Final Report and Feasibility Study

Van Meter, Iowa

Program Partners:

Iowa Department of Transportation
Trees Forever
Iowa State University

Iowa's Living Roadways community visioning

Participants

Town Steering Committee

Lani Lonning
Brenda Golwitzer
Cindy Winchell
Joel Akers
AJ Skogerson
Nate Weitl
Deron Durflinger
Erin Weitl
Patrick Junker
Lyn Lyon
Jarin Young
Austin Cox
Kyle Michel
Allan Adams
Dee House
Anne Iles
Joe Herman
Toni Baldwin

Trees Forever

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

Program Manager
Aaron Brewer
(319) 440-7529
abrewer@treesforever.org

Iowa State University

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

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

Bolton & Menk

1519 Baltimore Dr.
Ames, IA 50010
515-233-6100
www.bolton-menk.com

Joshua Shields, PLA, ASLA
(515) 233-6100 ext. 2913
Joshua.Shields@bolton-menk.com

Nate Schlorholtz, ASLA
(515) 233-6100 ext. 3335
Nathan.Schlorholtz@bolton-menk.com

Fan Lan
Landscape Architecture Intern
Iowa State University

Table of Contents

About Bolton & Menk

In 1949, two hard working Midwesterners – John Bolton and Martin Menk – saw people in their surrounding communities with dreams of a bright future, a desire to grow, and a common challenge of aging infrastructure. Their goal: to help communities make progress by listening to what people want, finding the best solutions for their needs, and treating them right. The legacy of John and Martin lives on. We still want to help, we work hard every day, and we always remember what got us here – we're people helping people. Today, Bolton & Menk, Inc. has more than 400 employees including a professional staff of over 150 engineers, planners, landscape architects, and surveyors.

Bolton & Menk specializes in providing public infrastructure solutions. We want to take care of our clients by providing the best services and solutions for them. From advocating for our communities, to designing their dreams, to finding funding; we take pride in our work throughout the Upper Midwest. Because we live here too. We believe in the power of face-to-face meetings, friendly conversations, and a collaborative decision making process to keep your projects on schedule, within budget, and focused on real, workable solutions.

Beyond our technical experience and skills, our service is also based on management and product delivery strategies we have developed over time:
Listen to the client's needs and wants
Learn the characteristics and personality of each client
Communicate proactively with staff, stakeholders, and the public
Develop **effective solutions** through consensus building
Achieve the **client's vision**
Foster **long-term relationships**

We promise every client two things: we'll work hard for you and we'll do a good job. We take a personal interest in the work being done around us. And at the end of the day, we're **Real People** offering **Real Solutions**.

Downtown Streetscape Improvements | Iowa Falls, IA

Program Overview

The city of Van Meter is one of 10 communities selected to participate in the 2019 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 interns, and ISU faculty and staff. The program is sponsored by the Iowa Department of Transportation.

Community Goals

The Van Meter visioning committee identified a number of goals and priority areas during the visioning process:

- Improve pedestrian connectivity and accessibility to local destinations
- Enhance the arrival experience of motorists entering town from the north
- Improve the downtown streetscape by adding aesthetics and site amenities
- Create a park space for families and community events

Capturing the Van Meter 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 sidewalk and trail improvements plan, concepts for enhancing the downtown business district, and concepts for a new downtown pocket park. These plans, as well as the inventory information, is illustrated in the following set of presentation boards:

Preliminary design review

Community design workshop

Preliminary design review

Downtown streetscape

Program Overview

The city of Van Meter is one of 10 communities selected to participate in the 2019 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 interns, and ISU faculty and staff. The program is sponsored by the Iowa Department of Transportation.

Community Goals

The Van Meter visioning committee identified a number of goals and priority areas during the visioning process:

- Improve pedestrian connectivity and accessibility to local destinations
- Enhance the arrival experience of motorists entering town from the north
- Improve the downtown streetscape by adding aesthetics and site amenities
- Create a park space for families and community events in downtown

Capturing the Van Meter 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 sidewalk and trail improvements plan, concepts for enhancing the downtown business district, and concepts for a new downtown pocket park. These plans, as well as the inventory information, is illustrated in the following set of presentation boards:

01. Program Overview
02. Bioregional Context
03. Transportation Assets and Barriers Assessment
04. Transportation Behaviors and Needs Assessment
05. Transportation Inventory and Analysis
06. Goal Setting
07. Concept Overview
08. Assessment & Survey Analysis
09. Sidewalk & Trail Improvements
10. Entry Corridor Beautification
11. Downtown Improvements

12a & 12b. Pocket Park Concepts

Pocket park design opportunity

R16 and F90 intersection

Van Meter

Program Overview

Bolton & Menk, Inc.
LAs: Josh Shields, PLA; Nate Schlorholtz
Intern: Fan Lan
Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

Bioregional Assessment

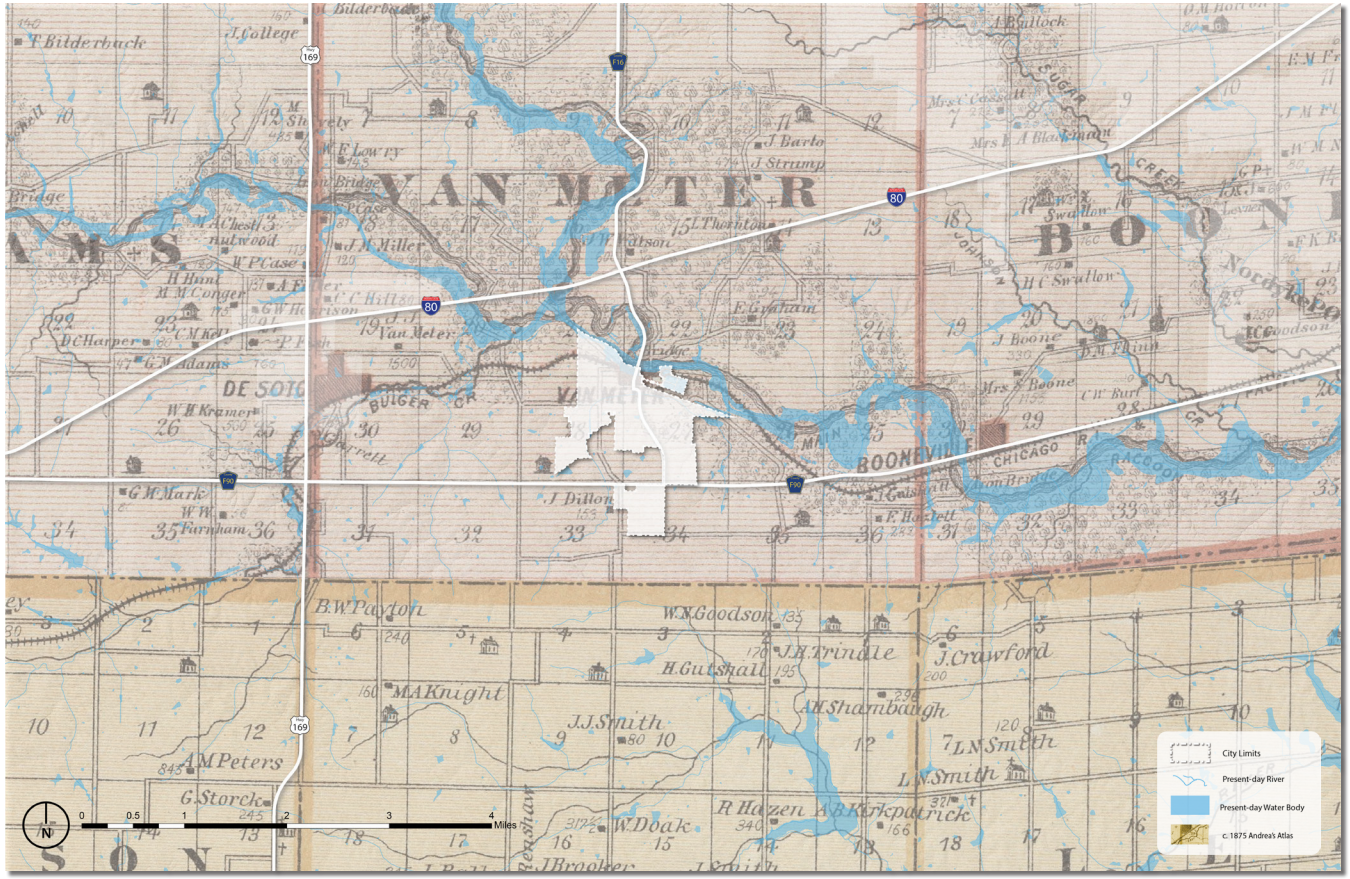
Settlement Patterns

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 is arranged to correspond closely with the 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.

Van Meter 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 the vegetation patches shown in the 1875 map still in existence?



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

Settlement Patterns

This board uses 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 is arranged to correspond closely with the 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.

Van Meter 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?

Van Meter
Historical Settlement Patterns

Bioregional Context
Julia Badenhope, Riley Dunn, Emma Georgeff, Timothy Kerkhove, Clare Kiboko, Alysse Kirkman, Giannis Koutsou, Zoey Mauck, Abigail Schafer
Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

Historical Vegetation

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

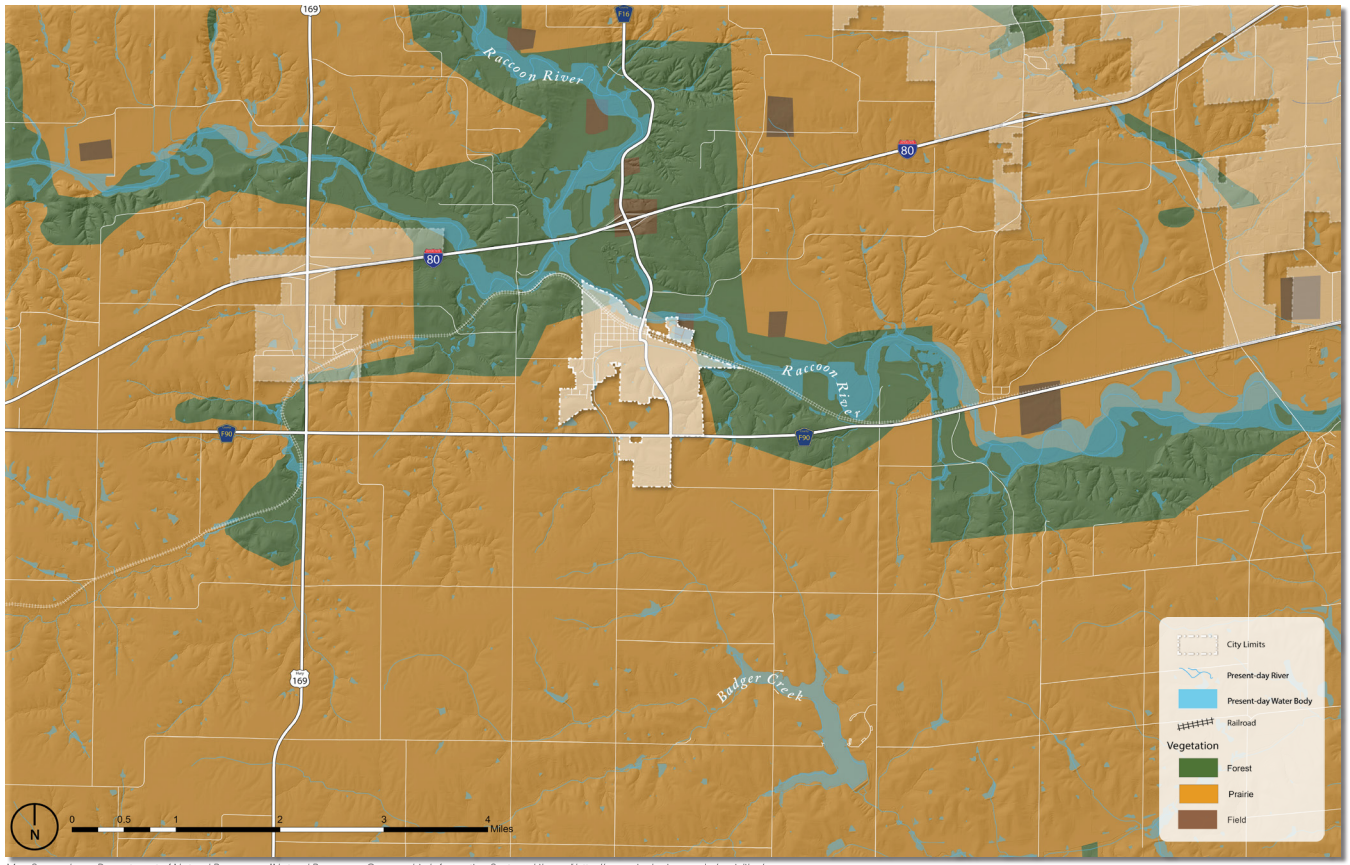
The plant community names mapped by the GLO surveyors varied. The original terminology they used has been preserved in the original data, but we have renamed them on this map to reflect names used to describe contemporary vegetation communities.

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 presented in the vicinity of your community:

1. Forest: Tree dominated, with a mostly closed canopy. Ground vegetation shade tolerant. Developed under infrequent fire.
2. Prairie: Perennial non-woody plants; fire dominated.
3. Field: Cultivated lands of early pioneers or Native Americans.

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



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

Historical Vegetation

The vegetation information shown here is derived from township maps made by the General Land Office (GLO) surveys beginning in 1836 through 1859. 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 presented in the vicinity of your community:

1. Forest: Tree dominated, with a mostly closed canopy. Ground vegetation shade tolerant. Developed under infrequent fire.
2. Prairie: Perennial non-woody plants; fire dominated.
3. Field: Cultivated lands of early pioneers or Native Americans.

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

Van Meter
Historical Vegetation

Bioregional Context
Julia Badenhope, Riley Dunn, Emma Georgeff, Timothy Kerkhove, Clare Kiboko, Alysse Kirkman, Giannis Koutsou, Zoey Mauck, Abigail Schafer
Iowa State University | Trees Forever | Iowa Department of Transportation

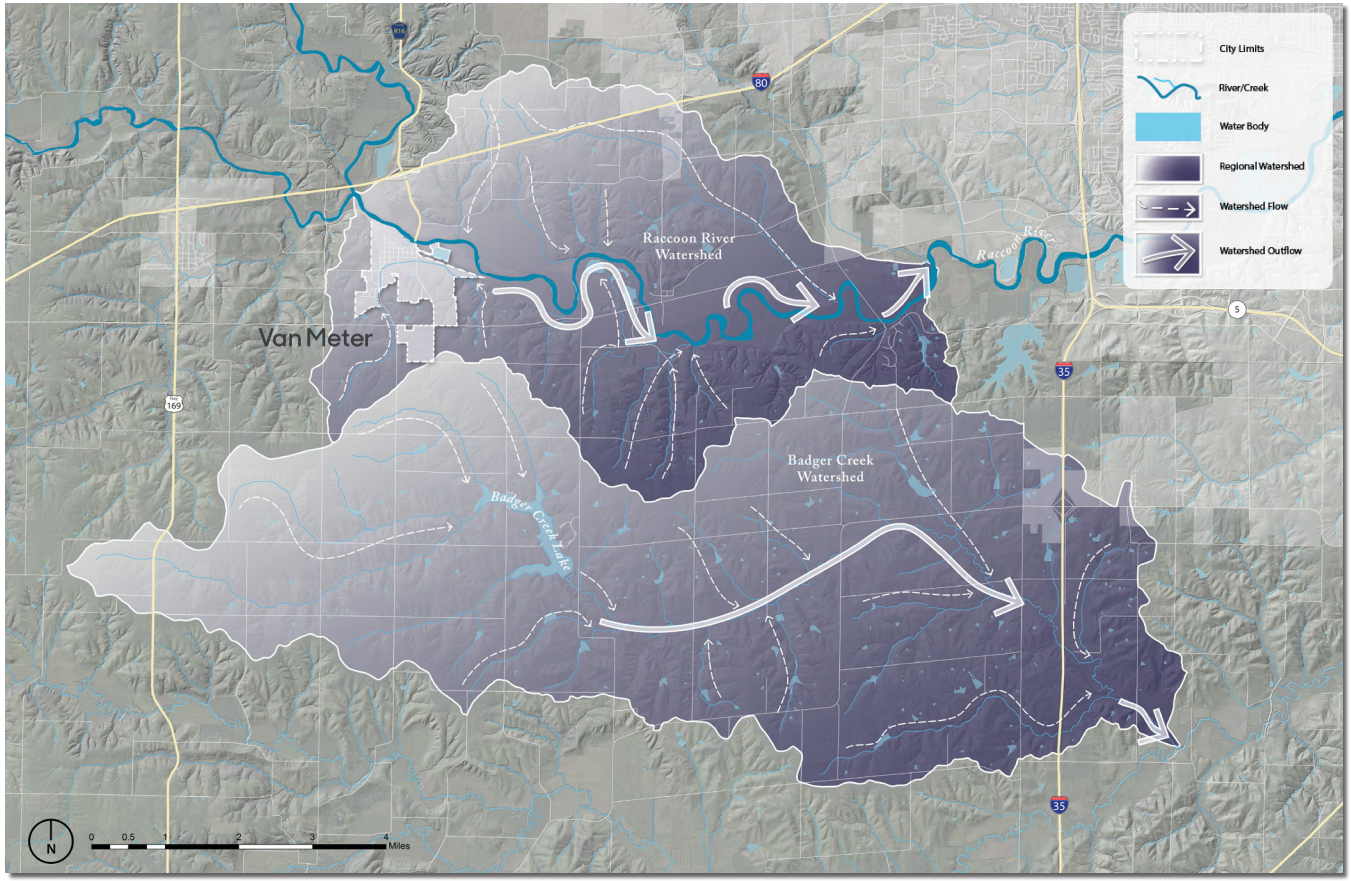
Iowa's Living Roadways community visioning

Regional Watershed

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

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

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



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

Regional Watershed

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

Van Meter
Regional Watershed

Bioregional Context
Julia Badenhope, Riley Dunn, Emma Georgeff, Timothy Kerkhove, Clare Kiboko, Alysse Kirkman, Giannis Koutsou, Zoey Mauck, Abigail Schafer
Iowa State University | Trees Forever | Iowa Department of Transportation

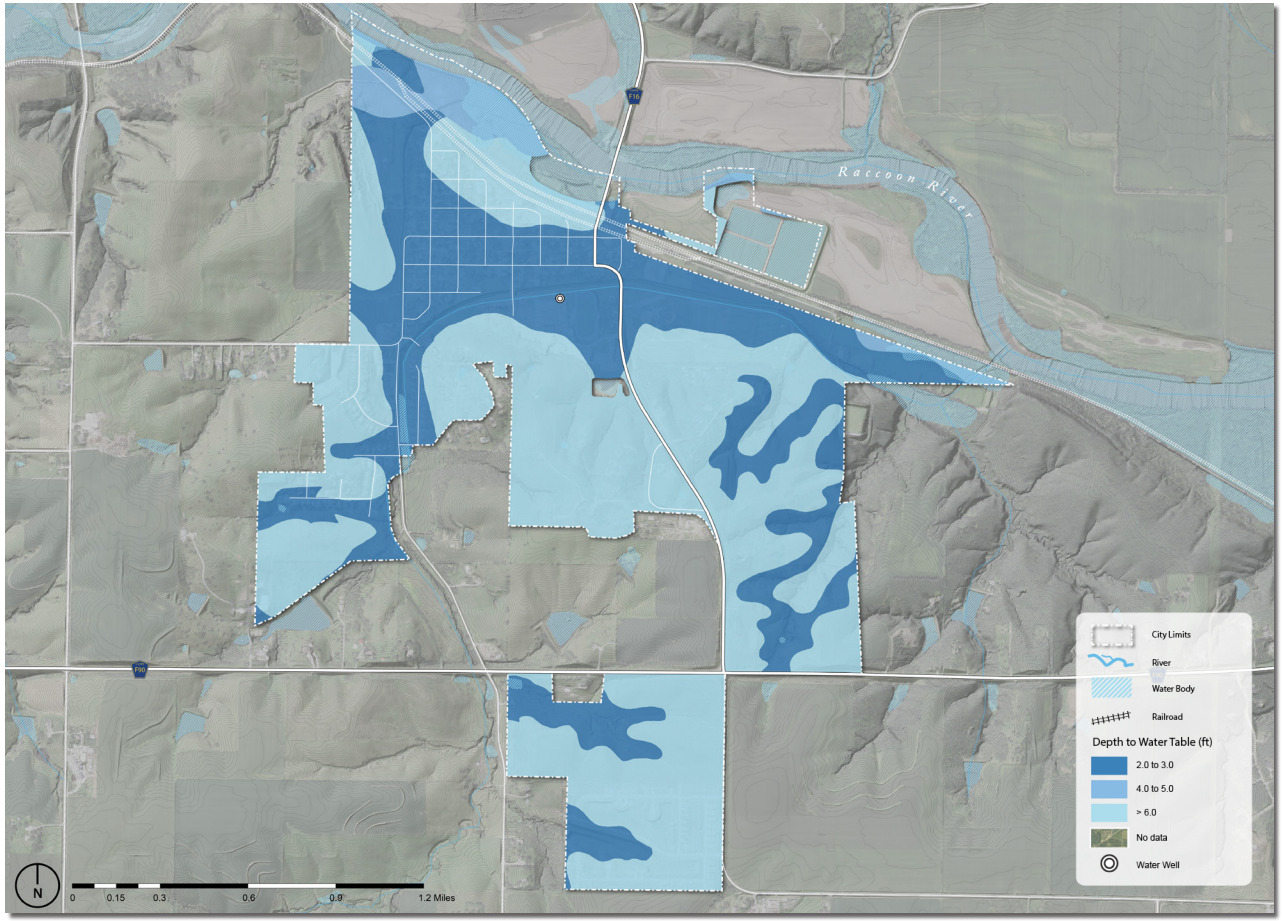
Iowa's Living Roadways community visioning

Depth to Water Table

The water table is defined as the 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.



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

Depth to Water Table

The water table is defined as the distance below the surface at which the ground is saturated with water. Depth to water table is represented as a range because it varies due to seasonal changes and precipitation volumes. For example, following spring 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.

Van Meter
Depth to Water Table

Bioregional Context
Julia Badenhope, Riley Dunn, Emma Georgeff, Timothy Kerkhove, Clare Kiboko, Alysse Kirkman, Giannis Koutsou, Zoey Mauck, Abigail Schafer
Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

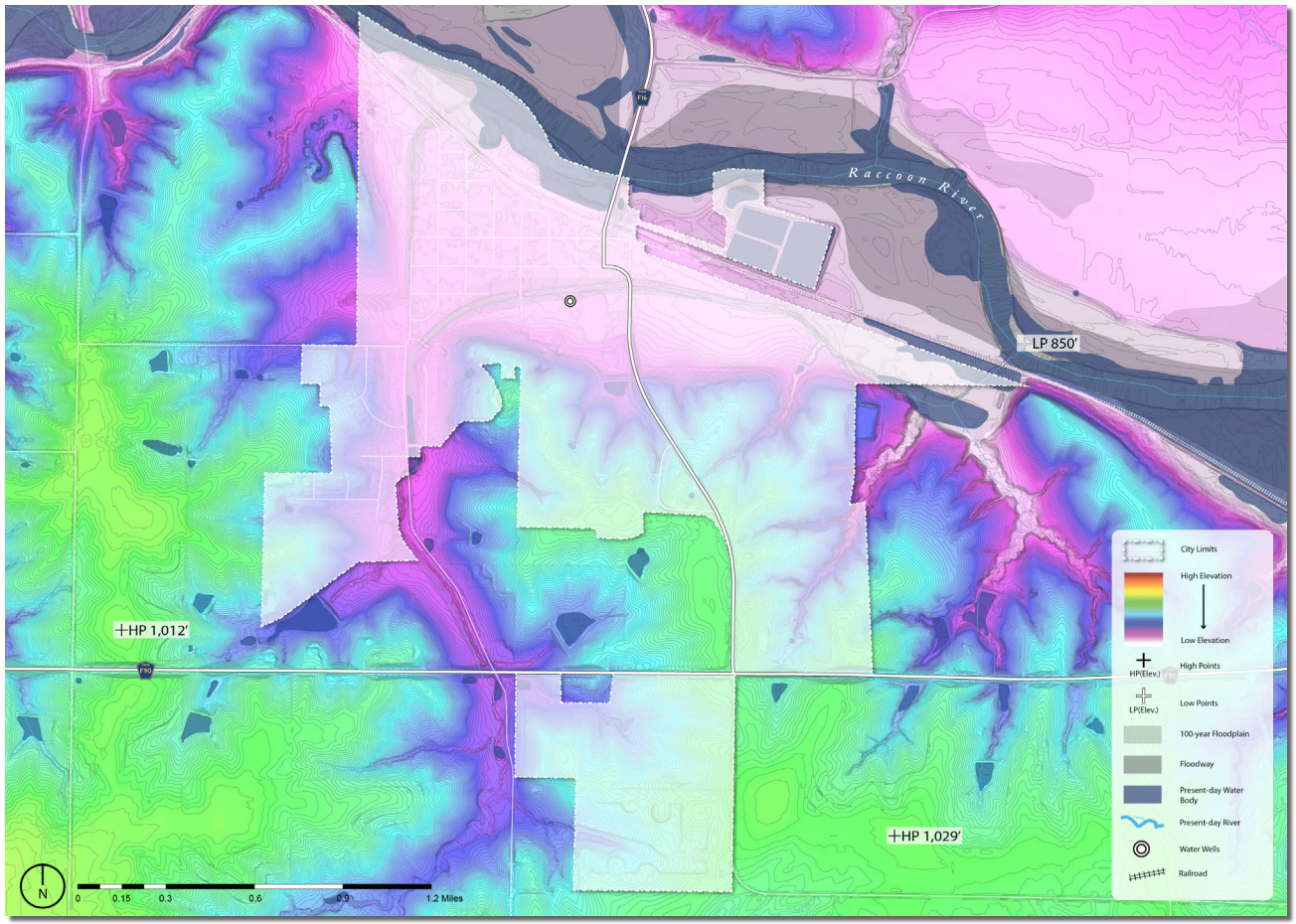
Elevation and Flow

The map to the right displays topographic differences in elevation using a combination of contour lines and the color gradient depicted in the legend. The high points and low points have also been located.

Note the relationship of your community to the surrounding elevation; is it located in a valley or on high ground, or is it split between the two?

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

Flood risk is correlated to low-lying land. This map also shows your community's flood risk as defined by the Federal Emergency Management Agency (FEMA) Flood Map Service Center. This map shows the two most important flood zones if they are 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.



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

Elevation and Flow

The map to the left displays topographic differences in elevation using a combination of contour lines and the color gradient depicted in the legend. The high points and low points have also been located.

Note the relationship of your community to the surrounding elevation; is it located in a valley or on high ground, or is it split between the two?

If your community lies within or near a floodplain or floodway, the map reflects these features. Not all communities will have these elements; 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. This map shows the two most important flood zones if they are 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.

Van Meter

Elevation and Flow

Bioregional Context
Julia Badenhope, Riley Dunn, Emma Georgeff, Timothy Kerkhove, Clare Kiboko, Alysse Kirkman, Giannis Koutsou, Zoey Mauck, Abigail Schafer
Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

Present-day Land Cover

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

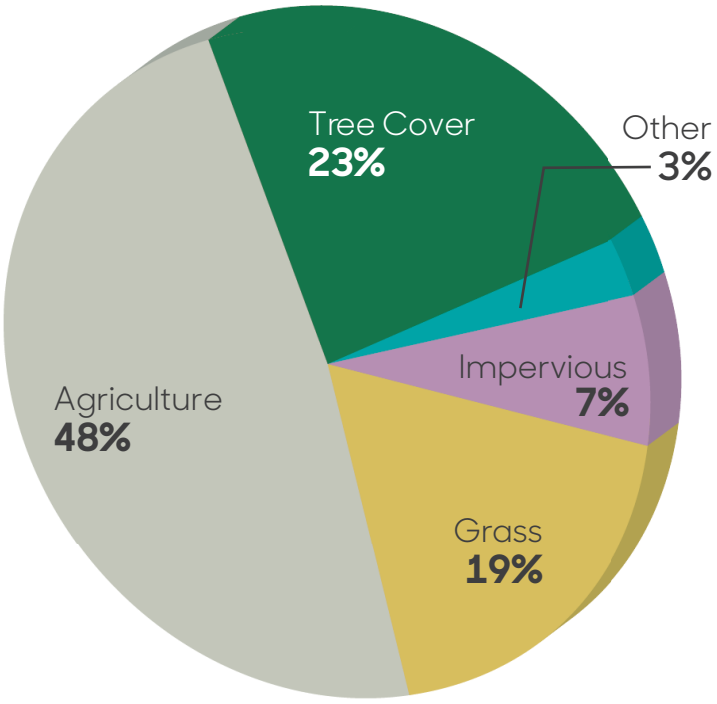
What do you observe about the dominant land cover types in your community? Where is the tree canopy most concentrated?

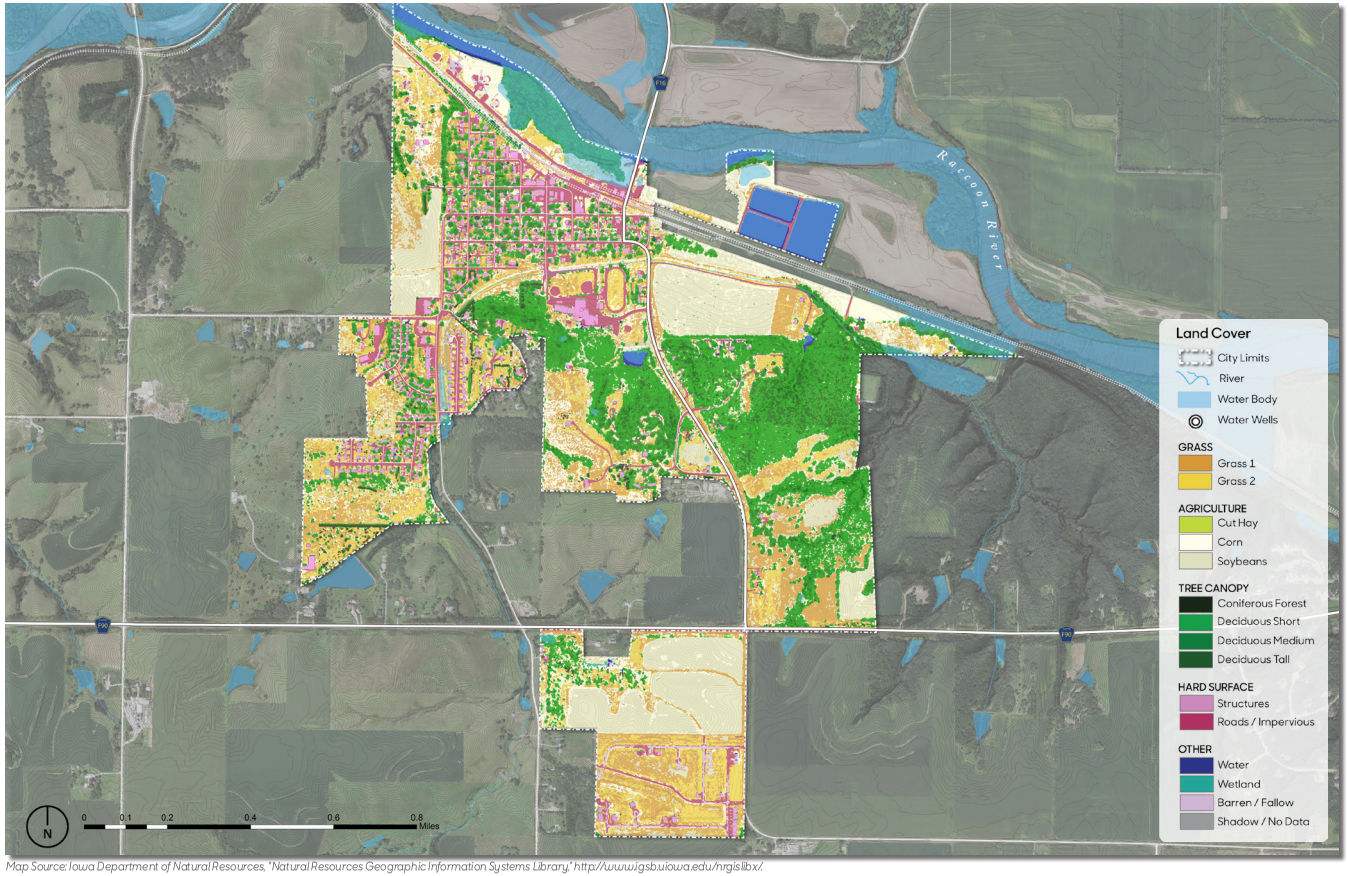
Where is the tree canopy most concentrated?

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

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

Percent Land Cover Type





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

Present-day Land Cover

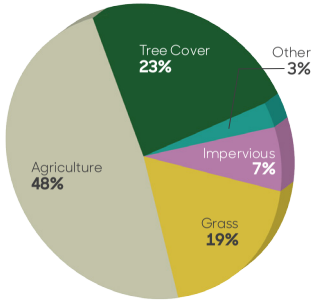
The land-cover map depicts both natural and man-made land-cover types with aerial imagery. The Iowa DNR created 15 unique classes for this dataset to differentiate land covers. Refer to the legend for a breakdown of land-cover types within your community boundaries.

What do you observe about the dominant land-cover types in your community?

Where is the tree canopy most concentrated?

Look at how much of your community consists of impervious surfaces (e.g., parking lots, roads, buildings) compared to 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

Van Meter
Present-day Land Cover

Bioregional Context
Julia Badenhope, Riley Dunn, Emma Georgeff, Timothy Kerkhove, Clare Kiboko, Alysse Kirkman, Giannis Koutsou, Zoey Mauck, Abigail Schafer
Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

Present-day Vegetation

This map shows the present-day vegetation in an aerial image, indicating where trees, shrubs, and other plants create shade, line streets, buffer edges, and provide other services.

Notice how much the vegetation has been altered since government land office surveyors mapped the historic vegetation. People alter vegetation to produce crops and provide shelter, and for other amenities.

Also notice how the community and its vegetation have changed since the Andrea's Atlas was drawn. Development typically removes vegetation where infrastructure is built, and then re-introduces vegetation for its functional and aesthetic value.

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

Present-day Vegetation

This map shows the present-day vegetation in an aerial image, indicating where trees, shrubs, and other plants create shade, line streets, buffer edges, and provide other services.

Notice how much the vegetation has been altered since government land office surveyors mapped the historic vegetation. People alter vegetation to produce crops and provide shelter, and for other amenities.

Also notice how the community and its vegetation have changed since the Andrea's Atlas was drawn. Development typically removes vegetation where infrastructure is built, and then re-introduces vegetation for its functional and aesthetic value.

Van Meter

Present-day Vegetation

Bioregional Context

Julia Badenhope, Riley Dunn, Emma Georgeff, Timothy Kerkhove, Clare Kiboko, Alysse Kirkman, Giannis Koutsou, Zoey Mauck, Abigail Schafer

Iowa State University | Trees Forever | Iowa Department of Transportation

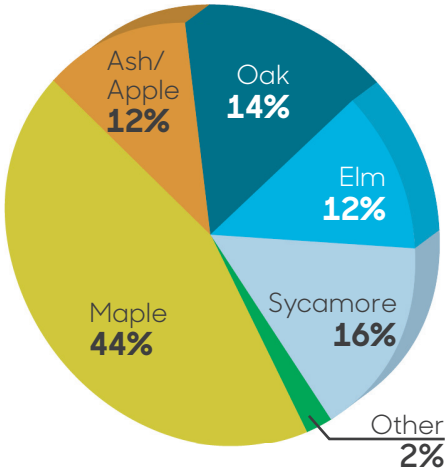
Iowa's Living Roadways community visioning

Urban Forest

The map depicts city-owned trees that have been surveyed by the Iowa Department of Natural Resources (Iowa DNR).[1] The trees are divided into three categories: healthy trees, hazard trees, and ash trees.

A yellow triangle indicates a "hazard" tree. The hazard designation reflects tree condition using the Iowa DNR's priority rating. Hazard trees are "dangerous, dead, or dying, and no amount of maintenance will increase longevity or safety;" or are infected by "insects, pathogens, or parasites."

A purple cross indicates an "ash" tree. They are under imminent threat from the Emerald Ash Borer (EAB), an invasive beetle that disrupts circulation in the tree resulting in the loss of tens of millions of ash trees in North America.[2] EAB was first discovered in Iowa in 2010 and was confirmed in 65 Iowa counties as of 2018. [3]



The graphic shows how many of the city's trees are of the same species. There is a strong possibility that 12% (ash trees) of Van Meter's city-owned trees will die once EAB is carried to the area. With proper planning and management, the city can improve its canopy by planting suitable trees that can gradually replace hazard trees. Improving species diversity will create a more resilient urban forest.

---

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

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

3 "Iowa Tree Pests website," Entomology and Plant Science Bureau of the Iowa Department of Agriculture and Land Stewardship (IDALS), last updated September 12, 2018, http://www.iowatreepests.com/eab_home.html.

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

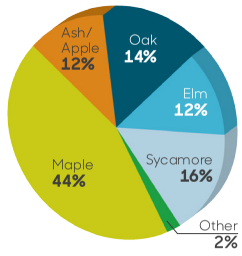
The Urban Forest

This map depicts city-owned trees that have been surveyed by the Iowa Department of Natural Resources (Iowa DNR).[1] The trees are divided into three categories: healthy trees, hazard trees, and ash trees.

A yellow triangle indicates a "hazard" tree. The hazard designation reflects tree condition using the Iowa DNR's priority rating. Hazard trees are "dangerous, dead, or dying, and no amount of maintenance will increase longevity or safety;" or are infected by "insects, pathogens, or parasites."

A purple cross indicates an "ash" tree. They are under imminent threat from the Emerald Ash Borer (EAB), an invasive beetle that disrupts circulation in the tree resulting in the loss of tens of millions of ash trees in North America.[2] EAB was first discovered in Iowa in 2010 and was confirmed in 65 Iowa counties as of 2018.[3]

The graph shows how many of the city's trees are of the same species. There is a strong possibility that 12% (ash trees) of Van Meter's city-owned trees will die once EAB eaches the area. With proper planning and management, the city can improve its canopy by planting suitable trees to gradually replace hazard and ash trees. Improving species diversity will create a more resilient urban forest.



1 Iowa Department of Natural Resources Community Tree Inventories, http://www.iowadnr.gov/Conservation/Forestry/Urban-Forestry/Community-Tree-Inventories.
2 Emerald Ash Borer the Green Menace, USDA Program Aid No. 1769, 2008, https://www.aphis.usda.gov/publications/plant_health/content/printable_version/EAB-GreenMenace-reprint.June09.pdf.
3 "Iowa Tree Pests website," Entomology and Plant Science Bureau of the Iowa Department of Agriculture and Land Stewardship (IDALS), last updated September 12, 2018, http://www.iowatreepests.com/eab_home.html.

Van Meter
Urban Forest

Bioregional Context
Julia Badenhope, Riley Dunn, Emma Georgeff, Timothy Kerkhove, Clare Kiboko, Alysse Kirkman, Giannis Koutsou, Zoey Mauck, Abigail Schafer
Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

Transportation Assets and Barriers

Overview

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

In this participatory assessment, we want to find out which factors and conditions affect transportation use in Van Meter, 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 Van Meter's transportation system works, we use focused, small-group conversations, mapping, and photos of the best and worst to understand local transportation.

Different Users = Different Needs

To capture insights about transportation from a variety of perspectives, we invited Van Meter residents with different transportation needs to participate in focus groups. A total of 61 residents attended Van Meter's workshop. Participants were separated into five user groups and the Van Meter steering committee.

Actives

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

Mobility Impaired

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

Older Adults

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

Youth

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

Parents

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

Steering Committee

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

Families, actives, and youth appreciate access to nature on local trails.

Some bridges are difficult to cross because there is no extra space for cyclists or pedestrians.

Curb cuts and tactile warning strips help the mobility– and sight–impaired cross safely.

Richland Road connects important places, but fast traffic and lack of bicycle or pedestrian areas inhibit use.

Important services, such as the US Post Office, have nearby accessible parking and a curb cut. These features are appreciated by residents.

Frequent trains disrupt crossing in town; lack of clearly identified and well maintained crossing areas creates anxiety for cyclists and pedestrians.

What Factors Affect Transportation in Van Meter?

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 Van Meter, 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 Van Meter's transportation system works, we use focused, small-group conversations, mapping, and photos of the best and worst to understand local transportation.

Different Users = Different Needs

To capture insights about transportation from a variety of perspectives, we invited Van Meter residents with different transportation needs to participate in focus groups. A total of 61 residents attended Van Meter's workshop. Participants were separated into five user groups and the Van Meter steering committee.

Actives

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

Mobility Impaired

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

Older Adults

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

Youth

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

Parents

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

Steering Committee

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

Van Meter
Overview

Transportation Assets and Barriers Analysis
Julia Badenhope, Sandra Oberbroeckling, Chad Schultz, Giannis Koutsou, Parmiss Sazgar, Alisa Courey, Paola Monllor-Torres
Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

What People Said

Actives

"It's terrible. You'll find everybody running [on the edge of the highway] where it is the worst place you could possibly run. You'll be running out here on Highway 90 where they're going 55 miles an hour... it's a death trap."

"If I try to go on a three-mile run, Van Meter is great. Anything over three miles is not happening."

"Every time I want to do a [long] bike or a run, I have to load up and go somewhere."

"[I like the] trail that is along the river... It is just nice being along the river like that."

"They did try to make a trail from the school...but it's overrun with weeds and gravel and I don't know. It almost doesn't even feel safe, but if they could make it nicer, that could be an area [to improve]."

"It would be so nice if we could hook up to the bike trail system."

Older Adults

"I enjoy the wildlife. I've been watching the birds because there's more coming back now."

"[The bike path] is too close to the road and if anybody is looking at their cell phone, —boom — you're gone. It just scares me."

"I would like to see another crossing somewhere along Wilson Street [into Van Meter Recreation Complex]."

"I would like a walking path that connects Van Meter to Crestview."

"I feel comfortable in our town. I feel like I can walk. I can talk. I can ride my bike. I can do things comfortably."

"I prefer to ride my bike around town for transportation if I can."

Mobility Impaired

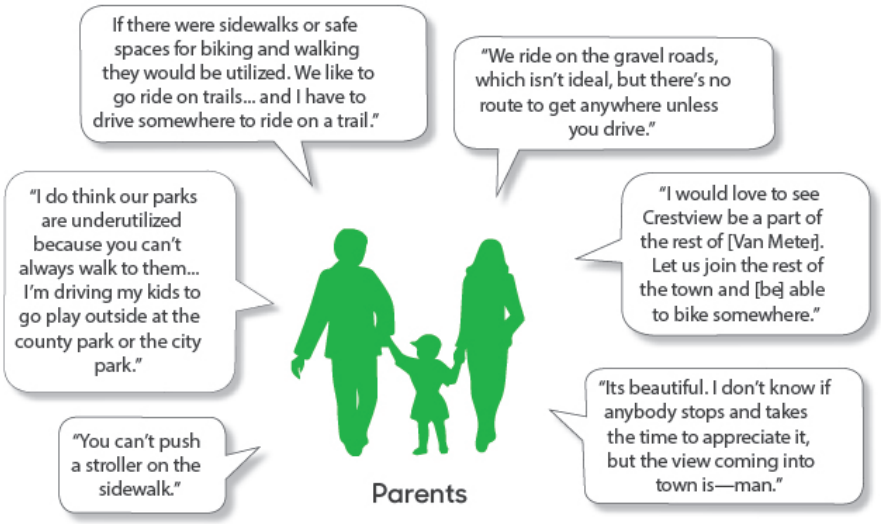
"If you're not mobility impaired, you're fine and you can navigate it, but if you have anything that is impaired, [Van Meter] is not accessible."

"I have witnessed a lot of elderly and older folks who have wheelchairs or have walkers having a very difficult time navigating in [the ball park]."

"The city hasn't upgraded the curbing so the streets just integrate right into the ditches, so even where there are no sidewalks, there's also no way for a blind person to cane where they're at. They can't find the side of the road, so they might be in the middle of the road and not even know it."

"It is hard to walk in the gravel, so if we were to cement that it would be much easier for [mobility impaired] people."

"They've started doing accessible sidewalks in the newer area."


If there were sidewalks or safe spaces for biking and walking they would be utilized. We like to go ride on trails... and I have to drive somewhere to ride on a trail."
"We ride on the gravel roads, which isn't ideal, but there's no route to get anywhere unless you drive."
"I do think our parks are underutilized because you can't always walk to them... I'm driving my kids to go play outside at the county park or the city park."
"I would love to see Crestview be a part of the rest of [Van Meter]. Let us join the rest of the town and [be] able to bike somewhere."
"You can't push a stroller on the sidewalk."
"Its beautiful. I don't know if anybody stops and takes the time to appreciate it, but the view coming into town is—man."
Parents


"[I like]how close we are with people…[we] kind of have a safe place that you know you're going to be okay."
" It would be nice to have some more walking trails different places."
"I really look forward to the summer so I can go explore the woods."
"When it is warmer out, we walk because it is a small town, so you can get around."
"Around the downtown there [are] a lot of sidewalks that suddenly go up; they're uneven… Hazardous conditions [for biking]."
Youth


"I would say a common issue across the entire community is pedestrian and bicycle ways of getting around... there are no biking paths."
"Johnston Park is a tough one because there's so much grade change. From an accessibility standpoint, if you are in a wheelchair, you can really only access the parking lot."
"I think street lighting is needed, especially around the main paths to school and down Main and Mill."
"[I would like] artworks and things like that to enhance the community... creating unity throughout [the community]."
"We get people that'll come and park out at Crestview as well and are walking around [the track]."
"We walk a lot during the day, but the sidewalks are sometimes impassable. You have to watch where you are going because you trip and there are holes."
Steering Committee

Emerging Themes

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

Actives walk, bike, and run regularly. They feel constrained by a lack of longer routes, connections to the river and other trail networks. They also want everyone to be able to access local amenities and services. They appreciate the hills as a challenge and for their beauty.

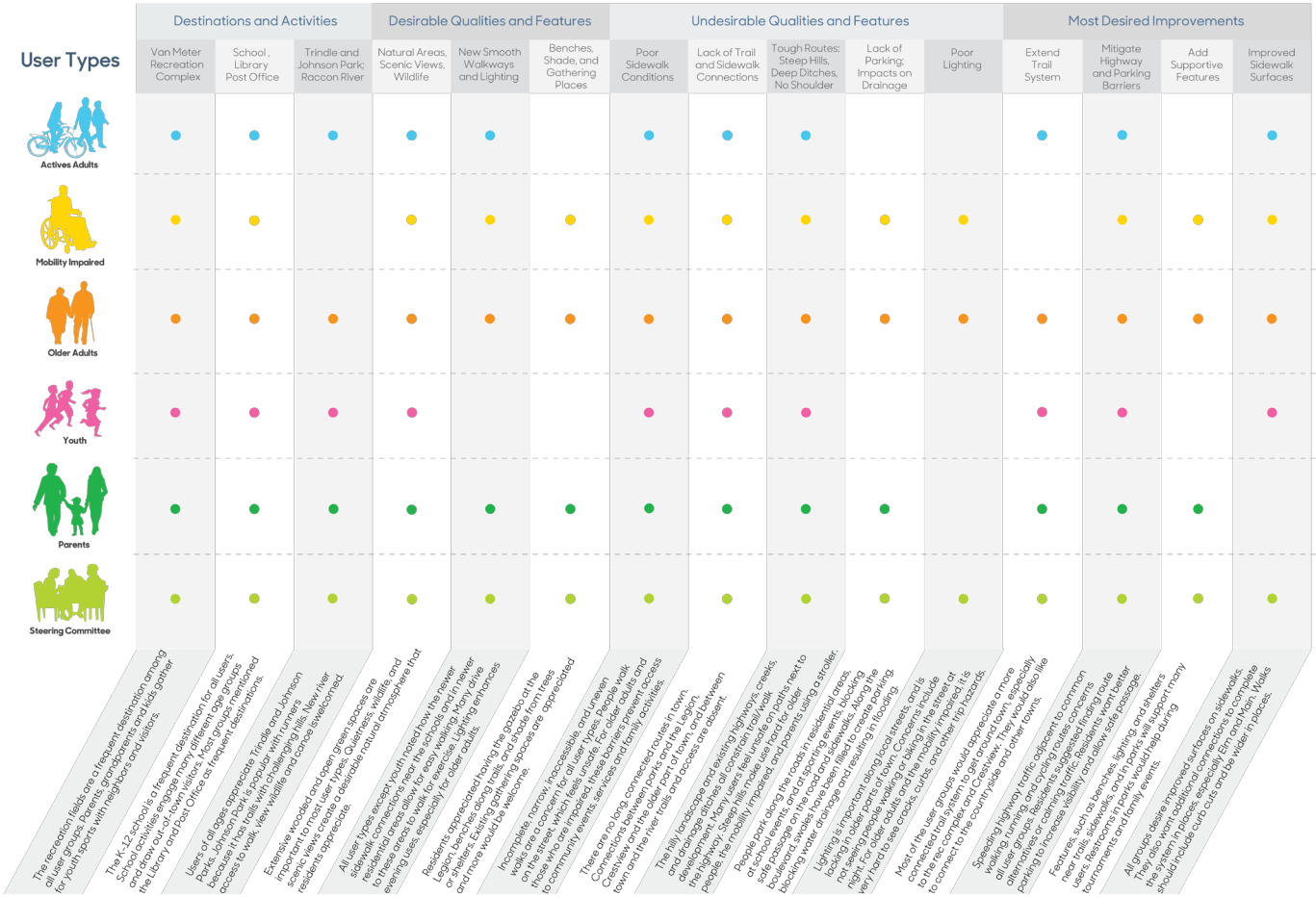
Mobility-impaired individuals often rely on walkers, motorized scooters and wheelchairs. Smooth, firm wide walkways are important. This group would like connected accessible routes, ADA doorways, curbs and ramps, and proper lighting. They can't enjoy community activities and services without these features.

Older adults enjoy living in a town with family nearby. Their main modes of transportation are driving and walking but they would bike or walk more if they had better connected, well-lit sidewalk and trail systems, with nearby parking. They love the natural beauty of Van Meter.

Youth enjoy destinations in town that include the parks and recreation fields. Their main modes of transportation include walking, biking, and driving. They would like better connections to local parks and the river. They like seeing wildlife and like the "woodsy" quality of Van Meter.

Parents drive, ride bikes, and walk. They are concerned about their children's safety as they travel throughout town. They identified paths close to Richland, the parking and traffic at events, and crossing the railroad track as serious problems. They would like to see safer routes to their kids' destinations.

Steering committee members walk, drive, and bike. They would like a connected walk/trail system, supportive amenities for all residents, and a unified landscape plan for the town. They want to facilitate green space and business development to provide destinations people will enjoy.



VanMeter

Emerging Themes

Transportation Assets and Barriers

Julia Badenhope, Sandra Oberbroeckling, Chad Schultz, Giannis Koutsou, Parmiss Sazgar, Alisa Courey, and Paola Monllor-Torres

Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

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 and behaviors, needs and desires of Van Meter residents. Surveys were mailed to 300 randomly selected residents living in Van Meter 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 249. A total of 123 people returned surveys, for a response rate of 49.4%. (A response rate of 20% is considered valid.)

We asked survey recipients what routes they used most often for going to work, walking, and biking. We also asked whether or not residents would like a recreation trail and where they think it should be. 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 Van Meter. This series of boards summarizes the results of the survey as follows:

- Willingness to Help
- Enhancement Priorities
- Commuting Routes
- Walking Routes
- Biking Routes
- Desired Trail Routes

Why Do A Survey?

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.

How Is It Done?

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 Van Meter residents. Surveys were mailed to 300 randomly selected residents living in Van Meter 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 249. A total of 123 people returned surveys, for a response rate of 49.4%. (A response rate of 20% is considered valid.)

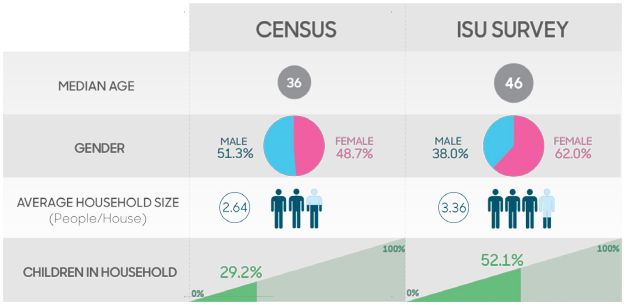
What Did We Find Out?

We asked survey recipients what routes they use most often for going to work and walking. In addition, we asked what qualities and features are important to cyclists and trail users. 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 Van Meter. This series of boards summarizes the results of the survey as follows:

- Willingness to Help
- Enhancement Priorities
- Commuting Routes
- Walking Routes
- Desired Qualities

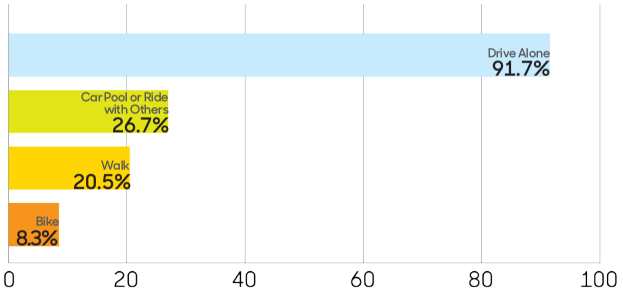
How Did We Do?

The demographics of the respondents are somewhat different from those obtained from the 2017 American Community Survey Five-Year Estimate. For example, the survey respondents median age of 46 is significantly older than the 2017 estimated average age for Van Meter residents of 36. In terms of gender, the percentage of female survey respondents is much higher than that of the census. Average household size and number of children in the household among survey respondents are significantly higher than the 2017 census estimates.



How Do Van Meter Residents Travel?

Most survey respondents drive to important destinations such as the convenience store, the post office, school, and church (91.7%). More than 26% car pool or ride with someone else. Some people indicated that they walk or bike, but the primary mode of transportation in Van Meter is by vehicle.



*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%.

Van Meter
Overview

Transportation Behavior and Needs Survey

Julia Badenhope, Sandra Oberbroeckling
Iowa State University | Trees Forever | Iowa Department of Transportation

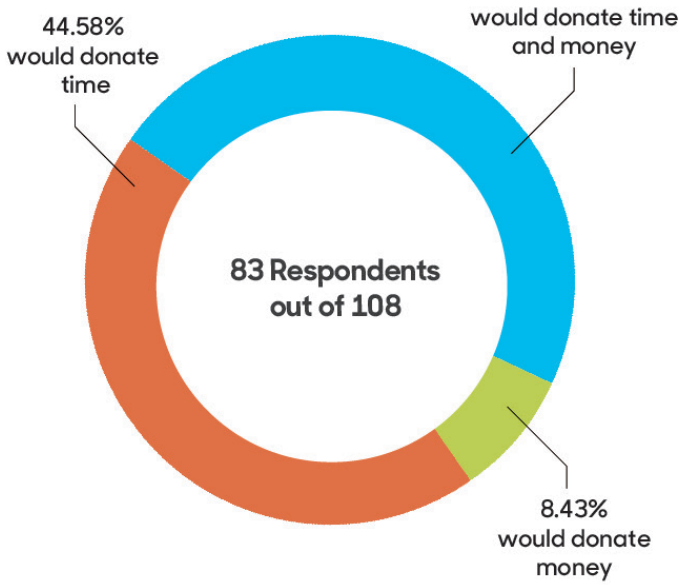
Iowa's Living Roadways community visioning

Willingness to Help

Most survey participants who answered this question are willing to help financially and contribute their time to community improvements (46.99%), while 44.58% would contribute their time. More than 8% of respondents indicated that they would be willing to contribute financially.

Compared to other small towns in Iowa, Van Meter residents are more willing 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] Van Meter exceeds this average by 33%.

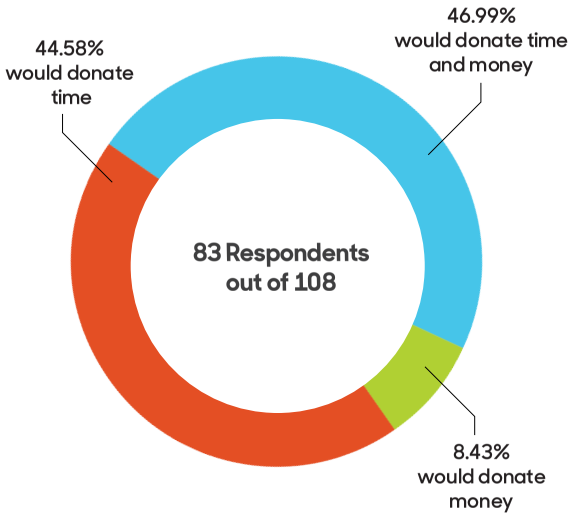
In 2014, the most common reason residents in small-town Iowa said they didn't become involved in community projects is that no one asked them (34%). Twenty-eight percent on average said that they don't have time, which is significantly lower than the 2004 average of 59%. Sixteen percent indicated that 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).

ARE PEOPLE WILLING TO HELP?

More than 76% said YES!



Willingness to implement change

Most survey participants who answered this question are willing to help financially and contribute their time to community improvements (46.99%), while 44.58% would contribute their time. More than 8% of respondents indicated that they would be willing to contribute financially.

Compared to other small towns in Iowa, Van Meter residents are more willing 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] Van Meter exceeds this average by 33%.

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

WHAT DID PEOPLE SAY?

Survey Participants Said...

"Van Meter is beautiful and would benefit from a nice bike and hiking trail."

"I think our city has the opportunity for good sidewalks and better lighting. It just needs to be funded."

"...it is so important [that] this town gets sidewalks that connect downtown across F90, where other friends live. We are dedicated to the enhancements of our sidewalks."

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.

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

Van Meter

Willingness to Help

Transportation Behavior and Needs Survey
Julia Badenhope and Sandra Oberbroeckling
Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

Priorities

Importance of transportation enhancement by type (105 responses)

On a scale of 1 to 5, with 5 being the most important, participants in Van Meter ranked creating more opportunities for physical activities as most important, with a mean value of 4.32. Other types of transportation enhancements that address pedestrian mobility, health, and safety are also considered important, such as creating better pedestrian connections (4.09), safer routes to school (4.00), and better lighting for night use (3.92). In terms of quality of the built environment, survey respondents consider better neighborhood streetscapes as most important (3.59), followed by enhanced seasonal beauty (3.54) and an enhanced downtown streetscape (3.50). These findings are consistent with the views expressed by focus group participants during the Transportation Assets and Barriers workshop held in March 2019.

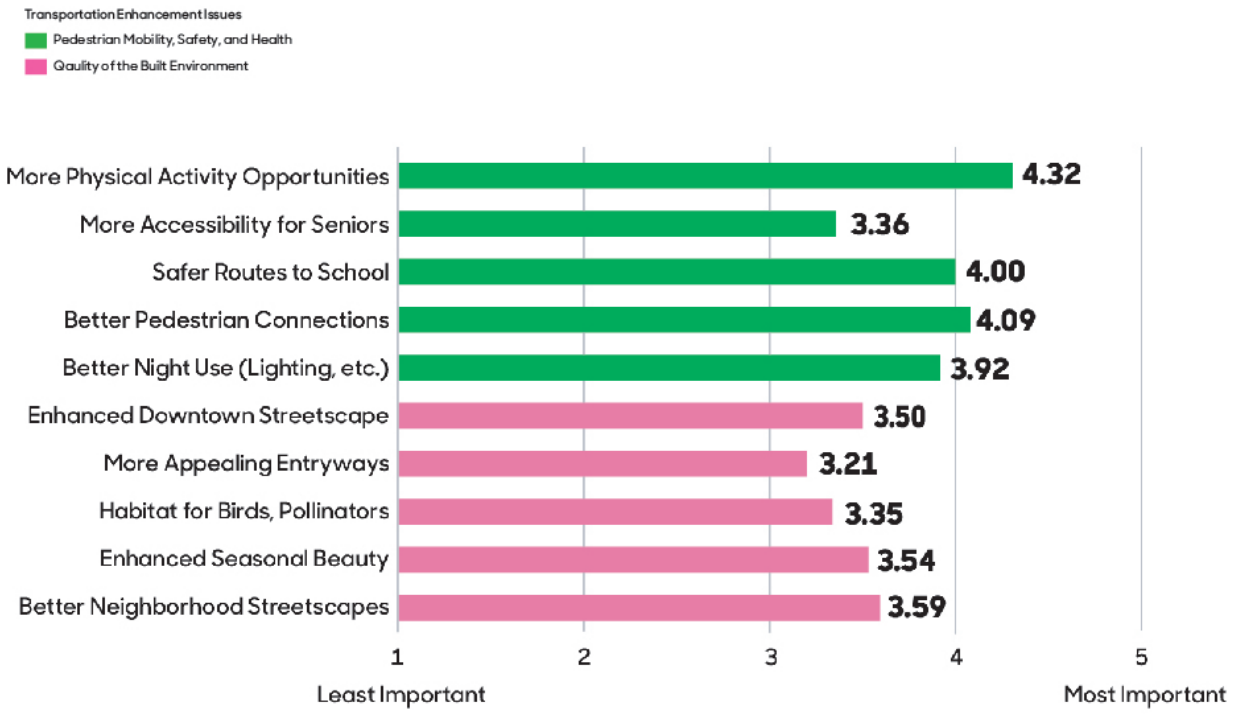
What Did They Say?

" [I] would love to see running trails. I would feel safe running if we had trails on F90."

" [I] would love to see a trail system develop, both walking and biking."

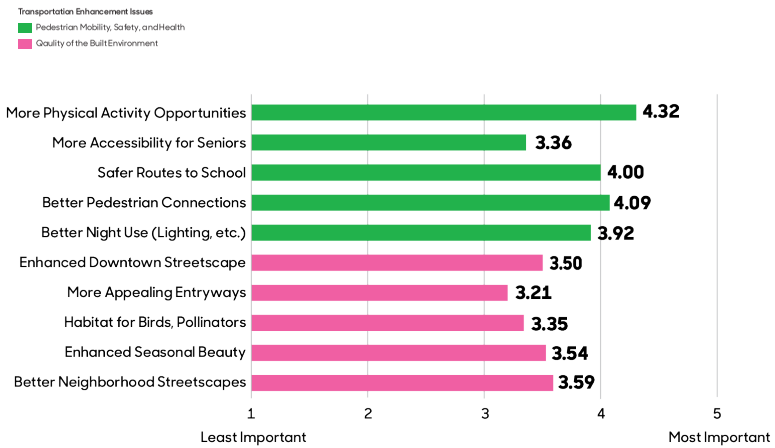
"[We] need sidewalks down Richland to the school. The only safe walk to school is from north and west. If you live south or east you are out of luck."

"I believe adding a school trail might help some of the kids ."



WHAT TYPES OF ENHANCEMENTS ARE IMPORTANT?

Mobility, Safety, and Health!



Importance of transportation enhancement by type (105 responses)

On a scale of 1 to 5, with 5 being the most important, participants in Van Meter ranked creating more opportunities for physical activities as most important, with a mean value of 4.32. Other types of transportation enhancements that address pedestrian mobility, health, and safety are also considered important, such as creating better pedestrian connections (4.09), safer routes to school (4.00), and better lighting for night use (3.92). In terms of quality of the built environment, survey respondents consider better neighborhood streetscapes as most important (3.59), followed by enhanced seasonal beauty (3.54) and an enhanced downtown streetscape (3.50). These findings are consistent with the views expressed by focus group participants during the Transportation Assets and Barriers workshop held in March 2019.

WHAT DID THEY SAY?

Survey Participants Said...

"[I] would love to see running trails. I would feel safe running if we had trails on F90."

"[I] would like to see a trail system develop, both walking and biking."

"[We] need sidewalks down Richland to the school. The only safe walk to school is from north and west. If you live south or east you are out of luck."

"I believe adding a school trail might help some of the kids."

Van Meter
Priorities

Transportation Behavior and Needs Survey
Julia Badenhope and Sandra Oberbroeckling
Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways
community visioning

Commuting Routes

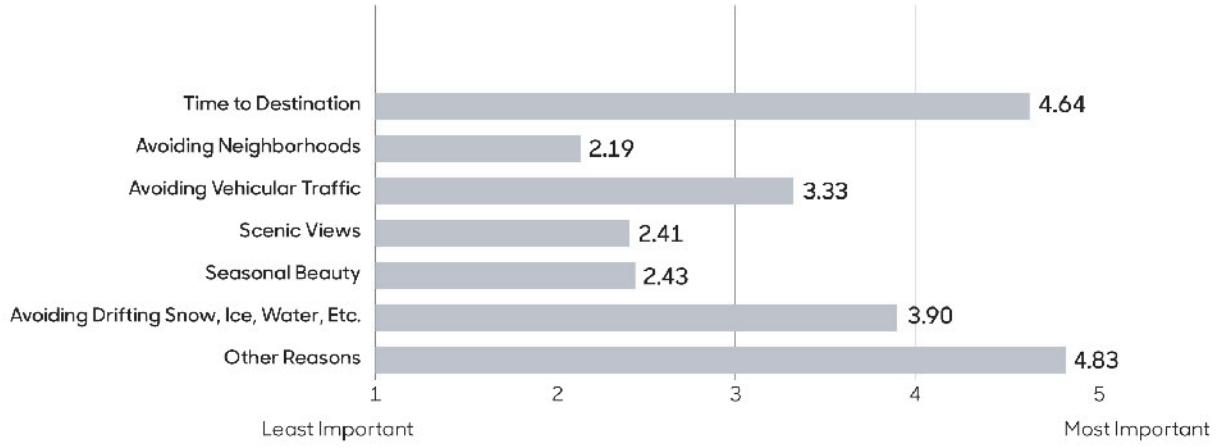
How They Get There?

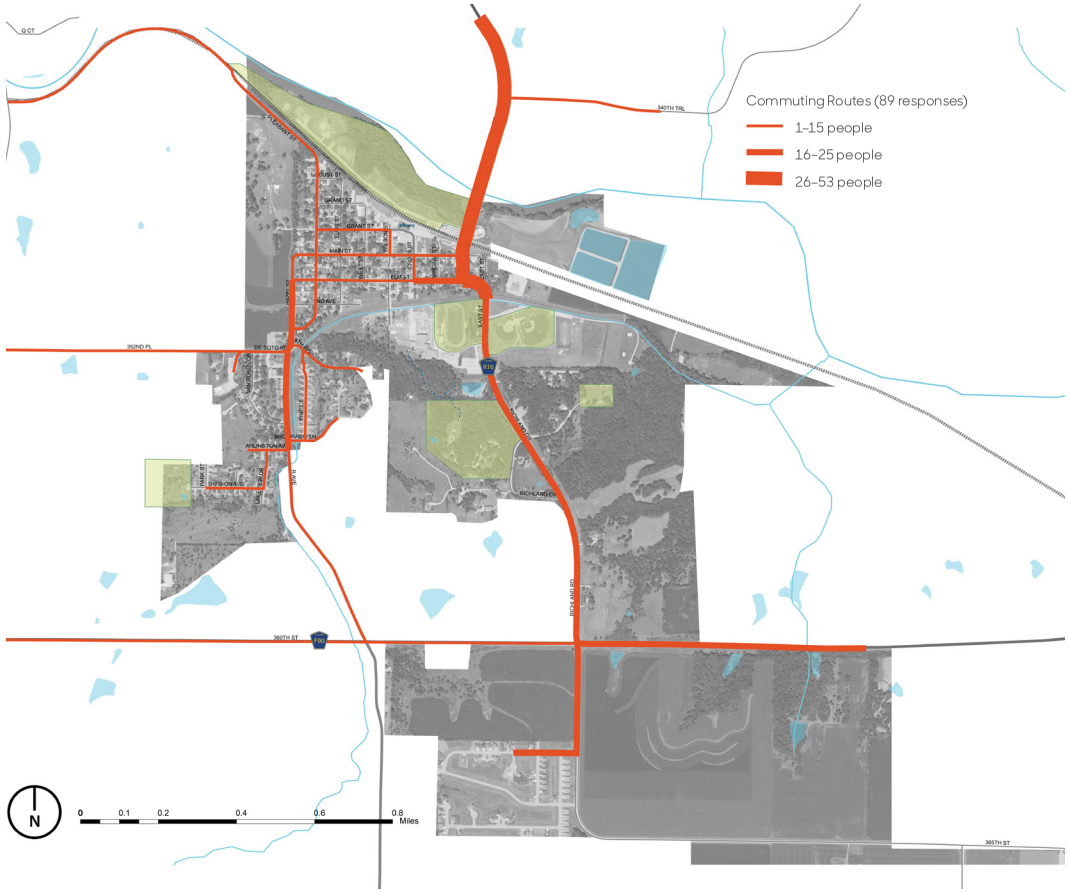
This map shows the commuting routes identified by 89 survey respondents. The frequency that the routes are used is depicted by their width, with most frequently used routes being the thickest. The primary commuting corridor in Van Meter is County Road R16 to the north from East Street, presumably because many commuters use I-80 to get to the Des Moines Metro Area. Some people also travel south on R16 to connect to County Road F90 to go east or west. As the only access to the Crestview development, R16 south of F90 is heavily traveled, as is Hazel Street in the west part of town.

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 Durant participants, other reasons such as the quality of the road, safe neighborhoods, coordinating multiple stops, and avoiding stoplights are the most important factors, with a mean value of 4.83, followed by time to destination (4.64). Avoiding weather-related issues such as snow and ice is also considered important, with a mean value of 3.90. Scenic views, seasonal beauty, and avoiding neighborhoods are not critical factors in determining commuting routes.





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

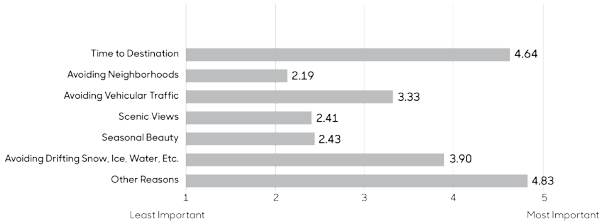
How They Get There

This map shows the commuting routes identified by 89 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 Van Meter is County Road R16 to the north from East Street, presumably because many commuters use I-80 to get to the Des Moines Metro Area. Some people also travel south on R16 to connect to County Road F90 to go east or west. As the only access to the Crestview development, R16 south of F90 is heavily traveled, as is Hazel Street in the west part of town.

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 Durant participants, other reasons such as the quality of the road, safe neighborhoods, coordinating multiple stops, and avoiding stoplights are the most important factors, with a mean value of 4.83, followed by time to destination (4.64). Avoiding weather-related issues such as snow and ice is also considered important, with a mean value of 3.90. Scenic views, seasonal beauty, and avoiding neighborhoods are not critical factors in determining commuting routes.



Van Meter
Commuting Routes

Transportation Behavior and Needs Survey
Julia Badenhope and Sandra Oberbroeckling
Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

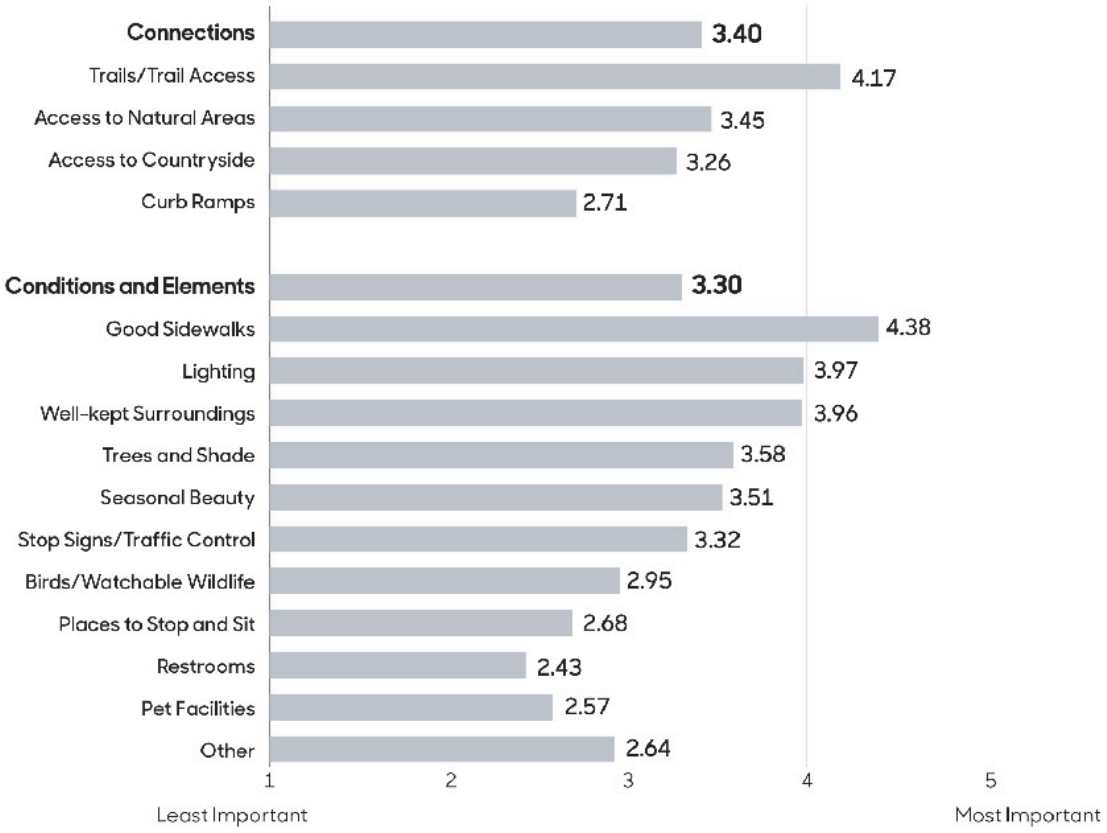
Walking Routes

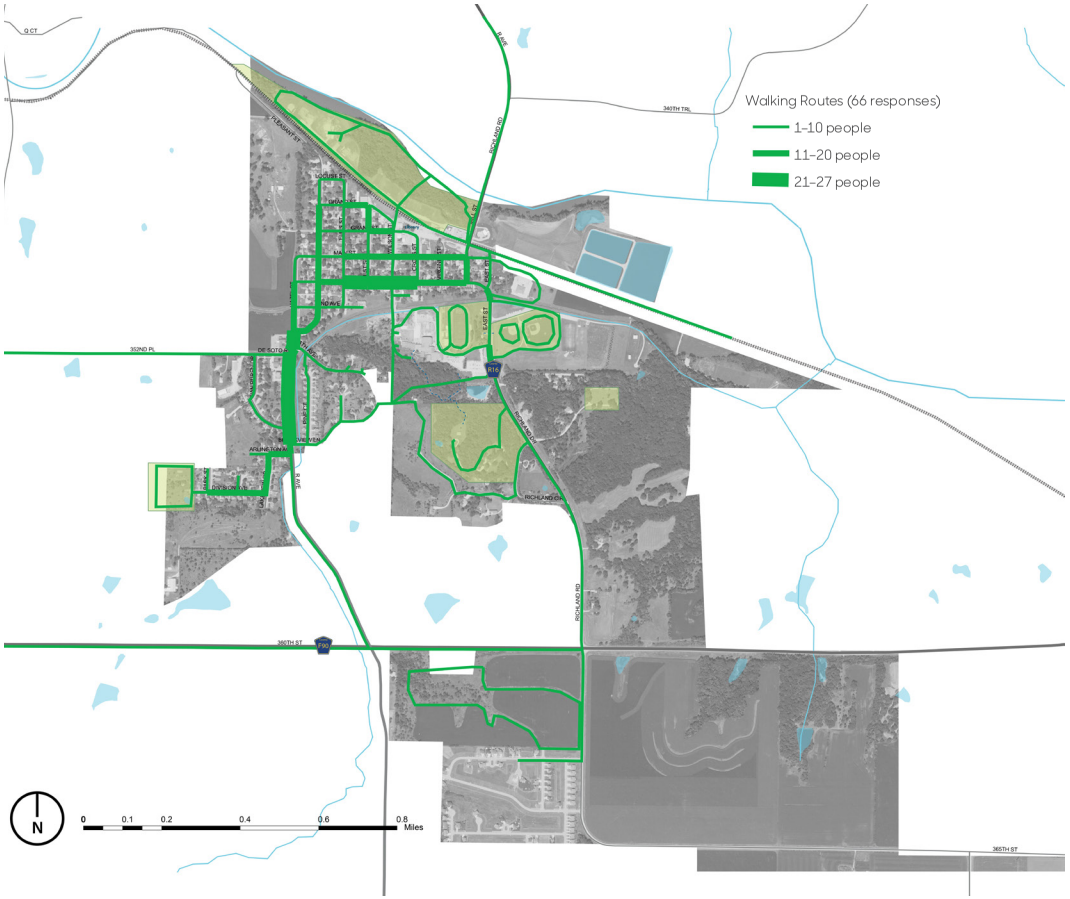
Where They Walk

This map shows the walking routes identified by 66 survey respondents. The frequency that the routes are used is depicted by their width, with most frequently used routes being the thickest. Survey respondents indicated that they walk primarily along the streets of Van Meter, with the most frequently walked streets in town being Elm and Hazel Streets. In addition, some people walk at the Van Meter Recreation Complex, Trindle Park, and Johnson park. People also walk around the track at the football field and around the ball fields.

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 Van Meter participants, connections are of somewhat more important than conditions/elements, with mean values of 3.40 and 3.30, respectively. In terms of connections, access to trails is most important with a mean value of 4.17. Good sidewalks (4.38) are the most important element to walkers, followed by well-kept surroundings (3.96) and lighting (3.97). Other significant factors include trees and shade (3.58) and seasonal beauty (3.51).





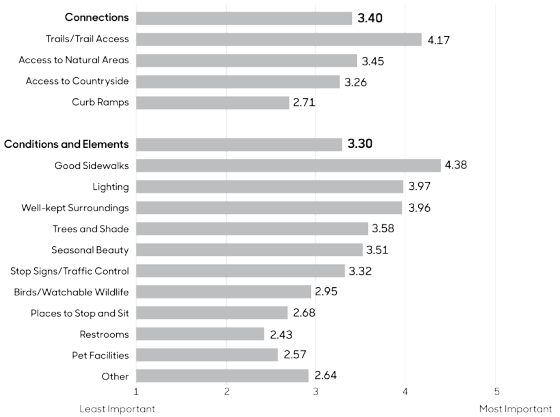
Map Source: Iowa Department of Natural Resources, "Natural Resources Geographic Information Systems Library," http://www.igsb.uiowa.edu/nrgislibx/.

Where They Walk

This map shows the walking routes identified by 66 survey respondents. The frequency that the routes are used is depicted by their width, with most frequently used routes being the thickest. Survey respondents indicated that they walk primarily along the streets of Van Meter, with the most frequently walked streets in town being Elm and Hazel Streets. In addition, some people walk at the Van Meter Recreation Complex, Trindle Park, and Johnson park. People also walk around the track at the football field and around the ball fields.

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 Van Meter participants, connections are of somewhat more important than conditions/elements, with mean values of 3.40 and 3.30, respectively. In terms of connections, access to trails is most important with a mean value of 4.17. Good sidewalks (4.38) are the most important element to walkers, followed by well-kept surroundings (3.96) and lighting (3.97). Other significant factors include trees and shade (3.58) and seasonal beauty (3.51).



Van Meter
Walking Routes

Transportation Behavior and Needs Survey
Julia Badenhope and Sandra Oberbroeckling
Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

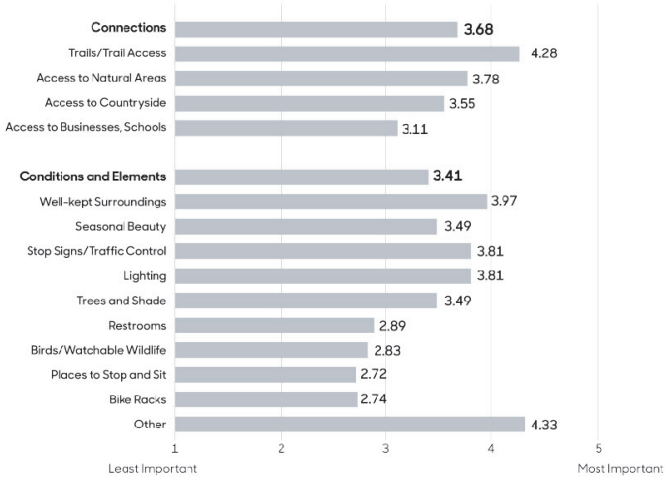
Desired Features

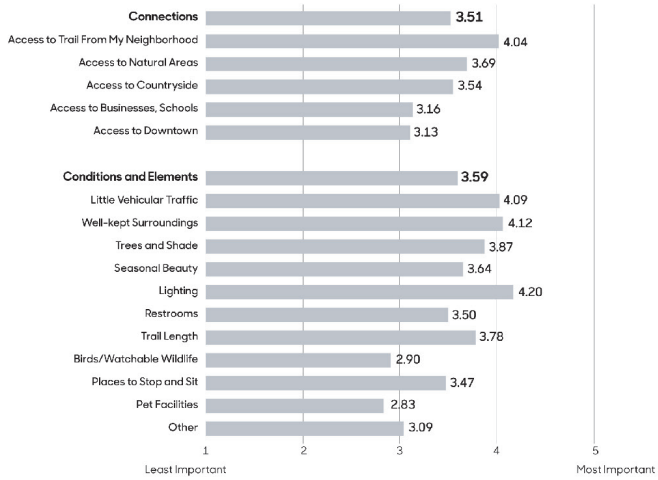
Desired Bike Route Features

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 Van Meter participants, connections are of somewhat more important than conditions/elements, with mean values of 3.68 and 3.41, respectively. In terms of connections, access to trails is most important with a mean value of 4.28. Other factors, such as paved surfaces rather than gravel, are the most important element to cyclists, with a mean value of 4.33. Well-kept surroundings (3.97), stop signs and traffic control (3.81), and lighting (3.81) are also important features.

Desired Trail Features

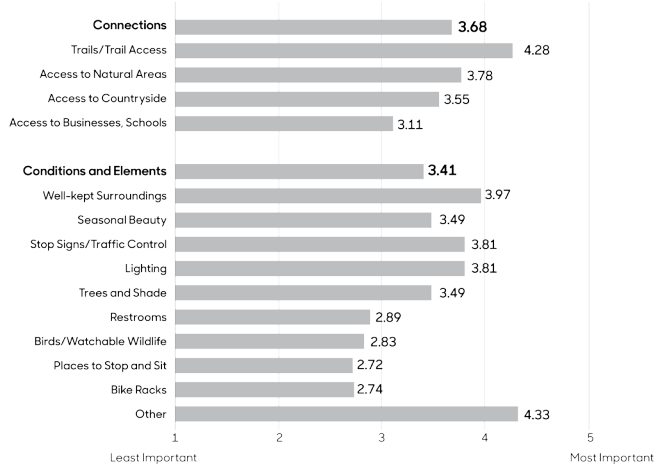
On a scale of 1 to 5, with 5 being the most important, survey participants ranked the characteristics and features that made their trail experience better. Like the bike route features, they are categorized as either "connections" or "conditions and elements." Conditions/elements are slightly more important to Van Meter trail users than connections, with mean values of 3.59 and 3.51, respectively. In terms of conditions/elements, lighting (4.20) is the most important element, followed by well-kept surroundings (4.12), and little vehicular traffic (4.09). In terms of connections, access to the trail from their neighborhoods is considered most important, with a mean value of 4.04.





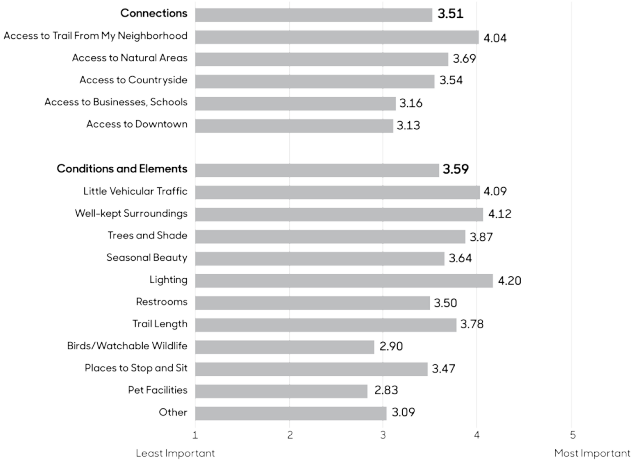
Desired Bike Route Features

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 Van Meter participants, connections are of somewhat more important than conditions/elements, with mean values of 3.68 and 3.41, respectively. In terms of connections, access to trails is most important with a mean value of 4.28. Other factors, such as paved surfaces rather than gravel, are the most important element to cyclists, with a mean value of 4.33. Well-kept surroundings (3.97), stop signs and traffic control (3.81), and lighting (3.81) are also important features.



Desired Trail Features

On a scale of 1 to 5, with 5 being the most important, survey participants ranked the characteristics and features that made their trail experience better. Like the bike route features, they are categorized as either "connections" or "conditions and elements." Conditions/elements are slightly more important to Van Meter trail users than connections, with mean values of 3.59 and 3.51, respectively. In terms of conditions/elements, lighting (4.20) is the most important element, followed by well-kept surroundings (4.12), and little vehicular traffic (4.09). In terms of connections, access to the trail from their neighborhoods is considered most important, with a mean value of 4.04.



Van Meter

Desired Features

Transportation Behavior and Needs Survey

Julia Badenhope and Sandra Oberbroeckling

Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

Transportation Inventory and Analysis

Knowledge of the transportation systems in an around a community is critical for sustainable transportation enhancement planning. Van Meter's transportation system includes paved and unpaved roadways, sidewalks, pedestrian and bike trails, waterways and active railroad lines.

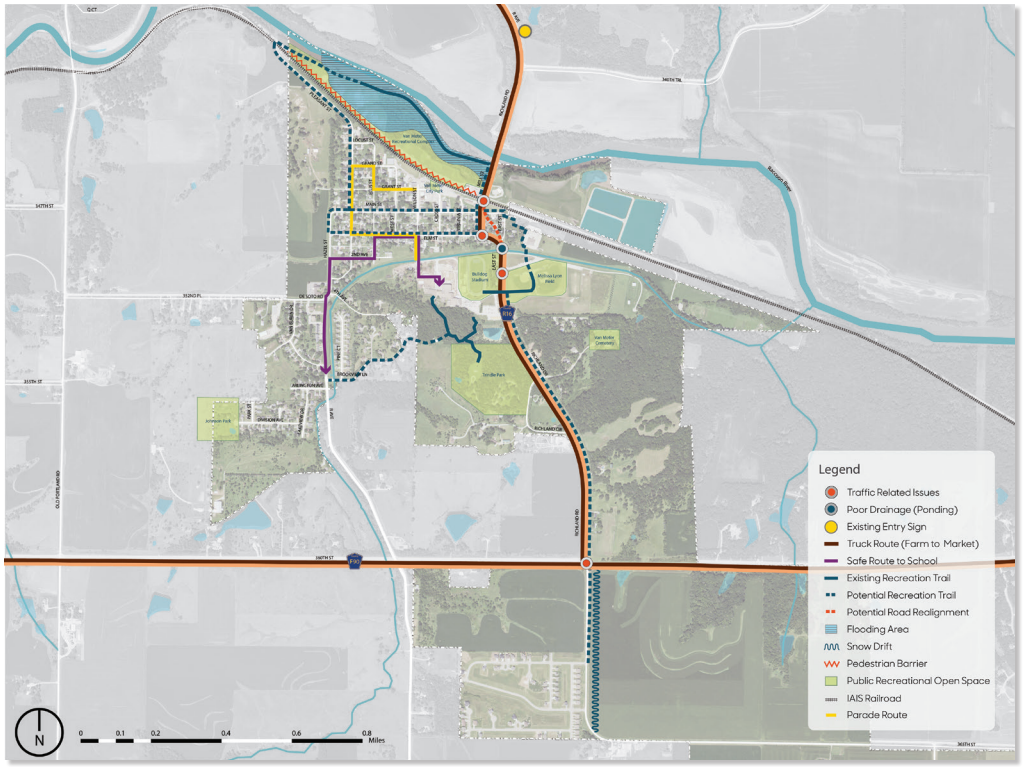
Van Meter is bounded on the north by the Raccoon River, which serves as a major means of recreation within the community. Additionally, the city is bisected by County Highways R16 and F90, which intersect along the southern boundary.

The design team coordinated with Iowa Department of Transportation (DOT) staff and local public works and maintenance personnel, and followed up with the Dallas County Engineer to identify existing, past, and future transportation system improvements. These included maintenance and other transportation-related constraints and opportunities in and around Van Meter.

Several transportation-related assets and opportunities include future roadway realignments that will provide opportunities for improved pedestrian and vehicular movement, transportation corridor enhancement along major community roadways, and improved recreational/pedestrian infrastructure throughout the community that will provide access to civic, cultural, and natural destinations.

Items of concern related to transportation systems include incomplete, narrow, and crumbling sidewalks and trails; unsafe intersections; and poor connections to community destinations, especially over county highways and the railroad. Other issues include high vehicular speed along County Highways F90 and R16, poor visibility, and overlapping vehicular, bike, and pedestrian traffic near the intersection of Elm St. and R16 to the Van Meter school entry/exit.

The design team used this information to explore opportunities for improving connectivity, safety, and cohesiveness throughout Van Meter.



Transportation Mapping

Knowledge of the transportation systems in an around a community is critical for sustainable transportation enhancement planning. Van Meter's transportation system includes paved and unpaved roadways, sidewalks, pedestrian and bike trails, waterways and active railroad lines.

Van Meter is bounded on the north by the Raccoon River, which serves as a major means of recreation within the community. Additionally, the city is bisected by County Highways R16 and F90, which intersect along the southern boundary.

The design team coordinated with Iowa Department of Transportation (DOT) staff and local public works and maintenance personnel, and followed up with the Dallas County Engineer to identify existing, past, and future transportation system improvements. These included maintenance and other transportation-related constraints and opportunities in and around Van Meter.

Several transportation-related assets and opportunities include future roadway realignments that will provide opportunities for improved pedestrian and vehicular movement, transportation corridor enhancement along major community roadways, and improved recreational/pedestrian infrastructure throughout the community that will provide access to civic, cultural, and natural destinations.

Items of concern related to transportation systems include incomplete, narrow, and crumbling sidewalks and trails; unsafe intersections; and poor connections to community destinations, especially over county highways and the railroad. Other issues include high vehicular speed along County Highways F90 and R16, poor visibility, and overlapping vehicular, bike, and pedestrian traffic near the intersection of Elm St. and R16 to the Van Meter school entry/exit.

The design team used this information to explore opportunities for improving connectivity, safety, and cohesiveness throughout Van Meter.

Actives

"Every time I want to do a [long] bike or a run, I have to load up and go somewhere."

Youth

"It would be nice to have some more walking trails different places."

Parents

"We ride on the gravel roads, which isn't ideal, but there's no route to get anywhere unless you drive."

Older Adults

"I would like to see another crossing somewhere along Wilson Street [into Van Meter Recreation Complex]."

Mobility Impaired

"If you're not mobility impaired, you're fine and you can navigate it, but if you have anything that is impaired, [Van Meter] is not accessible."

Steering Committee

"I would say a common issue across the entire community is pedestrian and bicycle ways of getting around... there are no biking paths."

Van Meter
Transportation Inventory

Bolton & Menk, Inc.
LAs: Josh Shields, PLA; Nate Schlorholtz
Intern: Fan Lan
Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

Goal Setting

The Van Meter steering committee presented the design team with observations from the TAB assessment, survey, and bioregional inventories. The committee then identified goals and values based on this assessment information. Each committee member was asked to provide reasoning on why it would be important to work on a project with the intent of achieving the broad-based goals, while also identifying potential improvements addressing areas of concern. The landscape architects organized these programming themes using the goals identified by the steering committee, with greater importance given to goals highlighted in discussions and/or repeated by individuals during the goal-setting meeting.

Sidewalk/Trail Plan

- Create pedestrian routes that connect Crestview to downtown and the school
- Connect pedestrians to major destinations in town
- Increase accessibility to Van Meter Recreation Complex
- Provide more recreational opportunities by extending trails and having loops

Entry Corridor Beautification

- Improve entry experience for residents and visitors
- Create a gateway and transition space as users approach downtown
- Improve visibility at night with additional lighting

Downtown Improvements

- Improve walkability downtown
- Add pedestrian amenities (benches, litter receptacles, bike racks)
- Utilize bump-outs to gain space for pedestrian amenities and decrease crossing distances
- Improve lighting to increase safety and visibility for evening/nighttime use
- Create a downtown aesthetic by adding street trees/planters/pavers/historic lighting
- Design streetscape to allow for growth and redevelopment

Pocket Park Concept

- Provide a gathering space near downtown
- Provide additional family-oriented amenities (splash pad, playground)
- Add parking for park users

Goal Setting Process

The Van Meter steering committee presented the design team with observations from the TAB assessment, survey, and bioregional inventories. The committee then identified goals and values based on this assessment information. Each committee member was asked to provide reasoning on why it would be important to work on a project with the intent of achieving the broad-based goals, while also identifying potential improvements addressing areas of concern. The landscape architects organized these programming themes using the goals identified by the steering committee, with greater importance given to goals highlighted in discussions and/or repeated by individuals during the goal-setting meeting.

Community Values/Themes	Broad-Based Outcomes/Goals	Why Change Anything?	What Exactly and Where?
Accessibility + Connectivity 	· Connections to parks + other amenities · Increased accessibility · Improved sidewalk connections	· Enhance recreational opportunities · Encourage walking/biking · Increase safety downtown	· Make Van Meter Recreational Complex accessible by trail · Provide pedestrian route from Crestview Development to school campus
Main Street Improvements 	· Increased walkability · More desirable appearance	· Attract people downtown · Make downtown a destination · Showcase community pride	· Improve quality and increase width of sidewalks · Provide site furnishings · Enhance corridor with trees/plantings · Improve lighting to increase safety and mobility at night
Beautification 	· Enhance entrances to town · More inviting downtown	· More "curb appeal" for visitors · Showcase community pride	· Enhance northern entry corridor with trees/plantings · Enhance downtown with trees/plantings · Provide entry signage on western and eastern entrances
Community Amenities/Destinations 	· Provide more community destinations · Create spaces for community gathering	· Provide space for community gathering · Encourage community pride/ownership	· Utilize open space on southwest corner of Grant St. and West St. for community events
Intersection Safety 	· Safe pedestrian crossings · Safe routes to school · Safe crossing at railroad	· Improve access amenities · Improve safety and accessibility	· Improve pedestrian crossing at the railroad and R16 intersection · Alleviate congestion at the school entrance/exit with R-16 · Provide safer pedestrian crossing at the F-90 and R-16 intersection · Coordinate with County DOT to include pedestrian crossings with future intersection improvements: F-90 and R-16, Elm St. and Mill St.

Van Meter
Goal Setting

Bolton & Menk, Inc.
LAs: Josh Shields, PLA; Nate Schlorholtz
Intern: Fan Lan
Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

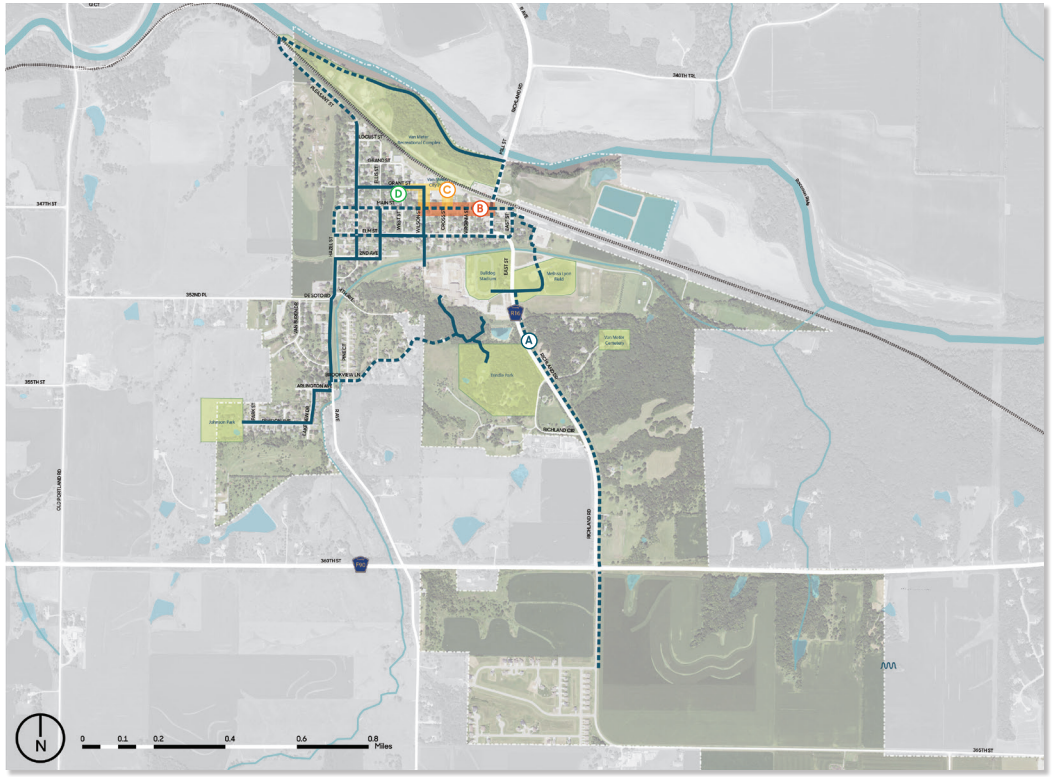
Community Concept Overview

Long-term visioning planning enables a community to provide its residents with sustainable, functional, and beneficial improvements. By analyzing transportation assessments and inventories of bioregional resources, Van Meter's steering committee set goals to define its vision and evaluate success of potential projects. During this goal-setting discussion, the steering committee asked the design team to generate several concepts aligning with the goals of their vision. An outline of the proposed concepts is included below, with locations shown on the corresponding map.

Following this goal-setting process, the design team led a conceptual design workshop and presented feedback from the workshop to community members. Enhancements explored during the design workshop included:

- Sidewalk & Trail Improvements
- Entry Corridor Beautification
- Downtown Improvements
- Pocket Park Concept

The community concept plan is based on input from both the visioning committee and residents of Van Meter, and brings together ideas, goals, and visions for improvements.



Concept Plan

Long-term visioning planning enables a community to provide its residents with sustainable, functional, and beneficial improvements. By analyzing transportation assessments and inventories of bioregional resources, Van Meter's steering committee set goals to define its vision and evaluate success of potential projects. During this goal-setting discussion, the steering committee asked the design team to generate several concepts aligning with the goals of their vision. An outline of the proposed concepts is included below, with locations shown on the corresponding map.

Following this goal-setting process, the design team led a conceptual design workshop and presented feedback from the workshop to community members. Enhancements explored during the design workshop included:

- (A) *Sidewalk & Trail Improvements*
- (B) *Entry Corridor Beautification*
- (C) *Downtown Improvements*
- (D) *Pocket Park Concept*

The community concept plan is based on input from both the visioning committee and residents of Van Meter, and brings together ideas, goals, and visions for improvements.

Van Meter
Concept Overview

Bolton & Menk, Inc.
LAs: Josh Shields, PLA; Nate Schlorholtz
Intern: Fan Lan
Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

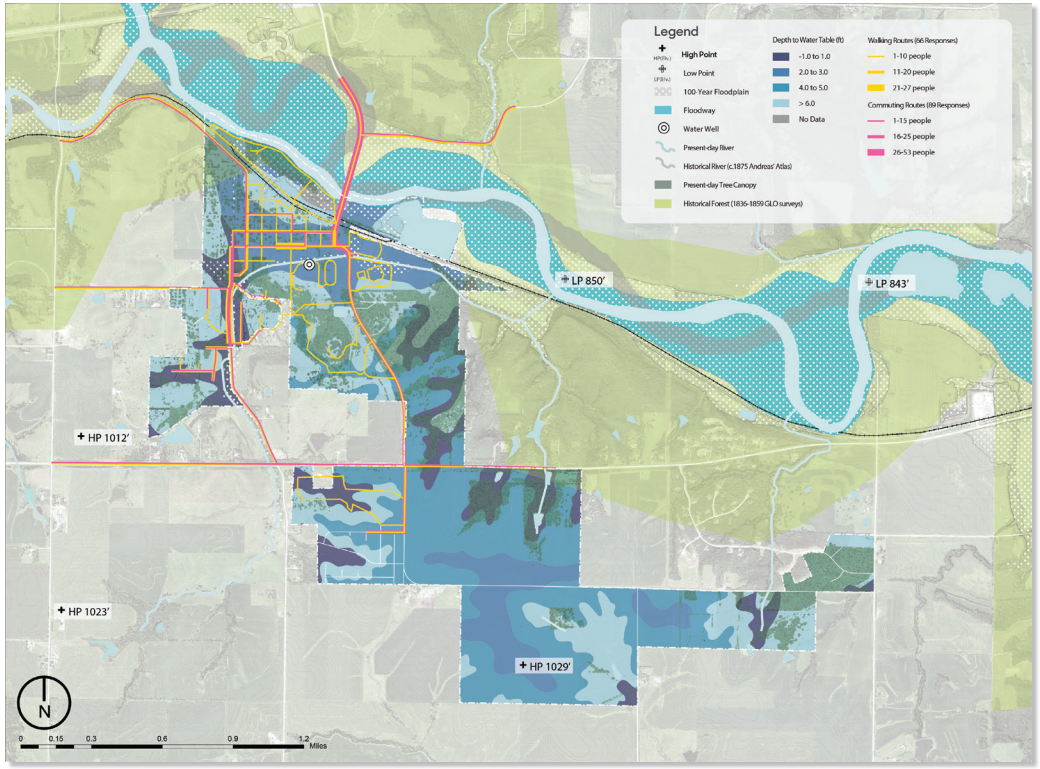
Assessment & Survey Analysis

Analysis of inventory and survey data can provide an introspective look at a community, particularly when reviewing historic and present-day conditions. In Van Meter, comparing the historic Raccoon River channel against its present alignment reveals how changes to the natural meander shifted the convergence of the two channels northwest of town. These changes also directly impacted agriculture and quarry operations along with orientation of transportation routes.

The placement of roads and railroads illustrates the role geography had on Van Meter's settlement and development patterns. Van Meter was settled in one of the few remaining flat areas near the Raccoon River. It was an ideal location for a water stop for the railroad and is equidistant between Booneville and De Soto. In its early days, the downtown would have been oriented toward the main source of transportation: the railroad. As cars became the main source of travel, roads were constructed, then paved. These were fit to the geography of the area and cut across railroads at ninety-degree angles. In Van Meter, this meant that roads cut across the east edge of town a few blocks from downtown and wound out of the valley along a ridge (now Richland Rd./R16). As the railroad lost prominence, the community's main street shifted to nearby county highways.

The presence (or absence) of water is another factor in Van Meter's development. The Raccoon River north of town serves as a natural barrier for growth. Development has occurred along nearby streams, where relatively flat areas provided space for housing. More recent development has occurred along ridges south of town. When reviewing depth to water table, many of these higher elevation areas indicate water close to the surface. Development in these areas likely creates a greater degree of wear on roads due to freeze/thaw as well as greater incidence of wet basements. Awareness of the water table can guide future development, or provide likelihood of placement for wells.

All of these factors play a pivotal role in how residents engage the natural places and destinations within their community. With transportation corridors being influenced by local geography, one can quickly see that there is an overlap between vehicular and pedestrian traffic. By reviewing these data, we can begin to explore alternate routes to start separating these modes of transportation and decrease conflicts.



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

Analysis of Assessments & Survey Data

Analysis of inventory and survey data can provide an introspective look at a community, particularly when reviewing historic and present-day conditions. In Van Meter, comparing the historic Raccoon River channel against its present alignment reveals how changes to the natural meander shifted the convergence of the two channels northwest of town. These changes also directly impacted agriculture and quarry operations along with orientation of transportation routes.

The placement of roads and railroads illustrates the role geography had on Van Meter's settlement and development patterns. Van Meter was settled in one of the few remaining flat areas near the Raccoon River. It was an ideal location for a water stop for the railroad and is equidistant between Booneville and De Soto. In its early days, the downtown would have been oriented toward the main source of transportation: the railroad. As cars became the main source of travel, roads were constructed, then paved. These were fit to the geography of the area and cut across railroads at ninety-degree angles. In Van Meter, this meant that roads cut across the east edge of town a few blocks from downtown and wound out of the valley along a ridge (now Richland Rd./R16). As the railroad lost prominence, the community's main street shifted to nearby county highways.

The presence (or absence) of water is another factor in Van Meter's development. The Raccoon River north of town serves as a natural barrier for growth. Development has occurred along nearby streams, where relatively flat areas provided space for housing. More recent development has occurred along ridges south of town. When reviewing depth to water table, many of these higher elevation areas indicate water close to the surface. Development in these areas likely creates a greater degree of wear on roads due to freeze/thaw as well as greater incidence of wet basements. Awareness of the water table can guide future development, or provide likelihood of placement for wells.

All of these factors play a pivotal role in how residents engage the natural places and destinations within their community. With transportation corridors being influenced by local geography, one can quickly see that there is an overlap between vehicular and pedestrian traffic. By reviewing these data, we can begin to explore alternate routes to start separating these modes of transportation and decrease conflicts.

Van Meter

Assessment & Survey Analysis

Bolton & Menk, Inc.
LAs: Josh Shields, PLA; Nate Schlorholtz
Intern: Fan Lan
Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

Sidewalk & Trail Improvements

Multiple user groups participating in community assessments voiced a desire for more connected sidewalk and trail routes. Many identified the school, Van Meter Recreation Complex, downtown core, and Crestview subdivision as areas of focus for these connections. The proposed plan takes a comprehensive look at the existing pedestrian infrastructure and where trails or sidewalks need to be located to connect users to major destinations. These connections also provide over two miles of additional recreational trails.

Key Concept Component

- Create pedestrian routes that connect Crestview to downtown and the school
- Connect pedestrians to major destinations in town
- Increase accessibility to Van Meter Recreation Complex
- Provide more recreational opportunities by extending trails and having loops

Recommended Design Expertise

Projects may require help beyond the capacity of the visioning committee or available city staff. For this improvement project, the committee should expect to involve the following design professionals: landscape architect, civil engineer, and traffic engineer

Project Cost Opinion

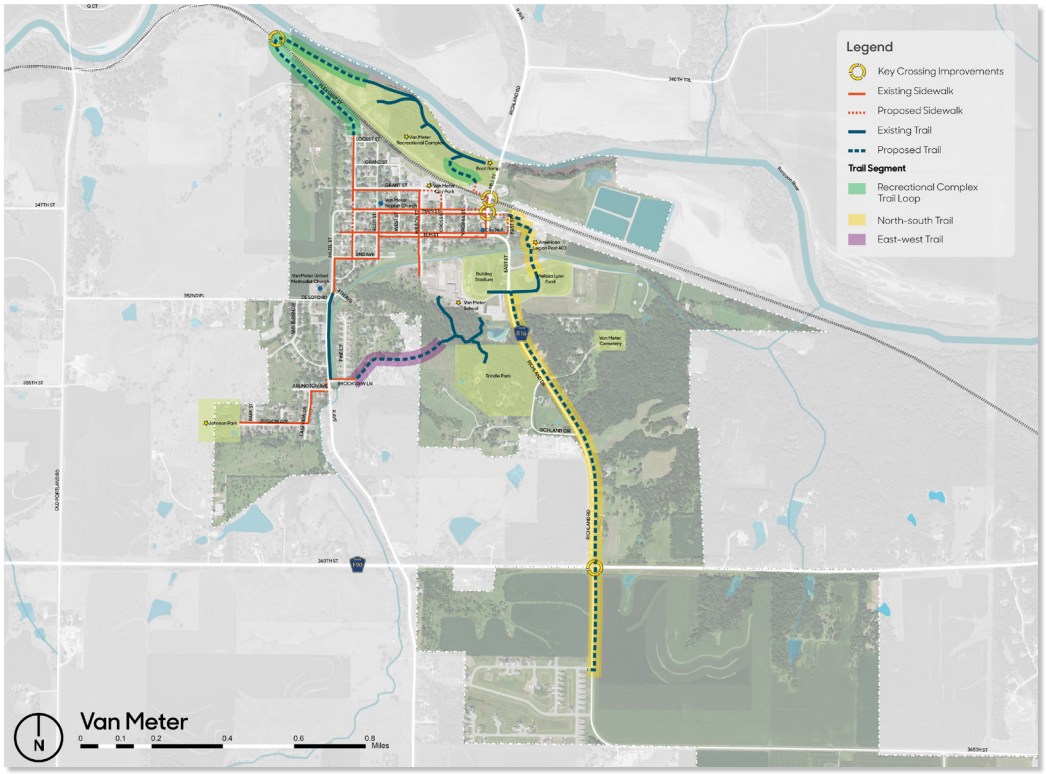
The following cost opinion is for conceptual design based on current Iowa bid pricing. Donated or at-cost materials and volunteer labor, when appropriate, could reduce overall project costs. The future intersection improvements at R16 and F90 are not included in the cost option. To assist the community in seeking funding to implement the sidewalk and trail segments desired as part of the concept plans, sidewalk improvements have been separated from trail routes; highlighting the Recreational Complex Trail Loop from the North-south Trail and East-west Trail to make it easier to apply for funding and plan for future implementation.

	UNIT	QUANTITY	UNIT COST	TOTAL
RECREATIONAL COMPLEX TRAIL LOOP SEGMENT				
Mobilization	LS	1	$30,000	$30,000
Traffic Control	LS	1	$20,000	$20,000
Excavation/Grading	CY	2,725	$15	$40,875
Proposed Trail (10' Wide)	SY	4,085	$55	$224,675
ADA Detectable Warning Panel	SF	24	$40	$960
Pedestrian Crossing Sign	EA	2	$1,000	$2,000
Seeding	AC	0.4	$6,500	$2,600
			IMPROVEMENTS SUBTOTAL	$321,110
			CONTINGENCY (20%)	$64,222
			DESIGN/ENGINEERING FEES (15%)	$48,167
			IMPROVEMENTS TOTAL	**$433,499**
			ANTICIPATED COST RANGE	**$320,000 - $440,000**

	UNIT	QUANTITY	UNIT COST	TOTAL
NORTH-SOUTH TRAIL SEGMENT				
Mobilization	LS	1	$65,000	$65,000
Traffic Control	LS	1	$50,000	$50,000
Excavation/Grading	CY	5,050	$15	$75,750
Proposed Trail (10' Wide)	SY	7,575	$55	$416,625
ADA Detectable Warning Panel	SF	32	$40	$1,280
Pedestrian Bridge	LS	1	$70,000	$70,000
Seeding	AC	0.7	$6,500	$4,550
			IMPROVEMENTS SUBTOTAL	$683,205
			CONTINGENCY (20%)	$136,641
			DESIGN/ENGINEERING FEES (15%)	$102,481
			IMPROVEMENTS TOTAL	**$922,327**
			ANTICIPATED COST RANGE	**$680,000 - $930,000**

	UNIT	QUANTITY	UNIT COST	TOTAL
EAST-WEST TRAIL SEGMENT				
Mobilization	LS	1	$12,000	$12,000
Traffic Control	LS	1	$10,000	$10,000
Excavation/Grading	CY	1,015	$15	$15,225
Proposed Trail (10' Wide)	SY	1,525	$55	$83,875
Seeding	AC	0.2	$6,500	$1,300
			IMPROVEMENTS SUBTOTAL	$122,400
			CONTINGENCY (20%)	$24,480
			DESIGN/ENGINEERING FEES (15%)	$18,360
			IMPROVEMENTS TOTAL	**$165,240**
			ANTICIPATED COST RANGE	**$120,000 - $170,000**

	UNIT	QUANTITY	UNIT COST	TOTAL
SIDEWALK IMPROVEMENTS				
Mobilization	LS	1	$9,500	$9,500
Traffic Control	LS	1	$15,000	$15,000
Excavation/Grading	CY	385	$15	$5,775
Proposed Sidewalk (5' Wide)	SY	1,145	$55	$62,975
ADA Detectable Warning Panel	SF	64	$40	$2,560
Pedestrian Crossing Sign	EA	4	$1,000	$4,000
Crosswalk Striping	EA	2	$500	$1,000
Seeding	AC	0.2	$6,500	$1,300
			IMPROVEMENTS SUBTOTAL	$102,110
			CONTINGENCY (20%)	$20,422
			DESIGN/ENGINEERING FEES (15%)	$15,317
			IMPROVEMENTS TOTAL	**$137,849**
			ANTICIPATED COST RANGE	**$100,000 - $140,000**
			OVERALL COST RANGE	**$1,220,000 - 1,680,000**



Existing intersection at R16 and F90

Proposed R16 and F90 intersection improvements

Pedestrian Routes and Connectivity

Multiple user groups participating in community assessments voiced a desire for more connected sidewalk and trail routes. Many identified the school, Van Meter Recreation Complex, downtown core, and Crestview subdivision as areas of focus for these connections. The proposed plan takes a comprehensive look at the existing pedestrian infrastructure and where trails or sidewalks need to be located to connect users to major destinations. These connections also provide over two miles of additional recreational trails.

Van Meter
Sidewalk & Trail Improvements

Bolton & Menk, Inc.
LAs: Josh Shields, PLA; Nate Schlorholtz
Intern: Fan Lan
Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

Entry Corridor Beautification

The entry experience is critical component of a community for both residents and visitors. Van Meter is fortunate enough to have a scenic north entrance over the Raccoon River just blocks from the downtown core. However, there are no streetscape elements connecting this entrance to downtown. The concept shown addresses the transition along Main St. that leads visitors from County Road R16 to Van Meter's central commercial district. Streetscape elements such as entry columns, street lights, banners, trees, and planter pots provide a rhythm and an urban aesthetic to give motorists a cue that they are entering the city center.

Key Concept Component

- Improve entry experience for residents and visitors
- Create a gateway and transition space as users approach downtown
- Improve visibility at night with additional lighting

Recommended Design Expertise

Projects may require help beyond the capacity of the visioning committee or available city staff. For this improvement project, the committee should expect to involve the following design professionals: landscape architect, civil engineer, traffic engineer, and sign fabricator.

Project Cost Opinion

The following cost opinion is for conceptual design based on current Iowa bid pricing. Donated or at-cost materials and volunteer labor, when appropriate, could reduce overall project costs.

	UNIT	QUANTITY	UNIT COST	TOTAL
ENTRY CORRIDOR BEAUTIFICATION				
Mobilization	LS	1	$13,000	$13,000
Traffic Control	LS	1	$10,000	$10,000
Entry Column	LS	1	$15,000	$15,000
Banner on Pole	EA	6	$1,000	$6,000
Pedestrian Light w/ Banner	EA	5	$6,500	$32,500
Roadway Light w/ Banner	EA	4	$8,000	$32,000
Existing Light Retrofit w/ Banner	EA	4	$4,000	$16,000
Planter Pot	EA	4	$1,000	$4,000
Overstory Tree	EA	18	$550	$9,900
			IMPROVEMENTS SUBTOTAL	$138,400
			CONTINGENCY (20%)	$27,680
			DESIGN/ENGINEERING FEES (15%)	$20,760
			IMPROVEMENTS TOTAL	**$186,840**
			ANTICIPATED COST RANGE	**$130,000 - 190,000**

Street Tree Benefits

Urban street trees provide multiple benefits to community members, visitors, and the environment. When properly selected and placed, street trees can:

1. Provide shade to pedestrians on sidewalks and trails
2. Reduce heat island effect caused by concrete and asphalt surfaces
3. Create a more aesthetic streetscape for motorists and pedestrians alike
4. Reduce stormwater runoff by absorbing and transpiring rain
5. Create safer walking environments by distinguishing between pedestrian and vehicular spaces
6. Improve business revenue: studies have shown increased income for stores on tree-lined streets versus those without

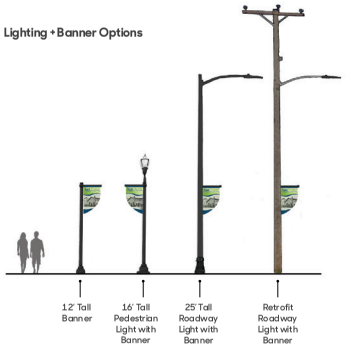
Recommended Street Tree List

COMMON NAME	SCIENTIFIC NAME	MATURE HEIGHT	MATURE WIDTH
Overstory Trees			
State Street Maple	Acer miyabei 'Morton'	30'-40'	30'-40'
Emerald Queen Norway Maple	Acer platanoides 'Emerald Queen'	40'-50'	35'-45'
Autumn Flame Red Maple	Acer rubrum 'Autumn Flame'	40'-60'	30'-50'
Green Mountain Sugar Maple	Acer saccharum 'Green Mountain'	40'-60'	25'-45'
Common Hackberry	Celtis occidentalis	40'-60'	40'-60'
Turkish Filbert	Corylus colurna	40'-50'	25'-30'
Autumn Gold Gingko	Gingko biloba 'Autumn Gold'	40'-50'	20'-30'
Princeton Sentry Gingko	Gingko biloba 'Princeton Sentry'	30'-40'	25'-35'
Imperial Honeylocust	Gleditsia tricanthos f. inermis 'Impcole' Imperial	35'-45'	25'-35'
Skyline Honeylocust	Gleditsia tricanthos f. inermis 'Skycole' Skyline	50'-70'	30'-45'
Quaking Aspen	Populus tremuloides	50'-70'	35'-50'
Swamp White Oak	Quercus bicolor	50'-60'	50'-60'
Shumard Oak	Quercus shumardii	40'-60'	30'-40'
Shawnee Brave Baldcypress	Taxodium distichum 'Michelson' Shawnee Brave	50'-75'	15'-20'
Redmond Linden	Tilia americana 'Redmond'	50'-70'	40'-65'
Littleleaf Linden	Tilia cordata	40'-80'	30'-50'
New Harmory Elm	Ulmus americana 'New Harmory'	50'-70'	30'-50'
Princeton Elm	Ulmus americana 'Princeton'	20'-50'	10'-30'
Understory Trees (below power lines)			
Autumn Brilliance Serviceberry	Amelanchier x grandiflora 'Autumn Brilliance'	20'-25'	20'-25'
American Hornbeam	Carpinus caroliniana	20'-25'	15'-20'
Thornless Cockspur Hawthorn	Crataegus crus-galli var. inermis	15'-20'	15'-20'
Redbud	Cercis canadensis	20'-30'	25'-35'
Spring Snow Crabapple	Malus 'Spring Snow'	20'-25'	15'-20'
Eastern Hornbeam	Ostrya virginiana	20'-35'	20'-35'
Ivory Silk Japanese Tree Lilac	Syringa reticulata 'Ivory Silk'	25'-40'	20'-30'

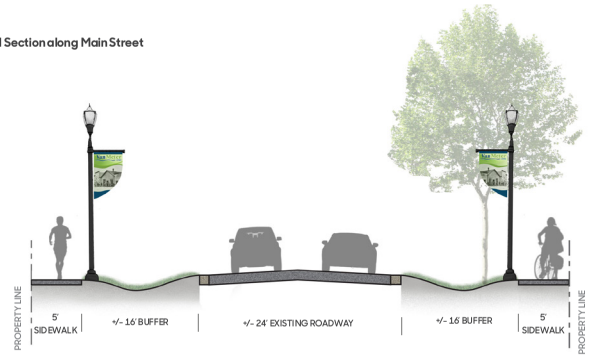
Proposed Mill St. corridor improvements

Proposed Main St. corridor improvements

Lighting + Banner Options



Typical Section along Main Street



North Entry Corridor Creation/Further Beautification

The entry experience is critical component of a community for both residents and visitors. Van Meter is fortunate enough to have a scenic north entrance over the Raccoon River just blocks from the downtown core. However, there are no streetscape elements connecting this entrance to downtown. The concept shown addresses the transition along Main St. that leads visitors from County Road R16 to Van Meter's central commercial district. Streetscape elements such as entry columns, street lights, banners, trees, and planter pots provide a rhythm and an urban aesthetic to give motorists a cue that they are entering the city center.

Van Meter
Entry Corridor Beautification

Bolton & Menk, Inc.
LAs: Josh Shields, PLA; Nate Schlorholtz
Intern: Fan Lan
Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

Downtown Improvements

Community assessments and surveys confirmed a desire to enhance the downtown streetscape, add supportive features for pedestrians, and improve walkability. Updating the streetscape to include bump-outs allows the space for amenities such as street trees, planting beds, pavers, benches, and lighting while maintaining the majority of the existing parallel parking spaces. The concept plan also considers eventual growth and redevelopment of key downtown areas. These downtown enhancements will help create a more functional and enjoyable experience for both pedestrians and motorists.

Key Concept Component

- Improve walkability downtown
- Add pedestrian amenities (benches, litter receptacles, bike racks)
- Create a downtown aesthetic by adding street trees/planters/pavers/historic lighting

Recommended Design Expertise

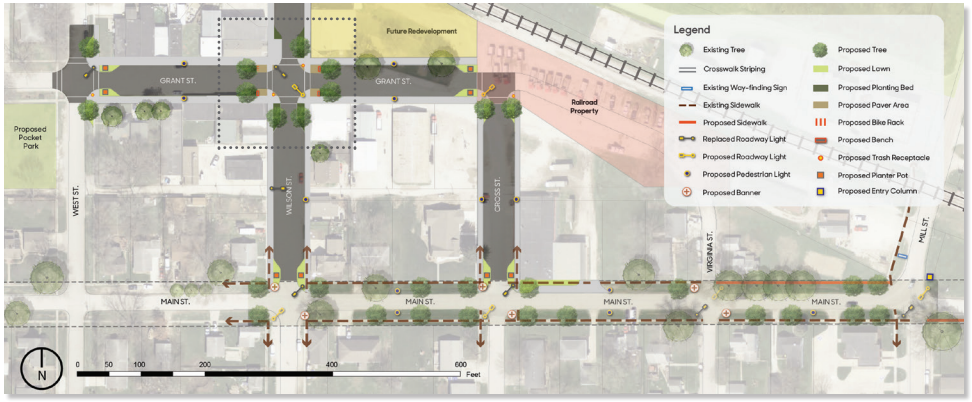
Projects may require help beyond the capacity of the visioning committee or available city staff. For this improvement project, the committee should expect to involve the following design professionals: landscape architect, civil engineer, electrical engineer, and traffic engineer.

Project Cost Opinion

The following cost opinion is for conceptual design based on current Iowa bid pricing. Donated or at-cost materials and volunteer labor, when appropriate, could reduce overall project costs.

	UNIT	QUANTITY	UNIT COST	TOTAL
DOWNTOWN IMPROVEMENTS				
Mobilization	LS	1	$95,000	$95,000
Traffic Control	LS	1	$55,000	$55,000
Pavement Removal	SY	3,590	$15	$53,850
Excavation/Grading	CY	3,155	$15	$47,328
Asphalt Roadway Mill & Overlay	SY	6,640	$45	$298,800
Sidewalk, Conc. (5" Thick)	SY	2,830	$55	$155,650
Curb & Gutter	LF	2,900	$30	$87,000
Roadway Markings	LS	1	$100,000	$100,000
Pavers	SF	890	$25	$22,250
Pedestrian Light w/ Banner	EA	7	$6,500	$45,500
Roadway Light w/ Banner	EA	2	$8,000	$16,000
Existing Light Retrofit w/ Banner	EA	3	$4,000	$12,000
Bench	EA	3	$2,000	$6,000
Trash Receptacle	EA	4	$900	$3,600
Bike Rack	EA	3	$750	$2,250
Planter Pot	EA	4	$1,000	$4,000
Overstory Tree	EA	11	$550	$6,050
Planting Bed	SY	280	$90	$25,200
Lawn Seeding	AC	0.2	$6,500	$1,300
ADA Detectable Warning Panel	SF	160	$40	$6,400
			IMPROVEMENTS SUBTOTAL	$1,043,178
			CONTINGENCY (20%)	$208,636
			DESIGN/ENGINEERING FEES (15%)	$156,477
			IMPROVEMENTS TOTAL	**$1,408,290**

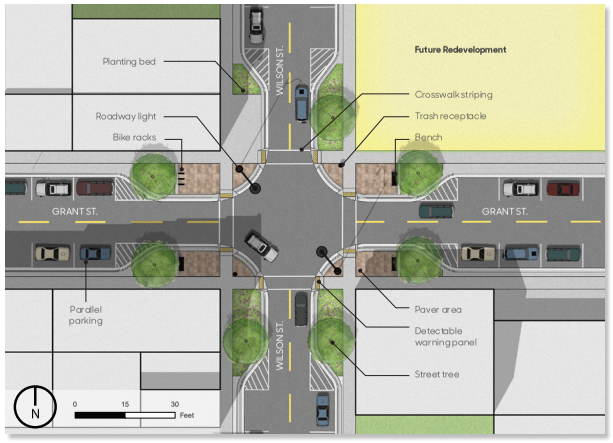
ANTICIPATED COST RANGE **$1,000,000 - $1,410,000**



Improving Aesthetics and Amenities in Downtown

Community assessments and surveys confirmed a desire to enhance the downtown streetscape, add supportive features for pedestrians, and improve walkability. Updating the streetscape to include bump-outs allows the space for amenities such as street trees, planting beds, pavers, benches, and lighting while maintaining the majority of the existing parallel parking spaces. The concept plan also considers eventual growth and redevelopment of key downtown areas. These downtown enhancements will help create a more functional and enjoyable experience for both pedestrians and motorists.

Visualization of proposed downtown improvements



Plan enlargement at intersection of Grant St. and Wilson St.

Van Meter
Downtown Improvements

Bolton & Menk, Inc.
LAs: Josh Shields, PLA; Nate Schlorholtz
Intern: Fan Lan
Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

Pocket Park Concept A

Van Meter's steering committee expressed a need for a community gathering area near downtown and identified a parcel of land on the west end of downtown that is well equipped for park development. The concept plan includes programming for family-oriented activities as well as flexible open space for community events. Trees and shrubs provide screening for adjacent properties as well as shade for park users. Multiple user groups expressed a desire for site amenities in their community parks. The plan includes benches, shade structures, and a portable restroom to support park use. Parallel parking is also included in the proposed improvements to accommodate those driving to the park.

Key Concept Component

- Provide a gathering space near downtown
- Provide additional family-oriented amenities (shelter, playground)

Recommended Design Expertise

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

Project Cost Opinion

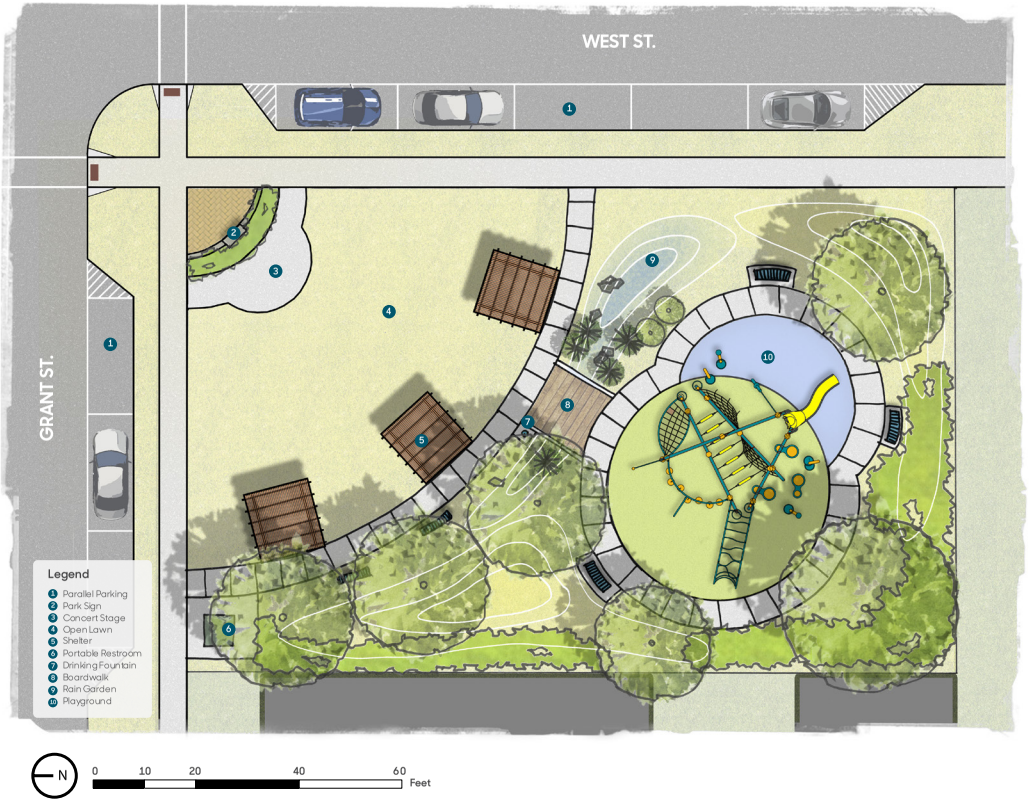
The following cost opinion is for conceptual design based on current bid pricing. Donated or at-cost materials and volunteer labor, when appropriate, could reduce overall project costs.

	UNIT	QUANTITY	UNIT COST	TOTAL
POCKET PARK (OPTION A)				
Mobilization	LS	1	$39,000	$39,000
Excavation/Grading	CY	280	$15	$4,200
Parallel Parking, Concrete	SY	165	$60	$9,900
Sidewalk, Conc. (5" Thick)	SY	195	$55	$10,725
Pavers	SF	100	$22	$2,200
Boardwalk	SF	145	$40	$5,800
Playground Surfacing	SF	1,650	$35	$57,750
Playground Equipment*	LS	1	$160,000	$160,000
Shelter, 15' x 15'	EA	3	$15,000	$45,000
Portable Restroom w/ Enclosure	LS	1	$8,500	$8,500
Drinking Fountain	EA	1	$8,000	$8,000
Bench	EA	5	$2,000	$10,000
Trash Receptacle	EA	1	$900	$900
Overstory Tree	EA	6	$550	$3,300
Shrub	EA	30	$75	$2,250
Planting Area	SY	125	$90	$11,250
Park Entry Sign w/ Stone Wall	LS	1	$12,000	$12,000
Lawn Seeding	AC	0.2	$6,500	$1,300
Biocell/Rain Garden	SF	575	$40	$23,000
Fence	LF	140	$80	$11,200

*Playground equipment price may vary depending on elements selected

IMPROVEMENTS SUBTOTAL	$426,275
CONTINGENCY (20%)	$85,255
DESIGN/ENGINEERING FEES (15%)	$63,941
IMPROVEMENTS TOTAL	**$575,471**

ANTICIPATED COST RANGE **$420,000 - $580,000**



Pocket Park Concept A

Van Meter's steering committee expressed a need for a community gathering area near downtown and identified a parcel of land on the west end of downtown that is well equipped for park development. The concept plan includes programming for family-oriented activities as well as flexible open space for community events. Trees and shrubs provide screening for adjacent properties as well as shade for park users. Multiple user groups expressed a desire for site amenities in their community parks. The plan includes benches, shade structures, and a portable restroom to support park use. Parallel parking is also included in the proposed improvements to accommodate those driving to the park.

Visualization of proposed pocket park

Van Meter
Pocket Park Concept

Bolton & Menk, Inc.
LAs: Josh Shields, PLA; Nate Schlorholtz
Intern: Fan Lan
Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

Pocket Park Concept B

Van Meter's steering committee expressed a need for a community gathering area near downtown, and identified a parcel of land on the west end of downtown that is well equipped for park development. The concept plan includes programming for family-oriented activities such as a playground and a splash pad. Trees and shrubs provide screening for adjacent properties as well as shade for park users. Multiple user groups expressed a desire for site amenities in their community parks. The plan includes limestone seating, a shelter, and a portable restroom to support park use. Parallel parking is also included in the proposed improvements to accommodate those driving to the park.

Key Concept Component

- Provide a gathering space near downtown
- Provide additional family-oriented amenities (splash pad, shelter, playground)

Recommended Design Expertise

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

Project Cost Opinion

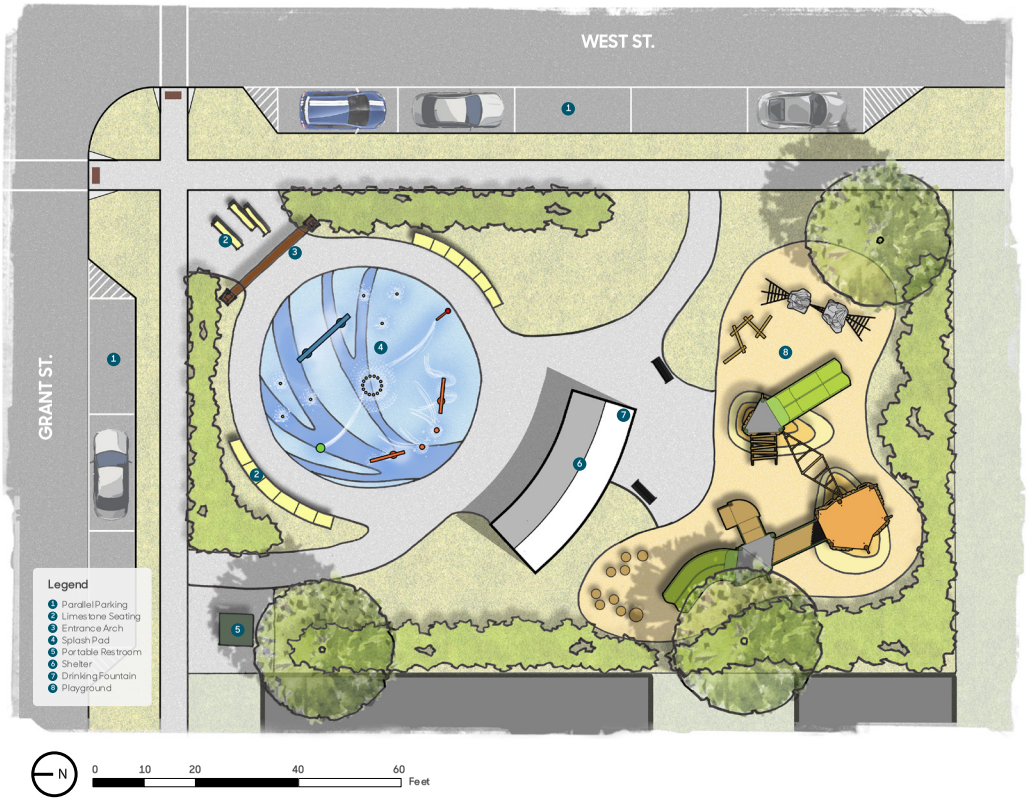
The following cost opinion is for conceptual design based on current bid pricing. Donated or at-cost materials and volunteer labor, when appropriate, could reduce overall project costs.

	UNIT	QUANTITY	UNIT COST	TOTAL
POCKET PARK (OPTION B)				
Mobilization	LS	1	$56,000	$56,000
Excavation/Grading	CY	300	$15	$4,500
Parallel Parking, Concrete	SY	165	$60	$9,900
Sidewalk, Conc. (5" Thick)	SY	315	$55	$17,325
Splash Pad*	LS	1	$150,000	$150,000
Limestone Seating	LF	60	$400	$24,000
Playground Surfacing	SF	2,450	$35	$85,750
Playground Equipment*	LS	1	$180,000	$180,000
Shelter, 30' x 12'	EA	1	$25,000	$25,000
Portable Restroom w/ Enclosure	LS	1	$8,500	$8,500
Drinking Fountain	EA	1	$8,000	$8,000
Overstory Tree	EA	3	$550	$1,650
Shrub	EA	46	$75	$3,450
Planting Area	SY	40	$90	$3,600
Park Entrance Arch	LS	1	$20,000	$20,000
Lawn Seeding	AC	0.2	$6,500	$1,300
Fence	LF	140	$80	$11,200
Bench	EA	2	$2,000	$4,000

*Splash pad and playground equipment price may vary depending on elements selected

IMPROVEMENTS SUBTOTAL	$614,175
CONTINGENCY (20%)	$122,835
DESIGN/ENGINEERING FEES (15%)	$92,126
IMPROVEMENTS TOTAL	**$829,136**

ANTICIPATED COST RANGE	**$610,000 - $830,000**



Pocket Park Concept B

Van Meter's steering committee expressed a need for a community gathering area near downtown, and identified a parcel of land on the west end of downtown that is well equipped for park development. The concept plan includes programming for family-oriented activities such as a playground and a splash pad. Trees and shrubs provide screening for adjacent properties as well as shade for park users. Multiple user groups expressed a desire for site amenities in their community parks. The plan includes limestone seating, a shelter, and a portable restroom to support park use. Parallel parking is also included in the proposed improvements to accommodate those driving to the park.

Visualization of proposed pocket park

Van Meter
Pocket Park Concept

Bolton & Menk, Inc.
LAs: Josh Shields, PLA; Nate Schlorholtz
Intern: Fan Lan
Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning

Implementation Strategies

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

Recommendations
Project implementation should be determined based on the priority given it by the community and with the realization of available funding sources. These funding sources may be through grants and private donations but may also be in the form of volunteer labor donated materials, or donated services.

The projects have been developed with a variety of different scales in mind, allowing some to be more easily realized than others. By reviewing the available resources and developing an implementation plan, the community can move forward towards realizing the fruits of its vision.

The primary goal of the community as it moves forward should be planning for successful projects. Successful implementation of a project allows for public support and interest to grow and can quickly lead to availability of additional and more diverse implementation resources - a community with a history of successful projects and involvement is more appealing to funding agencies. Therefore, a smaller project that fits the following criteria is generally recommended as a starting project for the community to undertake:

1. Is highly visible
2. Has a good chance of receiving a grant or funding assistance
3. Can use volunteers
4. Is not overly complicated

Because the information depicted on each board is conceptual in nature, the edits, sketches, and other deliverables are not intended for use as final design/construction documents. They need to be further developed with the help of professionals during a "design phase." During a design phase, concepts will be refined and developed to determine the actual character, size, and essentials that will become part of the final project. The final products from this phase may retain the general concepts depicted on the boards but may look vastly different because of constraints or opportunities unknown during the visioning process. However, the design that emerges from final design may also look very similar to that developed during the Visioning Program.

One thing to keep in mind with all projects, whether phased or not, is to make sure that the overall project is designed and planned for at the beginning to ensure that each segment will interconnect and relate to another. Failing to plan for future construction phases can easily lead to complications that could set back positive progress for years.

Action Plan

It is recommended that project implementation be approached using the following basic action plan:

Year 1

TASK 1 — Schedule monthly steering committee meetings, confirm understanding of scope and anticipated cost for identified projects. **Prioritize top three projects for design refinement.**

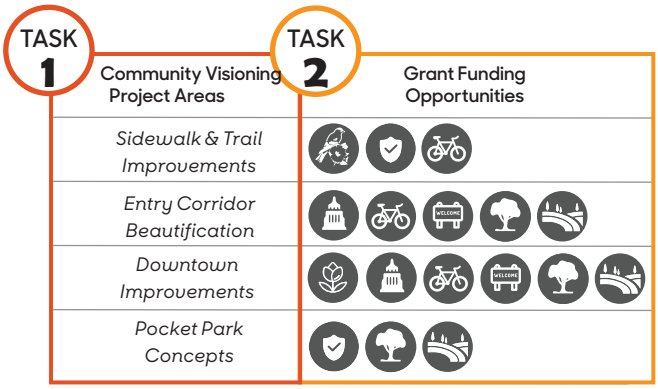
TASK 2 — Determine the most feasible first project and **identify all potential grant/funding opportunities.**

TASK 3 — Using Community Visioning deliverables and assistance from Trees Forever and a landscape architect, **develop application(s) for appropriating grant/funding.**

TASK 4 — After successfully securing funding, **develop a schedule for project design, bidding, and construction, and enter into a contract with a design consultant.**

Year 2 & Ongoing

TASK 1 — Re-evaluate priority projects based on funding success and **repeat Tasks 2-4 for a second project**



Grant Funding Opportunities Legend

Iowa DNR REAP
open space, park, trails, access to natural resources

The Wellmark Foundation
food nutrition, healthy environment, safety

Keep Iowa Beautiful
garden tools, site furniture, paint

Iowa Economic Development Authority
main street, green infrastructure

Iowa Department of Transportation
accessibility, safety trails, roadside vegetation

Iowa Department of Cultural Affairs
community enhancement through art, history & culture

Trees Forever
plantings, trees, educations

Iowa DNR/NPS Land and Water Conservation Fund
natural areas, water resources and cultural heritage

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
- Foundations & Partnerships (private and public)
- Trusts and endowments
- Fund-raising and donations
- Memorials
- Volunteer labor
- Low-interest loans
- Implement project in multiple phases

Funding Sources

- Iowa Department of Transportation (IDOT)
- Iowa Department of Natural Resources (IDNR)
- Iowa Department of Cultural Affairs (IDCA)
- Iowa Economic Development Authority (IEDA)
- Iowa Department of Agriculture & Land Stewardship (IDALS)
- Utility companies
- Trees Forever
- U.S. Department of Agriculture (USDA)

Grant Programs

- Alliant Energy and Trees Forever Branching Out Program
- Federal Highway Administration (FHWA) National Recreational Trails Program
- Federal Highway Administration (FHWA) Surface Transportation Program (STP)
- Iowa Clean Air Attainment Program (ICAAP)
- Iowa DNR Recreation Infrastructure Program
- Iowa DNR Resource Enhancement and Protection (REAP)
- Iowa DNR/National Park Service (NPS) Land and Water Conservation Fund (LWCF)
- Iowa Department of Agriculture & Land Stewardship State Revolving Fund (SRF) Program
- Iowa DOT Iowa's Living Roadways Projects Program
- Iowa DOT Living Roadways Trust Fund Program (LRTF)
- Iowa DOT Americans with Disabilities Act (ADA) Transition Plan
- Iowa DOT Statewide Transportation Enhancement Funding
- Iowa DOT State Recreational Trails Program
- Iowa DOT Transportation Alternatives Program (TAP)
- Iowa DOT Traffic Safety Improvement Program (TSIP)
- Pheasants Forever
- Revitalization Assistance for Community Improvement (RACI) Grant Program
- Wellmark Foundation