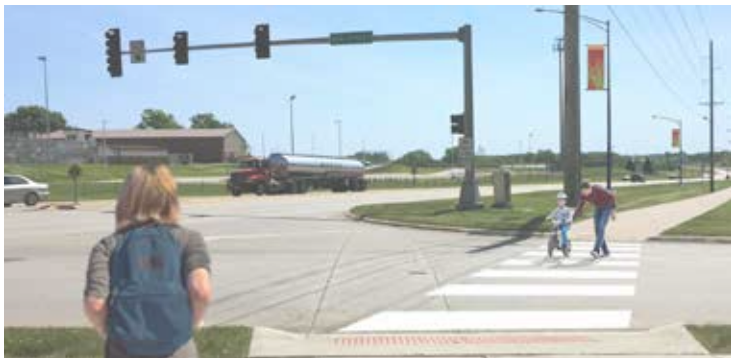

# Carlisle

Community Visioning Final Report and Feasibility Study | 2016


IOWA'S LIVING ROADWAYS

IOWA'S LIVING ROADWAYS

# Carlisle Community Visioning
# Final Report and Feasibility Study

RDG PLANNING • DESIGN


**Prepared by:**
RDG Planning & Design


**Program Partners:**
Iowa Department of Transportation
Trees Forever
ISU Landscape Architecture
ISU Extension Community and Economic Development

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## Participants

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Matthew Gordy, Studio Director

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RDG PLANNING ● DESIGN

# Consultant History and Expertise

From our newest team members to the founding principals who began their practices in the 1960s, RDG Planning & Design is a multifaceted network of design and planning professionals. Diverse in knowledge and experience, we are united in the pursuit of meaning for our clients and ourselves. Officially formed in 1989 as the Renaissance Design Group Corporation and crafted to bring well established firms together into practice, our two business centers of RDG IA Inc. and RDG Schutte Wilscam Birge, Inc. create one distinct organization with the shared purpose of creating meaning together.

**SERVICES:**

- Architecture
- Art Studio
- Engineering
- Graphic Design & Multimedia
- Interior Design
- Landscape Architecture
- Lighting Design
- Strategic Facilities Planning
- Sustainability

**MARKETS:**

- College & University
- Community Planning
- Regional Planning
- Corporate
- Early Learning
- Government
- Healthcare
- K-12 Education
- Parks & Recreation
- Public Safety
- Restoration
- Senior Living
- Sports
- Urban Design
- Worship

## CREATE.

Creation is a result of every interaction with our clients and those they serve. Ultimately, we help create lasting relationships between people and the places they live and love.

## MEANING.

We find meaning in relationships, and in people and the deep connections they have to their environments. When we find meaning, we achieve a deeper understanding of how to create the very best spaces to work, live, and play.

## TOGETHER.

The most important member of our team is you. You know your needs better than anyone else, and you're the advocate for the effort because you'll love and care for your space long after we celebrate its completion.

Fifty years of dedication to success have taken us around the world. Today, our commitment to communication and technology allows us to engage our clients anywhere they may be from our offices in Omaha, Nebraska; Ames and Des Moines, Iowa; and Ft. Myers, Florida. We're free from boundaries and able to work on a regional, national, or global scale. Our interdisciplinary approach allows us to integrate our broad areas of expertise and apply the right team members to any given endeavor.

**156** EMPLOYEES | **63** LICENSED PROFESSIONALS | **36** LEED APS | **66%** OF STAFF ARE STOCKHOLDERS

## Program Overview

The city of Carlisle is one of 10 communities selected to participate in the 2016 Iowa's Living Roadways Community Visioning Program. The program, which selects communities through a competitive application process, provides professional planning and design assistance along transportation corridors to small Iowa communities (populations of fewer than 10,000).

Goals for the Visioning Program include:
Developing a conceptual plan and implementation strategies with local communities, enhancing the natural, cultural, and visual resources of communities, and 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: Program initiation, needs assessment and goal setting, development of a concept plan, and implementation and sustained action.

Each visioning community is represented by a steering committee of local residents and stakeholders who take part in a series of meetings that are facilitated by field coordinators from Trees Forever. Iowa State University organizes design teams of professional landscape architects, design interns, and ISU faculty and staff. The program is sponsored by the Iowa Department of Transportation.

**Community Goals**
The Carlisle visioning committee identified a number of goals and priority areas during the visioning process, which are included below:

1. Entrance Enhancements
2. Highway 5 Signage and Beautification
3. Safe Routes to School through additional Sidewalk Connections
4. Downtown Trail Connection
5. Downtown Enhancements

**Capturing the Carlisle Vision**
Based on the needs and desires of the local residents, as well as a detailed inventory of community resources, the design team developed a conceptual transportation enhancement plan. This plan, as well as the inventory information, is illustrated in the following set of presentation boards:

1. Program Overview
2. Bioregional Assessment (9 total)
3. Transportation Assets and Barriers Assessment (7 total)
4. Transportation Behavior and Needs Assessment (9 total)
5. Transportation Inventory and Analysis
6. Concept Overview
7. Entrance Enhancements & Signage
8. Entrance Enhancements & Highway 5 Corridor Improvements
9. Safe Routes to School
10. Downtown + Trail Connection
11. Downtown Enhancements


Community Tour at Highway 5 Exit


Intersection of Highway 5 and South 1st Street


Community Tour in Downtown


Community Goal Setting Meeting


Community Goal Setting Meeting

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# Carlisle

## Program Overview

Landscape Architect and Intern: RDG Planning & Design - Bruce Niedermyer, PLA and Sara Davids

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

## Settlement Patterns

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

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


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

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# Carlisle

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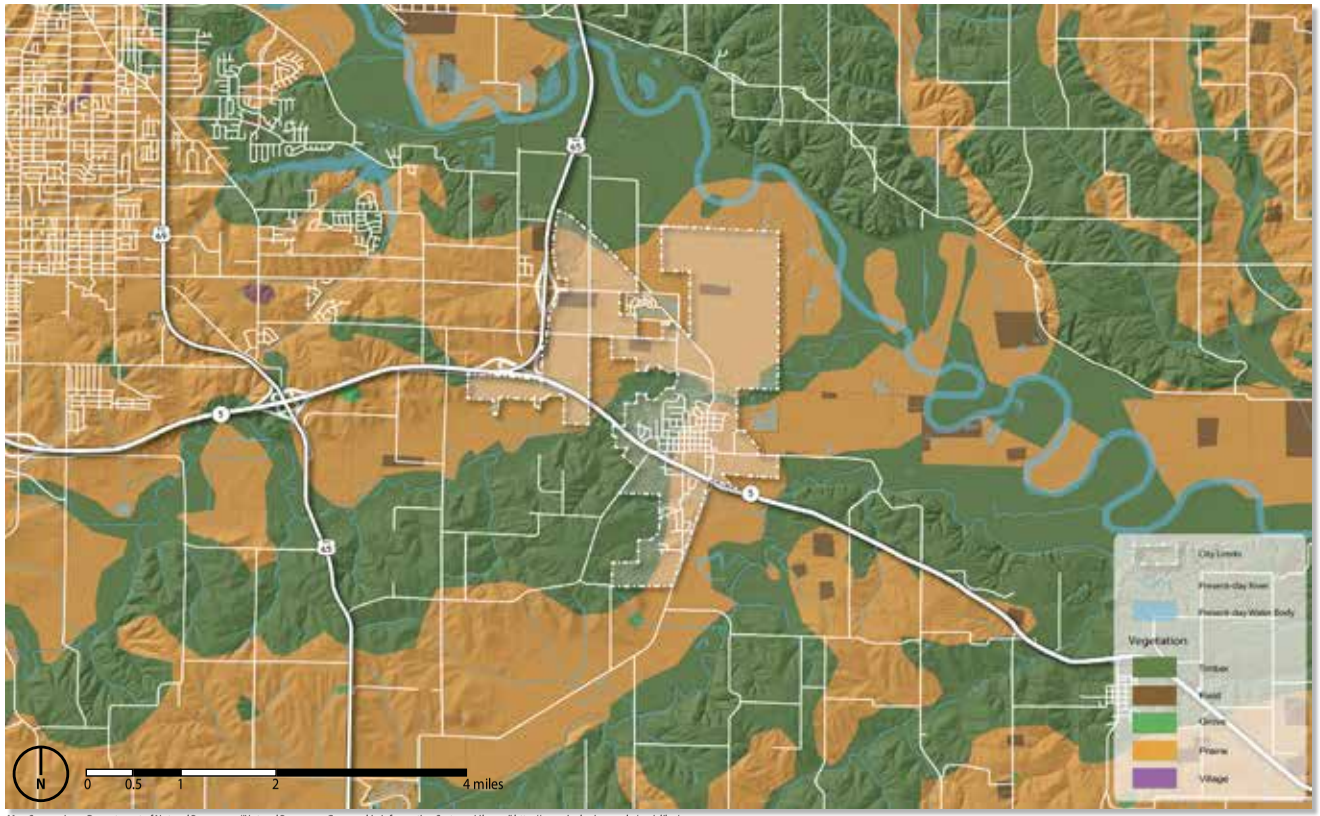
## Historic Vegetation

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

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

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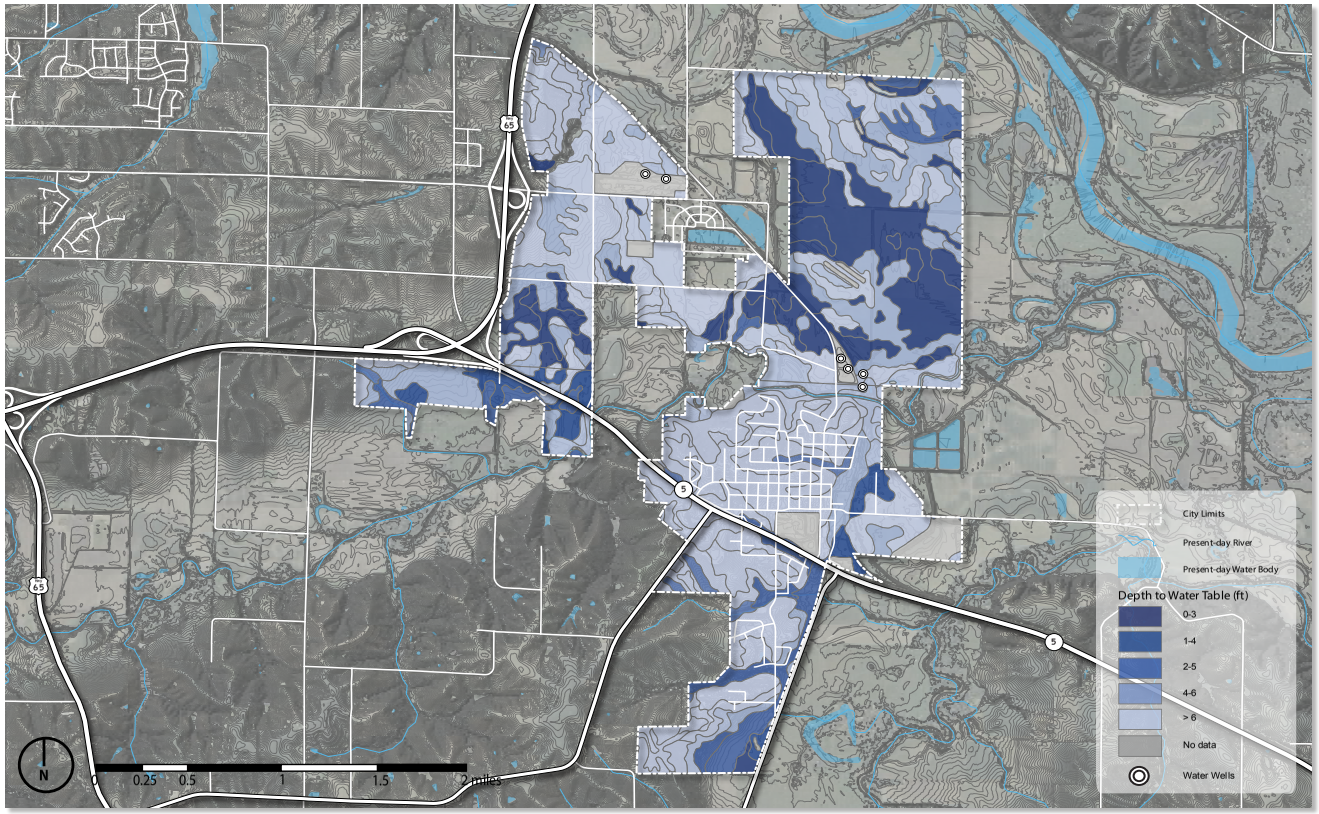
## Depth to Water Table

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

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

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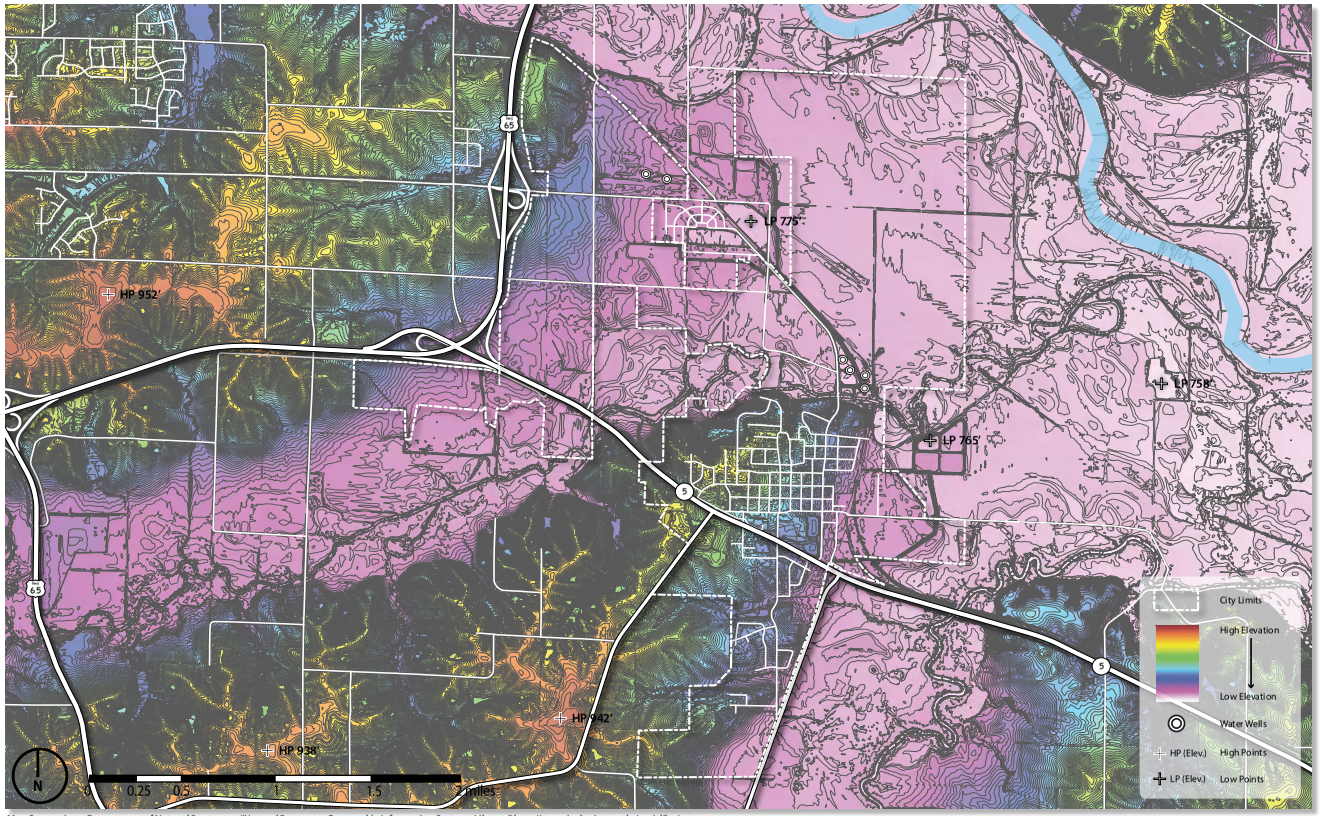
Spring 2016

## Elevation and Flow

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

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

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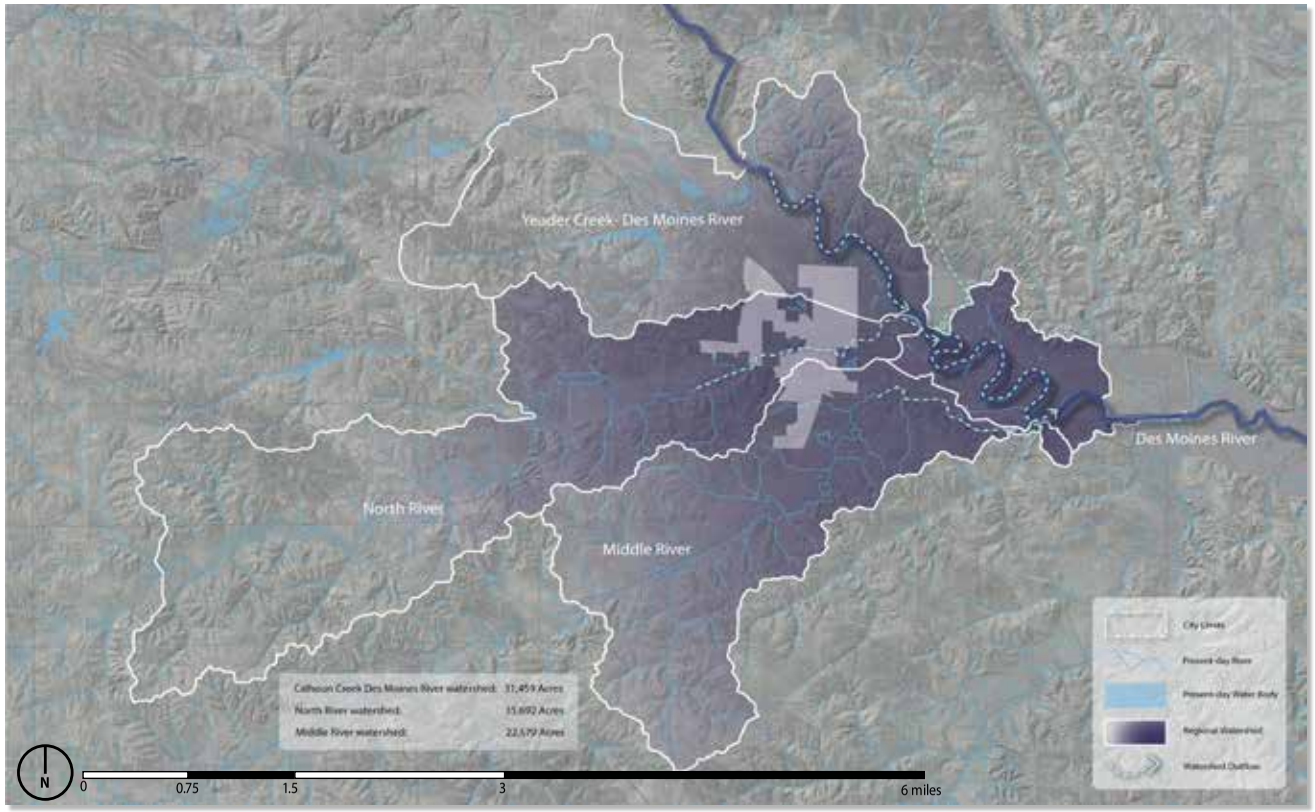
Spring 2016

## Regional Watershed

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

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

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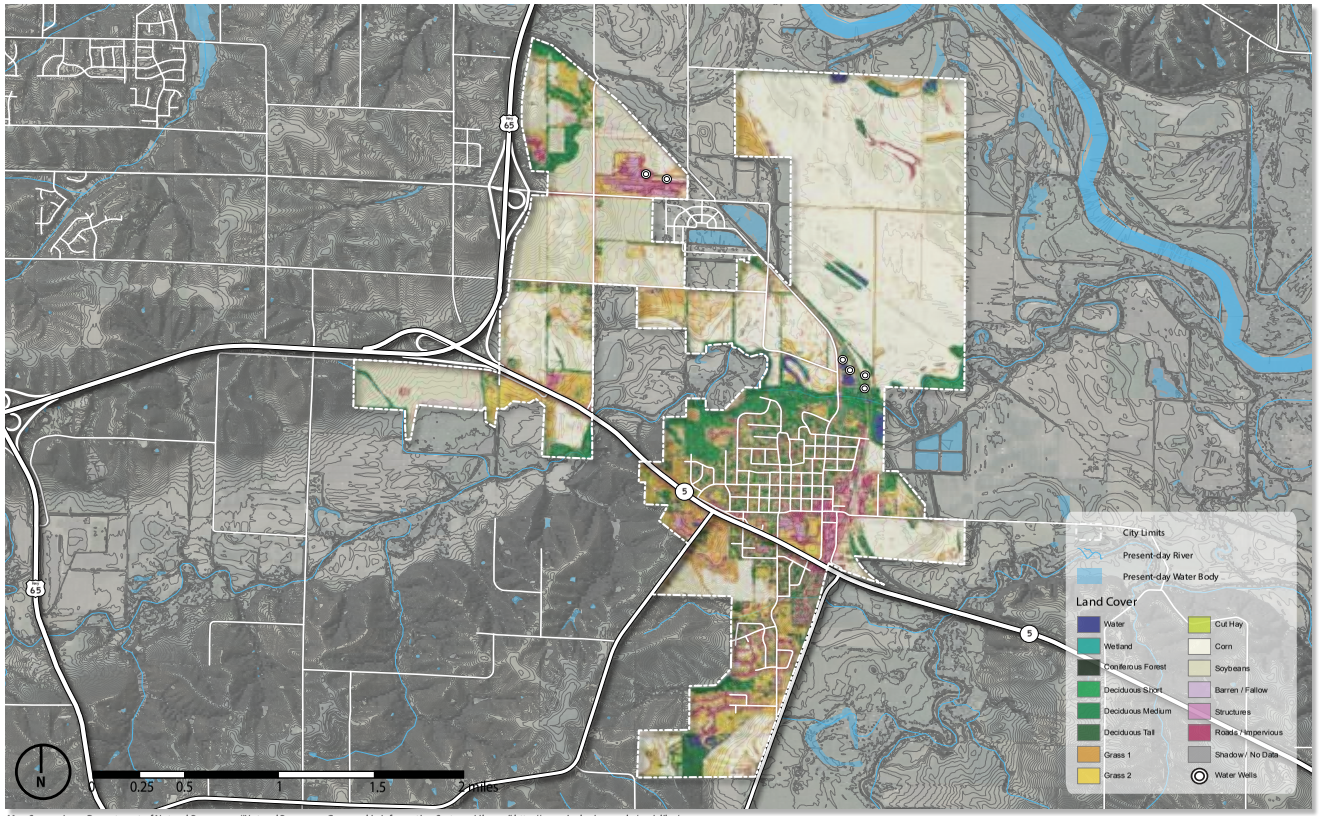
## Present Day Land Cover

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

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

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Spring 2016

## Present Day Vegetation

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

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


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## Strategies for Using Native Plants

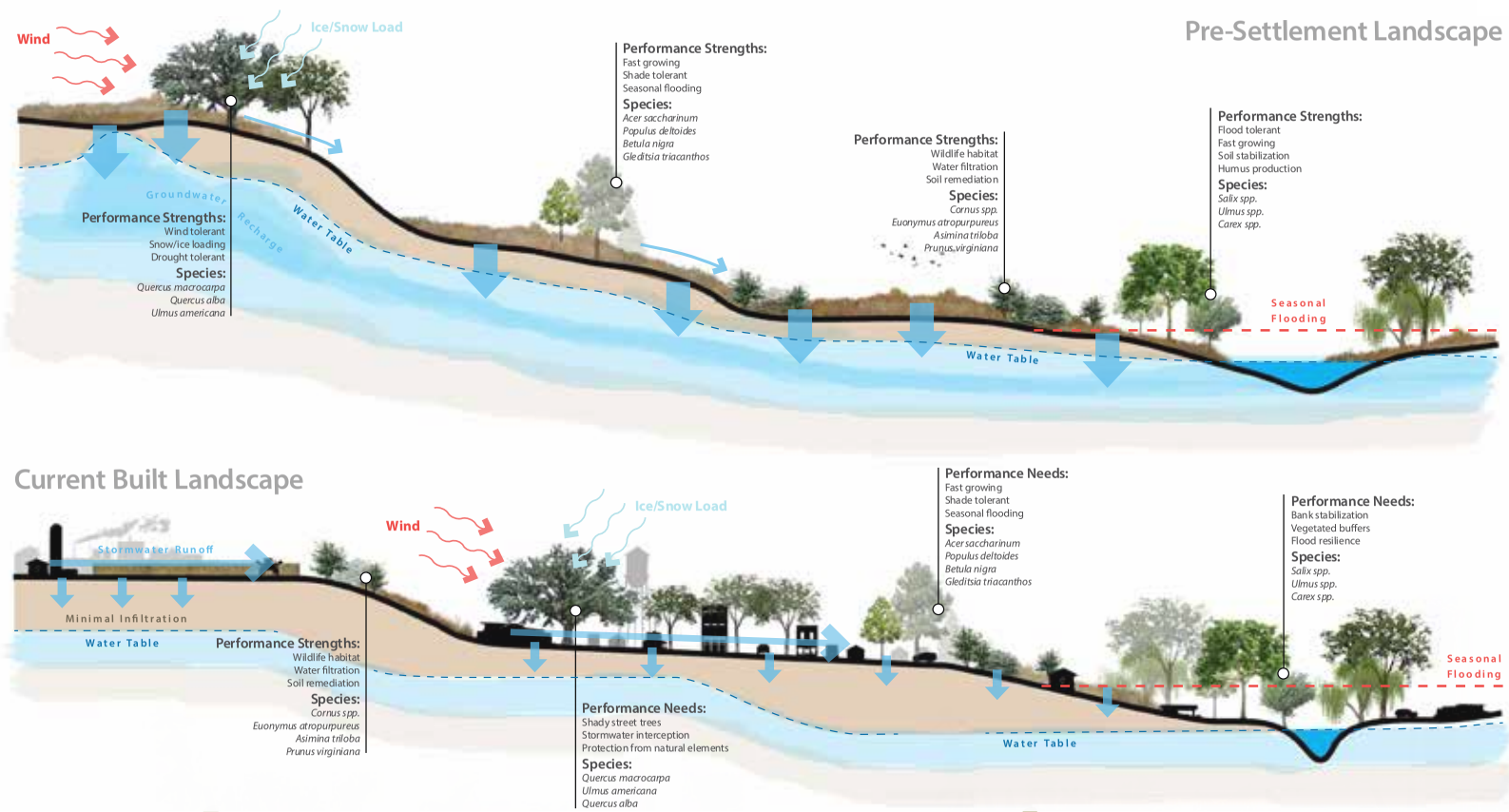
As open space disappears, it becomes increasingly necessary to look at our own landscapes as a refuge for biodiversity. Native organisms including plants, mammals, birds, amphibians, and insects create an intricate web of life. This is a wonderful natural orchestration with each species' life cycle highly dependent on the others.

For example: Spring wild flowers are pollinated by and provide nectar to tiny flies. These flies become food for early spring birds. The timing is orchestrated perfectly. It is not a coincidence that the local native plants have seeds and berries ready just when the birds need them. Bird droppings are the best way to get their seed dispersed. Plants and animals that have evolved together depend upon each other for survival.

Unfortunately, native plants, a vital part of the natural web of life, are being lost at an alarming rate. Removing a certain native plant from the landscape will likely remove the insect that feeds on that plant, which in turn may eradicate the bird that feeds on that insect. And this is just a simplified example. The loss of a species can quickly escalate to affect an entire ecosystem. To paraphrase Paul Ehrlich, author of Native Plants: Relationship of Biodiversity to the Function of the Biosphere, removing native species from an ecosystem is like taking rivets out of an airplane wing; it is impossible to know which one will be the last one that was holding the whole thing together.

There are real and practical pay-offs to encouraging a more biologically diverse city. Healthy, balanced ecosystems clean our water and our air. Pollinators are vital to food production.

There are also other profound reasons for using native plants in our cities. Aesthetically and spiritually, native plants enhance our sense of place. Native plants are one of the most visible elements in the local landscape. They are part of what makes a region unique. Learning and growing native plants promotes a deeper understanding and respect for the land. This information was developed by the Native Plant Society of northeastern Ohio.




# Carlisle

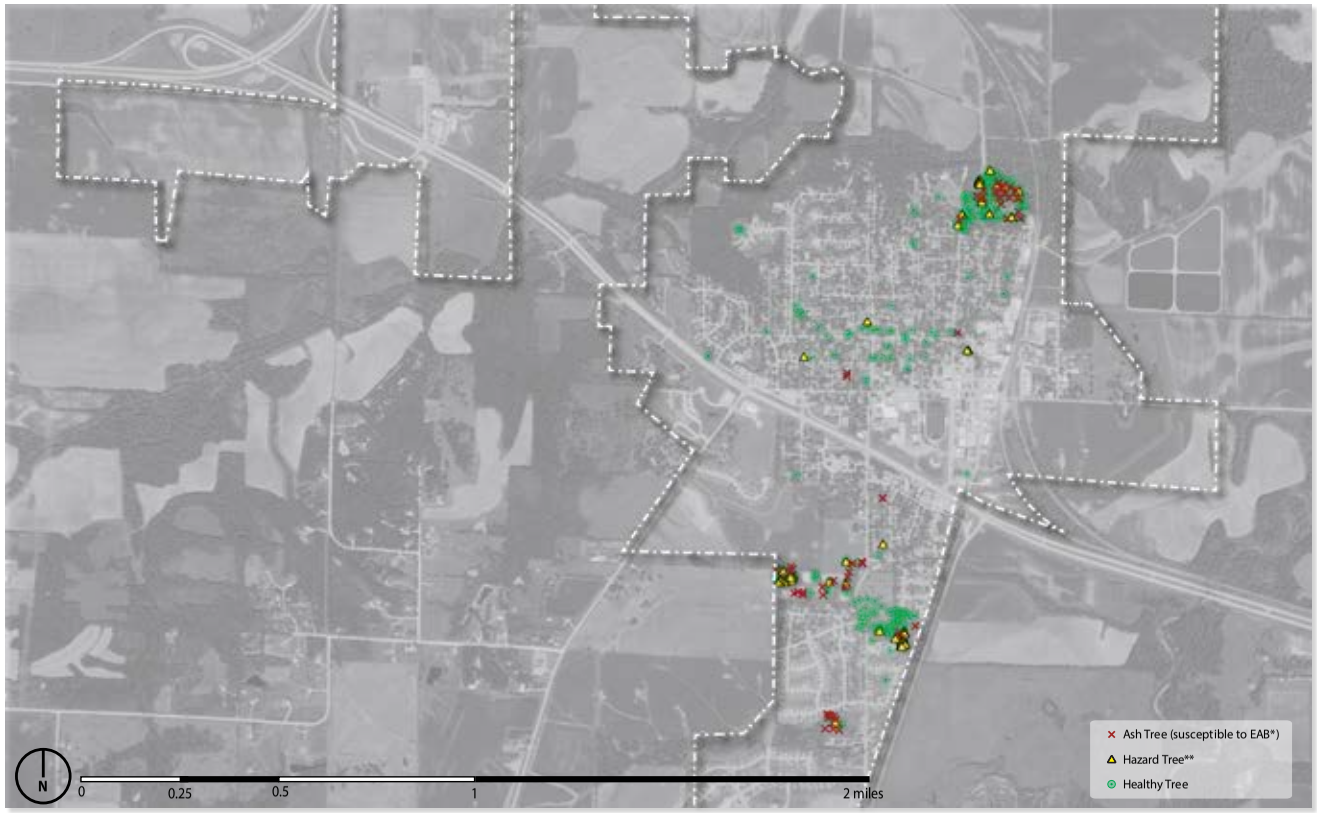
## Strategies for Using Native Plants

Eric Doll, ASLA Jeffrey L. Bruce and Company; Julia Badenhope,FASLA Iowa State University

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

## Urban Forestry Conditions

The map on the left depicts public right-of-way trees that have been surveyed by the Iowa Department of Natural Resources (Iowa DNR).1 The trees are divided into three categories: healthy trees, hazard trees, and ash trees. Hazard trees were determined using the Iowa DNR's priority rating. The ratings range from one to seven; trees with a rating of six or seven were classified as hazard trees.** A six rating is indicative of a tree that is "dangerous, dead, or dying, and no amount of maintenance will increase longevity or safety." A seven rating means there are "insects, pathogens, or parasites present and detrimental to tree longevity; treatment should be given to maintain longevity." Ash trees have been identified specifically due to imminent threats from the Emerald Ash Borer (EAB),* an invasive highly destructive beetle that has already killed tens of millions of ash trees in North America.2 EAB was first discovered in Iowa in 2010 and has been confirmed in 30 Iowa counties and counting.3




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

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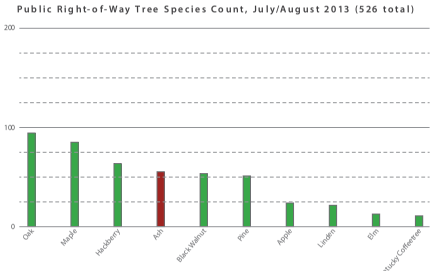


The bar graph above depicts the breakdown of the tree species surveyed by the Iowa DNR . Take note of the large number of ash and maple trees. Increasing species diversity in the urban forest will make it more resilient should a new exotic bug or plant disease emerge. There is a strong possibility that 10% (54 ash trees) of Carlisle's city owned trees will die once EAB becomes established in the community. With proper planning and management, the costs of removing dead and dying trees can be extended over years, mitigating public safety issues.

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

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

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

# Carlisle

## Urban Forestry Conditions

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

Spring 2016

## Transportation Assets and Barriers - Overview

**What Factors Affect Transportation in Carlisle?**
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 Carlisle, 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 Carlisle's transportation system works, we use focused, small-group conversations, mapping, and photos of the best and worst places taken by residents to understand local transportation.

**Different Users = Different Needs**
To capture insights about transportation from a variety of perspectives, we invited Carlisle residents with different transportation needs to participate in focus groups. A total of 67 residents attended Carlisle's workshop. Participants were separated into five user groups and the Carlisle steering committee.

**Actives (14 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.

**Seniors and Mobility Impaired (13 participants):** Accessibility - both in terms of physical access and proximity - is a major concern for this user group. Handicapped parking, curb ramps, and smooth surfaces are critical transportation features. Because some people in this user group do not or are unable to drive, having goods and services within walking distance is important.

**Youth (15 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 popular destinations on foot or via bicycle. Having goods and services within walking distance is important.

**Parents (12 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 (13 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.

*Residents enjoy walking and biking the beautiful Summerset Trail.*


*Downtown Carlisle is full of activity on a daily basis.*


*North Park is a restorative place to exercise and relax outdoors.*


*Lindhart Park offers a variety of outdoor activities.*

*The Scotch Ridge Nature Park and Trail gives Carlisle residents a scenic place to recreate.*


*The wide sidewalks on 1st Street provide residents plenty of room to walk and bike.*

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# Carlisle

## Transportation Assets and Barriers | Overview

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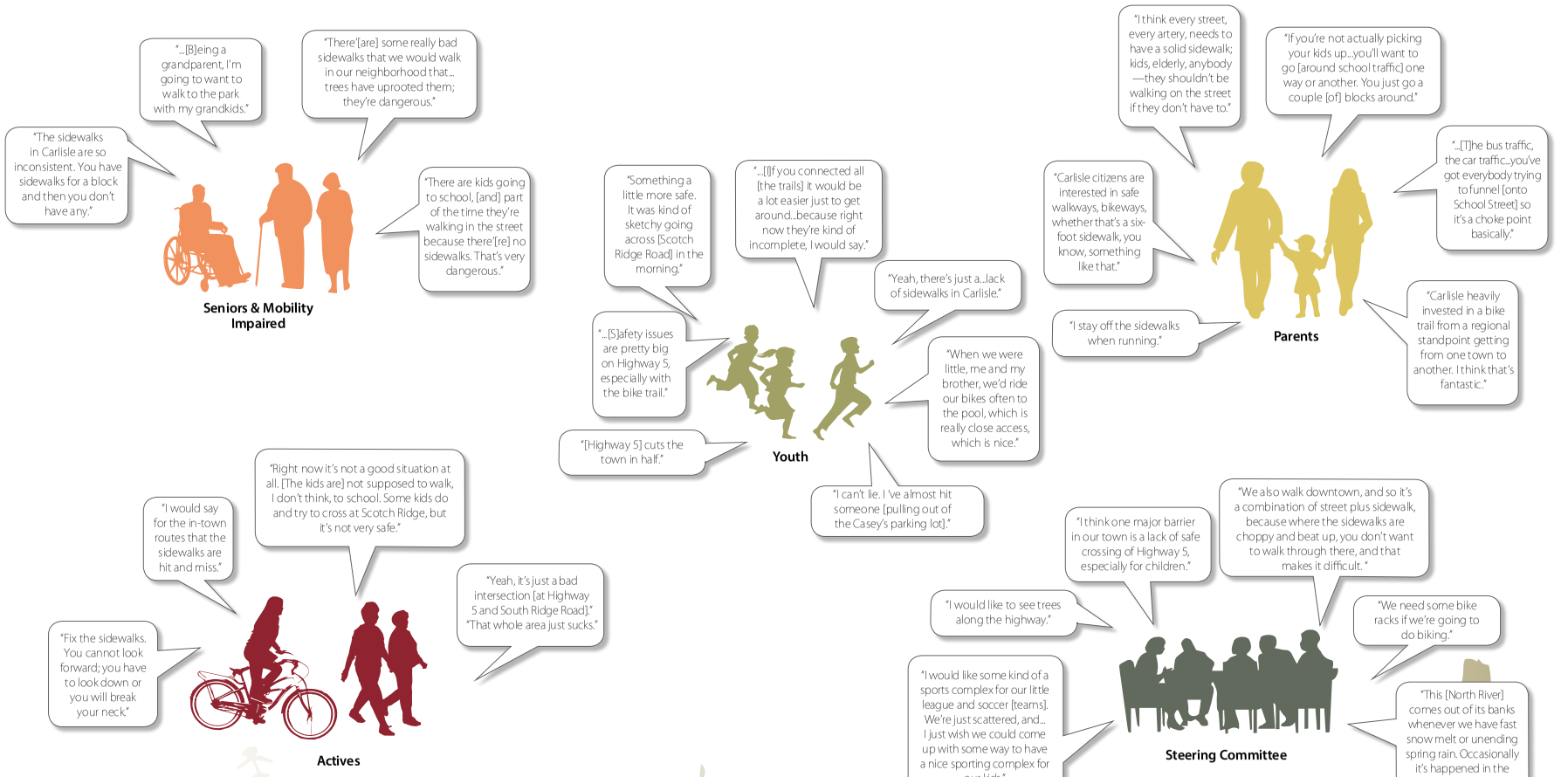
## Transportation Assets and Barriers - What People Said

Determining how user groups utilize spaces is an integral part of assessing needs, opportunities and constraints within a community. As part of the community analysis quotes from each user group are displayed to the right. The focus groups were divided into five groups including:

- Seniors and Mobility Impaired
- Actives
- Youth
- Parents
- Steering Committee




# Carlisle

## Transportation Assets and Barriers | What People Said

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## Transportation Assets and Barriers - Emerging Themes

Discovering emerging themes and consistencies among user groups helps validate survey and focus group information. The overlapping opportunities / concerns within the community help validate community improvements needed. The chart on the opposite page displays each group's collective thoughts on a particular issue and can be compared to other user groups within the community of Carlisle.

**Actives User Group:** Actives walk, drive, bike, and run regularly, either as part of a daily commute or as recreation/sports training. They consider safe sidewalks and trails with benches, lighting, and trash cans to be essential.

**Seniors and Mobility-impaired User Group:** Seniors and those who are mobility-impaired walk, drive, or use motorized scooters to get around. Like others, they are inconvenienced by the incomplete sidewalk network.

**Youth User Group:** Youth walk, drive, bike, run, and take the bus. They are most concerned about safety and getting to fun destinations.

**Parents User Group:** Parents walk, drive, bike, and run. They are concerned about their children's transportation experience. Parents' top priorities include accessibility and safety.

**The Steering Committee User Group:** The steering committee members walk, drive, and bike. They discussed the benefits of shade downtown and along trails, and how Carlisle could be better connected to regional transportation networks.

## What Matters to Carlisle Residents


# Carlisle

## Transportation Assets and Barriers | Emerging Themes

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Spring 2016

TAB 3c

## Transportation Assets and Barriers - Analysis of Barriers

**Carlisle's Barriers: Common Factors**

The analysis of barriers is a synthesis of the feedback we received from the four transportation user groups. The steering committee is not considered a user group, but rather an amalgamation of all user types. Although not shown on an individual map, input from the steering committee is incorporated into the maps of all four user groups.

**Pedestrian Connections**

All groups identified Highway 5 as a significant barrier to daily destinations such as the schools, and to recreational amenities including the trails. In particular, parents are concerned about nonexistent Highway 5 pedestrian crossings, especially for children. Also, students walk along the shoulder or on unpaved surfaces because there are no sidewalks along Highway 5. All groups said that inadequate trailheads and low-quality pavement impede trail access and use. Youth perceive the lack of sidewalks and/or trails along SE Avon Drive as a barrier to Lake Avon.

**Vehicular Traffic**

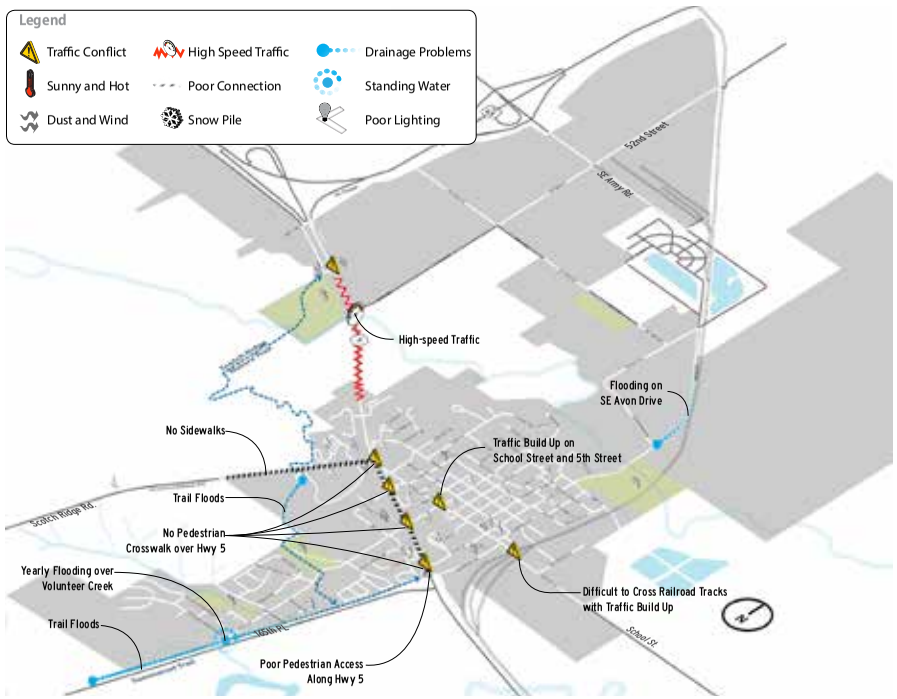
The youth and senior and mobility-impaired groups consider traffic volume and speed along the Highway 5 corridor and on SE Avon Drive as safety barriers. Actives see the abrupt speed-limit change on Scotch Ridge Road as a problem. Parents noted that backed-up traffic at the intersection of 5th and School Streets during school pick-up and drop-of times impedes traffic crossing the railroad tracks on School Street. Actives believe that poor lighting at the intersection of Highway 5 and 165th Place makes pedestrians and cyclists difficult to see at night.

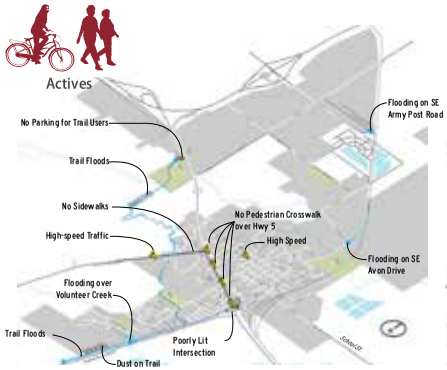
**Drainage and Flooding**

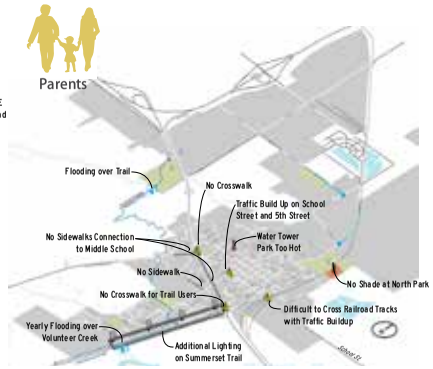
All groups identified flooding and drainage issues in town. Actives, parents, and youth see seasonal flooding along the Scotch Ridge Nature Trail and at SE Avon Drive and 165th Place. All groups mentioned that Summerset Trail sometimes floods at Volunteer Creek.

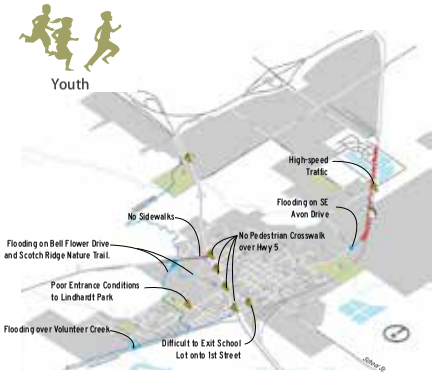
**Climate**

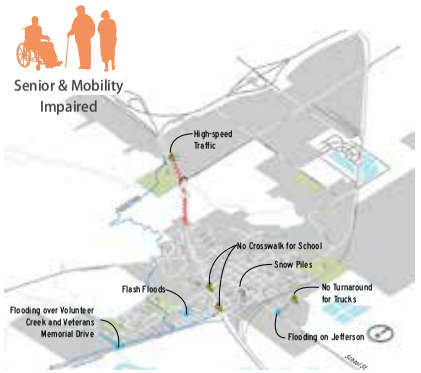
Parents said that North Park and Water Tower Park do not have enough shade. Actives noted wind-borne dust along Summerset Trail in south Carlisle as a barrier.

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## Transportation Assets and Barriers | Analysis of Barriers

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

## Transportation Assets and Barriers - Assets and Destinations

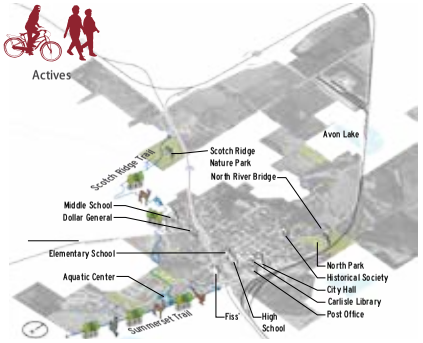
The analysis of assets and destinations is a synthesis of the feedback we received from the four transportation user groups. The steering committee is not considered a user group, but rather an amalgamation of all user types. Although not shown on an individual map, input from the steering committee is incorporated into the maps of all four user groups.

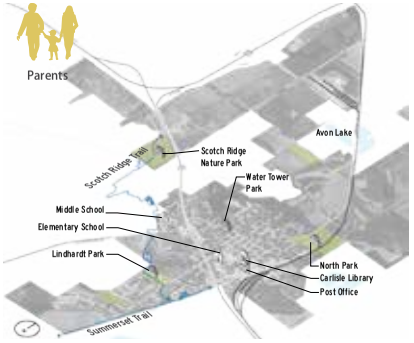
**Downtown**
Many Carlisle residents visit the downtown area daily to work and run errands. They appreciate the ease of travel, especially after 8th Street was redone, and the proximity of businesses and services.

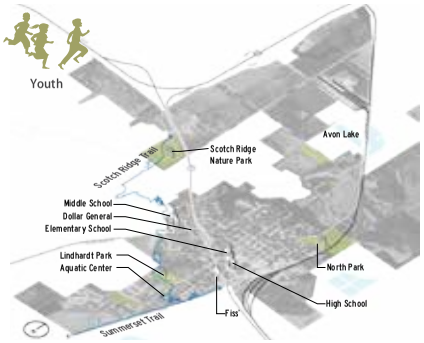
**Trails**
Residents in Carlisle enjoy both Summerset and Scotch Ridge Nature Trails. They exercise, walk their dogs, bike, and enjoy the wildlife that they can see from the trails. There are some seasonal flooding issues, but they don't limit trail use for extended periods of time. Actives use the trails during the winter when the snow has been cleared.

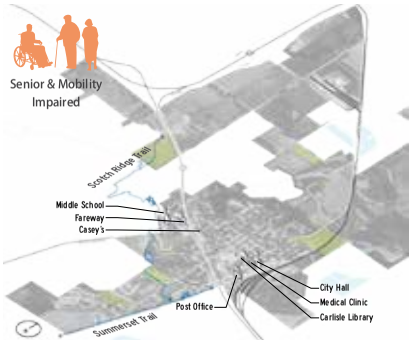
**Parks and Recreation**
The parks in Carlisle were commonly mentioned as great places to play and exercise. Lindhardt, North, and Scotch Ridge Nature Parks are assets to Carlisle residents of all ages. North Park in particular is appreciated because it welcomes visitors entering Carlisle and is beautiful, safe, and the site of many events.

**Schools**
All focus groups described Carlisle Elementary, Middle, and High Schools as common places for special events and recreation year-round. Many people discussed the importance of safe and convenient access to the schools, especially during school drop-of and pick-up times.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## Transportation Assets and Barriers | Assets and Destinations

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IOWA'S LIVING ROADWAYS
Spring 2016
TAB 3e

## Transportation Assets and Barriers - Desired Improvements

The analysis of desired improvements is a synthesis of the feedback we received from the four transportation user groups. The steering committee is not considered a user group, but rather an amalgamation of all user types. Although not shown on an individual map, input from the steering committee is incorporated into the maps of all four user groups.

Desired improvements in Carlisle can be characterized under three main themes; improving overall access along and across the Highway 5 corridor, upgrading sidewalks in the town center, and augmenting recreational amenities such as the Scotch Ridge Nature Trail and the Summerset Trail.

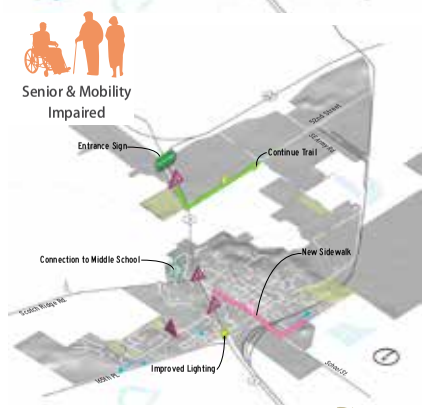
**Crosswalks and Intersections**
The desire to improve and/or add crosswalks along the Highway 5 corridor is unanimous. Critical points along the corridor include the intersection at Scotch Ridge Road (Carlisle Middle School is on the south side of Highway 5,) and the intersections of South 5th and South 1st Streets, (Carlisle Elementary and Carlisle High School are on the north side of Highway 5 here.) A combination of designated crosswalks with long walk signals connected to new and/or widened sidewalks are key desired improvements.

**Community Connectivity**
The Actives, Parents and Youth groups desire connections such as a pedestrian bridge over Highway 5 and an underpass under Scotch Ridge Road. Youth and Actives want to continue Summerset Trail to Avon Lake. Actives and Parents would like to see additional trail extensions to the Scotch Ridge Nature Trail south and west of Carlisle.

**Trail Amenities**
Among active adults, parents and youth, lighting was the most desired improvement along Summerset Trail. Water fountains, bike racks, trees, and benches are additional desired amenities that would improve transportation and recreation on the trail. A system of trail markers were also mentioned by the active adults.





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## Transportation Assets and Barriers | Desired Improvements

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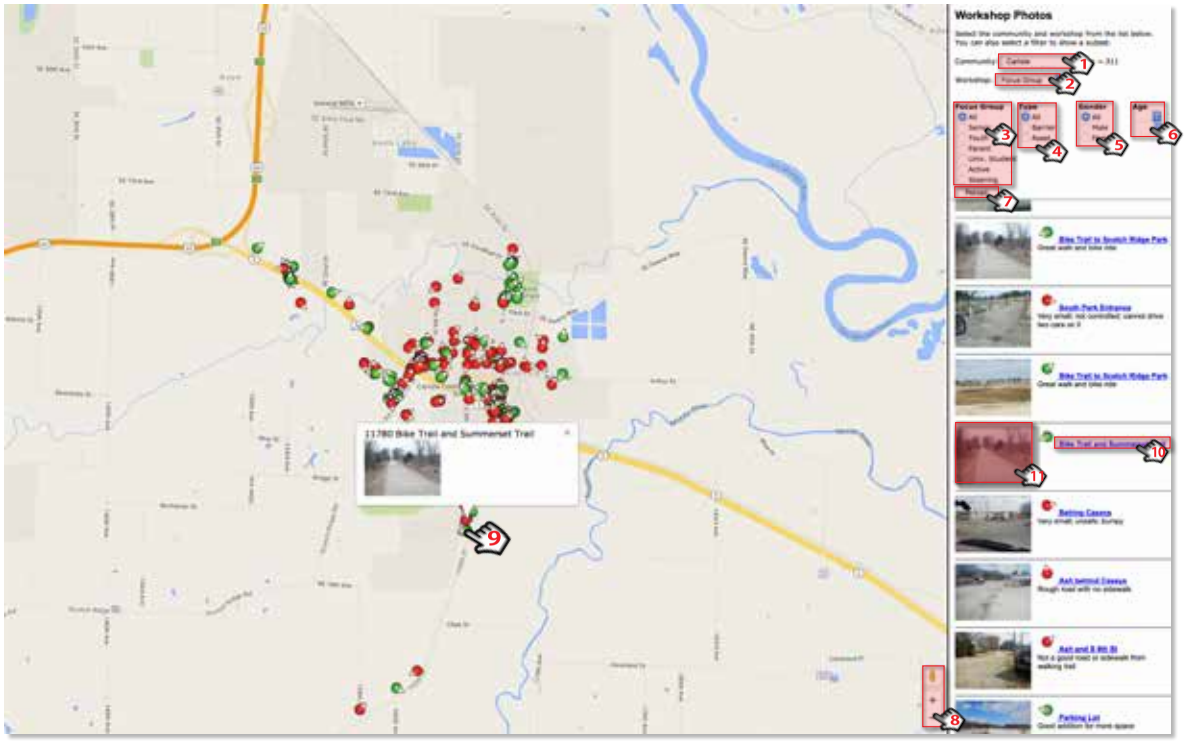
## Transportation Assets and Barriers - How to Use Your Map

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

The Iowa State University research staff uploaded the data from the cameras and entered the information from the worksheets into an online database, which is linked to an interactive online map. The map showing the images and descriptions is available to the public via the Community Visioning Program website at www.communityvisioning.org. On the homepage, click on the link reading: "Transportation Assets and Barriers Maps for the visioning communities are available HERE."

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

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

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Use these instructions to navigate the map, view photos and comments associated with the data points, and save photos as .jpg files.

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

# Carlisle

## Transportation Assets and Barriers | How to Use Your Map

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

## Transportation Behavior and Needs - Overview

**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 and photo-mapping 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 and behaviors, needs, and desires of Carlisle residents. Surveys were mailed to 400 randomly selected residents living in Carlisle 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 351. A total of 135 people returned surveys, for a response rate of 38.5%. (A response rate of 20% is considered valid.)

**What Did We Find Out?** We asked survey recipients what routes they used most often for going to work, walking, biking, and running. 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 Carlisle. This series of boards summarizes the results of the survey as follows: Willingness to Help, Enhancement Priorities, Commuting Routes, Walking Routes, Biking Routes, Running Routes, Desired Trail Routes, and Popular Parks.

**How Did We Do?** The demographics of the respondents are somewhat different from those obtained from the 2014 American Community Survey Five-Year Estimate. For example, the survey respondents median age of 55 is significantly older than the 2014 estimated average age for Carlisle residents of 36. In terms of gender, males are somewhat overrepresented in the survey sample. While the average household size of the survey sample is close to that of the 2014 estimated average, the number of children in the household is somewhat lower.

**How Do Carlisle Residents Travel?** Most survey respondents drive to important destinations such as the grocery store, the post office, school, and church (88.1%). Just over 35% car pool or ride with someone else. Some people indicated that they walk or bike, but the primary mode of transportation in Carlisle 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%.

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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 and photo-mapping at the transportation assets and barriers workshop.

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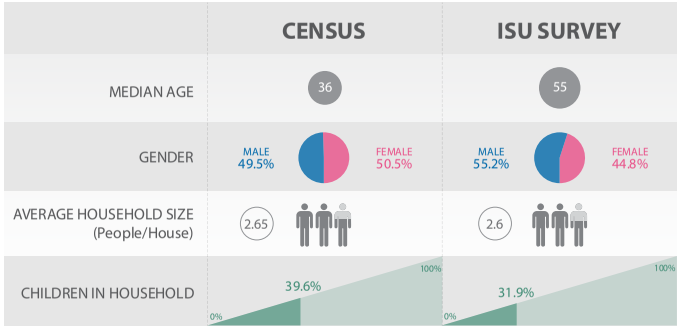
- Willingness to Help
- Enhancement Priorities
- Commuting Routes
- Walking Routes
- Biking Routes
- Running Routes
- Desired Trail Routes
- Popular Parks

# How Did We Do?




*Source: US Census Bureau, 2010–2014 American Community Survey Five-Year Estimates.*

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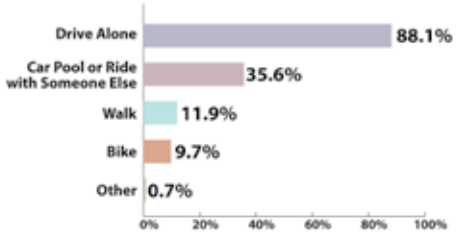



# Carlisle

## Transportation Behavior and Needs | Overview

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

Summer 2016

SURVEY 4a

## Transportation Behavior and Needs - Willingness to Help

**Willingness to implement change**

Most survey participants who answered this question are willing to contribute their time and talent to community improvements (56.6%), while just over 35% would contribute both time and talent and financial help. More than 7% of respondents indicated that they would be willing to contribute financially. Compared to other small towns in Iowa, Carlisle 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

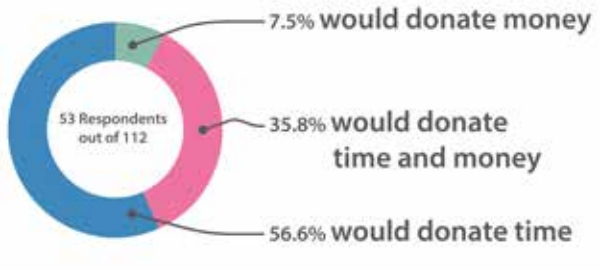
1 Sigma: A Profile of Iowa Small Towns 1994 to 2014 (Ames, IA: Iowa State University College of Agriculture and Life Sciences, 2015).

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.2 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).

ARE PEOPLE WILLING TO HELP?

## More than 47% said YES!

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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 THEY ARE WILLING TO DO?

## Survey Participants Said...

"I might be willing to donate time or money, depending on what enhancements are made."

"[I] would like to see a bike license...fee [for] trail maintenance or an additional charge to new bike purchases that would go to the trail maintenance."

"If we need to temporarily raise sales tax or property taxes to fix our streets and sidewalks only, I would be for it."

HOW DO YOU GET PEOPLE TO HELP?

## Ask, Show, and Advertise Opportunities to Residents!

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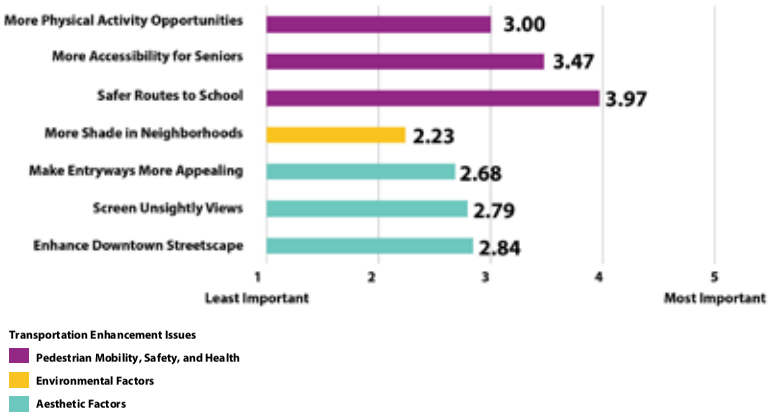
## Transportation Behavior and Needs - Enhancement Priorities

**Importance of transportation enhancement by type (132 responses)**

On a scale of 1 to 5, with 5 being the most important, participants in Carlisle ranked making routes to school safer at most important, with a mean value of 3.97. Other transportation enhancements that address pedestrian mobility, health, and safety are also considered important. Environmental and aesthetic issues are significantly less important among respondents, with mean values all below 3.0. These findings are consistent with the views expressed by focus group participants during the Transportation Assets and Barriers workshop held in March 2016.

WHAT TYPES OF ENHANCEMENTS ARE IMPORTANT?

# Mobility, Safety, and Health!

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# Survey Participants Said...

"Better and more sidewalks in residential areas. Our neighborhood has many lots or entire blocks with no sidewalk and many dangerous unlevel areas."

"There's always a want/need for more trails/options. We appreciate the current trail system—[it adds] a lot of value and opportunity to the community."

"It is pretty sad that Carlisle has a new middle school and kids can't even walk there."

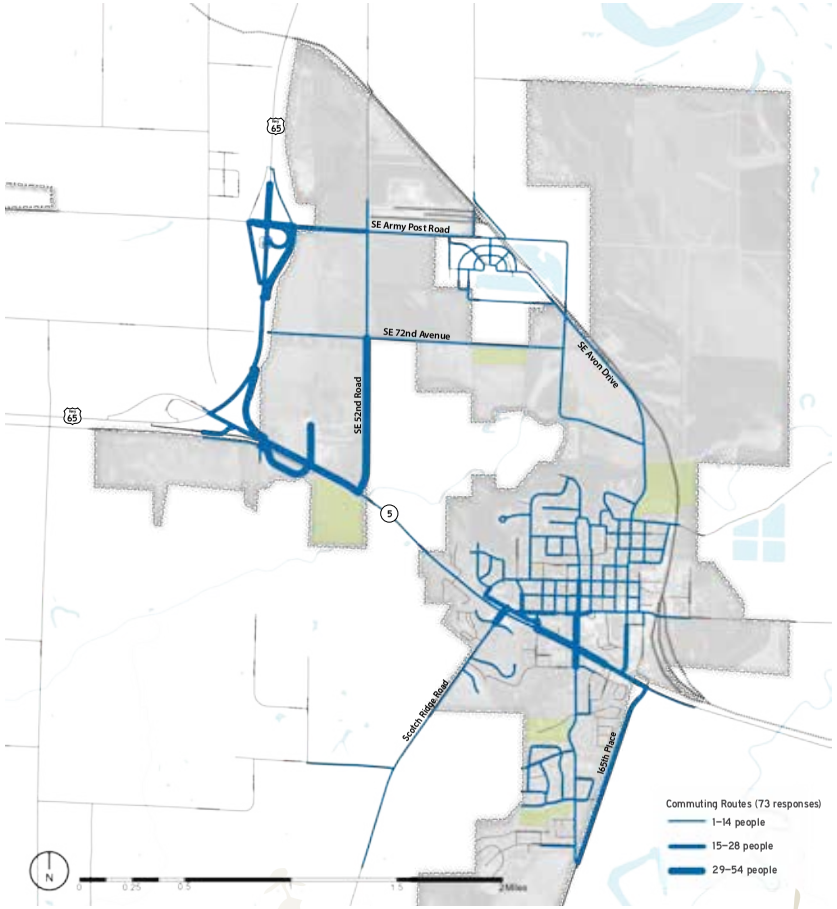
"[There need to be] sidewalks and crosswalks on Scotch Ridge Road to the middle school; [there's] no need to consider other ideas. [I'm] afraid of injury or death in this area due to poor accommodations for child pedestrians."

## Transportation Behavior and Needs - Preferred Commuting Routes

**How Often Do You Work From Home, in Carlisle, or Out of Town? (79 responses)**
Approximately 62% of survey participants indicated that they are employed. Of employed respondents, 79 rated how often they work from home, work in town, and work out of town using a scale of 1 to 3, with 1 meaning never and 3 meaning always. Clearly, most Carlisle residents work outside the community, as shown in both the graph and on the route map.

This map shows the commuting routes identified in the survey. The frequency that the routes are used is depicted by their thickness, with most frequently used routes being the thickest. Seventy three respondents provided commuting routes. Most Carlisle residents work out of town; therefore, commuters most frequently take a variety of routes that connect to US Highway 65, including Highway 5, SE 52nd Street, and SE Army Post Road. Some respondents identified 165th Place and Scotch Ridge Road as routes into and out of Carlisle from the south. In town, Highway 5, 5th Street, and 1st Street are heavily traveled, particularly around the school. This information supports residents' concerns regarding pedestrian safety in this area, particularly for children.

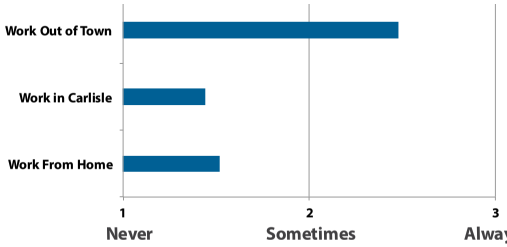
The circulation patterns that emerge when routes for biking, running, walking, and commuting are overlaid suggest suitable types of transportation enhancements. For example, where pedestrian and vehicular traffic intersect, such improvements could include creating better visibility, defining crossing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




*Map Source: Iowa Department of Natural Resources, "Natural Resources Geographic Information Systems Library," accessed October 2015, http://www.igsb.uiowa.edu/nrgislibx/. Route data derived from the 2016 Designing Livable Communities survey conducted by Iowa State University.*

## Where People Work

How Often Do You Work From Home, in Carlisle, or Out of Town? (79 responses)

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# Carlisle

## Transportation Behavior and Needs | Preferred Commuting Routes

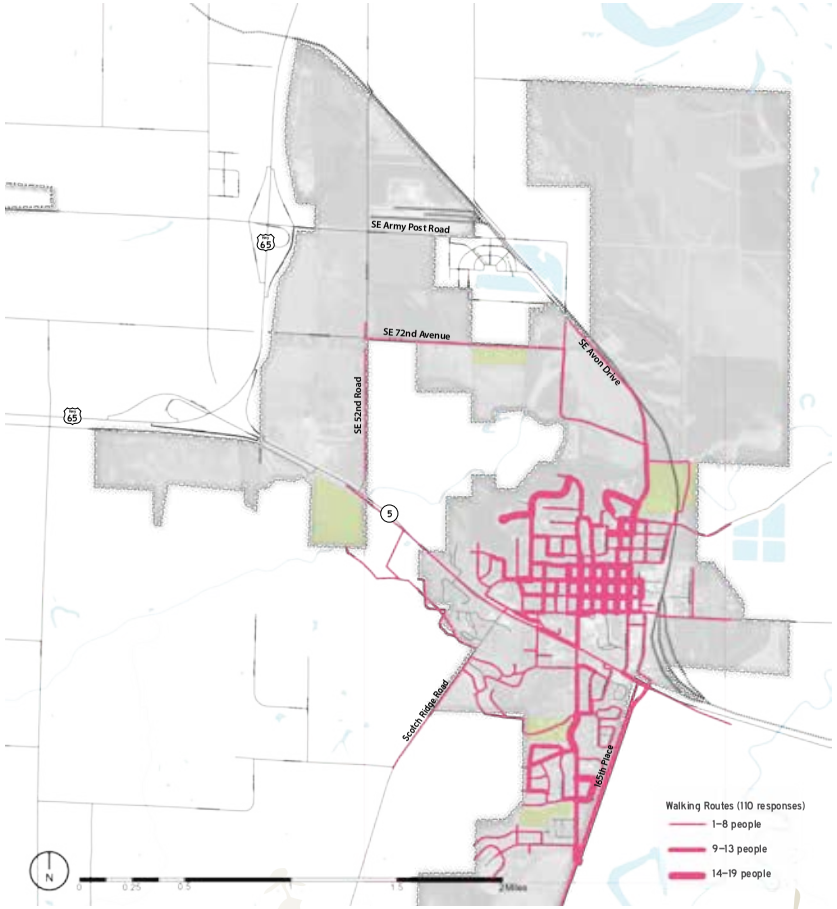
Iowa Department of Transportation  Trees Forever  ISU Landscape Architecture Extension  ISU Extension Community and Economic Development  Summer 2016

IOWA'S LIVING ROADWAY SURVEY 4d

## Transportation Behavior and Needs - Preferred Walking Routes

**How Often Did You Walk During the Past Year? (129 responses)**
Survey participants were asked how often they walked during the past year. More than 95% of respondents answered this question. Of those people, 85% indicated that they walked. More than 21% of respondents walked at least weekly, 19% walked at least monthly, and nearly 20% walked less than once a month. More than 10% of survey participants walked daily. Of respondents who indicated that they walk, 82.2% indicated that they walk more often during warmer-weather months.

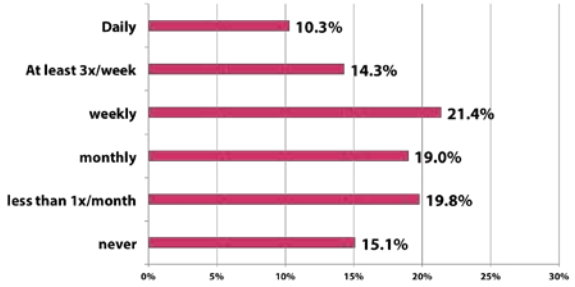
This map shows the walking routes identified by 110 survey respondents. The frequency that the routes are used is depicted by their thickness, with most frequently used routes being the thickest. Most Carlisle walkers use the grid of residential streets in "Carlisle proper" north of Highway 5. Several walking routes lead to and/or pass through the local parks and the soccer complex. A few people walk out to the Scotch Ridge Nature Park, and a number of people walk on Summerset Trail on the south side of town. South 5th Street south of Highway 5 and the loop of Highland and Patterson Drives are heavily traveled by walkers. Routes in the northern part of town include SE Avon Drive, SE Goodhue Drive, SE 72nd Street, and SE 52nd Street. A few people walk along Highway 5, despite safety concerns expressed by some survey participants.




*Map Source: Iowa Department of Natural Resources, "Natural Resources Geographic Information Systems Library," accessed October 2015, http://www.igsb.uiowa.edu/nrgislibx/. Route data derived from the 2016 Designing Livable Communities survey conducted by Iowa State University.*

# How Often People Walk

How Often Did You Walk During the Past Year? (129 responses)

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# Carlisle

## Transportation Behavior and Needs | Preferred Walking Routes

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

IOWA'S NEXT LIVING ROADWAY

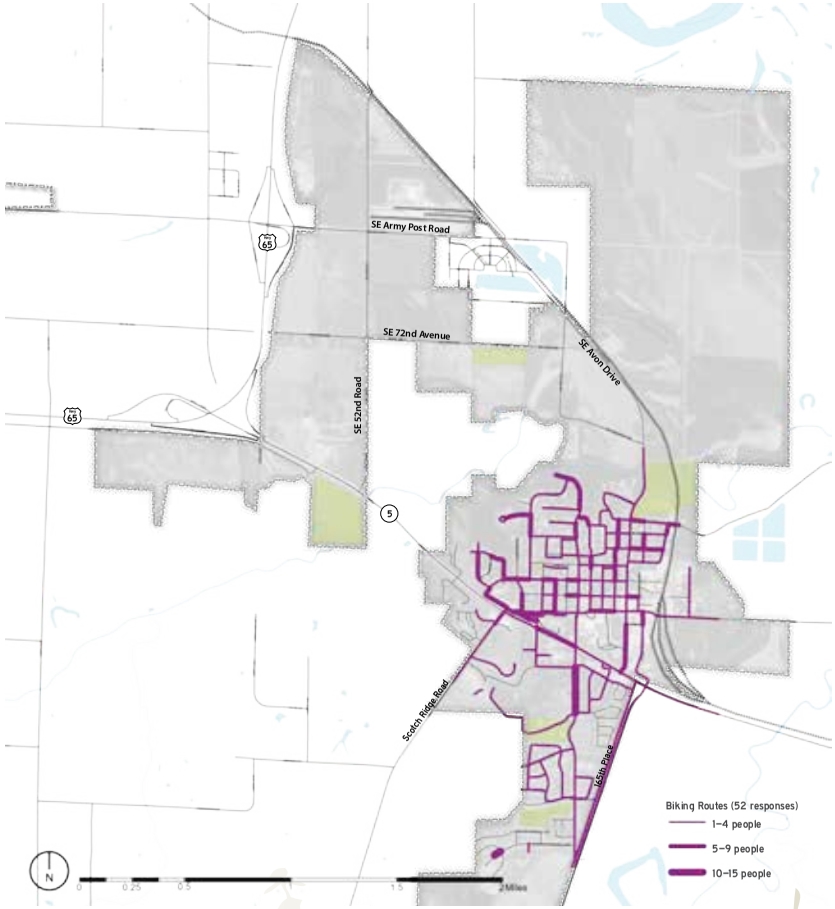
Summer 2016

SURVEY 4e

## Transportation Behavior and Needs - Preferred Biking Routes

**How Often Did You Bike During the Past Year? (128 responses)**
Survey participants were asked how often they biked during the past year. Approximately 95% of respondents answered this question. Of those people, 37% indicated that they biked. More than 14% of respondents biked less than once a month, 11.7% biked at least monthly, and 7% biked weekly. Less than 1% of survey participants biked daily. Of respondents who indicated that they bike, 38% indicated that they do so more often during warmer-weather months.

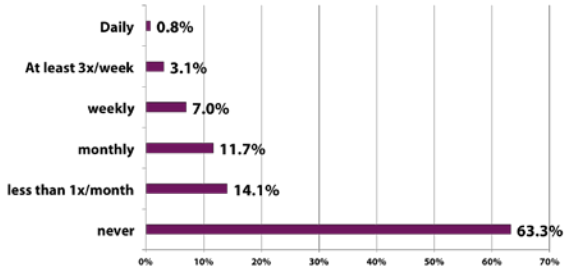
This map shows the biking routes identified in the survey. The frequency that the routes are used is depicted by their thickness, with most frequently used routes being the thickest. Fifty-two respondents provided biking routes. Cycling routes in Carlisle are similar to the walking routes identified, in that bikers use the Summerset Trail, Scotch Ridge Road, and S 5th Street south of Highway 5. Like walkers, bikers also ride on the residential grid north of Highway 5, and their routes take them to parks in town, including North Park, Lindhardt Park, Volunteer Park, and the Family Aquatic Center. Cyclists ride frequently on the Frontage Road, where destinations such as Casey's Dollar General, Fareway, and Subway are located. South 1st Street adjacent to the high school is also popular.




*Map Source: Iowa Department of Natural Resources, "Natural Resources Geographic Information Systems Library," accessed October 2015, http://www.igsb.uiowa.edu/nrgislibx/. Route data derived from the 2016 Designing Livable Communities survey conducted by Iowa State University.*

## How Often People Bike

How Often Did You Bike During the Past Year? (128 responses)

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# Carlisle

## Transportation Behavior and Needs | Preferred Biking Routes

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

IOWA'S LIVING ROADWAY

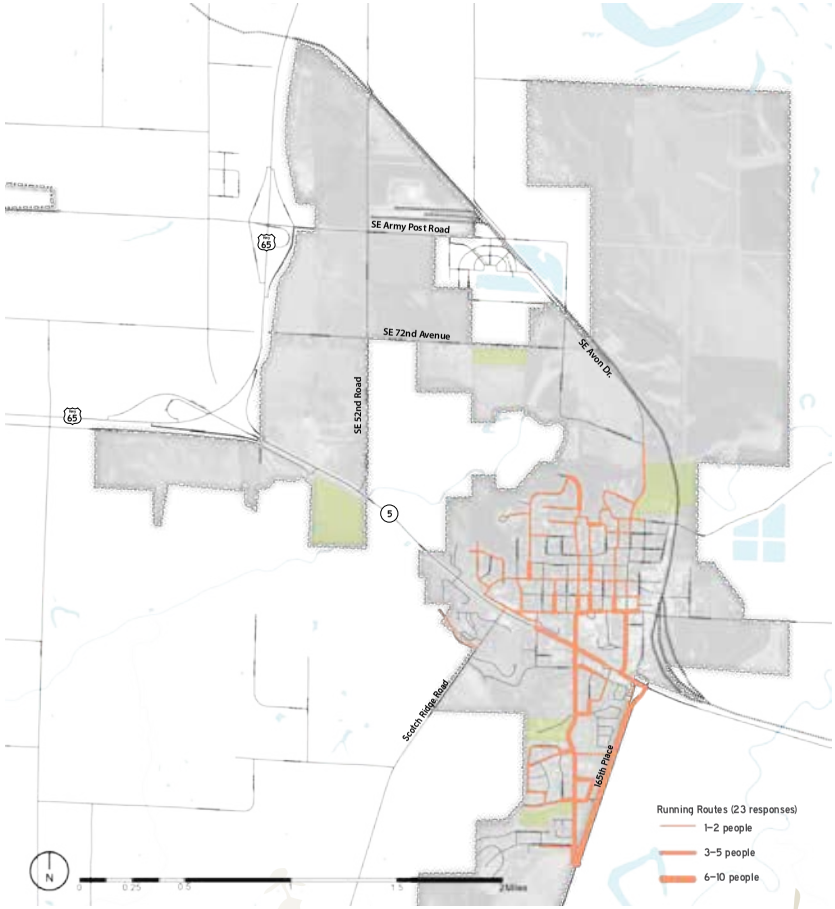
Summer 2016

SURVEY 4f

## Transportation Behavior and Needs - Preferred Running Routes

**How Often Did You Run During the Past Year? (129 responses)**
Survey participants were asked how often they ran during the past year. More than 95% of respondents answered this question. Of those people, 24% indicated that they ran. Nearly 10% of respondents ran less than once a month, 2.3% ran at least monthly, and 5.4% ran weekly. Of respondents who indicated that they run, 20% indicated that they do so more often during warmer weather months.

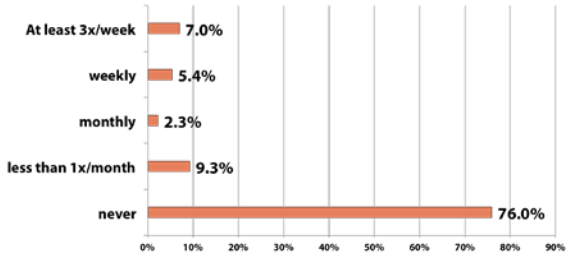
This map shows the running routes identified in the survey. The frequency that the routes are used is depicted by their thickness, with most frequently used routes being the thickest. Twenty three respondents provided running routes. Carlisle runners use many of the same routes used by walkers and cyclists, particularly in residential neighborhoods. Runners' routes connect to North Park, Lindhardt Park, and Volunteer Park. SE 5th Street from School Street south, across Highway 5, to the intersection with Summerset Trail is a popular running route, as is Summerset Trail. Highway 5 between 2nd and 8th Streets is also frequently used by runners, as well as S 1st Street adjacent to the high school.




*Map Source: Iowa Department of Natural Resources, "Natural Resources Geographic Information Systems Library," accessed October 2015, http://www.igsb.uiowa.edu/nrgislibx/. Route data derived from the 2016 Designing Livable Communities survey conducted by Iowa State University.*

# How Often People Run

How Often Did You Run During the Past Year? (129 responses)

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# Carlisle

## Transportation Behavior and Needs | Preferred Running Routes

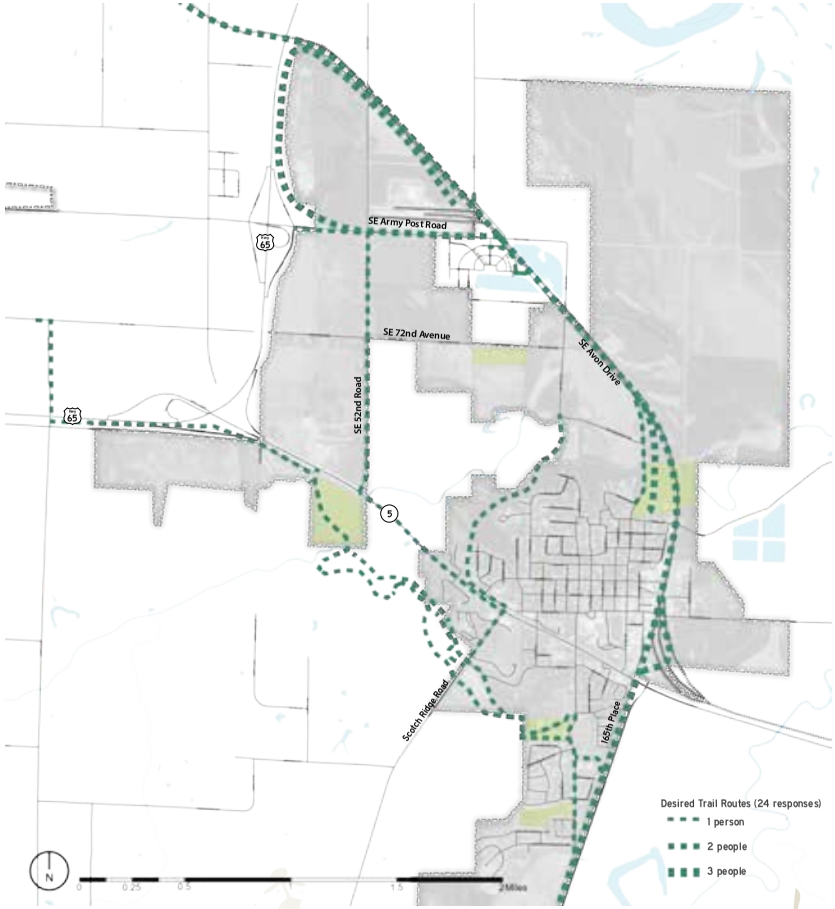
Iowa Department of Transportation  Trees Forever  ISU Landscape Architecture Extension  ISU Extension Community and Economic Development

Summer 2016

SURVEY 4g

## Transportation Behavior and Needs - Desired Trail Routes

This map shows the desired trail routes identified in the survey. The frequency that the routes are used is depicted by their thickness, with most frequently used routes being the thickest. Twenty-four survey participants identified routes for new trails. The trail routes identified mirror the walking, biking, and running patterns of participants in that the desired trails connect to city parks and the Scotch Ridge Nature Park. Participants also desire trail connections between Carlisle and the Des Moines trail system, as well as connections within the community itself. One of the popular desired trail routes follows the rail line from Summerset Trail north to US Highway 65 and beyond, presumably connecting with the Des Moines trail system. A trail connecting with the middle school is also popular, reflecting respondents' concern regarding children's access to the middle school.




*Map Source: Iowa Department of Natural Resources, "Natural Resources Geographic Information Systems Library," accessed October 2015, http://www.igsb.uiowa.edu/nrgislibx/. Route data derived from the 2016 Designing Livable Communities survey conducted by Iowa State University.*

# Where Do People Want Trails?

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"[We] need to link bike trails to the Des Moines system."

"[It] would be nice to have Summerset Trail connected to [the] rest of [the] area trails."

# Carlisle

## Transportation Behavior and Needs | Desired Trail Routes

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

IOWA'S LIVING ROADWAY

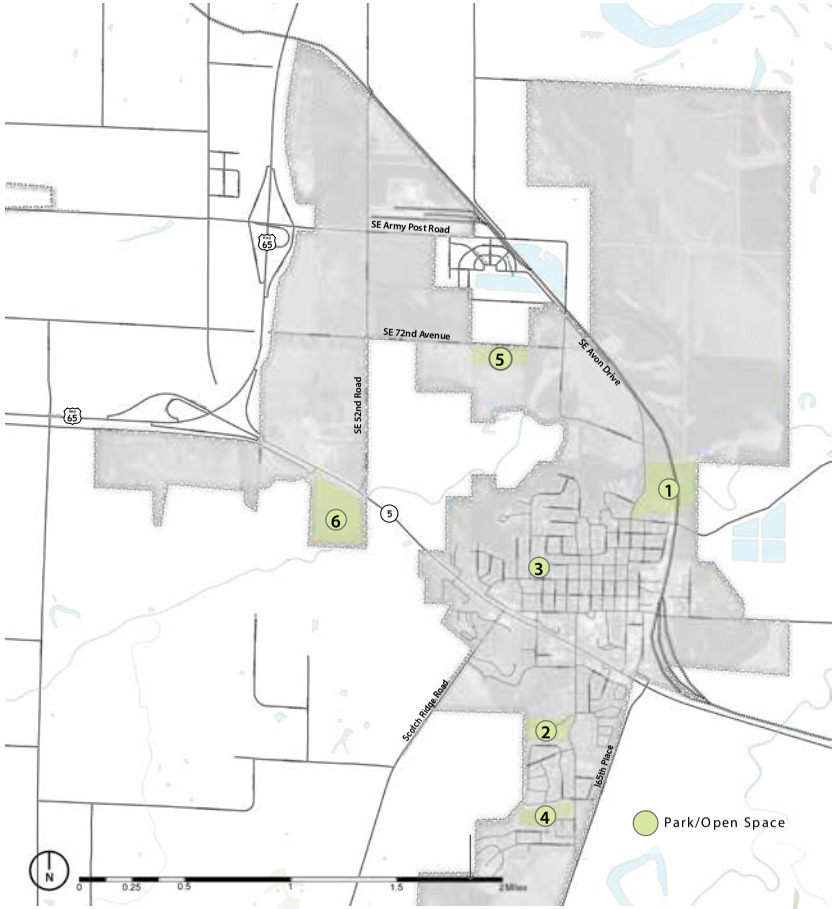
Summer 2016

SURVEY 4h

## Transportation Behavior and Needs - Preferred Parks

**Frequency of Park Visits (131 responses)**

Survey participants were asked how often they visited a park in or around Carlisle during the past year. Ninety-seven percent of respondents answered this question. Of those people, more than 80% indicated that they visited a park. More than 20% of respondents visited a park at least once a month. Nearly 15% of survey participants visit a park weekly.

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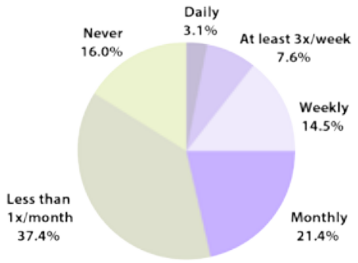
# How Often People Visit Parks

**Frequency of Park Visits (131 responses)**




Survey participants were asked how often they visited a park in or around Carlisle during the past year. Ninety-seven percent of respondents answered this question. Of those people, more than 80% indicated that they visited a park. More than 20% of respondents visited a park at least once a month. Nearly 15% of survey participants visit a park weekly.

# Where They Go

**Preferred Parks (103 responses)**

| | Park Name | Number of Respondents |
|---|---|---|
| 1 | North Park | 83 |
| 2 | Lindhardt Park | 35 |
| 3 | Water Tower Park | 9 |
| 4 | Volunteer Park | 6 |
| 5 | Soccer Complex | 3 |
| 6 | Scotch Ridge Nature Park | 2 |

# Carlisle

## Transportation Behavior and Needs | Preferred Parks

Iowa Department of Transportation  Trees Forever  ISU Landscape Architecture Extension  ISU Extension Community and Economic Development  Summer 2015

IOWA'S LIVING ROADWAY SURVEY 4i

## Transportation Inventory and Analysis

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

The Carlisle visioning design team worked with Iowa Department of Transportation (IDOT) personnel and local officials to identify past, present, and future transportation-related restraints and opportunities that could potentially affect project areas.

The vast majority of travelers who either pass through or enter Carlisle do so in personal vehicles on Highway 5, which connects to US Highway 65 at the northwest edge of Carlisle. There is a strong need for additional and safer crosswalks where this highway corridor runs through town. Traffic speed is a concern, as well as pedestrian visibility. Traffic calming measures to slow down motorists would improve pedestrian access and safety. Intersection improvements along this corridor will also be a tremendous benefit to students walking to and from school, as the highway is between many residents and their route to school.

The Summerset Trail and the connecting Scotch Ridge Nature Trail are both great assets to the community. An underpass for the Scotch Ridge Nature Trail is scheduled to be built soon. A mixed-use trail runs from School Street down South 1st Street to Highway 5, yet it doesn't fully connect to Summerset Trail. Other planned trail improvements include extending Carlisle's trail system north and west in order to connect to the Des Moines Trail system. This would greatly improve Carlisle's ability to draw recreational users from the Des Moines metro.

The Iowa Architectural Foundation completed a study of much of Carlisle in early 2016, prior to the Community Visioning process beginning. The information gathered and created during that process was also reviewed by the design team in order to fully understand past ideas and opportunities. The Community Visioning process is separate from the Iowa Architectural Foundation process, but it is important to be inclusive of other project ideas and goals when considering community improvements.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# Carlisle

## Transportation Inventory and Analysis

Landscape Architect and Intern: RDG Planning & Design - Bruce Niedermyer, PLA and Sara Davids

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

## Concept Overview

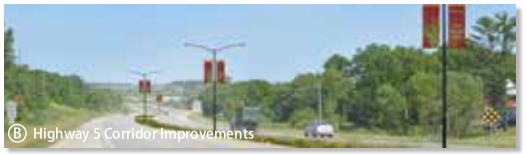
**Community Concept Plan**

This concept plan applies information gathered from transportation mapping, community surveys, and steering committee goals to develop a list of opportunities and create a vision for improving Carlisle. Based on priorities the steering committee identified from community feedback, these improvements focus on specific needs in Carlisle. High priority goals the steering committee identified and the design team address in this plan include:

- Entrance Enhancements
- Highway 5 Signage and Beautification
- Safe Routes to School through additional Sidewalk Connections
- Downtown Trail Connection
- Downtown Enhancements

Together these enhancements work to highlight important community features, improve city identity, and elevate aesthetics. The projects also serve to improve safety for pedestrians and cyclists alike. With implementation, the projects illustrated here and in more detail on subsequent boards work together to support continued growth and community pride for Carlisle. Implementation of these projects will require community-wide support and service. A survey completed early in the process showed that many community members are enthusiastic about helping out with donations of time or money.









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# Carlisle

## Concept Overview

Landscape Architect and Intern: RDG Planning & Design - Bruce Niedermyer, PLA and Sara Davids

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

## Community Concept Overview - Opinion of Probable Cost

| Description | Extended Amount |
|---|---|
| **ENTRANCE ENHANCEMENTS & SIGNAGE** | |
| **SUB-TOTAL** | **$ 762,000.00** |
| MOBILIZATION/GENERAL CONDITIONS - 5% | **$ 38,100.00** |
| CONTINGENCY - 15% | **$ 114,300.00** |
| DESIGN AND ENGINEERING - 10% | **$ 76,200.00** |
| Inflation - 3% | **$ 22,860.00** |
| **ESTIMATED CONSTRUCTION COST** | **$ 1,013,460.00** |

| | |
|---|---|
| **SAFE ROUTES TO SCHOOL** | |
| **SUB-TOTAL** | **$ 323,084.00** |
| MOBILIZATION/GENERAL CONDITIONS - 5% | **$ 16,154.20** |
| CONTINGENCY - 15% | **$ 48,462.60** |
| DESIGN AND ENGINEERING - 10% | **$ 32,308.40** |
| Inflation - 3% | **$ 9,692.52** |
| **ESTIMATED CONSTRUCTION COST** | **$ 429,701.72** |

| | |
|---|---|
| **DOWNTOWN ENHANCEMENTS** | |
| **SUB-TOTAL** | **$ 827,126.00** |
| MOBILIZATION/GENERAL CONDITIONS - 5% | **$ 41,356.30** |
| CONTINGENCY - 15% | **$ 124,068.90** |
| DESIGN AND ENGINEERING - 10% | **$ 82,712.60** |
| Inflation - 3% | **$ 24,813.78** |
| **ESTIMATED CONSTRUCTION COST** | **$ 1,100,077.58** |

| | |
|---|---|
| **GRAND TOTAL** | **$ 2,543,239.30** |

## Entrance Enhancements & Signage

**Corridor Signage**

A collection of signage is proposed to further strengthen the community's overall image and emphasize Carlisle's presence along Highway 5 and Highway 65. The theme for the design of the proposed signs comes from existing signage in order to harmonize with the community's established branding. Inspired by Carlisle's slogan, "The Natural Choice," the materials and patterns chosen evoke a more native feel, with natural stone, waving prairie grasses, and an earth-tone color palette. Each element greets newcomers and frequent travelers alike while indicating a sense of arrival into the community of Carlisle. The light poles and banners are proposed for the entire length of Highway 5 that is within Carlisle's city limits. This provides yet another feature to attract motorists traveling along Highway 65 to enter Carlisle and explore all that it has to offer. More information and graphics detailing the proposed entry sign, the relocation of the existing Highway 5 entrance sign, and the light poles with banners can be seen on board #8.

**Attracting Highway 65 Travelers**

Most visitors to Carlisle enter city limits from Highway 65, on the north edge of town. Other than a standard highway exit identification sign along this busy roadway, there is nothing to entice travelers to visit Carlisle and investigate all it has to offer. Creating a billboard or two along Highway 65 could have significant positive impacts on the amount of people visiting Carlisle on a daily basis. The billboard(s) could be generic while continuing to display a similar theme to the other community signage proposed, or could be much more specific. Often times, communities will market their historic downtowns with such billboards, or even a unique yearly festival. For the billboard sign shown below, the design team chose to focus on Carlisle being "The Natural Choice" for travelers with native vegetation shown in front of rolling hills and valleys, symbolic of Carlisle's landforms. Three separate options are shown on the map to the right for proposed locations of billboards. Each of these locations will need to be investigated to understand if landowners would be willing to lease space for a billboard to the City of Carlisle. The Iowa DOT has a number of restrictions that should be investigated prior to erecting a billboard along the highway as well. To access IDOT regulations for City and County Signs, visit the following website: http://www.iowadot.gov/iowaroadsigns/officialcitycountysigns.aspx

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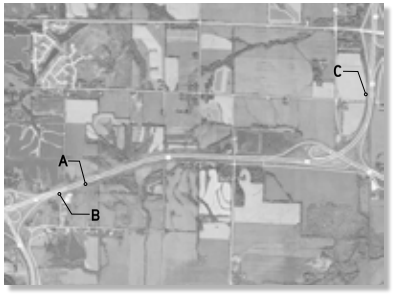

Proposed Billboard Location Options


Proposed billboard location along Highway 65 (2 miles west of Carlisle exit)


Before




Proposed Community Signage including Billboard Entry Sign, Entrance Monument Sign, Corridor Banners, and Gateway Sign

Existing Entry Sign

# Carlisle

## Entrance Enhancements & Signage

Landscape Architect and Intern: RDG Planning & Design - Bruce Niedermyer, PLA and Sara Davids

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

## Entrance Enhancements & Highway 5 Corridor Improvements

**Community Entrances**

Motorists enter Carlisle as soon as they exit US Highway 65, but there is no clear indication of arrival at this location. The current entrance sign, located to the left of Highway 5 as a driver nears Scotch Ridge Road, is in good condition but is not in an ideal location. A new Carlisle sign is proposed for the north entry into the community. The sign, shown in the above images, would be located west of Highway 5 in the northern most corner of Gateway Business Park. This is the best location for an entry sign that is close to the roadway while being outside of the IDOT right-of-way. Proposed to surround and frame the entrance sign would be a mix of native plantings and low maintenance trees and shrubs to further draw attention to the sign. The new monument sign base would be constructed of natural or cultured stone. These elements allow the sign to better connect the Carlisle's slogan, "The Natural Choice." It is also important to connect the design of this sign to other existing signs. Continuing use of the same fonts and colors schemes will establish this connection and will create a theme for all community signage. The entrance sign should be well-lit, either internally or with ground-mounted lighting to ensure visibility during evening hours. On the north side of town, near North Park, the existing entry sign needs updating. The existing entrance sign along Highway 5, which would no longer be needed after the new monument sign is built, is constructed in a way that allows it to be relocated. The design team recommends relocating that sign to the North Park location and providing updated landscaping around its base. This relocation would give this community entrance more prominence, and continue the same signage style that has already been established. This project would be a great opportunity to get community groups involved.

**Corridor Beautification**

Highway 5 is the main vehicular corridor through Carlisle. Currently there are problems with excessive traffic speeds, which result in the lack of pedestrian safety. To encourage traffic calming and increase aesthetics, native plantings are proposed for the medians that run through town on Highway 5. In addition, a series of interchangeable banners could be mounted on breakaway light poles to improve the appearance of the corridor and provide safe lighting at night. The plantings would consist of IDOT approved native grasses and wildflowers to create a more dynamic and colorful travel corridor that attracts wildlife, especially pollinators such as bees and butterflies, while not blocking any views of motorists.


Proposed Highway 5 Entrance Sign at north edge of Carlisle, looking southeast

Before

Before

Highway 5 Entrance Banners and Median Enhancements, looking northwest

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Existing Hwy 5 Entry Sign to be relocated to North 1st St.


North 1st Street Entrance Sign relocated from existing Hwy 5 location, looking south

Before

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# Carlisle

## Entrance Enhancements & Highway 5 Corridor Improvements

Landscape Architect and Intern: RDG Planning & Design - Bruce Niedermyer, PLA and Sara Davids

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

## Entrance Enhancements & Signage - Opinion of Probable Cost

| Description | Quantity | Unit | Unit Cost | Extended Amount |
|---|---|---|---|---|
| **GENERAL REQUIREMENTS** | | | | |
| Property Acquisitions/Easements | N/A | | | |
| **HIGHWAY 65 BILLBOARD** | | | | |
| Billboard Structure (Footings, poles, backer, etc.) | 1 | EA | $15,000.00 | $ 15,000.00 |
| Graphic Production & Printing | 1 | LS | $1,600.00 | $ 1,600.00 |
| Solar powered lighting | 1 | LS | $4,000.00 | $ 4,000.00 |
| **ENTRANCE MONUMENT SIGN** | | | | |
| Excavation | 1 | LS | $3,000.00 | $ 3,000.00 |
| Foundation/CMU Core | 1 | LS | $15,000.00 | $ 15,000.00 |
| Natural Bed Limestone Veneer - 3.5" thick | 300 | SF | $52.00 | $ 15,600.00 |
| Cast Stone Cap (31'X5') | 155 | SF | $80.00 | $ 12,400.00 |
| Painted Boxed Metal Letters spelling "CARLISLE" | 8 | EA | $1,500.00 | $ 12,000.00 |
| 18' Painted Metal Panel w/ "The Natural Choice" text | 1 | LS | $2,000.00 | $ 2,000.00 |
| LED ground-mounted lighting (power supply unknown) | 1 | LS | $3,500.00 | $ 3,500.00 |
| Landscaping | 1 | LS | $2,000.00 | $ 2,000.00 |
| **HIGHWAY 5 LIGHT POLES & BANNERS** | | | | |
| Dual-head light poles within center median | 23 | EA | $9,000.00 | $ 207,000.00 |
| (From Hwy 65 to Scotch Ridge Rd. @ 300' O.C.) | | | | |
| Single-head light poles outside of roadway | 46 | EA | $7,000.00 | $ 322,000.00 |
| (Scotch Ridge Rd. to 165th Pl. @ 200' O.C. each side) | | | | |
| Banners/Brackets | 92 | EA | $450.00 | $ 41,400.00 |
| (2 per dual-head poles + 1 per single-head poles) | | | | |
| **MEDIAN PLANTINGS** | | | | |
| Removal of Existing Concrete | 42,500 | SF | $2.00 | $ 85,000.00 |
| Soil Preparation | 1.25 | AC | $1,500.00 | $ 1,875.00 |
| Wildflower/Native Grass Seeding (less than 2' tall mix) | 1.25 | AC | $3,500.00 | $ 4,375.00 |
| 3-year Maintenance for Natives | 1 | LS | $5,000.00 | $ 5,000.00 |
| **RELOCATE EXISTING ENTRANCE SIGN** | | | | |
| Remove old sign at North Park | 1 | LS | $250.00 | $ 250.00 |
| Removal/Transport/Reinstall Existing Sign | 1 | LS | $2,500.00 | $ 2,500.00 |
| Foundation at New Site | 1 | LS | $3,000.00 | $ 3,000.00 |
| Potential Sign Repairs | 1 | LS | $500.00 | $ 500.00 |
| New LED Lighting (power supply unknown) | 1 | LS | $500.00 | $ 500.00 |
| New Landscaping | 1 | LS | $2,500.00 | $ 2,500.00 |
| | | | | |
| **SUB-TOTAL** | | | | **$ 762,000.00** |
| MOBILIZATION/GENERAL CONDITIONS - 5% | | | | **$ 38,100.00** |
| CONTINGENCY - 15% | | | | **$ 114,300.00** |
| DESIGN AND ENGINEERING - 10% | | | | **$ 76,200.00** |
| Inflation - 3% | | | | **$ 22,860.00** |

## Safe Routes to School

**Sidewalk Connectivity**

The Highway 5 corridor is currently focused on vehicular transportation, is lacking important sidewalk connections, and acts as a barrier that divides Carlisle into two separate regions. This prevents pedestrians from easily accessing this route and creates dangerous crossing experiences. In addition, the disconnected routes prevent students from easily and safely walking to school, especially if their homes are located on the opposite side of Highway 5 from their school. Several sidewalk connections are proposed along this corridor to connect these routes and encourage more safe pedestrian-use. One connection shown above links the middle school to Highway 5 and then leads pedestrians southeast to an existing sidewalk along the corridor. Another series of proposed links connects the elementary school down to an improved crosswalk at 5th Street and Highway 5. The sidewalk then extends southeast to the proposed downtown gateway intersection.

Connecting routes through town not only creates safe routes to school, but encourages recreation and creates easier opportunities for exercise. Businesses near this route would benefit from increased traffic, and neighborhoods will feel less divided by the highway. A more pedestrian friendly corridor also assists in slowing drivers as they perceive the change from an open highway to more enclosed community experience.

One of the most dangerous intersections in town is the intersection of Highway 5 and Scotch Ridge Road. The City of Carlisle is in the process of hiring an engineer to complete a study of this intersection in order to fully understand potential changes in its design. The pedestrian connections of this intersection should be considered just as important as the vehicular access during this study to ensure safe experiences for the children of Carlisle who need to be able to get to school.

Many of these sidewalk and trail connections are fairly simple projects and were noted as desired improvements during the survey process conducted by Iowa State University. It is clear that these improvements would benefit a majority of community members and would allow Carlisle to move from a divided community to a seemless community.


Safe Routes to School Sidewalk Connections


5th Street and Highway 5 Crosswalk, looking southeast

Before

## Sidewalk Connectivity

The Highway 5 corridor is currently focused on vehicular transportation, is lacking important sidewalk connections, and acts as a barrier that divides Carlisle into two separate regions. This prevents pedestrians from easily accessing this route and creates dangerous crossing experiences. In addition, the disconnected routes prevent students from easily and safely walking to school, especially if their homes are located on the opposite side of Highway 5 from their school. Several sidewalk connections are proposed along this corridor to connect these routes and encourage more safe pedestrian-use. One connection shown above links the middle school to Highway 5 and then leads pedestrians southeast to an existing sidewalk along the corridor. Another series of proposed links connects the elementary school down to an improved crosswalk at 5th Street and Highway 5. The sidewalk then extends southeast to the proposed downtown gateway intersection.

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Before


Highway 5 Sidewalk Connection, looking northwest

# Carlisle

## Safe Routes to School

Landscape Architect and Intern: RDG Planning & Design - Bruce Niedermyer, PLA and Sara Davids

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

## Safe Routes to School - Opinion of Probable Cost

| Description | Quantity | Unit | Unit Cost | Extended Amount |
|---|---|---|---|---|
| **GENERAL REQUIREMENTS** | | | | |
| Property Acquisitions/Easements | N/A | | | |
| Traffic Control | 1 | LS | $5,000.00 | $ 5,000.00 |
| **DEMOLITION** | | | | |
| Curb Cuts for ADA Ramps | 12 | EA | $500.00 | $ 6,000.00 |
| **HARDSCAPE** | | | | |
| Concrete Sidewalks & ADA Warning Pavers | 37,000 | SF | $7.00 | $ 259,000.00 |
| Median removal (half medians E & W of 1st St.) | 990 | SF | $4.00 | $ 3,960.00 |
| Median Replacement (2' wider for 'safe refuge') | 1,650 | SF | $10.00 | $ 16,500.00 |
| Pedestrian Actuation Bollards (at medians) | 2 | EA | $2,000.00 | $ 4,000.00 |
| Stamped, Colored Concrete Crosswalks (1st St./Hwy 5) | 1,452 | SF | $12.00 | $ 17,424.00 |
| **UTILITIES** | | | | |
| Minor Utility Adjustments | 1 | LS | $10,000.00 | $ 10,000.00 |
| **SITE IMPROVEMENTS** | | | | |
| Crosswalk Marking Paint (other intersections) | 4 | EA | $300 | $ 1,200.00 |
| | | | | |
| **SUB-TOTAL** | | | | **$ 323,084.00** |
| MOBILIZATION/GENERAL CONDITIONS - 5% | | | | **$ 16,154.20** |
| CONTINGENCY - 15% | | | | **$ 48,462.60** |
| DESIGN AND ENGINEERING - 10% | | | | **$ 32,308.40** |
| Inflation - 3% | | | | **$ 9,692.52** |
| **ESTIMATED CONSTRUCTION COST** | | | | **$ 429,701.72** |

## Downtown Plan + Trail Connection

**Carlisle Trail Connection**

Currently, the Summerset trail ends at the trailhead located just to the southeast of Casey's and Fiss'. There is a great opportunity to extend this trail and bring cyclists into Carlisle's downtown. A proposed Highway 5 crossing and new gateway signage will lead cyclists and visitors into the heart of the community rather than having them turn back at the trailhead. Safety is an important component in trail planning. The combination of the intersection improvements shown on board #11 and additional signage will allow for a safe and easily identifiable crossing. Once cyclists arrive in downtown, they are led on a shared lane route along School Street to a proposed community park and bike hub that serves as a trailhead within downtown.

**Downtown Plan**

To create a biking destination within downtown Carlisle, a community park is proposed to be located adjacent to Garfield Street. School Street, a main route though downtown, is proposed to include additional bump-outs to assist in pedestrian safety and serve as a traffic-calming mechanism. In addition, proposed tree wells provide much appreciated shade and buffers between parked cars. These improvements create a more vibrant, active, and pedestrian-friendly downtown, which is beneficial to local businesses and provides the community with additional space for activities. The proposed park and bike hub will be a space that the community can use to host events and concerts. In addition, it serves cyclists by giving them a place to rest, grab a bite to eat, and/or tune up their bicycles at the end (or beginning) of a trail ride. Opposite the park, on Garfield Street, a new parking lot is proposed to support an increase of vehicular traffic downtown. This downtown park also has the opportunity to grow even larger than what is shown on the plan to the right of this page if certain properties to the east become available. Additional space could allow room for a larger programmable green space or implementation of an additional small parking lot to serve the park and downtown businesses.

The combination of these proposals encourages more traffic in downtown, whether by vehicle, bicycle, or on foot. By creating a destination for cyclists, Carlisle can begin to draw more riders to their community. Additional signage to note where trails are located, such as the shown "Cycle Carlisle" sign, will bring awareness to where the existing trails and routes can be found. These proposed improvements also benefit other trail initiatives currently taking place within the Des Moines metro including the future connection of a bike trail from Carlisle to Des Moines.

Downtown Trail Connection

## Carlisle Trail Connection

Currently, the Summerset trail ends at the trailhead located just to the southeast of Casey's and Fiss'. There is a great opportunity to extend this trail and bring cyclists into Carlisle's downtown. A proposed Highway 5 crossing and new gateway signage will lead cyclists and visitors into the heart of the community rather than having them turn back at the trailhead. Safety is an important component in trail planning. The combination of the intersection improvements shown on board #11 and additional signage will allow for a safe and easily identifiable crossing. Once cyclists arrive in downtown, they are led on a shared lane route along School Street to a proposed community park and bike hub that serves as a trailhead within downtown.

### Downtown Plan

To create a biking destination within downtown Carlisle, a community park is proposed to be located adjacent to Garfield Street. School Street, a main route though downtown, is proposed to include additional bump-outs to assist in pedestrian safety and serve as a traffic-calming mechanism. In addition, proposed tree wells provide much appreciated shade and buffers between parked cars. These improvements create a more vibrant, active, and pedestrian-friendly downtown, which is beneficial to local businesses and provides the community with additional space for activities. The proposed park and bike hub will be a space that the community can use to host events and concerts. In addition, it serves cyclists by giving them a place to rest, grab a bite to eat, and/or tune up their bicycles at the end (or beginning) of a trail ride. Opposite the park, on Garfield Street, a new parking lot is proposed to support an increase of vehicular traffic downtown. This downtown park also has the opportunity to grow even larger than what is shown on the plan to the right of this page if certain properties to the east become available. Additional space could allow room for a larger programmable green space or implementation of an additional small parking lot to serve the park and downtown businesses.

The combination of these proposals encourages more traffic in downtown, whether by vehicle, bicycle, or on foot. By creating a destination for cyclists, Carlisle can begin to draw more riders to their community. Additional signage to note where trails are located, such as the shown "Cycle Carlisle" sign, will bring awareness to where the existing trails and routes can be found. These proposed improvements also benefit other trail initiatives currently taking place within the Des Moines metro including the future connection of a bike trail from Carlisle to Des Moines.

Proposed Downtown Enhancements Plan



Existing Downtown

# Carlisle

## Downtown Plan + Trail Connection

Landscape Architect and Intern: RDG Planning & Design - Bruce Niedermyer, PLA and Sara Davids

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

## Downtown Enhancements

**Downtown Park and Bike Hub**

Open space in an existing downtown district is often hard to come by. Carlisle is lucky to have an open area available adjacent to the new Chamber of Commerce office on the corner of School Street and Garfield Street. This space provides the opportunity to establish a downtown park to serve community members and visitors alike.

This proposed recreational park has the opportunity to provide a vibrant new gathering space for the community of Carlisle. With opportunities to host family fun days, evening concerts, and community celebrations, this would be a great addition to Carlisle's downtown. As shown in the image above, a proposed multi-use stage opens up opportunities for local performances, while an open green space leaves plenty of room for gathering and activities.

Integrating a bike hub, a space designed for bicyclists with bicycle-focused amenities, into the park creates a destination for cyclists in Carlisle and encourages them to continue from Summerset Trail into downtown. Things many cyclists seek out; food, drinks, safe bike parking, and entertainment, could be available at this stop. Integration of elements like Fix-It stations, where cyclists can complete quick repairs and tune up their bikes, will show that Carlisle welcomes the cycling community and encourages regional tourism and recreation.

**Downtown Gateway**

The intersection of South 1st Street and Highway 5 serves as a main entry to Carlisle's downtown. It is a busy intersection, with businesses including Fiss' and Casey's to the south, and access to downtown to the north. Busy Highway 5 becomes a barrier for pedestrians and lacks safe pedestrian crossings to encourage people to get from one side to the other without being in a vehicle. To remedy this unsafe situation, improvements are needed at this intersection, as well as others along Highway 5. The top right image shows proposed crosswalk enhancements including a decorative crossing that clearly indicates to motorists that pedestrians have the right-of-way. The medians are widened slightly to create refuge zones in the center, making it easier for pedestrians to get to a safe point in their crossing. With the north and south sides of Highway 5 linked, a trail connection is made from the Summerset Trailhead all the way to School Street in downtown (see board #10). In addition to creating a safer crossing for pedestrians, the enhanced crosswalks create a great first impression of the community and have an opportunity to draw travelers' eyes to a proposed gateway arch clearly marking the route to downtown.

The gateway arch is intended to be constructed with materials similar to those represented in other signage throughout town, including the proposed entrance signage on the north edge of town (shown on board #8). This style of design allows a theme to be carried throughout all Carlisle signage and allows visitors to easily understand that each piece is part of a larger family of signage.

Downtown Park and Bike Hub with bike parking and stage, looking west

Before

Downtown Gateway at Highway 5 and South 1st Street Crosswalk, looking northeast

Before

### Downtown Park and Bike Hub

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# Carlisle

## Downtown Enhancements

Landscape Architect and Intern: RDG Planning & Design - Bruce Niedermyer, PLA and Sara Davids

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

# Downtown Enhancements & Trail Connections - Opinion of Probable Cost

| Description | Quantity | Unit | Unit Cost | Extended Amount |
|---|---|---|---|---|
| **GENERAL REQUIREMENTS** | | | | |
| Traffic Control | 1 | LS | $5,000.00 | $ 5,000.00 |
| Property Acquisitions | N/A | | | |
| **ARCHWAY AT SOUTH 1ST STREET** | | | | |
| Footings/CMU Columns | 2 | EA | $7,000.00 | $ 14,000.00 |
| Stone/Masonry Veneer | 512 | SF | $48.00 | $ 24,576.00 |
| Metal Work Framing | 1 | LS | $20,000.00 | $ 20,000.00 |
| LED Back-lit Metal Letters | 24 | EA | $500.00 | $ 12,000.00 |
| **DOWNTOWN PARK & BIKE HUB** | | | | |
| Concrete Removal | 2,750 | SF | $2.00 | $ 5,500.00 |
| Concrete Paving - Walks | 2,000 | SF | $7.00 | $ 14,000.00 |
| Concrete Paving - Curbs | 2,800 | LF | $20.00 | $ 56,000.00 |
| Pavers on Concrete Subslab | 1,000 | SF | $16.00 | $ 16,000.00 |
| Performance Stage | 1 | LS | $350,000.00 | $ 350,000.00 |
| Bike Racks & Site Furniture | 1 | LS | $15,000.00 | $ 15,000.00 |
| Raised Planters | 5 | EA | $2,500.00 | $ 12,500.00 |
| Site Grading/Lawn Seeding | 9,000 | SF | $0.30 | $ 2,700.00 |
| Tree Planting | 10 | EA | $350.00 | $ 3,500.00 |
| Cycle Carlisle Signage (locations TBD) | 1 | LS | $1,000.00 | $ 1,000.00 |
| **STREETSCAPE & PARKING LOT** | | | | |
| Concrete Removal | 8,400 | SF | $2.00 | $ 16,800.00 |
| Concrete Paving - Curbs | 2,400 | LF | $20.00 | $ 48,000.00 |
| Concrete Paving - Walks | 6,400 | SF | $7.00 | $ 44,800.00 |
| Street Repairs (25% of adjacent roadway) | 6,000 | SF | $9.00 | $ 54,000.00 |
| Parking Lot Removals/Grading/Prep Work | 1 | LS | $2,000.00 | $ 2,000.00 |
| Parking Lot Paving & Striping | 4,150 | SF | $8.00 | $ 33,200.00 |
| Bike Racks & Site Furniture | 1 | LS | $20,000.00 | $ 20,000.00 |
| Potential Street Lighting Updates | 1 | LS | $15,000.00 | $ 15,000.00 |
| Pavement Marking Paint (Crosswalks, Parking Stalls) | 1 | LS | $3,500.00 | $ 3,500.00 |
| Tree Planting | 13 | EA | $350.00 | $ 4,550.00 |
| Perennial Planting @ Tree Wells | 10 | EA | $300.00 | $ 3,000.00 |
| Shared Bicycle Lane Painting | 1 | LS | $500.00 | $ 500.00 |
| **UTILITIES** | | | | |
| Potential Utility & Structure Adjustments | 1 | LS | $30,000.00 | $ 30,000.00 |
| | | | | |
| **SUB-TOTAL** | | | | **$ 827,126.00** |
| MOBILIZATION/GENERAL CONDITIONS - 5% | | | | **$ 41,356.30** |
| CONTINGENCY - 15% | | | | **$ 124,068.90** |
| DESIGN AND ENGINEERING - 10% | | | | **$ 82,712.60** |
| Inflation - 3% | | | | **$ 24,813.78** |
| **ESTIMATED CONSTRUCTION COST** | | | | **$ 1,100,077.58** |

## Implementation Strategies

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

**Key Recommendations**

Based on economic return and increased quality of life, it is recommended that projects be approached individually, keeping in mind that some may run concurrently and others may require phasing. It is important to have two goals related to implementation: create success and build on those successes. Initial projects should most likely require the least funding and present the fewest barriers to implementation. Many of the projects proposed in this document and through this process have numerous elements incorporated with one another. These elements have the potential of being separated out and completed systematically. This will provide an opportunity to address smaller, more affordable portions of work to build success without huge fundraising efforts.

**Entrance Enhancements & Signage**

The improvements planned for Carlisle's community signage has potential to create an extremely positive first impression for travelers visiting Carlisle. Even when not yet to Carlisle, but traveling on Highway 65 and viewing the proposed billboards, motorists will become interested in exploring what Carlisle has to offer.

One of the most visible projects proposed in this document is the new community entrance sign on the north edge of Carlisle. This proposed sign helps motorists understand that they are entering Carlisle, even if they've previously thought the City boundary was further south. Supporting that experiential change will be the proposed light poles and banners that will march along Highway 5 and guide visitors and residents through Carlisle. These poles and banners will even be apparent to people as they drive along Highway 65 on the north edge of town.

Finding ways to market the completion of these projects as a continuous Community Visioning effort will inspire more residents to become involved in this process, either physically or financially. This type of advertisement could lead to a service group volunteering to relocate the existing Carlisle Entrance sign currently located near Scotch Ridge Road or even maintain the median plantings. If a volunteer effort is executed, be sure to keep advertising that the origin of the work comes from the Community Visioning process. The signage and updated branding for Carlisle has great opportunities for economic impact. Funding sources that specifically focus on economic development should be investigated for these projects. The Iowa Department of Transportation funds numerous grant programs that would benefit the Highway 65 and Highway 5 corridors.

**Safe Routes to School/Recreational Trails**

The design proposal for these improvements seems fairly simple, but the amount of sidewalk that needs to be added or enhanced adds up rather quickly. One of the most beneficial aspects of this concept is the fact that the improved routes will connect the existing schools within Carlisle through a safe, walkable route that allows children and adults alike the opportunity to remove themselves from the dangers associated with walking in the street. Improvements specific to the intersection of Highway 5 and South 1st Street, including a widened median and stamped concrete crosswalk, improve pedestrian safety immensely. There are state sidewalk improvement programs as well as specific Safe Routes to School programs that should be tapped into in order to bring these concepts to reality. Also, these improvements will greatly improve the walkability of Carlisle, which is very important in any health-based funding sources. The connection of new sidewalks that have the dual purpose of trail connections/loops is also very important.

**Downtown Enhancements**

When looking for funding sources for the work proposed downtown, focusing on bicycling opportunities and local economy continues to be important. The proximity of downtown to the Summerset Trail is a great opportunity for local businesses. Proper signage, attracting people to the district, is very important. Funding sources for facade restoration should be investigated for those buildings that need to be rehabilitated. Often, investigating opportunities typically reserved for Main Street communities is beneficial to small towns in Carlisle's position. There are other opportunities for funding in relationship to infrastructure replacement, specifically if there are sustainable solutions that can be created. This should be kept in mind throughout all implementation. Smaller funding opportunities can help too. Bike racks, site furniture, and plant material are often easily paid for by smaller funding sources.

Carlisle has strategically identified community projects with great potential for success. The community should take a two-pronged approach to project implementation which includes: completion of select projects within a short timeframe and commencement of the fundraising and planning process for larger-scale, keystone projects. These improvements will increase the quality of life for all citizens of Carlisle, as well as develop and enhance a positive identity for the community.

**Available Resources**

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

**Funding Opportunities**

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

**Funding Sources**

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

**Grant Programs**

- Alliant Energy and Trees Forever Branching Out Program
- Federal Transportation Enhancement Act (TEA-21)
- Federal Surface Transportation Program (STP)
- Iowa Clean Air Attainment Program (ICAAP)
- Iowa DOT/DNR Fund Iowa
- Iowa DOT Iowa's Living Roadways Projects Program
- Iowa DOT Living Roadways Trust Fund Program
- Iowa DOT Pedestrian Curb Ramp Construction Program
- Iowa DOT Statewide Transportation Enhancement Funding
- Iowa DNR Recreation Infrastructure Program
- Land and Water Conservation Fund
- National Recreational Trails Program
- Pheasants Forever
- Revitalization Assistance for Community Improvement (RACI) Grant Program
- State Recreational Trails Program

## Appendix A

# Common Contacts for Community Visioning

### Signing

- General questions: District 1 Planner – Mike Clayton
  515-239-1202 or mike.clayton@dot.iowa.gov
- Specific types of signing: Office of Traffic & Safety at
  http://www.iowadot.gov/iowaroadsigns/index.aspx

### Funding

- General questions: District 1 Planner – Mike Clayton
  515-239-1202 or mike.clayton@dot.iowa.gov

- Federal and State Rec Trails Program:
  http://www.iowadot.gov/systems_planning/fedstate_rectrails.htm
  Yvonne Diller (Office of Systems Planning)
  515-239-1252 or yvonne.diller@dot.iowa.gov

- Statewide Transportation Alternatives Program:
  http://www.iowadot.gov/systems_planning/trans_enhance.htm
  Pam Lee (Office of Systems Planning)
  515-239-1810 or pamella.lee@dot.iowa.gov

  Safe Routes to Schools: http://www.iowadot.gov/saferoutes
  Deb Arp (Office of Systems Planning)
  515-239-1681 or debra.arp@dot.iowa.gov

- Regional Transportation Enhancement Program: Shirley Helgevold (MIDAS Council of Governments) 515-576-7183, ext. 212 or shelgevold@midascog.net

### Roadside Vegetation

- Mark Masteller (Office of Design)
  515-239-1424 or mark.masteller@dot.iowa.gov
  or
  Evelyn O'Loughlin (Office of Design)
  515-239-1078 or evelyn.oloughlin@dot.iowa.gov

The Iowa Department of Transportation's

# Guide to Transportation Funding Programs

can be found online at the following address:

**http://www.iowadot.gov/pol_leg_services/Funding-Guide.pdf**

*The Title Page and Table of Contents can be found on the following three pages.*

# Guide to
# Transportation Funding Programs

## of interest to local governments and others

In this document you will find information regarding state and federal programs that provide transportation project funding of interest to local governments and other entities. This information is intended to serve as a guide for preliminary funding searches. For more detail, we encourage you to contact the Iowa Department of Transportation (DOT) office listed for each program. (In some cases, the DOT district office or a Regional Planning Affiliation/Metropolitan Planning Organization is the recommended contact – maps and information for your area can be found beginning on page 81.)

Please note: the FAST Act, a surface transportation reauthorization bill passed in Dec. 2015, made several changes to funding programs. While this document incorporates many of the changes, USDOT guidance has not yet been received for some programs. You are advised to contact the offices listed for the most current information.

As always, to help you find as many potential funding sources as possible, we have included some programs under more than one heading.

**April 2016**

IOWA DOT
SMARTER | SIMPLER | CUSTOMER DRIVEN

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