

2018-2019

FINAL REPORT

UniverCity Year

Better • Places • Together

Designing healthy spaces in Monticello

LANDSCAPE ARCHITECTURE 321: ENVIRONMENT AND BEHAVIOR STUDIO

DESIGNING HEALTH PROMOTING ENVIRONMENTS



LA 321 - Designing Health Promoting Environments

Instr.: Kristín Thorleifsdóttir Ph.D., MLA, asst.prof.

Spring Semester 2019



the village of
Monticello



ABOUT THE COURSE

LA 321 - Designing Health Promoting Environments, is a required three credit sophomore design studio course in Landscape Architecture taught every spring at UW-Madison. In Spring 2019 the course was taught in a partnership with the Village of Monticello, the Department of Planning and Landscape Architecture, The UW-Madison Morgridge Center for Public Service and the UW-Madison's UniverCity Year.

In the course, an emphasis is placed on the application of design principles aimed at promoting people's health and wellbeing in small rural towns and villages. Students learned about people-environment interactions through systematic study of natural, socio-cultural and experiential factors. They learned to collect, analyze and interpret reliable qualitative and quantitative data and translate it into design principles that ground evidence-based design solutions.

The overall goal of course project was to develop a health promoting masterplan for open spaces in the village followed up with designs for several open spaces in the village.

The project was divided into two main parts: site inventory and analysis (group project) and evidence-based designs for public open space (individual project).

Through the project, students learned about the design process, project programming (rationale for improvements and goal setting), concept development, evidence-based design and community-based learning. We also continued to practice effective use of various computer software including geographic information systems (GIS), AutoCad, Illustrator, InDesign and PowerPoint.

Four creative micro, place-based exercises were integrated into the course project:

1. *Photo Vignettes* - Monticello photo book
2. *Village Patterns* - designs inspired by textiles and music
3. *Poetic Spaces* - place-based poem
4. *Engaging Sculpture* - interactive place-based sculpture

The class visited the village on two occasions. The main purpose with the first visit was to introduce the village, its history, people and places. After a warm welcome at the Morning Mug, a few members of the community shared their knowledge about the village. The class also visited the Historical Society, the Zwigli church and the Gempeler's Supermarket. Before heading back to Madison, the students walked around and took photographs describing their first impressions of Monticello (Photo Vignettes).

The second visit to Monticello took place in March. During this visit, the students assisted with a community design workshop focusing on opportunities for outdoor recreation in the village and its vicinity. At the workshop, the students presented findings from the group project and led thematic table discussions. The workshop was well attended and Monticello residents shared important information, which helped students develop design ideas for public open spaces in the village. At the end of the semester, the class presented their designs at UW-Madison.



THANK YOU MONTICELLO!

We would like to thank the people of Monticello for an amazing partnership. Without your help, enthusiasm, and willingness to share local knowledge, this project would never have been the same. This collaboration provided the students with a wonderful opportunity to learn about your community - to learn about issues facing rural communities and how community-focused town planning and design can help improve health and wellbeing. Special thanks are due to the Leora Miller, member of the Village Board, Tracy Bartels, the owner of the The Morning Mug, the Historical Society, the Public Library, Gempeler's Supermarket, the Zwingli church, and all the people who participated in the design workshop.

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selected
group
project



MONTICELLO.

Open Space Inventory and Analysis

students names have been removed.

for LA 321 - Spring 2019 - Dr. Thorleifsdóttir - Department of Planning and Landscap Architecture, UW-Madison

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Project Introduction

This document reports the findings from a context inventory and analysis for the Village of Monticello in Green County, Wisconsin. The analysis is a part of a semester-long course project aimed to promote health and wellbeing through the planning and design of open space. Based on these findings and further community discussions, students will develop a masterplan for public open space in the village and design selected spaces. The course, LA 321 Designing Health Promoting Environments, is a partnership with the Village of Monticello, the Department of Planning and Landscape Architecture, UW-Madison's UniverCity Year, a program aimed at creating more sustainable, livable and resilient communities, and the UW-Madison's Morgridge Center for Public Service. The partnership looks to maintain the University's Wisconsin Idea of using university resources and research to improve the health and life of the residents of the state by providing ideas for the future improvement of the village and innovative solutions that address the area's unique needs.

This analysis aims to better understand community needs in regard to public open space by identifying opportunities and constraints at a regional and local scale. We studied natural systems, the built environment, demographics, and experiential factors based on information from various sources including various GIS data sets, the U.S. Census Bureau's Fact Finder, local comprehensive plans and websites, seasonal photographs and findings from a resident workshop conducted by the course instructor's research team, and field data collected during a class visit to the village on 2/09/2019. Data about Monticello's resources and existing state were compiled, mapped and analyzed to produce a better understanding of the opportunities and constraints for the future of public open space within Monticello.

Location

The Village of Monticello is located in the South-Central region of Wisconsin and calls Green County its home. It is located in-between the counties two largest cities of New Glarus and Monroe. The village is connected to these urban centers and the rest of Wisconsin by the State Highway 69. The county's most prominent water feature, the Little Sugar River, runs through the village. The village lies on the westward edge of the "Driftless Area" of Wisconsin, an area untouched by the last glacial period, and give the humid summers, creating



Historical Image of Main Street on Market day (Historical Monticello Area Part 1. (n.d.)).

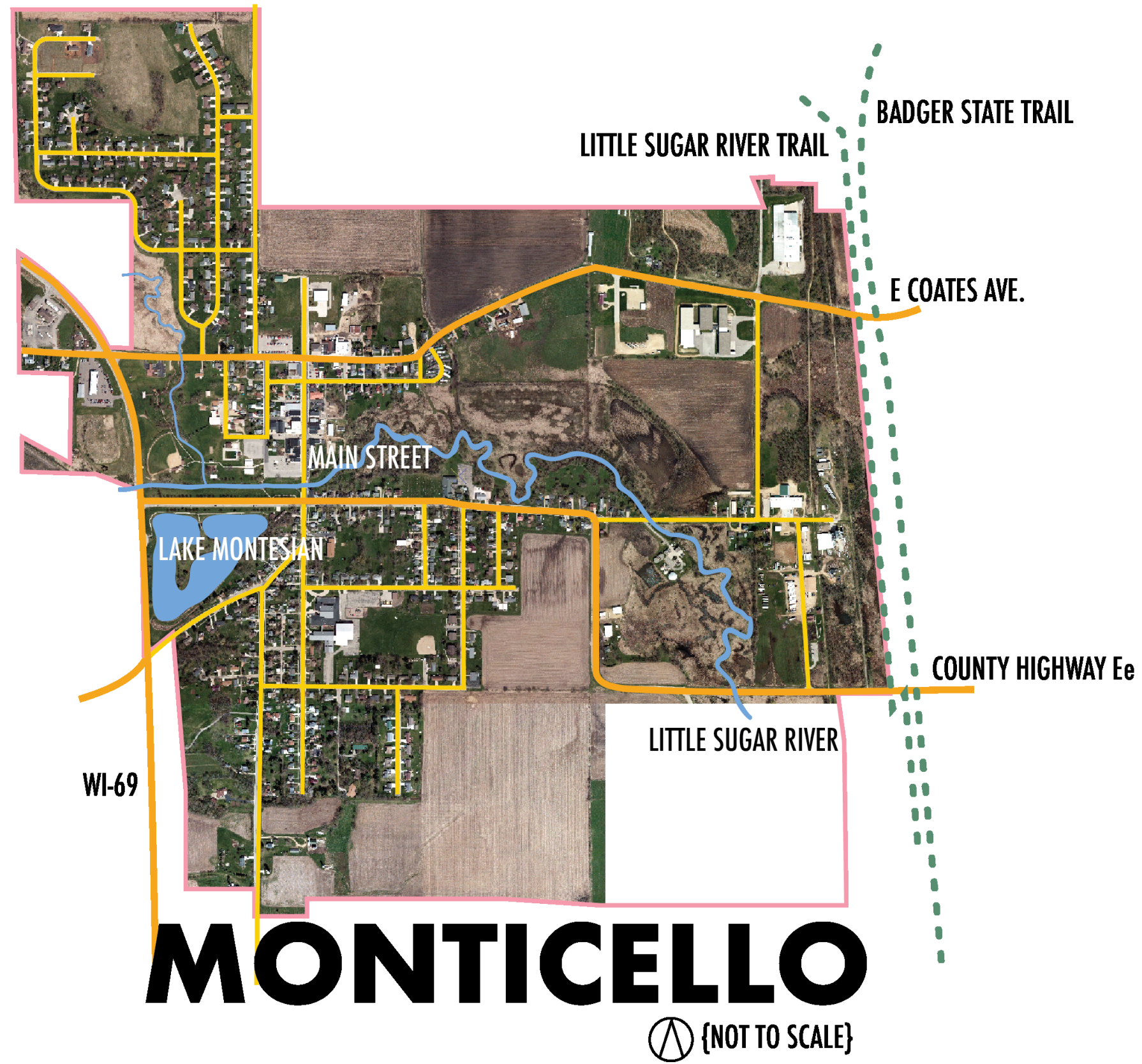
History

The history of Monticello begins with a man named Robert Witter, who is recorded purchasing 80 acres in the area on May 1st, 1845. From here the village grew as more people, mostly of Swiss and German heritages, followed Witter's lead and started to set up homesteads within the area. Soon a small downtown grew with a dirt Main Street and the creation of the precursor to the present day Lake Montesian, a pond created by damming the Little Sugar River for power. This resulted in the creation of the Monticello Grist Mill by Orrin Bacon in 1854, which turned the pond into a mill pond for flour production. The mill was in operation until 1830 and the pond grew to the size of 38-acres, offering not only recreation for the growing community of Monticello, but also work in the form of ice manufacturing in the winter months (Babler). Bacon was also influential in the creation of the Monticello Woolen Mill, located to the Northeast of town, which was formed in 1866. In the early 19th-century Monticello wool could be found in Chicago markets and department stores like Sears; however, in 1950 a fire destroyed the mill and permanently shut wool production down (Historic Monticello Area Part 1). At this time agriculture was, and still is, a large source of income for the community. The village got a large electrical upgrade in 1948, which greatly improved the quality of life for many of the residents. Additionally, in 1971 the Monroe Cheese Corp moved into town supplying jobs within the cheese market, a source of income that is still important to the village's livelihood to this day and the heritage of its residents. All of these events helped to contribute to the Monticello of present, which boasts a population of over 1,200.



Aerial photo of Monticello (About mahs. (n.d.)).

VILLAGE BASE MAP



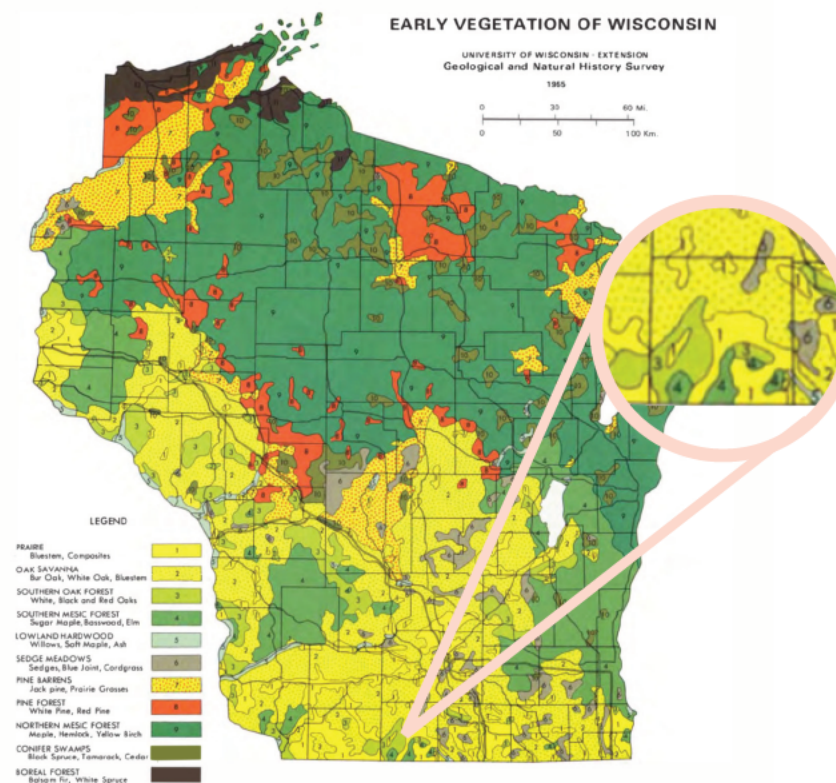
Knowledge Statement

Villages, towns, and cities of all sizes are a result of man-made planning around the natural systems of that area. Monticello would not be the place it is today if it had different hydrologic aspects, natural features, soils, and topography.

Studies show that a positive relationship between people and the natural environment in which they live can improve quality of life in a number of ways. Access to the native environment lowers stress, improves overall health, and can even increase rates of healing during times of sickness. Capitalizing on the natural setting of a town can lead to a healthier, more sustainable community (Terrapin Bright Green, 2014).

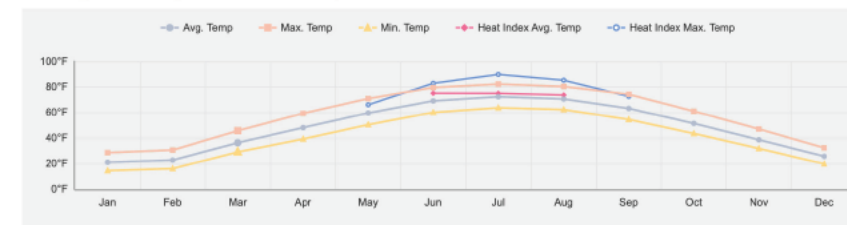
Archival data, literature and GIS data sets were used to inventory natural systems. Maps were generated and layered to better understand relationships between nature and the way people build their communities (University of Southern California, 2018).

Early Vegetation Map



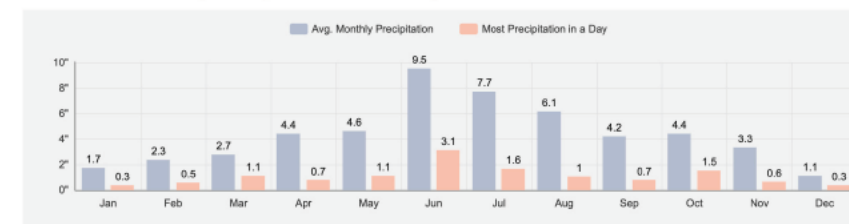
Cottam, G., & Loucks, O. (n.d.). Early Vegetation of Wisconsin. Retrieved February 28, 2019, from <https://mywisconsinwoods.org/>

Average Monthly Monticello Temperature With Heat Index



Areavibes. (n.d.). Monticello, WI Weather. Retrieved February 28, 2019, from <https://www.areavibes.com/monticello wi/ weather/>

Monticello Monthly Precipitation With Daily Maximum



Areavibes. (n.d.). Monticello, WI Weather. Retrieved February 28, 2019, from <https://www.areavibes.com/monticello wi/ weather/>

Vegetation

Because of the unique climate, soils, and modification from fire, the early land cover within the Monticello area was historically comprised of tall-grass prairie and oak savannas. Oak savannas feature sparsely dispersed trees, in-between which grasses and other shrub species are readily able to grow beneath them. The "openness" of these savannas are typically controlled by fires, which in turn help to create more fertile soils. Both tall-grass prairies and oak savannas support threatened species like the Prairie Bush Clover (*Lespedeza leptostachya*), Mead's Milkweed (*Asclepias meadii*), and Northern Long-Eared Bat (*Myotis septentrionalis*), as well as one endangered species, the Rusty-Patched Bumblebee (*Bombus affinis*) (Wisconsin Department of Natural Resources).

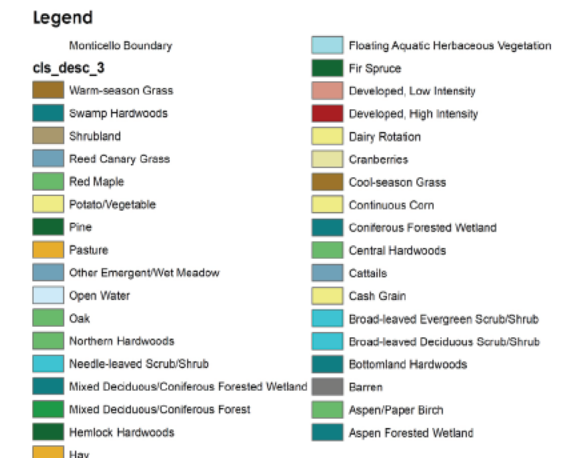
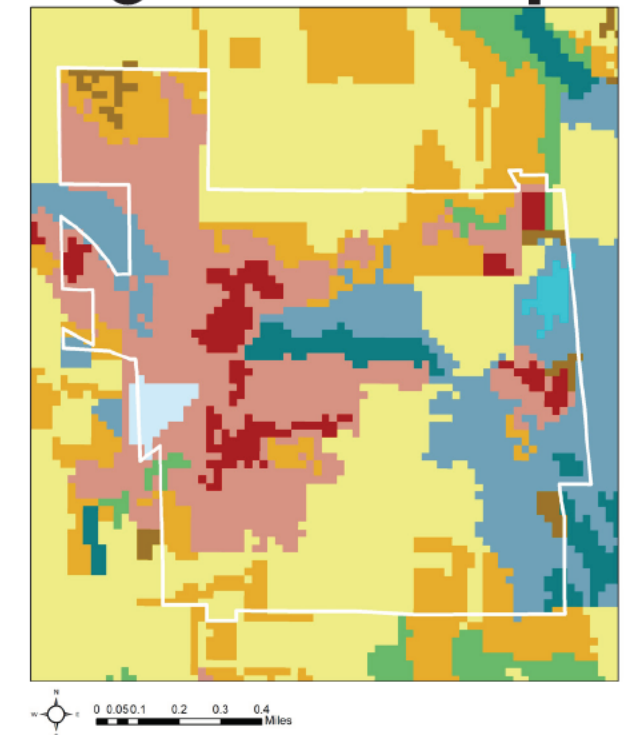
Because of this, and the fact that over 30% of the land cover in Monticello is agricultural lands, the dominate vegetation has drastically changed away from oaks and prairie grass with the growth of the human population in the area. Today cash grains, potato/vegetable, and pastures for dairy rotation dominate the Monticello vegetation landscape. The presence of the Little Sugar River and its surrounding floodplains additionally create large areas of wet meadows and emergent areas. Common vegetation within these zones are swamp hardwoods, Reed Canary grass, and cattails. As for larger vegetation, the area is dominated by oak trees and other central hardwoods.

Climate

Due to Monticello's location in Southern Wisconsin, its climate is considered to be a hot-summer humid continental climate (Dfa), known for a large temperature difference between seasons and are usually found between latitudes 40 and 60 degrees North (Britannica, T.E.). Monticello has a score of 41 out of 100 on the Sperling Comfort Index, an index in which the higher the score the more comfortable the climate is considered. Within the United States the average score for urban centers of various sizes is 54.

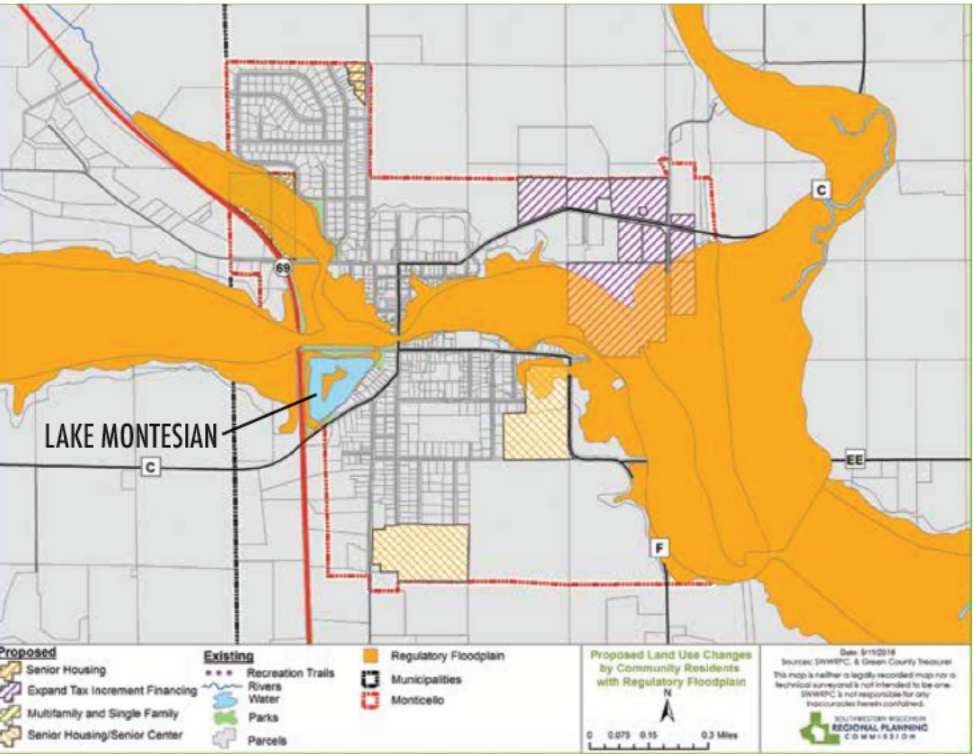
The average summer high is 85 degrees Fahrenheit, while the average winter low is 10 degrees. This corresponds with the temperature differences between seasons expected of a humid continental climate. Between this flux in temperatures, and the fact that two-thirds of the annual precipitation falls during the growing season make Monticello an ideal climate for small grain, corn, and dairy farming, something many farmers in the area have taken advantage of.

Vegetation Map



HYDROLOGY ANALYSIS

Floodplain Map



Southwestern Wisconsin Regional Planning Commission (SWWRPC). (2016). Comprehensive Plan for the Village of Monticello, Wisconsin (Rep.). Retrieved from <https://vi.monticello.wi.us/wp-content/uploads/2016/07/Monticello-Plan-Final-High-Resolution.pdf>.

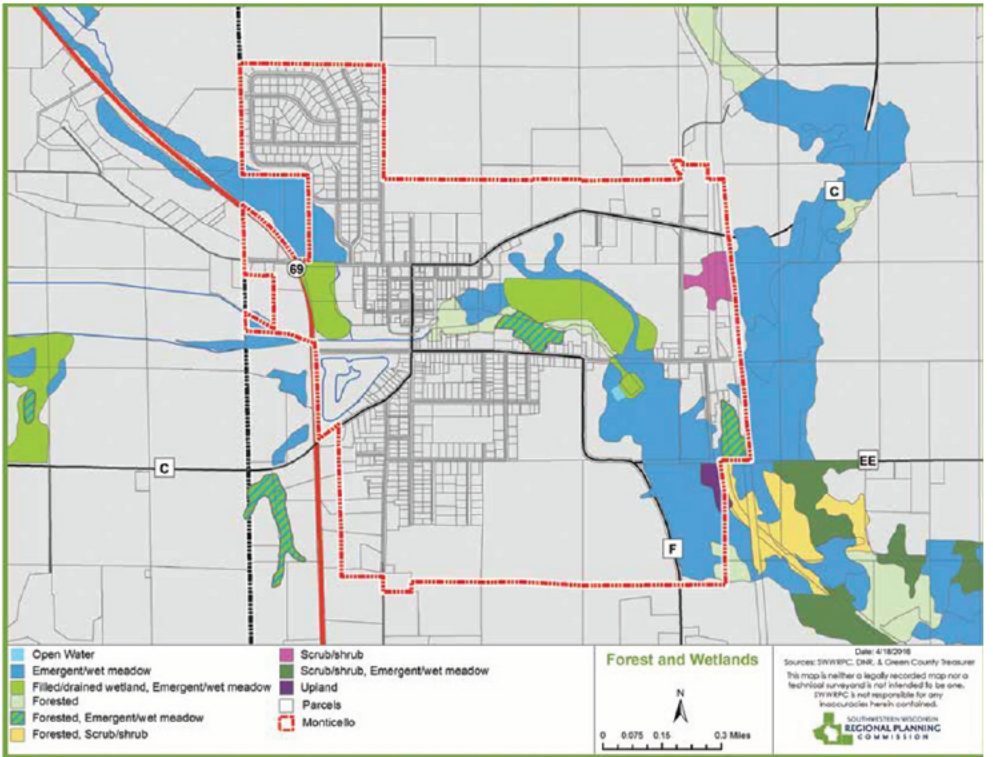
Because the Little Sugar River runs through the town, a portion of the commercial district is located in the river's floodplain. This is a problem to businesses and property owners as the river regularly floods, due to the lack of adequate water management practices. While the man-made spring fed Lake Montesian can retain some excess water, it is not connected to the Little Sugar River and does little to prevent the spread of flood water.

Lake Montesian

Lake Montesian, in its current form, is a man-made, 10 acres, spring fed lake located in the South-East corner of the rural downtown district that historically provided ice cutting jobs for the townsfolk in the winter months and was initially made by damming up the Little Sugar River to generate power. It was later used as a mill pond for the Monticello Grist Mill and was renovated into its current state in 1966. (Babler) It continues to be a cultural icon for the town with its unique eye catching sign and great fishing experiences. However, the lake is much more than that as it functions as a large water reservoir as well. Almost all of the runoff within the half mile radius of the downtown area, finds its way either into the lake or the Little Sugar River. Because of this, just like the river, in years of heavy rainfall the lake can be prone to flooding.

Both the floodplain and wetlands maps were taken from the Village of Monticello's Comprehensive plan created by SWWRPC and show the extent of the Little Sugar River's hydrological reach. It is clear that the banks of the river are not strict, and water interacts with a wide range of area surrounding the river.

Wetlands Map



Southwestern Wisconsin Regional Planning Commission (SWWRPC). (2016). Comprehensive Plan for the Village of Monticello, Wisconsin (Rep.). Retrieved from <https://vi.monticello.wi.us/wp-content/uploads/2016/07/Monticello-Plan-Final-High-Resolution.pdf>.

Introduction

The two largest, and most influential, hydrological features of the Village of Monticello are the man-made Lake Montesian and the natural Little Sugar River, which winds through the town. Both of these bodies of water collect runoff water from the village but also contribute to the cultural identity through recreational use and visual significance. This means it is not only environmentally and sustainably important to preserve and maintain these water bodies, but it is also culturally significant.

The Little Sugar River

Monticello, lies within the Little Sugar River watershed, which is named after the small river which cuts through the town itself and eventually reaches the Mississippi via the Sugar, Pecatonica, and Rock rivers (DNR). This river provides ecologically significant wetland areas along its banks; however, many of these wetland areas have been drained and converted into agricultural fields. Because of this, there is a large potential for polluted runoff to enter the river, although no tests have been done to determine the level of pollution. Additionally, the nearby New Glarus wastewater treatment plant has failed to meet the Wisconsin Pollutant Discharge Elimination System permit limits for the same river (DNR).

Opportunities and Constraints

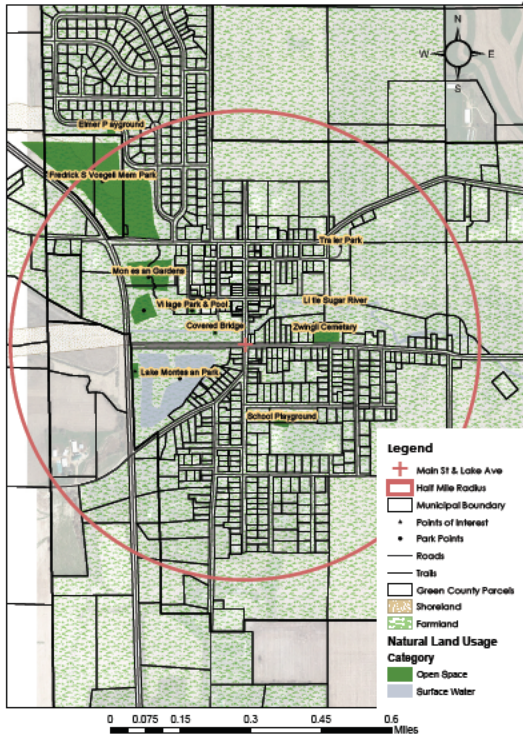
In summary, the village of Monticello has two unique and historically significant water features within its limits, the Little Sugar River and Lake Montesian. Both are attractive features that provide multiple opportunities for recreation but also serve as runoff/flooding reservoirs. Due to their close proximity to buildings and lack of adequate safety measures, both water systems create flooding related problems when there is an excess of water. The village needs a better plan to tackle the issue of flooding as well as creating better public access and enjoyment of these wonderful assets.

PARKS/NATURAL AREAS

Introduction

The village of Monticello prides itself on its public amenities and green spaces it provides to its citizens, something fairly unique to small Midwestern towns. There are numerous public parks as well as smaller amenities throughout the village that provide recreational opportunities and connectivity to natural areas. Many of these features are the backbones of communal gathering in the village.

Half Mile Park Inventory



Connectivity to Natural Areas

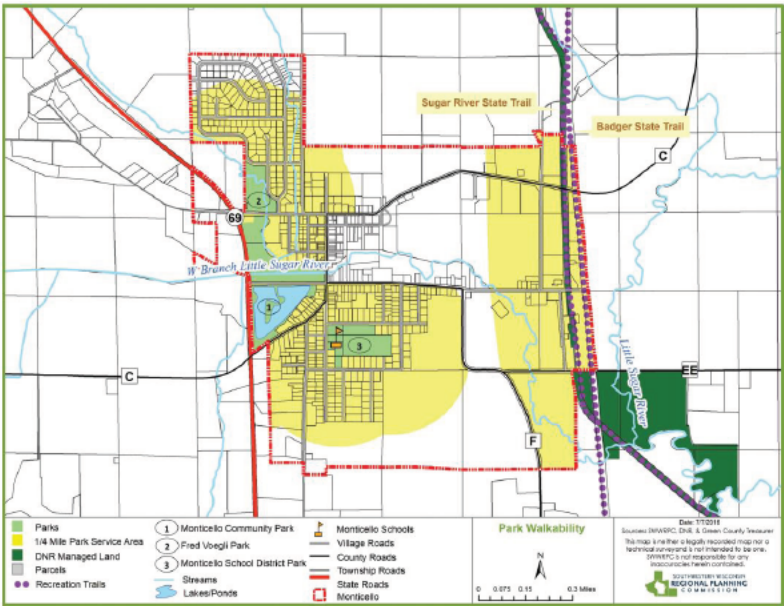
The Little Sugar River divides the village into northern and southern halves and two state bicycle trails run along the eastern border of the village: the Ice Age National Scenic Trail and the Badger State Trail. The trails provide great recreational and commuting opportunities for Monticello and connect the village to natural areas in Green County including a DNR managed land that is immediately southeast of the municipality boundaries, the Albany Wildlife Area, and the New Glarus Woods State Park (SWWRP, 2016).

Public Recreational Opportunities

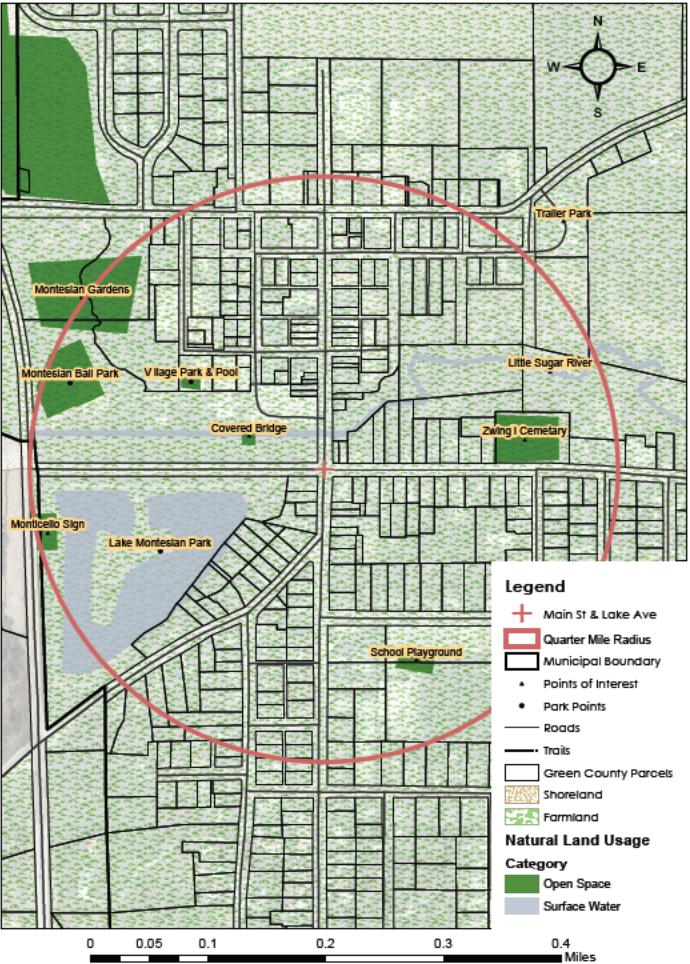
There are three large public attractions in the village of Monticello. Lake Montesian Park is located southwest of the intersection of Main St. and Lake Ave. and is centered around Lake Montesian. Located half a mile north of Lake Montesian is the Frederick S. Voegeli Memorial Park. Both of these parks are largely open green space (Lake Montesian Park has several built structures as well as the iconic 'Monticello' sign). In between Lake Montesian Park and the Voegeli Memorial Park are the Montesian Gardens. Also free to the public, the gardens are more designed than the other two, and feature community gardens connected via foot trails. Several art pieces can be seen throughout the space as well.

Aside from these three biggest public attractions, there are several smaller points of interest that offer recreational opportunities to the public. There is a baseball field and public swimming pool located immediately south of the Montesian Gardens. A cemetery is located next to Zwingli United Church of Christ, which is the largest open space aside from the three parks previously mentioned. There are two public playgrounds in Monticello. The Elmer Playground is located just outside the half mile radius from the intersection of Main & Lake, in the northwest portion of the village. There is also a public playground located adjacent to the elementary and high schools, which is the main feature of a small public school district park (SWWRPC, 2016).

Public Parks



Southwestern Wisconsin Regional Planning Commission (SWWRPC). (2016). Comprehensive Plan for the Village of Monticello, Wisconsin (Rep.). Retrieved from <https://vi.monticello.wi.us/wp-content/uploads/2016/07/Monticello-Plan-Final-High-Resolution.pdf>.



Quarter Mile Park Inventory

Opportunities and Constraints

In summary, for a small Midwestern town, Monticello offers a surprising variety of recreational opportunities related to parks and natural areas. The numerous parks and public places provide citizens with the tools to live a healthy lifestyle in relation to their surrounding greenery. Currently, however, the village's network of parks is somewhat constrained in its connectivity to neighboring natural areas, as the trails that run through the village do not connect directly to natural attractions.

Increased paths-open space connectivity provides opportunities to increase the use of Monticello's parks both by its citizens and visitors. Improved connectivity within the village and between the village and the state trails may also attract visitors which could provide economic benefits, e.g., better signage and connection of recreational trails to Main St. would be good for downtown businesses.

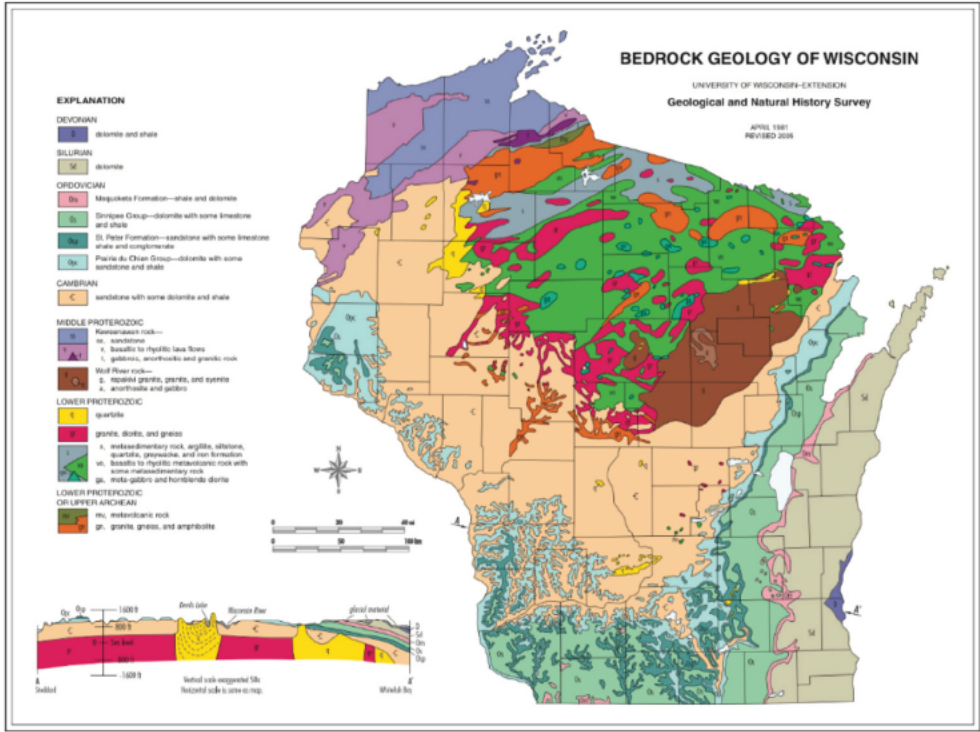
SOILS & GEOLOGY

Introduction

Soil is one of the great integrators of a landscape and the soil composition of an area plays a large part in its use and productivity. When planning a project soil is one of the major variables to consider as soil affects not only agricultural productivity but also the scope and size of buildings and construction on top of it. Monticello has a diverse group of individual soil classifications, though when classified into major groups the trend is towards a silty loam dominated landscape.

Path and Trails Suitability Map

Bedrock Geology of WI

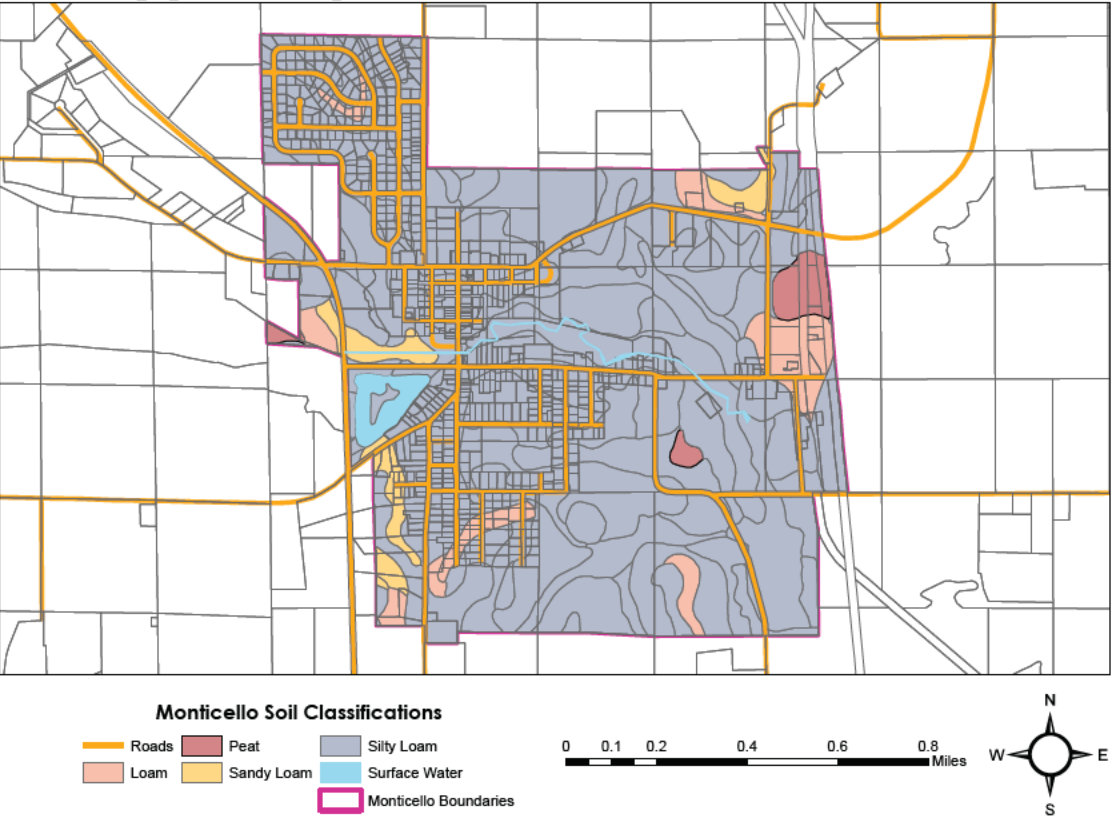


Good, M. (2017, June 14). Take Your Own Tour Through Geological Wonders Of Wisconsin. Retrieved from [https://www.wpr.org/take your own tour through geological wonders wisconsin](https://www.wpr.org/take-your-own-tour-through-geological-wonders-wisconsin)

Geology

In order to better understand soil types in and around Monticello it helps to look at a regional scale. Soils in the southern and western regions of Wisconsin are typically silty. A comparison of the soils map and the bedrock map shows a trend that parent material of dolomite and limestone tend to weather into silty soil. This is not a causal relationship however, as other factors such as Monticello’s location within the driftless area have also contributed to the soils found in the area today. The lack of glacial interference within this area meant that the level of weathering on the soil and the associated parent material were not altered.

Soil Type Map



Soil Classifications

Monticello has a diverse selection of soil classifications including loam, silty loam, sandy loam, surface water, and peat. The loamy soils dominate the landscape, though silt loam has the overall greatest percentage of the area at 79.9% of the area followed by Sandy loam at ~5.8% and Loam at 5%. Scattered throughout Monticello’s boundaries are patches of peat (~3%) (NRCS, 2017). These coincide with areas designated wetlands. Given this, these areas also scored poorly in their rating for paths and picnic area suitability. These areas are highlighted in red on the suitability map. Areas which are yellow are somewhat limited. Given that there were no sectors of Monticello which had a green rating of suitable, we should look to the areas in yellow as the main areas for development.

Silt loams are defined as soils containing a mixture of sand, silt, and clay. These are the three primary constituents of soil texture. Specifically, silt loams contain at least 20% sand, 70% silt, and a range between 0% and 27% clay. This relationship is best seen using a soil texture triangle which relates these three materials by percentage. Our next most prevalent soil is a sandy loam, having similar percentages of clay but with greater amounts of sand than silt. Loams are important for agriculture as they are incredibly rich and productive. It follows that this area is at the center of large agricultural activity as the soil is quite productive. The land use of Monticello shows that there is roughly a third of the land devoted to agriculture. While the total number of people employed by agriculture is low at roughly 50, this statistic reflects that each farmer maintains large plots of land. Looking at the soil map of Monticello, the area just outside of the village itself is composed almost entirely of silty loam.

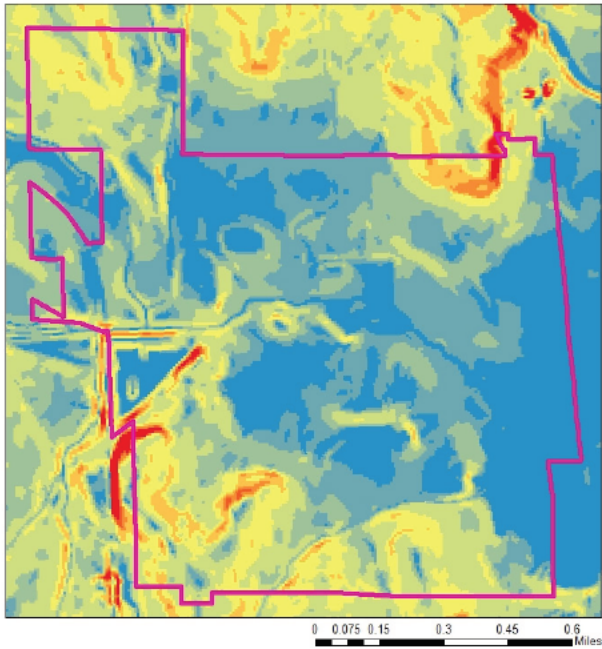
Opportunities and Constraints

In summary, the soil textures which dominate the area in and around Monticello and southwestern Wisconsin as a whole is silt loam. This soil is highly productive and prized for agriculture. Given the productivity of the soils, large swaths of land are devoted to farming. Moving forward, it is important to note that encroachment on farmers land will come at a cost to their productivity and should be considered when planning new areas.

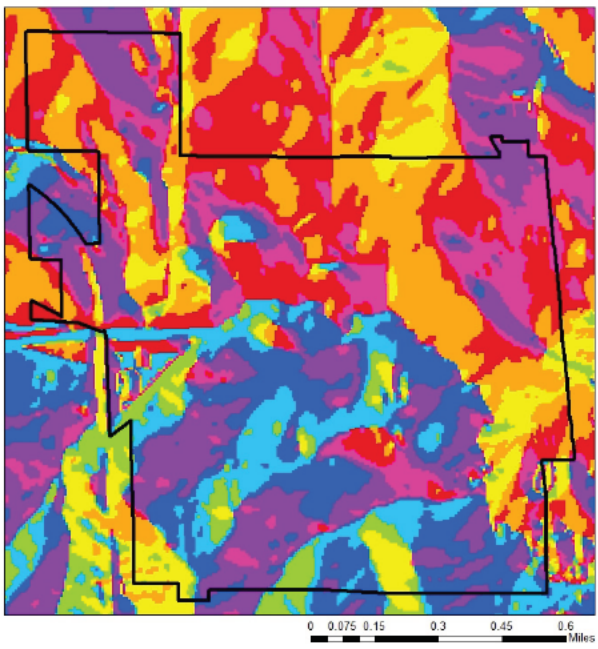
TOPOGRAPHY

Introduction

Three main components of topographical and landform analysis were studied: elevation, slope, and aspect. Elevation change determines the slope steepness, as well as its orientation or aspect. Slope steepness is important because features of the built environment require certain steepnesses, and can be hindered or helped by the existing steepness of a site. Slope aspect refers to the orientation of the grade change, and is typically divided into categories based on the cardinal directions. For example, a slope with a south aspect has a higher elevation to the north, and a lower elevation to the south, so that it is “facing” south. Primarily, aspect is used to determine the amount of sunlight a site receives. In the Northern Hemisphere, slopes with a south aspect receive the most sunlight.



Slope Steepness Map

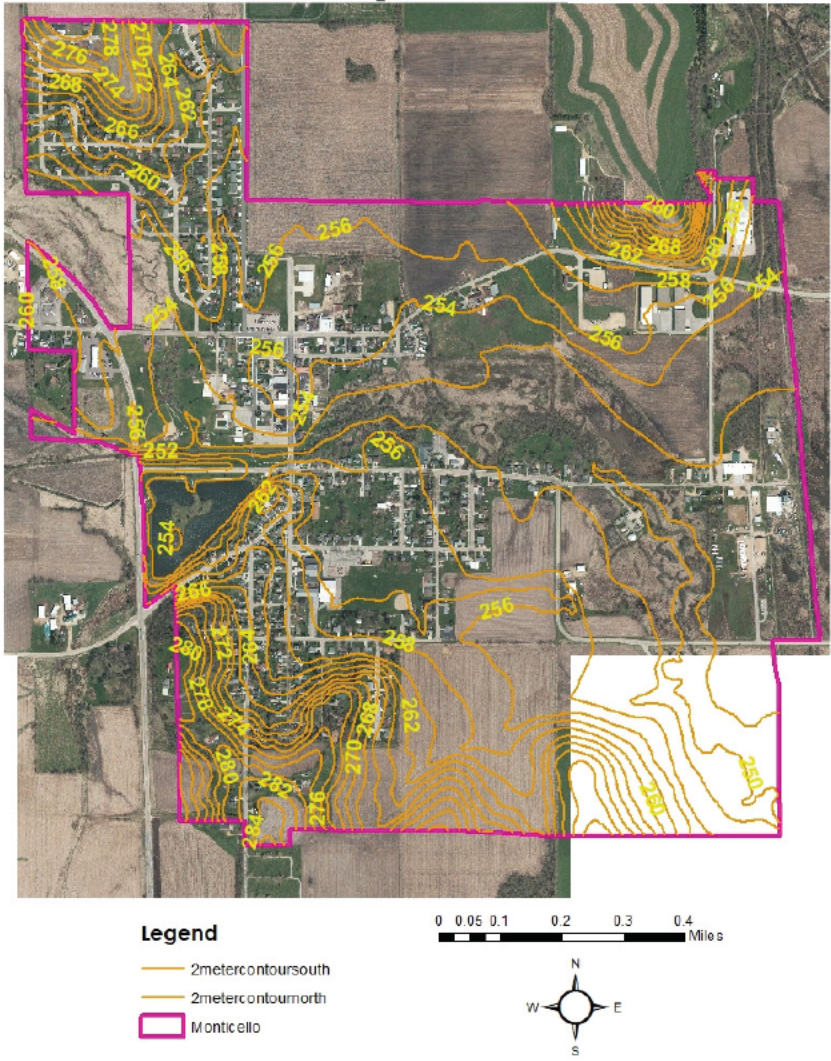


Slope Aspect Map

Slope Steepness, Aspect, and Elevation

Though it is a rural community surrounded by farms, Monticello has a variety of slope steepness. In fact, farms within the village boundaries have some of the steepest slopes and a farm on the northeast edge of town has employed contour farming because of it. The center of the town is the flattest area, with most slopes around 0 – 4%. An exception to this is the commercial part of Main Street, which is on a slight hill sloping down to the Little Sugar River that runs through it. On the edges of town, especially the northeast and southwest edges, there is more variation in the slopes. Slopes along the northeast, south, and northwest edges of town have a steepness of around 20% or more, which could cause challenges for building. The subdivision in the northwest corner of town is partially built on relatively steep slopes although the houses have been arranged around the steepest part in the middle, which was left undeveloped. In the southern part of town, most of the slopes face North, Northeast, or East. But in the northern part of town, many of the slopes face Southeast, South, or Southwest. The Sugar River is a dividing line between these two areas, as the land slopes up on either side of it.

2' Contour Map



GREEN COUNTY TOPOGRAPHY



MONTICELLO TOPOGRAPHY

The Driftless Area

Green County and the surrounding areas are a part of what is known as the Driftless Area. During the last glacial period, glaciers covered much of the Midwestern United States. When they retreated, the ice sheets scraped over the land, causing it to become flat. However, the extent of the glaciers did not reach all of the Midwest, and there was a large region that they left untouched, called “Driftless” because of the lack of glacial drift. This area is characterized by topography with much more variation, often with many valleys and rolling hills (Jefferson, 2010). This topography sets Monticello and the Green County area apart from the majority of Wisconsin.

Opportunities and Constraints

In summary, Monticello’s topography is a source of both opportunities and constraints for development of open space and promotion of active living. The Driftless Area with hills and valleys differentiates this region from other areas of the Midwest, and are a source of a variety of natural vistas, views and opportunities for outdoor recreation. Variety in topography can also be problematic in terms of accessibility and cause difficulty for development.

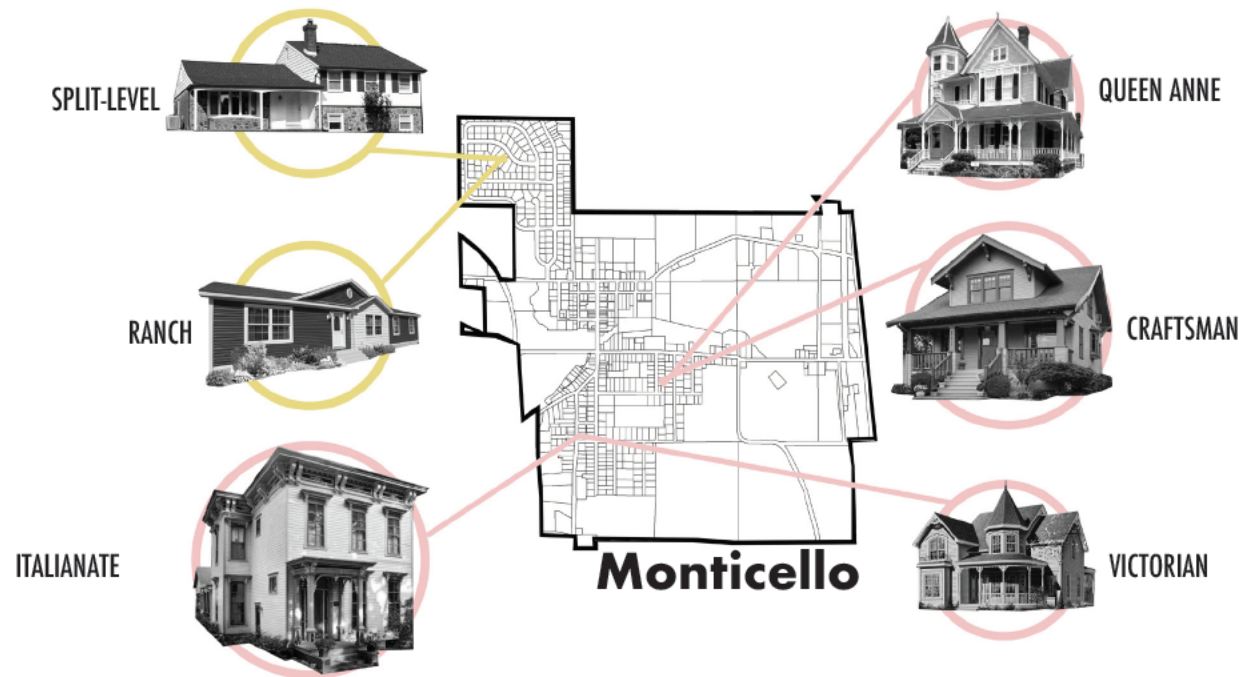
Knowledge Statement

The built environment in a large portion of Monticello is an aging and rustic one, with little new or mixed-use development occurring within the village. Most of the non-residential built environment is located along the length of Main Street in the historic downtown blocks. It is these buildings which contribute most to the town's communal built identity. On the other hand, the older neighborhood to the South of town shines with unique personal expressions of homeownership. While the town does feature some trails and sidewalks, most residents do not feel that these features are adequate and prefer to travel by car.

The built environment strongly influences the day to day lives of the citizens of Monticello in many different ways. It affects citizens through large scale systems like circulation and public access, which affect how individuals navigate and move through the village, and architecture, which helps for and reflect the village's identity and heritage. The built environment also affects individuals on more intimate scales, as Jan Gehl, a prominent Danish architect, has discussed in his books and lectures about the positive influence improved pedestrian and biking accessibility can have on public health and interaction within the community (Reclaiming Pedestrian Priority with Neuroscience, 2015). Because of these influences the built environment is critical to understand and study when looking at public open space projects.

Monticello Vernacular

Vernacular is a term used in relation to architecture to describe buildings which reflect and create the cultural identity of buildings in a specific area. Monticello is a town with a long history, going all the way back to 1845. Thus, the homes within the community have a variety of architectural styles, which reflect the progression of time and changes in style. The Village of Monticello features more modern interruptions of the houses in its northern suburb, while more traditional and historical styles are displayed in its older southern neighborhood.



Victorian

Victorian homes feature asymmetrical facades and are known for their steeply-pitched roofs, and front facing gable. Often referred to as "doll houses" the Victorian style features ornamentation and usually some form of front porch. All of these features combine to create a home that can, at times, be imposing or ominous.

Craftsman

Craftsman, or the American Bungalow, was an early 20th century style of home, which features simple designs, few decorations, and emphasizes the use of natural materials. The key characteristics of the craftsman style are the front porch and low-pitched gable roof (Architectural Styles. 2015.). These porches usually had unique forms of supporting-post design, in both shape and material.

Italianate

The Italianate Style, most popular in the early 19th century in Wisconsin, is often associated with the picturesque movement and landscape architecture Andrew Jackson Downing. These homes are typically laid out in "L" or "U" shaped plans and have two stories. They have heavily ornate windows and entrances and melded the ideals of informal rural homes with renaissance town house (Architectural Styles. 2015.). This melding is evident in the material selection for these homes, which favor wooden clapboard over the more expensive brick facades.

Queen Anne

Queen Anne is a residential architectural style that was at its peak in 1880-1910. This style gets its name from aesthetic ideals during the reign of Queen Anne. Homes in this style usually have asymmetrical facades and layouts, eclectic features, elaborate motifs, towers, and steeply pitched roofs (Architectural Styles. 2015.).

Ranch

First invented in the 1920s the ranch style of home saw a large boom in America from 1940 to 1970. These single story, sprawling homes have a low-pitched roofline and attached garages. Usually ranches have a simple, open floor plan making them easy to navigate and popular amongst aging populations (Architectural Styles. 2015.).

Split-Level

Split-level homes get their name from the staggering of floors throughout the home. They usually feature a finished basement, a ground floor, and a bedroom level, all separated by short runs of stairs. This style was most widely implemented in the mid 20th century in tandem with the spread of suburban developments.

LAND USE

Land is used for a multitude of different purposes within the village of Monticello. From and conservation land to commercial and residential uses, the people of Monticello use the land to businesses, build their homes, and live out their lives.

Agriculture

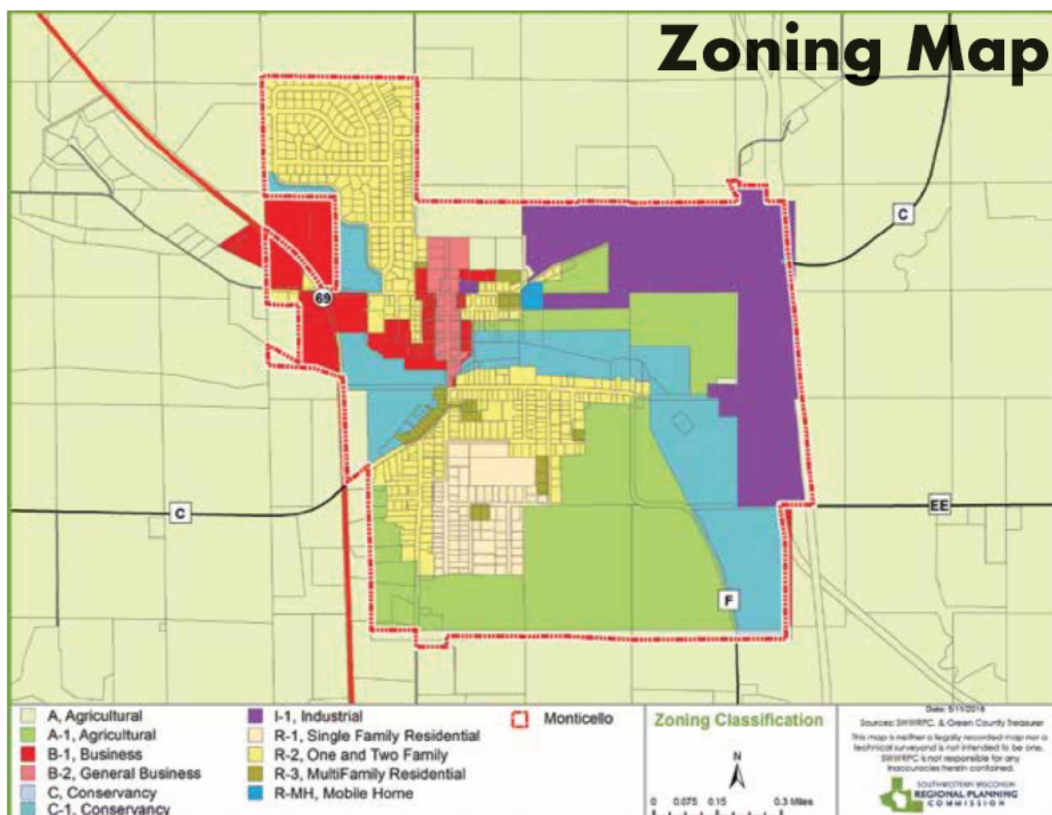
Within Monticello, agriculture makes up the largest category of land use, roughly 25.9% land is used for agricultural purposes. This is due to the fact that many people within the town make their livelihood from the agricultural sector. Additionally, this large amount of agriculture potentially at risk of contaminating runoff and local water bodies with pollutants such as fertilizers.

River Lands/Conservancy

Because of the presence of the Little Sugar River and the man-made Lake Montezian, the large amount of land within Monticello that is being conserved or undeveloped due to proximity to features. It is imperative that these wetland areas are preserved for both the hydrological sustainability area, as well as the habitats they provide.

Industrial

Industry covers 16.8% of the land within the municipal boundary of Monticello and is in an economic state of the village. These areas represent a broad range of jobs and industries ranging from manufacturing and soil cultivating to freight trucking and mail-order houses.



Residential

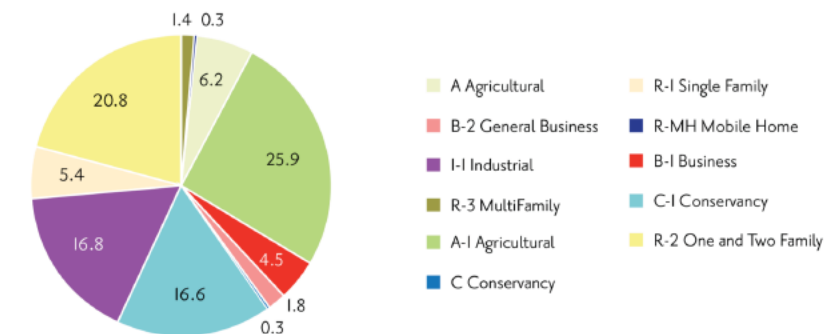
The residential land within Monticello can be broken down into three categories: single family, one to two family, and multifamily residential housing. Currently there is no mixed-use development within Monticello; however, the community wishes to see that change in the future. The residential areas of the town can be split into two areas, the northern newer subdivision, and the older neighborhood, which is located to the south of the downtown district by the Monticello High School. The newer subdivision to the north features mostly one to two family residences, has a more organic, curvilinear layout, and is separated from the rest of town by Coates Ave.

The older neighborhood to the south on the other hand features single family, one to two family, and multifamily residences and has a grid like form and layout. The last form of residential housing within Monticello is a trailer park (shown in blue on the zoning map) and is located to the north-west of Main Street and the downtown district.

Commercial

Commercial land is mostly located in the heart of Monticello along Main Street in the historical downtown stretch. This area features some of the town's most iconic businesses such as the M&M Café, a local favorite, as well as Gempeler's Supermarket, a local grocery store and hangout. The downtown stretch, located along Main Street, is the main focal area of the town and helps to define the small town Wisconsin identity of Monticello.

Percentage of Land by Zoning Type in Monticello



Southwestern Wisconsin Regional Planning Commission (SWWRPC). (2016). Comprehensive Plan for the Village of Monticello, Wisconsin (Rep.). Retrieved from https://vi.monticello.wi.us/wp-content/uploads/2016/07/MonticelloPlan_Final_HighResolution.pdf.

Opportunities and Constraints

In summary, there are many different uses of land within Monticello, all of which help to build both the community and identity of the village. With large areas of agricultural land, the threat of pollution of both the Little Sugar River and Lake Montezian from fertilizers and other chemicals in runoff is considerable. With that being said, the large amount of land set aside for conservation, especially the wetlands, should be maintained for future generations. Additionally, the inclusion of mixed-used development, something Monticello is lacking, would most likely be a welcome addition to the downtown area and help the community grow.

Southwestern Wisconsin Regional Planning Commission (SWWRPC). (2016). Comprehensive Plan for the Village of Monticello, Wisconsin (Rep.). Retrieved from https://vi.monticello.wi.us/wp-content/uploads/2016/07/MonticelloPlan_Final_HighResolution.pdf.

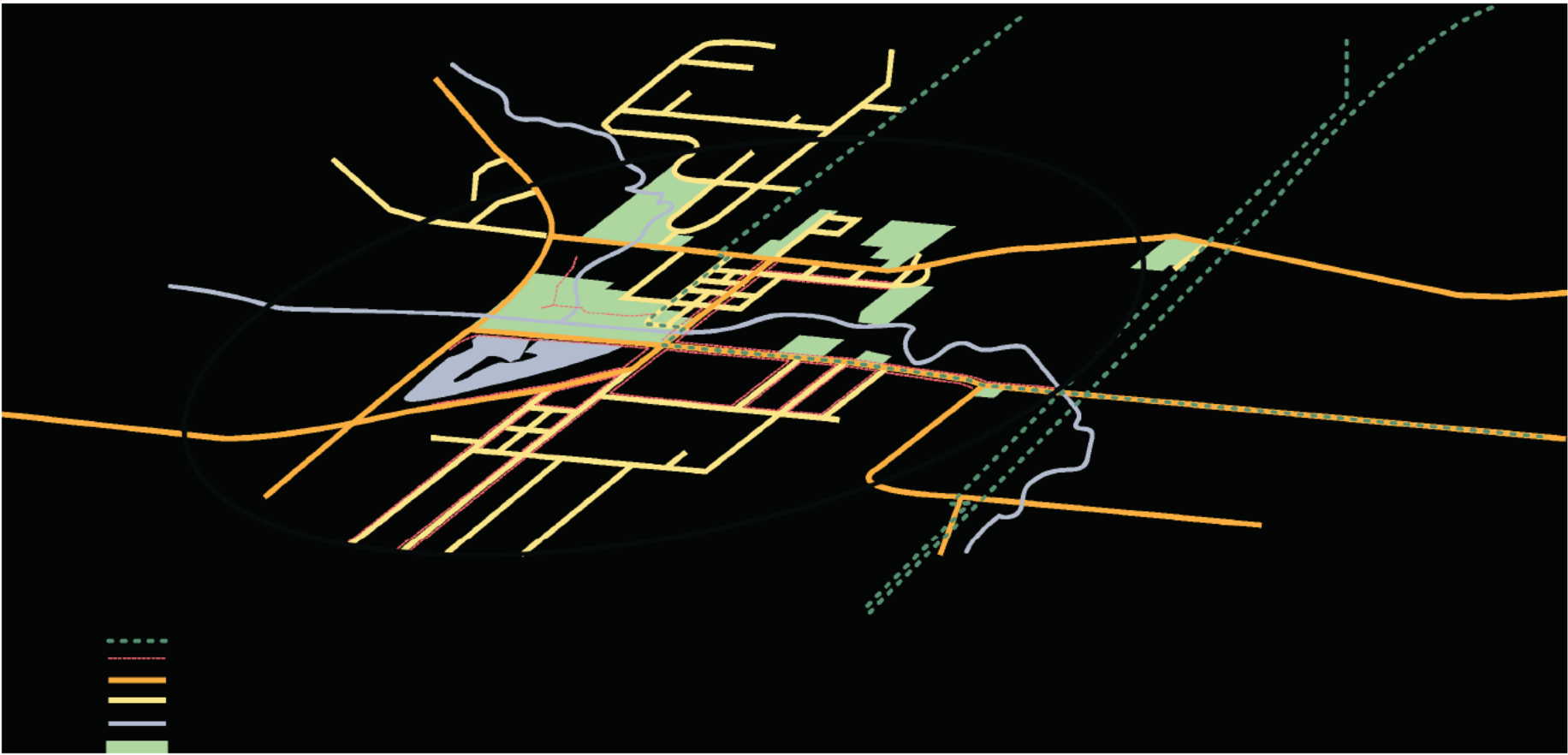
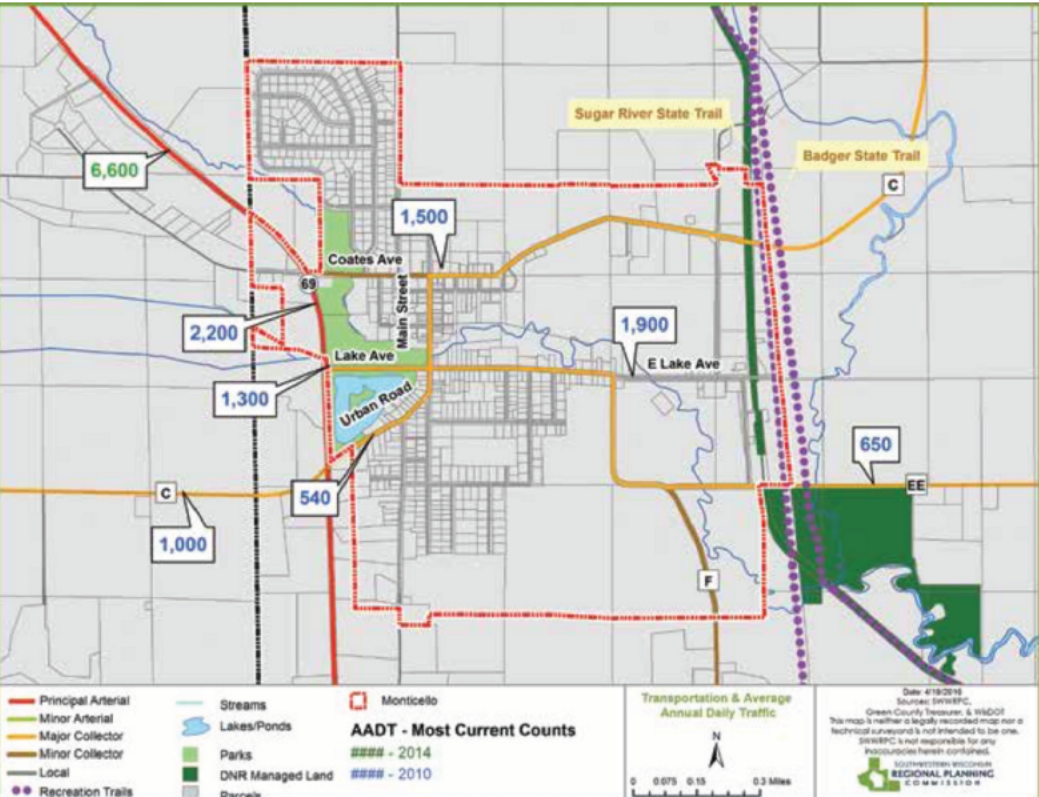
TRANSPORTATION

Introduction

Transportation in Monticello is how people travel, get to work, go on bike rides or runs, meet friends and family, and move within the community. This is done on a series of highways, roads, trails, and sidewalks. The busiest artery that connects Monticello to the rest of Wisconsin by car is WI-69, which sees roughly 6,600 cars passing through the area each day. WI-69 is a state highway, which runs from Verona to the Illinois border by Monroe, WI, and runs through the western edge of the village and passes directly by Lake Montesian. The next busiest streets within Monticello are Lake and Coates Ave, both of which average between 1,500 and 1,900 cars a day. These two avenues are the main roads for east to west travel within the village of Monticello and are part of the towns two main intersections, located where each avenue intersects with Main Street.

Monticello is also in close proximity to both the Sugar River State Trail, which runs from New Glarus to Brodhead, and the Badger State Trail, which runs from Madison to Monroe and into Illinois. Both of these trails pass through the eastern edge of the municipality; however, there is no direct access to these trails from the more urban and populated areas of the village. Finally, the village of Monticello has a small amount of sidewalks within its more residential and commercial areas. Most of these sidewalks are poorly lit at night and feature some disparity in alignment and connections. Despite the poor condition of sidewalks with the village and because of the close proximity of most locations, many residents still walk to destinations.

Road Activity Map



Public Transport

The village of Monticello only has one form of public transportation: a shuttle bus run by the Aging and Disability Resource Center of Green County. This shuttle bus runs from New Glarus to Monticello to Monroe every Wednesday and also travels to Madison and Janesville on the first and third Thursday of each month. This is the only public option for transportation within the village and is underutilized due to poor advertising.

Parking

Many voices within the community have spoken out about the state of parking within Monticello. Many claim that the angled street parking on Main Street causes a loss in driver's ability to see when entering or exiting a parking spot, making many members of the community feel unsafe. Additionally, many intersections within the village have parking spaces in close proximity to them, again impairing driver's ability to see other cars on the road.

Opportunities and Constraints

In summary, connected to the rest of the state by WI-69, transportation within Monticello is somewhat limited and at times dangerous:

- The existing sidewalks reach and lighting put pedestrians in unsafe situations when sidewalks end and are not lit at night.
- The proximity of both the Little Sugar River and Badger State trails to the village are great assets; however, without safe connecting trails to the more populated areas of the village and information on biking safety, these trails will continue to be underutilized.
- Additionally, most of the on street parking within the village causes a loss in driver's visibility, which causes many people within the community to feel unsafe when parking or entering intersections.

PENDL

PENDL is an organized approach to defining the spatial layout of cities by Kevin Lynch. It looks at the Paths, Edges, Nodes, Districts, and Landmarks. Paths refers to the streets, sidewalks, trails and any other channels in which people travel. Edges are the boundaries, real or perceived, within an area. Nodes are places of intersection which offer multiple different options of continuing and often are a place to contemplate ones next move within the city. Districts are areas which are grouped together by common characteristics or other zoning assessments and lastly Landmarks are points of reference that have some define/significant feature, which can be visual, cultural, or personal.

Paths

Paths within Monticello can be divided into categories based off of the means of transportation. First there are the major roadways which take people to and from Monticello. The largest of these is Wisconsin State Highway 69 (WI-69) located on the western edge of town. Perpendicular to WI-69, cutting from west to east through Monticello, are the next to most traveled roadways: Coates Avenue and County Highway Ee (Lake Ave. within town). The three of these roadways make up the higher speed and more heavily trafficked roads within Monticello. Next are the secondary roads, which connect all the businesses and homes within the community and are not as heavily traveled. The most prominent of these being Main Street and Lake Ave. Bike trails are also another aspect to Paths within Monticello. Both the Little Sugar River and Badger State trails pass through the eastern edge of Monticello; however, there are no proper or safe paths to reach these trails from the downtown area. Lastly there are some sidewalks within Monticello (see transportation diagram); although, these sidewalks are lacking in proper lighting and scope. All of these paths allow people to travel throughout the village.

Edges

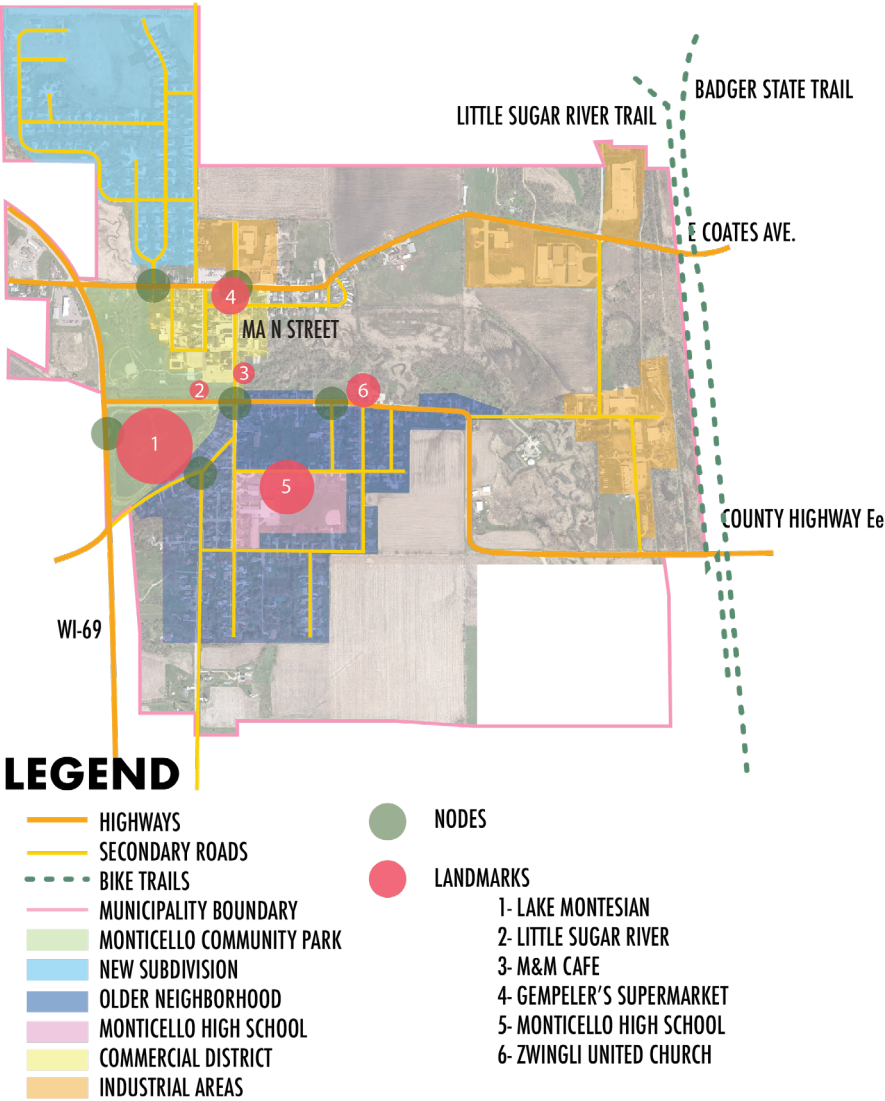
While there are many different edges within Monticello, the village’s municipal edge is bordered by WI-69 on the western side, the Little Sugar River and Badger State trails on the eastern edge and agricultural land on both the northern and southern sides. Within the village itself there are many different districts, whose edges are marked by the polygon boundaries on the map, these edges are determined by both visual characteristics and uses.

Nodes

Nodes are where different areas or locations where channels intersect within a city. They offer a myriad of options on how to proceed and where to go within the city, usually offering a moments rest to come to a decision as well as to take in the city. Within Monticello the largest/ most focal nodes are located at either end of Main Street. To the north, the Main Street Coates Avenue intersection is a node that draws many into the town with its expansive view of the quaint downtown, a stark image compared to the surrounding rolling hills. On the other end of Main Street, the intersection of Lake Ave. (which turns into County Highway Ee) and Main Street and the small bridge in close proximity offer up a node with a nice view as well as many options as to where to proceed. Additionally, Lake Montesian, the M&M Cafe, and Gempeler’s Supermarket serve as cultural nodes and meeting place within the village. Other nodes in the village are mostly street intersections as cars are the primary mode of transportation for the citizens of this area.

Districts

There are six different districts within Monticello, each of which set apart from the rest by its unique purpose and identity. Firstly, the large Monticello Community park, featuring Lake Montesian, the Little Sugar River, the public pool, and gardens, is a district of its own within the village because of its size and natural features. Next there is the newer subdivision on the North side of town, which is defined by the architectural style of its homes and the curvilinear road design. After that there is the older neighborhood located on the South side of Monticello where all the homes have different and unique architectural styles. The Monticello schools are located in this district. Finally, around Main Street there is the commercial district where most of the town's businesses are located as well as pockets of industry spread throughout the western part of the village.



Landmarks

There are six visual and cultural landmarks within the village of Monticello. Firstly, Lake Montesian is not only a beautiful view, it also has historically provided work in the form of ice harvesting and has many personal ties to it as well, making it a large landmark and way-finding tool. Next the Little Sugar River is a defining feature of the area and creates a great point of reference. The M&M Café, located right next to the river, is a local hang out that has been serving great food for years. Because of this many locals are regulars, putting this as a cultural landmark on the map. Gempeler’s Supermarket is another cultural landmark as it is one of the few grocery stores in the area. It is locally owned and creates a wonderful local hub for the village. Finally, both the Monticello schools and the Zwingli United Church are noteworthy landmarks and the largest buildings in town.

Opportunities and Constraints

In summary, Monticello has a very unique PENDL Profile. Most of its paths are not geared towards bikers or pedestrians, making car the most viable means of transportation and roads the largest arteries of the village. While one can argue that there are edges at every crack in the road, the most prominent edge is at the beginning and end of Main Street, which contains the commercial/downtown district. This is because of the higher height of building facades, different architectural style of the businesses, and the unique feel of the historic downtown. Monticello features many different distinct districts and nodes, which help with navigating the city and understanding one’s surroundings. Finally, Monticello has many landmarks within its edges, which not only offer visual stimulation or great food, but also hold cultural significance for those who frequent them.

DEMOGRAPHICS

Knowledge Statement

Demographic data is an extremely important factor to consider when conducting community planning research and analysis. It provides communities the necessary information to plan for the future and make investment decisions, along with determining the amount of aid and other services that are received from various federal agencies (French, 2014). Demographic data includes any type of statistical information relating to a population of people, often for a specific geographic region (Cambridge Dictionary). The statistics provide a generalization of the population, as they are based on only a part of the people in that area. This kind of data is very useful for understanding how a population has changed over time, as demographics record the population only for a specific time frame.

Specifically for community planning, demographic data is necessary for determining issues that the community is facing. Analyzing the data and determining things that are unsatisfactory can be a way to lay out the area's goals in a measurable way, and can be used to quantify the vision. But before these goals can be laid out, the existing characteristics need to be understood. By using statistical demographic data, we can better understand the population which we are studying. Doing so requires a certain level of interpretation of the statistics as they can often be biased due to their collection methods.

Demographic Scale

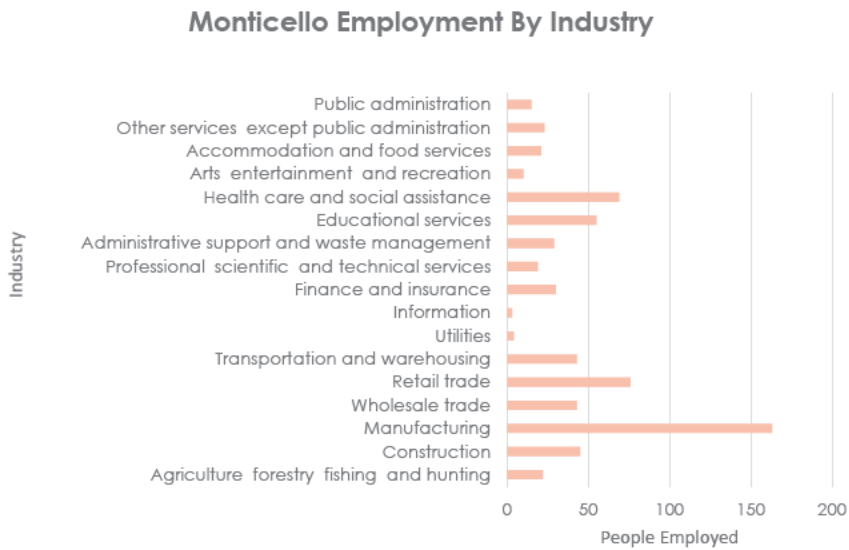
Wisconsin as a whole has a population of 5.8 million as of July 1st, 2018. Green County, located in southern Wisconsin, has a population of 36,869 as of 2017. Monticello, a single town located within Green County, has a population of 1,154 as of 2017. In order to better understand the statistical data of a small subset of data (i.e. Monticello vs. Wisconsin) we need to look at the data from multiple scales and compare this small amount of data with the population as a whole. Doing so allows us to notice trends within data, such as whether a percentage of any one race or ethnicity is notable for example.

By viewing a snapshot of Monticello we can analyze its general state and determine whether systematic change needs to be instituted and if so, where. Conversely, if we notice a positive statistic such as low unemployment or high educational achievement we can elevate and spread news of this to better advertise the community and its good characteristics. Ultimately, the purpose of compiling this data is to see where Monticello is doing well and where it could do better.

EMPLOYMENT

Introduction

Understanding the employment status and industries of the citizens of Monticello can help provide insight into their livelihoods. By analyzing who works, where they work, and how they get there, it's easy to understand how planning deficiencies/efficiencies help exacerbate/improve issues related to the workforce of Monticello's residents. For the purposes of this section, "wage earner" refers to a person over the age of 16 years of age with a measurable annual income.

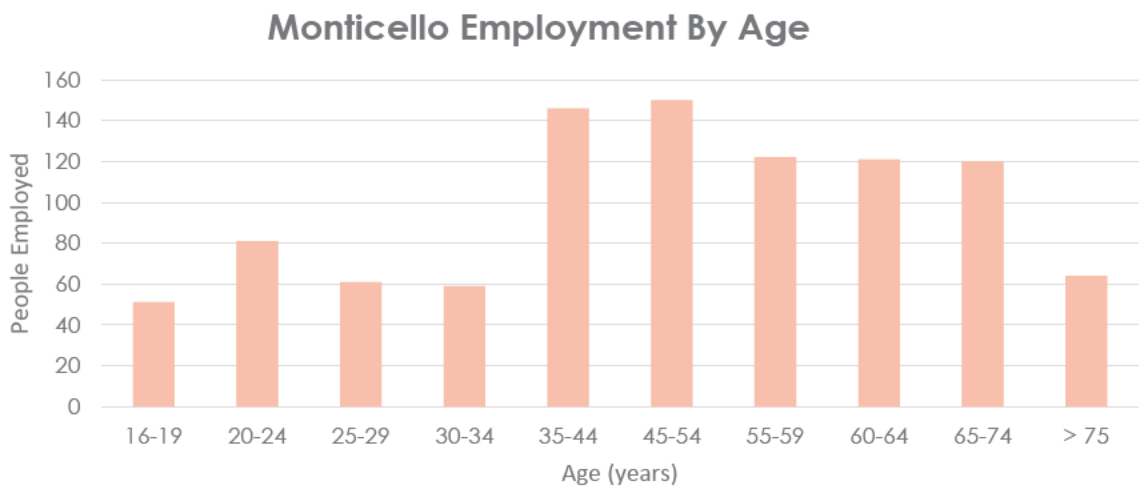


US Census Bureau (2017). SELECTED ECONOMIC CHARACTERISTICS 2013 2017 American Community Survey 5 Year Estimates. Retrieved from <https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF>

Employment

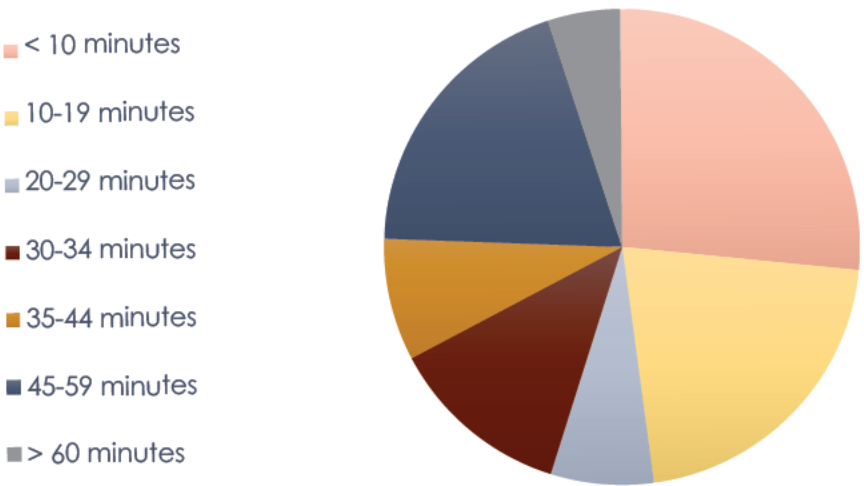
The village of Monticello has 975 wage earners among its population. Within that group, 670 are employed. At 2.0%, Monticello's unemployment rate is slightly lower than that of Green County as a whole (2.6%). Most of these workers are between the ages of 35 and 64. Slightly more than half of these wage earners' place of employment is outside Green County. Slightly less than half don't have to leave the county for work. A very small minority have a place of employment outside the state of Wisconsin.

The largest majority of full-time employees residing in Monticello work in the manufacturing industry. Health care and social assistance, educational services, and retail trade are other industries that are relatively common areas of employment among Monticello residents. There is a noticeably small number of wage earners working in the information and utilities industries.

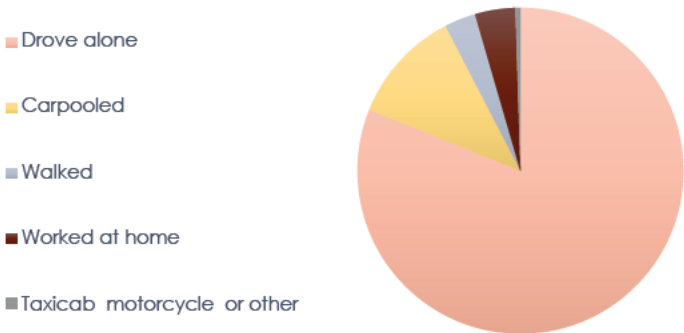


US Census Bureau (2017). EMPLOYMENT STATUS 2013 2017 American Community Survey 5 Year Estimates. Retrieved from <https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF>

Monticello Commute To Work

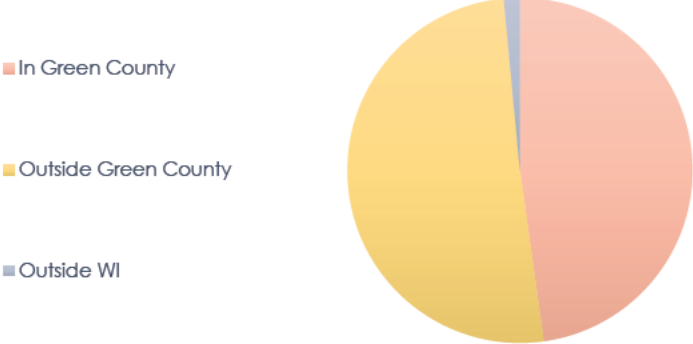


Monticello Transport To Work



US Census Bureau (2017). COMMUTING CHARACTERISTICS BY SEX 2013 2017 American Community Survey 5 Year Estimates. Retrieved from <https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF>

Monticello Place Of Work



Commute to Work

When it comes to commuting to work, more than 75% of people living in Monticello travel less than 45 minutes. Slightly less than half of the employed population don't have to commute any more than 20 minutes. The majority of commuters (slightly more than 75%) drive alone to work. The remaining employed population is evenly split between carpooling and walking/working from home. The population of those taking a cab/biking to work is almost non-existent (American Community Survey, 2017).

Opportunities and Constraints

In summary, in terms of unemployment, Monticello is performing fairly well when compared to the rest of Green County. Since the unemployment rate is relatively low, it is fair to say that improvements could be made not in the amount of jobs available within the area, but in the types of jobs that are available. The overwhelming number of manufacturing jobs compared to the finance and technical services suggest an opportunity to increase the average wage of Monticello residents, given the opportunity to gain the skills required for more technical careers presents itself. Furthermore, a potential increase in information and recreation/entertainment jobs is possible given a planning authority's commitment to developing open space for its residents.

Since more than half of the wage-earners in Monticello have to commute more than 20 minutes to work each day, and the amount of carpooling is extremely low, there is ample opportunity to live more sustainably when it comes to commuting to work. Increasing carpooling and encouraging walking/biking (which is rarely done in the village, currently) can both reduce the village's carbon footprint and save residents money, allowing them to reinvest in their community.

INCOME

Introduction

Unfortunately, a person’s earnings are one of the deciding factors when it comes to their quality of life. By looking at the income of people on Monticello, and comparing their earnings to those of surrounding areas, it will be easier to analyze some of the opportunities and constraints that come with living in the village. Furthermore, looking at income data can help identify correlations between income and other demographic characteristics, such as educational attainment.

Monticello Household Income

- < \$10,000
- \$10,000 - \$24,999
- \$25,000 - \$34,999
- \$35,000 - \$49,999
- \$50,000 - \$74,999
- \$75,000 - \$99,999
- \$100,000 - \$149,999
- > \$150,000

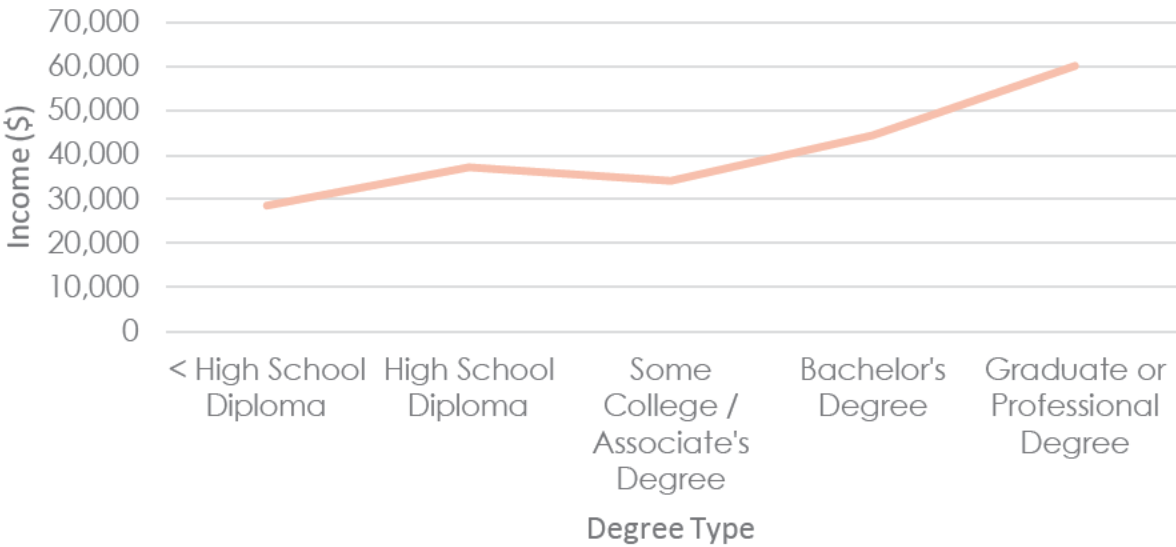


US Census Bureau (2017). EMPLOYMENT STATUS 2013 2017 American Community Survey 5 Year Estimates. Retrieved from <https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF>

Household Income

The the median household income in Monticello is \$53,594, while the average is \$60,639. This is significantly less than the median and average household incomes for Green County as a whole, which are \$60,609 and \$73,263 respectively. Among the 565 households surveyed, 145 earned between \$50,000 and \$74,999. At 25.7% of households, this is the most common income bracket for Monticello households to fall under. 45.6% of households make less than \$50,000 annually, with the remaining 28.7% earning more than \$75,000 per year (American Community Survey, 2017).

Monticello Income By Degree Type



US Census Bureau (2017). EARNINGS IN THE PAST 12 MONTHS (IN 2017 INFLATION ADJUSTED DOLLARS) 2013 2017 American Community Survey 5 Year Estimates. Retrieved from <https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF>

Wage-Earners

The village of Monticello, according to the 2013-2017 American Community Survey 5-Year Estimates, has approximately 710 citizens over the age of 16 years with earnings. The median earnings among that group is \$33,649. Within that group, there are 473 full-time, year round workers. The median earnings for those full-timers is \$41,696, while the average is \$45,668. In Monticello, 77 people are below the poverty line.

Among wage-earners in Monticello, there is a correlation between educational attainment and income. With each advancing degree type, a boost in income is expected, as data shows those with bachelor’s and graduate degrees earn more than those with a high school diploma or less. The only outlier in the data shows that those with some college education or an associate’s degree actually make less than those with only a high school diploma. However, those with some college completed do still make more than those without a high school diploma (American Community Survey, 2017).

Opportunities and Constraints

In summary, overall, Monticello’s residents earn significantly less than their counterparts in the rest of Green County. This is a disadvantage as those within the village will inherently have less to spend and reinvest into their community than other towns whose citizens are earning more. Efforts should be made to either increase skilled employment opportunities within Monticello, or educate Monticello’s existing population, since data suggests a positive correlation between educational attainment and income.

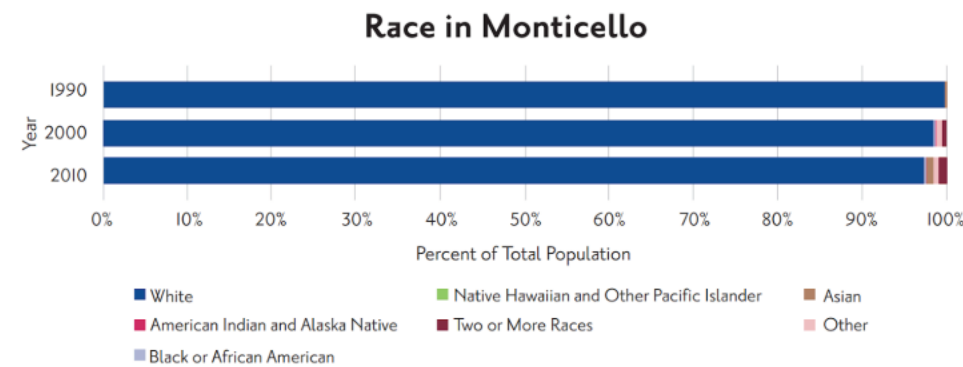
In terms of planning, one way to combat the low income levels of the village could include providing more local amenities in order to allow an increase in wealth recycling within the village (as opposed to having to travel outside for services, robbing Monticello of potential capital). Other options to improve earnings within the village could include vocational training, increased networking between Monticello’s commercial enterprises to discuss how to maximize wealth recycling within the community, and exploring ways of lowering the cost of goods within the village (buying more local food, etc.) in order to allow additional investment in the village by its residents. The bottom line is that the people of Monticello won’t be able to invest in and produce wealth for their community if they don’t have the money to spend in the first place.

AGE/SEX/GENDER

Introduction

Monticello's demographics are a typical view of a quiet midwestern town. There is little diversity within the towns population as the lion's share is white, middle aged, and make roughly \$60,000 a year. This provides a biased picture however, as statistical data can only show so much. Through the combination of data on age, gender, and race we hope to illuminate more of the variance between the population of Monticello.

Figure 4: Race in Monticello, 1990-2010⁵



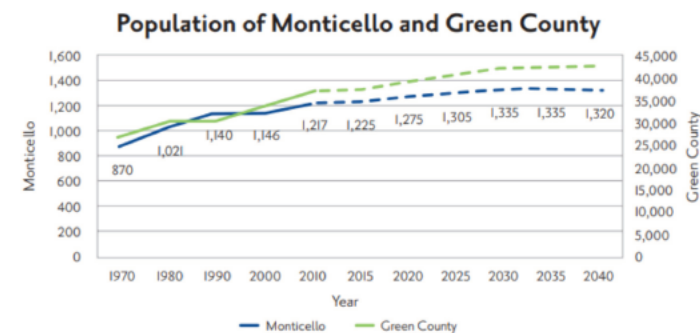
Southwestern Wisconsin Regional Planning Commission (SWWRPC). (2016). Comprehensive Plan for the Village of Monticello, Wisconsin 2016 2036 (Rep.). Retrieved from <https://vi.monticello.wi.us/wp-content/uploads/2016/07/Monticello-Plan-Final-High-Resolution.pdf>.

Ancestry + Population

Monticello is at first glance not a very diverse town as it is almost exclusively white with (according to recent census data) only 10 people of color out of the entire population of 1,154. Upon further inspection however, we see that within the white population there are four main origins and cultures which dominate the cultural landscape. These four in order of greatest percentage are German, Swiss, Norwegian, and Irish. Monticello's comprehensive plan shows an awareness of the lack of diversity within the town's population "Monticello generally lacks racial and ethnic diversity, although this has been changing slightly in recent years." Looking at the two graphs pictured you can see the slow but steady increase in ethnic and otherwise non-Caucasian groups within Monticello. Since the master plan was published there have been increasing numbers within the Hispanic community, continuing to grow in size from the 33 in 2010 to 66 in 2017 according to census data. These efforts seek to combat the population issues which have plagued Monticello for some time. From 1990 to 2000 Monticello experienced a -1% growth in population. Compare this to nearby towns such as New Glarus and Albany with population increases of 61% and 26% respectively. While extrapolated data shows an upward trend in population there must be diligent effort to make the town appealing to help bring in younger people and in general grow the population.

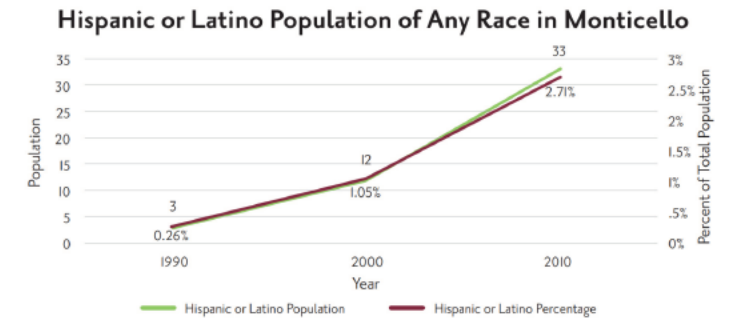
Comparing Monticello to Green County shows a similar trend in terms of ancestry and race proportions of these populations. Both Green County and Monticello show a similar proportion dominated by German ancestry, followed by Swiss, then Norwegian, and finally Irish population. Along with this ancestry, we see that the races of these two populations are similar in their large proportion of white single race citizens along with a small but notable population of two or more races and Hispanic/Latino populations.

Figure 3: Population Trends of Monticello and Green County, Actual 1970-2010 and Projected 2015-2040⁴



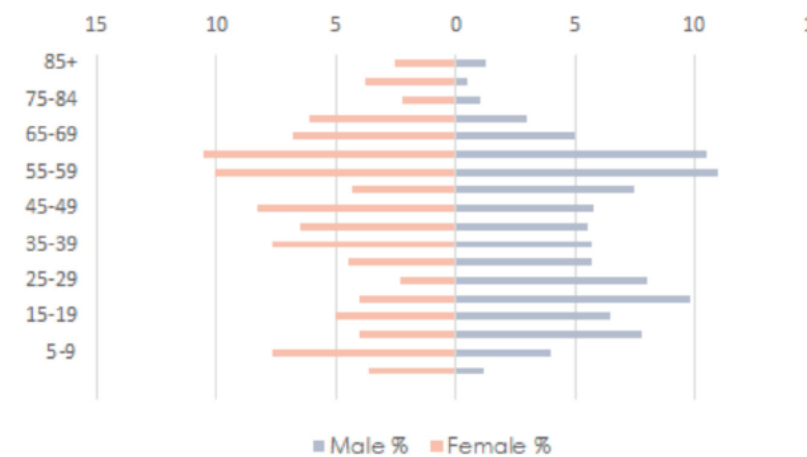
3 U.S. Census Bureau. (1970, 1980, 1990, 2000, 2010)
4 Wisconsin Department of Administration. (2013). Wisconsin Population & Household Projections, Projected Components of Population Change for Wisconsin Counties: April 2010 - April 2040. Retrieved June 1, 2016, from <http://www.doa.state.wi.us/divisions/intergovernmental-relations/demographic-services-center/projections>

Figure 5: Hispanic or Latino Population of Any Race in Monticello, 1990-2010⁵



Southwestern Wisconsin Regional Planning Commission (SWWRPC). (2016). Comprehensive Plan for the Village of Monticello, Wisconsin 2016 2036 (Rep.). Retrieved from <https://vi.monticello.wi.us/wp-content/uploads/2016/07/Monticello-Plan-Final-High-Resolution.pdf>.

Monticello Population Distribution



Age and Gender

As you can see from the population pyramid above, the majority of the population is in their mid to late 60's, along with a growing group of teens and young adults. The median age for the population is 45. There seems to be a lack of middle aged citizens within Monticello, so this median age exhibits the bimodal distribution of the population well. Looking at gender in particular there are a few interesting trends. For the younger population 18+ we see a ratio of 111.8 males to 100 females, in comparison to the 65+ cohort which has only 54.6 males to 100 females. The two main groups within Monticello are within the 10-30 range as well as 55-75. According to Monticello's comprehensive plan, population is expected to increase by 8.5% between 2010 and 2040 which, when compared to Wisconsin's overall rate of 16% is slow. Given Monticello's small size however and current lack of draw for large numbers of tourists and inhabitants, any growth is positive growth (Southwestern Wisconsin Regional Planning Commission, 2016). Even compared to Green County (16% expected growth) Monticello pales, and according to past data this trend is a positive change in comparison to 1990-2000 where Monticello had a -1% growth rate. Comparing Monticello to Wisconsin as a whole shows us that the distribution found in Monticello is not the same as Wisconsin as a whole. Where Monticello has two main groups of population Wisconsin as a whole is more evenly spread with the average age being accurately represented at 39.2. Compare this to the average age of Monticello being 45 due to the two modes found within the data set of Monticello Population Distribution.

Opportunities and Constraints

In summary, Monticello lacks a diverse community if you are classifying diversity by race. Ethnically there is a greater amount of diversity given the range of European and foreign population within the town. Overall there are slow but steady increases in Hispanic and Latino populations and the village of Monticello hopes to continue to grow at a steady rate. When planning for future development it is important to note not only the history of the predominantly white population, but also to provide for the growing population of people of color. Future projects should also seek to draw in new young population in order to continue growth and revitalize the community.

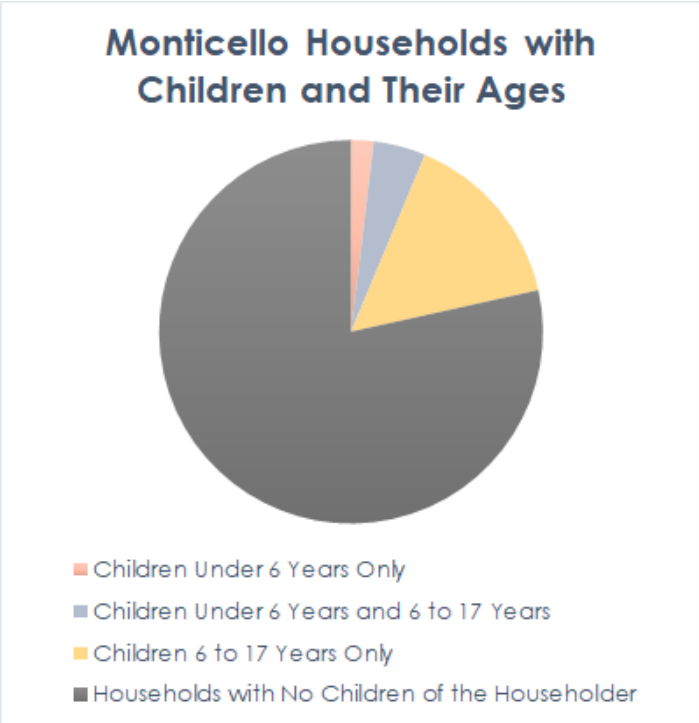


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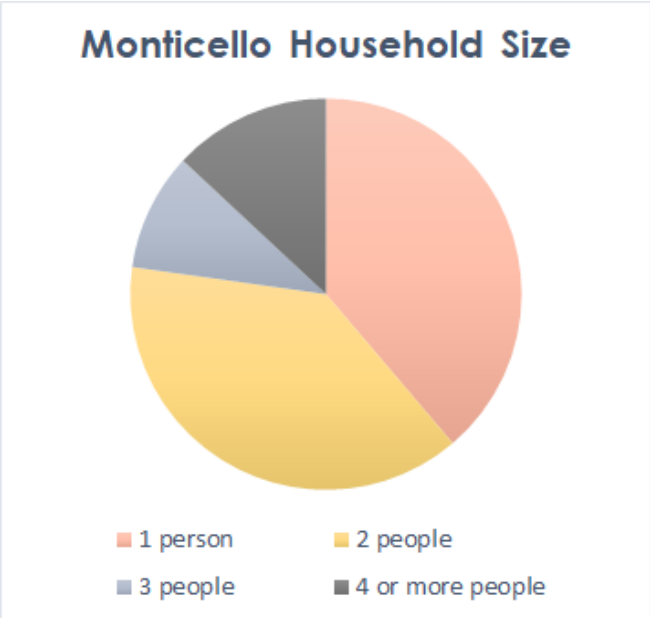
HOUSING/FAMILIES

Introduction

Knowledge of the family characteristics and housing types in Monticello can provide a better understanding of the stage of life of the residents, and the type of amenities that they might be looking for. In different stages of life, people have different needs for housing and living situations, as well as different needs in terms of public and open spaces, so it’s important to understand this type of data so these needs can be accounted for and met. This allows for future planning to ensure that the current population can be supported, and that Monticello can work to attract various demographic groups that might be lacking in the town.



US Census Bureau (2017). ACS DEMOGRAPHIC AND HOUSING ESTIMATES 2013 2017 American Community Survey 5 Year Estimates. Retrieved from <https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF>



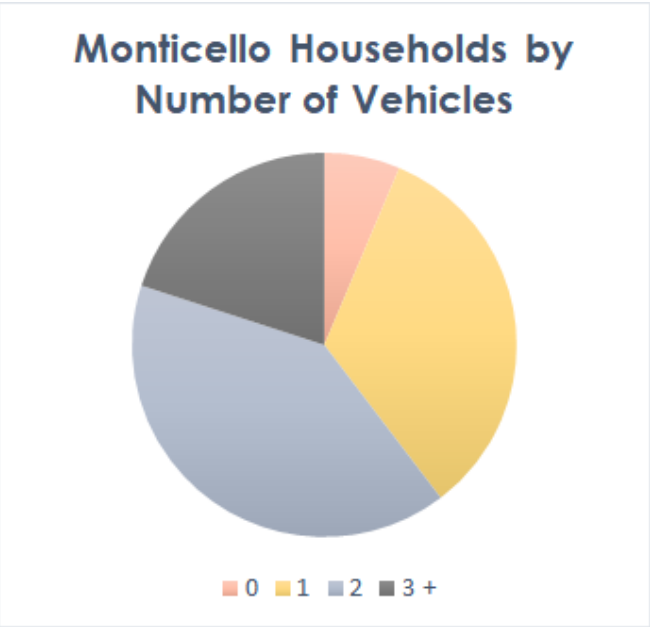
US Census Bureau (2017). ACS DEMOGRAPHIC AND HOUSING ESTIMATES 2013 2017 American Community Survey 5 Year Estimates. Retrieved from <https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF>

Comparison of Selected Village Demographics to Green County

We selected several demographic factors that have the potential to be relevant to this project and compared those of Monticello to those of Green County. They were similar in many ways, but we found some key differences. Most notably, Monticello has significantly larger portion of its population that lives alone. This could possibly be affecting aspects of the community, such as mental health, and shows the importance of gathering places in the community outside of the home that people can go to for social interaction. Another difference was the percent of households that have children. Monticello had 7% less households with children than Green County as a whole. Much of this difference occurred in the age group of children who were less than six years old. Nearly 2% of Monticello’s households had children in this age group, while almost 6% Green County’s fell into this range (American Community Survey, 2017). This may seem like a small difference, but it could mean that people are having less children in Monticello, possibly putting future population growth into question.

Housing Unit Type

Based on the 2017 American Community Survey, there was a total of 588 housing units in Monticello in 2017, 565 of which were occupied, while the remaining 23 were vacant. 371 of the households were single-unit, detached structures, 50 were single-unit attached, 152 households were in structures that had two or more units, and there were 15 mobile homes. The average number of rooms in each household was 5.3, and the majority had 2 or 3 bedrooms. 360 of the 565 occupied houses were owner occupied, while 205 were renter-occupied. Of the owner-occupied units, the most common value of the unit was from \$100,000 to \$149,000. Of the renter-occupied units, nearly three quarters had a rent between \$500 and \$999, while one quarter had a rent less than \$500. About two thirds (341) of the occupied units had two or more vehicles available, while 36 units had no car available (American Community Survey, 2017). In the 2016 Monticello Comprehensive Plan, the community mentioned the fact that the value of housing in the town decreased after 2008, but has been increasing slowly in the past few years. The community members who participated in the town meeting on infrastructure also discussed the need for more rental housing to attract young professionals, as many young people are not looking to purchase a house at that age. Additionally, they said they would like more senior housing for the aging population (Monticello Comprehensive Plan, 2016).



US Census Bureau (2017). ACS DEMOGRAPHIC AND HOUSING ESTIMATES 2013 2017 American Community Survey 5 Year Estimates. Retrieved from <https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF>

Families

Of the 565 occupied housing units, around half (223) were occupied by one person. 211 were occupied by two people, 56 by three people, and 75 by four or more. Half of the households were occupied by a family while the other half were non-families. The overwhelming majority of those families were married-couple families, while families with either a male householder with no wife present or a female householder with no husband present made up the remaining households. Around 89% of the non-family households were occupied by someone living alone. One fifth of the housing units had children of the householder under age 18.

Opportunities and Constraints

In summary, there are several notable demographic groups within Monticello that provide opportunities to create spaces that appeal specifically to them. There is a rather small population of families with young children, and the town wishes to attract more families of this type in the future. Perhaps some sort of playground or other feature tailored to children would help with this. Additionally, there is a large population of people living alone. These people might benefit from spaces meant for gathering and social interaction.

EXPERIENTIAL FACTORS

Knowledge Statement

Experiential learning refers to the practice of educating through hands-on, real life experience. Students and instructors in fields ranging from sciences to the arts often make use of this technique. According to the University of Texas at Austin (2019), experiential learning includes the following elements: “reflection, critical analysis and synthesis, opportunities for students to take initiative, make decisions and be accountable for the results”.

These elements are directly applicable to our visit to Monticello. During our trip we took measures to document our sensory stimuli. This then allowed us to reflect upon our findings by analysing sensory characteristics in order to develop ideas for the planning of open space within the village. In other words, physically exploring and learning about Monticello better prepares us to provide insight into how to improve the sustainability of the village.

Sensory Analysis

A sensory evaluation was conducted based on the experiential factors documented during our trip to Monticello. Such a process involves making observations (both objective and subjective), recording data, analysing said data, and then compiling the findings into a report. This left us with an inventory of key sensory stimuli within the town that could be used to find problems and/or benefits to the current open space plan of Monticello in terms of how current design decisions affects one’s experience while visiting the village (Washington State University).

Site Visit

On February 9th of 2019, we visited the village of Monticello as a class. The early morning time was spent gathering sensory information individually, taking photographs to document our findings. Afterwards, village trustee, Leora Miller, took us on a small tour through the village that highlighted key aspects of daily life. The Historical Society, the Zwingli United Church of Christ, and the local supermarket were key stops along the way. Throughout our visit we were collecting sensory data that will be used to identify a sense of place in order to gain a better understanding of the town before making suggestions for the planning of open space.

FIRST IMPRESSIONS

Introduction

The village of Monticello has a character built over years. The first impressions you as a traveler have when visiting a site are important in the formation of place. Past visits to Monticello have provided us with data to draw on as we reflect on our visit and initial ideas on the village. Understanding the first impressions of a place help when trying to analyze where public recreational areas are or ought to be.

Impressions

Past visits to Monticello were documented on the UW Extension page from visits in 1997 and 2006. There were some similarities between the visits over the years, notably that prior to visitation there is little known of the town other than its small town and homey reputation. The 1992 crowd described Monticello as ,“A small, friendly village tucked in the hills of southern Wisconsin - perhaps with a little Swiss flair,” (Hilliker, 1997). The 2006 group had a similar take ,“A couple of us had never really been in Monticello, but had driven by on the highway many times. Each of these people had often thought it would be a nice idea to stop in Monticello ‘some day’,” (Lewis, 2006). Our class and specifically our group had an analogous view of Monticello before visiting it. We were mostly unaware of the specific attractions found therein however some of us knew that the village was close to New Glarus. Our class, like the group in 2007, visited Monticello on a Saturday morning. Our drive in brought us through the slightly rolling hills past farms and small towns. Our first point of reference within Monticello was the recently founded Morning Mug cafe. A quaint and eclectically decorated spot, filled with locals having breakfast and morning coffee. Our intent of our visit was to capture the characteristics and feeling the village provided. We set out as a class to individually capture the village’s character through photography. In this we saw a plethora of small town images, including faded architecture, maintained institutions, and history abound. Some takeaways we’ve had as a class, having time to think about our visit, align with past groups as well. Of note were the mentions of signs in need of repair, seen in both the 1997 and 2006 visits. In class conversation about our visit there was mention of the civic pride in upkeep of houses and historical buildings.

Our main takeaways as a class and group were that Monticello is a quiet but deeply historical community. The architecture and facades may be faded but the community which inhabits them is fighting to retain that heritage, as evidenced through the upkeep of the museum on Main Street and the passionate community members. The town itself has a few main points of interest, notably Lake Montesian, Main Street (including Gempeler’s Supermarket), and Kubly’s garage, the Zwingli United Church of Christ, and the monument which holds the sign for Monticello.

Opportunities and Constraints

In summary, past visits to Monticello in 1997 and 2006 provided us with additional perspective on our first impressions of the village. Through our personal visit as well as these accounts, we were able to find parallels between our various experiences. These notably focused on the quiet demeanor of the town, with its midwest charm seen throughout. Along with this there is the mention of the need for repairs on some of the signage. Small changes such as this could help to reinvigorate the image of Monticello and help to draw in new population. Moving forward, the focus within the projects done on Monticello should work to revitalize the town’s image, draw in new users, and build a recognizable name for the village.

SENSORY ANALYSIS

Introduction

Paying attention to sensory stimuli when visiting a place for the first time can help substantiate the first impressions that place leaves. The sounds, sights, smells, and sensations felt in a space collectively make up our memory of our experience. By documenting the sensory stimuli present in Monticello, a better understanding of its culture and sense of place is formed.

Sights, Sounds, and other Stimuli

The sights seen in Monticello during our visit were predominantly gray. The overcast sky as well as the snowy landscape combined to make the town’s natural landscape appear colorless. The most colorful visual stimuli came from the varying tones of the brick buildings along Main St., as well as a fair amount of signage typical of the small-town Americana aesthetic. The village was extremely quiet during our Saturday field trip. This was in large part due to the foot-plus of snow that covered the landscape, absorbing most of what little sound daily life in the town produces. The occasional pickup truck could be heard driving down Main St., as well as the motors of snowmobilers passing through. Sometimes chatter from inside the village taverns could be heard upon visitors entering or leaving, but for the most part there wasn’t much to be heard during the cold morning and afternoon. On our way to the village, the smell of manure was common upon passing many of the local farms. However, the only smells that were potent within the village itself were the occasional fumes from trucks driving along Main St. Aside from that, there were no other distinguishable aromas to be smelled around town. The temperatures during our visit ranged from 25°F-38°F (9:00 AM - 1:00 PM). There wasn’t any noticeable wind, and the only precipitation was a very light snow flurry towards the beginning of our visit.

Comparison to UW-Extension Survey

Our senses weren’t exactly stimulated during our trip to Monticello during the cold winter months, and an October 1997 visit conducted by Mark Hilliker (1997) on behalf of the Waushara County UW-Extension provides a corroborating experience that took place during a different time of the year. Like us, Hilliker did not hear any particular sounds that dominated the environment. The air was noted as being clean, but no strong scents were observed. Hilliker felt a strong sense of community during his visit, and made sure to point out he felt as if he received a warm welcome from the locals. One way in which our sensory analyses differed from that of Hilliker’s is that Hilliker was more stimulated by nature during his visit than we were during our’s. He noted the beautiful parks as well as their accompanying sounds of nature as being a positive sensory stimuli. This is a key experience we would miss out on by visiting during the winter, where the rustling of leaves or chirps of birds are nonexistent. Overall, Hilliker’s memory of Monticello was shaped mostly by the welcoming atmosphere he experienced in addition to the village’s natural areas.

Opportunities and Constraints

In summary, currently, the village is lacking in sensory stimuli. Although we initially thought our visit might have limited visual and auditory features due to the weather, an earlier sensory analysis during a different time of year seemed to confirm the lack of stimuli in the village.

Where there is stimuli lacking, there is opportunity to provide memorable experiences. Those in charge of planning would be advised to use any developable open space to bring more life to the town. Recreational opportunities, art displays, performing centers, etc. can all contribute to a more satisfactory sensory experience upon entering the village. Doing so will enhance the village’s sense of place and encourage people to come back and take part in its services again.

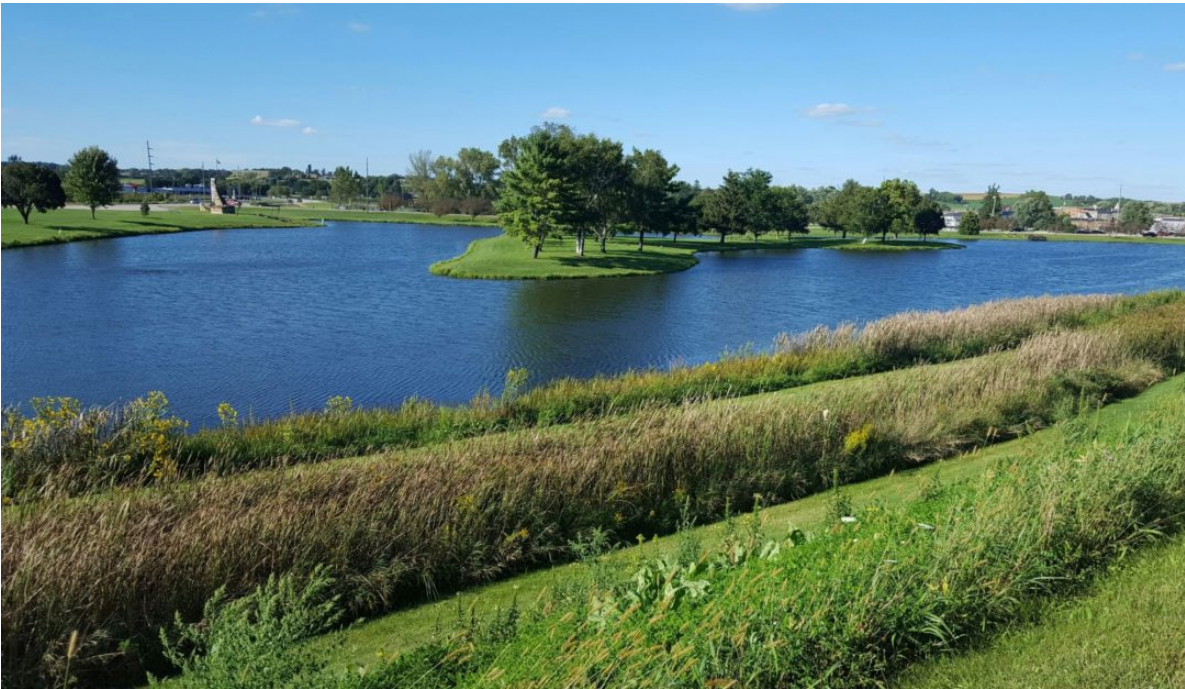
VILLAGE IDENTITY

Introduction

Though Monticello has a small population, its identity is strong. The region has a rich history of European immigration. The immigrants brought their culture and agricultural skills with them, and settled at the intersection of two rivers, which would later become Lake Montesian. This history continues to influence the culture and identity of the town, as they look toward adapting to the future.

Lake Montesian and the Park System

A great source of pride for the Village is Lake Montesian, which the 2016 Monticello Comprehensive Plan describes as the “center” of the community. The lake was first formed when the intersection of two streams were dammed and used for milling flour, but it later eroded and eventually became a man-made lake which opened in 1966 (Babler). Lake Montesian, and the Little Sugar River make up the waterways of Monticello, and are popular with residents for a variety of outdoor recreational activities, such as fishing, canoeing, and picnicking (Monticello Comprehensive Plan, 2016). The public park system as whole is immensely valued by the community, and is marketed as a unique amenity that many other towns in the area do not have.



Lake Montesian

(<https://monticellochamber.com/places/lake-montesian/#post-content>)

History and Employment

The history of the settlement of Monticello begins with Robert Witter who went to the Mineral Point Land Office in 1843 to register the land that would later become the Village of Monticello. Many of the first people to settle in the area were from the eastern United States such as Pennsylvania and New York, and had English ancestry. Soon, Swiss immigrants from New Glarus began to move to the region. As discussed in the Demographics section of this report, the vast majority of current Monticello residents have ancestors from Europe, specifically Germany, Switzerland, Norway, and Ireland, and this heritage is reflected in the racial demographics of the town, with white being the overwhelming majority. Many of the early settlers were engaged in cheese-making, particularly Swiss and limburger cheese, which was and still is a source of cultural identity for the town (Monticello Past and Present, 1976). Green County as a whole has a similar history of cheese makers. Many Monticello residents are employed in cheese factories, and it was identified by community members as a particularly important industry to the town, because it can provide jobs and bring in visitors (Monticello Comprehensive Plan, 2016). Additionally, the dairy and agricultural farming industries were common jobs for early residents. Today, many Monticello residents are employed in the animal production industry, and farmland makes up the majority of the lands surrounding the Village, which contributes to its small-town feel. The rural atmosphere is accentuated by the architectural character of Main Street. Many of the building façades retain their original look from when the town was new. When residents were asked via the 2016 Community Survey about the most satisfactory aspect of life in the Village, the top response was “Small Town/Rural Atmosphere” (Monticello Comprehensive Plan Appendix, 2016). This indicates that the small-town character is a crucial component of the personality of the Village and its people.



Main Street

(Google Maps, image captured in 2007)



The west side of Main Street, showing the Casino to the far left. On the right is a former Bank of Monticello building, which now is owned by Attorney Paul Voegeli.

(Monticello Past and Present, 1976. No date of photo or photo credits)

Opportunities and Constraints

In summary, the 2016 Monticello Comprehensive Plan demonstrates that the Village is eager to stay current and to up-to-date with their amenities to keep up with larger towns. There is a strong focus on attracting new residents, especially families and young professionals who can help keep the population growing. Monticello has successfully been able to retain and cherish its history while simultaneously working to plan for future changes to the town.

PHOTOGRAPHY





DISCUSSION (SWOT)

SWOT Analysis

SWOT is an acronym that stands for strengths, weaknesses, opportunities, and threats. The term was coined by Albert Humphrey, a lead researcher at Stanford University. Originally developed to analyse why company planning models fail, it has since become a tool used by planners, problem solvers, and evaluators in all fields. The model relies on a matrix in which internal/helpful features are deemed strengths, internal/harmful features are identified as weaknesses, external/helpful features are recognized as opportunities, and external/harmful features are called threats. The outcomes of a SWOT analysis are meant to identify advantages, disadvantages, and formulate a plan to neutralize threats and capitalize on opportunities (Morrison, 2018).

Natural Systems

Strengths

For a small town, Monticello is unique in that it has an extensive park system that consists of a variety of types of natural areas, including a lake, river, Veterans' memorial park, public pool, playground, and more. The water features in particular are a strong contributor to Monticello's identity, which shines through to anyone who comes to visit. These park areas are clearly a source of pride for the town, and could be used as a marketing tool to increase tourism. Additionally, it could mean that residents would be more likely to support a proposed open space project that would enhance their already substantial park system. Monticello's topography and that of the surrounding areas is another source of unique outdoor beauty.

Weaknesses

One of Monticello's greatest weakness within its natural systems is the lack of infrastructure and amenities to deal with and prevent flooding of the Little Sugar River. This flooding is a frequent occurrence, and since the river flows through the center of the town, there are a lot of areas that are susceptible, most notably the land directly north of Lake Montesian and part of Main Street. The river is an important source of recreation and identity for Monticello, so it is crucial that the flood hazard be reduced so that it can continue benefiting the town. When we analyzed Monticello's soils, we found that there are significant areas that are unsuitable for picnic areas, paths and trails, and buildings without basements. We chose to analyze these soil characteristics because we felt they would be relevant to the next part of our project. Many of the unsuitable area are adjacent to existing park and open space features, which could pose a challenge if we were looking to expand or add to these features.

Opportunities

The unique natural and recreational features of Monticello have the opportunity to bring in people from surrounding areas. Most notably, with the Badger State Trail and the Ice Age National Scenic Trail running right next to the town boundaries, people could be drawn into the downtown area if there was more of a connection between them. Currently, the trails simply touch the boundary of the town, but if a path was created that connected them to the other recreational features such as Lake Montesian, then more people would be likely to enter the town from these trails and Monticello could serve as an attraction along the routes. Similarly, as a part of the Driftless Area, Monticello and Green County as a whole contain unique topographical features which have the potential to attract people from other areas of the Midwest that don't have as much elevation variation.

Threats

One thing that could be hurting the town is pollution and runoff from surrounding areas that ends up in the Little Sugar River. There are many farms nearby that could be adding runoff containing fertilizer, herbicide, or other chemicals, and since there has not been any testing to determine if this is the case, this threat could be going unquantified. Another issue that we identified as a potential harm to the town is the lack of connection of Monticello's open and public spaces to those of surrounding areas and to other features within Monticello itself. As discussed in the Opportunities section, we identified the need to connect the Badger State Trail and the Ice Age National Scenic Trail to park features in Monticello. Additionally, if these park features were also connected to each other, then the network of open space could be expanded and visitors would be encouraged to stay even longer. In their current state as singular features, Monticello could be missing out on the increased tourism of people from other areas.

Built Environment

Strengths

Monticello's built environment, while aging as it is, does still have some unique strengths. Firstly, and especially in the older neighborhoods, the built environment expressive large amounts of character that not only hark back to the historical history of the town, but also reflect the identity of the current residents. The architecture of the historic downtown along Main Street also is a strong example of the rural Midwestern vernacular of built design from ages gone by. Monticello's built environment is also strong in the close proximity of all of its districts, which when implemented correctly, promotes walkability and connectivity within the village. Additionally, the public parks, like Lake Montesian and the Monticello Gardens, offer wonderful experiences within the town. It is areas like these that can be expanded upon and connected to draw more residents outdoor s.

Monticello also has a strong sense of character, something that is emphasized by some of its cultural landmarks, like Gempler's Supermarket and the M&M Café. These cultural hubs have become essential buildings for many within the community and not only bring people together, but also help drive and fuel the local economy.

Weakness

While Monticello has the base for pedestrian and biker infrastructure, there are many missing connections, which lead to issues of safety. There are too few sidewalks within the town, and too often the existing ones do not connect nor are the properly lit at night. This creates dangerous conditions for pedestrians, which results in higher amounts of vehicular use for short inter-village trips. The lack of bike lanes and connections to both the Little Sugar River and Badger State bike trail also hinder the connectivity of Monticello. The current situation of street parking also hinders driver's visibility, making it both unsafe for drivers and pedestrians alike. Additionally, the lack of consistent public transportation options force citizens to drive, and putting both them and pedestrians at risk.

While Monticello has most forms of development, it does not have any mixed-use development, something many people within the village believe would help draw in new residents into the community, seeing as the current population is aging. Along with this, a large majority of the buildings are starting to show signs of age and are beginning to decay, an issue that is increased by the lack of proper water management. Although the Little Sugar River is one of the village's strongest natural assets, Monticello does not have proper water management systems in place to effectively divert and minimize the impact of the habitual flooding of the river.

Opportunities

The current public parks and bike trails within Monticello offer great opportunities for public open space and increased physical activity within the community. Neither of these opportunities are currently fully realized due to a lack of safe access and connectivity between them. The lack of a consolidated trail throughout the whole village also offers up the opportunity of creating such a path. Along with this, the large amount of conservancy land offers up great opportunities for "green high-ways" through the village and make for protective corridors for biological life and movement. These opportunities could be maximized by implementing more signage and creating more awareness of them.

Threats

The largest two threats to Monticello's built environment are unsafe/lack of pedestrian/bike paths and ineffective water management systems. Without the ability to feel safe traveling on foot or bike, the connectivity among not only the built environment but the community as a whole will fall apart. Without these fundamental pathways in place, navigating the village on foot becomes troublesome and can lead many visitors to miss out on some of the villages amazing assets. The lack of proper storm and flood water management is also a huge threat to the villages built environment. Not only does it cost thousands of dollars in building repairs each year, it results in a large amount of water runoff and waste, which could be reincorporated back into the villages ground water instead.

Demographics

Strengths

Monticello and its surrounding area have a few strengths which stand out in terms of its Demographics. Arguably the most notable is the low unemployment statistics within the city. The lack of unemployment and relatively small number of its population below the poverty line show that for a small town its citizens are still productive and active. Along with this, the cultural heritage of the various ancestries located within Monticello make for a rich cultural heritage. Like other surrounding cities within Green County this cultural heritage is cherished and upheld through the traditions of its members. Focusing specifically on housing, the relatively small size of Monticello comes with low housing prices. This comes with the caveat of relatively few destinations for nightlife apart from bars.

Weaknesses

Monticello’s average income is notably lower than Green County in which it is situated. The difference of roughly \$13,000 per year is notable as this provides less freedom for its citizens to make purchases and invest in opportunities other than their day to day work. Going along with the relatively low population and subsequent per capita income could make funding projects difficult if the burden of funding is placed on the shoulders of the town’s populous. Another issue with Monticello is the notable lack of diversity. Especially with younger populations who value diversity and culture, having a largely homogeneous population is hurting future prospects for Monticello. While the low level of unemployment within Monticello is encouraging, the means of transportation within its working class are troubling. Roughly 75% of Monticello’s working class drive alone to work for periods of under 20 minutes. The lack of available public transport and/or ride sharing are an issue.

Opportunities

Monticello has lots of opportunities for growth and new development due to a lot of factors. For starters, the low average income could be beneficial when considering opportunities for community engagement. By providing more free or lower cost activities like picnics or festivals, community engagement could increase as well as drawing in tourists and the associated revenue. The social contact created through the proposed festivals would benefit Monticello given that 89% of non-family households have a single user. Creating more social areas and a more inviting downtown would also help to draw in new people.

Threats

One threat given the large percentage of the population involved in manufacturing could be the outsourcing or closing of a plant. One clear example of this happening could be the city of Detroit, whose economy was built upon manufacturing. The outsourcing of labor and manufacturing as a whole derailed this economy and sent the town into a economic spiral. Though not an easily predictable threat, the housing market fluctuations could cause property values to decrease and discourage new populations living in Monticello.

Experiential Factors

Strengths

The experiential factors documented during our trips to Monticello provided plenty of information that can be used to identify strengths, weaknesses, opportunities, and threats in terms of establishing a sense of place for the village. One notable strength of Monticello is its rich history of European settlement, which provides us with an identity to maintain throughout the planning process. Also, Lake Montesian and the public park system in general is unique for towns as small as Monticello, providing hubs for communal gathering. Overall, the village’s strengths can be boiled down to its cultural heritage and strong sense of community.

Weaknesses

Unfortunately, Monticello is not without weaknesses. There is a notable lack of sensory stimuli. Visits to the village both by our class as well as previous research groups indicated there weren’t any sights, sounds, or smells to provide a memorable experience in Monticello. While the architecture is aesthetically pleasing and the quietness of a small Midwestern town may be appealing to some, there isn’t much that is unique to Monticello specifically. In other words, despite the welcoming atmosphere, there aren’t any apparent standout experiences that will encourage people to return after visiting.

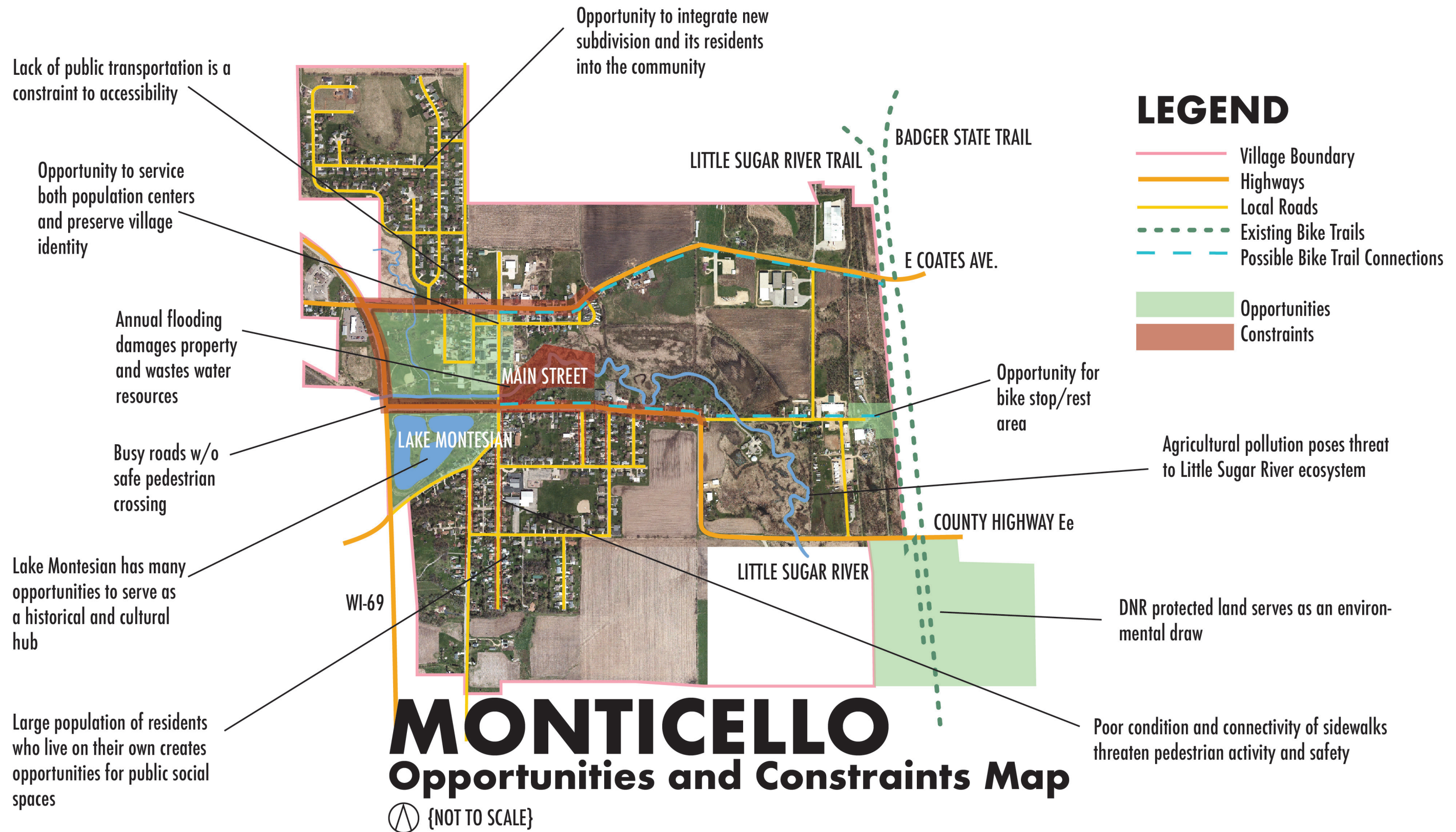
Opportunities

Despite its weaknesses, there are numerous opportunities that can be taken advantage of to improve the experience of visiting Monticello. One would be connecting existing amenities and parks to regional parks, which would then increase traffic to Monticello and bring in a more diverse sensory experience. This would enhance the the village by producing a more lively and celebratory atmosphere. Restoring run-down or antiquated buildings in the downtown center would also make the visual setting more appealing.

Threats

Threats being faced by the village would include any neighboring town whose sense of place and sensory stimuli draw people away from Monticello into those other communities. The increasing appeal of urban culture and living among young people is another considerable threat the village faces. If Monticello wants to continue to progress as a small town in the 21st century, it has to provide a sensory experience and sense of place that is richer, more tightly knit, and more diverse than its surroundings.

CONCLUSION



For the purposes of this project, the village of Monticello has collaborated with our class in order to develop ideas for improving the planning of public open spaces. An inventory and analysis based on natural systems, built environments, demographics, and experiential factors has helped identify planning decisions that have benefited Monticello's residents, as well as some areas that could use improvement. Looking forward, the contents of this report can be used to coordinate a masterplan for open spaces in Monticello and design of selected spaces in the village. Better knowledge of local and regional attributes enables a comprehensive, evidence-based approach to develop a plan for open spaces that encourages the residents of Monticello to live in a more sustainable way while being sure not to sacrifice the sense of place that has been established over generations. The next step in the process is a design workshop with village residents to introduce these findings and develop ideas for an open space masterplan and design of selected spaces within the village.

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In text - (Wisconsin State Cartographer’s Office, 2019)

*All uncited maps created by authors

individual
projects

Monticello Schoolgrounds

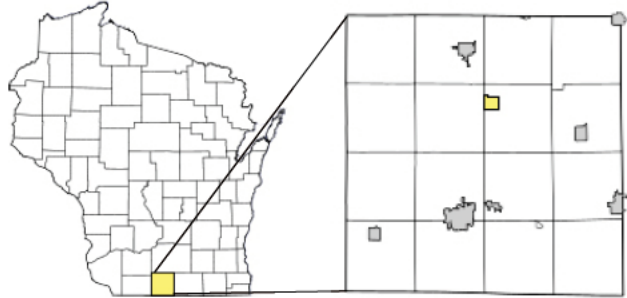
DESIGNING HEALTH PROMOTING ENVIRONMENTS

1:2

MONTICELLO, WISCONSIN |

| MAY, 2019 | INSTR. KRISTIN THORLEIFSDOTTIR

LOCATION & VACINITY

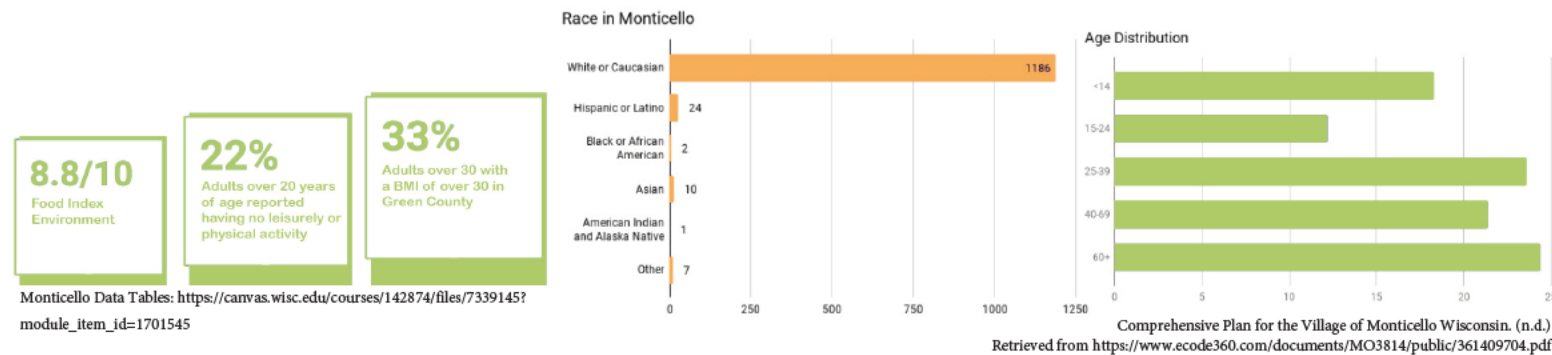


MONTICELLO HISTORY

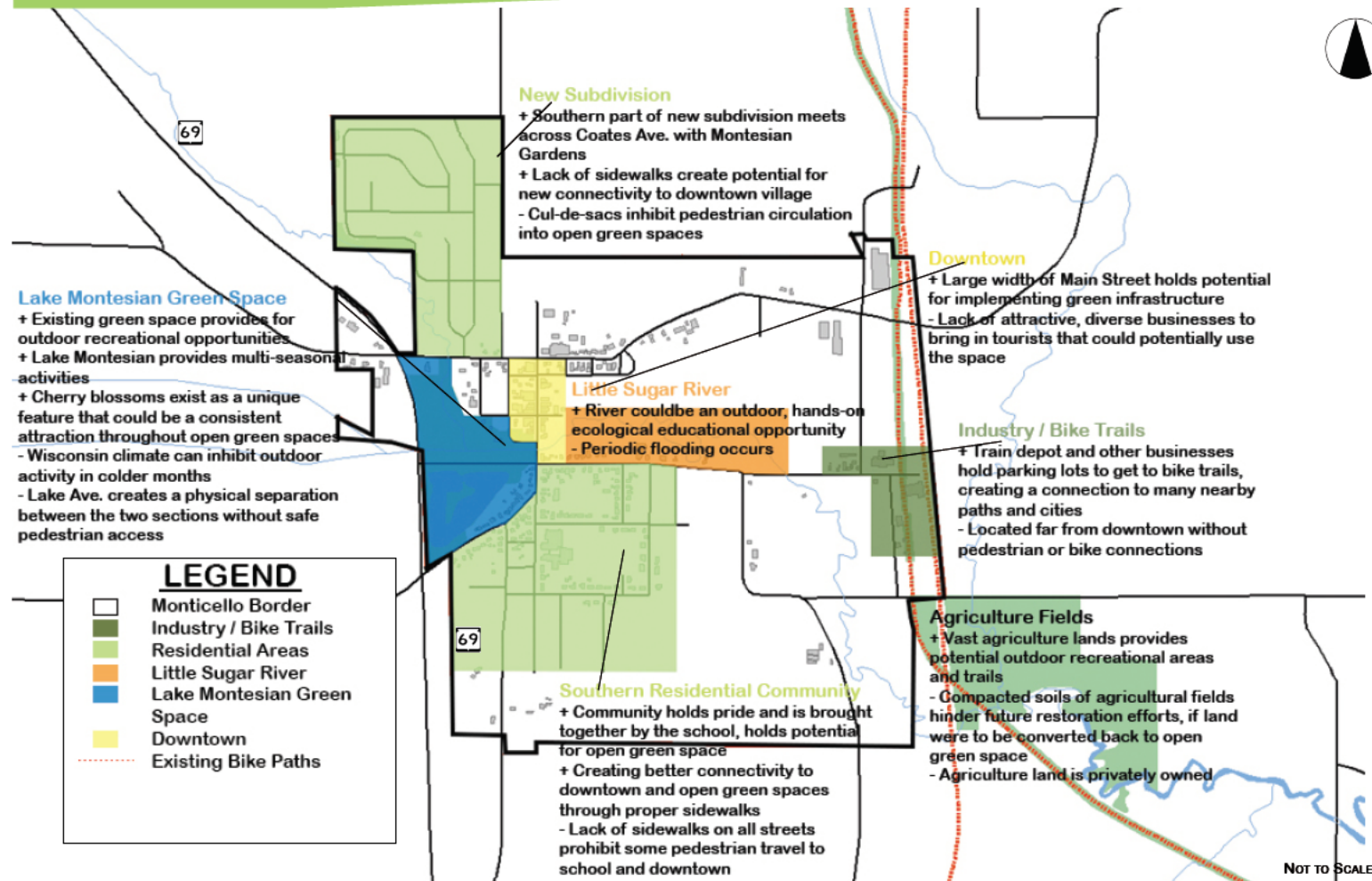
The Village was founded shortly after the birth of Wisconsin in 1845, initially surrounding the areas dairy and agriculture industries. Today, it is best known for its' small town atmosphere and friendly community.



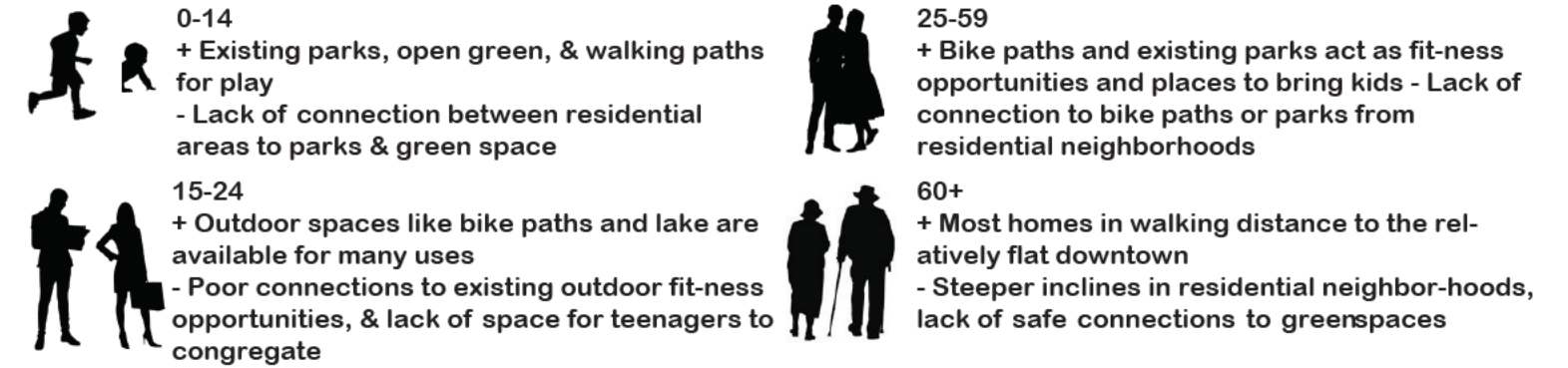
DEMOGRAPHICS



OPPORTUNITIES & CONSTRAINTS



NEED BASED ANALYSIS OPPORTUNITIES & CONSTRAINTS



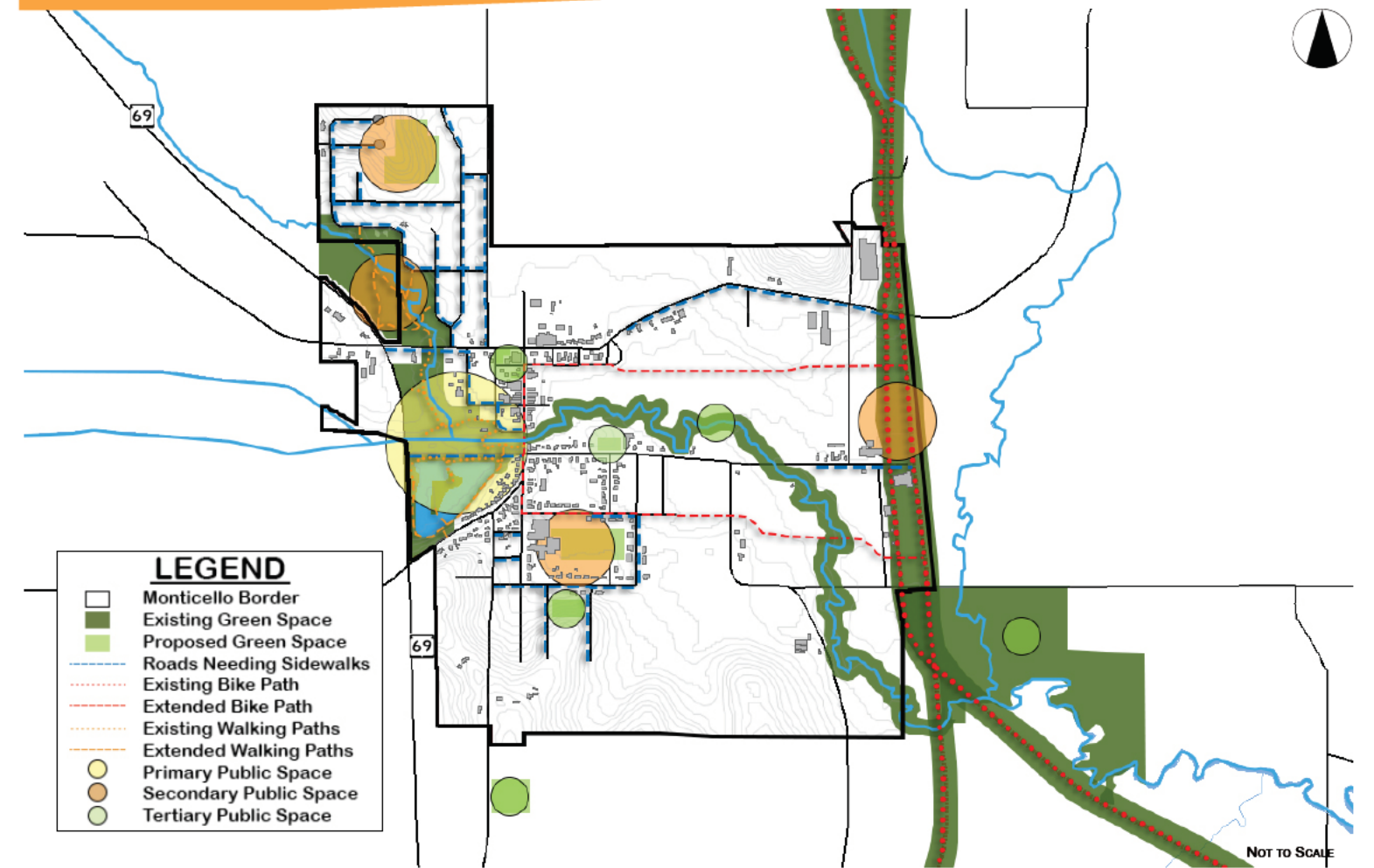
VISION STATEMENT

To provide connection to the Village's great potential of open green space through both improved circulation, and creating attractive, accessible, & multi-use destinations.

GOALS & PROGRAM ELEMENTS

- + Public sidewalks where lacking
- + New connections to the bike path, connecting on E Park Ave. & E Highland Ave & looping together down Main Street.
- + Increasing walkability through Voegli Park
- + Safely making the connection between Montesian Gardens and Lake Montesian walkable.
- + Implementing outdoor parks for children and safe connectivity to and from the residential areas

THEMATIC MASTERPLAN



FOCUSED SITE: MONTICELLO SCHOOL GROUNDS

MONTICELLO, WISCONSIN |

| MAY 2019 | INSTR. KRISTIN THORLEIFSDOTTIR

SITE ANALYSIS



+ Enrollment:
Elementary: 168
Middle: 79
High: 92
Total = 339

1. Children's POD Park
2. Vegetated Path System
3. Open Green Space/Ice Rink
4. Wooded Picnic Area
5. Forested Area
6. Tennis/Basketball Courts
7. Baseball Field

- + 3 Existing Play Structures
- + Baseball Field
- + Open Field
- + 2 Gaga Pits
- + Shotput Circle
- + Vegetable Garden

PROGRAM ELEMENTS

- + Surrounding public sidewalk
- + Resized turf baseball field, Three tennis courts, One basketball court, Two Gaga Ball Pits
 - Existing structures, performing arts stage, undulated lawn, edible garden, & more
- + Forested area
- + Open lawn/Ice skating rink area
- + Green/Living wall
- + Picnic area

VISION STATEMENT & GOALS

To provide a greater connection to nature through bio-philic design, as the existing site is all open green space without any diversity. In addition, implementing new athletic structures and public meeting places to provide opportunities for all groups and ages.

FOCUSED SITE DESIGN

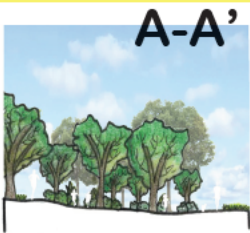


PRECEDENT STUDIES



1. Natural Learning Initiative Children's Park & their many elements
 2. Living Green Wall
- Precedent without completely restructuring building

ELEVATION



A-A': This elevation shows people moving through the vegetation nodes along the paths



B-B': This elevation shows children using the park, with the play structures, gaga pits, vegetation beds, and more.

SCALE: 1' = 30' - 0"

PERSPECTIVES



P1: This perspective shows the sculptural nodes, for a material contrast & a play/seating space.



P2: This perspective displays the covered grill/picnic area located just beyond the outfield for both a gathering & a viewing area.

EXISTING SITE IMAGES



+ School Grounds Aerial View



+ Blank Exterior Walls



+ Existing Play Structures

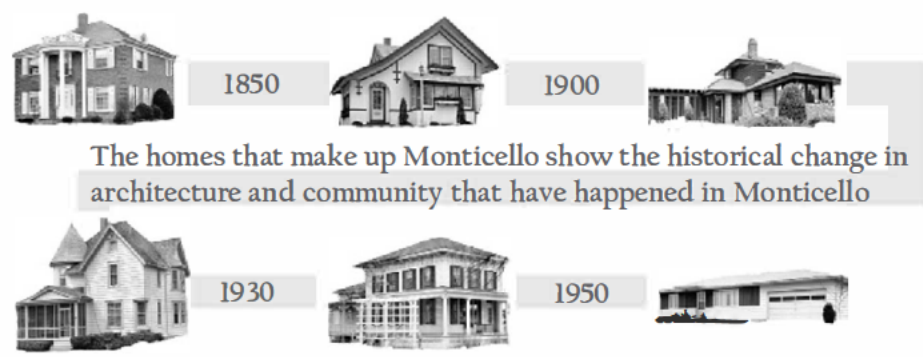
Avenue Park

Monticello's Open Space - Master plan

Vision & Goals

The future of Monticello's public open space includes additional green spaces in advantageous locations, determined by the inventory and analysis of the town. These locations will be connected to a larger circulations system that links the community spaces by foot and bike. The system increases interaction and activity in nature so that the residents of Monticello can take full advantage of the landscape they call home.

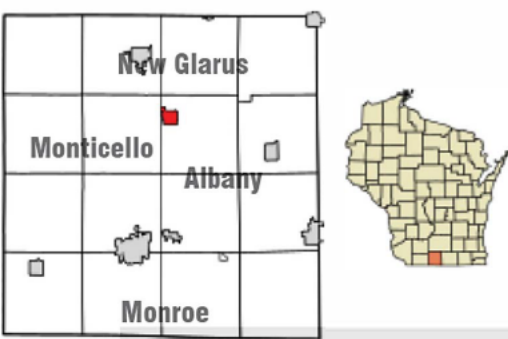
The Town



The homes that make up Monticello show the historical change in architecture and community that have happened in Monticello

Green County

Monticello, located in Green County, is mixed into farmland and prairie of the drift-less area. Towns of similar heritage and size call the southern boarder of Wisconsin home along with Monticello.



Paved walking trails along green spaces lead users to destinations of town and in nature.



Park space, added to existing or brand new neighborhood parks, increases public space square footage.



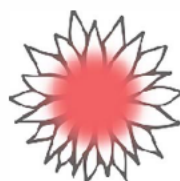
Themes & Elements

Walk/Bike Paths - Bike maintenance stations exist at the major Badger and Ice Age Trail junctions created with new trails.

River Access - A river walkway utilizes as much waterfront as possible for public space.

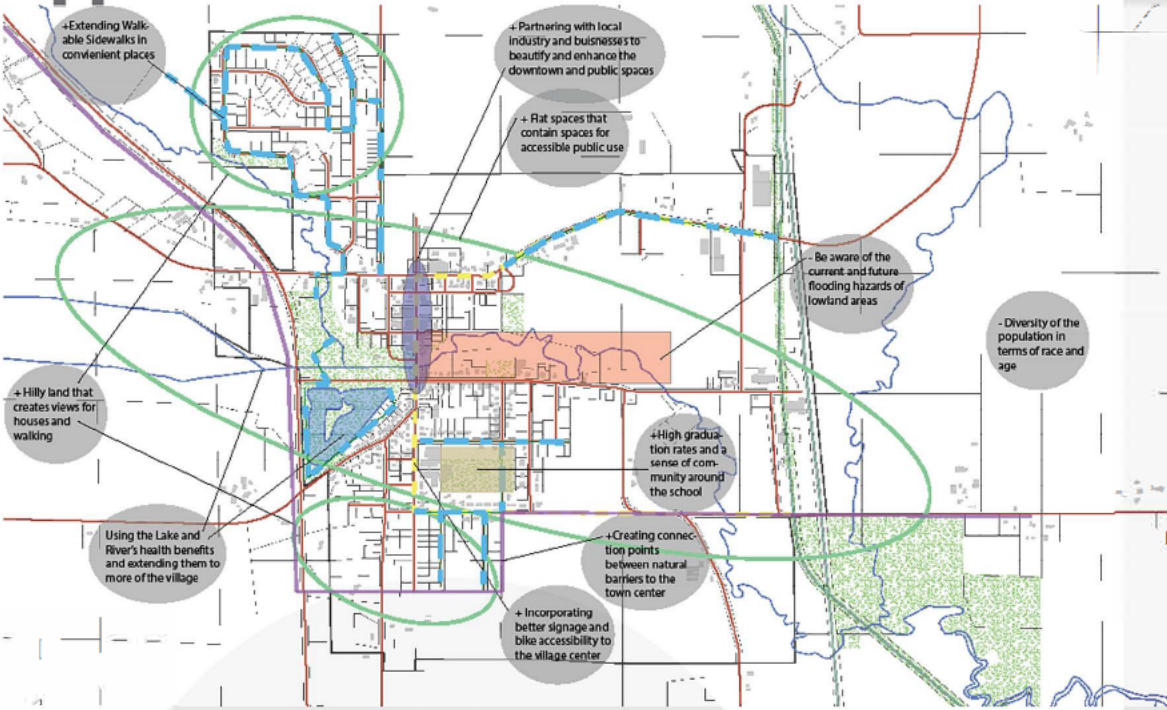
Outdoor Activity - New paths around Monticello will create greener corridors throughout town.

New bike trails cut through town and connect to the Badger and Ice Age trail



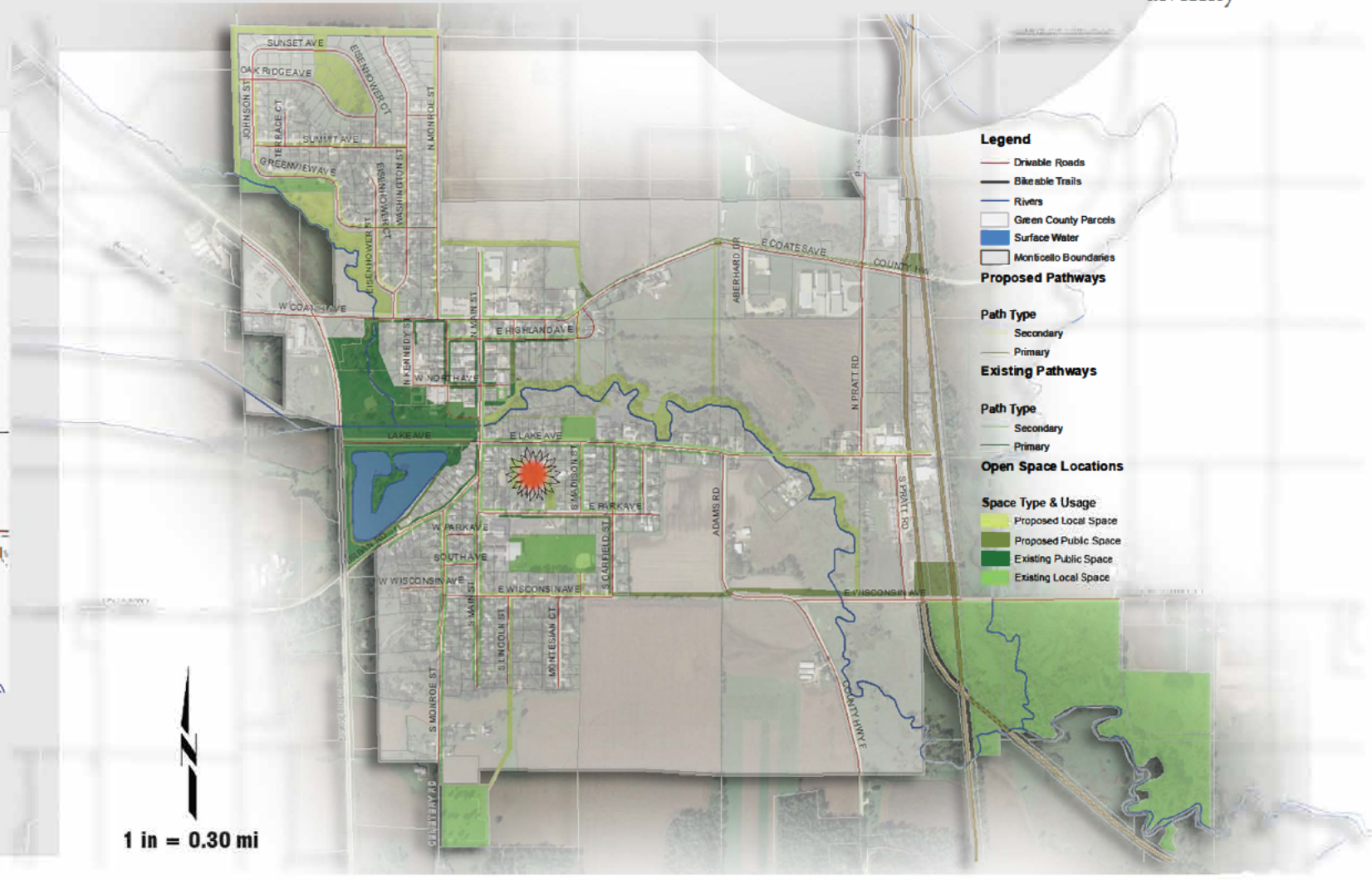
Avenue Park contains a kitchen garden, adding to the towns garden collection diversity

Opportunities & Constraints

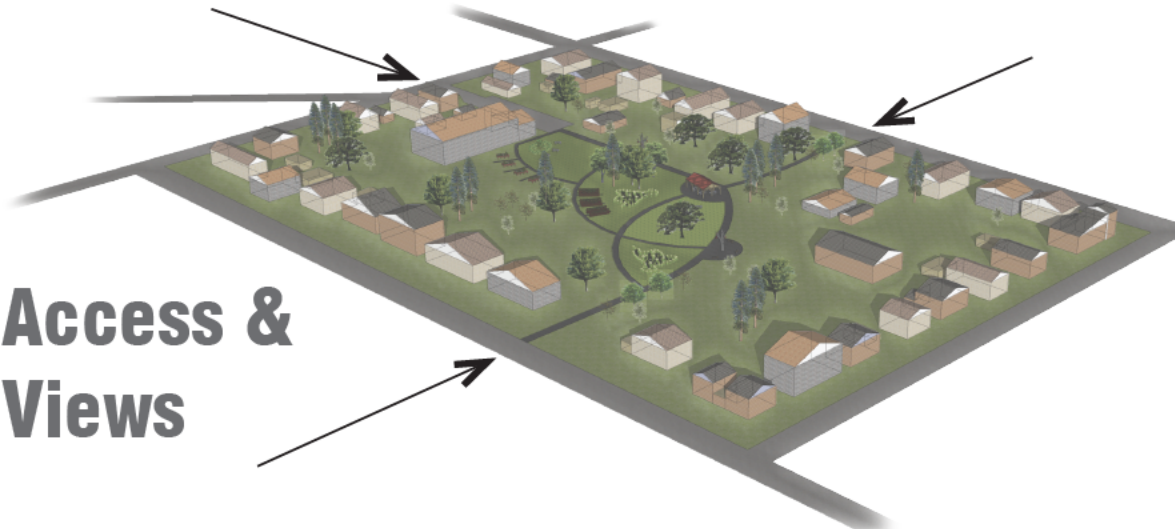


Needs Assessed

- Elementary - safe walking trails
- High School & Young Adult - gathering spaces and outdoor/bike activity
- Middle Aged - bike, garden, and park utilization
- Seniors - garden and leisure space



Monticello's Open Space - Avenue Park



Access & Views

Vision & Goals

The design for Avenue Park, transforms a “forgotten” space into a leisure activity space where immediate community members and explorers of southern Wisconsin can come together.

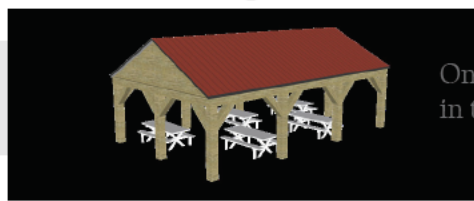
The site is divided into several programmed spaces including: seating spaces offering sun and shade, grassy spaces where gardening is available in planters, and sculpture spaces



Program Elements



Two “Song Oak” sculptures, which are foggy metal forms with bird feeders and houses hanging from bulky branches, are highlighted in nodes.



One pavilion provides shade, seating, and space to meet in the center of the park.



Multiple planter types harbor fruit and vegetables that are to be used and eaten by Monticello residents.

Park Plan

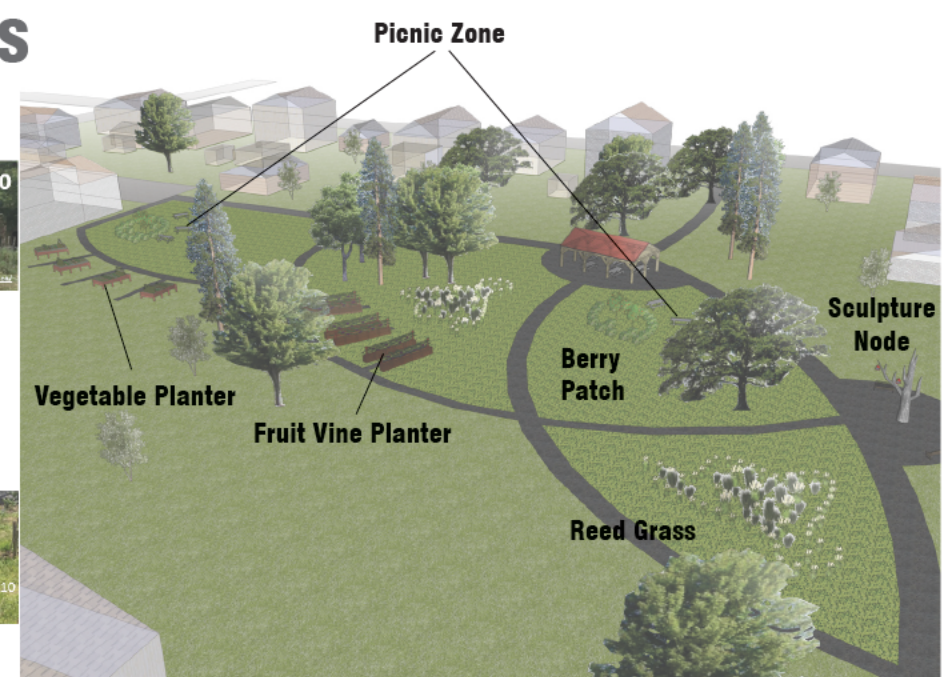


- Includes:
- 4 vegetable planters
 - 6 fruit vine planters
 - 2 berry patches
 - 2 sculpture nodes
 - 2 picnic zones
 - 2 reed grass areas
 - 1 pavilion

Precedent Designs



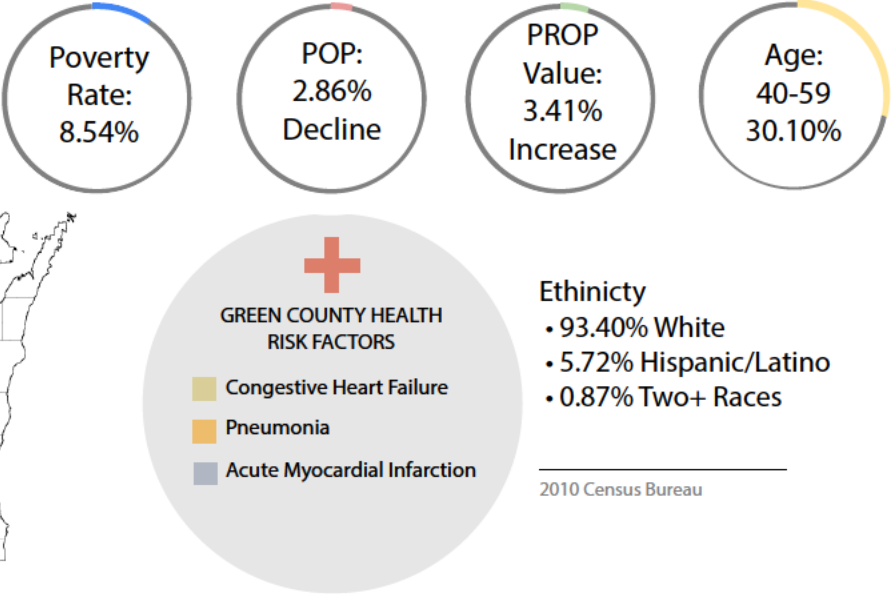
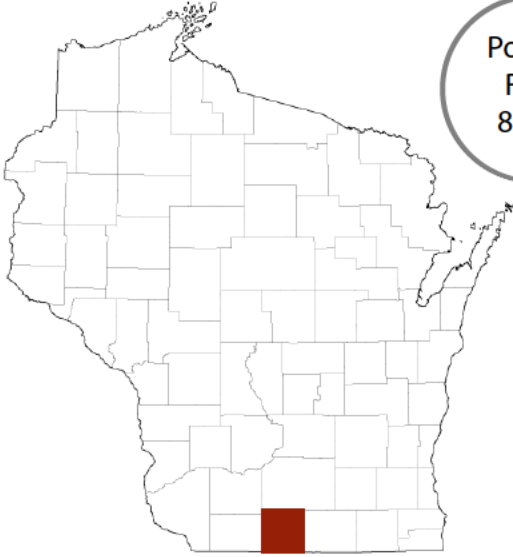
Fergus Falls and Good Neighbor Gardens, located in Minnesota and New Zealand, inspired and guided design decisions on the garden elements of the park.



Lake Montesian

LAKE MONTESIAN MONTICELLO, WI

LOCATION: Monticello is located in Green County, Wisconsin and is home to Lake Montesian and the Sugar River.



- OPPORTUNITIES:**
- Monticello needs to consider creating active spaces for the younger audience
 - Encourage active learning and education beyond the classroom
 - Monticello needs pockets or nodes for multiple generations of users
 - Allow for more connection between the older and newer neighborhood via the park system
 - More signage throughout Monticello
 - Creating a bike-friendly village while connecting both Badger State Trail and the Little Sugar River Trail
 - Increases in availability for multi-transportation usage
 - Creative ways to prevent or decrease the amount of flooding

HISTORY:



Swiss Heritage - Ice Harvesting - Village Development - Agriculture - Local Businesses - Lake Montesian - Sugar River

VISION STATEMENT:

Working with the community to create a plan that utilizes green infrastructure within the bounds of Monticello.

GOALS:

- Improve the quality of living within Monticello
- Green infrastructure towards multigenerational usage.
- Creating a plan that is viable

68%

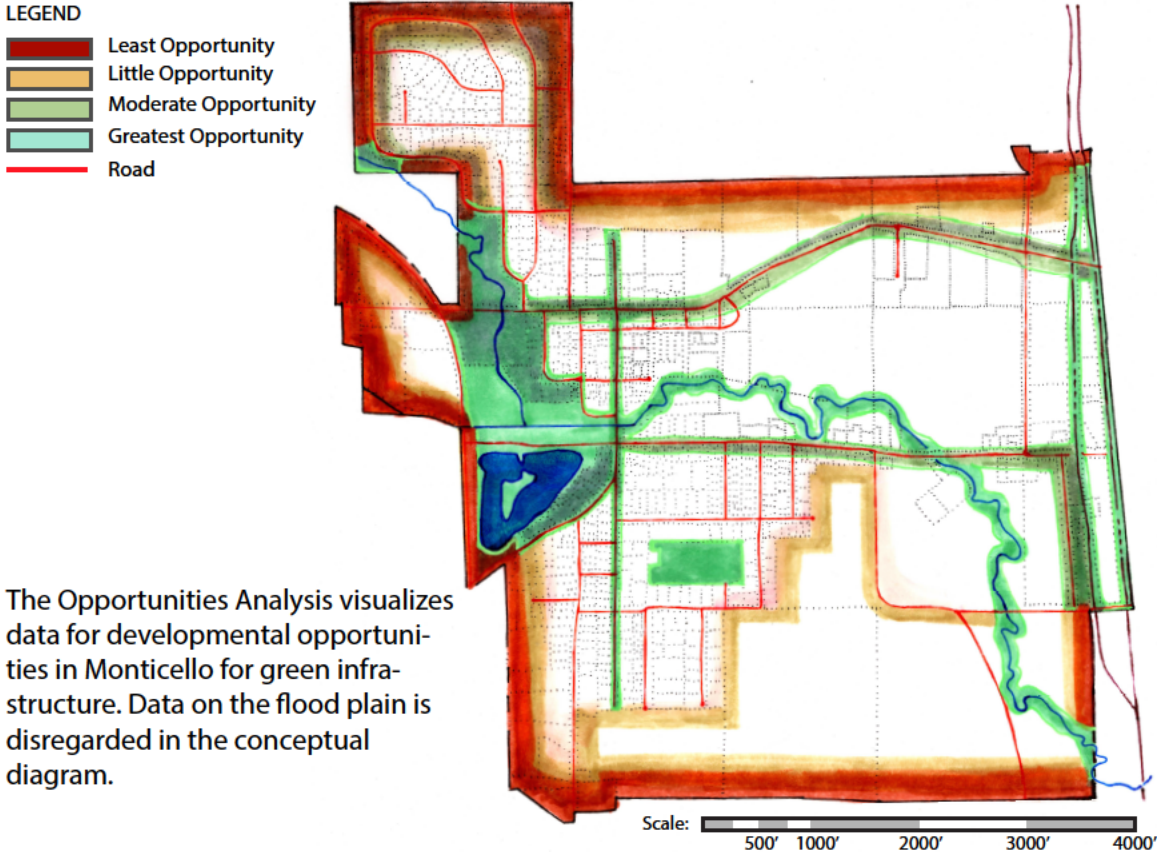
Survey Respondents wanted more investment towards algae removal [Comprehensive Plan]

Health

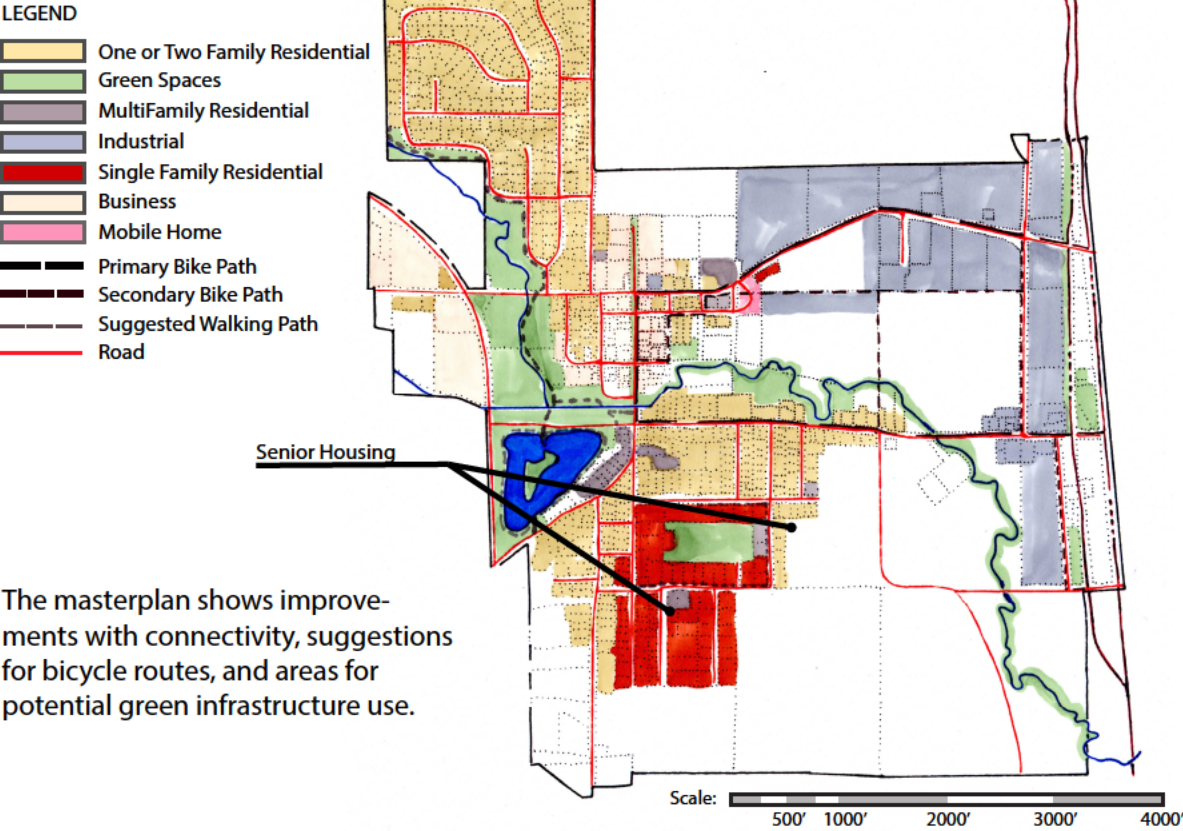
Algae is harmful with direct contact, ingestion, or breathing in aerosols containing toxins [CDC]

Control Animal Waste

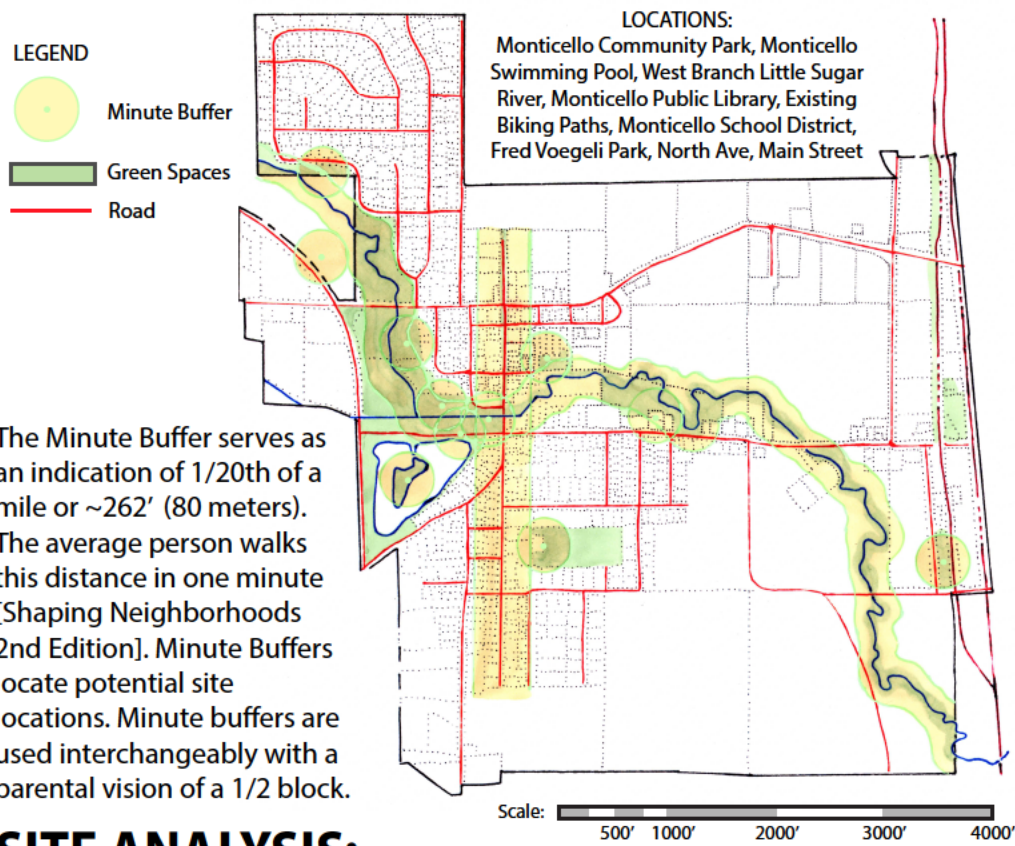
OPPORTUNITIES MAP:



MASTER PLAN:



POINTS OF INTEREST:

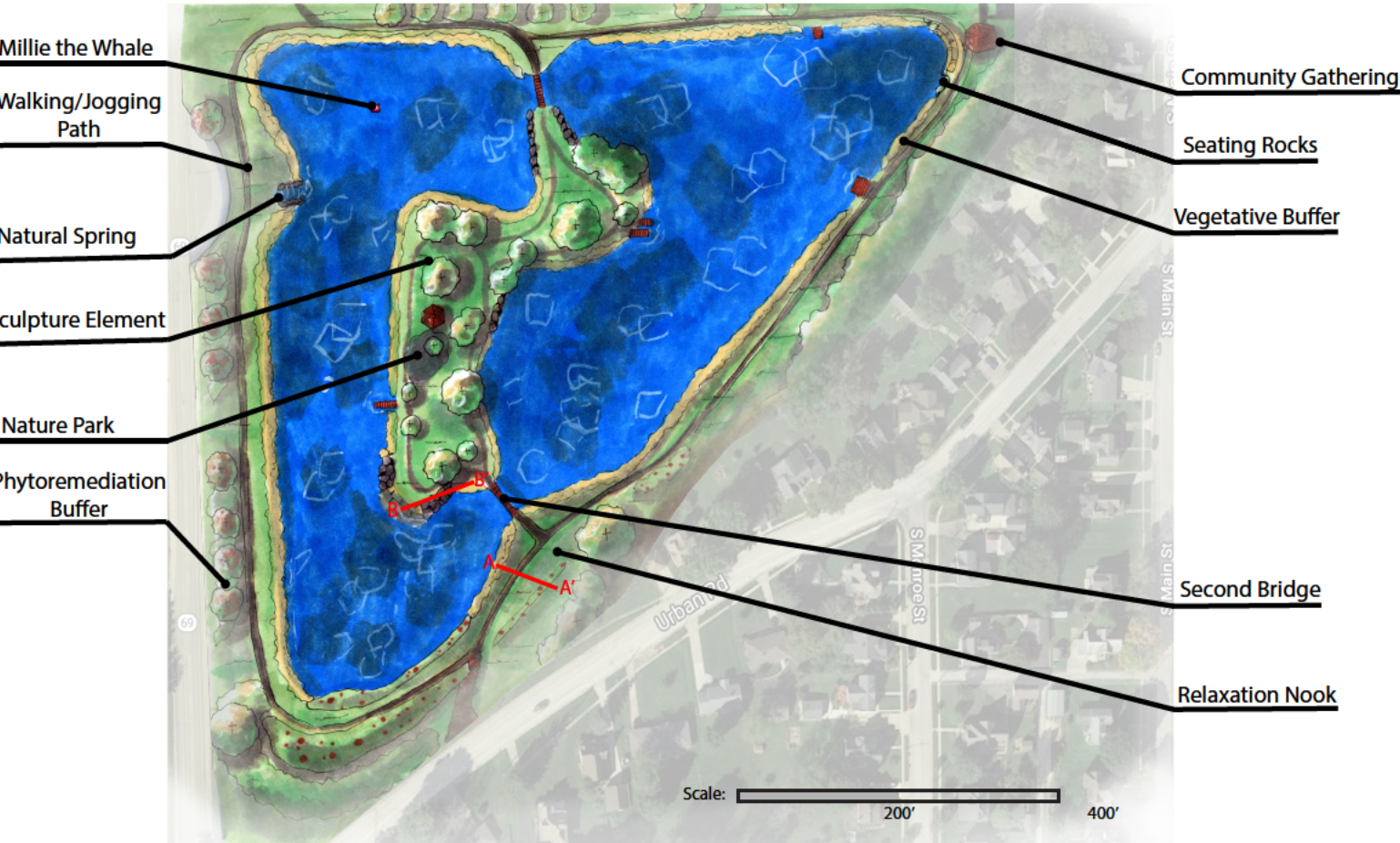


The Minute Buffer serves as an indication of 1/20th of a mile or ~262' (80 meters). The average person walks this distance in one minute [Shaping Neighborhoods 2nd Edition]. Minute Buffers locate potential site locations. Minute buffers are used interchangeably with a parental vision of a 1/2 block.

SITE ANALYSIS:

Lake Montesian contains a lot of algae from chemicals and lawn clippings entering the water. A large population of geese floods the lake area which calls for a geese management plan. There is little connection to the school and the southern housing region of Monticello.

SITE PLAN:



VISION STATEMENT:

Encourage outdoor activity such as fishing, sunbathing, and relaxation within Lake Montesian while dealing with issues such as algae and geese. Flashing forward healthier connections between humans and nature will be established. I want people to wade in the water, listen to the rustling leaves, and be at full equanimity.

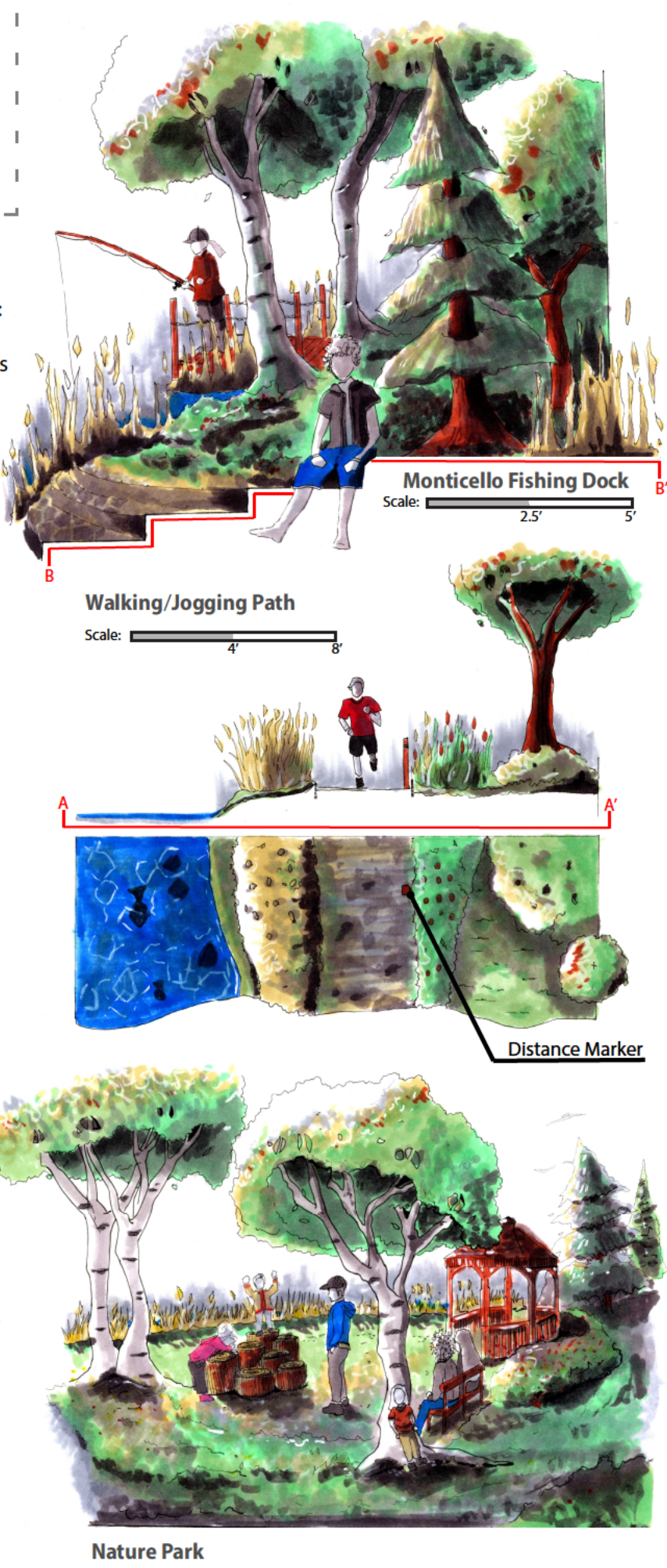
PROGRAM ELEMENTS:

- Relaxation Nook:
- Isolated Seating area
 - Transition Space
- Monticello Island:
- Learning Nook
 - Fishing Areas
 - Nature Park
- Around Lake Montesian:
- Marked Jogging Path
 - Vegetative Buffer Strips
- Community Gathering:
- Ice Skating (Winter)
 - Fishing Area



Sculpture Element: Monti The Whale

SECTIONS & PERSPECTIVES:



GOALS:

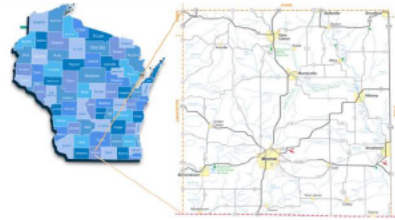
- ALGAE
 - GEESE
 - FISH
 - EXERCISE
- Creatures are holding a conversation
Click-
- The birds are singing harmonious melodies while dancing to the beat of nature
-rustling their feathers
-tapping their talons
-by rehearsing with their community and planting their voices within their young
their voices so Earthly
- The water is beautiful
Click-
- The water replicates all that is beautiful
Its basin amplifying the songs of the birds
The roaring waters project their own tune
-The water remains uninterrupted continuously screaming
-Sound waves traveling in and out of the depths of the lake
- The birches are amazing
Click-
- The birches are the orchestra
providing the tempo for the rhythmic patterns of nature
Their roots tapping to music like drums
Their leaves rattling - maracas
Branching grazing others - the violin
- I watch with the boulders, I watch with the spring, I watch with the cattails
We applaud

Hierarchy of Social Spaces

Monticello Masterplan: Hierarchy of Social Spaces

I April 30th, 2019 I Land Arc 321 I Instr. Kristin Thorleifsdottir

Location:



History:



- Monticello is a village in Green County, Wisconsin.
- Total Land: 1.19 sq mi
- Total Water: 0.02 sq mi
- Monticello High School was built in 1902 on the north end of the town. It was moved closer to the center in 1913.
- The Monticello Area Historical Society was founded in 1995 by Mrs. Marlene Schmalbeck.
- In 2001, Mrs. Ruth Knight Sybers, purchased the old Woelffer Drug Store building and donated it to the society for use as a museum which is used for later collection.

Demographics:

Ethnicity

- 1,112 White residents (93.6%)
- 63 Hispanic residents (5.3%)
- 8 multi-racial residents (0.67%)
- 5 black residents (0.42%)

Age

- 41.4 years of age median

Household Languages

- Spanish (20 speakers)
- German (9 speakers)
- French (3 speakers)

Housing units

- 540 households
- Car average: 2
- House pricing/property value 129,000 with a .08% growth rate
- Household income 50,682 with a 62% decline.

Site Analysis:

Constraints:

1. Some residential households are not within the 1/4 miles buffer.
2. Not many vegetations can be found along the street.
3. Loss uniformity of the architectural types.

VS

Opportunities:

1. Most gathering places are within the 1/4 miles buffer.
2. Natural resources can be easily reached.
3. Not many hardscapes are around natural systems.
4. Diverse architectural elements showing diversity.

Design Concept:

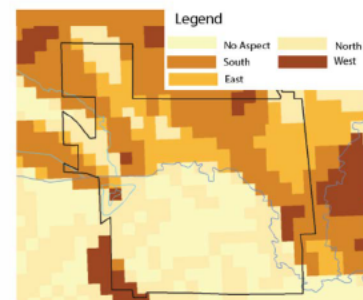
Hierarchy of commonly used spaces (stratified village).

- Social equality and social access
- intergeneration communication
- Build a sense of neighborhood
- Encourage outdoor activities

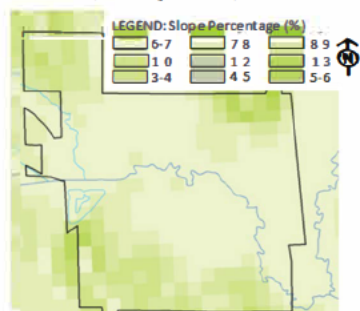
Master Plan:



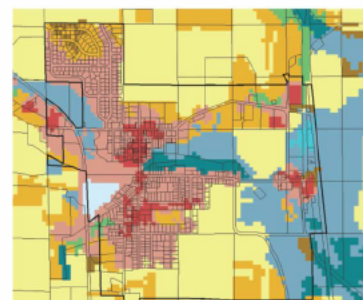
Key Findings:



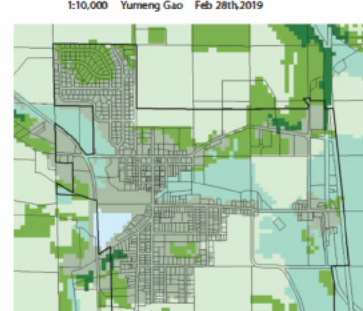
Slope Aspect Map of Monticello
1:10,000 Yumeng Gao Feb 28th, 2019



Slope Steepness Map of Monticello
1:10,000 Yumeng Gao Feb 28th, 2019



Land Cover Map of Monticello
1:10,000 Yumeng Gao Feb 28th, 2019



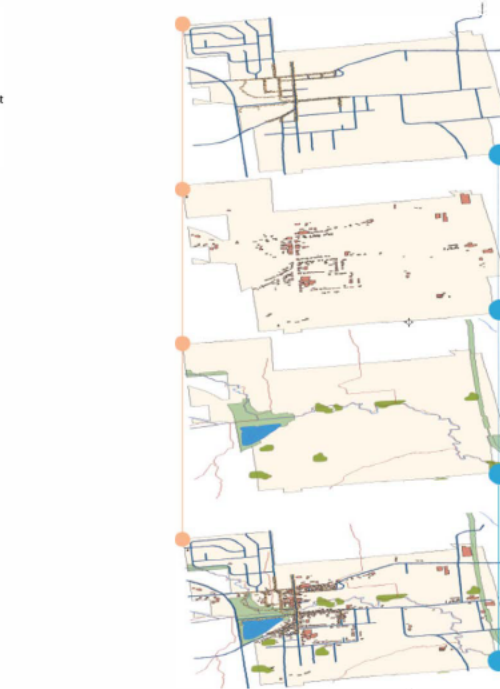
Land Cover Map of Monticello
1:10,000 Yumeng Gao Feb 28th, 2019



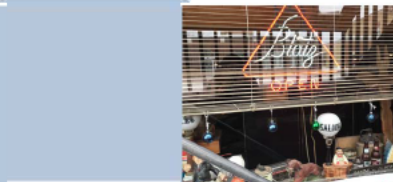
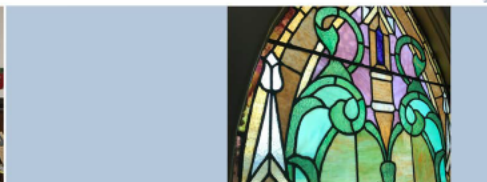
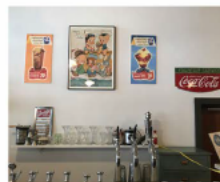
Land Cover Map of Monticello
1:10,000 Yumeng Gao Feb 28th, 2019



Land Cover Map of Monticello
1:10,000 Yumeng Gao Feb 28th, 2019



Photos:



Monticello Site Design--Healing Community Space

| April 30th, 2019 | Land Arc 321 | Kristin Thorleifsdottir

Site Analysis

Opportunities

1. Semi-private
2. Large open space
3. No previous construction

Constraints

1. Frequent flooding
2. Used by both seniors and students

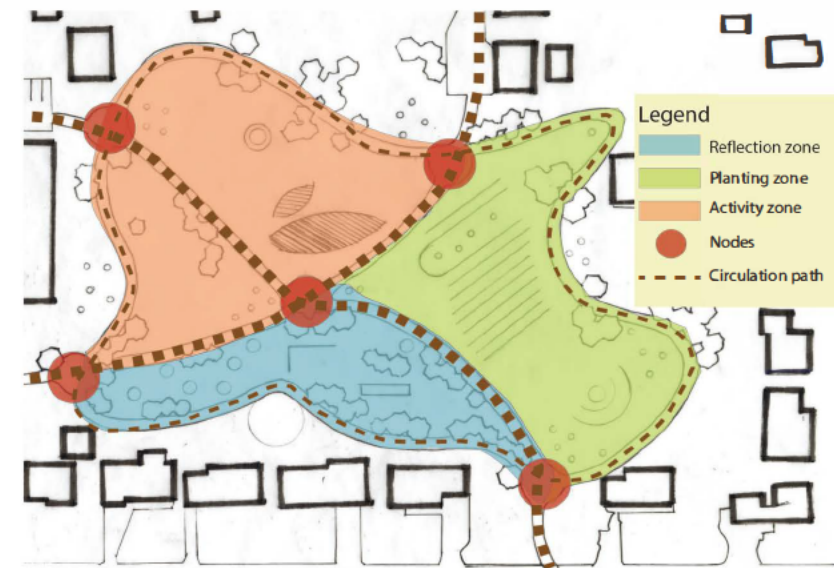
Design Objectives

1. Helping seniors and residents to relax
2. Connection between school and library
3. Encouraging outdoor activities

Site Design

Design Concept

Healing Community Space



Section and elevation



Section 1



Section 2

Creative Poem

Healing based community space

.....

Healing, Healing! Helping people bring the happiness back.

Biophilic patterns are introduced, and various ground textures are highly praised.

Daily recreation is further stressed.

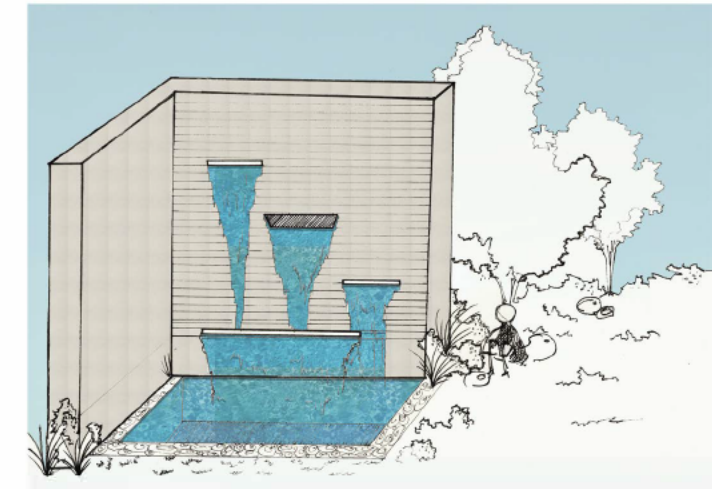
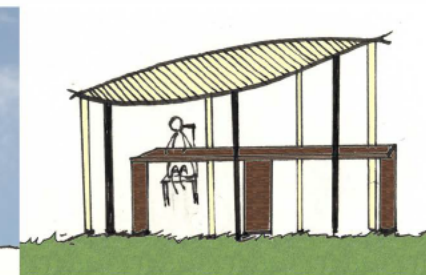
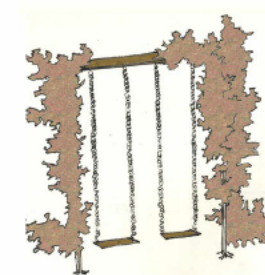
Green plants are crazily raised, and the beauty of flowers cannot be sealed. Fresh air can be clearly breathed.

Happy sounds of students can be heard, even from further place across the street. which makes seniors happy too.

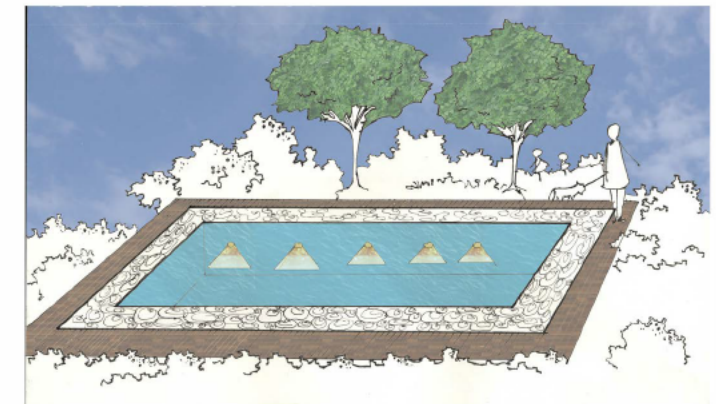
Flooding still happens, but the rain water no longer washes out the unity of the community.

--written by Yumeng Gao

Complimentary drawings



Perspective 1



Perspective 2

Sculpture

The sculpture I have made is called angel's wing which is a two-piece art work. The taller piece resembles the body of a standing angel, while the lower piece stands for a squat angel. Both pieces have no distinct corner edge but pretty rounded shape which might help seniors and residents to relax. The sculptures can be viewed as landmarks of the community.

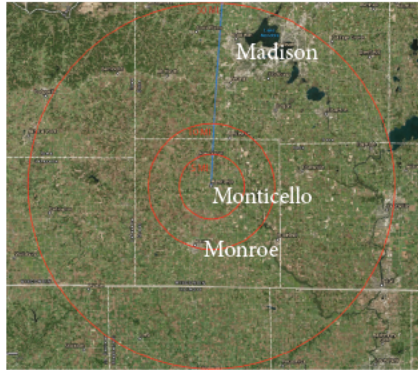
Little Suger River Park: Connecting People and Space



Connecting People and Space

Land Arch 321 – Designing Health Promoting Environments April 29th, 2019

Site Intro and History of Monticello, Wisconsin



Located about 30 miles from Madison, Monticello has a population of about 1,200. It sits in the southern heart of the driftless region. Positioned on the Sugar River, the town has multiple assets of natural beauty. The Sugar River Bike Trail and the Badger State Trail run just East of the village. The village is surrounded by primarily farmland lending to its thriving cheese industry.



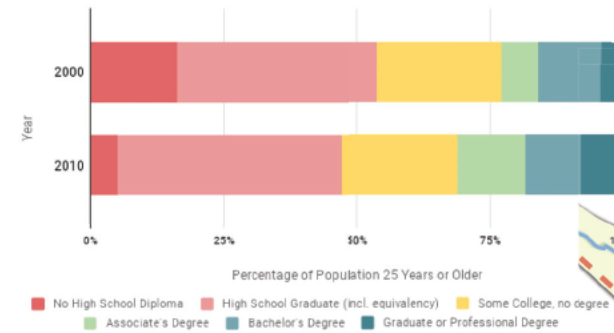
Shortly after 1845 Monticello was founded by primarily Swiss immigrants who found a connection to their native landscape. The river became a source of power as the flour mill was originally run off the river. The fertile soils made for a thriving farming and dairy industry. The railroad which ran just East of the town led to the expansion of the village.

Demographics

The total population of Monticello in 2010 was 1,217. Overall, there is net movement of people into the region as Green County is expected to grow roughly 16% by 2040.

Monticello does have its own school district that services a small outlying area. The district consists of Monticello Elementary School, Middle School, and High School, all located in the same building.

Educational Attainment



Conceptual Openspace Masterplan

Need Based Analysis:

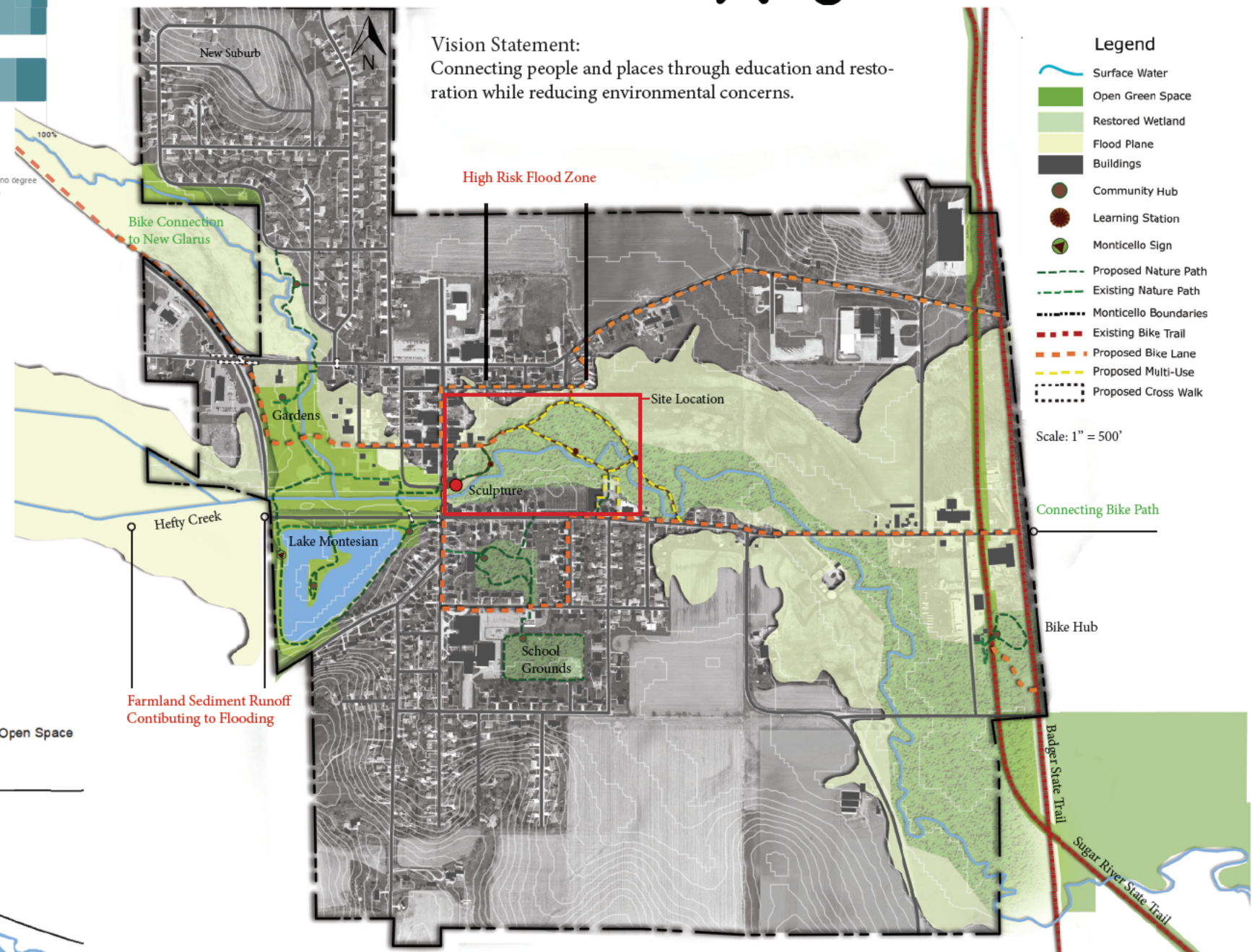
Add walking trails throughout the village creates access between and within open space. Improving connection between the state bike trails and the village will add opportunities for exercise and energize bikers to come into the village. The revitalization of open spaces will encourage people to learn about the importance of ecological habitats. Restoring wetlands will reduce environmental instabilities like flooding, while remediating the pollutants entering the soil and groundwater.

Goals:

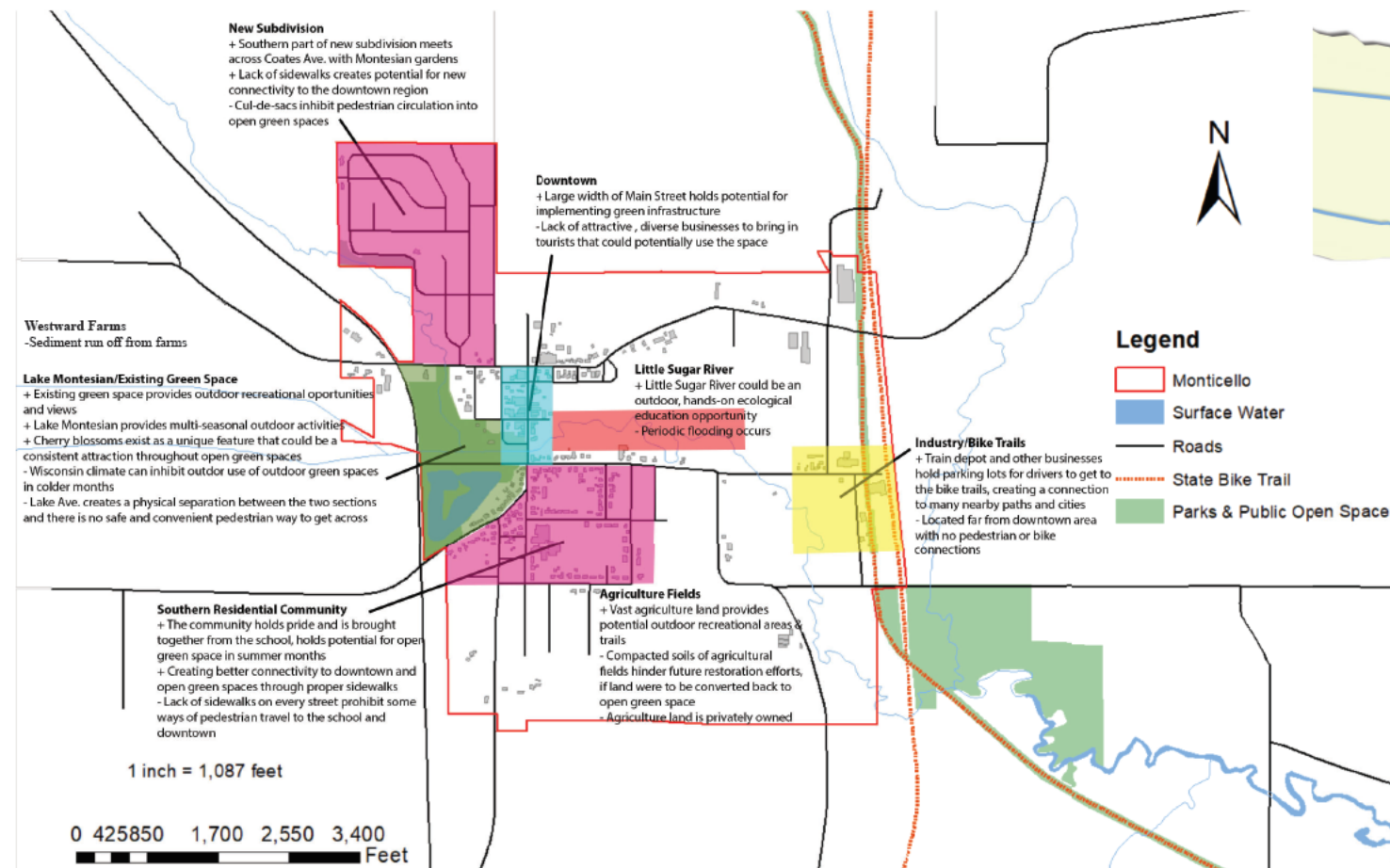
1. Establish a network of trails for walking and biking.
2. Revitalize open space and create opportunities for education
3. Restore wetlands and reduce flood and pollution risks.



Vision Statement:
Connecting people and places through education and restoration while reducing environmental concerns.



Findings From Group Project





Connecting People and Space

Land Arch 321 – Designing Health Promoting Environments

April 29th, 2019

Site Plan

Vision Statement: Through connecting trail systems and restoring wetlands opportunities for education and flood reduction are created.



Bio - Phytoremediation Using Wetland Species

Removes Pollutants From Water



Water Hyacinth



False Watercress



Duckweed



Indian Grass

Bio - Phytoremediation Using Flood Tolerant Trees



Cottonwood

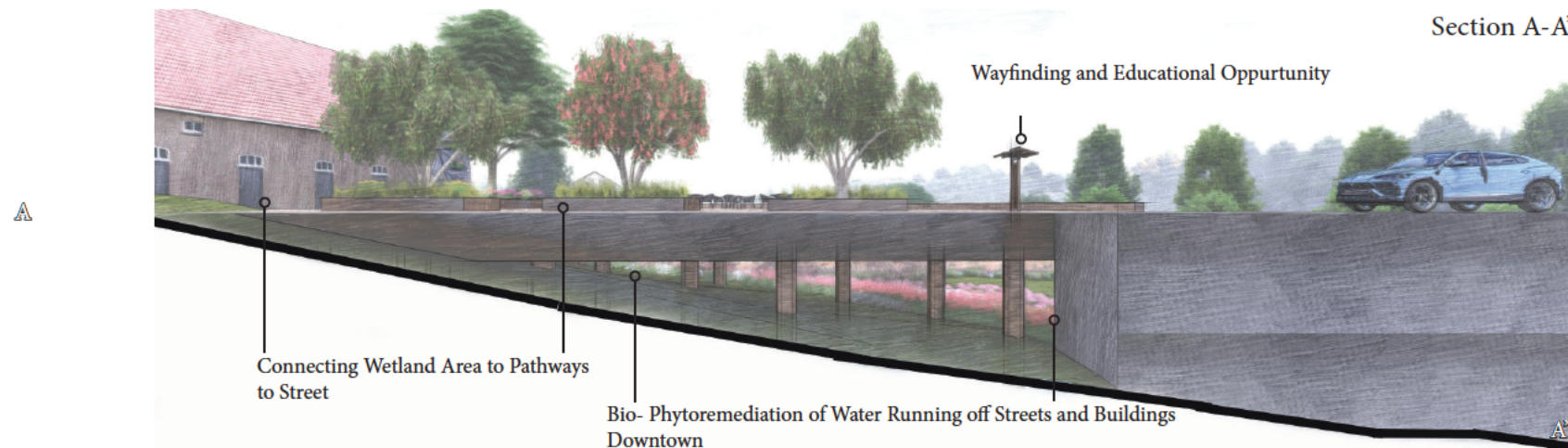
Uptake of 100 gallons of water per-day



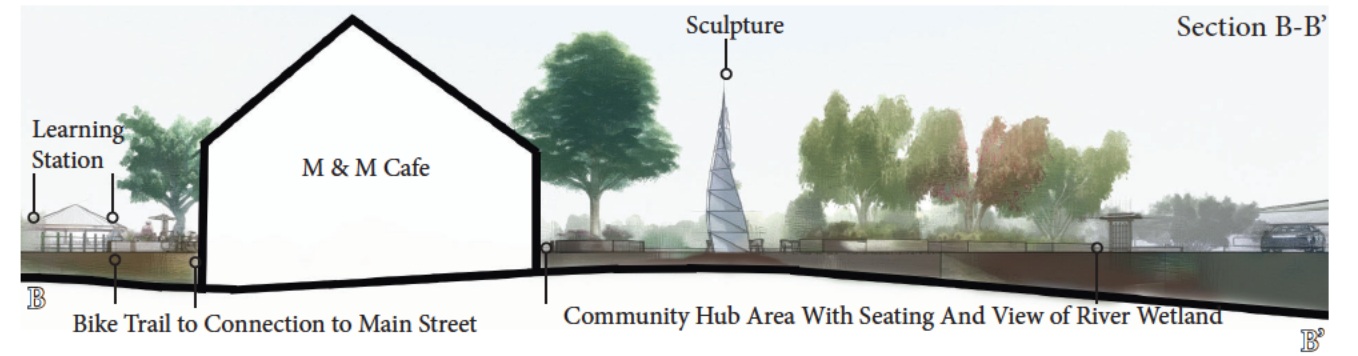
Weeping Willow

Connection to existing bike trail

Section Elevations



Section A-A'



Site Perspectives

Community Art and Lighting Creates a Sense of Place at Night

A Healthy Landscape for Humans and Animals



Monticello Haiku

Rolling hills rich soil
Breezy meadows meet dam roots
Long history flows

Connecting Trails and People

Reducing Flooding With The Use of Plants

Restoring Wetlands and Educating about Natural Ecosystems



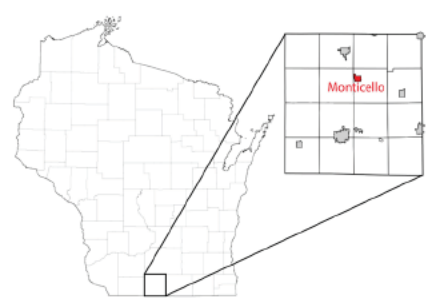
Sources: Monticello Comprehensive Plan and Data Access and Dissemination Systems

Meander through Monticello - Trail Head

Monticello, WI: Village Analysis and Masterplan

Introduction

Location of Monticello Monticello's History



Monticello's location within Green County, Wisconsin

The Village of Monticello began in 1845 when 80 acres near the town were purchased, and soon other European homesteaders arrived in the area. Many earned their living by farming and cheese-making, both of which remain an important part of the economy in Monticello. Located on the Little Sugar River, the Monticello Grist Mill opened in 1854 after the river had been dammed for power. Today, Lake Montesian is all that remains of the site, and it serves as a beautiful centerpiece for the Village's park system.



Historical vs. present day Main Street



Demographics

Monticello has a strong history of European immigration, and most of its residents are of German, Swiss, Norwegian, or Irish decent. Additionally, it is relevant to this project that about 80% of residents drive alone to work, about 4% walk, and only 1% bike, take a taxi, or another form of transportation.

Masterplan

Key Points of Need-Based Analysis

A large portion (about a third) of Monticello residents live alone, so they may want a space that can be used for social gatherings. Additionally, the Village wants to attract more young people and families, who may be looking for that as well.

Vision Statement Goals

To increase the connectivity of existing and proposed green spaces by creating a comprehensive park system that will positively benefit the Village through the promotion of an active and healthy lifestyle.

- To extend Monticello's park system to neighborhoods that are currently lacking green spaces, and to connect these new features to existing spaces
- To create a Monticello Bike Loop that connects the Badger and Sugar River State Trails to Village landmarks
- To create a bike and pedestrian transportation network

Group Report Findings

General Opportunities & Constraints

Opportunities

- Strong sense of community
- Expressive architecture contributes to Village character
- Could improve the first impression Monticello instills in its visitors
- Opportunity to attract more tourists

Constraints

- Not enough rental housing or mixed-use development
- Large percent of residents live on their own
- Monticello sometimes gets overshadowed by larger nearby towns
- General lack of quality pedestrian and bike infrastructure

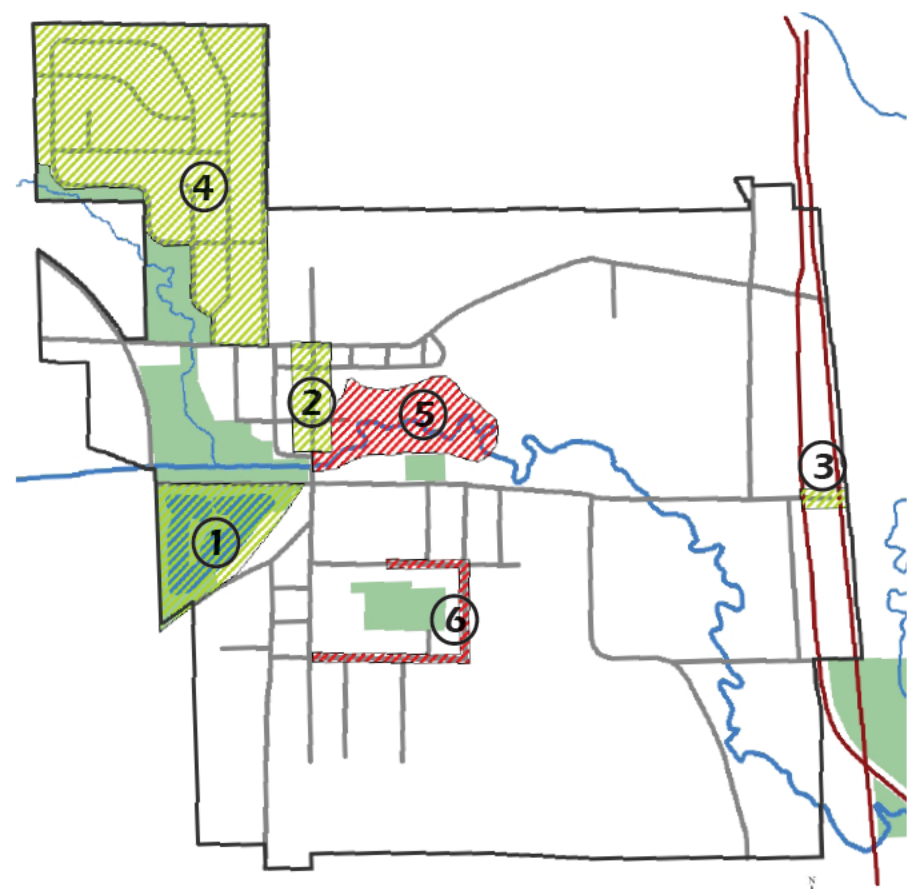
Opportunities & Constraints: Public Open Space & Transportation (On Map)

Opportunities

- ① Excellent existing park system: Lake Montesian especially can serve as a historical and cultural center
- ② Main Street: Opportunity to restore rundown/empty buildings and beautify the pedestrian space
- ③ Lake Ave. & Bike Trials: Potential bike node and entrance to Village
- ④ Subdivision: Can strengthen connection to rest of Village and provide park amenities

Constraints

- ⑤ Little Sugar River: No flood prevention infrastructure
- ⑥ Sidewalks by School: Poor connectivity threatens pedestrian safety



Key

Lake Montesian

Little Sugar River

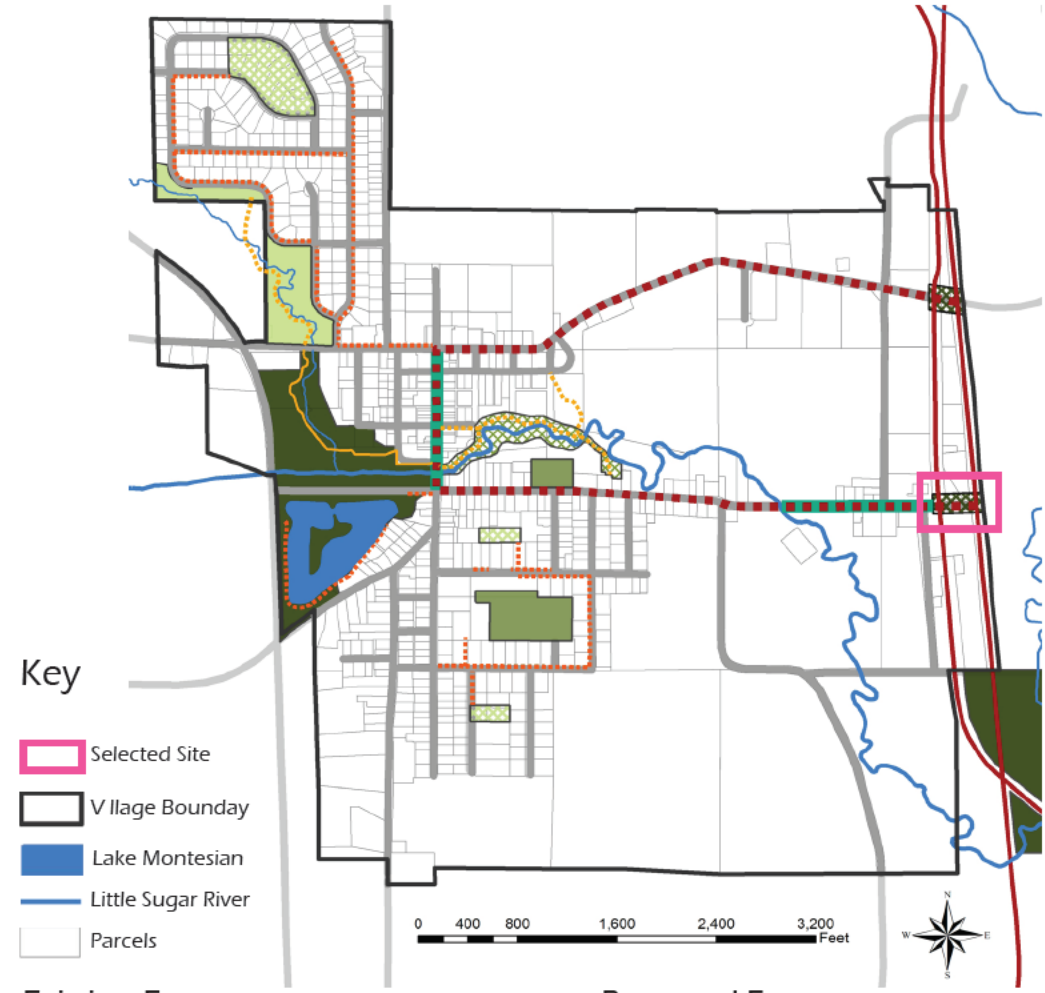
Parcels

Bike Trail

Existing Green Space

Constraints

Opportunities



Key

Selected Site

Village Boundary

Lake Montesian

Little Sugar River

Parcels

Existing Features

Proposed Features

Neighborhood

Village

Village +

Tertiary: Gravel/Park Trail

Bike Trail

Roads

Neighborhood

Village

Village +

Tertiary: Gravel/Park Trail

Secondary: Sidewalks

Primary: Paved Bike Lane

Green Street

Monticello, WI: Site Design - Meander through Monticello

Site Introduction

Site Introduction

Located at the intersection of Lake Ave. and the Badger and Little Sugar River State Bike Trails in the eastern industrial district, this site has a unique potential to act as an entry and exit point into Monticello, serving both Villagers and visitors.

Vision Statement

To create a unique community landmark that "puts Monticello on the map" by acting as a gateway to prompt bikers on the Badger State Trail and the Little Sugar River State Trail to enter the Village, and to promote the health and wellbeing of Villagers by encouraging them to use the bike trails and spend time outdoors.

Site Goals

- To establish Monticello as a popular bike stop along the Badger State and Little Sugar River Trails
- To use unique program elements to make the site different from what the Village and bike trails already have
- To create a relaxing space where bikers can rest/gather before starting the proposed Monticello Bike Loop
- To invite people who work in the eastern industrial area of Monticello to use the space for lunch or breaks
- To renovate and add beauty to the industrial part of the Village
- To create a space that serves as a gateway from the town to the bike trails and vice versa

Inventory & Analysis



The site in its current state

Opportunities

- Wide open, not constricted by site area or topography
- Proximity to bike trails and industrial district allow for variety of site users
- Some infrastructure already exists: road and building

Constraints

- Site is far from residential areas
- Industrial facilities nearby may still need access

Site Design

Site Plan



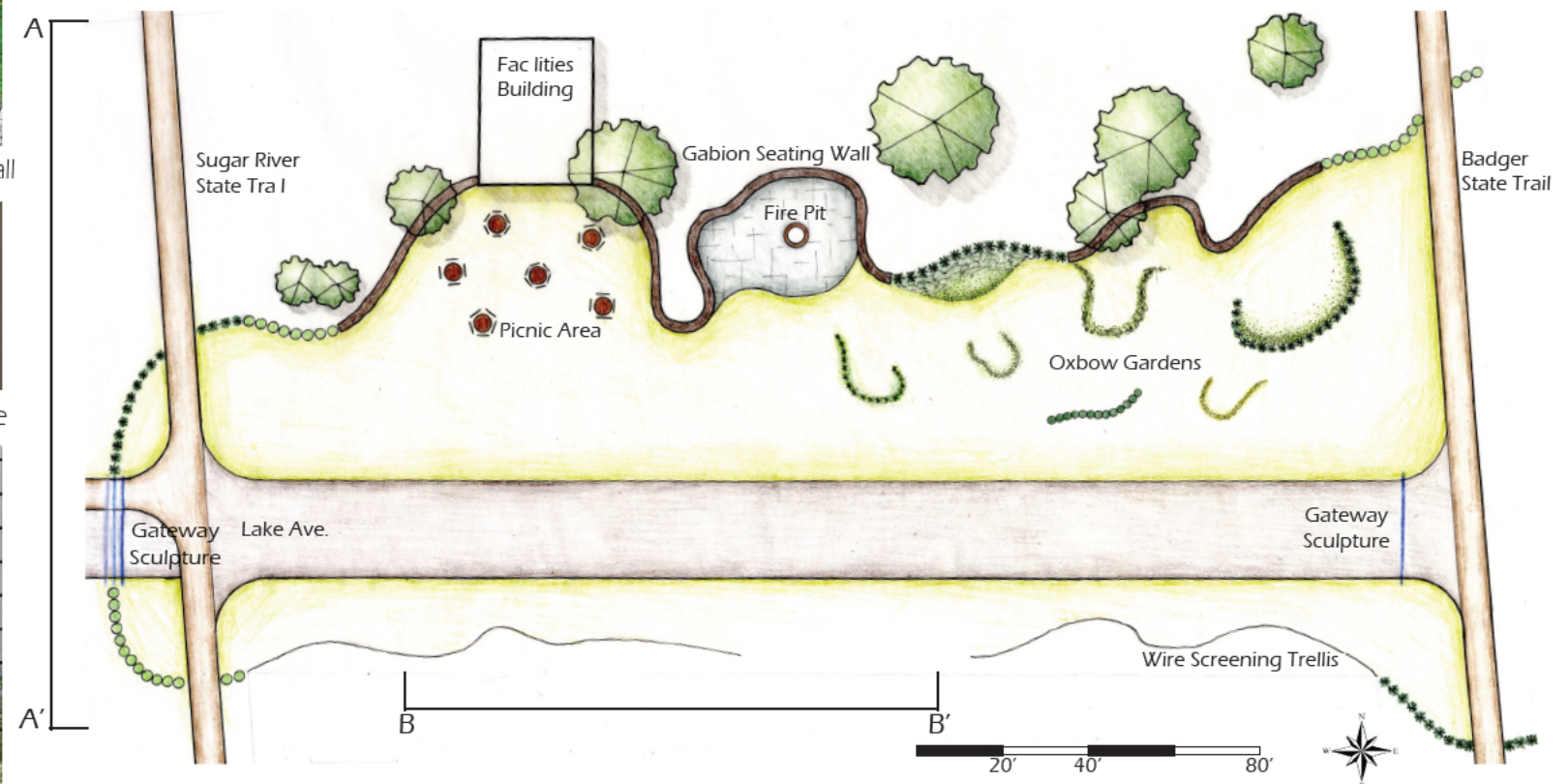
Gabion Seating Wall



Gateway Sculpture



Wire Screening Trellis



Design Concept: Meander through Monticello

- Inspired by the form of a meandering river, like the Little Sugar River
- These rivers change course over time, sometimes creating oxbow lakes which show the old path of the river
- This is analogous to Monticello retaining its history while charting a new course for the future



Section A - A'



Section B - B'

Green Ribbon Transition

PUBLIC AND OPEN SPACE MASTERPLAN

The village of Monticello was founded in 1845 when Robert Witter purchased 80 acres of land in what is now Green County, Wisconsin. Over the course of its history, the village has seen the creation of Lake Montesian by damming the Little Sugar River (which eventually became a mill pond), the booming business of the Monticello Grist and Monticello Wollen Mills, and a catastrophic fire which ended the village's wool production. Since then, Monticello has relied heavily on their agricultural production from their rich soils. The village currently features a downtown center, Main Street, as well as a well established public park system. Although containing only 1,200 residents, there is a rich sense of place within the village that is a result of its strong Swiss and German heritages.

During the spring semester of the 2018-19 school year, the Village of Monticello partnered with the University of Wisconsin - Madison's department of Landscape Architecture in order to allow students the opportunity to gain professional experience in planning the design of public and open space.

Information via E. Babler and the Monticello Historical Society

DEMOGRAPHIC CHARACTERISTICS



PROBLEMS & NEEDS

A needs-based analysis involves examining the specific problems and needs of a certain group of individuals. Doing so can provide a starting point for planning the village's public and open spaces. To read the diagram to the right, notice that problems are listed in white and needs are listed in black. Look for areas of overlapping need among age groups, but note that some items (e.g. recreation) would certainly benefit all ages, not just their targetted demographic. The location of the items below are chosen based on what age group faces the most problems or has the most need for each item. For example, unsafe streets are never good, but the elderly and infants face the most risk from these dangerous conditions.



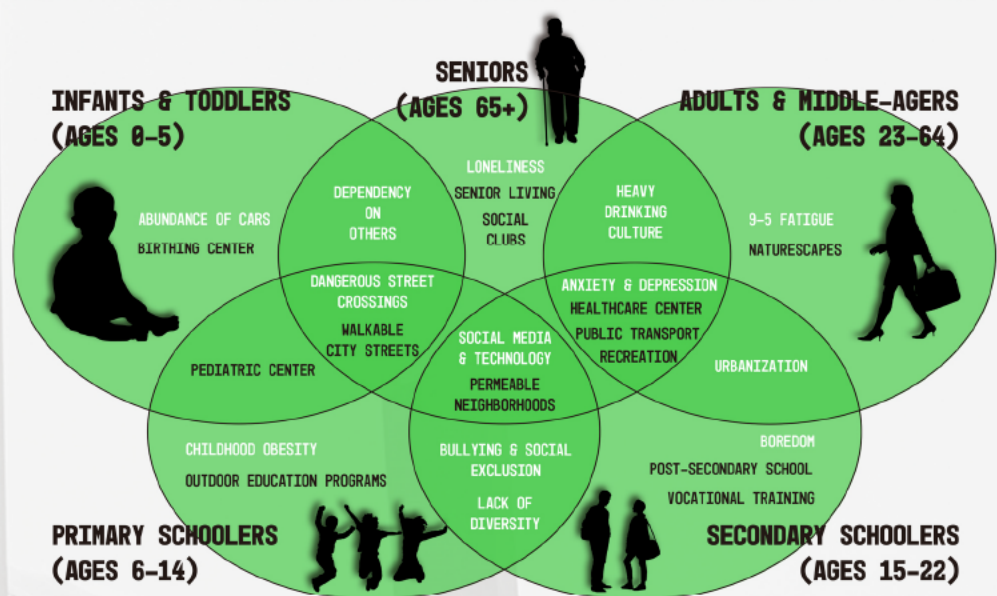
There is a notable lack of signage signalling pedestrian crossings at busy intersections such as this one; Main Street and North Avenue.

OPPORTUNITIES & CONSTRAINTS

For the purpose of this project, an opportunity is defined as an area for potential improvement within the village with regards to its current planning of public and open space. Conversely, a constraint would be something that limits potential for development. Opportunities and constraints can be anything from physical features of the landscape to demographic characteristics to the current design of public and open spaces. It is important to note a constraint isn't inherently "bad", it is simply a limitation for development.



ANALYSIS: PROBLEMS AND NEEDS IN MONTICELLO BY AGE



OPPORTUNITIES

- INCREASE CONECTIVITY BETWEEN EXISTING BIKE TRAILS TO THE EAST AND THE VILLAGE'S EXISTING PARKS
- EMPLOY MORE MONTICELLO RESIDENTS IN RECREATIONAL SERVICES TO CAPITALIZE ON PARK SYSTEM
- ENCOURAGE MORE SUSTAINABLE MODES OF TRANSPORTATION WHEN TRAVELING WITHIN CITY LIMITS
- ADDITION OF BOTH MULTIGENERATIONAL AND MULTIUSE SPACES AND FACILITIES

CONSTRAINTS

- POOR SIDEWALK CONDITIONS CURRENTLY LIMIT WALKABILITY IN THE VILLAGE, MOSTLY IN NEIGHBORHOODS
- FLOODING FROM RIVER POSES SERIOUS RISK TO MAIN ST. AND ADJACENT RESIDENTS
- DEPENDENCY ON EMPLOYMENT OUTSIDE THE VILLAGE STYMIES LOCAL ECONOMIC GROWTH AND DEVELOPMENT.
- HILLS AND VALLEYS OF DRIFTLESS AREA PROHIBIT DEVELOPMENT IN CERTAIN AREAS

PRECEDENT STUDY: KOLONI BIKE SHARING



Koloni is a company that works with small communities to offer bike sharing programs to their residents. Programs similar in scope to Monticello's have been successful in Pocahontas, IA.

PRECEDENT STUDY: SHARED STREETS



Shared streets allow access for multiple types of traffic (vehicular, pedestrian, bike, etc.). Implementing a shared street in Monticello will increase accessibility for all types of people in the village.

PRECEDENT STUDY: BIOPHILIC POCKET PARKS

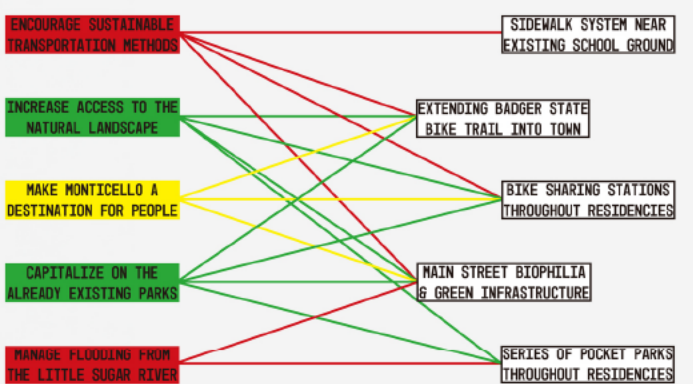


Biophilia refers to our innate connection with nature. Studies show people benefit greatly from spending leisure time in areas such as pocket parks, which will be implemented in Monticello.

VISION STATEMENT

By capitalizing on the existing park system and proposing amenities that take advantage of underutilized surrounding facilities, Monticello can become a model of a biophilic village.

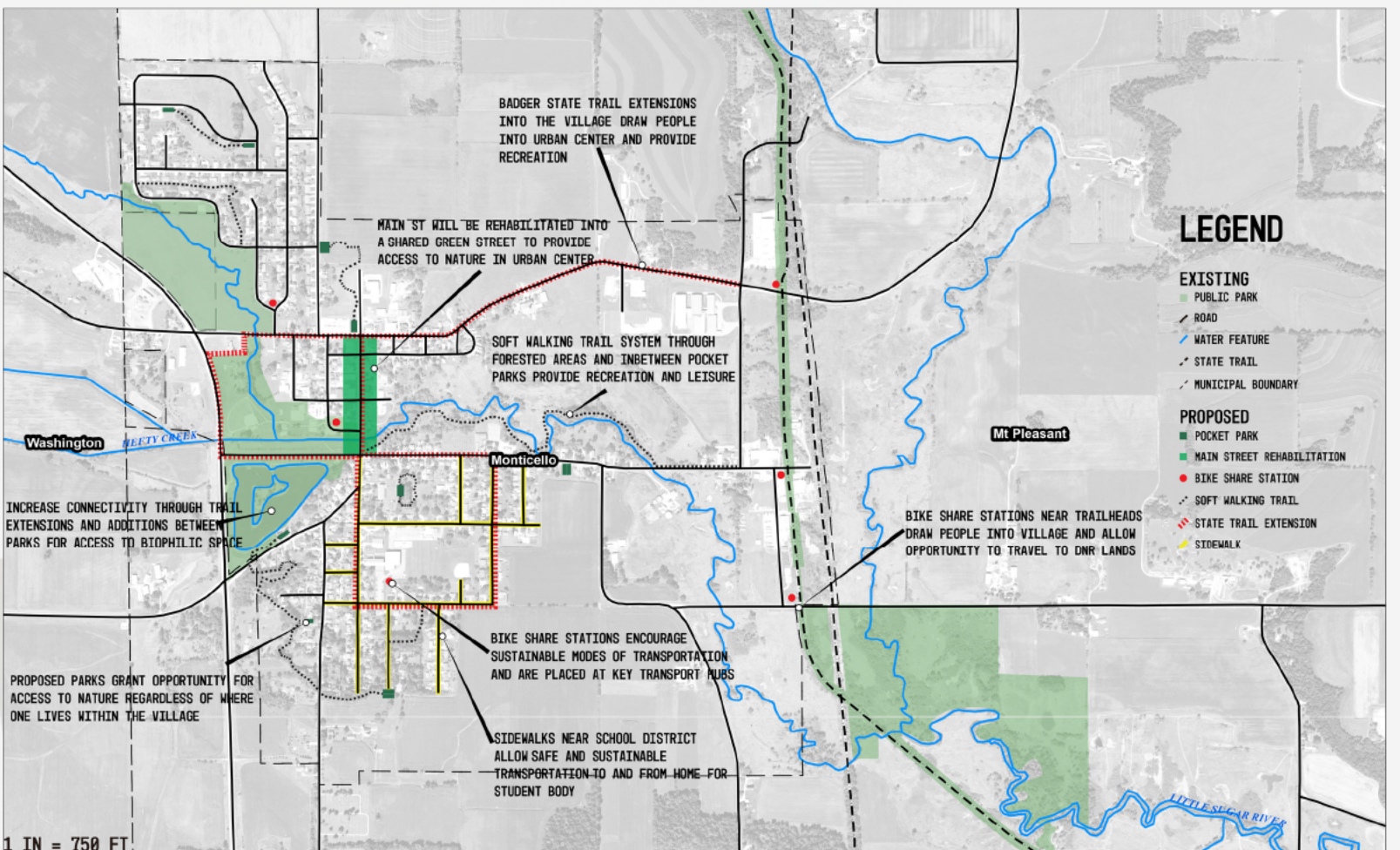
GOALS

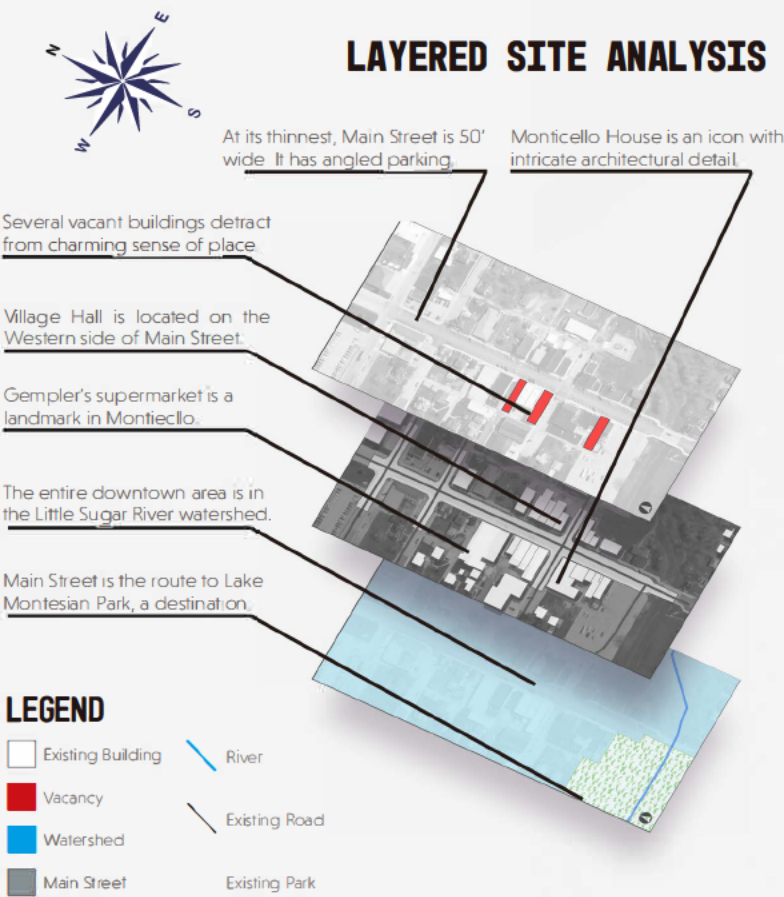


GOALS & PROGRAM ELEMENTS

By utilizing the precedent studies above and combining them with the findings of both the needs-based and opportunities and constraints analyses, areas for improvement regarding the planning of public and open spaces can be identified. Capitalizing on existing features and proposing new strategies based on these findings will result in a Monticello that is more sustainable, healthy, and active while at the same time maintaining its rich cultural heritage and charming identity.

Furthermore, the combination of analytical methods make it simple to establish goals for the public and open space masterplan. These goals can be seen in the left column on the diagram to the right. In order to achieve these goals, several program elements, which can be seen on the right side of the diagram, will be proposed.

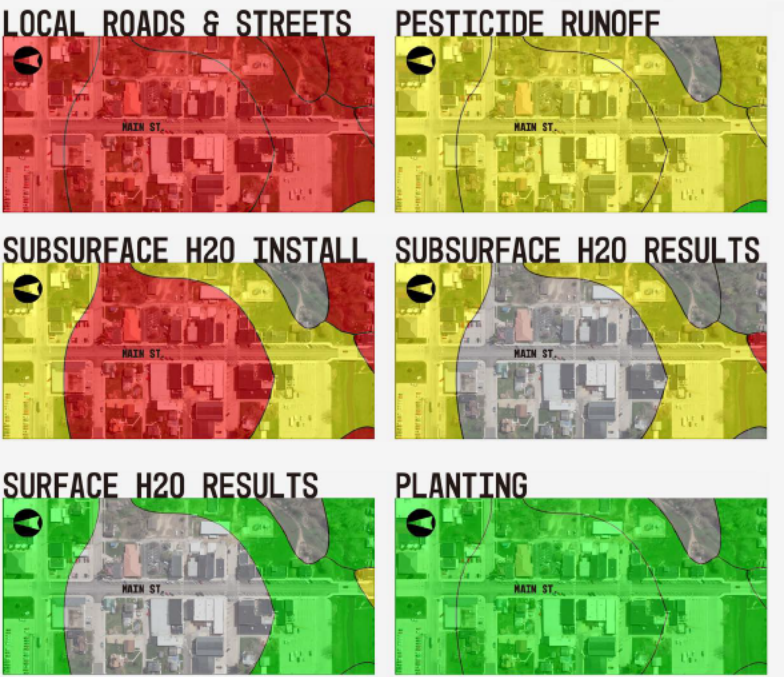




SOIL SUITABILITIES & DANGERS

Familiarity of the soils within a region allows one to determine which types of development are most suitable for the area. The vast majority of the soils in the urban center of Monticello are silty loams.

Using data from the USDA's Web Soil Survey, these maps evaluate suitability and risks for a number of different types of development / scenarios. Red areas feature soils that aren't suitable / pose danger, yellow areas are somewhat suitable/hazardous, green areas are suitable, and areas without a colored overlay require more data than currently available before making a suitability judgement.



MAIN STREET AS IT EXISTS TODAY



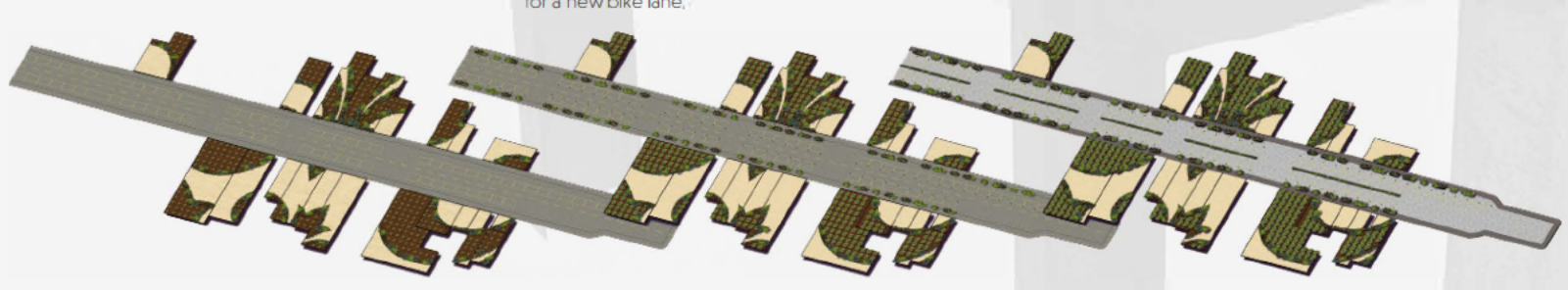
VISION STATEMENT

Through careful planning, Monticello's Main Street will transform into a shared green street that manages stormwater runoff, allows safer travel through the village, and provides access to biophilic elements via plantings.

CONCEPT DEVELOPMENT



PHASES OF IMPLEMENTATION



- | | | | | | |
|------------------|--|------------------|---|--------------------|---|
| PHASE ONE | <ul style="list-style-type: none">5-10 yearsrooftop gardens along Main Street storesredefining traffic lanes and parking | PHASE TWO | <ul style="list-style-type: none">10-15 yearsbollards separating vehicles and pedestriansplanters separating bikers and walkers | PHASE THREE | <ul style="list-style-type: none">15-20 yearsrepave road with permeable paversintroduce road median and rooftop seating |
|------------------|--|------------------|---|--------------------|---|

FINAL SITE PLAN

The plan below shows Main Street in Monticello, Wisconsin circa 2040. Note that the shape of the rooftop gardens is an abstracted fleur-de-lis, an idea inspired by the crown molding at a local coffee shop, the Morning Mug.



SITE SECTIONS

The section on the left cuts across the road perpendicularly and shows the relationships between the newly defined traffic lanes.

The elevation on the right runs parallel to the road and illustrates how the new design allows for different types of transportation.

Lines are red on the site plan.



Little Sugar River Nature Trail

LITTLE SUGAR RIVER NATURE TRAIL

MONTICELLO, WISCONSIN



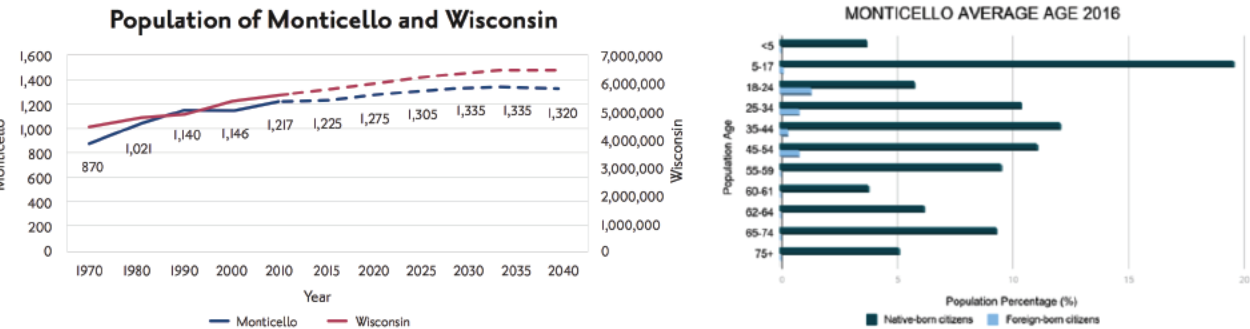
Nestled in the rolling hills of Green County in Southern Wisconsin is the community of Monticello. This friendly village lies in the south-western part of the state between New Glarus, America's Little Switzerland, and Monroe, the Green County seat.

A short escape located just thirty miles south of the capital city of Madison, Wisconsin, Monticello offers the closeness to the big city, as well as the small town charm of agreeable neighborhoods and a historical downtown featuring pubs, coffee shops, restaurants and welcoming specialty shops.

Monticello also provides amazing access to the wonders of the country, including the Little Sugar River for canoeing and kayaking, two amazing biking trails – the Badger State Trail & Sugar River State Trail, local community parks, proximity to New Glarus Woods State Park, and rolling hillsides dotted with prairie flowers, grazing cows and picturesque dairy farms.



MONTICELLO, WISCONSIN - DEMOGRAPHICS AND RESEARCH FINDINGS:



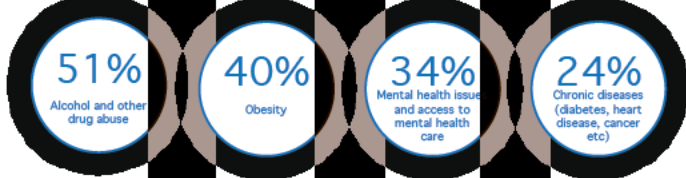
HEALTH CONCERNS FOR MONTICELLO: SOURCE: GREENCOUNTYHEALTH.ORG



FUTURE TRENDS IN 2040: AN AGING POPULATION



SURVEY: BIGGEST COMMUNITY HEALTH PROBLEMS:



NEEDS BASED ANALYSIS:

OPPORTUNITIES:

- Historical downtown
- Little Sugar River as a destination for recreation
- Wetlands in vicinity allows for species diversity
- Established pathways through existing parks
- Proximity of parks to central business district and residential areas
- Existing State bike trail network on east side
- Potential for enhanced park network

CONSTRAINTS:

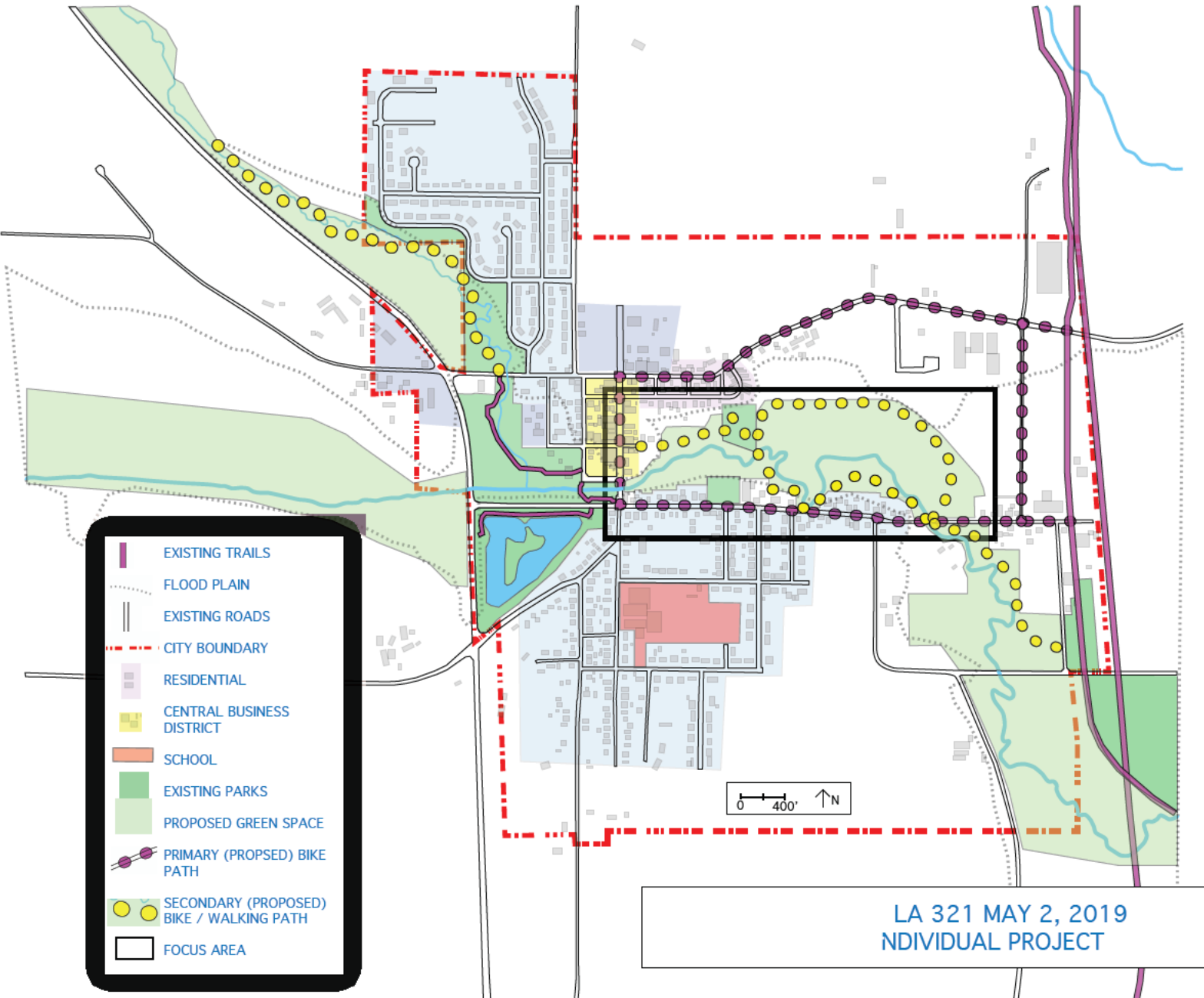
- Significant flooding risk
- Lack of connectivity from bike trails on east side to parks on west side
- No established bike lanes
- Property lines and property ownership
- Funding for large scale projects or land acquisition

BENEFITS & ENHANCED VALUE

- 1. SOCIAL** - Recreational value, health & well being promotion, scenic access, cultural preservation, place making
- 2. LAND** - Preservation, efficiency
- 3. WATER** - Stormwater management, improved water quality, flood protection
- 4. HABITAT** - Habitat preservation and restoration, improved quality
- 5. ECONOMIC** - Increased property values, visitor spending, economic development

VISION STATEMENT: In the natural area at the heart of Monticello, provide opportunities for physical activity, active living, social interactions and mental restoration, through a nature-connected path network, allowing access to public open space, environments and connected districts.

OPEN SPACE MASTER PLAN:



LA 321 MAY 2, 2019
INDIVIDUAL PROJECT

SITE ANALYSIS:

PHYSIOGRAPHIC CONTEXT

- Gently sloping, moist soils, cold winters, hot summers.
- Large parcel in relation to town size

BIOLOGICAL CONTEXT

- Moderate sized river, extensive potential for wetlands, wildlife, and plant communities

LAND USE, INFRASTRUCTURE, & REGULATORY

- No significant designation
- Zoning is in floodplain
- Some land owned publicly, some privately

CULTURAL & HISTORIC

- Part of the neighborhood character
- Mostly single family
- Historical relationship to the Little Sugar River

GOALS:



PHYSICAL

- Recreation, active living & active lifestyle



MENTAL & SPIRITUAL

- Mental restoration, therapeutic space



SOCIO-CULTURAL --

- Enhanced connectivity, shared values, identity, place-making



EMOTIONAL

- Well being enhancement through nature



ENVIRONMENTAL

- Protection of habitat, flood mitigation

PRECEDENT STUDIES:



BLUE HOLE REGIONAL PARK, WIMBERLEY, TX

- Park/open space plan for sustainable regional park
- Enhanced site ecology
- Interpretive education & active recreation amenities



AVALON PARK & PRESERVE, STONY BROOK, NY

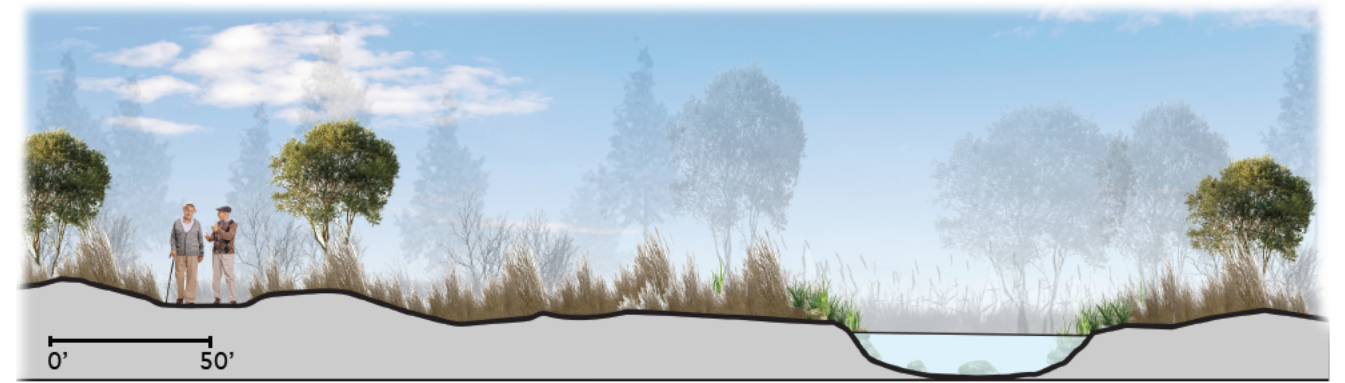
- Garden/arboretum & nature preserve
- Outdoor classroom and restorative garden
- Increased physical activity of users



NAPA RIVER FLOOD PROTECTION

- Restored 75% of historic wetlands
- 2.5 miles of new trails connecting 500 mile corridor around Bay
- Can handle 100 year flood

TRAIL SECTION B-B'



COUNCIL RING SECTION A-A'



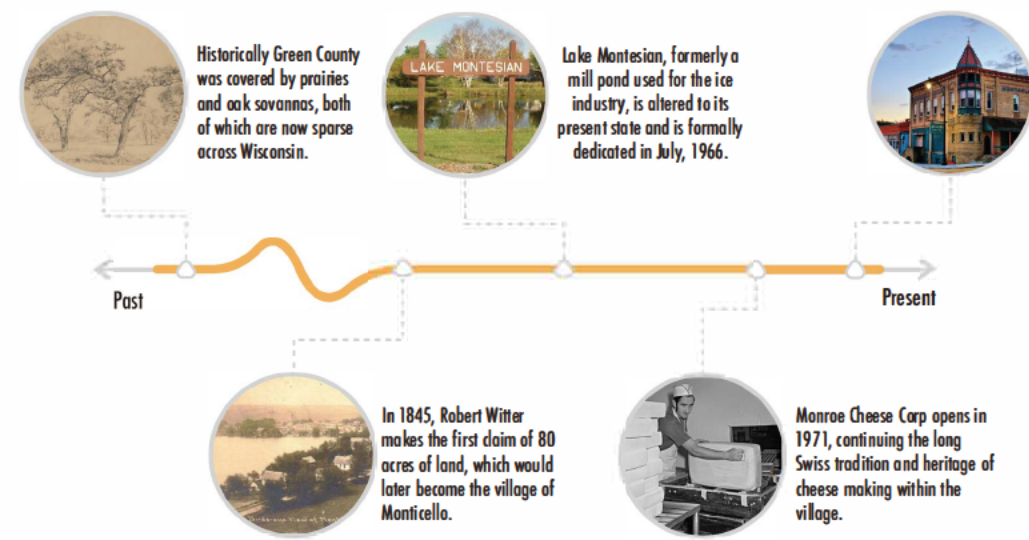
- A. Council Ring
- B. Turtle Sculpture
- C. Boardwalk/bridge
- D. Trail Connection
- E. Public Library
- F. Church
- G. Viewpoint

A Tale of Two Trails

MONTICELLO A TALE OF TWO TRAILS

| UW-MADISON LA 321 | 05/01/2019

LOCAL HISTORY

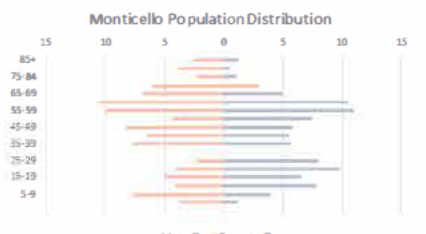


The Monticello of today is rich in local connections and heritage, featuring a unique series of outdoor spaces and natural features, such as the Little Sugar River.

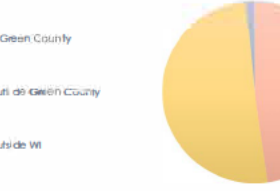


DEMOGRAPHICS

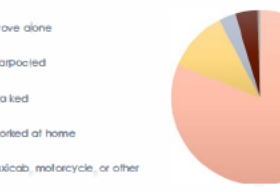
Monticello has a large aging population whose dominant form of transportation is through the use of vehicles. This not only creates an environmental concern, but additionally contributes to unhealthy lifestyles and reduces the amount of exercise aging populations require to maintain good health. With almost half of residents working within green county, and the already established bike trails to the east, biking could become a major way to commute with properly implemented connectivity.



Monticello Place Of Work



Monticello Transport To Work



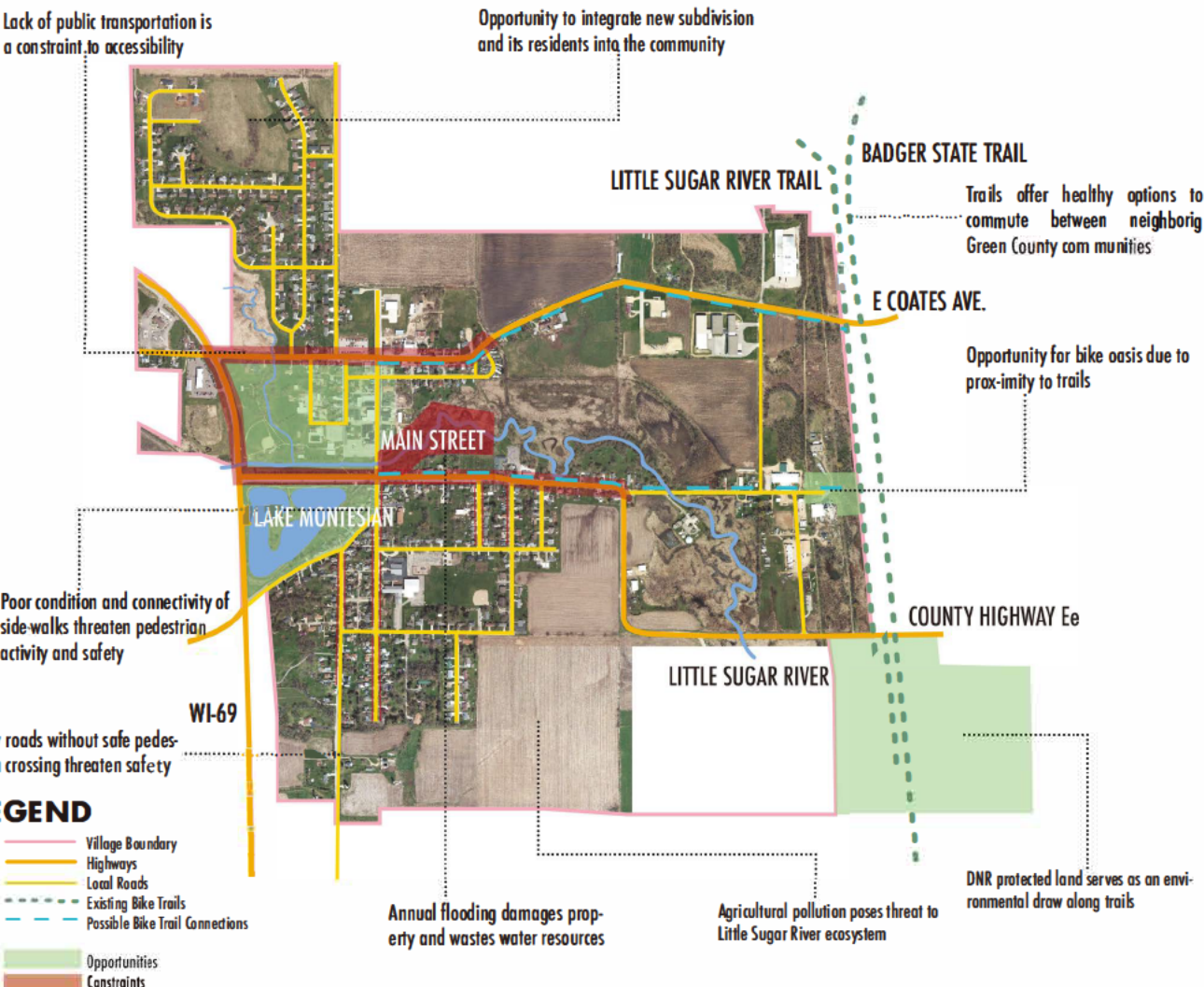
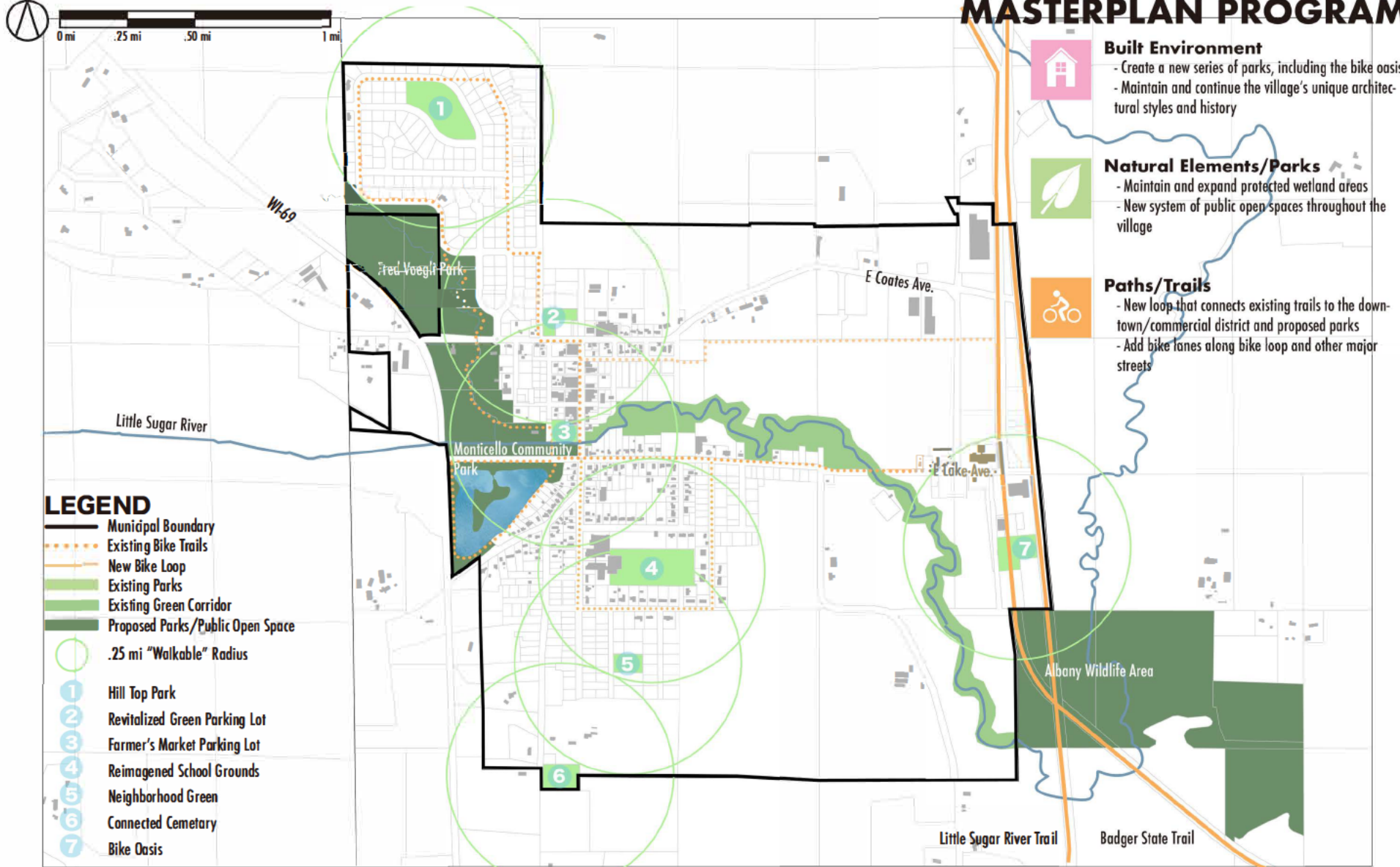
LOCATION

Monticello is located within the heart of Green County, Wisconsin, in the south-central section of the state. Being just on the eastern edge of the "Driftless Area," Monticello has a landscape of rolling hills and agricultural land. The natural landscape of Monticello is broken up by the meandering Little Sugar River, which eventually drains into the Mississippi and Lake Montesian, a man-made lake at the center of the community.

MONTICELLO MASTERPLAN

MASTERPLAN PROGRAM

- Built Environment**
 - Create a new series of parks, including the bike oasis
 - Maintain and continue the village's unique architectural styles and history
- Natural Elements/Parks**
 - Maintain and expand protected wetland areas
 - New system of public open spaces throughout the village
- Paths/Trails**
 - New loop that connects existing trails to the downtown/commercial district and proposed parks
 - Add bike lanes along bike loop and other major streets



VILLAGE OPPORTUNITIES & CONSTRAINTS

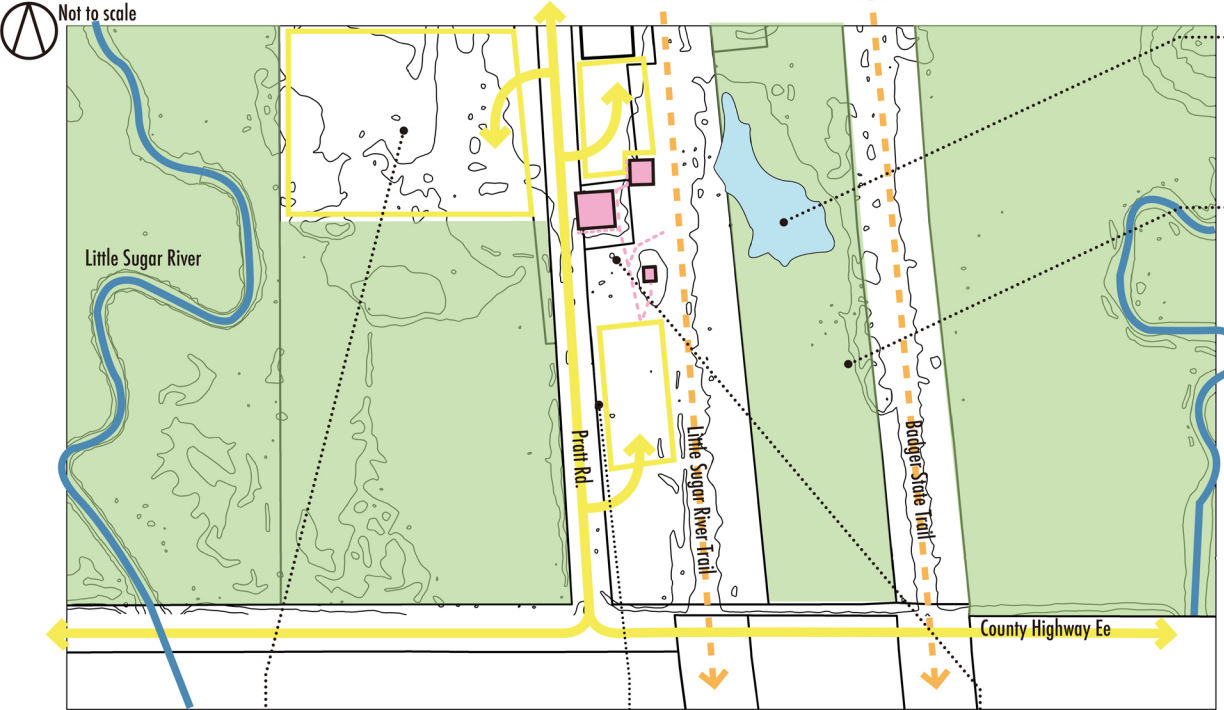
VISION STATEMENT

The design of the masterplan for the future of public open space within the village of Monticello is centered around the idea of creating a cohesive system of parks and pedestrian paths to promote healthier lifestyles and connectivity both within and outside the village. By connecting the two existing trails to both new and existing parks/greenspaces via the proposed bike loop, the new design will promote pedestrian accessibility and connectivity across the village and to neighboring Green County communities. This, in tandem with the new system of proposed public open spaces help to create a future of healthy living and safe connections within Monticello.

NEED BASED ANALYSIS

- AGES 0-12**
 - Require safer sidewalks and street crossings, as well as interconnected park systems to safely play and learn outdoors.
- AGES 12-18**
 - Require exciting/interesting outdoor spaces to hangout in and businesses that have local entry level work, such as cafes and other small/seasonal businesses.
- AGES 18-35**
 - Require exciting/interesting outdoor spaces to hangout in and businesses that have local entry level work, such as cafes and other small/seasonal businesses.
- AGES 35-50**
 - Require access to bike trails for themselves, and the reassurance of safety for when both they and their families use them.
- AGES 50+**
 - Require safe and easily accessible walking/biking paths to maintain health into old age, as well as places for social gathering as many older residents live alone.

SITE INVENTORY & ANALYSIS

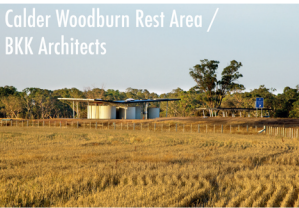


Pond between the two trails is not accesible, but could be used as a connector between them.

Lack of extreme slopes on site allow for ease of new development

PRECEDENT STUDIES

The Calder Woodburn Rest Area by BKK Architects is located in the Australian bush and mimics the countries traditional service stations. The design offers a place to rest and a place of reflection for travellers drawn in by the roof, which serves as an icon.



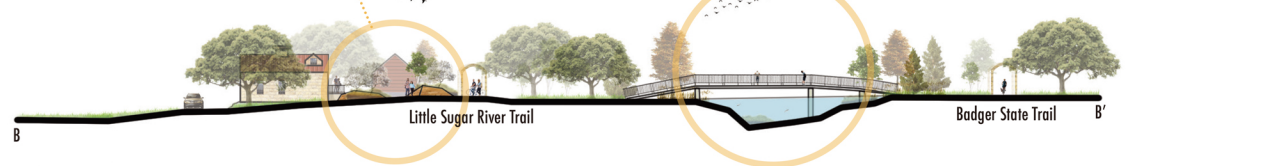
The team at GroupGSA in Sydney, Australia, created a unique mountain biking experience and social hub in the "bushland." GroupGSA's design features rolling mounds, which give way to rigid geometric contours, connecting the natural and built environment.

VISION STATEMENT

The Bike Oasis Design is not only a reflection of the history of Monticello, taking influence from the site's industrial and driftless past, but the oasis offers a relaxing rest for trail users and showcases Monticello's new approach to public open space all while expanding the connectivity of pedestrian and bike paths within the village. Through increased access to natural features in the area, such as the pond, the oasis is a place for the weary to pause and reflect, a place to take a moment and experience the charm of Monticello.

SECTION A-A'

Interactive mounds offer a relaxing oasis directly off of the trails



SCALE: 1" = 50'-0" (On Arch D page)

Scenic boardwalk connects the two trails and offers new insight into the area's ecology

SECTION B-B'

SCALE: 1" = 50'-0" (On Arch D page)

SITE PROGRAM



Built Environment

- Repurpose existing depots for seasonal businesses
- New pavilion with restrooms
- Scenic boardwalk
- Jim Town Arches
- Northern parking lot with handicap access



Natural Elements

- Restorative oak savannas
- Four open greens
- Interactive sculptural mounds



Paths/Trails

- Connect the Badger State and Little Sugar River trails
- Create cued views along connections



Scenic Boardwalk

Connecting the two trails, the scenic boardwalk also opens up the underutilized, and previously inaccessible pond on the site. The boardwalk allows users an up-close look at the aquatic ecology of the area and is surrounded by the relaxing sounds of nature.

Jim Town Arches

These arches, made of industrial steel, draw upon and emphasis the rich industrial history of the site. Formerly called Jim Town, this site was home to the booming industrial yards of Monticello and the connection to the railways for the village. The arches also help catch trail user's eyes and reference the noteworthy Stewart Tunnel located 4.5 mi to the north on the trail

Cued Views

Connecting Trails offer glimpses at the designs major elements, drawing participants in to the site and creating a sense of exploration.

New Pavilion

A new pavilion/rest area, features easy access to both restrooms and water fountains directly off of the trail, offering a much needed rest stop for trail users.

Interactive Mound Installation

The Mound interactive sculptures, dotted across the site, bring forth connections to the swales of the Driftless Area in addition to creating unique structures to play and relax on

Oak Savanna Restoration

Oak Savannas are one of the native landscapes that are increasingly hard to find within Green County at the present. In order to help reincorporate these landscapes into the village, the site features multiple savanna pockets, which allows create sight lines across the site and help to create intrigue

BIKE OASIS DESIGN

UW-MADISON LA 321 | 05/01/2019



Trail Perspective



Lumion Renderings



Boardwalk Perspective

Interactive Mound Model

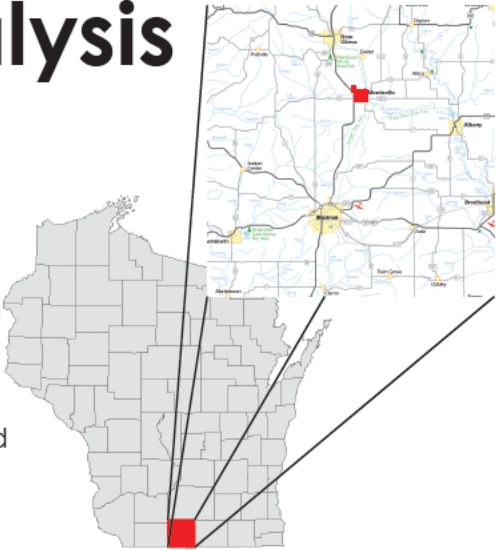
Central Pocket Park: Connection of People, Place and Pines

Monticello: Masterplan Analysis

Land Arch 321 - Designing Health Promoting Environments
05.01.2019



History: The village of Monticello is found in Green County in the Southern section of Wisconsin. Located on the Little Sugar River and adjacent to Highway 69, Monticello lies within the Driftless Area providing rolling hills and beautiful vistas. Settled just after 1845 by a largely Swiss and German population, Monticello began its life being known for its water driven flour mill and agricultural plenty. Over time the village would expand, facilitated by the railroad where the Badger State trail currently lies. Over the years various industries came and went including ice manufacturing, wool, and most recently cheese. Agriculture has remained at the heart of Monticello since its inception.



Need-Based Analysis: Given the variance between the population and ability ranges within the population of Monticello a variety of paths needed to be established. Safe, beautiful path-ways encourage movement outside the home and foster the small town charisma which Monticello is known for. These paths don't stand alone however; the upkeep and creation of parks and open spaces is paramount to the success of an active Monticello

Vision: Create an interconnected Monticello to facilitate an active population interacting with their community and nature. My site sits square at the center of Monticello, drawing in attraction both from the local residents but also those passing through.

Goals: Provide variety and safety for the current walkers of Monticello, while also creating spaces for casual relaxation and recreation. Establish a bike loop to and from the Badger State Trail. Establish a connection between the two main neighborhoods of Monticello through more connected trails. Provide spaces for tourists and bikers to visit and explore Monticello, then return on their way.

Opportunities

1. Roads intersecting the Badger State trail can serve as a point to draw in bikers
2. Revitalization of facades and implementation of Green Architecture can help revitalize downtown Monticello
3. Undeveloped spaces adjacent to existing natural areas can serve as connection paths between areas.
4. Existing but underutilized green spaces can serve as bases for new open space developments.

Constraints

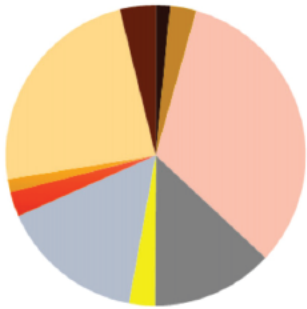
1. Lack of sidewalks in new development increases likelihood of car-related accident
2. Annual flooding causes damage to downtown business and limits use of space
3. Crossing busy roads puts pedestrians at risk
4. Incomplete sidewalk loops near Monticello High School raises risk for walking to school.

Demographics

Monticello's population in 2010 was 1,217 with the majority of the population identifying as Caucasian (97.5%). Occupying the other 2.5% are roughly 2% Hispanic/Latino with the remaining percentage being populated by Black or African American and Asian people. The ratio of women to men in Monticello is 52% to 48%.

Looking deeper at the population statistics of Monticello a bimodal trend of age appears. There are two large portions of the population: one young and the other aging.

The ancestry of Monticello is indicative of the area; it is largely European with a majority being German, then Swiss, then Norwegian (see below).

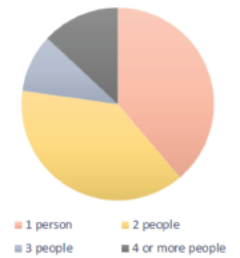


Legend

- Neighborhood
- Existing Sidewalk
- Proposed Sidewalk
- Existing Footpath
- Proposed Footpath
- Existing Bike path
- Proposed Bike path
- Landmark
- Business Sector
- 1/4 Mile Walking Radius
- Open Water
- Proposed Site
- Green Space
- Floodplain

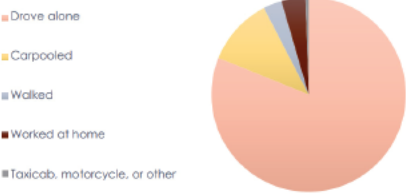
Household Size and Transportation Analysis

Monticello Household Size

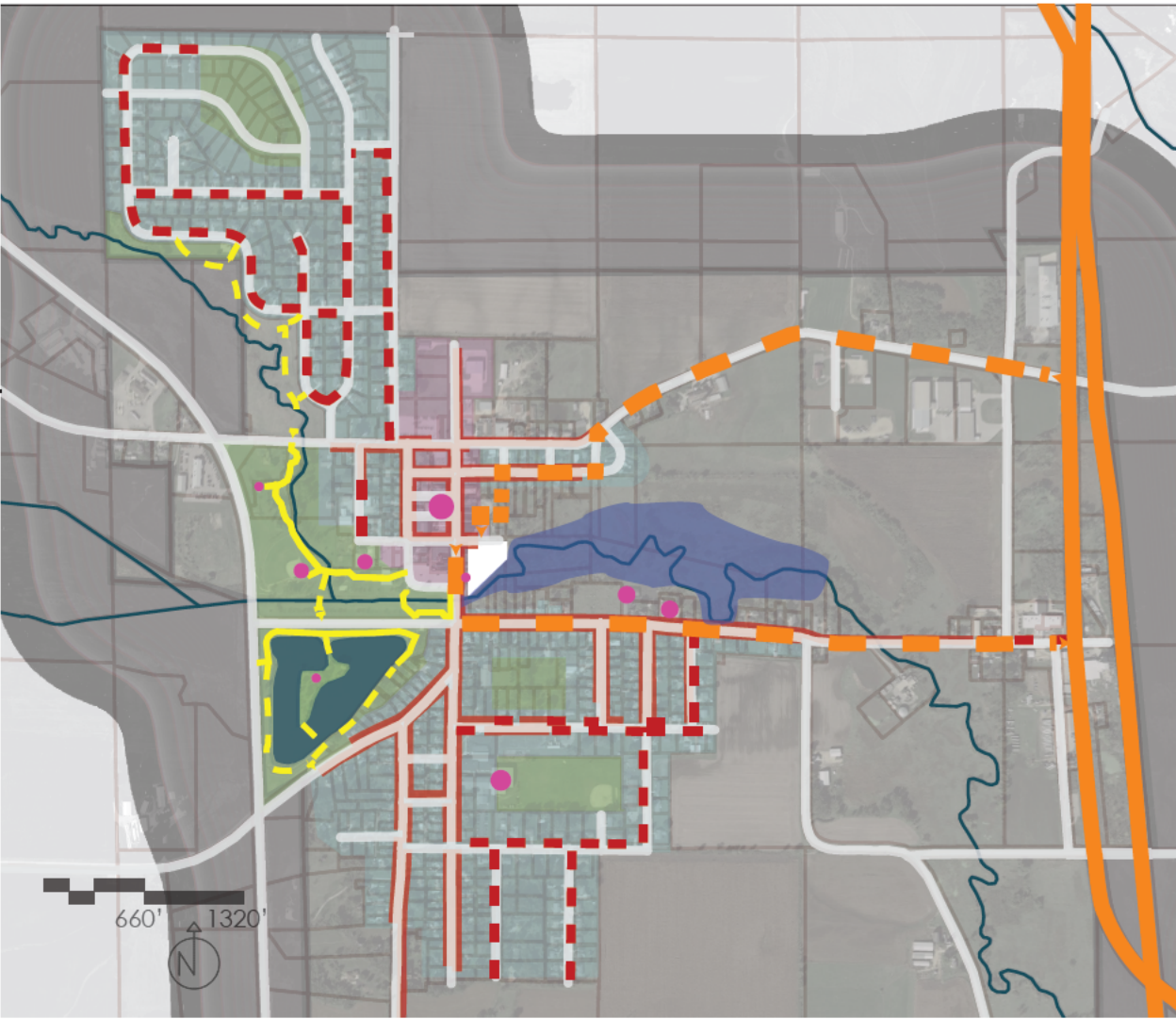
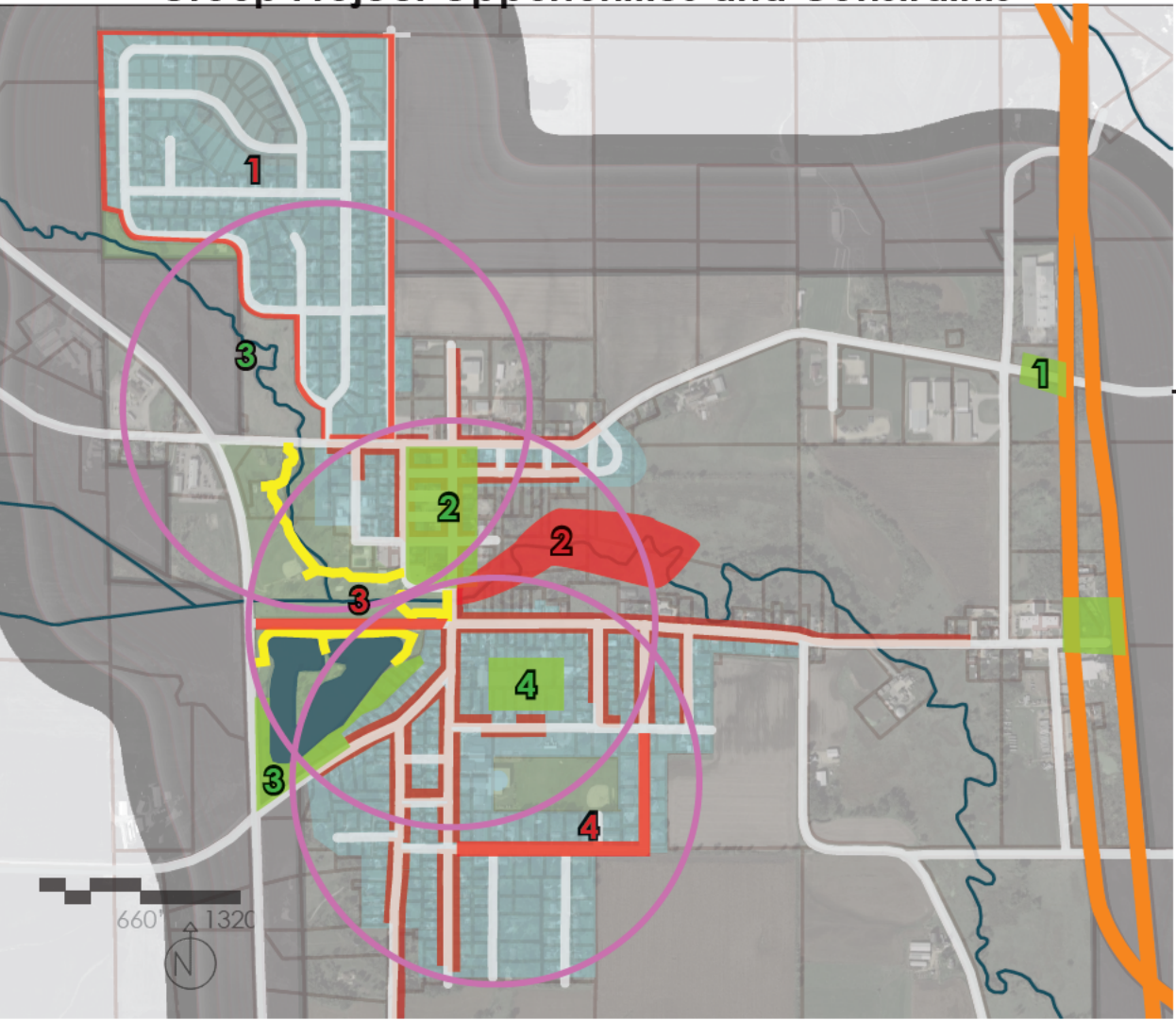


The population of Monticello almost entirely commutes using cars or cabs. Given the majority of households are either 1 or 2 persons there is a great need for fossil fuels to facilitate this. Creating bike paths and safe sidewalks in and around Monticello could facilitate more green practices such as walking or biking to work. If commuting to work by bike is out of the question, then the creation of paths could provide a good change of pace once the population of Monticello returns home for the night.

Monticello Transport To Work



Monticello Master Plan

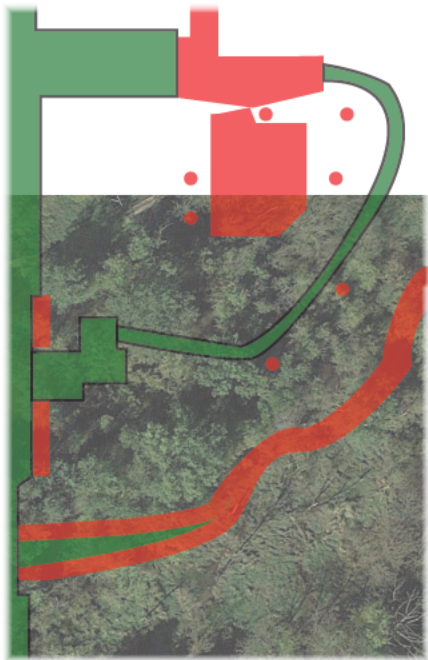


Monticello: Central Pocket Park Design

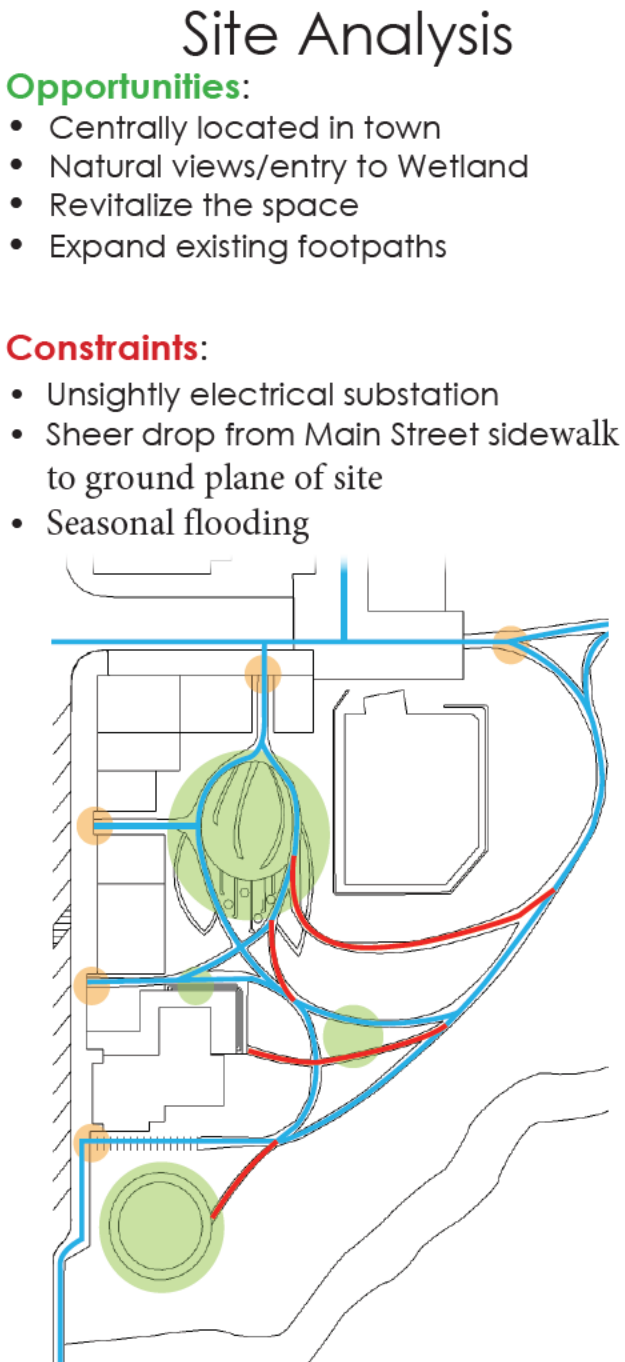
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05.01.2019

Vision Statement: The addition of public and semi-public spaces as well as the creation of a thoroughfare creates a space near the downtown to encourage fitness and relaxation.

Goals: 1. Establish a public space close to Main Street. 2. Provide a destination between the two main neighborhoods. 3. Screen the substation to improve visual characteristic of site. 4. Employ subsurface materials to manage water along with natural plantings.

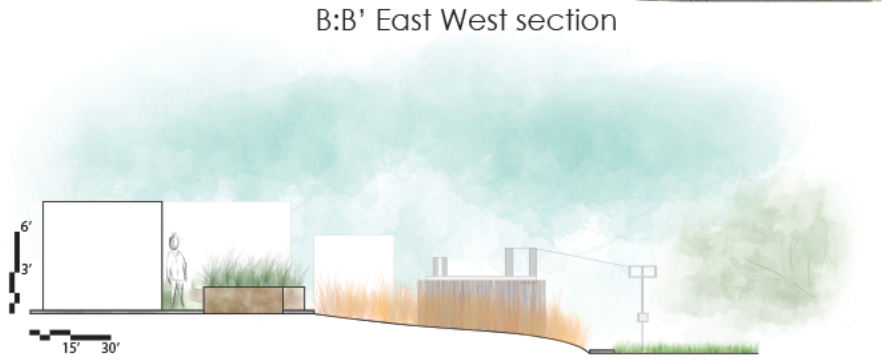
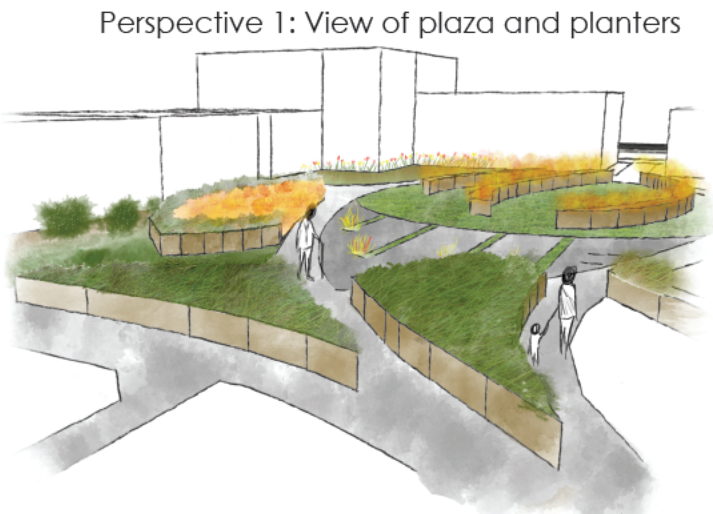
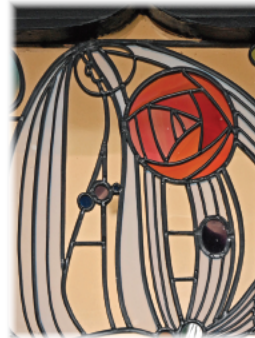


Pedestrian Flow
Orange: Entry node
Blue: Primary footpath
Red: Secondary footpath
Green: Pause node



Legend

- A. Open lawn
- B. Central plaza
- C. Proposed M&M deck
- D. Council Ring
- E. Tall grass plantings
- F. Bike staging/Wetland entry



Inspiration

About UniverCity Year



UniverCity Year is a three-phase partnership between UW-Madison and one community in Wisconsin. The concept is simple. The community partner identifies projects that would benefit from UW-Madison expertise. Faculty from across the university incorporate these projects into their courses, and UniverCity Year staff provide administrative support to ensure the collaboration's success. The results are powerful. Partners receive big ideas and feasible recommendations that spark momentum towards a more sustainable, livable, and resilient future. Join us as we create **better places together**.



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