance safety, prioritize pedestrians, and emphasize pedestrian network and connections.
 - 4 Playground - Replace existing playground with new topography-based, nature-themed playground that celebrates the site's unique characteristics.
 - 5 Existing Baseball Field - Maintain existing baseball field with minor upgrades to sod, backstop, bases, dugouts, and seating.
 - 6 Field House - Construct new field house with restrooms, concessions, storage, and multi-purpose space to support park and community uses.



EXISTING CONDITIONS PHOTOS:



site design group

LA: Cassandra Rice, PLA, ASLA, Hana Ishikawa, AIA
 Landscape Designer: Richard Meagher
 Intern: Paul Hsu

Iowa State University | Trees Forever | Iowa Department of Transportation



EXISTING CONDITIONS

- Issues and opportunities include:
- Facilities are outdated and no longer meet current codes or safety requirements (ADA, ASTM, CPSC, etc.).
 - There have been regular maintenance complaints about the existing bathrooms.
 - The sidewalk and pedestrian connection ends at 14th Street, allowing for safe pedestrian access to Oak Park from the south, but there is no connection to Toledo to the north.
 - Plenty of space for programming opportunities on the site.
 - Large, mature shade trees create opportunities for trails and passive recreation opportunities.
 - Topography on the south half of the park creates interesting opportunities for play and activities.
 - The planning team heard a desire for a skate park, playground, band shell and improved bathrooms for this site.

COMMUNITY FEEDBACK

Tama parents enjoy going to Oak Park with their kids to use the playground and baseball diamonds. Parents want more sidewalks throughout town and better connections to the park and aquatic center.



Mobility-challenged people in Tama find it difficult to enjoy the existing amenities at Oak Park such as the shelter, picnic tables, baseball field and sand volleyball courts which are not updated per current codes and standards.

COMMUNITY ENGAGEMENT RESPONSE

"More Physical Activity Opportunities"
 According to the Tama priorities, community members identified More Physical Activity Opportunities as one of the third most important Transportation Enhancement issues. The existing recreation opportunities at Oak Park are out of date and in poor shape, but a revitalized park for both Tama children and parents could be a huge potential asset for both Tama and Toledo communities. The Design Concept for Oak Park features a renovated play area, a bandshell for community gatherings and events, a dog park for residents to safely let their pets off-leash, and a skate park for older children that currently have little to no recreational opportunities.

"Better Pedestrian Connections"
 According to the Tama priorities, residents felt that better pedestrian connections was the third most important Transportation Enhancement issue. Both concepts provide safe crossing across both streets by providing crosswalks, slowing traffic, and shortening the distance for pedestrians to cross. The proposed sidewalks along both State Street and McClellan Street will help to provide a more complete pedestrian network, and address the many comments and concerns from Tama and Toledo parents about the unsafe walking conditions for children trying to get to either the Tama Toledo Family Aquatic Center as well as Oak Park.

"More Accessibility for Seniors"
 The Tama priorities also identified lack of access for seniors and the inability to safely use existing facilities such as the bathrooms and playgrounds will be updated per ADA standards to allow for increased access.



The Tama priorities also identified lack of access for seniors and the inability to safely use existing facilities such as the bathrooms and playgrounds will be updated per ADA standards to allow for increased access.

Broadway Street + Lincoln Highway

Overview

The intersection of Broadway Street and Lincoln Highway was identified by the design team as an important point of connection between Tama and Toledo. This intersection is a key point for pedestrian safety as community members said that they will occasionally walk, run, or bike along the side of Lincoln Highway because it is the only road where pedestrians are given a wide berth to occupy. This is also an important walking route to Iowa Premium Beef. Track traffic taking a left turn onto South Broadway Street does not stop, creating an increasingly dangerous pedestrian environment. Increasing pedestrian safety is important because Broadway Street also serves as an important pedestrian artery for the extended sidewalk network, connecting residents from both communities to both Oak Park and the Tama/Toledo Aquatic Center, two strong community resources. Finally, 2nd Avenue intersects with the Toledo Business District to the west, and providing a pedestrian route would allow community members to safely walk to businesses such as the State Bank, Medicap Pharmacy, and Fareway Grocery.

1. Concept One: Tactical Urbanism Approach

The concept attempts to stop and slow traffic on Lincoln Highway for a safer pedestrian crossing at this important point of connection between Tama and Toledo. A blinking yield sign cautions drivers, slowing down traffic to a stop when there are pedestrians actively trying to cross the street. An ADA ramp is also provided, connecting the proposed crosswalk along the north side of Broadway Street to the existing sidewalk.

Design Expertise Recommended

Projects may require help beyond the capability of the Tama Visioning Steering Committee or available city staff. For this improvement project, the steering committee should expect to engage the services of a Landscape Architect and a Civil Engineer.

BROADWAY AND LINCOLN AVE

TAMA-TOLEDO JOINT PROJECTS	
ITEM	
Site Prep and Demolition	
8' Concrete Trail (SF)	
B6-12 Concrete Curb	
6'-wide Crosswalk Striping	
ADA Curb Ramp	
Signage - Stop Sign	
Signage - Yield Sign	
Wayfinding Signage	
Grading, Drainage, and Erosion Control	
TOTAL	

CONCEPT 1			
QTY	UNIT	COST	TOTAL
1	ALLOW	\$ 7,500	\$7,500
2300	SF	\$ 8	\$18,400
50	LF	\$ 28	\$1,400
1	ALLOW	\$ 2,500	\$2,500
4	EA	\$ 1,000	\$4,000
1	EA	\$ 500	\$500
1	EA	\$ 500	\$500
2	EA	\$ 500	\$1,000
1	ALLOW	\$ 1,200	\$1,200
TOTAL			\$29,500

INDIRECT COSTS	
GENERAL CONDITIONS AND SUPERVISION	
PERMITS, INSURANCE AND BONDS	
OVERHEAD AND PROFIT	
DESIGN AND ESTIMATION CONTINGENCY	
ESCALATION CONTINGENCY	
DESIGNERS FEES (15%)	
OWNER'S CONSTRUCTION CONTINGENCY (5%)	

\$1,180
\$295
\$885
\$4,425
\$590
\$4,425
\$1,475

GRAND TOTAL COSTS

\$42,775

NOTES:

1. The unit pricing in the above opinion of probable costs represents in part, both historical average contractor
2. Contractors General Conditions may include, but are not limited to, items such as project management, trucking
3. All "Landscape" scope on-structure opinion of probable costs are limited to components above waterproofing.
4. This opinion of probable costs is based on information and the accuracy of that information available at the time

EXCLUSIONS:

1. All site and subconsultant fees, Permitting and/or Expediting Fees, All Removals and/or Demolition of Existing Materials, Utility scope, Lighting System Scope, Security System Scope, Audio System Scope, Water Feature Scope, Signage and/or Wayfinding Scope, Site furnishings Scope and All "NIC" items noted in Deetail or Summary Sheets.
(Unless Included Herein)

COMMUNITY FEEDBACK

The intersection of Broadway Street and Lincoln Highway was identified as a critical intersection due to community member feedback from multiple groups. The Tama Steering Committee, older adults, and active adults all felt that the crossing between Lincoln Highway and Broadway Street was unsafe to cross due to high-speed traffic coming from both directions, and small changes could be made to dramatically increase pedestrian safety.



COMMUNITY ENGAGEMENT RESPONSE

"Heavy Traffic"
The Broadway Street and Lincoln Street intersection were identified by community members as a danger to cross on the Toledo Metric due to vehicular speeding and lack of crosswalk. The US Highway 63 trucking route travels through this crossing. The goal of the first concept is to slow down the Lincoln Highway traffic by increasing pedestrian awareness through flashing yield signs.



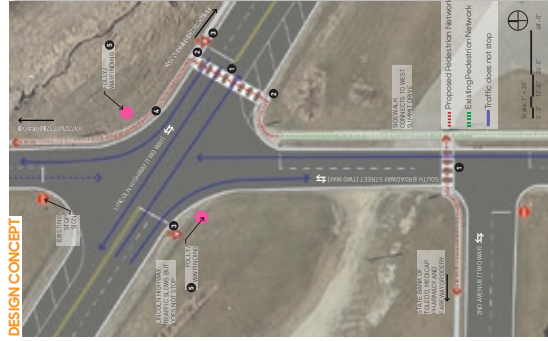
"Better Pedestrian Connections"
According to the Toledo Priorities, residents felt that better pedestrian connections was the third most important Transportation Enhancement Issue. Both concepts provide safe crossing across both streets by providing crosswalks, slowing traffic, and shortening the distance for pedestrians to cross. The proposed sidewalks along 2nd Avenue and Broadway Street will help to provide a more complete pedestrian network, satisfying the priorities identified by Toledo community members including Better Pedestrian Connections and Better Neighborhood Streetscapes.



"More Accessibility for Seniors"
The Toledo Priorities also identified lack of access for seniors and the mobility challenged as a Transportation Enhancement Issue, and the design concept for Lincoln Highway and 2nd Avenue address this issue by providing ADA curb ramps with detectable warning at tips at the end of all proposed crosswalks. Yield and stop signs are also proposed to slow incoming traffic and make drivers more aware of potential pedestrian presence, creating a safer crossing environment.

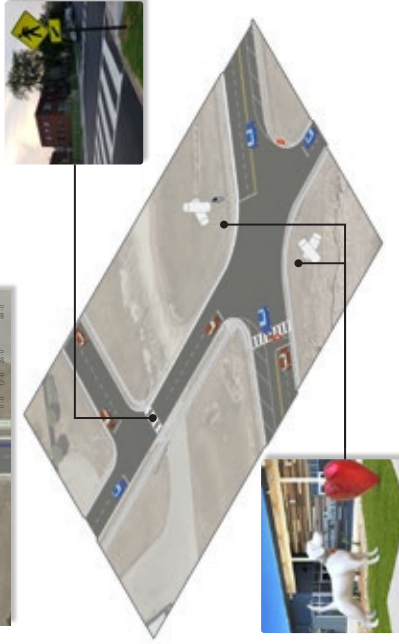


- Primary 17th Street and US Highway 63 issues and opportunities include:
- Traffic does not stop while taking the left-turn onto US Highway 63 while students may be trying to cross the street to school.
 - Traffic using US Highway 63 truck route increases the danger to pedestrian safety.
 - No opportunities for pedestrians crossing across US Highway 63 to access school.
 - Lack of pedestrian connection north to Toledo.



- LEGEND:**
- 1 Crosswalk
 - 2 ADA Curb Ramps - Curb ramp with ADA detectable warnings.
 - 3 Blinking Yield Sign - Cautious approaching drivers, and slows traffic to increase safety for crossing pedestrians.
 - 4 New Sidewalk - 6 wide (minimum) concrete sidewalk connection.
 - 5 Folly / Wayfinding

EXISTING CONDITIONS PHOTOS:



Toledo

Broadway St + Lincoln Hwy

site design group

LA: Cassandra Rice, PLA, ASLA, Hana Ishikawa, AIA
Landscape Designer: Richard Meagher
Intern: Paul Hsu

Iowa State University | Trees Forever | Iowa Department of Transportation



Implementation Strategies

Implementation Overview

The Community Visioning Plan created by the design team for both Tama and Toledo are the first step towards implementing the transportation network changes that can improve the safety and livability of both communities. Using these documents as a foundational first step in the design process, projects can progress towards the point of construction with the continued help of allied professionals.

The design team, site design group.ltd (*site*), would like to continue our effort to improve the cities of Tama and Toledo by serving as landscape architectural consultants in the future for both communities. Our familiarity with the Community Visioning Plan and the members of both Steering Committees, as well as our experience with implementing these types of projects while able to help secure future funding, makes site design group a strong candidate for further inclusion in the improvement of both Tama and Toledo.

Projects may require help beyond the capability of the Tama Visioning Steering Committee or available city staff. For this improvement project, the steering committee should expect to engage the services of a Landscape Architect and a Civil Engineer.

YEAR 1

- TASK 1** Schedule monthly steering committee meetings, confirm understanding of scope and estimated costs of identified projects, and **prioritize the top three projects for design refinement and implementation.**
- TASK 2** Determine the most practical project for implementation and identify all applicable and eligible funding sources and other resource opportunities.
- TASK 3** Utilizing Community Visioning deliverables along with assistance from Trees Forever and a landscape architect, **submit application(s) for eligible and related grant programs.**
- TASK 4** Upon a successful grant application and securing funding, **develop a schedule for project design, bidding, and construction. Select and execute a contract with a landscape architect as the lead design consultant.** This begins the Design development phase.

YEAR 2-10+

- TASK 1** Each year re-assess the top three priority projects based on grant application success and other funding/resource opportunities, **then repeat Tasks 2-4 for the next selected project.**

Action Plan



Stage 2: Schematic Design

Stage 1: Master Planning (Vision)

Stage 6: Completed Project

Stage 3: Design Development

Stage 4: Construction Documents

Stage 5: Construction Administration

Enhanced Pedestrian Network

Tama and Toledo are here in the process

Concept Data

Community Visioning

The Community Visioning Plan created by the design team for both Tama and Toledo are the first step towards implementing the transportation network changes that can improve the safety and livability of both communities. Using these documents as a foundational first step in the design process, projects can progress towards the point of construction with the continued help of allied professionals.

The Action Plan is a basic, recommended approach for project implementation on how to take the ideas from the Community Visioning Plan to completed construction projects.

The design team, site design group, would like to continue our effort to improve the cities of Tama and Toledo by serving as landscape architectural consultants in the future for both communities. Our familiarity with the Community Visioning Plan and the members of both Steering Committees, as well as our experience with implementing these types of projects while able to help secure future funding, makes site design group a strong candidate for further inclusion in the improvement of both Tama and Toledo.

Schedule monthly steering committee meetings, confirm understanding of scope and estimated costs of identified projects, and prioritize the top three projects for design refinement and implementation.

Projects may require help beyond the capability of the Tama Visioning Steering Committee or available city staff. For this improvement project, the steering committee should expect to engage the services of a Landscape Architect and a Civil Engineer.

Determine the most practical project for implementation and identify all applicable and eligible funding sources and other resource opportunities.

The graphics on this board to the right illustrate the process for taking individual design projects from a general vision to a fully realized implementation. The specific amount of time, costs, and efforts are different from site to site, and will require a more in-depth cost estimate and analysis by whoever is selected to continue the various stages of each project. Projects may need to be adjusted based on a variety of factors such as project scope, complexity, project schedule and funding sources.

Utilizing Community Visioning deliverables along with assistance from Trees Forever and a landscape architect, submit application(s) for eligible and related grant programs.

The ideas presented through the Community Visioning Program are the beginning of this design process.

Upon a successful grant application and securing funding, develop a schedule for project design, bidding, and construction. Select and execute a consultant with a landscape architect as the lead design consultant. This begins the Design development phase.

Each year re-assess the top three priority projects based on grant application success and other funding/resource opportunities, then repeat Tasks 2-4 for the next selected project.

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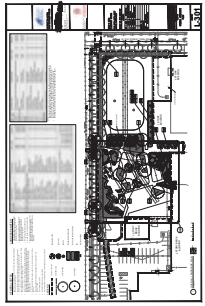
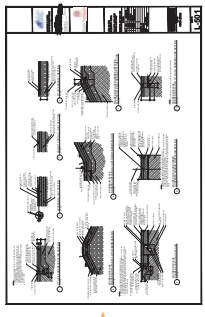
Tama + Toledo

Implementation Plan

site design group

LA: Cassandra Rice, PLA, ASLA, Hana Ishikawa, AIA
Landscape Designer: Richard Meagher
Intern: Paul Hsu

Iowa State University | Trees Forever | Iowa Department of Transportation



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)