Focus Group (February 18, 2023): Focus group participants listen to questions about transportation-related assets and barriers before providing their feedback

Design Workshop (July 4, 2023): The public design workshop was held during West Burlington's annual July 4th celebration, coinciding with the fireman's annual pancake breakfast

Design workshop (July 4, 2023): Participants had the opportunity to design proposed project areas based on their preferences (see above), and fill out questionnaires and comments about desired enhancements

Design Workshop (July 4, 2023): Community members participate in the interactive design workshop and talk with the design team

Program Overview

The city of West Burlington is one of 10 communities selected to participate in the 2023 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 (less than 10,000 residents).

Visioning Program Goals:

- Develop a conceptual plan and implementation strategies alongside local community residents.
- Enhance the natural, cultural and visual resources existing within communities.
- Assist local communities in using external funds as leverage for transportation corridor enhancement.

Each visioning community works through a planning process consisting of four phases of concept development:

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

Each visioning community is represented by a steering committee of local residents and stakeholders who take part in a series of meetings that are facilitated by field coordinators from Trees Forever.

Iowa State University's Department of Landscape Architecture and ISU Extension and Outreach, of which Community Visioning is part, manage the visioning process and the design team. In addition, ISU project staff and interns conduct a bioregional assessment and public input sessions, including transportation assets and barriers (TAB) focus groups, and a random-sample survey. Iowa State University, along with Trees Forever and the Iowa Department of Transportation, select private-sector Professional Landscape Architects (PLA) to be part of the design team and work with the various communities in creating their "community vision" and transportation enhancement plan.

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

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

Community Goals

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

- Improve pedestrian connectivity and accessibility
- Implement branded way-finding to enhance the community's identity, user experience, and streetscape aesthetics
- Enhance the West Burlington trail system by 1) extending it to create a connected system within the community, 2) connecting it to the regional Flint River Trail, 3) adding additional site amenities such as benches and shade trees to improve user comfort, and 4) creating a trailhead

Refer to board 6, "What, Where, & Why," for further details related to the main community goals summarized above.

Capturing the West Burlington Vision

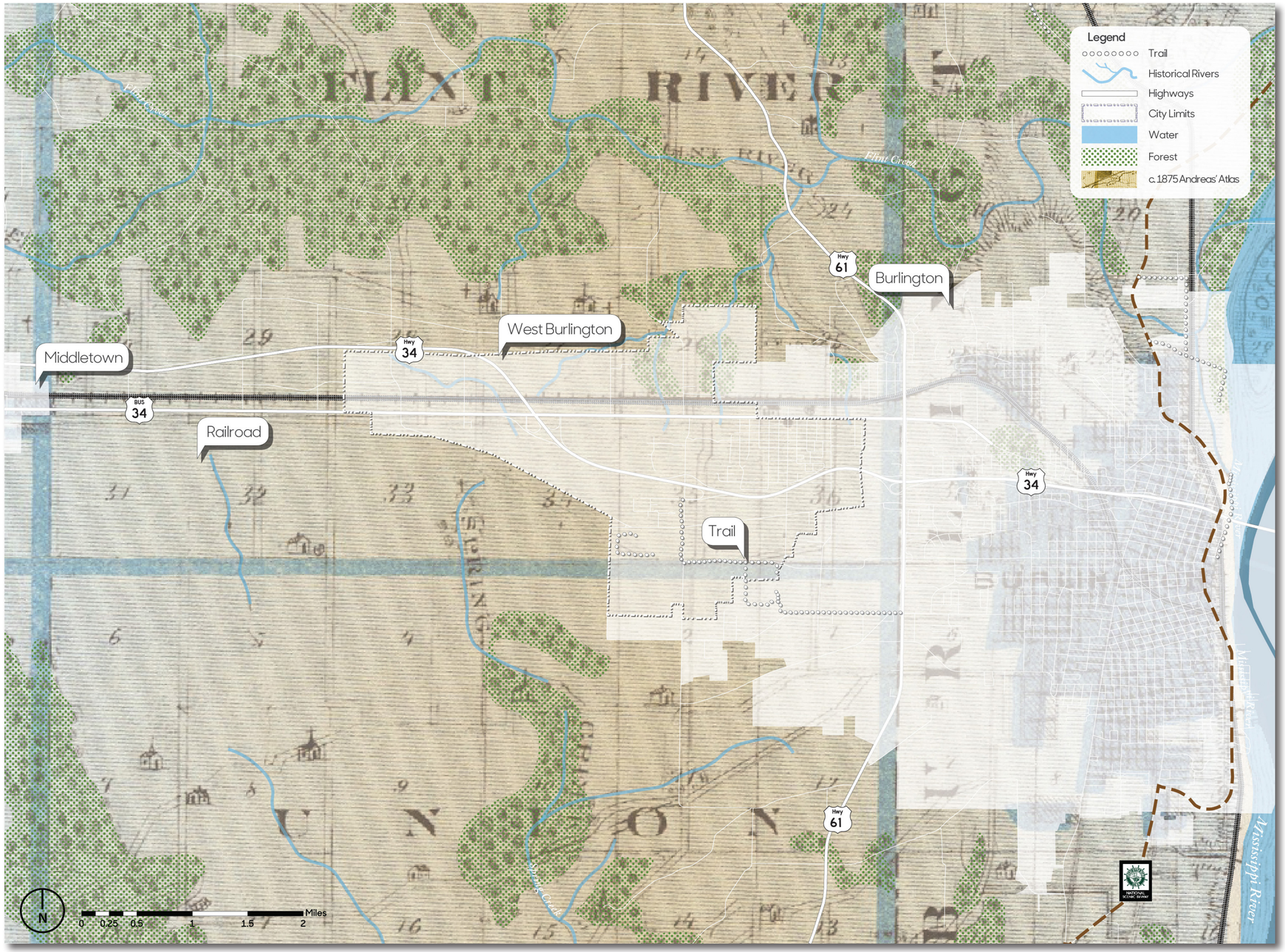
Based on the needs and desires of the local residents, as well as a detailed inventory of community resources, the design team developed transportation-based community improvement project concepts, which are illustrated in the following set of presentation boards:

1. Program Overview
2. Bioregional Assessments
3. Transportation Assets and Barriers
4. Transportation Behaviors and Needs
5. Transportation Inventory & Analysis
6. What, Where, & Why
7. Concept Plan
8. Community Identity & Entryways
9. Accessibility & Safety
10. Trailhead

West Burlington
Program Overview

Flenker Land Architects Consultants,LLC
LA: Meg Flenker, PLA, CPESC, CPSWQ
Interns: Mikky Ojha, Trevor Smith
Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning 2023



Map Source: Iowa Department of Natural Resources, "Natural Resources Geographic Information Systems Library,"

Settlement Patterns

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

Community in Context

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

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

West Burlington

Historical Settlement Patterns

Bioregional Context

Julia Badenhope, Chad Hunter

Lead intern: Joslyn Schafer

Iowa State University | Trees Forever | Iowa Department of Transportation

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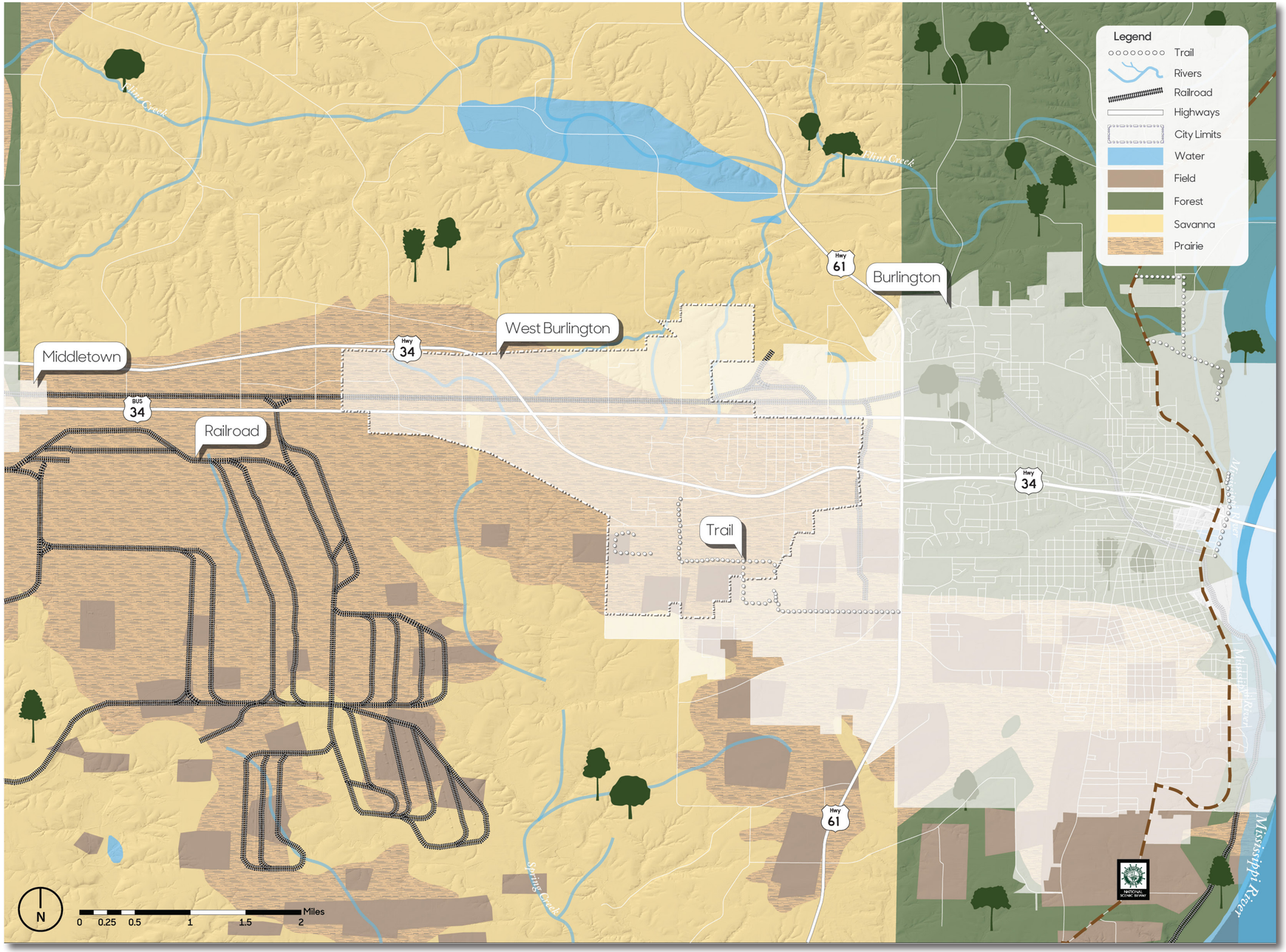

Map Source: Iowa Department of Natural Resources, "Natural Resources Geographic Information Systems Library," http://www.igsb.uiowa.edu/nrgislibx/.

Historical Vegetation

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

The names of plant communities mapped by the GLO surveyors varied. The original terminology used by the surveyors who made maps has been preserved in the original data, but we have re-named these types on this map to reflect names used to describe contemporary ecological vegetation communities.

Not all communities will have all vegetation types, because various conditions that effect vegetation- such as geology, exposure to wind, seasonally high water or ground water, and frequency of fire- differ from place to place.
The following types have been mapped :

1. Forest: Tree dominated, with a mostly closed canopy. Ground vegetation shade tolerant. developed under infrequent fire.
2. Savanna: Scattered trees, with an open canopy, and prairie below. Fire dominated.
3. Prairie: Perennial non woody plants, fire dominated.
4. Field: Cultivated lands of early pioneers or Native Americans.

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

West Burlington
Historical Vegetation

Bioregional Context
Julia Badenhope, Chad Hunter
Lead intern: Joslyn Schafer
Iowa State University | Trees Forever | Iowa Department of Transportation

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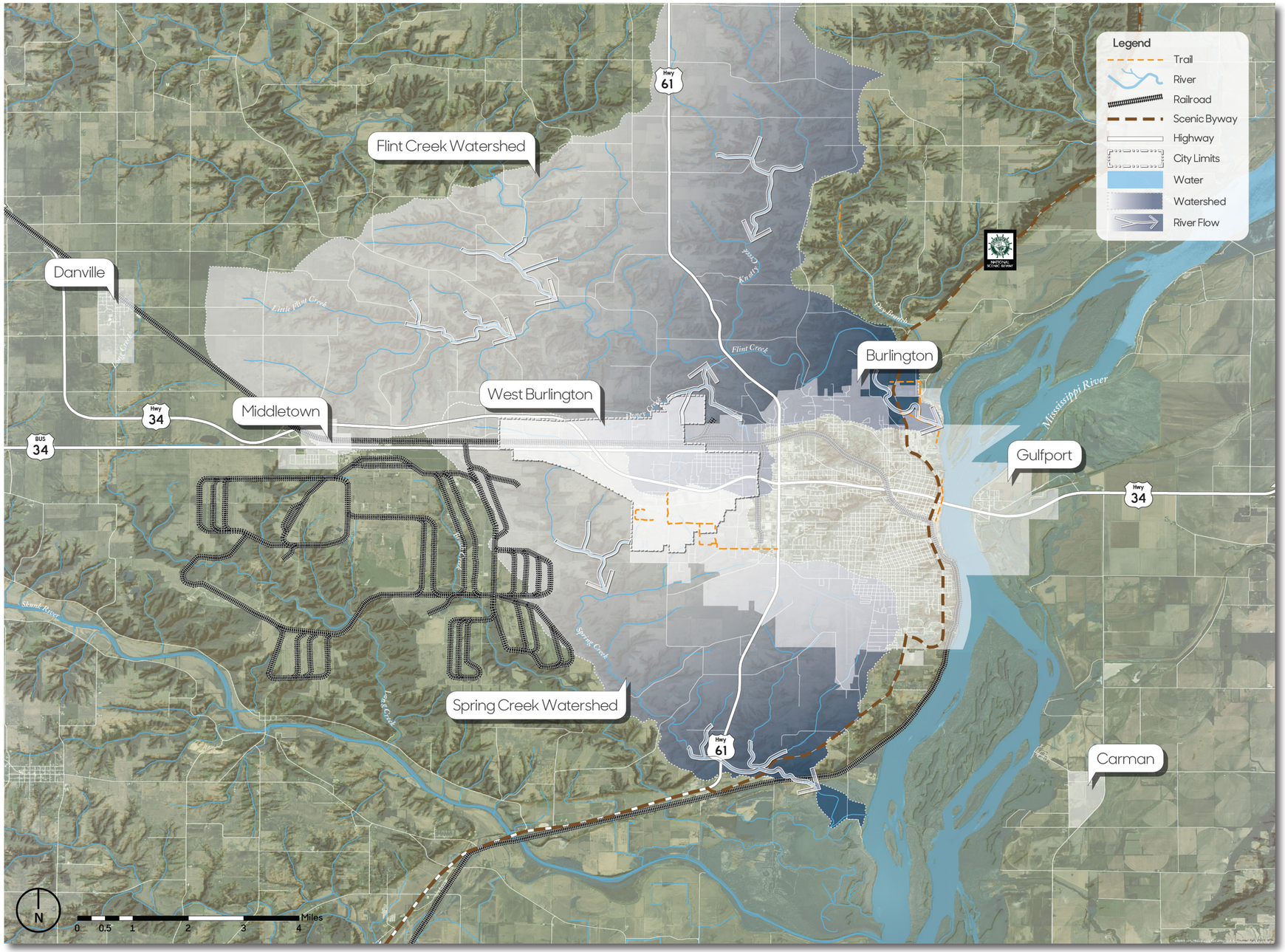

Map Source: Iowa Department of Natural Resources, "Natural Resources Geographic Information Systems Library," http://www.igsb.uiowa.edu/nrgislibx/.

Regional Watershed

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

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

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

West Burlington
Regional Watersheds

Bioregional Context
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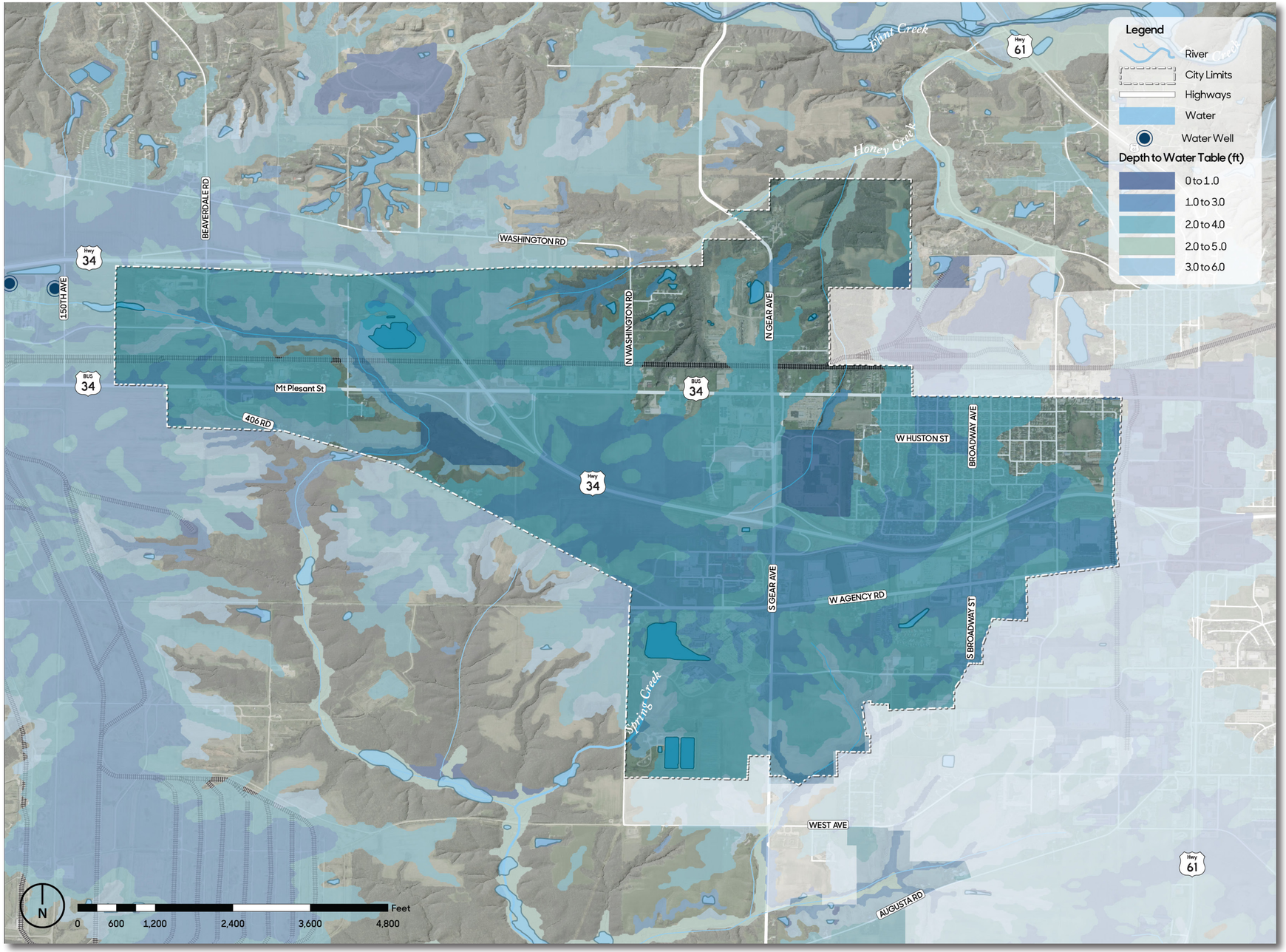

Map Source: Iowa Department of Natural Resources, "Natural Resources Geographic Information Systems Library," http://www.igsb.uiowa.edu/nrgislibx/.

Depth to Water Table

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

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

Where the value is less than 0ft, water can well up out of the ground. This causes localized flooding, even if there is no surface water draining to the area.

West Burlington

Depth to Water Table

Bioregional Context
Julia Badenhope, Chad Hunter
Lead intern: Joslyn Schafer
Iowa State University | Trees Forever | Iowa Department of Transportation

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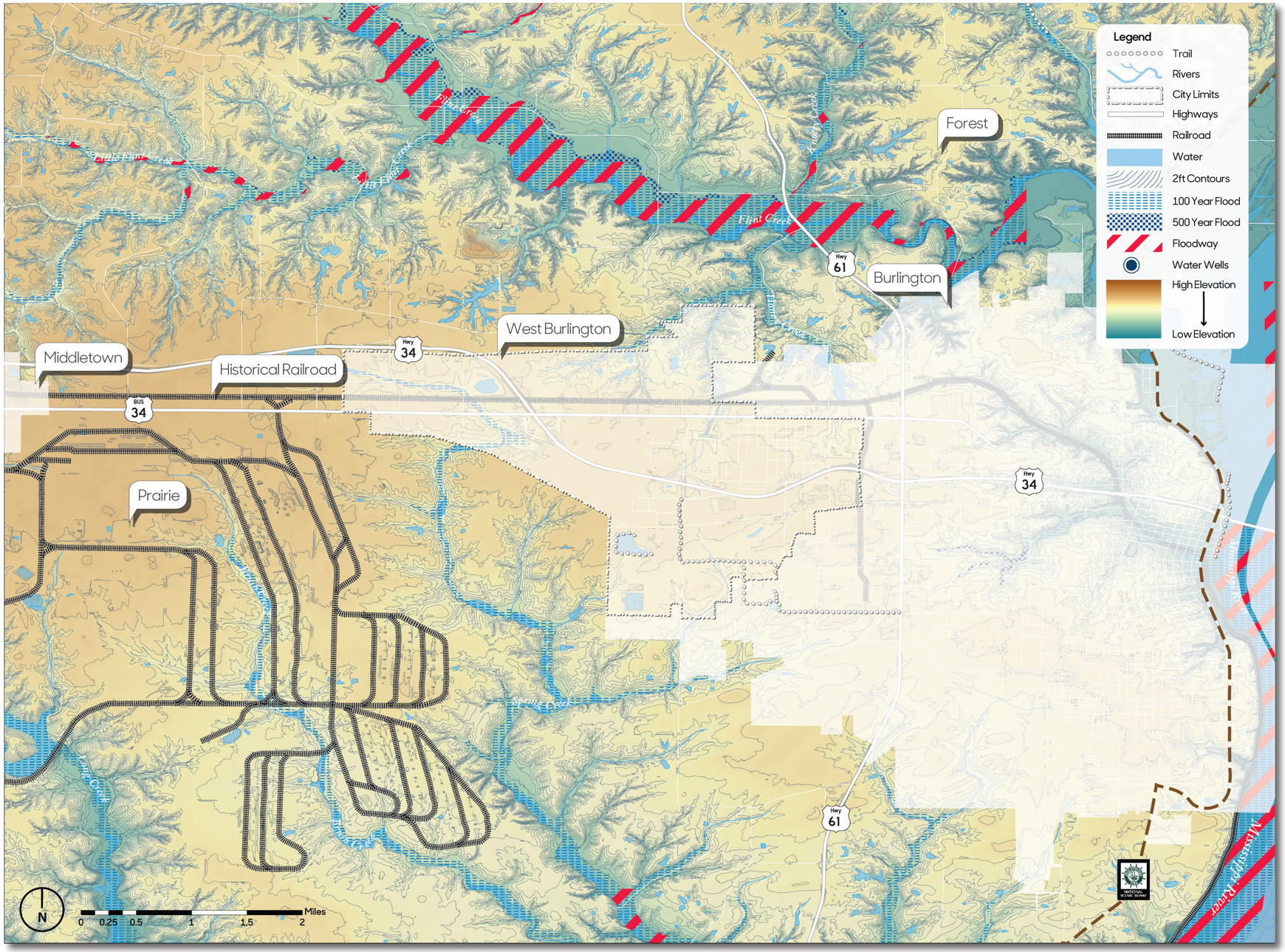

Map Source: Iowa Department of Natural Resources, "Natural Resources Geographic Information Systems Library," http://www.igsb.uiowa.edu/nrgislibx/.

Elevation and Flow

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

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

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

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

West Burlington

Elevation and Flow

Bioregional Context
Julia Badenhope, Chad Hunter
Lead intern: Joslyn Schafer
Iowa State University | Trees Forever | Iowa Department of Transportation

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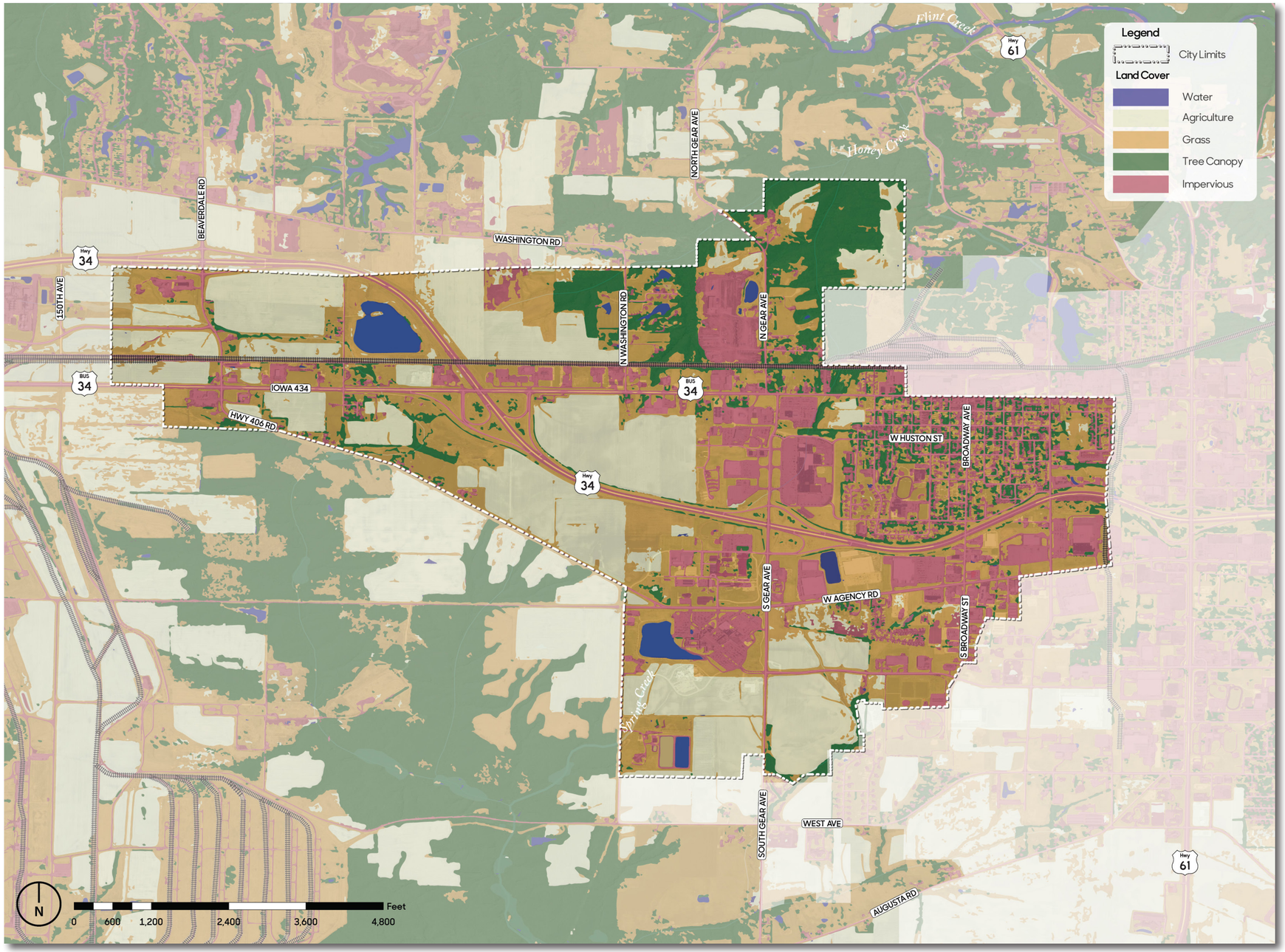


Map Source: Iowa Department of Natural Resources, "Natural Resources Geographic Information Systems Library," http://www.igsb.uiowa.edu/nrgislibx/.

Present Day Land Cover

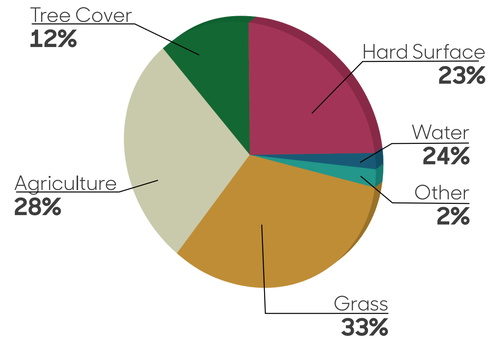
The land cover map depicts both natural and man-made land cover types with aerial imagery. The Iowa DNR created 15 unique classes for this dataset to differentiate land covers. Refer to the legend for a breakdown of land cover types within your community boundaries.

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

Where is the tree canopy most concentrated?

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

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



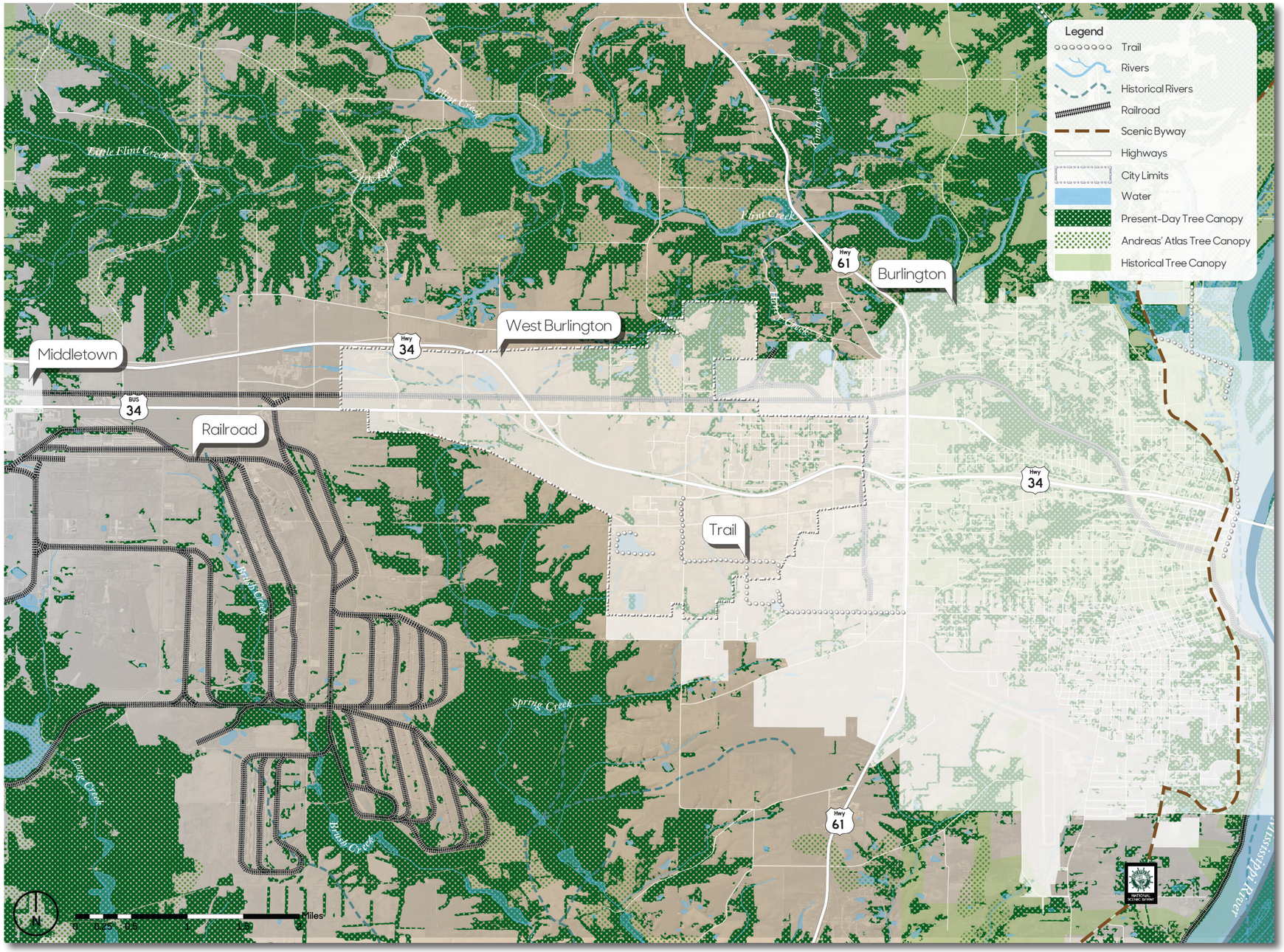
Percent Land Cover Type

West Burlington

Present-Day Land Cover

Bioregional Context
Julia Badenhope, Chad Hunter
Lead intern: Joslyn Schafer
Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning 2023



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

Landscape Change Over Time

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

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

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

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

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

West Burlington

Landscape Change Over Time

Bioregional Context
Julia Badenhope, Chad Hunter
Lead intern: Joslyn Schafer
Iowa State University | Trees Forever | Iowa Department of Transportation

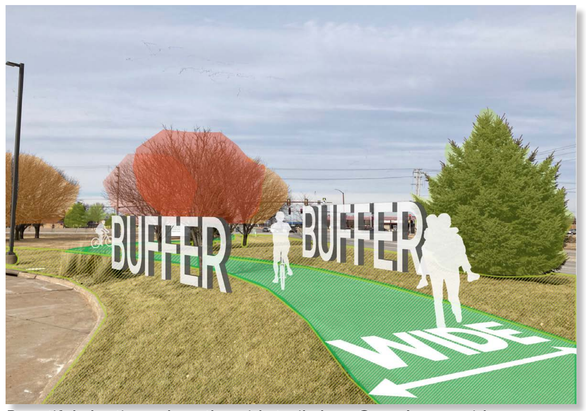
Iowa's Living Roadways community visioning 2023

The hospital green space has a wide, paved path, ample seating, and shade. The site is a popular place to walk, bike, relax, and watch birds.

Mt. Pleasant Street is intimidating to both cyclists and pedestrians because the bike lane is too close to vehicular traffic and there is no sidewalk or trail.

Residents enjoy the Rec Plex for its wide, well-maintained trails and sports venues. Cyclists appreciate the bike repair station located there.

Pedestrians have trouble crossing at the intersection of Broadway Street. and Agency Road because traffic is heavy and there is no crosswalk.



Beautiful plantings along the wide trail along Gear Ave provide great buffers from vehicular traffic on the side streets.

Pedestrians and cyclists find it difficult to access businesses and services along Agency Road, which has no sidewalk or developed shoulder.

What Factors Affect Transportation in West Burlington?

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

Different Users = Different Needs

To capture insights about transportation from a variety of perspectives, we invited West Burlington residents with different transportation needs to participate in focus groups. A total of 56 residents attended West Burlington's workshop. Participants were separated into five user groups and the West Burlington steering committee.

Actives

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

Mobility Challenged

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

Older Adults

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

Youth

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

Parents

(11 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

(9 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.

West Burlington
Overview

Transportation Assets and Barriers Analysis
Julia Badenhope, Sandra Oberbroeckling, Britney Markhardt

Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning 2023

"[The trail at the Rec Plex is] peaceful. You just feel safe. You're separated from all the congestion of traffic. It's bright out there."

"[The walkway on the Hwy 34 overpass on S Gear Ave is] really unlevel. The ramp...going north and then even the ramp coming south [are] just difficult... It's definitely not wheelchair accessible. Bik[ing] is no fun on it."

"In the wintertime, under the overpass [on W Burlington Avenue gets] icy... No one removes the snow from the sidewalks, so the people...[are] walking in the street or...walking on ice."

"There's a bike [lane on Mount Pleasant Street], but it's not a safe bike [lane]...It's...one painted line away [from traffic]."

"There [are Southeastern Community College] students who don't have cars... They have to walk anywhere they go... There's no sidewalk [along Agency Road] from the college to anywhere."

Actives

"I don't think there is a crosswalk [at the intersection of Agency Road and Broadway Avenue]...It's just a four-way stop and it's busy... That probably is actually the busiest intersection in West Burlington."

"A lot of people don't follow the 20 miles per hour limit [around the schools], and they speed past it..."

"Truthfully, they need to get a pedestrian bridge [across S Gear Avenue from the mall to Target]... [and] the bigger picture would be connecting to the bike path."

"If we had [a trail] down [Agency Road]...It might be pretty easy to then connect over to the library [in Burlington]."

"Most of the neighborhood [across from Luers Park] has sidewalks, but they're on, like, only one side of the street...It makes it pretty hard to get around."

Youth

"[After school, kids run] across [Ramsey] in-between parked cars and...parked cars on both sides of the street, plus a line trying to turn into the [school] pickup/drop-off lane, plus random cars [try] to squeeze their way through."

If I want to go walk the trails over at the Rec Plex, I have to drive there because... there's no sidewalk accessibility, particularly across [Highway] 34 [on Gear Avenue]."

"There is a sidewalk [on] Gear [Avenue on the Highway 34 overpass], but it's super narrow and it's really rough, and then it turns to all grass on the other side..."

"...parents—or just everyday people—they want trails. They want pedestrian paths...a lot of people don't care for [the share-the-road] option. I, for one, don't like that with my kids."

"[On West Burlington Ave] by the pool, when kids are walking...there is hardly any [shade]... sometimes I see kids sitting underneath the [highway] overpass to take a break in the shade, and that's not really a great spot."

Parents

"I would like to see some benches. People walk and they need a rest...one place would be by the mall, because that's going to be a trail through there."

"From the [community] college to [Kohl's], people walk in the road [along Agency Road because there's no sidewalk]... And I have many times just about hit [someone]...at night, it's horrible."

"...on the south side of West Burlington... the traffic noise is so loud...[It's] just unreal [with] how bad the noise is. I don't know how [people living there] stand it."

"[My wish] would be [for] walking and bicycling trails, because in town, you're either walking on the crooked sidewalks or in the street..."

"[The bike lane on Mt Pleasant Road is] scary. It needed to be wider... it's close to the traffic... [and] the traffic doesn't respect the bikes."

Older Adults

"...a lot of older people [and]...people with disabilities [live at Western Pines]...they can't [get anywhere] because there's no sidewalk...They're... stuck there, because [Agency Road] is such a busy street. If anybody's in a wheelchair or [using] a walker, they're not getting across Agency."

"...during school [pickup or drop-off] time... if you're leaving the parking lot from the [elementary] school, you cannot [turn left to] go...north. You literally have to go to the south to get out..."

"I walk with my grandma almost every single day. So a walking path...in Luers Park—that would be nice to go out there and enjoy being outside."

"It would be really cool to have...a sidewalk going down Broadway...that connects to [the Rec Plex and Gear Avenue to make] a big loop around town to walk."

"There is a sidewalk and a little bridge [over the creek in Luers Park], but it's not accessible, really, because you have to walk up stairs..."

Mobility Challenged

"...once you cross...Gear Ave on your bike...there's no way of riding a bike up over the [Hwy 34] bridge over to the mall...there's a pedestrian crossing there, but it's poorly kept. It's narrow. You'd really have a tough time if you met a cyclist, met a walker."

"[The trail around the lake is] wide and well-kept and I don't have to worry about... cars running over my kids if they get further ahead of me...But the problem is we have to drive to get there."

"...in regard to transportation, I'm looking more for accessibility. I'm looking at the benches, the water fountain[s], some shade...an oasis along the way."

"We need more sidewalks. We need to fix sidewalks. We need to make sure they're all at least four-foot [wide]. There [are] two-foot [and] three-foot [sidewalks], and there [are] upheavals..."

"[On Broadway Avenue] there's a sidewalk on one side, but not on the other side...[so people] just traipse across the road..."

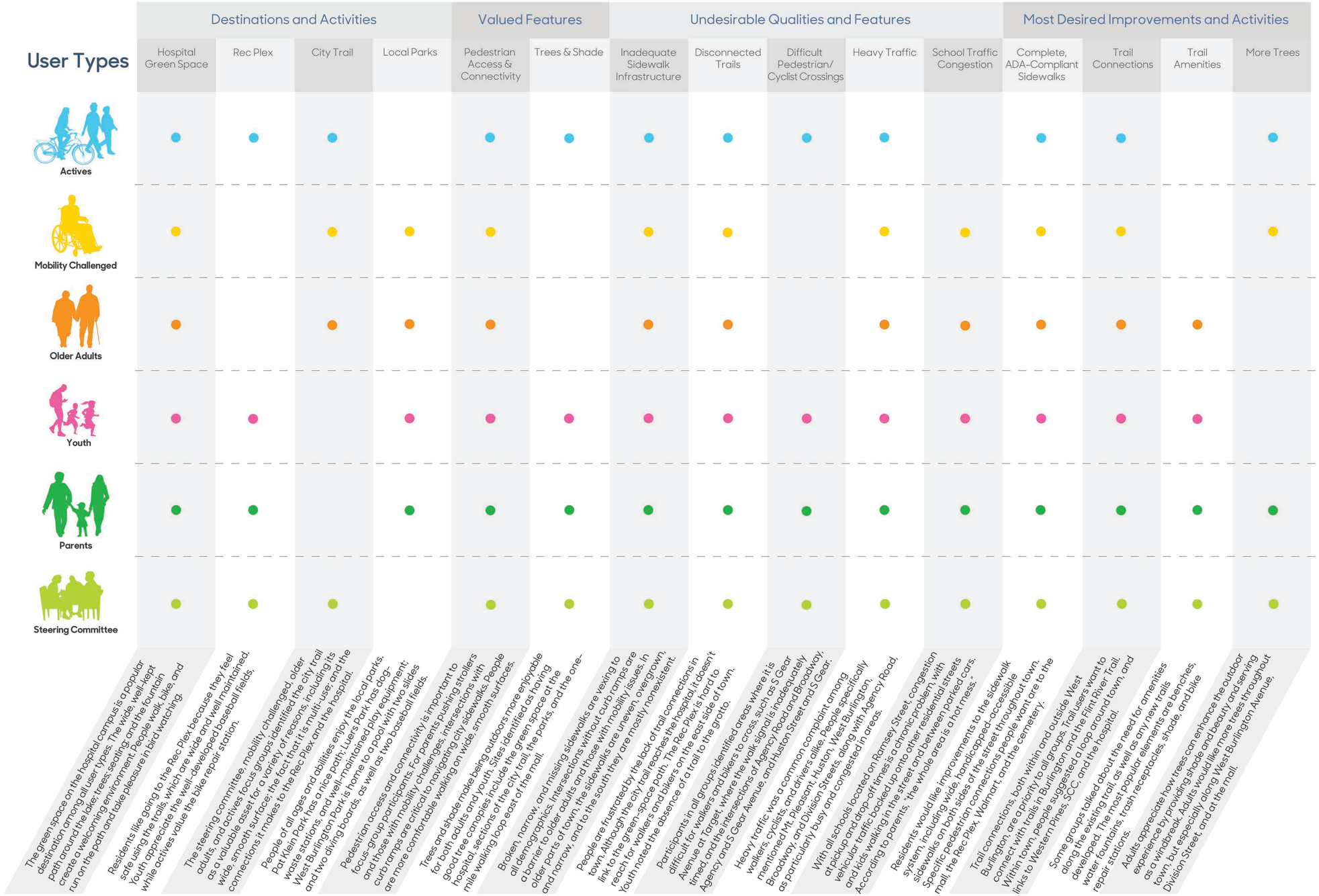
Steering Committee

West Burlington
What People Said

Transportation Assets and Barriers Analysis
Julia Badenhope, Sandra Oberbroeckling, Britney Markhardt

Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning 2023



Actives walk, bike, and run regularly for exercise and/or recreation. This group prefers to use multi-use trails that are separated from traffic. They do not feel safe riding in the designated bike lane along Mt. Pleasant Street because vehicular traffic is too close.

Mobility-challenged individuals walk and drive around town. Smooth, wide surfaces are important to this group. A more accessible, controlled crossing over West Burlington Avenue to the pool and a sidewalk or trail along Agency Road are two improvements this group desires.

Older adults drive, walk, and bike. This group talked about the traffic noise from Highway 34 disturbing residents living on adjacent residential streets and the traffic bottleneck at the intersection of Broadway Street and Agency Road. Older adults would like more parking downtown.

Youth walk, bike, and ride scooters or a Segway to get around town. Older youth also drive. Kids would like a bus route to the Rec Plex. They also want a longer crossing signal on S Gear Street near Target, more speed control around the school campus, and more shelters in the parks.

Parents walk, run, and bike, as well as drive personal vehicles and side-by-sides. They also enjoy riding Hoverboards and Onewheels. This group is concerned about the safety of their children. They suggested building walkways over busier intersections to make it safer and easier for walkers and cyclists to cross.

Steering committee members drive, walk, and bike. This group would like attractive welcome signs at community entrances, safe pedestrian crossings at intersections, and bump-outs and medians to give pedestrians a safe spot when crossing the street. Committee members suggested road diet for Agency Road, Mt. Pleasant Street, and Gear Avenue.

West Burlington
Emerging Themes

Transportation Assets and Barriers Analysis
Julia Badenhope, Sandra Oberbroeckling, Britney Markhardt

Iowa State University | Trees Forever | Iowa Department of Transportation

Iowa's Living Roadways community visioning 2023

Why Do A Survey?

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

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

How Is It Done?

With assistance from Iowa State University's Survey Research Services staff in the Center for Survey Statistics and Methodology (CSSM-SRS), ISU visioning program staff conducted a survey to better understand the transportation patterns, behaviors, needs, and desires of West Burlington residents. Surveys were mailed to 400 randomly selected residents living in West Burlington 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 338. A total of 105 people returned surveys, for a response rate of 31.1%. (A response rate of 20% is considered valid.)

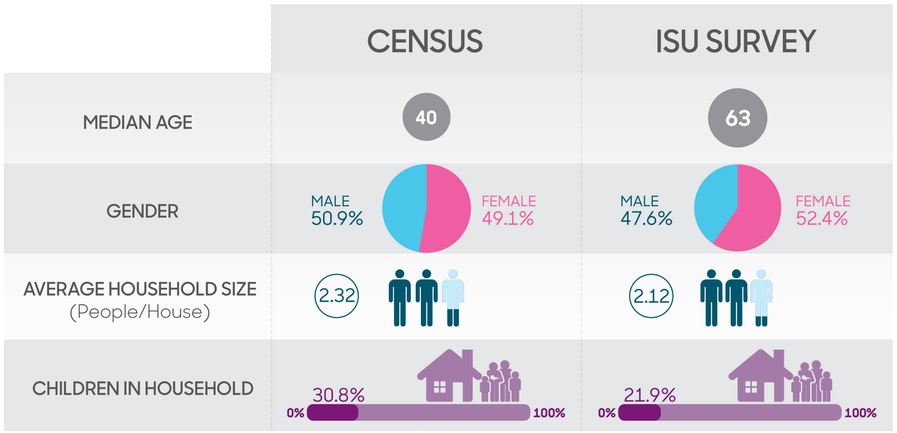
What Did We Find Out?

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

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

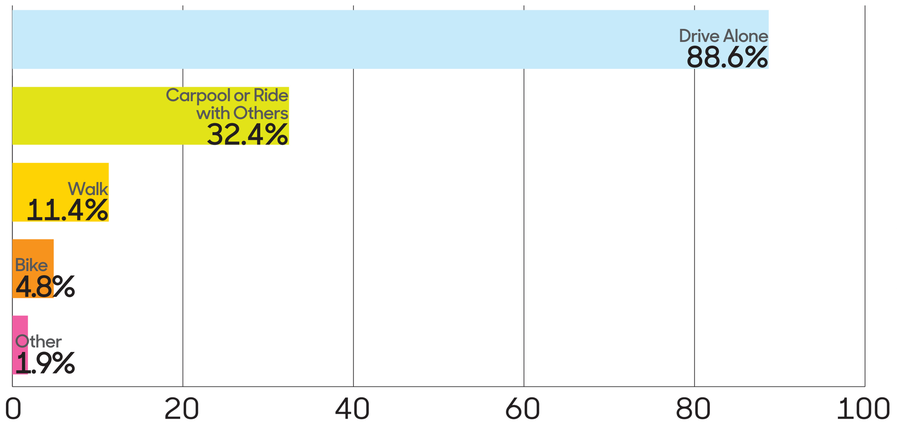
How Did We Do?

The demographics of the respondents are somewhat different from those obtained from the 2021 American Community Survey (ACS). For example, the survey respondents median age of 63 is significantly older than the ACS estimated average age for West Burlington residents of 40. In terms of gender, the percentages of male and female survey respondents are similar to ACS estimates. Average household size among survey respondents and the percentage of households with children are somewhat lower than the ACS estimate.



How Do West Burlington Residents Travel?

Most survey respondents drive to important destinations such as the convenience store, the post office, school, and church (88.6%). More than 32% carpool or ride with someone else. Some people indicated that they walk (11.4%) and/or bike (4.8%), but the primary mode of transportation in West Burlington 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%.

West Burlington
Overview

Transportation Behavior and Needs Survey

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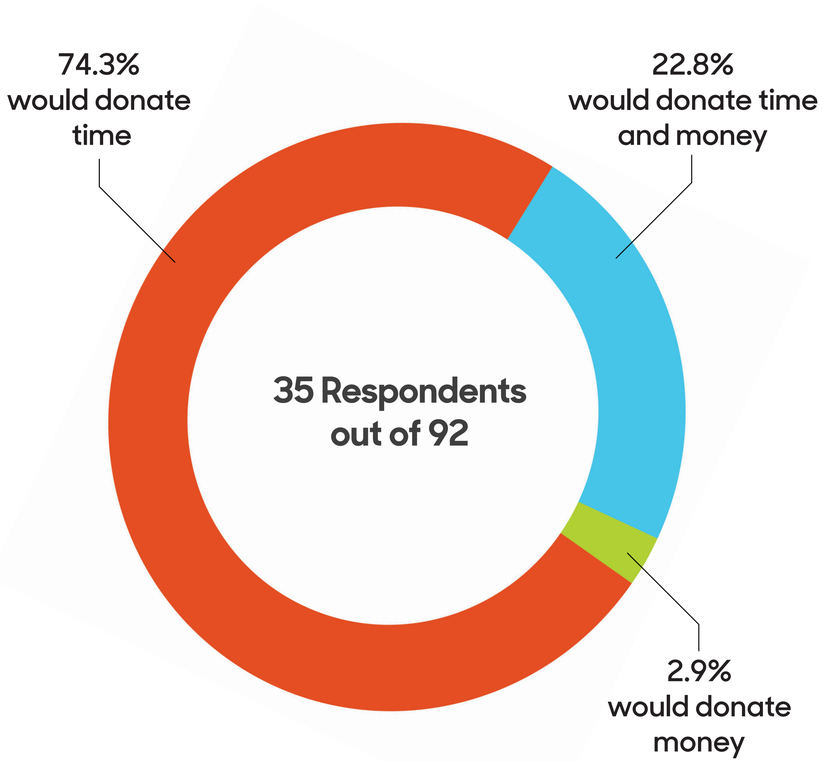
ARE PEOPLE WILLING TO HELP?

38% said YES!



Willingness to implement change

Most survey participants who answered "Yes" this question are willing to contribute their time to community improvements (74.3%), while 22.8% would help financially and contribute their time. Nearly 3% of respondents indicated that they would be willing to contribute financially.

Compared to other small towns in Iowa, West Burlington residents are somewhat less 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] The percentage of West Burlington residents is 5% lower than this average.

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

WHAT DID PEOPLE SAY?

Survey Participants Said...

"The most important aspects, to me, for improving transportation and the community are to make the community more walkable and to do so in the most environmentally conscious way possible."

"While I don't need the bus, I want it to be available to those who do depend on it!"

"[We need to] synchronize the stoplights for better traffic flow. A sidewalk [is needed] from the [community] college to Walmart [and] from Walmart [east] into Burlington along Agency Road."

HOW DO YOU GET PEOPLE TO HELP?

Ask, Show, and Advertise Opportunities

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

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

West Burlington
Willingness to Help

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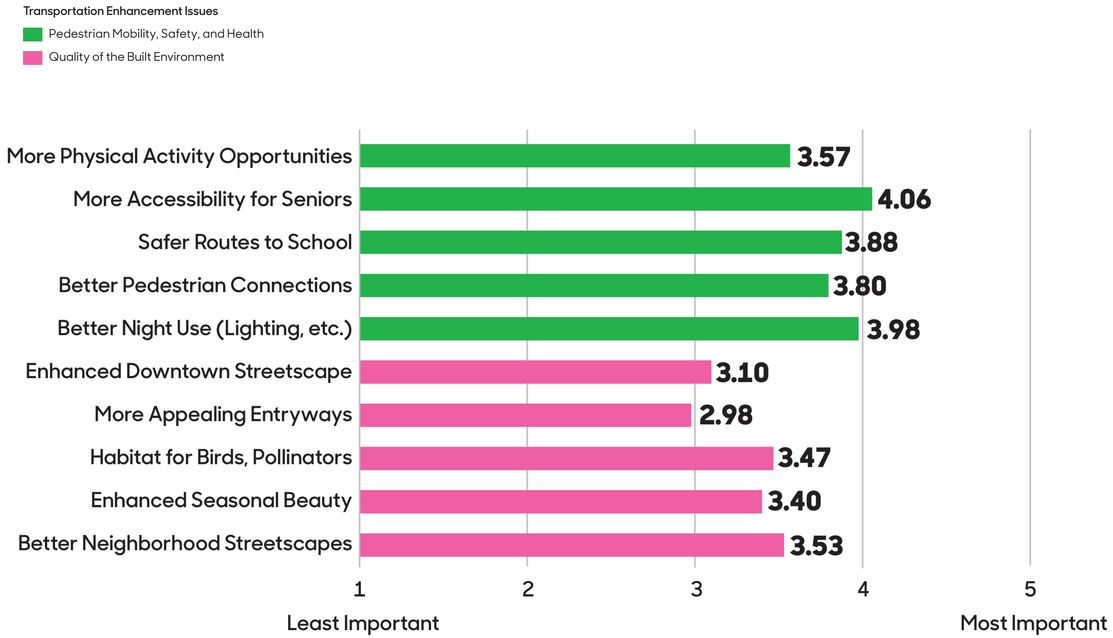
WHAT TYPES OF ENHANCEMENTS ARE IMPORTANT?

Mobility, Safety, and Health!



Importance of transportation enhancement by type (90 responses)

On a scale of 1 to 5, with 5 being the most important, participants in West Burlington ranked improving accessibility for seniors as most important, with a mean value of 4.06. Other types of transportation enhancements that address pedestrian mobility, health, and safety are also considered important, such as providing better lighting for night use (3.98), creating safer routes to school (3.88), and making better pedestrian connections (3.80). In terms of quality of the built environment, survey respondents consider improving neighborhood streetscapes as most important (3.53), followed by creating habitat for birds and pollinators (3.47), and enhancing seasonal beauty (3.40). These findings are consistent with the views expressed by focus-group participants during the Transportation Assets and Barriers workshop held in February 2023.

WHAT DID THEY SAY?

Survey Participants Said...

Please use a street sweeper on the bike lanes on Mt. Pleasant! Your streets are in good physical repair, but the debris makes it unusable for bikes.

"[I feel safe walking] during the day, [but] lighting at night isn't very good."

"[I don't feel safe] because you have to walk in the street on north side or cross to south side on Longmeadow between Broadway and the elementary school."

"West Burlington has nice walking areas. There are sidewalks that could be installed yet or improved—especially for kids to walk to and from school."

West Burlington
Priorities

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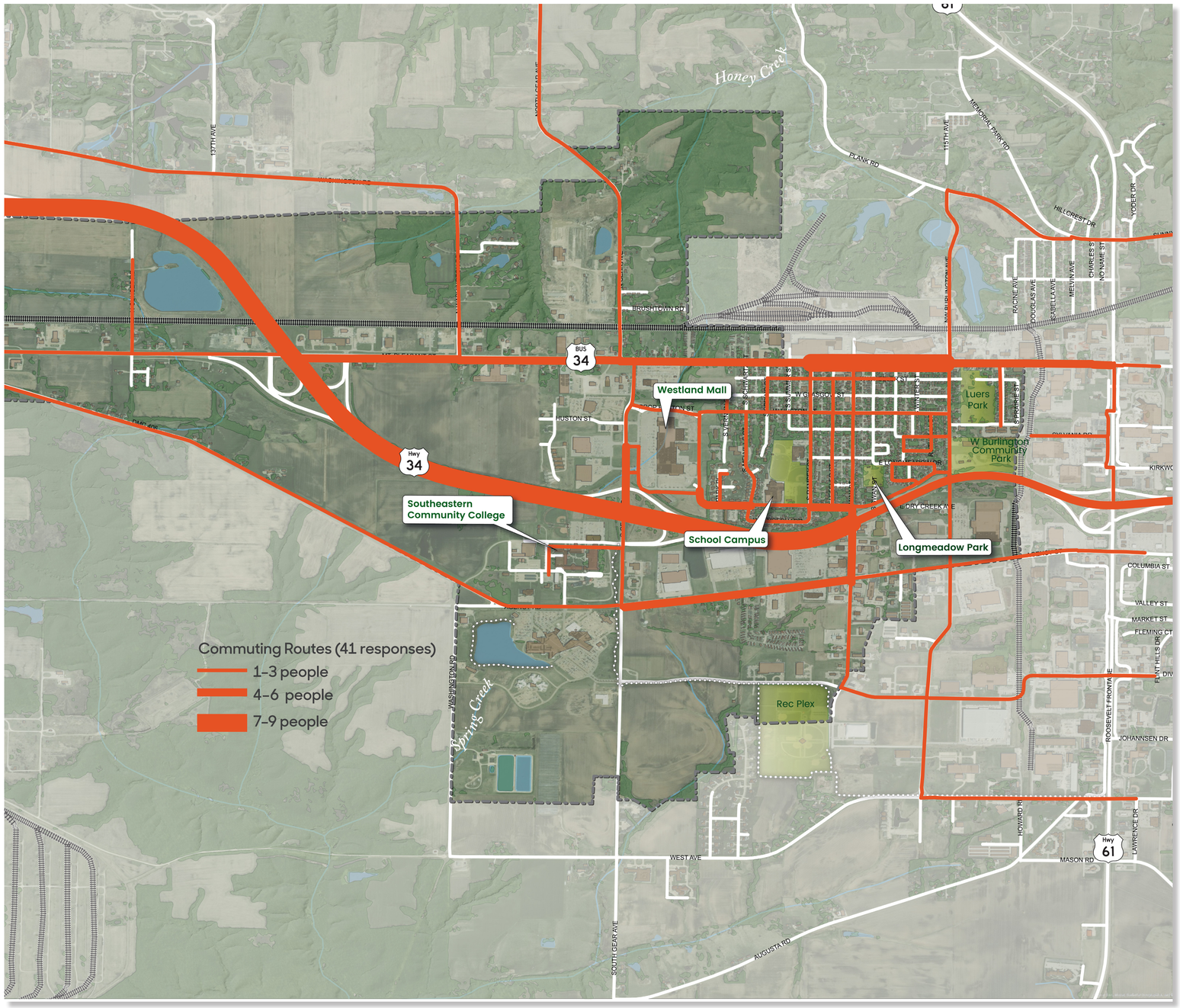


Map Source: Iowa Department of Natural Resources, "Natural Resources Geographic Information Systems Library," http://www.igsb.uiowa.edu/nrgislibx/.

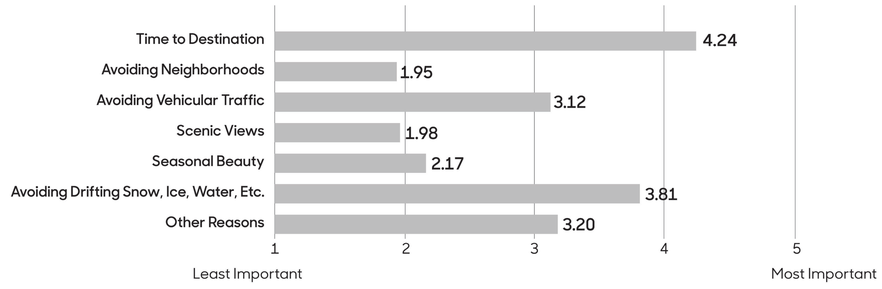
How They Get There

This map shows the commuting routes identified by 41 survey respondents. The frequency that the routes are used is depicted by their width, with most frequently used routes being the thickest. The primary commuting corridor into and out of West Burlington is Highway 34. Other east-west routes identified by respondents include W Mt. Pleasant Street, especially through the downtown area, and W Agency Road. West Burlington Avenue, N Gear Avenue, and Washington Road are the north-south routes commuters take.

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

Why They Go That Way

On a scale of 1 to 5, with 5 being the most important, survey participants ranked the characteristics and features that factored into their choice of commuting route. Among West Burlington participants, time to destination is the most important factor in determining commuting routes, with a mean value of 4.24. Avoiding weather-related issues such as snow and ice is also significant (3.81). Scenic views, seasonal beauty, and avoiding neighborhoods are not critical factors in determining commuting routes.



West Burlington
Commuting Routes

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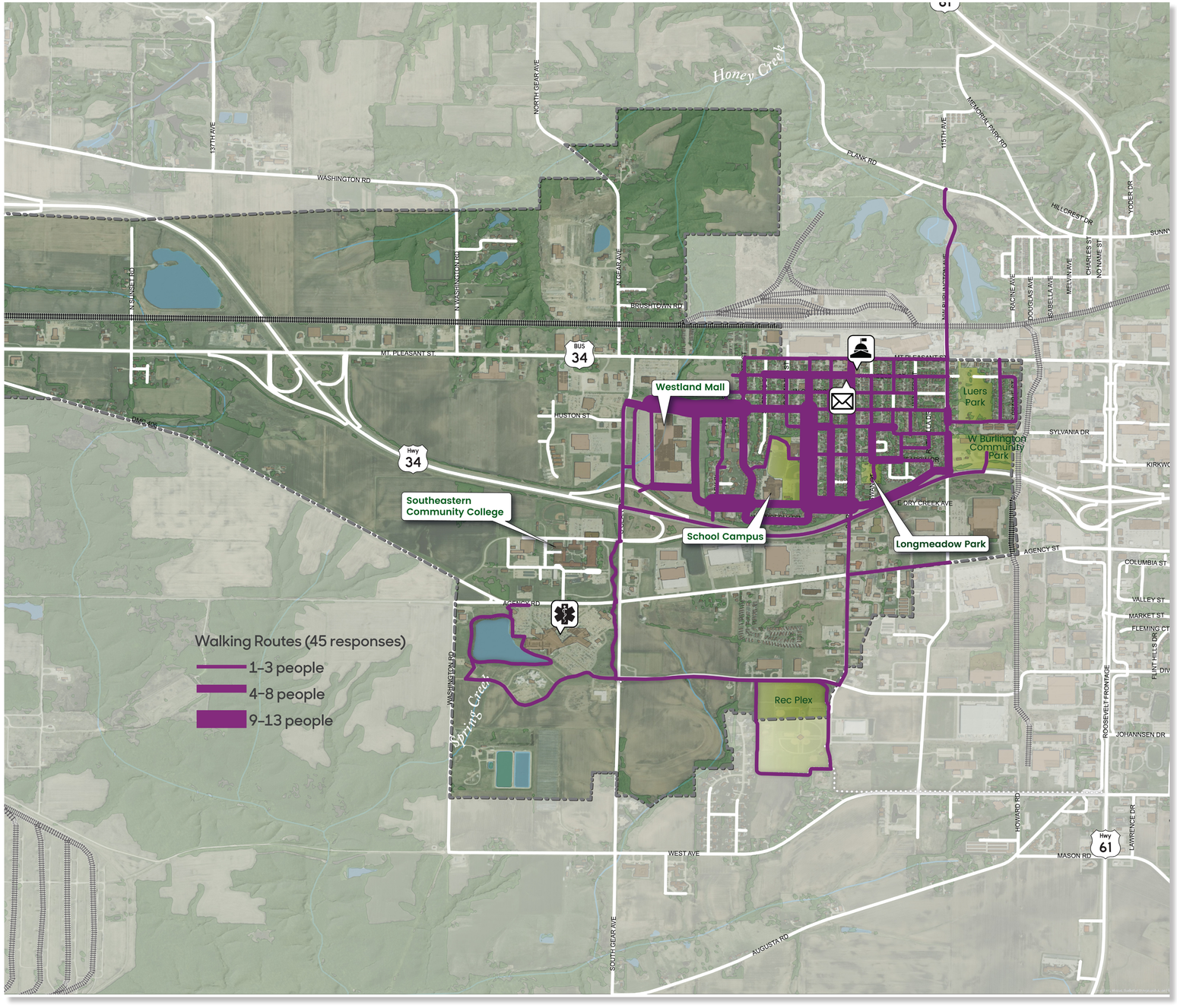


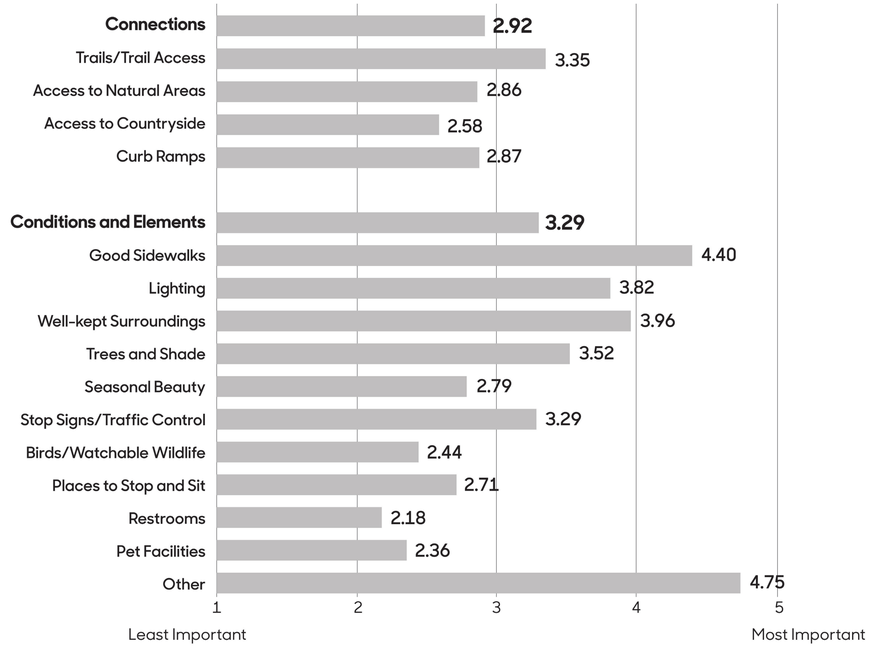
Map Source: Iowa Department of Natural Resources, "Natural Resources Geographic Information Systems Library," http://www.igsb.uiowa.edu/nrgislibx/.

Where They Walk

This map shows the walking routes identified by 45 survey respondents. The frequency that the routes are used is depicted by their width, with most frequently used routes being the thickest. The most heavily traveled routes among walkers are Ramsey Street, particularly the blocks adjacent to the schools; Huston W from Melville Avenue west to the mall; and sections of Van Weiss Boulevard. Other popular routes include portions of Wheeler Street, Leffler Avenue, Kimberly Drive, and parts of West Burlington Avenue. Some people walk the trail along S Gear Avenue and Division Street and loop around the Rec Plex, and some walkers enjoy the path around the lake on the hospital campus.

Why They Go That Way

On a scale of 1 to 5, with 5 being the most important, survey participants ranked the characteristics and features that made their walking experience better. These features are categorized as either "connections" or "conditions and elements." West Burlington participants consider conditions/elements as more important than connections, with mean values of 3.29 and 2.92, respectively. In terms of connections, access to trails is most important with a mean value of 3.35. Other factors—namely safety, low noise, wider sidewalks, and snow removal in winter—are the most important conditions/elements, with a mean value of 4.75, followed by good sidewalks (4.40), well-kept surroundings (3.96), and lighting (3.82).



West Burlington
Walking Routes

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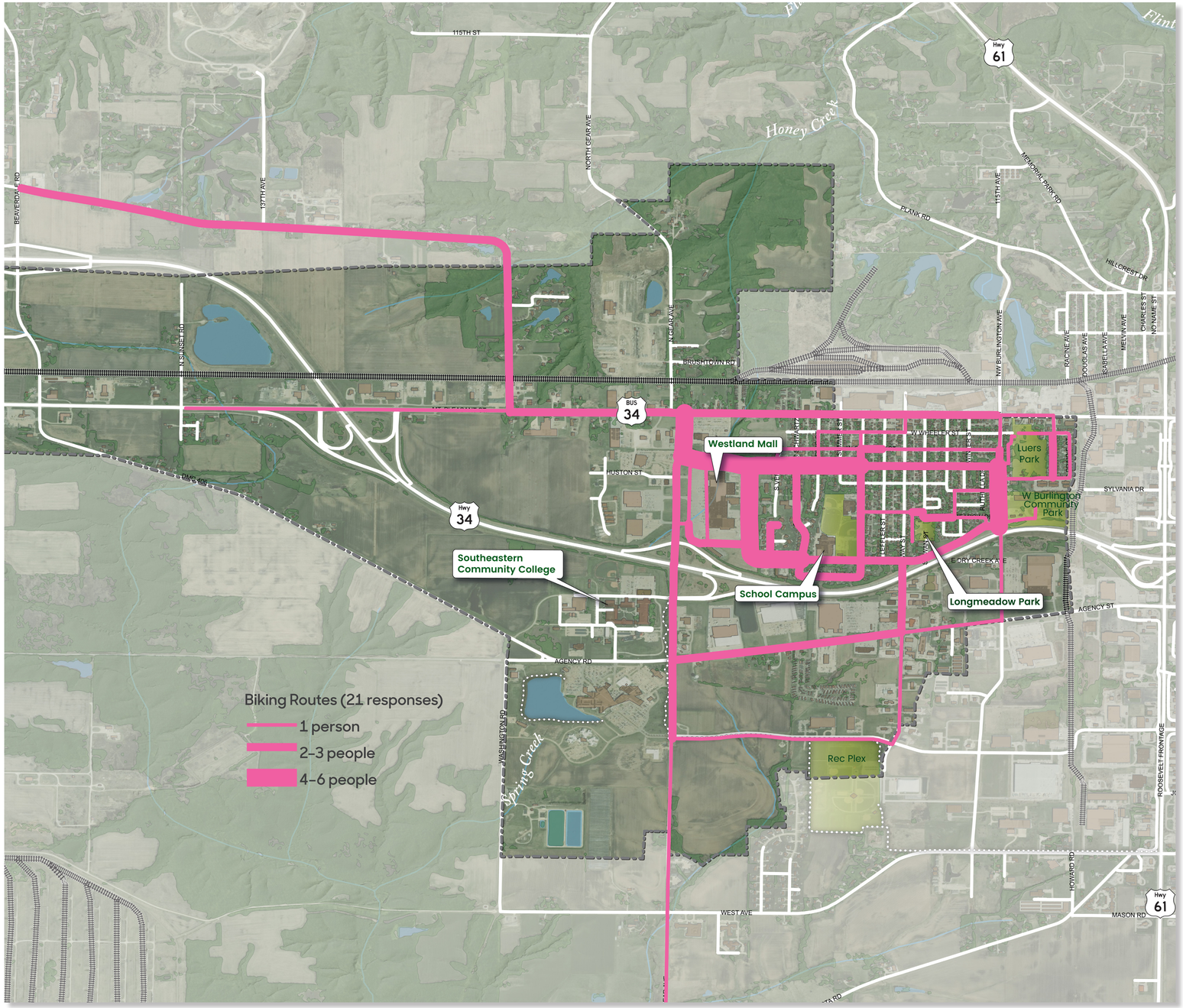


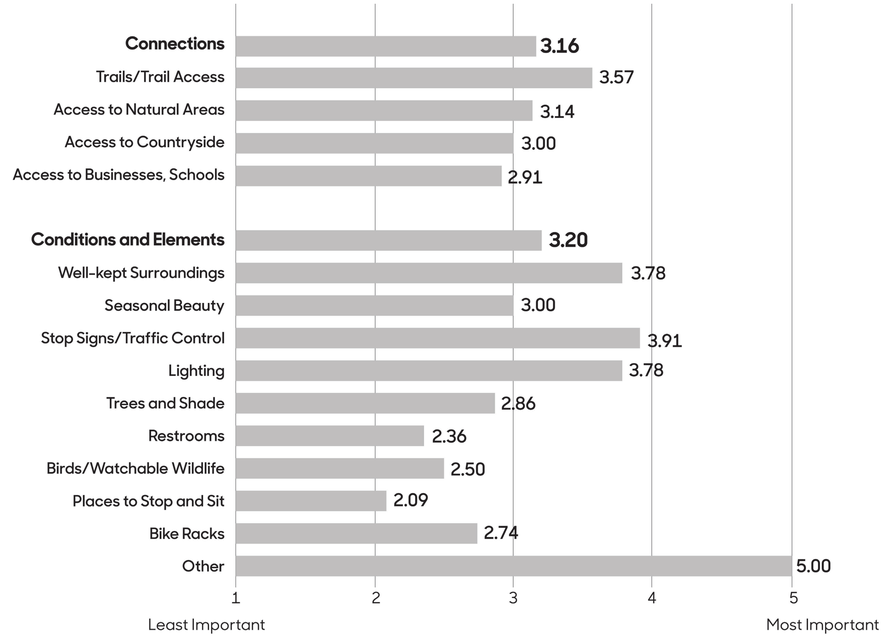
Map Source: Iowa Department of Natural Resources, "Natural Resources Geographic Information Systems Library," http://www.igsb.uiowa.edu/nrgislibx/.

Where They Bike

This map shows the biking routes identified by 21 survey respondents. The frequency that the routes are used is depicted by their width, with most frequently used routes being the thickest. Similar to walkers, cyclists most often ride on Huston Street from Ramsay Street to the mall, Autumn Lane, W Van Weiss Boulevard, and West Burlington Avenue. People also bike on S Gear Avenue, Agency Road, Division Street, and Broadway Street. Some bikers take advantage of the bike lane on W Mt. Pleasant Street and some ride out of town on Washington Road.

Why They Go That Way

On a scale of 1 to 5, with 5 being the most important, survey participants ranked the characteristics and features that made their biking experience better. These features are categorized as either "connections" or "conditions and elements." West Burlington participants consider conditions/elements somewhat more important than connections, with mean values of 3.20 and 3.16, respectively. Access to trails is most important connection to survey respondents with a mean value of 3.57. In terms of conditions/elements, other factors, which were not identified by respondents, are most significant, with a mean value of 5.00, followed by stop signs/traffic control (3.91), and well-kept surroundings and lighting (both at 3.78).



West Burlington

Biking Routes

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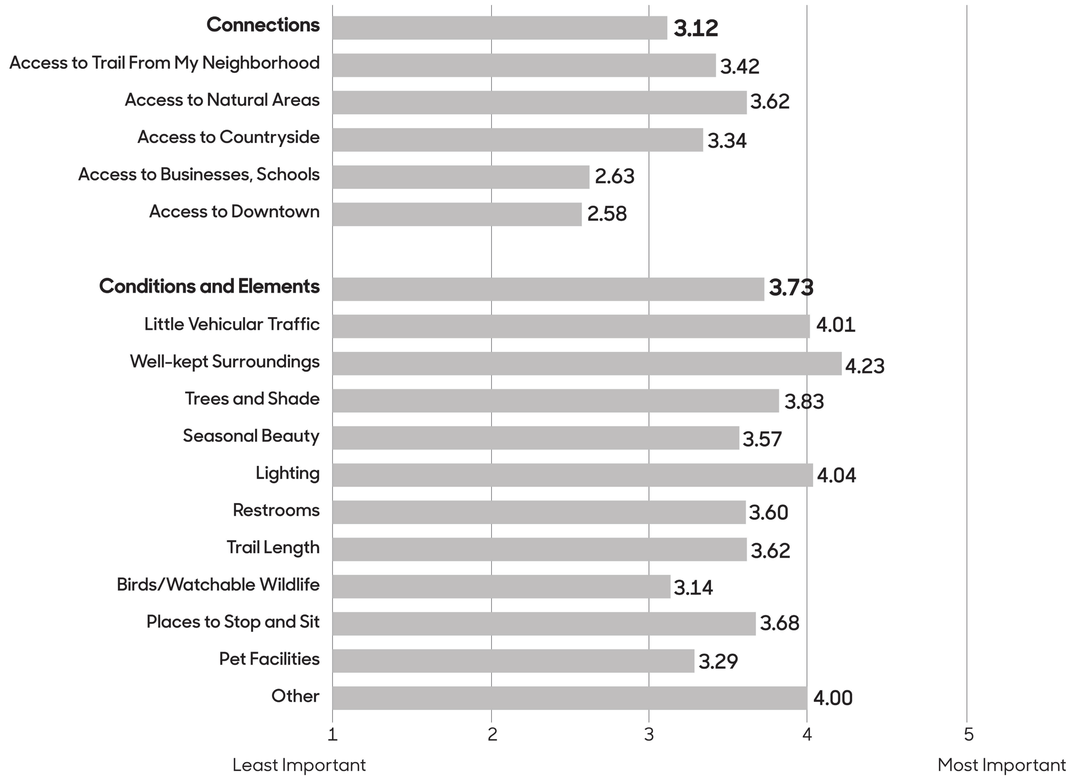
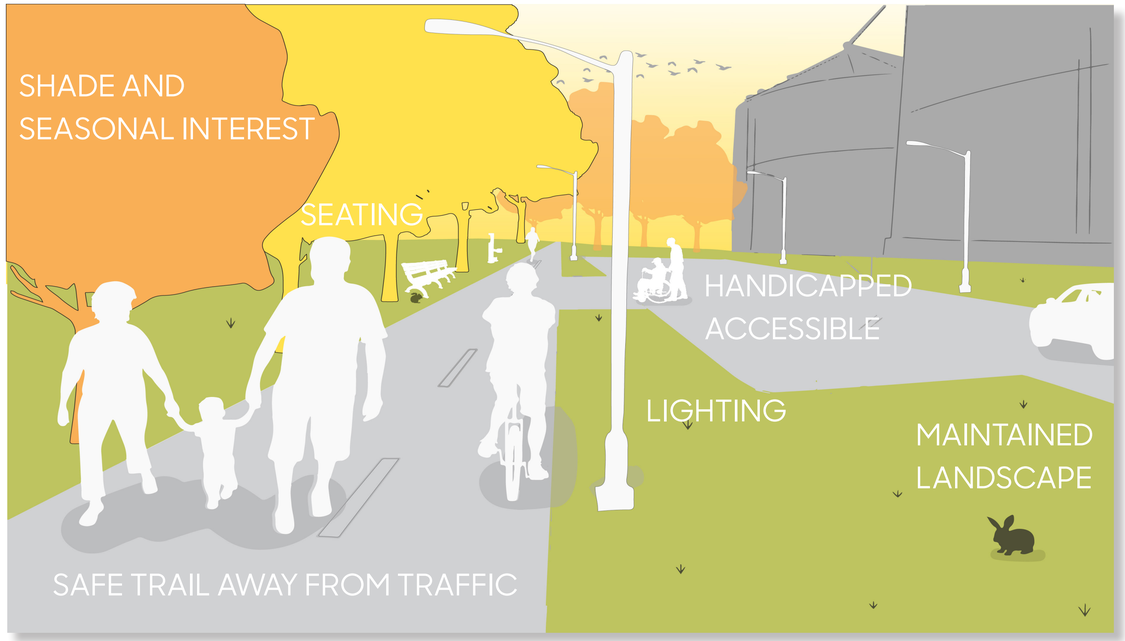
Desired Trail Features

Trails are off-street paths that are paved or unpaved and can be used by pedestrians and cyclists. On a scale of 1 to 5, with 5 being the most important, survey participants ranked the characteristics and features that made their trail experience better. Like the bike route features, they are categorized as either "connections" or "conditions and elements." Conditions/elements are more important to West Burlington trail users than connections, with mean values of 3.73 and 3.12, respectively. Access to natural areas is the most important connection among trail users, with a mean value of 3.62. In terms of conditions/elements, well-kept surroundings are most important, with a mean value of 4.23, followed by lighting (4.04), and little vehicular traffic (4.01). Other factors such as handicapped accessibility, consistent availability of restrooms, and safety are desirable conditions, with a mean value of 4.00. Also of significance to trail users are trees and shade (3. 83) places to stop and sit (3.68), trail length (3.62), and restrooms (3.60).



"It would be wonderful if you connected the trail routes from the hospital, SCC, [and the] Rec Plex and made a 'loop' around West Burlington to exercise—walking, running, biking, etc."

"I think a long and accessible trailway (like the Rock Island Trail in and around Peoria, IL) would enhance travel, activity, and increase visitors to the area."



West Burlington
Desired Trail Features

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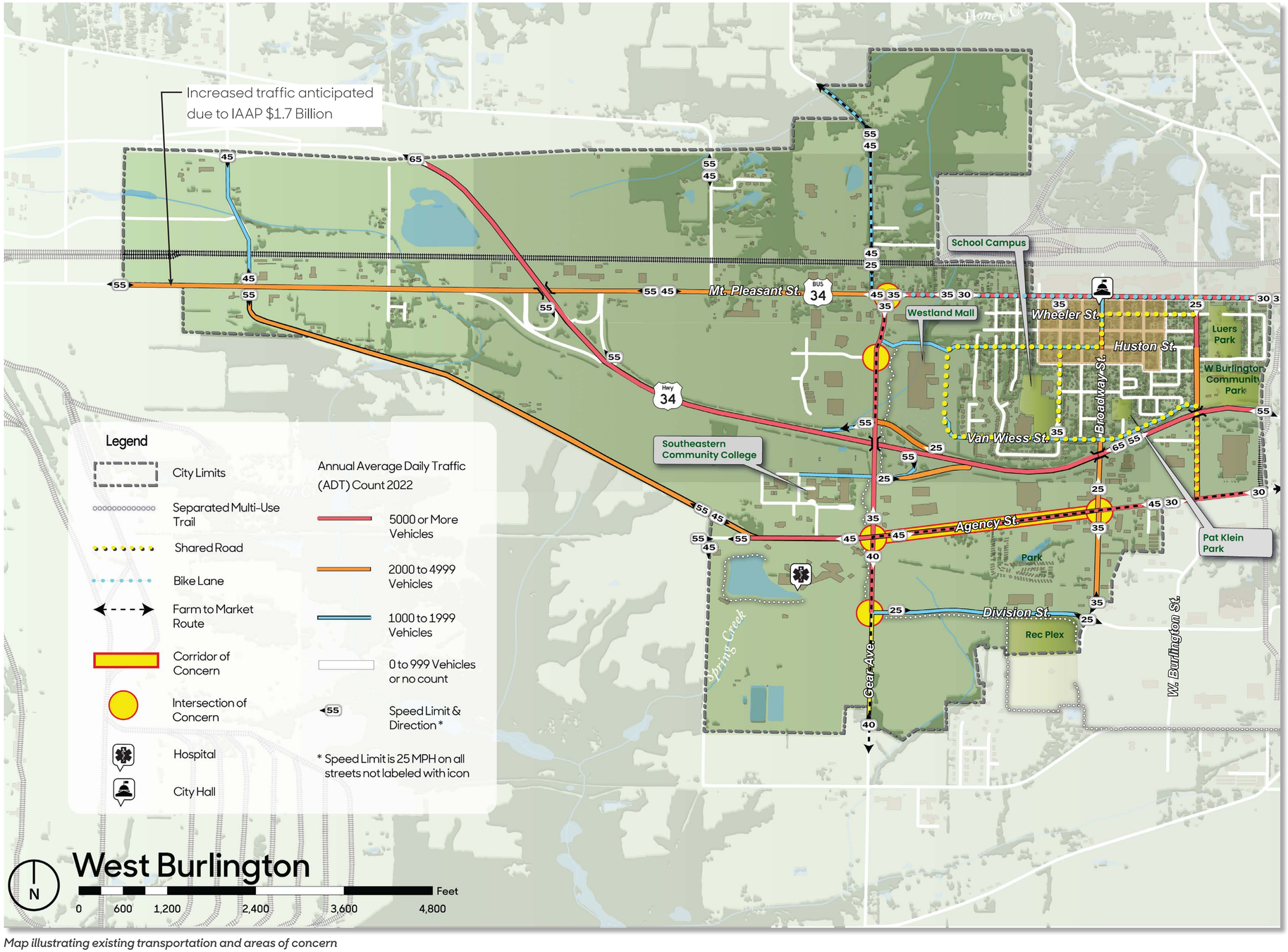

Map illustrating existing transportation and areas of concern

Transportation Inventory

Knowledge of the transportation systems in and around a community is critical for sustainable transportation enhancement planning. West Burlington's transportation system includes roadways, sidewalks, and recreational trails.

The West Burlington visioning design team and representatives of the visioning steering committee met with personnel from the Iowa Department of Transportation (IDOT), South Eastern Iowa Regional Planning Commission, Des Moines County Conservation, and local city officials in order to identify current and future transportation-system capital improvements. Also discussed during this meeting were maintenance and other transportation-related issues or obstacles that might influence the designs coming out of the visioning process.

Several transportation-related opportunities include creating a trailhead at the northeast quadrant of the intersection of Gear St. and the Highway 34 west bound exit ramp, enhancing vehicular and pedestrian circulation throughout the community with branding and way-finding signage, and distinguishing West Burlington from Burlington by addressing entryways.

Items of concern related to West Burlington's transportation system included: incomplete and narrow sidewalks; lack of accessibility at some intersections; ; intersection crossings at Agency St. & W. Burlington Ave., Agency St. & Broadway Ave., Agency St. & Gear Ave., and Gear Ave.. & the Highway 34 west bound exit ramp; and pedestrian circulation and connectivity along Gear Ave. from the north side of Highway 34 to Mt. Pleasant St..

Existing way-finding signage at intersection of Agency St. and Broadway Ave. looks cluttered and disorganized

West Burlington
Transportation Inventory

Flenker Land Architects Consultants,LLC
LA: Meg Flenker, PLA, CPESC, CPSWQ
Interns: Mikky Ojha, Trevor Smith
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What, Where, & Why?

The What, Where, & Why (goal setting) meeting is critical component in the development of a successful project. Setting and prioritizing goals allows us to focus our efforts and resources more effectively to help the community develop a vision for West Burlington. The design team met with West Burlington's visioning committee to discuss its goals. The steering committee members presented to the design team their interpretations of the data presented in the transportation assets and barriers board, random-sample survey and bioregional information.

The nominal group technique process was used for this meeting. Through this method, the committee identified goals and values based on information from the assessments. Each committee member also included reasoning for improvements around town and highlighted specific needs for areas of improvement. These objectives and desired improvements were recorded during an open discussion, followed by a vote to prioritize the major themes presented during the meeting.

The landscape architecture design team organized the themes for the city of West Burlington using the goals and desired improvements identified by the steering committee during the discussion, giving greater weight to those goals receiving more votes and common ideas presented multiple times. The chart on this board reflects a representation of the outcomes of the goal-setting process - the what, where, and why.

Community Values / Themes Based on Assessments	Broad-Based Outcomes and Goals	WHAT Exactly and WHERE?	WHY Change Anything?
 **Connectivity & Accessibility**	▪ Achieve ADA standards of accessibility ▪ Improve walkability ▪ Provide safe and accessible routes to community destinations and businesses, including the college and hospital	▪ Make sidewalks ADA compliant, well drained, the appropriate width for use and location, level, complete, and in good repair ▪ Construct wide, ADA-compliant sidewalks along primary corridors and major collector streets: Gear Ave., Broadway St., W. Burlington Ave., Mt. Pleasant St., Huston St., Van Weiss Blvd., and Agency St. ▪ Prioritize ADA compliance and 6-foot width (5-foot minimum) of sidewalks on the Safe Routes To School route	▪ ADA-compliant sidewalks would provide the opportunity for all user groups to travel safely throughout West Burlington ▪ Encourage more physical activity ▪ Supportive infrastructure would eliminate the need for people to walk in the streets and in the grass along roadways
 **Community Identity + Entryways**	▪ Guide visitors to key places ▪ Clearly and uniformly identify community destinations ▪ Direct passersby and help them navigate to points of interest throughout the city ▪ Enhance user comfort ▪ Reduce "cluttered" signage ▪ Reinforce city branding efforts	▪ Incorporate community caps that reinforce identity (branding) of West Burlington into way-finding signage ▪ Way-finding signage with placement focused along primary and secondary corridors: Gear Ave., Ramsey St., Broadway St., W. Burlington Ave., Mt. Pleasant St., Huston St., Van Weiss Blvd., and Agency St. ▪ Create community gateways with new entryway signage at north and south entryways on Gear Ave. and W. Burlington Ave., and east and west entryways on Mt. Pleasant St. and Agency St,	▪ Direct visitors to where you want them more efficiently ▪ Way-finding signage exposes visitors to places they might otherwise miss, thus encouraging extended stays ▪ Well maintained signs, transportation corridors, and infrastructure reassure visitors that they are safe and on the right path ▪ Consolidate messages onto fewer signs and improve the visual environment ▪ Consistent graphics in way-finding signage create a unified and organized look ▪ Brand-supportive way-finding celebrates the community's unique character and creates a unified, memorable experience for visitors ▪ When branding is supported throughout the community, residents feel a stronger sense of place and take pride in knowing they are part of a unique community
 **Trail Extension + Enhancements**	▪ Expand trail system network for greater local and regional connectivity ▪ Enhance existing trails with site amenities such as benches and shade trees ▪ Improve connectivity within town, including along main corridors ▪ Create a trailhead	▪ Create a recreational trail that loops in and around the city linking public parks, the schools and college, and hospital and commercial districts, and extends beyond the city limits to connect to the Flint River Trail system ▪ Enhance user safety and comfort by adding site amenities such as shade trees, benches, and lighting ▪ Construct a trailhead that provides a welcoming environment, is park-like, and provides ample parking for visitors	▪ Encourage physical activity ▪ Enhance recreational opportunities ▪ Improve the user's experience and comfort ▪ Create a destination that is functional, aesthetic, and draws visitors
 **Safety**	▪ Provide safe pedestrian road crossings ▪ Ensure sidewalks meet ADA accessibility standards ▪ Add lighting to main pedestrian routes ▪ Maintain roadways and sidewalks	▪ Provide safe pedestrian street crossings with ADA-compliant ramps on all streets, prioritizing the following corridors: Gear Ave., Ramsey St., Broadway St., W. Burlington Ave., Mt. Pleasant St., Huston St., Van Weiss Blvd., and Agency St., and also the streets that are part of the Safe Routes To School route ▪ Install high-visibility crossings at intersections ▪ Correct drainage issues that impact the safety, health, and welfare of residents, especially on streets, sidewalks, and trails ▪ Repair streets and sidewalks that are in disrepair ▪ Ensure existing sidewalks and future sidewalks meet ADA-accessibility standards	▪ Improve safety for pedestrians, cyclists, and motorists ▪ Improve vehicular and pedestrian circulation ▪ Enhance the aesthetics of the community ▪ Keep roadways, sidewalks, and trails in good repair

West Burlington
What, Where & Why

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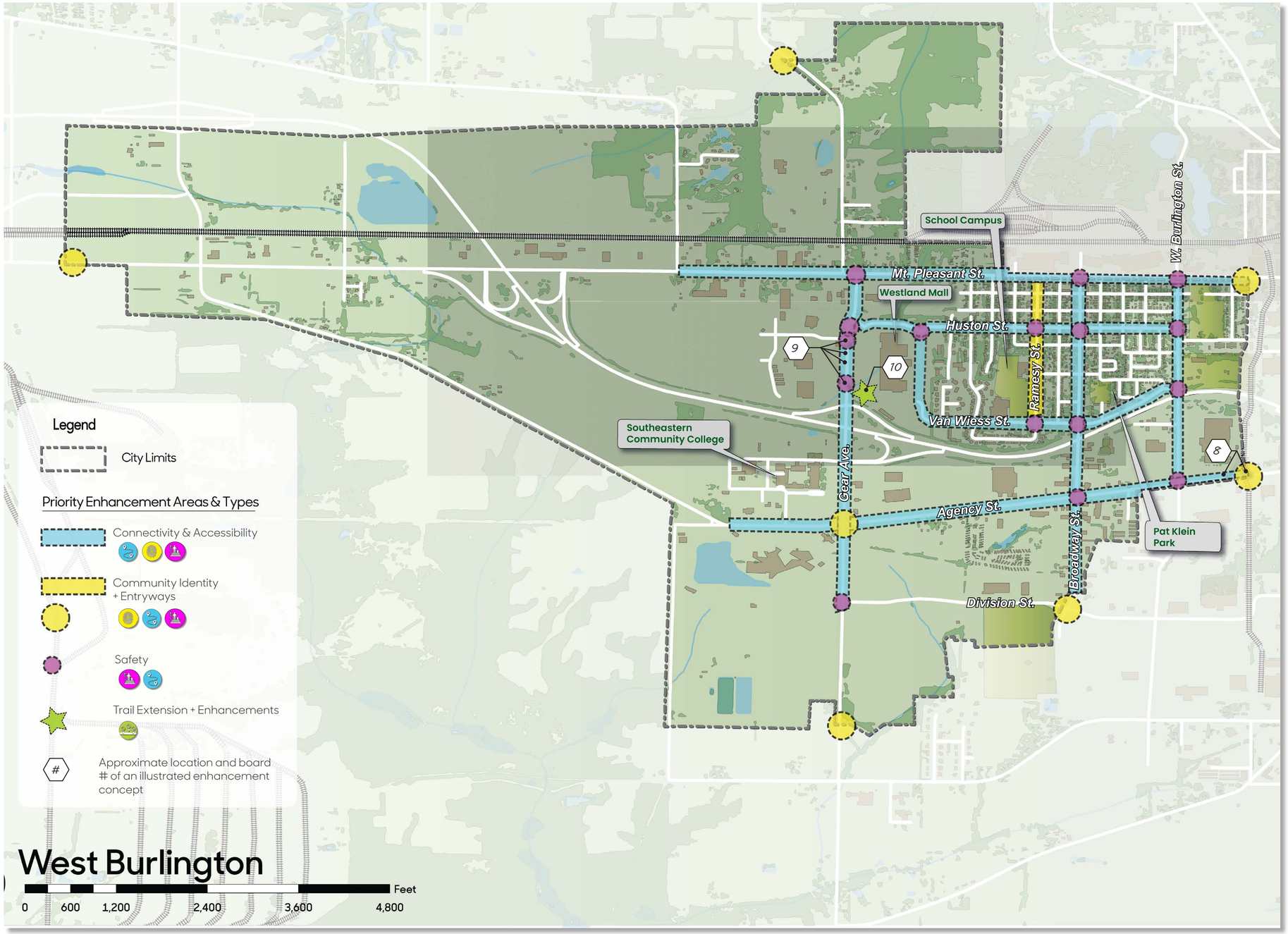

Concept master plan

West Burlington
Concept Plan

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LA: Meg Flenker, PLA, CPESC, CPSWQ
Interns: Mikky Ojha, Trevor Smith
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Concept Plan

The concept master plan shows the proposed location for various enhancements ("projects") that are showcased in the visions illustrated on the following boards. These concepts represent potential design solutions to various challenges and desires related to West Burlington's transportation system that residents identified throughout the visioning process. The icons shown on the plan represents the enhancements that provide solutions to meet one or more of each specific value/theme detailed on Board 6 with the same icon. This plan and the enhancements illustrated in this set of boards identify opportunities for effective placemaking.

Placemaking

Perhaps one of the best definitions of placemaking is from Wikipedia: *"Placemaking is a multi-faceted approach to the planning, design and management of public spaces. Placemaking capitalizes on a local community's assets, inspiration, and potential, with the intention of creating public spaces that improve urban vitality and promote people's health, happiness, and well-being....Good placemaking makes use of underutilized space to enhance the urban experience at the pedestrian scale to build habits of locals."*

What, Where, and Why?

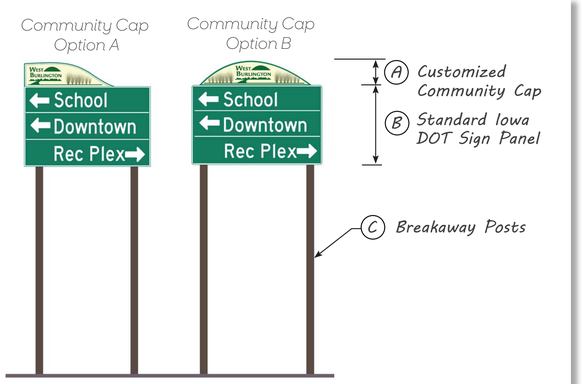
As can be seen on the concept plan and in the concepts that follow, a project designed to address one concern has the potential to improve and/or solve other issues. As an example, enhancements that improve connectivity and accessibility can aid in strengthening community identity and improving safety and traffic control.

Adopting and utilizing a "complete streets" approach to planning, designing, building, operating, and maintaining streets enables safe access for all user types, including pedestrians, bicyclists, and motorists of all ages and abilities. The visions shown on the following boards were created following the complete streets methodology as part of placemaking efforts.

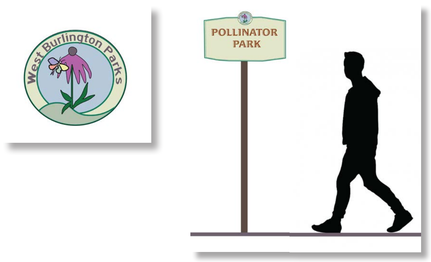
Community Identity & Entryways

Entryways are a visitors first impression of a community. The entrance sign is an integral part of the entryway, as it identifies the community to passersby and clearly defines the city's boundaries. An effective entryway sign is clear and concise so that it can be quickly and easily read by motorists who have minimal reading and comprehension time.

To enhance community identity, it is important that the city logo is incorporated and that the sign utilizes colors and materials taken from a designated palette of colors and hardscape and landscape materials that are replicated elsewhere in public areas within the community - this applies to site amenities as well. The replication of color, material, and style is critical to create a unified, aesthetic appearance and enhance community branding efforts.



Proposed way-finding signage with community cap



A new proposed logo to be incorporated into park identity & park interpretive signage reflects West Burlington's pre-development prairie heritage through the use of graphics and colors

Proposed entryway sign concept style 1

Proposed entryway sign concept style 2

Proposed entryway sign concept style 3

Signage Elements

Way-finding Signage With Community Cap

- Color of sign panel (B) Iowa DOT(DOT) standard green.
- Community cap (A): Both options shown incorporate the city's existing logo and prairie grass like that used on the entryway signage; the background color is cream with a DOT green colored border
- Sign posts (C): IDOT-compliant metal breakaway posts, color to match light posts.

Entryway Signage

- Sign Style 1: sign materials include natural colored tumbled field stone and limestone; grasses, logo and WB constructed of metal - all backlit for nighttime viewing
- Sign Style 2: sign materials include brick and limestone; grass, logo constructed of metal - all backlit for nighttime viewing
- Style 3: sign materials include brick and limestone with engraved colored border around limestone; grass; logo constructed of metal and backlit for nighttime viewing

Proposed entryway concept A: Illustration incorporates proposed entryway signage style 1

Proposed entryway concept B: Illustration incorporates proposed entryway signage style 2

Proposed entryway concept C: Illustration incorporates proposed entryway signage style 3

Existing entryway photo: Photo taken from Agency St. looking northwesterly toward the existing entryway signage and westerly along Agency St. on the east side of town just to the west side of the railroad

Community Entryway Concept Elements

- Decorative Lighting : enhances aesthetics and nighttime pedestrian safety and use, assists in traffic calming, reinforces branding efforts, and serves as an element of way-finding when placed along main corridor routes; bronze/brown color integrates with signage color palette
- Street Trees: provide needed shade to pedestrians, improve streetscape aesthetics, assist in traffic calming, and direct/screen views
- Community Branded Way-Finding Signage: provides guidance to important destinations within the community, enhances community identity
- ADA-Compliant Sidewalk Along Agency St. Corridor: enhances pedestrian safety and accessibility
- Entryway Signage Landscaping: simple landscaping in mass to accent and not distract from the sign; low maintenance, native plant material; mowing edge and mulch bed to minimize maintenance
- Ornamental Grass Group Plantings: assist in carrying out grass element of signage, improve streetscape aesthetics while being low maintenance, create more visual interest for both the pedestrian and motorists, and assist in traffic calming
- Landscaped Seating Area "Pods": provide seating along long stretches of walking routes, enhance user comfort, and integrate landscaping into the corridor
- New Entryway Signage: defines boundaries of community and forms first impression to visitors

West Burlington
Community Identity & Entryways

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Accessibility & Safety

In the focus groups and the survey, as well as at the design workshop, residents consistently cited the same major transportation-related concerns and desired enhancements.

Concerns focused on pedestrian accessibility and safety, from the lack of curb ramps and existing sidewalks that are too narrow and/or in disrepair throughout the community, to the lack of ADA-compliant sidewalks, safe pedestrian crossings, lighting, and shade trees along the main corridors. Desired enhancements include ADA-compliant sidewalks, pedestrian lighting, trees, benches, safe road crossings and separated recreational trails.

Gear Avenue

The Gear Avenue corridor concept shown below addresses all of the residents' concerns and desired enhancements by incorporating "Complete Street" principals. Complete streets are designed to meet the needs of all users, regardless of their age and ability, or whether they walk, bike, drive, or take public transportation.

Three options are shown for the location of a crosswalk on Gear Ave.. See board 9b for information regarding these options and the traffic calming measures that are integrated into them. Board 9b also shows examples of other types of traffic calming strategies that can be integrated into roadways within West Burlington to enhance pedestrian and motorist safety.

Gear Avenue Corridor Plan Notes

1. Street trees enhance streetscape aesthetics, provide shade, reduce heat-island effects, assist with water and air quality, and direct views, their vertical structure and spacing can also help with traffic calming.

2. Widened and ADA-compliant sidewalks and designated crosswalks enhance streetscape aesthetics, improve pedestrian accessibility, increase safety, strengthen connectivity to commercial businesses along Gear Avenue, and reinforce the importance of the corridor. Decorative crosswalks create a unified appearance when the hardscape materials and colors replicate those found in the entryway signage.

3. Raised roadway median on each side of crosswalk minimizes pedestrian and motorist interactions, increasing safety and user comfort. The median can be planted with short, salt-tolerant plants or surfaced with decorative pavement.

4. Landscaped seating area "pods" adjacent to the sidewalk (on pavement) provide accessible seating along walking routes, enhance user comfort, and incorporate landscape into the corridor to improve the streetscape aesthetics. The use of native plantings or hardy ornamentals and mowing edges will minimize maintenance.

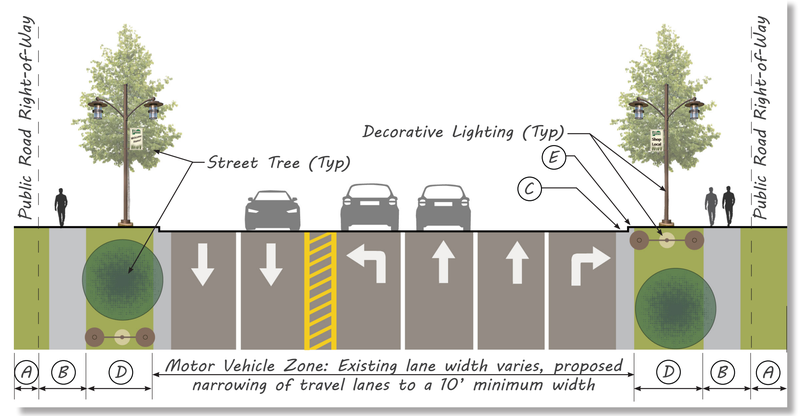
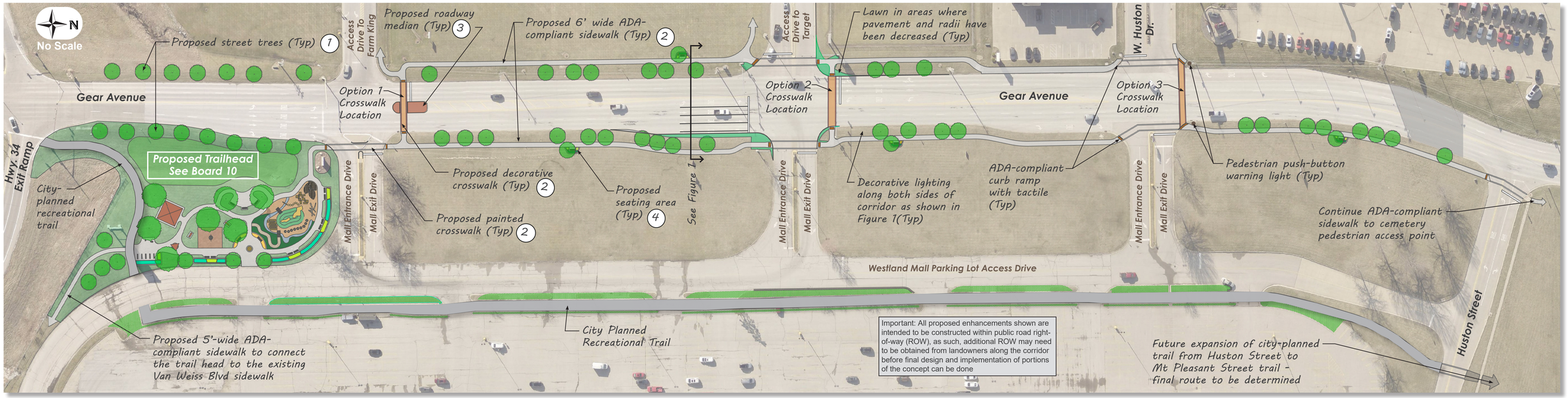


Figure 1: Proposed typical section for Gear Avenue

Typical Section Notes

- (A) Commercial Zone
- (B) Pedestrian Zone: Width varies from 6' wide for sidewalk to 15' wide in seating areas)
- (C) Gutter: Width +/- 2' wide from front of curb for storm water drainage, not part of travel lane
- (D) Green Zone: Width varies (recommend 10' - 15' wide); location of decorative street lighting,street trees, traffic control signs, way-finding signs, and utilities
- (E) Curb



Proposed concept plan for Gear Avenue from Hwy. 34 to Huston Street

West Burlington
Accessibility & Safety

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Interns: Mikky Ojha, Trevor Smith
Iowa State University | Trees Forever | Iowa Department of Transportation

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Traffic Calming

"A variety of definitions are commonly used in the traffic calming field and although the exact wording may differ, the essence remains; traffic calming reduces automobile speeds or volumes, mainly through the use of physical measures, to improve the quality of life in both residential and commercial areas and increase the safety and comfort of walking and bicycling."

– U.S. Department of Transportation Federal Highway Administration

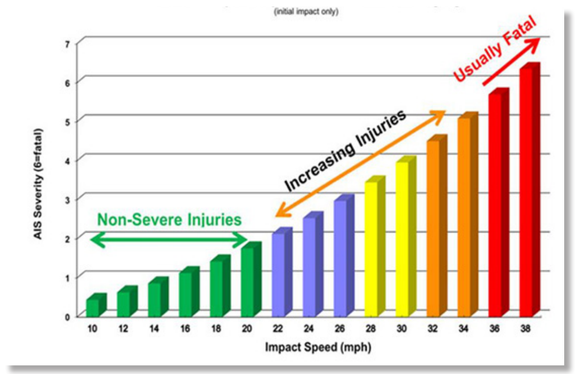


Figure A: Speed/Pedestrian Injury Severity Correlation; Source: US DOT FHWA - C.E. "Rick" Chellman

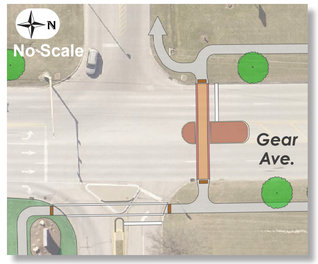
Traffic calming is an integral component of complete streets, contributing to safety and improved quality of life and creating a sense of place in a community. There are numerous design tools available for calming traffic in urban areas like West Burlington, whether it is along a primary corridor like Gear Ave., or along a residential street.

This board illustrates various types of traffic-calming treatments that are shown in the concepts, and/or if not, are still applicable to various locations within West Burlington. Some of these approaches will require little to no major modifications to the roadways, and some may require more extensive modifications that are more appropriate for new construction or street reconstruction/rehabilitation.

It is the intent that all of the pedestrian crossings support a safe, walkable environment.

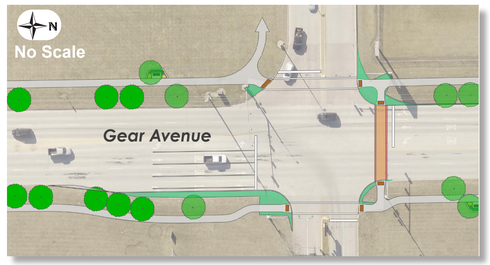
Gear Avenue Crosswalks

Following are thumbnails drawings of the three options proposed for potential crosswalks on Gear Ave.



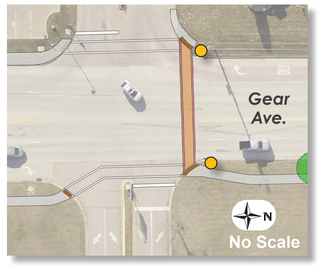
Option 1 Gear Ave. Crossing

Option 1: Having the least amount of pedestrian/ motorist interaction, this crosswalk is supported by the vertical traffic calming measure of a raised median with a crosswalk cut-through, which slows traffic and increases pedestrian safety by providing a center refuge on which to wait.



Option 2 Gear Ave. Crossing

Option 2: Located at a traffic light controlled intersection, this option utilizes two traffic-calming techniques to support the crosswalk: 1) road diet (lane narrowing) which reduces speeds and minimizes accidents by making drivers more cognizant of traffic and other users, and 2) radii reduction, which decreases vehicle turning speeds and pedestrian crossing distances. The radius on the southwest corner of the intersection is not reduced to allow delivery semis to have access to Target from the south.



Option 3 Gear Ave. Crossing

Option 3: This option consists of supporting the crosswalk with pedestrian-activated signals to alert approaching vehicles on Gear Ave. of pedestrian use.

Figure B: Raised median with crosswalk cut-through (aka refuge island); Photo source: highways.dot.gov

Figure C: Curb Extension (also referred to as bulb-out or bump-out); Photo credit: Dylan Passmore

Figure D: Raised intersection; Photo source: space4cyclingbne.com

Figure E: Raised crosswalk; Photo source: sfbetterstreets.org

TRAFFIC CALMING EXAMPLES

Raised Median (Figure B)

This is a street-width reduction, traffic-calming measure. A raised curb median is installed in the center of the road where it was otherwise marked for no traffic; the walkway cuts through the median, maintaining ADA-compliant accessibility.

- Creates shorter crossings for pedestrians
- Provides a safe, protected waiting area in the middle of the four-lane road for pedestrians who can't make the full crossing in one attempt
- Provides a space to integrate plantings or decorative pavement into the streetscape to enhance the aesthetics

Curb Extension (Figure C)

This is also a street-width reduction, traffic-calming measure. Curb extensions extend the pedestrian zone farther out into the roadway (staying out of the travel-way) for the purpose of narrowing the road visually and physically.

- Creates shorter crossings for pedestrians
- Protects vehicles parked along a street when there is on-street parking and prevents parking too close to intersection
- Tightens intersection curb radii to encourage lower turning speeds
- Increases the overall visibility of pedestrians
- Serves as a visual cue to motorists that they are entering an area of slower traffic speeds
- Visually and physically narrows roadway to slow down traffic
- Provides space to incorporate plantings into the streetscape and/or stormwater management and water quality treatments

Raised Intersection (Figure D)

This traffic-calming measure is considered to be a vertical deflection. A raised intersection is flush with the sidewalk, and road (lane) approaches to intersection are gradually sloped; intersection corners are protected with bollards to keep motorists from crossing into pedestrian space.

- Tightens intersection curb radii to encourage lower turning speeds
- Increases the overall visibility of pedestrians, which helps reinforce slow speeds and encourage users to yield to pedestrians at the crosswalk
- Serves as visual and physical cue to slow down

Raised Crosswalk (Figure E)

This traffic-calming measure is also considered to be a vertical deflection and essentially functions the same as a raised intersection, except that it only spans the width of the crosswalk - the top elevated portion is generally 12' wide and centered on the the crosswalk marking.

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Tailhead

The city's newly acquired property on the northeast quadrant of the intersection of Highway 34 and Gear Avenue was deemed by the steering committee to be the perfect place for a trailhead. The site has access to ample parking, it is easily accessible to visitors, and the Gear Ave. trail extension that is scheduled to be constructed in 2024 will run through the site, allowing for ease of connectivity.

Trailhead Notes and Major Elements

- **Landscape buffer plantings:** buffer plantings with ornamental grasses and shrubs define the outer edge of the trailhead and provide users with a soft visual barrier from the adjacent vehicular uses

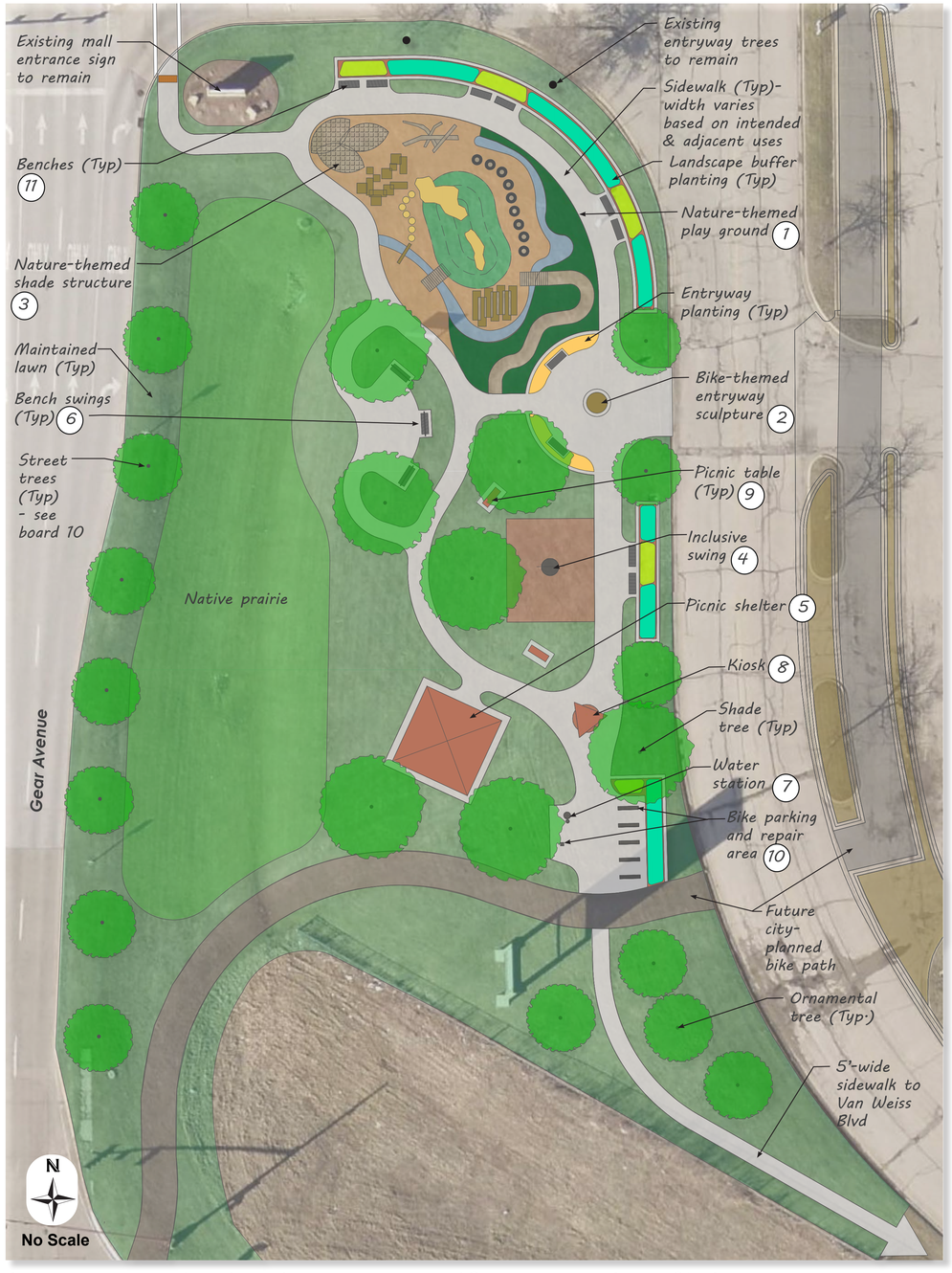
- **Trees:** Trees provide many environmental benefits and increase user comfort, while contributing to the overall aesthetics; ornamental trees align the east side of the trailhead to create an inviting entryway and sense of place

- **Native prairie:** planting native prairie on the steep and low portions of the roadway ditch will reduce mowing maintenance and provide a number of environmental benefits that include: improving storm-water quality, reducing storm-water runoff, and providing pollinator habitat . Adding interpretive signage along the prairie edge allows for users to conduct a self-guided tour and learn about the prairie and other associated topics. The selection of plant species for the prairie would entail incorporating species that are less weedy and maintain a shorter height, which is more conducive to the urban setting.

- **Nature-themed playground**: play area constructed to reflect a natural environment that physically and mentally challenges youth and fosters their imagination for creative play (see photo 1); a sidewalk defines the playground boundary

- **Nature -themed shade structure:** shade structure with perforated roof provides dappled shade, enhancing the comfort of playground users (see photo 3), and integrates well with the playground theme

- **Site amenities:** site amenities (see photos 5 - 11) enhance user comfort and when their placement and design are well thought out they improve usability; the color, materials, and style of site amenities should be coordinated/ complementary to create a unified appearance that contributes to the overall aesthetics
  Note: Selection of commercial-grade materials is important for safety, longevity, and reduced maintenance; placement of amenities on paved surfaces reduces maintenance, and when directly adjacent (connected) to a sidewalk, increases accessibility



Proposed concept plan for trail head in northeast quadrant of Gear Avenue and Highway 34 exit ramp

1 *Nature-themed playground*

2 *Bike-themed sculpture*

3 *Nature-themed shade structure*

4 *Inclusive multi-user-multi-direction swing*

5 *Small shelter with a few picnic tables*

6 *Bench swing to match color and style of benches*

7 *Water station*

8 *Informational kiosk*

9 *Covered individual picnic table*

10 *Contemporary-styled bike racks*

11 *Site amenities from same style family & in matching colors*

West Burlington
Trailhead

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