WISCONSIN
UNIVERSITY OF WISCONSIN–MADISON

TOWARDS A SAFE ROUTES TO SCHOOL PLAN IN MONONA

URBAN AND REGIONAL PLANNING WORKSHOP

DECEMBER 2016

UNIVERCITY
BETTER PLACES TOGETHER

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ABOUT THE UNIVERCITY YEAR

UniverCity Year is a year-long partnership between UW-Madison and one community in Wisconsin. The community partner identifies sustainability and livability projects that would benefit from UW-Madison expertise. Faculty from across the university incorporate these projects into their courses with graduate students and upper-level undergraduate students. UniverCity Year staff members provide administrative support to help keep the collaboration running efficiently and effectively. The result is on-the-ground impact and momentum for a community working toward a more sustainable and livable future.

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BE THE NEXT UNIVERCITY YEAR PARTNER

The University of Wisconsin-Madison is accepting proposals from cities, counties, and/or agencies to participate in the UniverCity Year.

The UniverCity Year is applicable to communities addressing livability at the local or regional scale. Cities, counties, agencies and clusters of communities (for example, along a transportation corridor, around a regional center, or within a watershed) are eligible to apply. To minimize travel time and costs, applicant communities should be located within a two-hour drive of the Madison area. Communities located further away may be considered if additional funds are contributed for overnight travel costs.

UniverCity Year partners have access to the broad base of expertise at UW-Madison. Our faculty come from a wide range of disciplines and are particularly well versed in all aspects of sustainability (environmental health, economic opportunity, social justice, and community livability) and all stages of sustainability (analysis, planning, design, implementation, and evaluation).

Through work with the UniverCity Year, the community can enhance its capacity to advance sustainability. In addition, UW-Madison students benefit from real-world opportunities to apply their knowledge and training. They also bring energy, enthusiasm, and innovative approaches to address difficult, persistent problems.

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Many thanks to the city committees, staff, and residents who provided information for this report. The input was thoughtfully incorporated into the plan and can help guide transportation planning in Monona throughout the coming years.

Guidance on the content and direction of this report was given by Kurt Paulsen, Associate Professor, University of Wisconsin-Madison, Department of Urban and Regional Planning.

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ABOUT THIS REPORT

The City of Monona adopted a new Comprehensive Plan in 2016 and a Sustainability Plan in 2015. Both of these plans included goals to promote all modes of transportation and increase the percentage of residents, and in particular children, who use alternative transportation like biking and walking. Leaders in Monona, including City staff and the Sustainability Committee, identified the need to analyze the current state of Monona's transportation system as it applies to walking and biking, and to prioritize key fixes in areas where it is unsafe for children to walk and bike. City leaders also identified the National Safe Routes to School Program as a framework through which they could make change in their community.

This particular project was undertaken by graduate students in the Department of Urban and Regional Planning at UW-Madison as part of their Planning Workshop course. For over 50 years, the Department has been training graduate students for professional careers in planning and the public sector and has conducted applied Workshops with actual communities. Students are able to work with real-world problems as they develop professional skills, while communities are able to draw on the resources of the department and University to address critical issues in their communities. This project was undertaken as part of the "UniverCity" Year Program.

The City of Monona is the first ever community partner with the University of Wisconsin-Madison's UniverCity program, a year-long partnership between the University and a community. The City of Monona has identified a number of priorities and projects where City leaders and staff can work collaboratively with UW students and faculty. These areas include parks, transportation, housing and development, and Connected Monona.

EXECUTIVE SUMMARY

Monona has many attributes that make it a wonderful community in which to live, work, learn, and play. The City acts as a peaceful retreat, with mature trees, many parks, and the southern shore of beautiful Lake Monona. Residents love its small-town feel, but also benefit from the cultural and economic resources of a growing urban region. In many ways, Monona offers the perfect combination of a tightly-knit, rural community and the convenience of a more urban neighborhood.

Monona's natural beauty and many parks are one of its strongest features.

For walking and biking, Monona has much to offer as well. The "bones" of a very walkable and bikeable community are already in place in the City. According to our parent survey, most students live within walking or biking distance of their school. Interesting, pleasant views and the comfort provided by mature shade trees emerged as key strengths for walking and biking on Monona's streets. The City's street grid pattern also favors walking and biking for transportation. While block sizes tend to be fairly long, the fragmented parallel grid pattern offers many connections for bicyclists and pedestrians.

While Monona has many attributes that make it a good place to walk and bike, other features can make it seem unsafe for those not in an automobile. In order to analyze these features and prioritize improvement projects, the research team conducted bicycle counts, route audits, and a parent/guardian survey.

Walking and biking to school would be much safer and potentially done by many more students and parents if we had bike lanes and/or sidewalks. We live on a busy road and have worked hard to teach our son to ride safely, however, having a path to ride on or sidewalks to use would be very helpful. –*Monona parent*

A family crosses the street at a crosswalk in walkable Victoria, British Columbia. pedbikeimages.org / Tiffany Robinson

Overall, the walk audits and parent/guardian survey revealed that while Monona's streets may be comfortable and safe for adult walkers and bikers, they are not for children. Many of Monona's residential streets see a high amount of traffic, especially during peak hours before and after school. The wide streets encourage drivers to speed and the lack of sidewalks does not provide a space dedicated to pedestrians.

The parent/guardian survey resulted in key insights about the attitudes and behaviors of school children and their parents. From the survey responses, it was determined that 50 percent of students can walk to school within 20 minutes and 70 percent of students can bike to school within 15 minutes. Only 23 percent of students walk or bike to school, though. Safety emerged as the primary concern for parents and guardians of students, with three of the top concerns being speed of traffic, amount of traffic, and lack of sidewalks or pathways.

The lack of sidewalks in the neighborhood was concerning. It's an older neighborhood and those tend to have wider streets and lack the sidewalk, but the amount of traffic on Gordon in the morning is higher than we ever would have guessed. –*Monona parent*

Unsafe streets for pedestrians are a self-fulfilling reality. If we provide sidewalks in the right places, then kids can get to schools by walking, more parents will encourage walking, and more families will buy homes here who want safe, walkable communities. –*Monona parent*

Based on the walk audit and parent/guardian survey, the research team also identified key intersections that should be redesigned for the safety of students walking and biking to school. The five-way intersection of Greenway Road, McKenna Road, and Maywood Road; crossing Monona Drive and Nichols Road; travelling along Winnequah; and Schluter Road from Maywood Road to the City Library all were identified as areas of particular concern.

Chapter Four of this report contains detailed redesign options for the five-way intersection mentioned above, all of which would facilitate improved bicycle and pedestrian safety and comfort. Chapter Four also includes improvement ideas and priorities for all routes audited.

The review of current school and City policies revealed that Monona could make policy changes that would facilitate walking and biking school. Most importantly, Monona should adopt a Complete Streets ordinance in order to ensure that bicycle and pedestrian needs are considered when constructing and reconstructing roads, whether by the City, County, or State. Monona should also officially adopt NACTO design standards as their official streetscape design guidelines. This will guide the City in constructing streets that are safe for all users. Lastly, the City should form a Safe Routes to School coalition to build momentum for the initiative and ensure that all voices are heard.

Monona's many advantages can only be enhanced by making it safer and easier for children to walk and bike to school. With a few improvements and broad-based programming, Monona can ensure that the needs of all road users are provided for and make the community even more liveable.

CHAPTER ONE | INTRODUCTION

This introduction includes a primer on the Safe Routes to School program, its history, and its purposes. This chapter also includes an overview of the scope and vision of this report.

WHAT IS SAFE ROUTES TO SCHOOL?

Safe Routes to School (SRTS) is an international idea with roots in Denmark in the 1970s. SRTS helps schools and communities to create safe and convenient routes for children to walk and bike to school. The program officially started in the United States in 2000 and, beginning in 2005, federal funding has been dedicated in national transportation plans to SRTS activities.[1]

Wisconsin Safe Routes to School – 3 Purposes[2]

1. To enable and encourage children, including those with disabilities, to walk and bicycle to school.

2. To make bicycling and walking to school a safer and more appealing transportation alternative, thereby encouraging a healthy and active lifestyle from an early age.

3. To facilitate the planning, development, and implementation of projects and activities that will improve safety and reduce traffic, fuel consumption, and air pollution in the vicinity of schools.

After World War II, the street patterns of new towns and neighborhoods transitioned away from the traditional

1 "History of SRTS," National Center for Safe Routes to School, accessed December 6, 2016, http://www.saferoutesinfo.org/about-us/history-srts.

2 Wisconsin Department of Transportation, "Wisconsin Safe Routes to School (SRTS) Program," 2014, Accessed November 20, 2016, http://wisconsindot.gov/Documents/doing-bus/local-gov/astnce-pgms/aid/safe-routes/pre-intro.pdf.

connected grid to a system of winding neighborhood streets that fed into collectors and then arterials. New schools and centers of employment were separated from residential areas, built on the edges of towns on large tracts of cheap land. These changes placed schools further away from where children lived and made them much more difficult to travel to on foot or by bike. In 1969, 41 percent of children ages 5 to 14 lived within one mile of school. Eighty-nine percent of these students walked or biked to school. By 2009 only 31 percent lived within one mile of school and only 35 percent of those students walked or biked to school. In 1969, 48 percent of all children ages 5 to 14 walked or biked to school. In 2009, only 13 percent did. The top two reasons given in surveys for why children do not walk or bike to school are that the school is too far away and that traffic is too dangerous along the route.[3]

Health and academic success are the two most important reasons for developing safe routes to school. Young children's activity levels and time spent outdoors have been declining rapidly over the past thirty years. Obesity, type 2 diabetes, and related health risks have meanwhile risen steadily. The CDC recommends sixty minutes of exercise for children to be developmentally healthy. With schools cutting back recess time and physical education classes to make room for meeting academic standards, children no longer achieve the necessary exercise during the school day. Studies increasingly show a connection between increased exercise and better academic performance. Walking or biking to school allows children to use up energy before and after the school day, preparing them for long learning hours. Safe routes have the potential to make exercise a "built-in" part of the day for students.[4]

Along with developmental health, instituting a SRTS program can achieve numerous additional benefits. For children who are already walking or bicycling to school, fast-moving vehicles are a serious safety concern. In 2009, approximately 23,000 children were injured while walking or bicycling, and 250 were killed. These safety concerns result in millions spent on health care costs for preventable crashes. SRTS can also mitigate air pollution, reducing total vehicle miles traveled in a community. This is crucial in limiting the significant rise in youth asthma cases (75 percent over the last 25 years). Reducing vehicles during rush hour also lessens road congestion, saving time and work hours. Finally, school districts may save money on bus transportation when more students no longer rely on bussing to get to school.[5]

SRTS programs follow the "5 Es" to make improvements to routes:[6]

Engineering

- » Traffic calming to reduce vehicle speed
- » Sidewalks for pedestrian access
- » Improvements for safe street crossings
- » On-street bicycle facilities
- » Secure bicycle parking

Encouragement

- » Make walking and biking popular
- » Have fun while traveling to school

Education

- » Ensure that all road users know how to share space safely

Enforcement

- » Improve driver behavior
- » Increase awareness of bicyclists and pedestrians

Evaluation

- » Collect data
- » Understand attitudes
- » Implement improvements
- » Track progress

Engineering is crucial to success, as the physical design and layout of the street has the greatest impact on the perceived and actual safety of children walking or biking. A SRTS program also requires encouragement and education as a means to bring students, teachers, parents, and

3 "SRTS Guide," National Center for Safe Routes to School, accessed December 16, 2016, http://guide.saferoutesinfo.org/.

4 *Ibid.*

5 "Quick Facts and Stats," National Center for Safe Routes to School, accessed December 6, 2016, http://saferoutespartnership.org/healthy-communities/101/facts.

6 http://saferoutespartnership.org/healthy-communities/101/facts. Wisconsin Department of Transportation.

Monona's many three-way intersections could use engineering improvements to make them easy to navigate and safer.

other community stakeholders together to create a culture of safe travel to school. Enforcement ensures a continuing safe street environment where all users understand what is expected to keep the most vulnerable users free from harm. Finally, evaluation is vital to understanding community needs and tracking improvements through time.

GOALS AND VISION

This report is intended to provide a clear direction for a SRTS program in the City of Monona. This chapter serves as an introduction to SRTS. Chapter Two outlines the methods used for understanding existing conditions in Monona. The research team wanted to ensure that City staff, schools, parents, students, and volunteers were able to continue collecting data and implementing improvements in the years to come. Chapter Three defines existing conditions by analyzing the results of the baseline bike counts at selected intersections, targeted infrastructure audits of routes to Monona schools, a survey for parents and guardians regarding how their children get to and from school, and a review of transportation policy. Chapter Four lays out recommendations for creating safer routes. The research team identifies key routes and intersections to improve, offers design alternatives for incorporating elements necessary to increase numbers and safety of children walking and biking to school, and proposes policy changes to facilitate infrastructure improvements.

Monona's mature trees and roadside nature make walking and biking pleasant and interesting.

CHAPTER TWO | RESEARCH AND METHODS

This chapter outlines the methods with which the research team collected information about the biking and walking environment in Monona. Brad Bruun, GIS specialist for the City of Monona, helped the research group identify the need for bike counts, observational audits, and a parent/guardian survey.

BIKE COUNTS

The method for conducting a bike count in Monona was provided by the National Bicycle and Pedestrian Documentation Project (NBPDP), a joint effort of Alta Planning & Design and the Institute of Transportation Engineers Pedestrian and Bicycle Council.[7]

The bike count in Monona focused on locations where many collisions have taken place, on bicycle or pedestrian routes, and on areas that connect common destinations in Monona. The bike count team conducted counts four times at each of the six key intersections between 7:00 and 9:00 am or between 2:30 and 4:30 pm on a Monday and a Wednesday. This time frame is one of the most highly trafficked. Bike counts were mostly conducted the last week of September. According to the NBPDP, the second week in September is the optimal week of the year because of agreeable weather and high cycling and walking rates. At each intersection selected, bike counters tallied total cyclists according to the route they took through the intersection, including the street and direction of travel entering and exiting the intersection.

The bike count team aggregated the cyclists per intersection according to methodology provided by the NBPDP. Taking into account time, date, and climate data, the bike count team calculated total number of bicyclists

7 National Bike and Pedestrian Documentation Project, accessed December 6, 2016, http://bikepeddocumentation.org/.

per intersection per year. The team then averaged each intersection's annual count across the city to get a total annual bike count for Monona. The original route data was collected and stored for future analysis.

During the count, each counter also made observations about their intersection (such as: "Everyone's riding bikes on the sidewalk instead of in the bike lane," or "Few drivers stopped at that stop sign.") Counters also recorded the number of pedestrians using each route.

STREET AUDITS

The audit team selected the Pedestrian-Friendliness Scorecard, created by the Voorhees Transportation Policy Institute at Rutgers University in coordination with New Jersey Future, to conduct observational audits of street segments along school routes.[8] It included the necessary features: the results are reported as a score, it comprehensively analyzes the built environment, and it emphasizes user safety. This tool breaks the audit down into the following 10 categories:

Infrastructure and Maintenance: This category scores the presence and quality of sidewalks, the presence and quality of curbs, and the quality of the pavement. Since it is assumed that the City has a pavement improvement plan for resurfacing and maintaining streets and every street audited utilized an urban cross section with curbs, the critical components of this category are the three sidewalk variables. Street segments receive a score out of 17 possible points for this section.

Continuity: This category examines whether facilities connect to destinations in the area and the ease with which pedestrians are able to walk between points of interest. Variables include destination connectivity, signal timing, the number of curb cuts (frequent curb cuts correspond to increased potential conflict points between vehicles and pedestrians), pavement markings at pedestrian crossings, and curb ramps at sidewalk corners. Street segments receive a score out of 14 possible points for this section.

Traffic and Street Crossing: This category accounts for the ease of crossing streets, vehicular speeds and volumes, and pedestrian visibility. Street segments receive a score out of 13 possible points for this section.

Streetscape: Streetscape scoring examines the visual appeal of streets and how the environment impacts user comfort. Variables include presence of trees and flowers, availability of shaded areas, visual appeal, cleanliness, and overall appeal. Street segments receive a score out of 11 possible points for this section.

Land Use: This category quantifies the pedestrian-orientation of the environment. Variables include the presence of pedestrian-focused land uses, access to retail, concentration of commercial development, separation of transportation modes, and presence of buffered space between the roadway and pedestrian areas. Street segments receive a score out of 13 possible points for this section.

Wayfinding signage, like these markers for the Lake Loop, were considered in the Pedestrian Amenities section of the audit.

8 "Smart Growth in Your Town," New Jersey Future, accessed on December 6, 2016, http://www.njfuture.org/smart-growth-101/your-town/.

Safety Rules: This category assesses the safety of pedestrians within the corridor. Variables include visibility of pedestrians at crosswalks, presence of bollards, and presence of a roadway shoulder where no sidewalk exists. No bollards are present at street corners within Monona. As these facilities are not justified based on vehicular volumes and speeds, this variable can be excluded from future audits if desired. Street segments receive a score out of 7 possible points for this section.

Security and Lighting: This category assesses both the real and perceived safety of pedestrians. Variables include the frequency and scale of lighting, presence of lighting at intersections, presence of pay phones, perceived security of the corridor, and the presence of threatening individuals. Street segments receive a score out of 11 possible points for this section.

Pedestrian Amenities: This category examines the presence of pedestrian amenities within the corridor. Variables include wayfinding systems, transit signage, availability of seating, and presence of drinking fountains. Street segments receive a score out of 6 possible points for this section.

Topography: This category examines the topography of the area and its impact on pedestrian comfort. Variables include the uniformity of the topography, user comfort, and drainage issues. Due to the limited time of the study, auditors were unable to fully assess drainage and instead made assumptions based on topography and pavement quality in order to score this variable. Street segments receive a score out of 13 possible points for this section.

Seasonal Issues: Due to the limited study period, this category was excluded from the audit.

The total audit (minus the Seasonal Issues section) resulted in a score out of 95 possible points. The entire audit tool is included in Appendix B.

Some inherent difficulties with a scored audit tool involve applying a numeric score to qualitative data. Ordinal data such as this can often be unintentionally interpreted in misleading ways. For example, the category grading the condition of sidewalks ranges from "0 points: Sidewalks present tripping hazards" to "3 points: Sidewalks are in consistently good shape." A score of three on this scale represents a better condition than a score of two, but not necessarily in a scalable way; it does not represent a 33 percent improvement as may be interpreted by the numbers alone. One cannot generally average ordinal data to a mean value for this reason. Variables that may be calculated across the sample population are limited to the median, mode, and range.

A cyclist takes advantage of the newly-added bike lane on Monona Drive.

Another drawback of utilizing a scored audit tool is that not all corridors warrant the same design features, but all must be scored using the same matrix. For example, only two corridors audited received a non-zero score for signal timing. The majority of the corridors audited do not have a need for signals, so they are unable to be scored in this category. Similar issues occur with the Pedestrian Amenities category, which awards up to six points for the presence of features such as benches or drinking fountains. This difficulty results in expected differences for scores

The City may consider further analyzing routes to destinations other than schools, like the public library.

observed on different classifications of roadway, and must be considered when interpreting audit results.

Once the audit tool was selected, eight routes surrounding Monona's schools were identified for study. The team then separated routes into corridors and assigned several corridors to each pair of auditors for review.

Each pair of auditors completed the audit on a weekday, during either the morning or afternoon commute period to best simulate the experience students would have during their commute to or from school. Completing audits in groups of two helps ensure that all aspects of the environment have been accounted for and improves time for completion, as one auditor may reference the audit tool while the other records results.

PARENT/GUARDIAN SURVEY ABOUT WALKING AND BIKING TO SCHOOL

The survey team adapted and used the Parent Survey about Walking and Biking to School by the National Center for Safe Routes to School.[9] The survey identifies the variables associated with students' commute to and from school, such as time, distance, and mode of transportation. Most importantly, the survey also allows parents/guardians to indicate why they do or do not allow their children to walk or bike to and from school. The resulting data also reveal roads or intersections where parents/guardians have particular concerns for the safety of their children. Ultimately, the survey aims to shed some light on potential improvements to ensure safe routes to school—and the increased use of those routes—for children in the City of Monona.

The Monona Planning Department assisted in the distribution of the English and Spanish versions of the survey to four schools in the City of Monona. Parents/guardians completed the survey online through the UW-Madison Qualtrics Survey Hosting Service. Participating schools included Winnequah Elementary School, Monona Grove High School, Immaculate Heart of Mary School, and Nuestro Mundo Community School. From November 14, 2016 to December 1, 2016, a total of 287 parents/guardians responded to the survey. The survey is included in Appendix G.

Bike lanes, like this one on Monona Drive, may make bicycling safer if they are properly designed.

9 "Evaluation: Parent Survey," National Center for Safe Routes to School, accessed December 6, 2016, http://www.saferoutesinfo.org/program-tools/evaluation-parent-survey.

CHAPTER THREE | EXISTING CONDITIONS

This chapter reflects the results of the team's research and data analysis. It includes an overview of related regional plans, school policies, and City policies and plans; the annual average bike count for key intersections throughout Monona; a summary of the audit results by corridor; and findings from the parent/guardian survey.

REGIONAL PLANS

Safe Routes to School in Dane County

Communities throughout Dane County continue to expand opportunities for children to walk or bike to school with SRTS plans. According to the Madison Area Transportation Planning Board (MATPB), between 2011 and 2014 the Madison Metropolitan School District (MMSD) received funds from a SRTS grant. The grant enabled the school district to implement encouragement campaigns, safety planning, and education. The grant also allowed the district to purchase new bike racks for 30 schools. In addition, the school district received fleets of donated bicycles, which are now used for educational purposes, field trips, and after-school and summer programs. Sun Prairie has also developed a SRTS program, which includes walking school buses, encouragement activities, and traffic safety plans.[10]

Dane County schools can participate in several events that encourage active transport to school. One example is the week-long "Walk or Wheel Challenge," which awards points for encouragement and awareness-raising activities. Another example is the "Fire up your Feet" program, supported by the Wisconsin Bike Federation and the Safe Routes to School National Partnership, which encourages students to live active lifestyles and allows them to track

10 Madison Area Transportation Planning Board, Bicycle Transportation Plan for the Madison Metropolitan Area and Dane County (2015), http://www.madisonareampo.org/planning/documents/Final_BTP_2015_web.pdf.

The City should work with Winnequah Elementary School, pictured here, and all the schools in Monona, to promote walking and biking.

their activities online. As an incentive, schools compete against one another across the country.[11]

Other ways that Dane County schools promote walking and biking include hosting bike rodeos, offering bicycle and unicycle clubs, hosting Youth Mountain Bike League teams, and partnering with Tri 4 Schools to put on youth athletic events. Children can also work with the non-profit Wheels for Winners to earn their own bike.[12]

The Bicycle Transportation Plan and Monona

MATPB recognized in the 2015 Bicycle Transportation Plan for the Madison Metropolitan Area and Dane County the positive strides that the City of Monona has taken to make walking and biking safer for everyone. Among Dane County communities with populations over 2,000, Monona had the largest increase in bike mode share between 2000 and 2009-2013, with an increase of 2.2 percentage points. Monona rated second only to Madison on this list for total bike mode share with 2.8 percent commuting by bike. The plan also acknowledged the Monona Police Department for bike and pedestrian safety education, as well as for having officers on bikes.[13]

In the plan, MATPB also pointed out weaknesses for bike and pedestrian safety in Monona. MATPB looked at the Dane County census tracts with the lowest premium bicycle facility (e.g. off-street paths, bike boulevards, protected bike lanes) mileage per square mile, and one of Monona's census tracts rated in the bottom 25 percent. The plan listed several future bike infrastructure improvements for Monona, like improving the popular Lake Loop and expanding on-street bike facilities. The plan also called for improved connections to Monona from neighboring communities, such as adding bike lanes to Buckeye Road and Atwood Avenue where it turns into Monona Drive.[14]

CURRENT POLICIES

Zoning Code

Monona uses performance zoning, rather than traditional zoning codes. Performance zoning provides flexibility in allowed land uses rather than rigid standards. It depends on good judgement for determining whether a land use, and the design of that land use, is appropriate. That being so, Monona does not have strict regulations for bicycle and pedestrian access to land uses, whether they are businesses, subdivisions, or planned community developments.

Articles C (Use Performance Standards) and D (Site Performance Standards) of Monona's Zoning Code do require that land uses account for safe and efficient vehicular, bicycle, and pedestrian access and circulation. The Code does not include specifications for ensuring such access, though.

Code of Ordinances

Monona's Code of Ordinances details laws regulating the use and ownership of bicycles, and associated fines. It also gives authority to school crossing guards to stop vehicular traffic. It includes redevelopment standards for the construction of new sidewalks, but only pertaining to the leveling, laying, and funding of those sidewalks. Ordinance No. 2-16-675, passed in February 2016, states that the city will pay for all new sidewalks. This new ordinance was not reflected in the Code, nor was it apparent on the "Updates" section of Monona's live "Code of Ordinances" web page at the writing of this report.

The Code of Ordinances did not include any mention of Complete Streets, traffic calming, bicycle infrastructure, or connectivity standards.

11 *Ibid.*

12 *Ibid.*

13 *Ibid.*

14 *Ibid.*

Monona Grove School District Policies

The Monona Grove School District Wellness Policy states that the district will encourage and support healthy eating patterns and regular physical activity, but does not specifically mention walking and bicycling to school to promote physical activity.[15]

According to the school district's 2016-2017 "Transportation Information for Parents," buses are made available free of charge to students living greater than two miles from schools or in designated "Unusually Hazardous Transportation" (UHT) zones.[16] School officials, the city police department, and the county sheriff collaborate to determine which areas constitute UHT zones. If the UHT plan is approved by the state superintendent, the school district may receive up to $15 per pupil per year to provide bussing services to student who live in UHT zones.[17]

According to a 2008 correspondence between the Monona Grove School District and the Dane County Sheriff, most of Monona is considered a UHT zone. East of Monona Drive and south of Owen Road is deemed hazardous for students in grades 3-8, while west of Winnequah Road and north of Dean Avenue is deemed hazardous for students in grades 3-6.

Immaculate Heart of Mary Policies

The Immaculate Heart of Mary School (grades K-8) Student Handbook states that bicycles may be used as a form of transportation to school, and provides guidelines for parking bicycles in school-owned racks.[18] The school did not have a wellness policy published on its website.

Madison Metropolitan School District Policies (Nuestro Mundo Community School)

MMSD's Wellness Policy on Student Nutrition and Physical Activity states that, "Schools should encourage students to walk, bike, or bus to school where available and appropriate for travel to school."[19]

Additionally, MMSD Board Policy 4233 establishes rules for bicycling to school and storing bicycles on school grounds. It states that students must be in at least the 4th grade to bicycle to school without being accompanied by an adult, unless the principal approves a written request for exception by a parent or guardian.[20]

CURRENT PLANS

Monona Drive Urban Design Guidelines

In 2010, the City of Monona obtained funding from the Dane County Better Urban Infill Development (BUILD) program to develop design guidelines for the Monona Drive corridor. The guidelines focus on the site design of properties along the street, and not on the street itself or the public right of way. Nevertheless, one of the goals of the guidelines is to promote walkability and bikeability along Monona Drive.

Snow and cold are certainly factors to consider when designing streets for walking and biking.

15 Monona Grove School District, Board Policy 458: Monona Grove School District Wellness Policy, approved April 18, 2007, http://www.mononagrove.org/cms_files/resources/Wellness%20Policy1.pdf.

16 Jerrud Rossing and Krista Ballweg, "Nelson Welcome Letter," Monona Grove School District and Nelson Bus Service, Inc., published June 1, 2016, http://www.mononagrove.org/cms_files/resources/nelson%20welcome%20letter%202016-2017%20-%20MG.pdf.

17 "Transportation to Public Schools: Unusually Hazardous Transportation," Wisconsin Department of Public Instruction, accessed December 6, 2016, http://dpi.wi.gov/sms/transportation/hazardous-transportation.

18 Immaculate Heart of Mary School, Family Handbook 4K-8th Grade: 2015-2016, revised in August 2015, http://www.ihmcatholicschool.org/wp-content/uploads/2015/08/2015-2016Handbook.compressed.pdf.

19 Madison Metropolitan School District, Wellness Policy on Physical Activity and Nutrition, revised January 28, 2013, https://board.madison.k12.wi.us/files/boe/Policy%204610%20approved%20Jan%2028%202013_0.pdf.

20 "MMSD Policies and Procedures: 4233," Madison Metropolitan School District, published on July 26, 2013, https://board.madison.k12.wi.us/policies/4233.

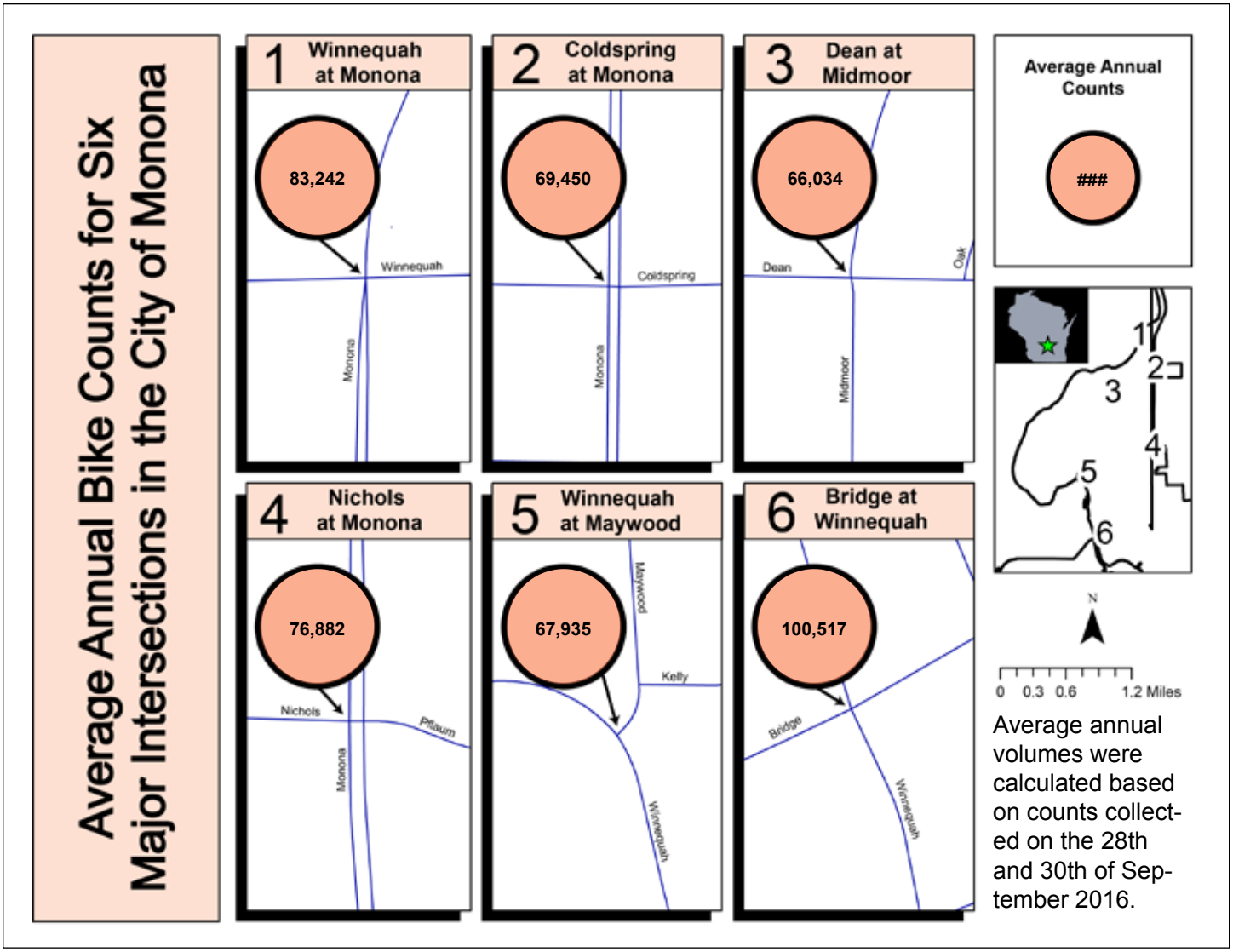


Figure 1: Annual average bike volumes for six major intersections in the City of Monona.

The design guidelines encourage pedestrian-scaled and -oriented development, including detailed building facades, plantings and planters, and attractive lighting features. In addition, the guidelines prioritize the pedestrian walk environment, calling for safe, efficient, and clearly visible walkways from the road to business entrances; buffers between parking areas and sidewalks; and changes in surface materials to alert walkers to potential conflicts with vehicles.

North Monona Drive Redevelopment Plan: Redevelopment Area #7

In 2011, the City of Monona developed a plan for reinvigorating the Monona Drive corridor. In this plan, the City recognized the unpleasant and dangerous conditions that Monona Drive presented to pedestrians at the time. Through the redevelopment effort, the City hoped to improve pedestrian safety and energize economic development along the corridor. Specific findings of the study related to pedestrians include the inadequacy of overall design and the lack of a buffer between the sidewalk and parking lots.[21]

21 City of Monona Community Development Authority, North Monona Drive Redevelopment Plan: Redevelopment Area #7, adopted February 21, 2011, http://mymonona.com/DocumentCenter/Home/View/4734.

Comprehensive Plan

Monona's Comprehensive Plan, adopted in 2016, includes an objective in the Transportation section to "Promote a multi-modal transportation system." Strategies for achieving this objective include developing a bicycle and pedestrian network, promoting bicycle lanes and pedestrian-scaled development, considering the expansion of bike and walk facilities when reconstructing roads, and requiring developers to include pedestrian and bicycle amenities when appropriate.

Another objective in the Transportation section addresses safety issues on Monona's roadways. It aims to reduce accidents on Monona's roads and improve safe pedestrian and bicycle access to activity centers.

Sustainability Plan

Monona's Sustainability Plan, adopted in 2015, includes two objectives related to safe routes to school: increase the percentage of residents using alternative transportation to destinations within Monona and increase the percentage of students using alternative transportation.

Strategies identified in the Sustainability Plan to achieve those objectives include analyzing disconnections in bicycle and pedestrian networks and prioritizing fixes, providing bike racks at municipal buildings, scheduling bike education for students and parents, operating a SRTS program, and developing carpool programs for Monona's schools.

BIKE COUNT RESULTS

The total number of cyclists per year at each intersection is as follows:

Winnequah at Monona	**83,242 cyclists/year**
Winnequah at Maywood	**67,935 cyclists/year**
Winnequah at Bridge	**100,517 cyclists/year**
Monona at Coldspring	**69,450 cyclists/year**
Monona at Nichols	**76,882 cyclists/year**
Dean at Midmoor	**66,034 cyclists/year**
Total Average for Monona	**77,343 cyclists/year**

These numbers serve as a baseline count for Monona to build on in coming years. Consistency in data collection will make the data more useful for the City, as the results of changes to Monona's infrastructure and programming can then be easily tracked. The City may want to compare this bike count data to other municipalities. The NBPDP collects data nationwide, and can provide reports for municipalities that follow their methodology and report into their database.

STREET AUDIT RESULTS

Observational street audits were completed for nine different routes. The audit team divided each route into consistent corridors, then scored those corridors based on the Voorhees Transportation Policy Institute Pedestrian-Friendliness Scorecard. Twenty-one separate corridors were audited. Scores ranged from 27 to 71 out of a possible 95 total points, as seen in Figure 2 below.

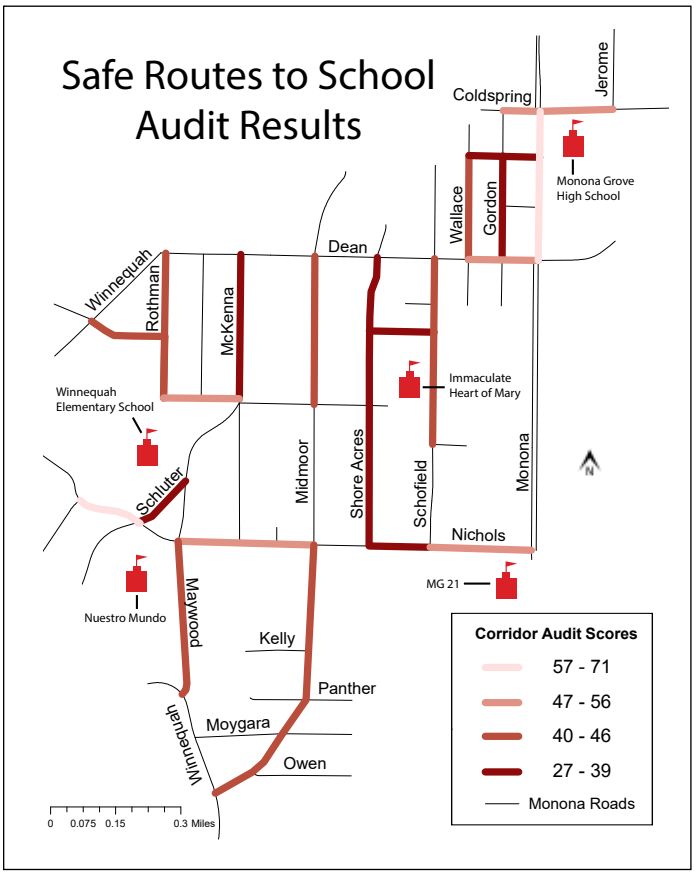


Figure 2: Corridor scores ranged from 21 to 71 out of 95 possible points.

AUDIT RESULTS: GREEN ROUTE

Corridor 1: Dean Avenue from Wallace Avenue to Gordon Avenue | Score: 48

Auditors reviewed this route in coordination with a corridor from the Red Route and audit results reflect the entire corridor of Dean Avenue from Wallace Avenue to Monona Drive. Sidewalks are present along Dean Avenue, but do not extend along any of the cross streets leading away from the intersections. Curb ramps exist at intersections, but do not have standard ADA Detectable Warning Fields installed. No direct pedestrian route connects the sidewalks to adjacent businesses; pedestrians must enter through the parking lots with no dedicated pedestrian space. Street crossings are relatively comfortable for users when crossing Wallace or Gordon, though no pavement marking or signage is in place. No accommodations–curb ramps, pavement markings, or signage–are provided for pedestrians wishing to cross Dean Avenue, which experienced fairly consistent vehicular traffic during the analysis period. The streetscape is pleasant for pedestrians; however, lighting is scaled for vehicular traffic and not present at intersections, posing safety concerns during evening and early morning hours.

Corridor 2: Wallace Avenue from Lofty Avenue to Dean Avenue | Score: 42

This corridor currently has no sidewalks or intersection treatments, such as pavement markings or signage, in place. Parking is allowed on both sides of the street, which may pose safety hazards to pedestrians who are trying to walk along the road edge. Due to the low traffic volumes, streets are easy to cross at intersections. The streetscape is pleasant for pedestrians. Lighting is scaled for vehicular traffic and not present at intersections, resulting in safety concerns during early morning and evening hours. No pedestrian amenities are present.

Corridor 3: Lofty Avenue from Wallace Avenue to Monona Drive | Score: 39

This corridor currently has no sidewalks or intersection treatments, such as pavement markings or signage, in place. Parking is allowed on both sides of the street, which may pose safety hazards to pedestrians who are trying to walk along the road edge. It is relatively easy to cross streets at intersections due to the low traffic volume;

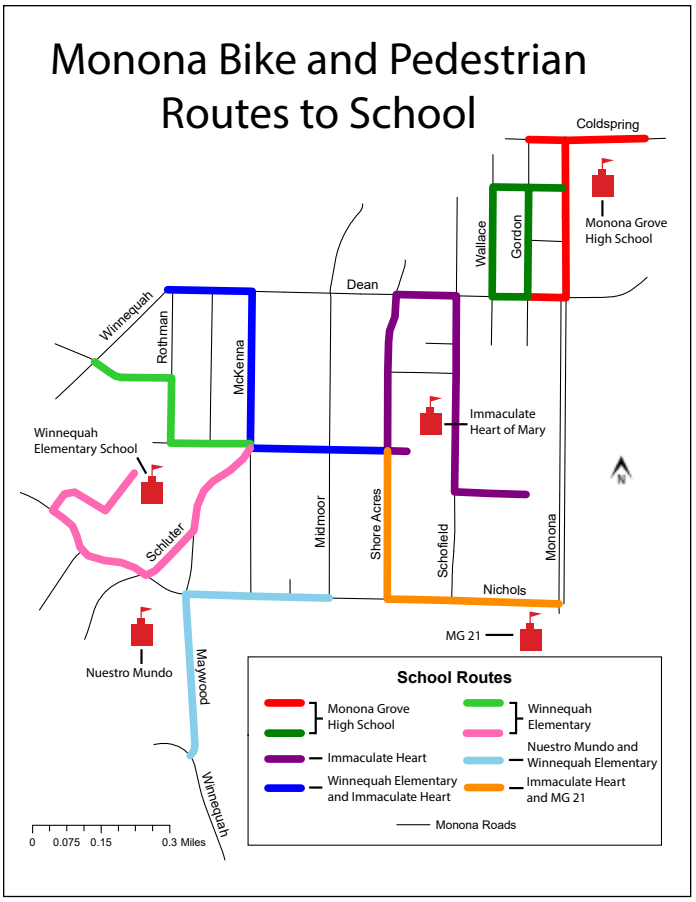


Figure 3: The City of Monona with bike and pedestrian routes to five schools.

however, visibility of pedestrians is low and this may pose a safety hazard when vehicles are present. The streetscape is pleasant for pedestrians. Lighting is scaled for vehicular traffic and not present at intersections, resulting in safety concerns during early morning and evening hours. No pedestrian amenities are present.

Corridor 4: Gordon Avenue from Lofty Avenue to Dean Avenue | Score: 37

This corridor currently has no sidewalks or intersection treatments, such as pavement markings or signage, in place. Parking is allowed on both sides of the street, which may pose safety hazards to pedestrians who are trying to walk along the road edge. The frequency of driveways within this corridor increases this concern, as visibility may be restricted for vehicles when entering or leaving a driveway. It is relatively easy to cross streets at intersections due to the low traffic volume. The streetscape is pleasant

for pedestrians. Lighting is scaled for vehicular traffic and not present at intersections, resulting in safety concerns during early morning and evening hours. No pedestrian amenities are present.

AUDIT RESULTS: RED ROUTE

Corridor 1: Monona Drive from Dean Avenue to Coldspring Avenue | Score: 64

This corridor features sidewalks in all areas, all of which are in good condition and in compliance with ADA standards. The connectivity of sidewalks to adjacent businesses does not welcome pedestrians, as no dedicated pedestrian facilities are present between the sidewalk and business entrances. The frequency of driveways and business entrances also decreases pedestrian safety and adds to the feeling that vehicles are the primary focus of the corridor. Street crossing at intersections is relatively easy due to the presence of both pavement markings and signals. Traffic volumes and speeds are relatively high. Auditors did not feel at risk because of this, but it detracts from the pedestrian environment and results in a corridor that pedestrians are unlikely to utilize for recreational purposes. Visibility is provided through pavement markings and signage, though it was noted that no "Crossing Ahead" signage was present within the corridor. This is of particular concern at Lofty Avenue. Vehicles traveling north on Monona Drive may be unaware that a cross street travels west due to the configuration of the three-way intersection. Lighting is well-spaced, though all lights are directed toward vehicular traffic rather than pedestrian facilities.

Corridor 2: Coldspring Avenue from Gordon Avenue to Jerome Street | Score: 51

Sidewalks are present along the corridor from Monona Drive east to Jerome Street, but do not continue west from Monona Drive to Gordon Avenue. Sidewalks present are in good condition. Notably absent from the corridor is a pedestrian connection between the sidewalk and the entrance to Monona Grove High School. During the audit period, many students were observed walking through the grass and parking lot to reach the school. There is high visibility at the pedestrian crossing of Monona Drive along Coldspring Avenue due to the use of colored pavement, but pedestrian visibility was not prioritized

Auditors noted that Monona Grove High School lacks pedestrian access from Coldspring Avenue, forcing students to walk through the busy parking lot.

elsewhere within the corridor. Lighting is adequate near Monona Drive, but decreases as you travel away from the intersection in either direction. No pedestrian amenities are present within the corridor.

Corridor 3: Dean Avenue from Gordon Avenue to Monona Drive | Score: 48

This corridor was reviewed in coordination with a corridor from the Green Route and audit results reflect the entire corridor of Dean Avenue from Wallace Avenue to Monona Drive. See Corridor 1 under Audit Results: Green Route for results.

AUDIT RESULTS: PINK ROUTE

Corridor 1: Nichols Road from Healy Lane to Schluter Road | Score: 71

Sidewalks are present along this corridor and provide pedestrian access to adjacent destinations, including Nuestro Mundo Community School. Pavement markings delineate crosswalks, which are also designated with signage and, when combined with low traffic volumes and speeds, result in a relatively easy pedestrian experience when crossing the roadway. The streetscape also provides an environment that is inviting to pedestrians; however, no pedestrian amenities such as benches or drinking fountains are present.

Corridor 2: Schluter Road from Maywood Road to Nichols Road | Score: 37

There are no sidewalks present within this corridor. There is currently a painted roadway edgeline on one side of the road to assist in separating vehicular traffic and pedestrians; however, parking is not prohibited along this shoulder. Streets are relatively easy to cross due to low traffic speeds and volumes. Street lights are not present within this corridor, posing safety concerns for pedestrians and bicyclists during morning and evening hours.

Corridor 3: Maywood Road from Greenway Road to Schluter Road | Score: 37*

This corridor was identified as part of the Pink Route; however, a separate audit was not completed due to observed consistencies within the route. Schluter Road turns into Maywood Road at the intersection of Schluter and Maywood, so results are expected to be the same as Corridor 2: Schluter Road from Maywood Road to Nichols Road.

AUDIT RESULTS: LIGHT BLUE ROUTE

Corridor 1: Maywood Road from Nichols Road to Winnequah Road | Score: 43.5

This corridor currently has no sidewalks in place. The intersection of Maywood and Winnequah was recently reconstructed, and features a sidewalk along the curb radius in the northwest corner of the intersection. Pavement markings are striped across Winnequah, but no pedestrian curb ramps are provided and the sidewalk section does not connect to any other pedestrian routes. This results in increased pedestrian visibility at the intersection, but does not improve accessibility for pedestrians. Pavement markings at intersections are absent elsewhere within the corridor. Traffic volumes and speeds are compatible with walking environments, and the streetscape provides a positive aesthetic. Lighting could be improved through the corridor, but is adequate at intersections where it is most critical. No pedestrian amenities are present within the corridor.

Corridor 2: Nichols Road from Maywood Road to Midmoor Road | Score: 54.5

Sidewalks are present along this corridor, though they are beginning to show signs of deterioration. Pedestrians must access most adjacent businesses through the parking lot entrance, as pedestrian facilities are not present. This factor contributes to a feeling of automobile prioritization within the corridor. High traffic volumes and observed high vehicle speeds within the corridor further detract from the pedestrian environment. Pedestrians have low visibility at intersections, which causes safety concerns, especially when combined with the vehicle volumes present. Lighting within the corridor is not pedestrian-focused or -scaled and inadequate at intersections, further decreasing pedestrian visibility.

AUDIT RESULTS: LIGHT GREEN ROUTE

Corridor 1: Rothman Place from Dean Avenue to Greenway Road | Score: 41

This corridor currently has no sidewalks in place. Pavement markings are present at the intersection of Rothman and Dean, but are absent elsewhere along the corridor. Parking is allowed on both sides of the street, which may pose safety hazards to pedestrians who must walk within the roadway. The streetscape is pleasant for pedestrians. Lighting is scaled for vehicular traffic and not present at intersections, resulting in safety concerns during early morning and evening hours. No pedestrian amenities are present.

Corridor 2: Progressive Lane from Winnequah Road to Rothman Place | Score: 46

No sidewalks are present within this corridor. There are frequent curb cuts, including a driveway to a parking lot for Fireman's Park, which is located very close to the Progressive/Winnequah intersection. This increases potential conflicts between pedestrians and vehicles along the corridor, and in particular makes the operation of the intersection more difficult to predict for some pedestrians, especially younger children who are not familiar with roadway rules. Crosswalks have been striped at this intersection to help provide visibility to pedestrians; however, no walkway is provided and pedestrians do not have a designated space to wait before crossing the street. No designated pedestrian walkway is provided into Fireman's Park. Lighting is scaled for vehicular rather than pedestrian traffic, which may result in safety hazards, particularly at intersections. The streetscape provides a pleasant aesthetic walking environment.

Greenway Road offers a pleasant walking atmosphere, but pedestrian infrastructure is lacking.

Corridor 3: Greenway Road from Rothman Place to McKenna Road | Score: 50

This corridor currently has no sidewalks in place. A crosswalk is striped on the east side of the intersection crossing Greenway, but pavement markings are absent elsewhere in the corridor. This crossing connects to a sidewalk on Greenway, but no pedestrian curb ramp is provided. Parking is allowed on both sides of the street, which may pose safety hazards to pedestrians who are trying to walk along the road edge. Due to the low traffic speeds, streets are easy to cross at intersections. The streetscape is pleasant for pedestrians. Lighting is scaled for vehicular traffic and not present at intersections, resulting in safety concerns during early morning and evening hours. No pedestrian amenities are present.

AUDIT RESULTS: BLUE ROUTE

Corridor 1: McKenna Road from Dean Avenue to Greenway Road | Score: 38

No sidewalks are present within this corridor and the pavement surface is showing signs of deterioration. Pavement markings help provide visibility at the intersection of McKenna and Greenway/Maywood, but are absent elsewhere within the corridor. The configuration of this intersection results in an uncomfortable and potentially unsafe environment for pedestrians, even with the striped crosswalk. The lack of dedicated space for pedestrians through this corridor further adds to the stress pedestrians are likely to feel when navigating this intersection. No pedestrian amenities are present along the corridor.

Corridor 2: Greenway Road from McKenna Road to Shore Acres Road | Score: 50*

This corridor was identified as part of the Blue Route; however, no separate audit was performed. This corridor was observed to be consistent with the Corridor 3 from the Green Route and was assigned the same score as that corridor.

AUDIT RESULTS: ORANGE ROUTE

Corridor 1: Shore Acres Road from Greenway Road to Nichols Road | Score: 35

No sidewalks are present within this corridor. Frequent driveways throughout the corridor create potential conflict points between pedestrians and vehicles. A striped crosswalk is present at the intersection of Shore Acres and Nichols, but absent elsewhere within the corridor. Curb ramps are present at this location, but do not have detectable warning fields installed per ADA standards. Traffic volumes are fairly high through this corridor, likely making pedestrians uncomfortable without a designated space. Lighting is limited throughout the corridor and inadequate at intersections, resulting in safety concerns for pedestrians. No pedestrian amenities are present within the corridor.

Corridor 2: Nichols Road from Shore Acres Road to Monona Drive | Score: 56

Nichols Road has sidewalks on both sides of the street, but they do not continue along any of the intersecting streets, resulting in issues of continuity. Curb ramps are present at intersections but do not have detectable warning fields installed thereby not meeting ADA standards. Traffic speeds and high volumes along Nichols Road make the environment unwelcoming to pedestrians and increase the difficulty of crossing at intersections. Adequate lighting is installed at intersections.

AUDIT RESULTS: PURPLE ROUTE

Corridor 1: Shore Acres Road from Dean Avenue to Greenway Road | Score: 38

This corridor currently has no sidewalks in place. Pedestrian crossings are unmarked, though reported as moderately easy to cross due to low traffic volumes and

speeds. Parking is allowed on both sides of the street, which may pose a safety hazards to pedestrians who are trying to walk along the road edge and decrease the visibility of pedestrians. Lighting is scaled for vehicular traffic, which may result in safety concerns for pedestrians. No pedestrian amenities, such as benches or wayfinding signage, are present.

Corridor 2: Schofield Street from Dean Avenue to Greenway Road | Score: 41

Sidewalks are present in portions of the corridor, but do not provide full mobility to pedestrians. No pavement markings are present at intersections to provide awareness to pedestrians. Intersections were still reported as being relatively easy to cross due to the low traffic volumes and speeds. The presence of parked cars throughout the corridor may require pedestrians to walk further toward the center of the roadway and decrease visibility, increasing potential risk of incident. Lighting is scaled for vehicular traffic and may result in decreased safety and comfort for pedestrians.

Corridor 3: St. Theresa Terrace from Schofield Street to Gordon Avenue | Score: 38*

This corridor was identified as part of the Orange Route; however, no separate audit was performed. This corridor was observed to be consistent with the rest of the route and was assigned a representative score based on the lowest audited score within the route.

Corridor 4: Dean Avenue from Shore Acres Road to Schofield Street | Score: 38*

This corridor was identified as part of the Orange Route, however no separate audit was performed. This corridor was observed to be consistent with the rest of the route and was assigned a representative score based on the lowest audited score within the route.

ADDITIONAL CORRIDORS:

Corridor 1: Midmoor Road from Dean Avenue to Greenway Road | Score: 42

There are no sidewalks present within this corridor. Parking is allowed on both sides of the street but very few parked cars were present.

Corridor 2: Lamboley Avenue from Shore Acres Road to Schofield Street | Score: 38

As a connector between Shore Acres and Schofield, this short stretch allows travel to either side of Immaculate Heart of Mary School. There are no sidewalks along this route and parking is allowed on both sides. There are no marked crosswalks at either end, likely due to extremely low traffic volumes and speeds along the road.

PARENT SURVEY RESULTS

From November 14, 2016 to December 1, 2016, a total of 287 parents/guardians responded to the parent survey.

Figure 4 shows that 50 percent of survey respondents had children who attended Winnequah Elementary School (WES), 37 percent of survey respondents had children who attended Monona Grove High School (MGHS), and the rest of survey respondents had children who attended Immaculate Heart of Mary School (IHoMS), Nuestro Mundo Community School (NMCS), and Monona Grove 21st Century Charter School (MG21). In other words, parents/guardians whose children attend WES and MGHS reflect the majority of voices in this survey.

Figure 5 shows how far students live from their school. According to the survey team's calculations, children who live less than one mile from school can walk to school in 20 minutes at a walking speed of three miles per hour. In addition, students who live less than two miles from school can bike to school in 15 minutes at a speed of eight miles

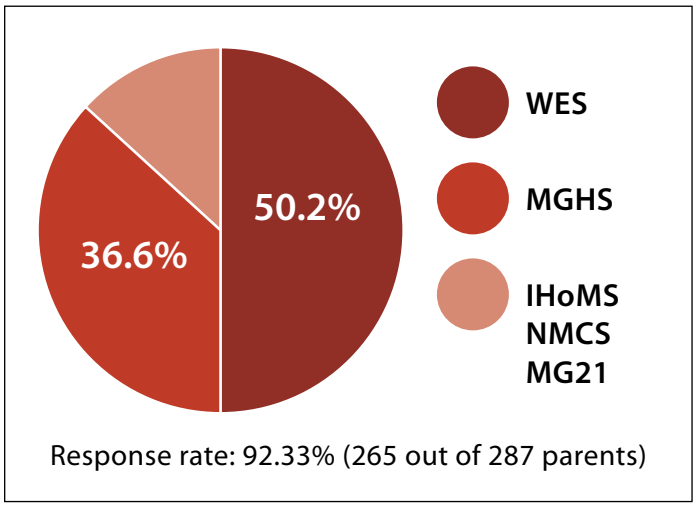


Figure 4: Survey responses by school.

per hour. This means that about 50 percent of respondents' children could walk to school within 20 minutes and about 70 percent of respondents' children could bike to school within 15 minutes, if safety and available infrastructure were not a concern.

Contrary to the aforementioned calculations, Figure 6 shows that only 23 percent of the children walk or bike to school, which is 49 percent less than the expected number based on distance alone. The remaining 77 percent of children travel to school by school bus, family vehicle, car pool, or city bus. Even though fewer students walk and bike to school than expected, those who live close to school are more likely to walk or bike there than those who live farther away.

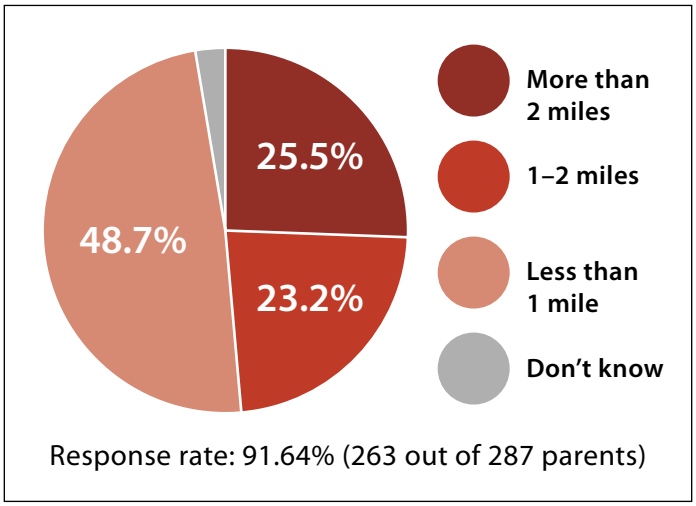


Figure 5: Distance children live from school

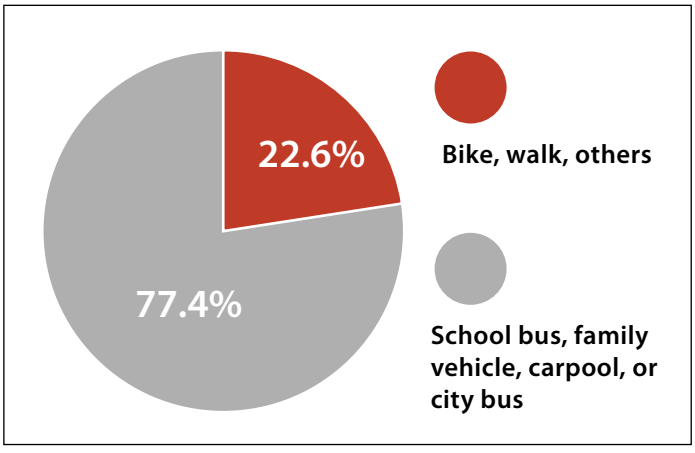


Figure 6: Mode of transportation to school

For children who walk or bike to school, 80 percent of their parents/guardians feel the route to school is somewhat safe or very safe, and 20 percent of their parents/guardians feel the route to school is not at all safe or somewhat unsafe. On the other hand, only 33 percent of the parents/guardians whose children do not walk or bike to school feel the route to school is somewhat safe or very safe, and 59 percent of those parents/guardians feel the route to school is not at all safe or somewhat unsafe. According the responses to this question, it seems that perceived safety is a limiting factor for children to walk and bike to school.

Figure 7 shows the top five factors that influence a parent/guardian decision about letting their children walk or bike to school. The result reveals four recurring themes in both children who do and do not walk or bike to school. They are speed of traffic, amount of traffic, sidewalk or pathways, and weather. While we cannot change the weather, the other three factors can be improved through better traffic control planning and improvement to sidewalk facilities. In addition to these three issues, parents/guardians also expressed that if there were crossing guards or other forms of adult accompaniment, they would allow their children to walk or bike to school.

Walk or Bike

1. Speed of traffic along route
2. Distance from home to school
3. Amount of traffic along route
4. Weather
5. Sidewalks or pathways

Do Not Walk or Bike

1. Amount of traffic along route
2. Speed of traffic along route
3. Weather
4. Child's age
5. Sidewalks or pathways

Figure 7: Top five factors for whether children do or do not walk or bike to school

I appreciate the city conducting a survey about the issue. I wish it were safer for my kids to walk or bike to school, but without sidewalks and with how distracted drivers are today with their phones and being in rush and so on, it worries me too much to ever let them do this alone, even when they are much older. –*Monona parent*

We need better speed controls on the major routes to the elementary schools. Most mornings I want to have a flashing neon sign attached to my stroller begging drivers to SLOW DOWN. I think a stronger police presence during the morning and afternoon drop off times would help enormously! –*Monona parent*

In addition to general safety concerns, parents/guardians also expressed safety concerns about particular routes and intersections in Monona. Winnequah Road and Monona Drive were the most frequently mentioned roads when parents expressed specific safety concerns, 26 and 16 times respectively. Among their comments, poor driving habits, lack of sidewalks, inferior intersection design, traffic, and inadequate bike facilities were the major issues along those roads (see Figure 8). The 119 comments by parents/guardians about specific routes and intersections of concern are included in Appendix G. Highlights from these comments can be found in the storymap section of the survey website at parentsurvey.github.io.

The parent/guardian survey provides valuable insights about the commuting habits of children to and from school. The survey also reveals important information about parents'/guardians' perspectives on the safety level of the route to school and their reasons for encouraging or deterring their children from walking or biking to school.

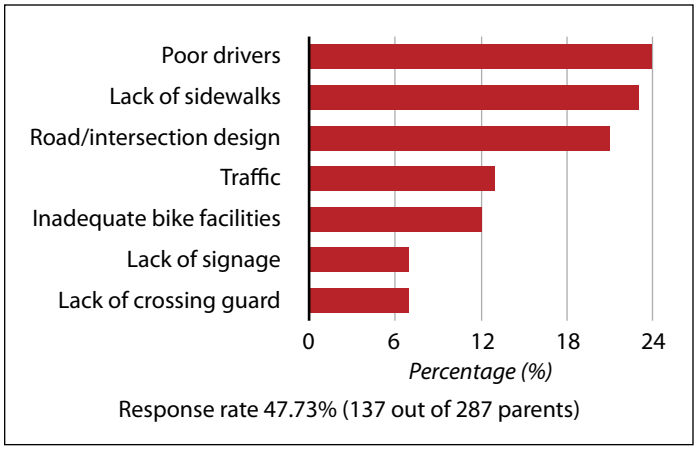


Figure 8: Top issues from area or intersection where parents have safety concerns.

Most importantly, the parents/guardians also identified specific locations at which they have increased safety concerns. In short, the results of the survey include valuable input from parents/guardians whose children attend school in Monona, which can provide guidance on how to improve routes to school in the future.

More results of the survey can be viewed at parentsurvey.github.io and in Appendix G.

The Winnequah Park gazebo offers a peaceful setting, but parents and children do not always feel as safe on the City's streets.

CHAPTER FOUR | RECOMMENDATIONS FOR SAFE ROUTES

POLICY RECOMMENDATIONS

While Monona's Comprehensive and Sustainability Plans set goals for alternative transportation use and identify strategies for achieving those goals, those strategies should be codified into city policy in order to make real change in Monona's transportation environment.

Complete Streets Ordinance

The first major policy change that Monona should make to facilitate a better bicycle and pedestrian environment is drafting and passing a Complete Streets ordinance. Monona's 2015 Bicycle Friendly Community application cited Wisconsin's Complete Streets policy as the mechanism by which bike and pedestrian infrastructure could be considered in road reconstructions. That state policy was, in effect, repealed in late 2015. In order for bicycles and pedestrians to be considered in state and county roadway projects, Monona should pass a Complete Streets policy.

The National Complete Streets Coalition notes that Complete Streets policies can give small municipalities a stronger voice in the maintenance and reconstruction of federal, state, and county roads that often run through their downtown corridors. A Complete Streets ordinance would force transportation officials at all levels of government to consider the feasibility and appropriateness of adding bicycle and pedestrian infrastructure when building new roads or reconstructing old ones.

It should be noted that "Complete Streets" does necessarily mean that all roads must be constructed with bicycle lanes and wide sidewalks. Complete Streets can have widened shoulders for walking and biking, rustic off-road paths, or traffic calming devices. A Complete Streets policy would urge City officials to think creatively about the needs of all road users during constructions, so that designing roads safely for people of all ages and abilities to walk and bike becomes the norm.

Examples of Complete Streets policies and other resources can be found at https://smartgrowthamerica.org/resources/.

Street Design Guidelines

The Monona Drive Urban Design Guidelines were intended to give Monona's decision makers a framework by which to judge potential developments. These guidelines are, of course, limited to the Monona Drive corridor. Two of the strategies in Monona's Comprehensive Plan for promoting a multi-modal transportation network are to promote bicycle lanes and pedestrian-scaled development and to require developers to consider the bicycle and pedestrian needs when designing new developments.

In order to implement those strategies, Monona should pass an ordinance that streetscape design follow, to the fullest extent possible, the guidelines of the National Association of City Transportation Officials (NACTO).[22] While larger cities develop their own street design guidelines, it may be more appropriate for Monona to simply pull from these existing ones. It could be helpful for City officials to pull together design ideas particularly suitable for Monona from the NACTO guidelines and coalesce them into a "best practices" guide for the City. These guidelines, though, should be written into the Zoning Code or Code of Ordinances so that they have a lasting impact on the design of Monona's streets.

Sidewalk Policy

Monona made great steps in the last year to make the construction of sidewalks more feasible, by passing Ordinance 2-16-675 in February 2016, making new sidewalk construction paid for by general taxes rather than adjacent landowners. This ordinance is not widely publicized or known in the City, though. The City should ensure that residents know that this policy has been passed.

In addition, Monona should consider a policy or program by which its residents can pay for snow removal on sidewalks fronting their property. It is thought that this is a significant barrier to the construction of sidewalks, and creative programming could easily alleviate it.

22 "Urban Street Design Guide," National Association of City Transportation Officials, accessed on December 6, 2016, http://nacto.org/publication/urban-street-design-guide/.

Brightly painted diagonal crossings can streamline bike and pedestrian traffic at busy intersections, and could be considered in the streetscape design guidelines.

School Policies

While school policies are not under direct control of the City of Monona, the school district and the City must work closely in order to implement any SRTS Program. That being such, the City should encourage the Monona Grove School District to adopt language in its Wellness Policy specifically encouraging walking and biking to and from school. In this way, the schools can become better partners in promoting active transportation in Monona through programming, policy, and infrastructure development.

It should be noted that changes in the walking and biking environment may change the UHT plan for the school district, in turn changing school district bussing plans. The policy team encourages Monona to evaluate these changes in conjunction with the school district.

Safe Routes to School Coalition

Developing a SRTS Coalition is the first step in the National Safe Routes to School Guide. The Coalition gauges public opinion about SRTS interventions, translates government resources and policy decisions to the community, builds momentum for the initiative, and ensures that diverse community voices are heard in the process. The Coalition should be comprised of government and school employees, parents/guardians, community members, local businesses, and community organizations, and should also reflect the views of the children that the SRTS program will affect.

Remote Drop-Off/Pick-Up

Lastly, the Monona Grove School District should consider a remote drop-off or remote pick-up policy for their buses. Because the Monona Grove School District encompasses two distinct geographic areas, students are often bussed to school. Instead of each student being picked up at their home and then dropped off at school, buses can pick up in several central locations and/or drop off students half a mile or so from school. This allows students to get some exercise before school, normalizes walking for transportation, and reduces congestion in the school area. For young students, a parent/guardian volunteer or teacher can escort students as they walk to or from the school bus.

CORRIDOR RECOMMENDATIONS

General Recommendations

Monona was built with the automobile in mind, which is why there are few sidewalks throughout the City. This also means that most, if not all, houses in Monona have a driveway and room to park multiple vehicles off the street. During the day, traffic is light and there are very few parked cars on Monona's residential streets. The road then looks and feels very wide, which encourages higher-speed vehicular traffic. Drivers often feel less comfortable driving through a neighborhood where cars line both sides of the street, which results in slower driving speeds. On certain residential streets, the City should explore removing parking from one side of the street and narrowing the road. This would not only create more room for sidewalks, but also slow down traffic.

GREEN ROUTE

Corridor 1: Dean Avenue from Wallace Avenue to Gordon Avenue

This corridor has some existing pedestrian facilities, but some changes would create a significant impact in making the environment more pedestrian-friendly. Extending sidewalks along the cross streets would improve connectivity within the area. Similarly, extending pedestrian connections to business entrances rather than forcing pedestrians to utilize vehicular entrances would improve both safety and the overall atmosphere of a pedestrian-oriented corridor. Intersections could be improved through the installation of ADA detectable warning fields at curb ramps, pavement markings to delineate crosswalks, and signage. Crossings should be considered across Dean Avenue rather than just along Dean, as existing conditions allow for. If a crosswalk is installed across Dean, increased lighting is recommended at that location as lighting is currently absent at intersections.

Corridor 2: Wallace Avenue from Lofty Avenue to Dean Avenue

This corridor should be considered for the addition of sidewalks. As described above, pavement marking of crosswalks at the intersection of Dean should be considered, but do not appear necessary elsewhere within the corridor due to low traffic volumes

Corridor 3: Lofty Avenue from Wallace Avenue to Monona Drive

This corridor should be considered for the addition of sidewalks. The crossing of Lofty at Monona Drive does present some safety concerns, and this is detailed within the analysis of the Monona Drive corridor of the Red Route in Chapter Three. Due to low traffic volumes and speeds, intersection treatments are not likely to be warranted elsewhere within the corridor.

Corridor 4: Gordon from Lofty Avenue to Dean Avenue

This corridor should be considered for the addition of sidewalks. As previously described, pavement marking of crosswalks at the intersection of Dean should be considered, but do not appear necessary elsewhere within the corridor due to low traffic volumes.

Adults accompany children to a central bus pick-up area.
pedbikeimages.org / Dan Burden

RED ROUTE

Corridor 1: Monona Drive from Dean Avenue to Coldspring Avenue

Pedestrian facilities along this corridor could be improved by increasing focus on pedestrian-oriented design. This includes modifying lighting to be more pedestrian-scaled, as all existing street lights are directed toward vehicular lanes. This also involves providing separate pedestrian access to businesses located along the corridor rather than expecting pedestrians to utilize vehicle facilities. Combining parking lots for adjacent properties would also work towards achieving this goal and improve safety of the corridor by decreasing conflict points between pedestrians and vehicles.

Crossing Monona Drive, especially at Lofty Ave, the cars don't stop for walkers. My daughter was almost hit there.
–Monona parent

Overall, intersections utilize good design practices to increase visibility for pedestrians. The intersection of Lofty at Monona could be further improved through the installation of "Crossing Ahead" signs and Rectangular Rapid Flashing Beacons. This particular intersection was noted as being dangerous due to the fact that only pedestrian traffic crosses here. Because of the separated median along Monona Drive and because this particular location functions more as mid-block crossing than in intersection, vehicular traffic traveling north may not realize that pedestrians can cross there. This crossing is also right in front of Monona Grove High School, making it an important area for improvement.

Corridor 2: Coldspring Avenue from Gordon Avenue to Jerome Street

The most notable absence in this corridor was a pedestrian connection into Monona Grove High School from Coldspring Avenue. Many students were observed cutting through the grass and into the parking lot; separated facilities would improve safety and the overall pedestrian friendliness of the corridor. Additional sidewalks should also be considered continuing west from the Coldspring/Monona intersection. The addition of pedestrian amenities such as a benches near the school or by the tennis courts would also improve the pedestrian environment.

Corridor 3: Dean Avenue from Gordon Avenue to Monona Drive

This corridor was reviewed in coordination with a corridor from the Green Route and audit recommendations reflect the entire corridor of Dean Avenue from Wallace Avenue to Monona Drive. See Corridor 1 under Safe Routes to School Recommendations: Green Route for results.

PINK ROUTE

Corridor 1: Nichols Road from Healy Lane to Schluter Road

The sidewalks and on-street bicycle lanes along this segment are pleasant. Additional trees should be planted in the terraces to provide shade for pedestrians. The three painted crosswalks along Nichols should be repainted with bold bars to make pedestrian crossing points much more visible to drivers traveling west down the hill. While there are destinations for pedestrians to walk to, additional interesting landscaping in the library lot and along the parking lots on the north side of the street would make walking more comfortable and interesting. We also recommend installing one new crosswalk to replace the removal of one at Schluter.

A yard sign in Monona encourages motorists to slow down.

Corridor 2: Schluter Road from Maywood Road to Nichols Road

At least one sidewalk should be installed on Schluter. This could replace the on-street stripe that currently delineates pedestrian traffic. Or a sidewalk could be constructed on the other side, which has few properties adjacent to the road segment. Because Schluter/Maywood adjoin a long stretch of public destinations (school, city hall, police department, library) there is great potential to increase pedestrian safety and volume along this route. Adding one or two streetlights along this corridor would make travel at night or during inclement weather safer.

The painted crosswalk from Schluter across Nichols is extremely long and crosses at the crest of the hill. We recommend removing this crosswalk and installing new painted crosswalks, one farther east and one farther west on Nichols. We also recommend extending the curb on the northeast corner to make crossing shorter.

Cars go way to fast on Schluter Road. The intersection of Schluter and Nichols has a blind spot at the top of the hill. I have been with my kids and almost got hit by a car. At this point the only way for them to cross Nichols would be with a crossing guard. –*Monona parent*

Corridor 3: Maywood Road from Greenway Road to Schluter Road

Sidewalks are present along this corridor and provide pedestrian access to adjacent destinations including Nuestro Mundo Community School. Pavement markings delineate crosswalks, which are also designated with signage, and, when combined with low traffic volumes and speeds, result in a relatively easy pedestrian experience when crossing the roadway. The streetscape also provides an environment that is inviting to pedestrians; however, no pedestrian amenities such as benches or drinking fountains are present.

LIGHT BLUE ROUTE

Corridor 1: Maywood Road from Nichols Road to Winnequah Road

One recommendation is to remove the raised sections of bike lane on Winnequah Road. These raised sections are confusing for cyclists who are unfamiliar with them, and as one resident pointed out, potentially lethal at night. There are marked crosswalks crossing Winnequah at Maywood, but one should be added crossing Maywood as well. The median works nicely as a pedestrian refuge at this crossing. The walking lane on Maywood should be removed and replaced with a sidewalk. Although the walking lane is a low-cost solution for creating a place to walk, it is not sufficiently safe. It is quite common for automobiles to cross painted lines on the roadway, but they rarely drive with one set of wheels on the curb.

Corridor 2: Nichols Road from Maywood Road to Midmoor Road

Sidewalks should be installed along Midmoor. There are crosswalks painted for crossing Midmoor, but not for

crossing Nichols. Having marked crosswalks in all directions at this intersection is especially important as Nichols carries faster moving traffic as well as more traffic volume than streets like Midmoor. The intersection of Nichols and McKenna is one of the most complete intersections in Monona, with crosswalks in all directions and sidewalks along Nichols. This intersection does not need improvement.

LIGHT GREEN ROUTE

Corridor 1: Rothman Place from Progressive Lane to Greenway Road

This corridor could be improved with sidewalks on both sides of Rothman, which would move pedestrians off the street and reduce vehicle-pedestrian conflicts. The crosswalks at Greenway could then be altered to lead from one ADA-approved curb cut to another. Rothman is currently sufficiently narrow to limit vehicle speeds.

I either bike with my child or watch him bike and I have personally witnessed near misses - HE HAS ALMOST BEEN HIT BY CARS SEVERAL TIMES - because people do rolling stops turning onto Rothman from Progressive and turning from Rothman onto Greenway right into the crosswalk area without paying extra attention. I have had to stop my child from proceeding through the crosswalk because of cars rolling through right in front of us.–Monona Parent

Corridor 2: Progressive Lane from Winnequah to Rothman Place

While the painted crosswalks at Winnequah and Progressive alert vehicles to crossing pedestrians, the team recommends a sidewalk along the south side of Progressive Lane. In addition, crosswalks should be added to cross Progressive Lane at Rothman and to cross the entrance to Fireman's Park. Lastly, the City should consider curb improvements to make the entrance to Fireman's Park perpendicular to Progressive Lane to slow traffic entering and leaving the park. ADA-approved curb ramps should be installed on all new sidewalks where they cross roads. Progressive Lane is sufficiently narrow to slow through-traffic.

Streets should be designed for people of all ages to safely walk and bike on them.
pedbikeimages.org / Tiffany Robinson

We're lucky, we live close to the Nichols crossing that has a crossing guide in the morning and evenings. I hear absolute horror stories from families whose children have to cross at the crazy five-way intersection at McKenna & Greenway. That intersection needs some serious attention before someone is seriously injured. –Monona parent

Corridor 3: Greenway Road from Rothman Place to McKenna Road

At least one sidewalk should be added along Greenway, and would ideally replace the painted walking lane. The street is sufficiently wide to construct one or two sidewalks, which would also narrow the street and slow traffic (see

design solutions in the next section). Additionally, an ADA-approved curb ramp should be added where the sidewalk along Greenway (fronting Winnequah Elementary School) ends to allow pedestrians of all abilities to cross Greenway on the crosswalk provided.

BLUE ROUTE

Corridor 1: McKenna Road from Dean Avenue to Greenway Road

McKenna should have sidewalks on both sides of the street, which would make it a better route for students walking to Winnequah Elementary School. This would also help pedestrians crossing at both Dean Avenue and at the intersection with Greenway and Maywood Roads. The pavement and curb conditions on McKenna are poor and in need of repair. Because of its width, McKenna is likely to see faster vehicle speeds approaching the Greenway/Maywood intersection. A realignment of this intersection is suggested (see below).

ORANGE ROUTE

Corridor 1: Shore Acres Road from Greenway Road to Nichols Road

Because of the fairly high traffic volumes observed, sidewalks should be added to at least one side of Shore Acres. Crosswalks exist along Greenway, but should be added for crossing Greenway on Shore Acres.

Corridor 2: Nichols Road from Shore Acres Road to Monona Drive

Speeding on Nichols Road between Monona Drive and City Hall was of particular concern during the audits. The City should consider increasing enforcement or placing a permanent speed sign along this corridor. In addition, the sidewalks along Nichols should be continued down Schofield Street. There is ample room on the west side of Schofield along the open lot just south of Immaculate Heart of Mary School to extend the existing sidewalk.

The recent reconstruction of Monona Drive has improved conditions for crossing at Nichols Road, but further improvements could be made with pedestrian crossing signals. When crossing Nichols, pedestrians are automatically given a walk signal when the light is green. But when crossing Monona, pedestrians must press the button to turn on the walk signal. If a pedestrian presses the button to cross Monona at the same time the light turns green, he or she will be forced to wait an entire cycle to cross with a signal. If the pedestrian decides not to wait and is hit by an automobile, she can then be liable for walking against the signal. This makes very little sense, as she would have been given a walk signal if she had pressed the button one second earlier. This framework establishes pedestrians as subordinate to motorists and discourages walking. Giving pedestrians walk signals automatically with green lights will create a better environment for walking, even if it means a slightly longer wait time for traffic on Monona Drive.

PURPLE ROUTE

Corridor 1: Shore Acres Road from Dean Avenue to Greenway Road

Sidewalks should be added to both sides of the street to reduce pedestrian-vehicle conflicts. A painted crosswalk should be added on both sides of Greenway at Shore Acres to promote visibility and improve the school route. Painted crosswalks should also be added at Dean Avenue to promote the safe crossing along Shore Acres.

Corridor 2: Schofield Street from Dean Avenue to Greenway Road

Sidewalks should be added to both sides of the street to reduce pedestrian-vehicle conflicts. Painted crosswalks should also be added at Dean Avenue to promote safe crossing on Shore Acres. The sidewalk along Immaculate Heart of Mary School is useful for drop offs. This sidewalk should be extended along Shore Acres to Dean.

ADDITIONAL ROUTES

Corridor 1: Midmoor Road from Dean Avenue to Greenway Road

Midmoor could be improved as a route to school with sidewalks on both sides of the street. Despite the four-way stop at Greenway, traffic speeds may be increased considering the width of Midmoor Road. Currently, pedestrians walking on the street may cause conflicts with vehicles, especially during times when there are many parked cars to walk around. Painted crosswalks should be added on Greenway to make the intersection more visible.

DESIGN SOLUTIONS

After completing SRTS audits and gathering parent feedback, the Greenway Road/McKenna Road/Maywood Road intersection was identified as a critical area for improvement. Four potential design solutions were created and are described below. These schemes reflect potential options for future improvements along Greenway Road, leading to and from this intersection. The current state of Greenway Road can be seen below in Figure 9. For a mock-up of a design solution for the entire intersection, see Appendix E.

These design ideas are not meant for construction purposes and it is recommended that future design work be completed following NACTO standards. With all designs shown below, a two-foot curb (six-inch head with 18-inch pan) was included between the edge of roadway and terrace/sidewalk areas. This is not shown in images from streetmix.net due to restrictions with this technology.

Scheme 1

This design option features sidewalks on both sides of the street, one lane of parking, narrowed eight-foot vehicular lanes, and "Share the Road" signage would be placed near intersections to alert drivers to the expected presence

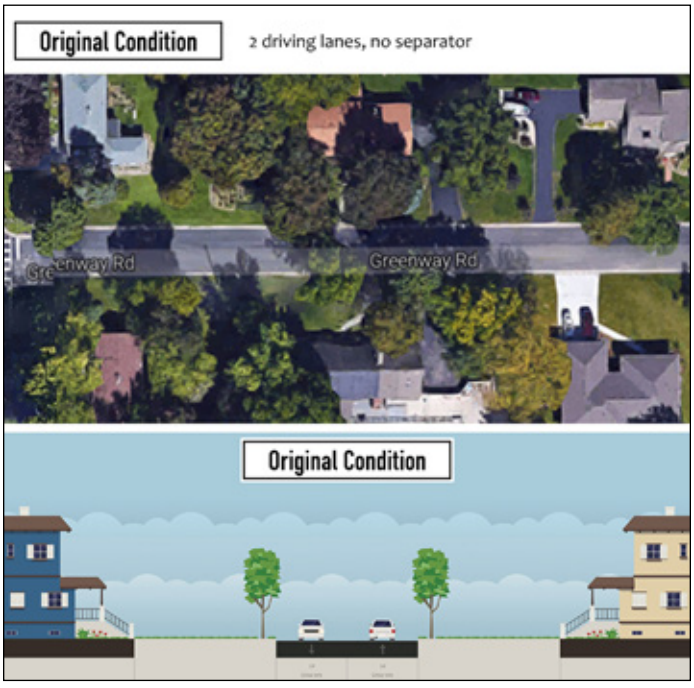


Figure 9: A cross section of Greenway Road's current design.

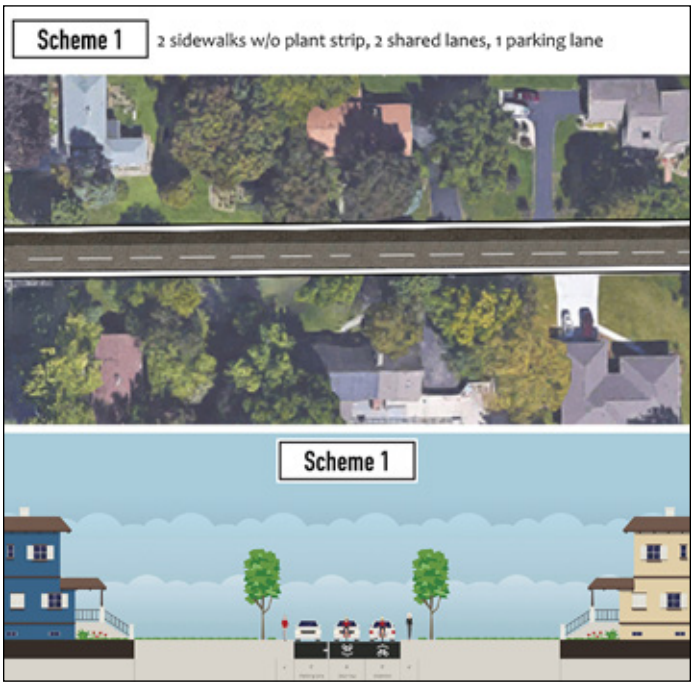


Figure 10: Scheme 1 for the reconstruction of Greenway Road.

of bicyclists. Reducing parking to one side of the roadway allows for better use of the existing right-of-way with minimal impact to residents. Though this initially sounds narrow, it provides more than adequate space for local traffic. As a comparison, the City of Seattle Right of Way Improvements Manual recommends 25-foot roadway width for low density, residential roadways with parking on both sides. This is measured from face-of-curb to face-of curb, and therefore would correspond to a decrease of two feet compared to this design recommendation while accommodating an additional lane of parking.

One potential drawback of this design scheme is the sidewalk width, particularly when considered in coordination with the location. The sidewalks are designed at four feet wide, which meets ADA minimum requirements. The lack of terrace, however, poses a maintenance concern, particularly in reference to snow storage. All snow would have to be stored on the backside of the sidewalk, which would be unable to accomplish with a snow plow. Residents are unlikely to be expected to clear all plowed snow off of the sidewalk, so additional maintenance vehicles may be required to ensure sidewalk accessibility in winter months.

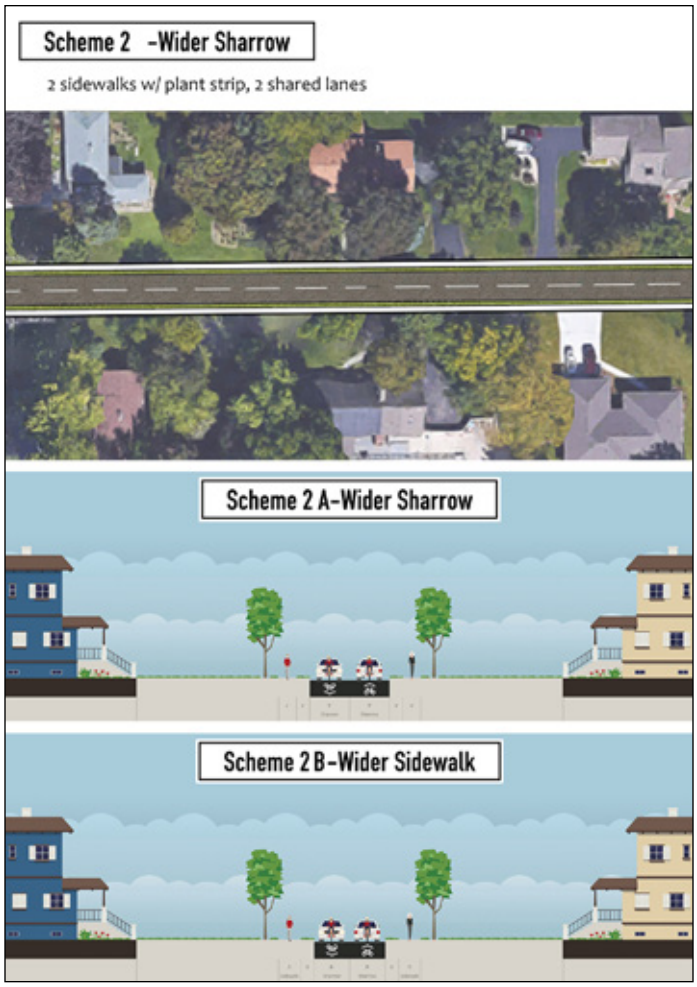


Figure 11: Schemes 2A & 2B for the reconstruction of Greenway Road.

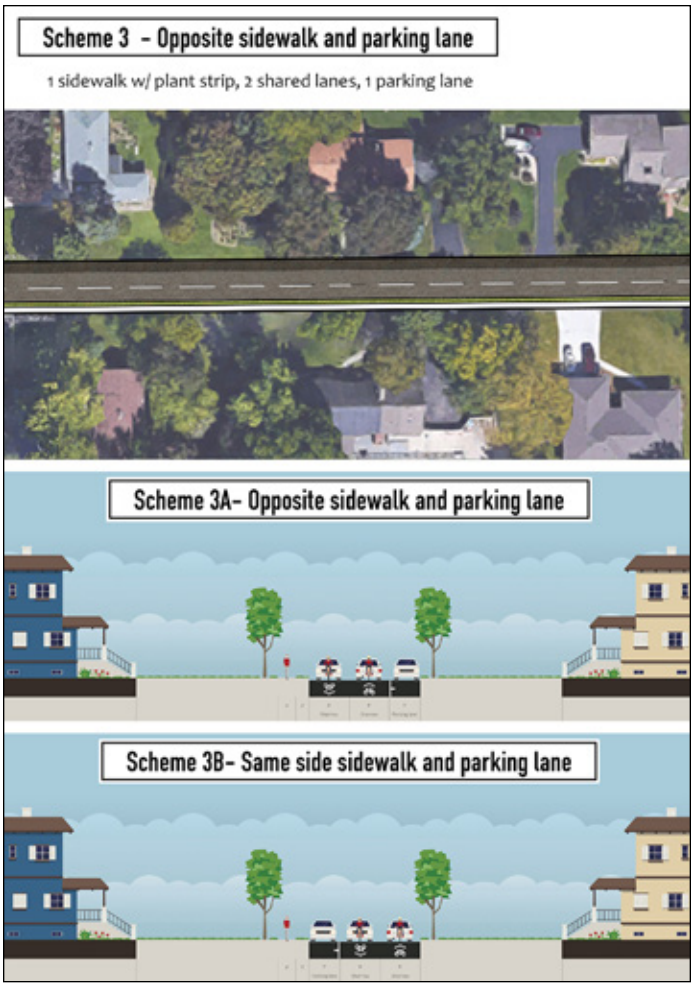


Figure 12: Schemes 3A & 3B for the reconstruction of Greenway Road.

Schemes 2A & 2B

These potential design alternatives fully remove parking from the roadway. Parking would still be readily available on adjacent streets. Both Scheme 2A and 2B feature three-foot terraces with a sidewalk. Scheme 2A incorporates nine-foot travel lanes and four-foot sidewalks. Scheme 2B incorporates eight-foot travel lanes and five-foot sidewalks. Both design options provide for improved snow storage when compared with Scheme 1. Scheme 2B provides the optimal design option for pedestrians, though residents are unlikely to be supportive of the option. Narrowing the roadway to only 16 feet may also restrict the ability of buses or trucks to access the corridor. Turning movements for these vehicles should be assessed at all intersections before moving forward with this design option.

Schemes 3A & 3B

Both of these design schemes include two nine-foot travel lanes, one eight-foot parking lane, and one four-foot sidewalk with a three-foot terrace. Scheme 3A places the sidewalk opposite vehicular parking. This would improve visibility for pedestrians when compared to Scheme 3B. Scheme 3B places the sidewalk on the same side of the roadway as the parking lane. This may decrease visibility, but the parking lane would also act as a buffer to separate pedestrians from moving vehicles. If a high number of right turns are anticipated, placing the parking on the opposite side of the street would be recommended to increase visibility for pedestrians. If traffic volumes are anticipated to be high (but low turning movements) during periods when students walk to school, placing the sidewalk on the same side as the parking lane may be beneficial.

Scheme 4

This potential design solution again removes parking from the corridor. Parking would still be available on adjacent streets. Eight-foot vehicular lanes and four-and-a-half-foot bicycle lanes would be included, with a three-foot terrace and four-foot sidewalk. The terrace area provides room for snow storage and the four-foot sidewalk meets minimum ADA requirements. Bicycle lanes are typically recommended at five-foot width, but four feet may be acceptable in specific situations. Given the low volume and vehicular speed of the roadway, four-and-a-half-foot bicycle lanes are likely to provide adequate user comfort and safety. One potential drawback of this design solution is ensuring that vehicles do not park in the bicycle lane, particularly given the frequency of vehicles parking in the current striped "pedestrian zone" on Greenway Road.

RECOMMENDATIONS TO OBTAIN SRTS FUNDING

The SRTS program is funded through the Wisconsin Department of Transportation (WisDOT) Transportation Alternatives Program (TAP). TAP was created in 2012 by the Moving Ahead for Progress in the 21st Century Act (MAP-21). Though the program is overseen by WisDOT, TAP is a Federal Highway Administration (FHWA) program utilizing federal funding. As part of a federal program, all eligible projects must be in compliance with WisDOT design standards and the Americans with Disabilities Act (ADA).

Project sponsors are responsible for paying 20 percent of approved project costs and federal funding will pay 80 percent of approved project costs. Each award cycle is four years long, beginning in alternate years. Program specifics may change from cycle to cycle; information included in this section is based on the 2016-2020 award cycle. In each of 2016 and 2017, the total statewide TAP budget was $7.05 million per year. This funding is allocated approximately evenly between Transportation Management Areas (TMAs) and smaller urban or rural communities. No specific program requirements designate funding allocations to different categories, such as SRTS.

For a project within Monona to be eligible for TAP funding, it must be submitted to and ranked by MATPB. MATPB will decide which projects to submit to TAP, and final decisions regarding TAP funding allocations for the

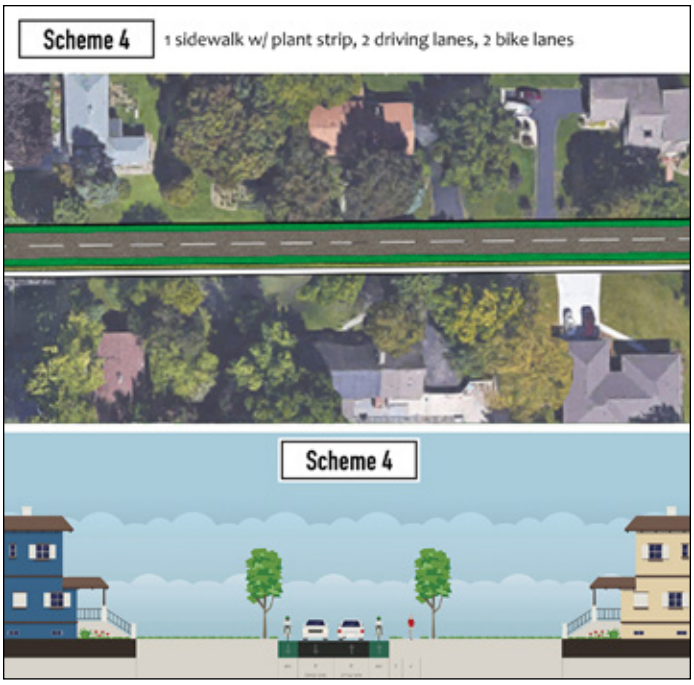


Figure 13: Scheme 4 for the reconstruction of Greenway Road.

greater Madison area are determined by MATPB. For example, if MATPB submits more requests for funding than is received, they retain the ability to choose which specific projects to fund. It is possible for the City to submit a project separately from MATPB, but they will still be considered part of a TMA when funds are allocated and would therefore be less likely to receive funding based on the aforementioned funding allocations for projects within or outside TMAs. Infrastructure improvement projects eligible for TAP funding must have a minimum cost of $300,000, including design costs.

PLAN FOR CONTINUING DATA COLLECTION

Bike Count

The City should conduct bike counts annually in order to track use of bicycle facilities and report on goals in the Comprehensive and Sustainability Plans. The time, cost, labor, planning, equipment, and locations are important to establish. NBPDP has recommendations for making this process streamlined and sustainable in both planning and execution.[23]

23 National Bicycle and Pedestrian Documentation Project.

First, the City should identify a count manager as a point person for the bike count. This person could work for the City or serve on a committee or an advisory council. The manager will need about eight hours of initial planning time and one hour for every hour of count time moving forward. The materials needed for the bike count include count forms, instructions, and, if desired, a background data sheet. All of these can be found at the NBPDB website.[24]

Bike counts could be conducted at the same intersections observed this year, at additional intersections, or at different intersections. It is important to determine appropriate intersections early in the process, to obtain consistent data and track changes over time. Bicycle corridors, areas near popular destinations, locations where counts have historically been conducted, and locations of safety concern are good candidates for future bike counts. The intersection of paths and roads, high-trafficked roads, downtown areas, and transit stops are important locations as well. The instructions sheet provided by the NBPDP includes details on selecting locations and how to conduct the counts safely. For example, counters should be comfortable and safe, and not obstructing pedestrians or cyclists.

When conducting counts in Monona, each location requires one counter. Counters can be agency employees, temporary employees, students, volunteers, or from a professional data collection firm. The City may need to secure insurance coverage for counters, or have them sign waivers. Counters will need to be trained how to complete forms and interpret field conditions. All counters should be provided with reflective vests, a clipboard, pens, count sheets, and business cards of the lead contact.

After the count is finished, the forms should be collected by the count manager, who will check for completion and legibility. The count information can be aggregated to compute monthly and annual counts for each intersection, and an overall average annual count for Monona. Directional information can also be used to assess highly-trafficked routes in Monona.

24 "Program Forms and Materials," National Bicycle and Pedestrian Documentation Project, accessed on December 6, 2016, http://bikepeddocumentation.org/index.php/downloads.

The Sails welcome people to Monona.

Safe Routes to School Audit

Walk audits are a useful way to monitor critical corridors over time. It is recommended that an audit be performed every five years to ensure that no corridors experience issues and to monitor roadway improvements over time.

Creating a SRTS maintenance team would be an efficient way for the City to accomplish the goal of updating the audit results. Volunteers, such as parents from the schools, members of a local bicycle advocacy or recreational group, or even high school students, would easily be able to complete audits with minimal training. It is recommended that the City hold a training session for volunteers prior to audit completion to ensure that all volunteers complete the audits in similar ways. Training sessions could be completed in less than one hour, and audits would take approximately one to one-and-a-half

hours, depending on the number of corridors each team is assigned.

To ensure consistency over time and optimal time management, providing past audits of the same corridor is recommended as many criteria such as land use or location of lighting is unlikely to change from one audit period to the next, unless a major infrastructure project has occurred within the corridor. This will provide greater ease for auditors and ensure meaningful comparisons between consecutive audit periods.

Parent/Guardian Survey

The City should periodically re-issue the SRTS parent/guardian survey conducted by the research team. If the City has access to Qualtrics software, the survey can be shared directly with an administrator. In this case, Qualtrics can automatically create analytics and reports each time the survey is conducted. If the City does not have access to such software, the research team can share it in another form.

It is recommended that Monona conduct the survey every two years, or after major route constructions or improvements have been made. The City may want to consider conducting more targeted surveys as well, to measure the impact of specific improvements. For instance, the City may want to conduct a survey specifically about the crossing of Monona Drive at Lofty if signage is added at that location. All results should be stored to compare attitudes, beliefs, and transportation habits over time.

Crash Data

One form of evaluation that was not considered in this report is crash and vehicle speed data. The Planning Department should work with the Police Department to obtain baseline estimates of vehicle speeds along routes to school, as well as crash data throughout Monona. By periodically collecting vehicle speed data, the City can determine whether roadway improvements are reducing speeds or not. By analyzing crash data, the City can pinpoint areas of safety concern to bicycles and pedestrians and compare objective and perceived safety concerns.

BIBLIOGRAPHY

City of Monona Community Development Authority. North Monona Drive Redevelopment Plan: Redevelopment Area #7. Adopted February 21, 2011. http://mymonona.com/DocumentCenter/Home/View/4734.

"Evaluation: Parent Survey." National Center for Safe Routes to School. Accessed December 6, 2016. http://www.saferoutesinfo.org/program-tools/evaluation-parent-survey.

"History of SRTS." National Center for Safe Routes to School. Accessed December 6, 2016. http://www.saferoutesinfo.org/about-us/history-srts.

Immaculate Heart of Mary School. Family Handbook 4K-8th Grade: 2015-2016. Revised August 2015. http://www.ihmcatholicschool.org/wp-content/uploads/2015/08/2015-2016Handbook.compressed.pdf.

Madison Area Transportation Planning Board. Bicycle Transportation Plan for the Madison Metropolitan Area and Dane County. 2015. http://www.madisonareampo.org/planning/documents/Final_BTP_2015_web.pdf.

Madison Metropolitan School District. Wellness Policy on Physical Activity and Nutrition. Revised January 28, 2013. https://board.madison.k12.wi.us/files/boe/Policy%204610%20approved%20Jan%2028%202013_0.pdf.

"MMSD Policies and Procedures: 4233." Madison Metropolitan School District. Published July 26, 2013. https://board.madison.k12.wi.us/policies/4233.

Monona Grove School District. Board Policy 458: Monona Grove School District Wellness Policy.
Approved April 18, 2007.
http://www.mononagrove.org/cms_files/resources/Wellness%20Policy1.pdf.

National Bike and Pedestrian Documentation Project. Accessed December 6, 2016. http://bikepeddocumentation.org/.

"Program Forms and Materials." National Bicycle and Pedestrian Documentation Project. Accessed December 6, 2016. http://bikepeddocumentation.org/index.php/downloads.

"Quick Facts and Stats." National Center for Safe Routes to School. Accessed December 6, 2016. http://saferoutespartnership.org/healthy-communities/101/facts.

Rossing, Jerrud and Krista Ballweg. "Nelson Welcome Letter." Monona Grove School District and Nelson Bus Service, Inc. Published June 1, 2016. http://www.mononagrove.org/cms_files/resources/nelson%20welcome%20letter%202016-2017%20-%20MG.pdf.

"SRTS Guide." National Center for Safe Routes to School. Accessed December 16, 2016. http://guide.saferoutesinfo.org/.

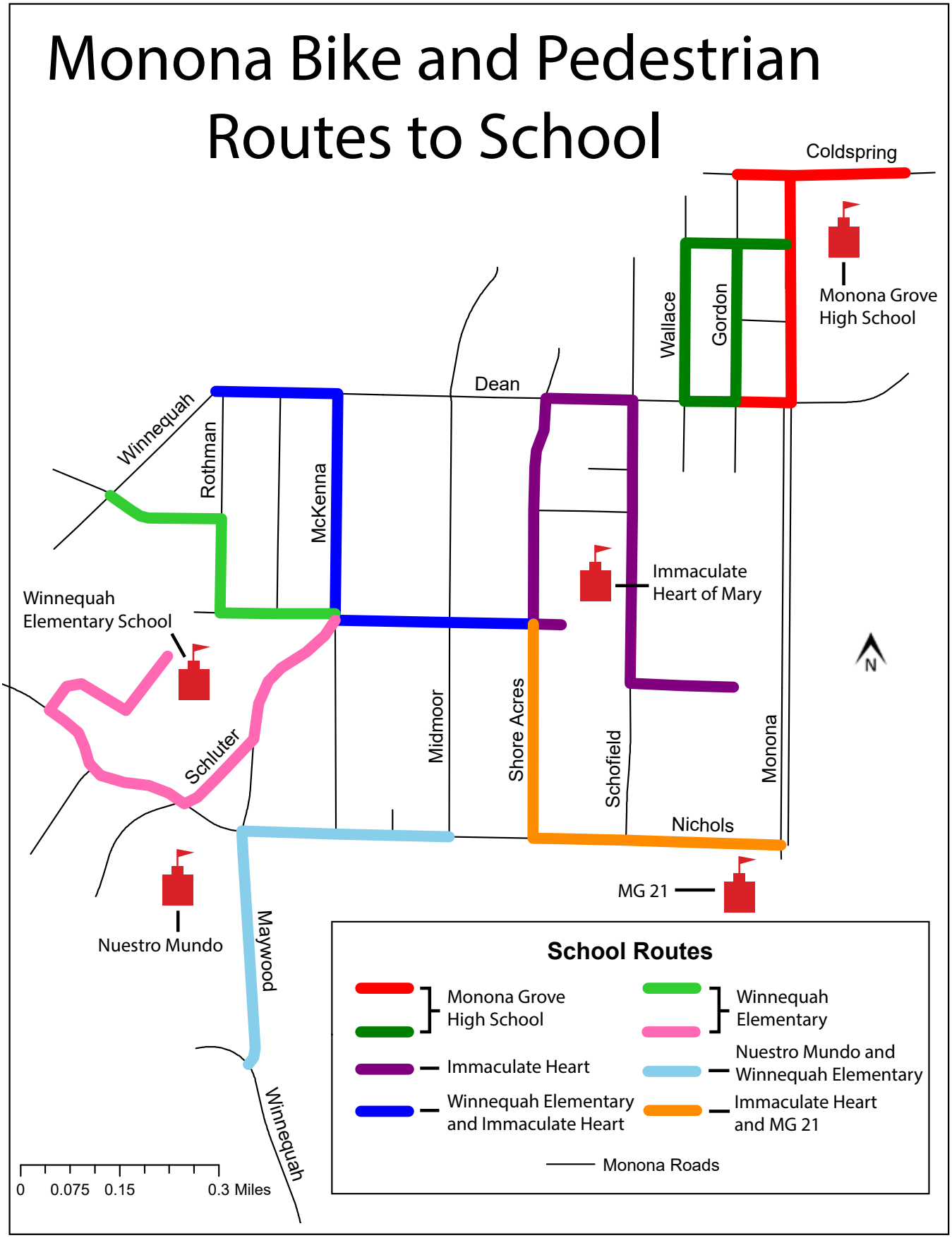
"Smart Growth in Your Town." New Jersey Future. Accessed December 6, 2016. http://www.njfuture.org/smart-growth-101/your-town/.

"Transportation to Public Schools: Unusually Hazardous Transportation." Wisconsin Department of Public Instruction. Accessed December 6, 2016. http://dpi.wi.gov/sms/transportation/hazardous-transportation.

"Urban Street Design Guide." National Association of City Transportation Officials. Accessed December 6, 2016. http://nacto.org/publication/urban-street-design-guide/.

Wisconsin Department of Transportation, "Wisconsin Safe Routes to School (SRTS) Program," 2014, accessed November 20, 2016, http://wisconsindot.gov/Documents/doing-bus/local-gov/astnce-pgms/aid/safe-routes/pre-intro.pdf.

APPENDIX A: MONONA BIKE AND PEDESTRIAN ROUTES TO SCHOOL



APPENDIX B: SAFE ROUTES TO SCHOOL AUDIT

Voorhees Transportation Policy Institute
Pedestrian-Friendliness Scorecard

What is pedestrian-friendliness? Pedestrian-friendliness is the cornerstone and key to an urban area's efficient ground transportation. We begin and end every trip as a pedestrian. Walking remains the cheapest form of transport for all people, and the construction of a pedestrian-friendly environment provides the most affordable transportation system any community can plan, design, construct and maintain. Assessing the pedestrian-friendliness of our communities is the first step towards establishing more liveable communities.

About this scorecard: This scorecard is as much a conceptual model as it is a practical tool. It should be viewed as a way to help citizens and local officials evaluate whether or not a municipality is pedestrian friendly, and whether the right tools are in place to make it so. This scorecard is designed to help us answer the questions "How walkable are our communities?" and "How can we make our communities safer and more enjoyable places to walk?" Walkable communities have a number of benefits, including traffic and congestion reduction, and decreasing demand for parking, especially in local commercial and train station areas.

General pedestrian-friendly criteria:
-- Facility design and infrastructure enhances the pedestrian environment
-- Transitions and continuity of the pedestrian environment encourage walking
-- Traffic and street crossing design prioritizes pedestrian's needs
-- Streetscape is designed at a human scale and is visually interesting
-- Land uses are pedestrian-oriented
-- Safety rules prioritize the pedestrian and are enforced
-- Design of lighting and landscaping considers pedestrian comfort and safety
-- Pedestrian amenities exist and are appropriately located
-- Pedestrian paths maximize level walking surfaces
-- Seasonal issues do not compromise pedestrian accessibility or safety

Directions: The scorecard is divided into ten sections, one for each pedestrian-friendly criterion (see above). Read through the sections and identify the best answer for each measurement listed. To calculate the score, enter the points for a given answer into the score column. Add up the scores for each measurement and write that number (subtotal) in the space provided. If using the electronic scorecard, simply place an "x" in the appropriate answer column and the scorecard will tally your responses automatically.

To use: Scorecard will tally your responses automatically. Simply place an "X" in the appropriate answer column.

I. Infrastructure / Maintenance

Some aspects of transportation facility design can enhance the pedestrian environment while others can act as deterrents to walking and create obstacles to travel. Particular attention should be given to the construction and maintenance of sidewalks and curb cuts, and to walkway widths.

I. Infrastructure / Maintenance		Points	Answer	Score
There are sidewalks on both sides of the street	Plenty of sidewalks on both sides of street	4		0
	Adequate sidewalks on both sides of street	3		0
	Sidewalks on one side of street only	2		0
	Few sidewalks exist	1		0
	Very few or no sidewalks exist	0		0
Sidewalks are wide enough in all locations *(minimum clear width*	Sidewalks are consistently wide enough	2		0
	Sidewalks vary in adequate width	1		0
	Sidewalks are too narrow	0		0
Sidewalks are in adequate repair	Sidewalks are consistently in good shape	3		0
	Sidewalk repair is adequate	2		0
	Sidewalks need some repair	1		0
	Sidewalks present tripping hazards	0		0
There are curbs	Curbs are appropriately located	2		0
	Curbs are in most locations	1		0
	No curbs exist	0		0
Curbs are designed for easy pedestrian access	Curbs are pedestrian accessible	1		0
	Curbs are not pedestrian accessible	0		0
Curbs are in adequate repair	Curbs are consistently in good shape	2		0
	Curb repair is adequate	1		0
	Curbs are in poor repair	0		0
The pavement is well-maintained	Pavement is consistently in good shape	3		0
	Pavement maintenance is adequate	2		0
	Pavement needs some repair	1		0
	Pavement is a hazard	0		0
			Subtotal	0

II. Continuity

The ease of transitions within the pedestrian realm is a key element in encouraging people in your community to walk. The provision of pedestrian-oriented pavement markings and signalization affords safe points of interaction with motorized traffic. Attention to grade shifts at driveways and building entrances make for a more seamless trip.

II. Continuity		Points	Answer	Score
Pedestrian walkways lead to and from adjacent areas allowing for	Walkways prioritize pedestrian access	4		0
	Walkways link most destination points	3		0
	Continuity is adequate for pedestrian access	2		0
	Continuity is poor for pedestrian access	1		0
	Pedestrian walkways go nowhere	0		0
Signals are conveniently timed *(Signal cycle lengths should be*	Pedestrians do not have to wait for signals	3		0
	Signals change quickly for pedestrians	2		0
	Signals respond slowly for pedestrians	1		0
	Vehicle movement is prioritized	0		0
There are minimal curb cuts *(frequent curb cuts for driveways*	Few curb cuts exist	2		0
	Some curb cuts exist	1		0
	Curb cuts exist in abundance	0		0
Pedestrian crossings are marked *(Marked crosswalks increase*	Crossings are consistently marked	3		0
	Crossings are marked at most intersections	2		0
	Crossings are marked at major intersections	1		0
	Crossings are rarely marked	0		0
Curb ramps are provided at all corners *(The ADA requires two*	Curb ramps exist at all corners	2		0
	Presence of curb ramps is adequate	1		0
	Few or no curb ramps exist	0		0
			Subtotal	0

III. Traffic and Street Crossing

Well-designed traffic and street crossings can enhance the pedestrian realm and encourage walking. Street design should consider street widths, traffic speeds, and pedestrian's lines of sight.

III. Traffic and street crossing		Points	Answer	Score
Streets are easy to cross *(Corners should be free of obstructions,*	Streets are consistently easy to cross	4		0
	Street crossing is relatively easy	3		0
	Street crossing is adequate	2		0
	Streets are difficult to cross	1		0
	Streets are dangerous to cross	0		0
Traffic speeds are compatible with pedestrians *(Narrower travel*	Speeds prioritize pedestrian movement	3		0
	Speeds are compatible with pedestrians	2		0
	Traffic speeds intimidate pedestrians	1		0
	Speeds compromise pedestrian safety	0		0
Traffic volumes do not make walking unpleasant	Traffic volumes are low	2		0
	Traffic volumes do not intimidate pedestrians	1		0
	Traffic volumes are unsafe for pedestrians	0		0
Parked cars do not block pedestrian's views	Parked cars do not block views	2		0
	Parked cars occasionally block views	1		0
	Parked cars compromise pedestrian safety	0		0
Trees, plants and signage does not block pedestrian's views	Foliage or signage do not block views	2		0
	Foliage or signage do not pose problems	1		0
	Foliage or signage compromise safety	0		0
			Subtotal	0

IV. Streetscape

Streetscape design includes the layout of the streets, the sense of focus and enclosure, proportions and dimensions, and responds to natural features. Awnings, benches, drinking fountains, planters, trees and other sidewalk furniture and amenities are integral elements in making a community more visually interesting and more accommodating for the pedestrian.

IV. Streetscape		Points	Answer	Score
There are trees, flowers, etc. along the route	Foliage significantly enhances the route	2		0
	Some trees and flowers are along route	1		0
	Few or no trees or flowers exist along route	0		0
Trees or awnings provide sun protection	Pedestrian has plenty of protection from sun	2		0
	Pedestrian has some protection from sun	1		0
	Limited or no protection from sun	0		0
The sidewalks are visually interesting *(Building facades, including*	Sidewalks have visual appeal	2		0
	Sidewalks have adequate visual interest	1		0
	Sidewalks are uninteresting	0		0
The walking environment is litter and graffiti free *(Trashcans*	The environment is very clean	2		0
	The environment is adequately clean	1		0
	The environment is unclean	0		0
The walking environment is pleasant	The environment encourages walking	3		0
	The environment is enjoyable	2		0
	The environment is adequate	1		0
	The environment deters pedestrians	0		0
			Subtotal	0

V. Land Use

Land uses that are pedestrian-oriented incorporate a careful consideration for the access needs of the person traveling by foot, and therefore encourage walking. Buffers between pedestrian and auto-oriented land uses offer many advantages to the comfort and safety of pedestrians.

V. Land Use		Points	Answer	Score
There are pedestrian-oriented land uses *(Land use and*	The environment is pedestrian-oriented	3		0
	Land uses encourage pedestrianism	2		0
	Pedestrian-orientation is adequate	1		0
	No pedestrian uses exist	0		0
Retail and service uses are located on lower levels of buildings	Retail & services are on the ground level	2		0
	Some ground level services exist	1		0
	Ground level access to services is difficult	0		0
Commercial development is concentrated	Commercial uses consistently concentrated	2		0
	Commercial uses adequately concentrated	1		0
	Commercial uses compromise environment	0		0
Auto-oriented land uses are separated from those for pedestrians	Pedestrian and auto uses happily coexist	4		0
	Pedestrian access is prioritized	3		0
	Auto-orientation does not dominate	2		0
	Environment favors auto-orientation	1		0
	Autos are obstacle or threat to pedestrians	0		0
Pedestrian areas are buffered from auto-related hazards	Pedestrians areas buffered from auto hazards	2		0
	Auto hazards encroach on pedestrian realm	1		0
	Autos compromise pedestrian realm	0		0
			Subtotal	0

VI. Safety Rules

In a pedestrian-friendly environment motorists can anticipate and respond to pedestrian movements, and pedestrians can always identify safe spaces where motorists must yield.

VI. Safety Rules		Points	Answer	Score
At crosswalks pedestrians can see and be seen by drivers	Pedestrian visibility is prioritized	4		0
	Pedestrians feel safe at crosswalks	3		0
	Pedestrian visibility is adequate	2		0
	Pedestrian visibility at crosswalks is poor	1		0
	Pedestrians feel vulnerable at crosswalks	0		0
Bollards are used to protect pedestrians on corners or other areas	Bollards are consistently used	2		0
	Bollards are used at major intersections	1		0
	Pedestrians feel vulnerable at waiting areas	0		0
Where there are no sidewalks, pedestrians can walk on shoulders	Yes	1		0
	No	0		0
			Subtotal	0

VII. Security / Lighting

Creating a walkable environment can enhance the safety and security of the community. Strategically-placed lighting can substantially enhance pedestrian safety. Careful consideration should be given to landscaping that affords ease of access and good visibility.

VII. Security / Lighting		Points	Answer	Score
Lighting is adequate on pedestrian routes *(Pedestrian light*	Lighting is frequent and human-scale	3		0
	Lighting is adequate	2		0
	Lighting is infrequent	1		0
	Pedestrian routes are poorly lit	0		0
Lighting is adequate on street corners *(Particular attention should*	Street corners are well-lit	2		0
	Lighting exists at major intersections	1		0
	Few street corners are adequately lit	0		0
Pay phones or police call boxes are located along pedestrian	Yes	1		0
	No	0		0
The route appears secure (no vacant buildings, good visibility,	The route maximizes pedestrian security	3		0
	Route security is adequate	2		0
	Route security is poor	1		0
	The route feels unsafe	0		0
Threatening behavior does not dominate route	No antisocial activity exists	2		0
	Antisocial activity is not a significant problem	1		0
	Antisocial activity dominates the route	0		0
			Subtotal	0

VIII. Pedestrian Amenities

Pedestrian facilities should be designed to provide for pedestrian flows and pedestrians waiting to make their desired street crossing. Ideally, parking spaces, poles, mail boxes, bus stop shelters, planters, trees, and other sidewalk furniture and amenities will not be located near crosswalks where they may obscure pedestrians and decrease pedestrian waiting and queuing areas.

VIII. Pedestrian Amenities		Points	Answer	Score
Vicinity maps are displayed along the route	Yes	1		0
	No	0		0
Signage is clear for transit station, bus stops and destination	Signage clearly marks transit locations	2		0
	Some transit signage exists	1		0
	No transit signage exists	0		0
There are places to sit in sun and shade	Seating is available in both sun and shade	2		0
	Seating exists but is infrequent or random	1		0
	No seating exists	0		0
Public drinking fountains are along the route *(Drinking fountains*	Yes	1		0
	No	0		0
			Subtotal	0

IX. Topography

While the lay of the land is generally out of the control of the municipality, municipalities can take steps to ensure that pedestrian paths maximize level walking surfaces, and that seasonal issues are not allowed to compromise walkability.

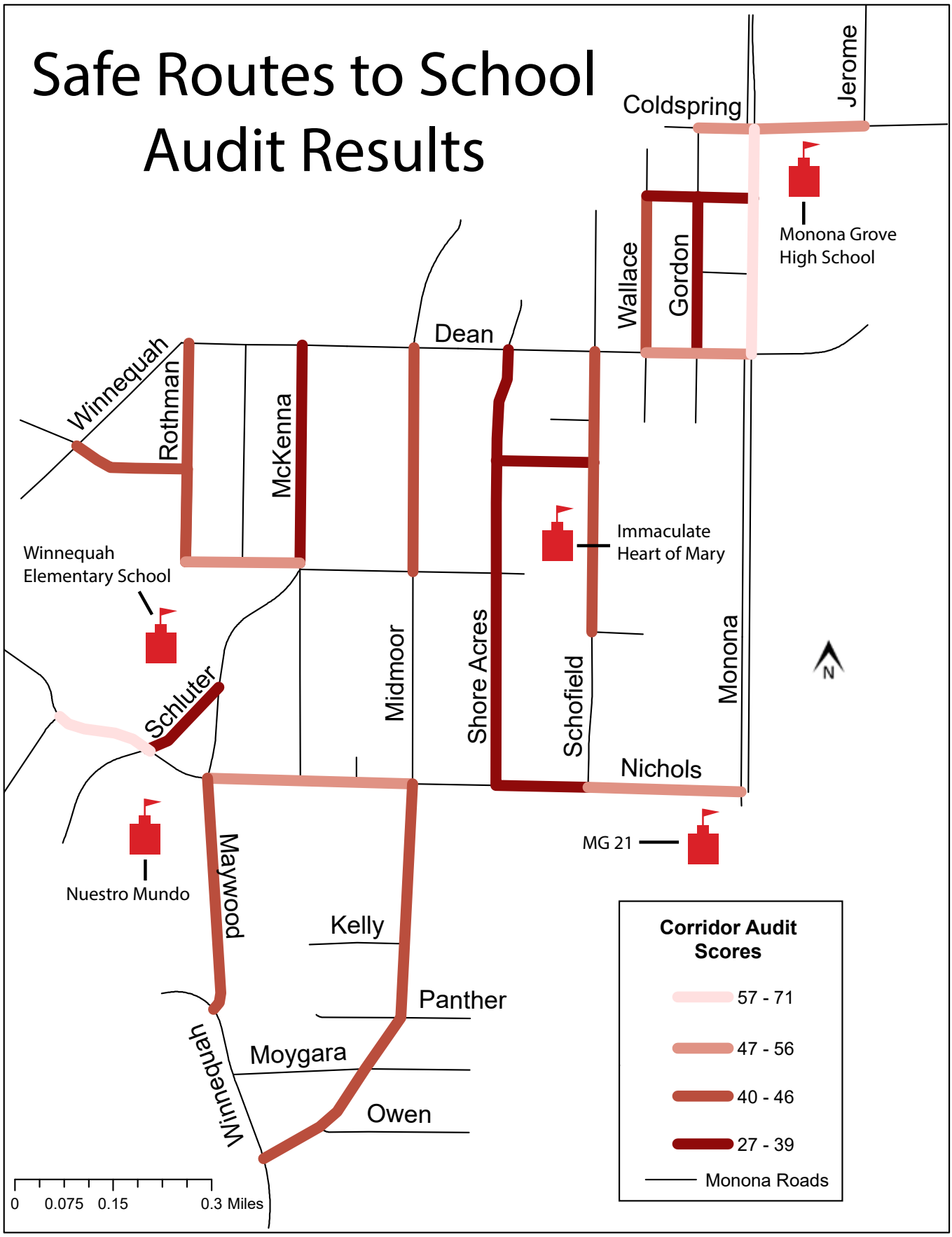
IX. Topography		Points	Answer	Score
Topography is uniform (no hills / slopes)	Yes	1		0
	No	0		0
Topography lends itself to comfortable walking	Yes	1		0
	No	0		0
Topography does not cause problems with pooling water, snow	Yes	1		0
	No	0		0
			Subtotal	0

X. Seasonal Issues

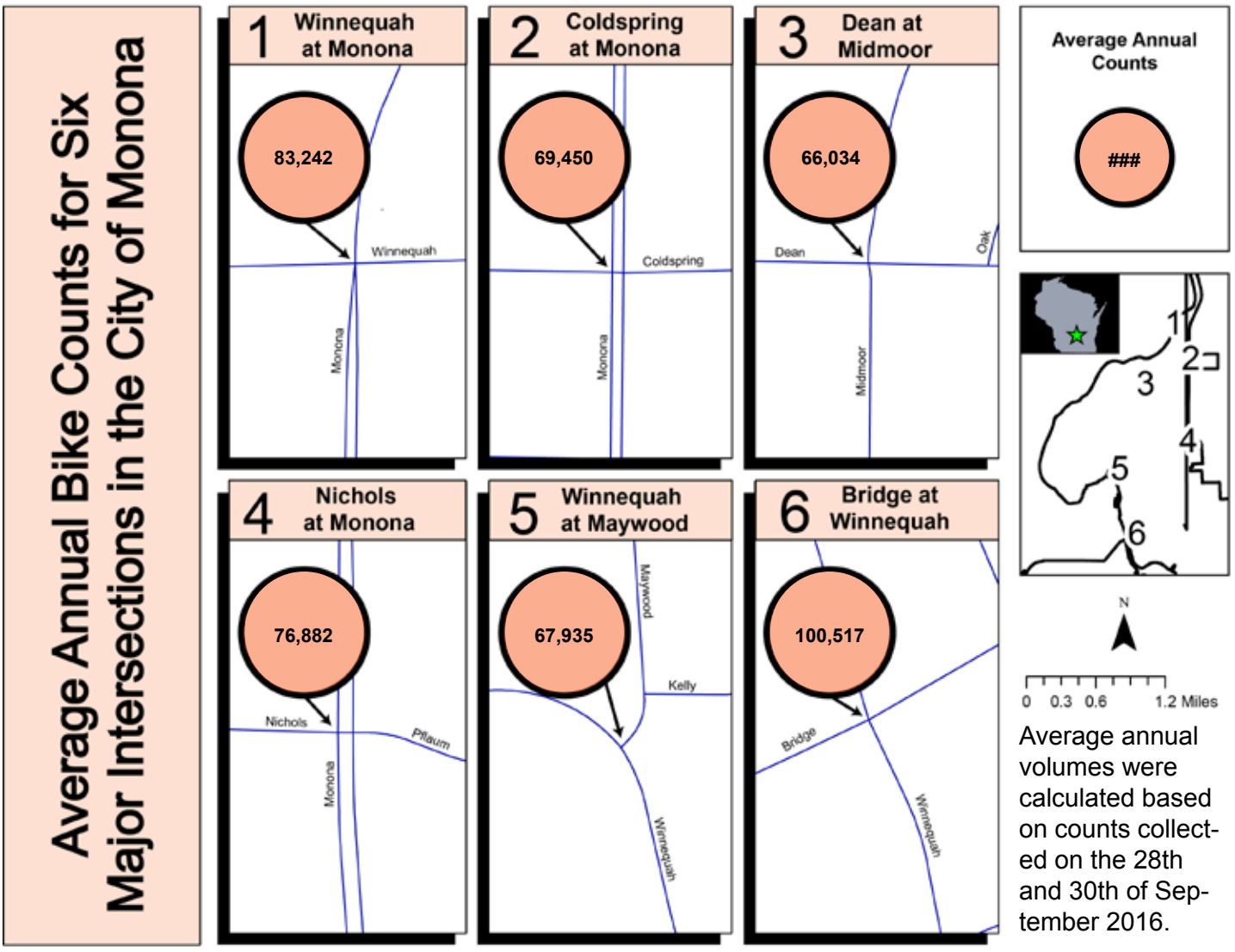
As with topography, municipalities can do little about the weather. Nevertheless, they can take steps to ensure adequate drainage around routes that are known problems, and ensure that residents and municipal employees are aware of their responsibilities regarding snow removal.

X. Seasonal Issues		Points	Answer	Score
There is adequate drainage along the route	Drainage is consistently adequate	2		0
	Drainage exists but is clogged or inadequate	1		0
	No drainage exists along route	0		0
Snow drifts do not create access problems	Snow drifts do not create any problems	2		0
	Snow drifts create some access problems	1		0
	Snow drifts block pedestrian routes	0		0
Snow removal from streets includes clearing of crosswalks and	Yes	1		0
	No	0		0
			Subtotal	0

APPENDIX C: SAFE ROUTES TO SCHOOL AUDIT RESULTS

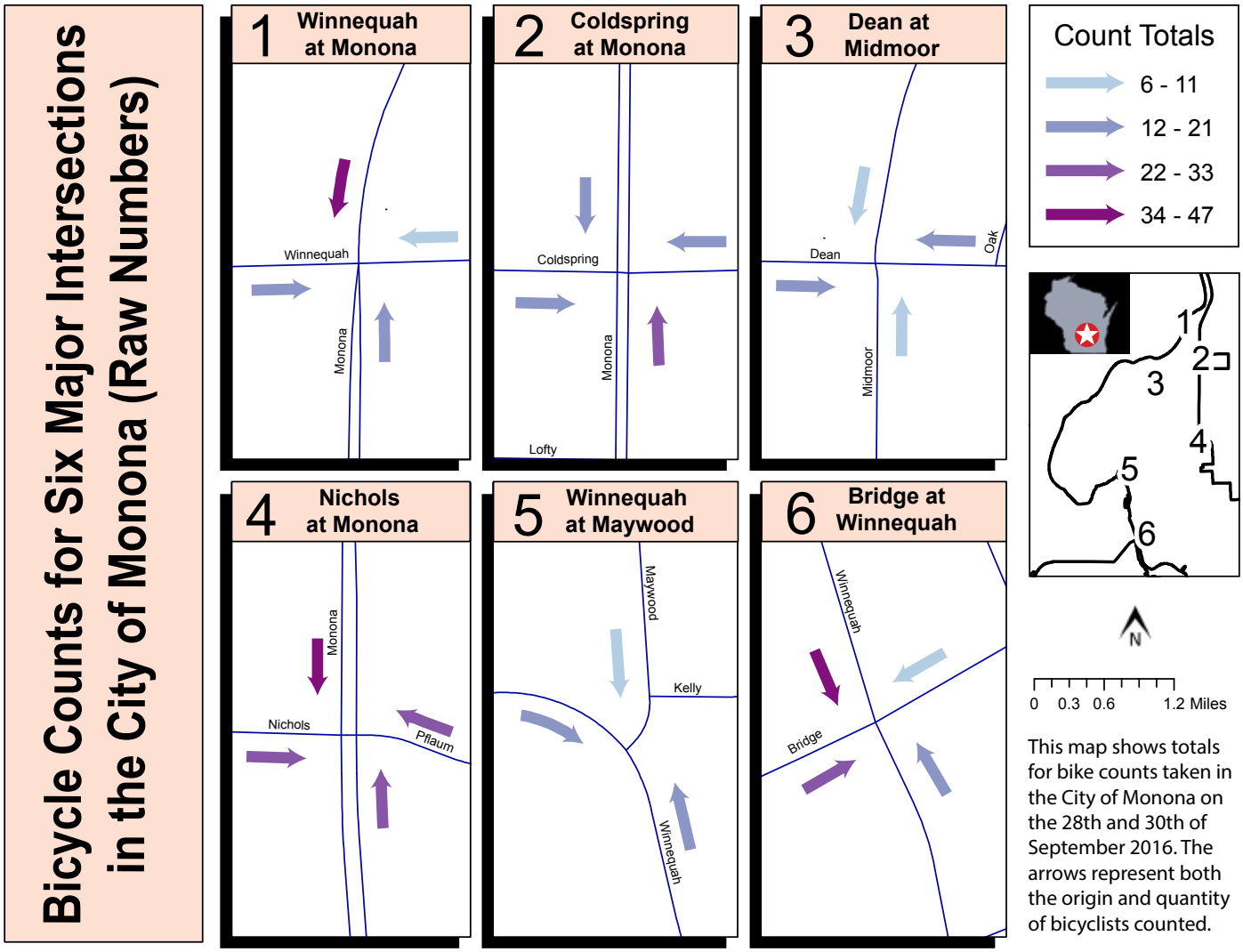


APPENDIX D: BIKE COUNTS



Average annual volumes were calculated based on counts collected on the 28th and 30th of September 2016.

APPENDIX D: BIKE COUNTS



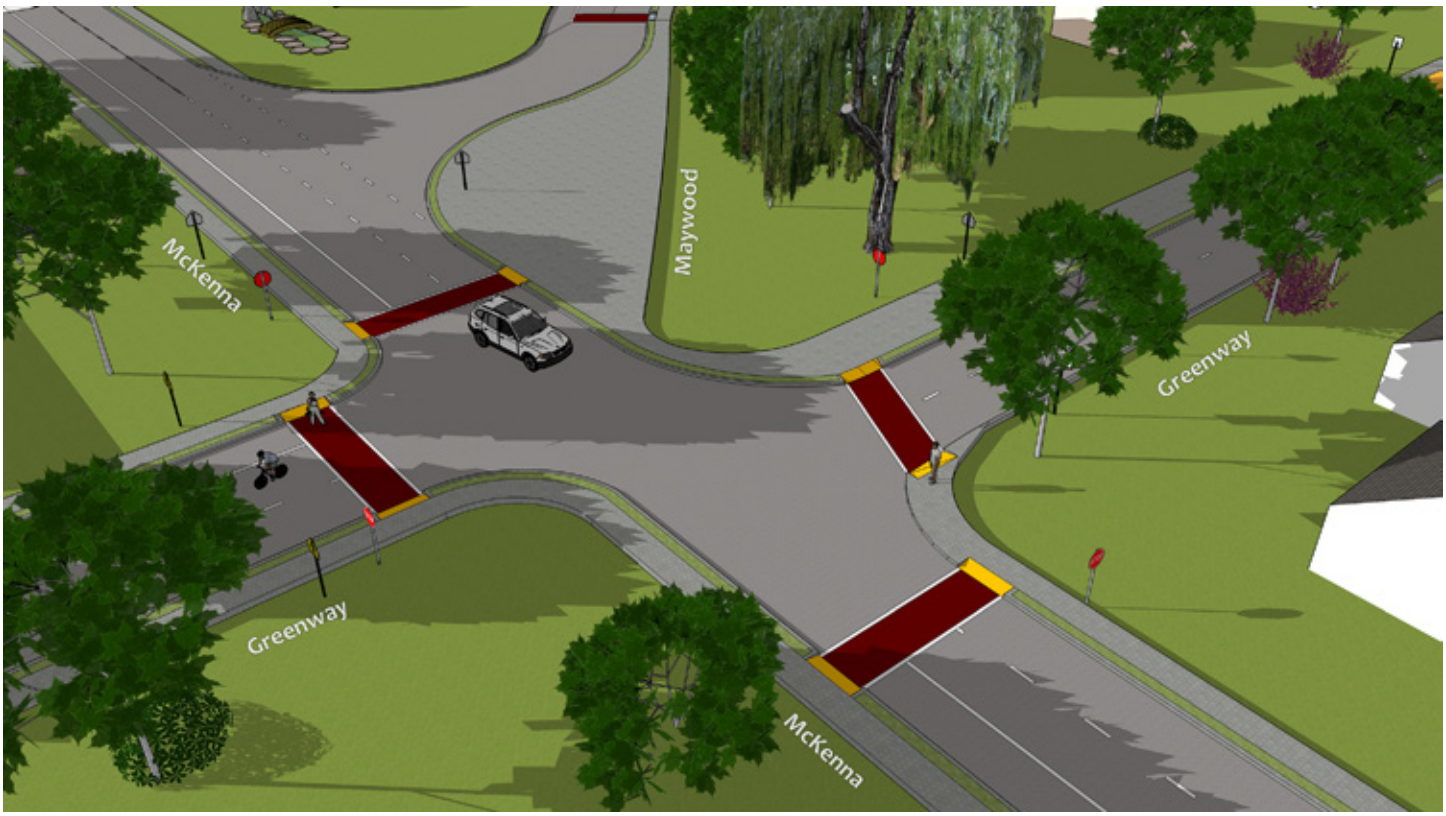
This map shows totals for bike counts taken in the City of Monona on the 28th and 30th of September 2016. The arrows represent both the origin and quantity of bicyclists counted.

APPENDIX E: ROUTE IMPROVEMENT DESIGNS

Current Conditions **Possible Improvement**

Planting strips | Driving lanes / shared lanes | Parking lanes | Bike routes | Sidewalks | Expansion needed

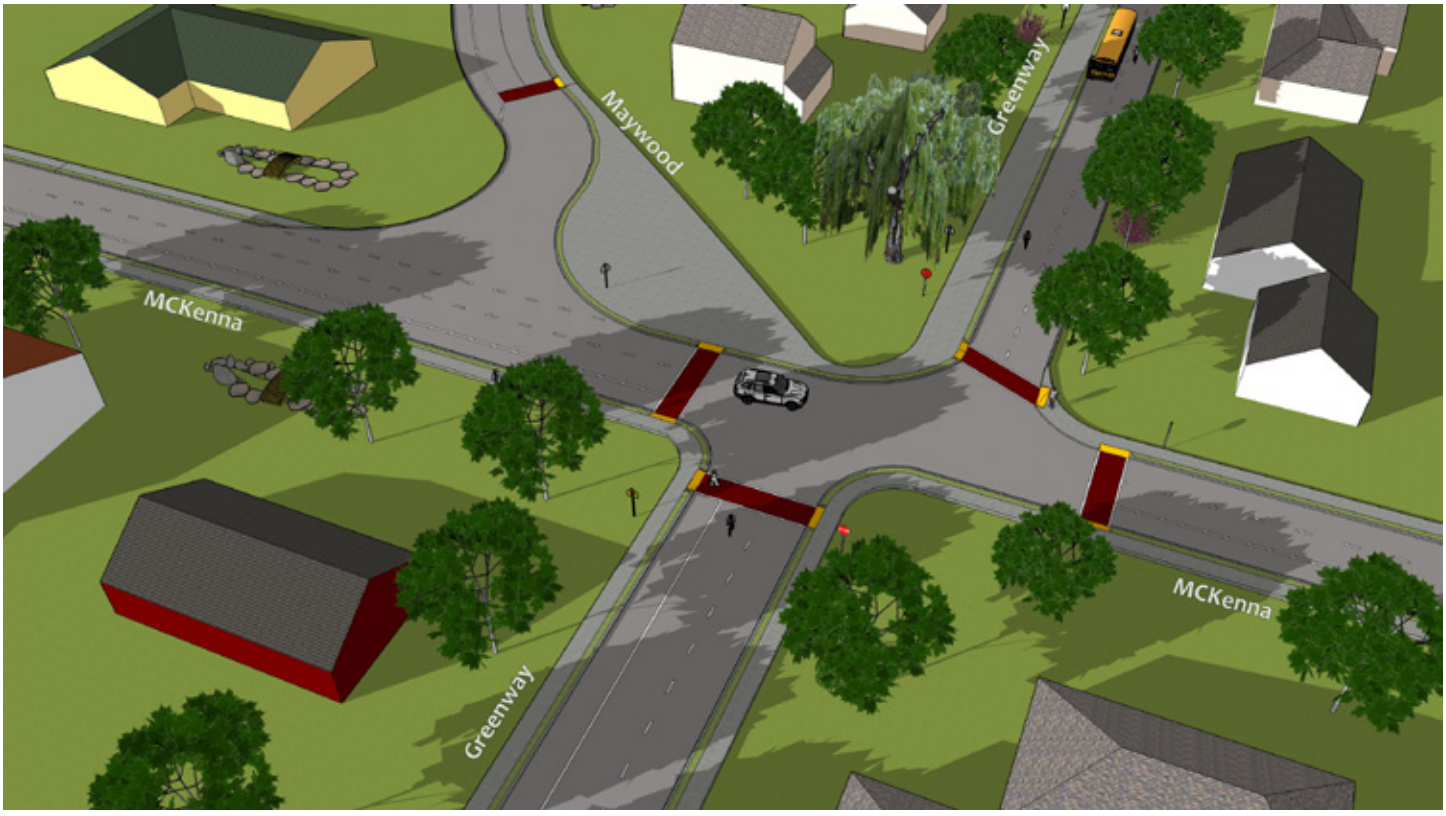
APPENDIX E: ROUTE IMPROVEMENT DESIGNS



APPENDIX E: ROUTE IMPROVEMENT DESIGNS

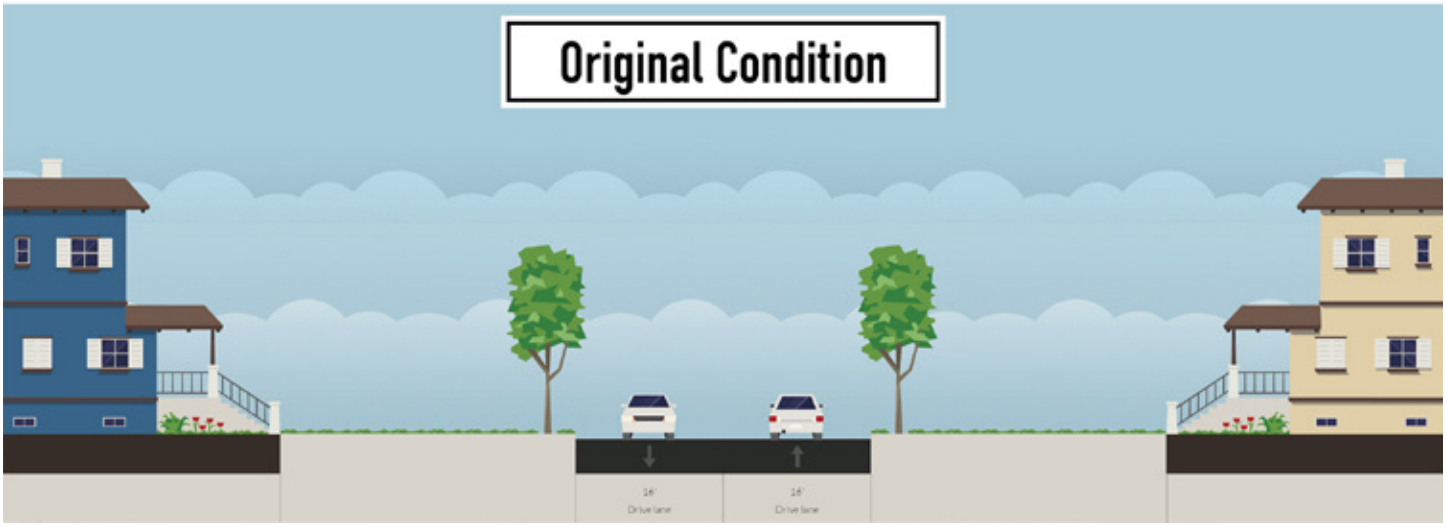
CURRENT CONDITIONS

SUGGESTED IMPROVEMENT



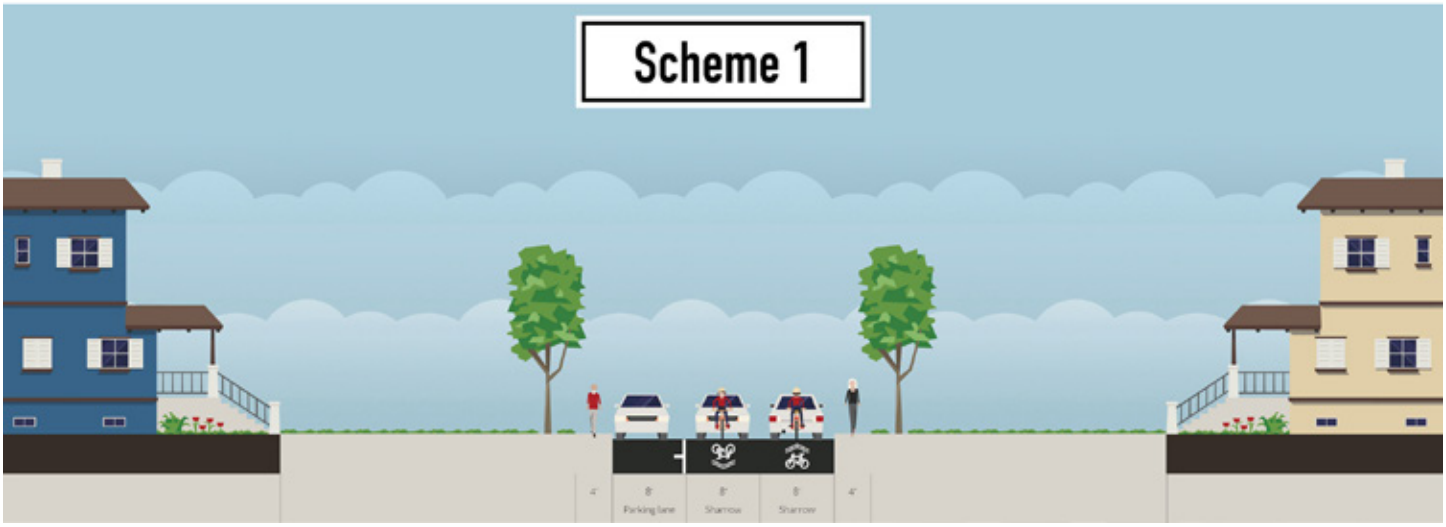
APPENDIX E: ROUTE IMPROVEMENT DESIGNS

Original Condition 2 driving lanes, no separator



APPENDIX E: ROUTE IMPROVEMENT DESIGNS

Scheme 1 2 sidewalks w/o plant strip, 2 shared lanes, 1 parking lane

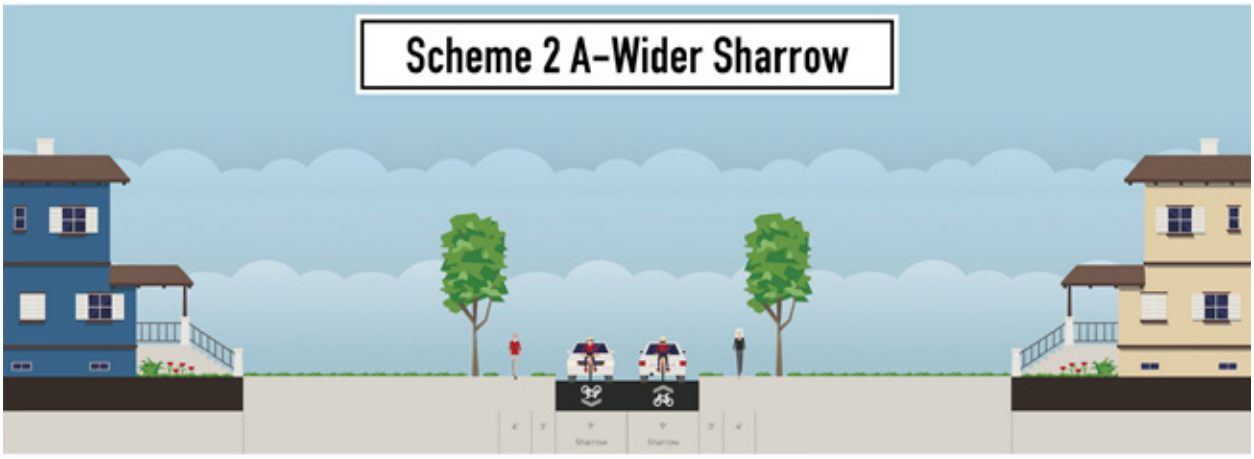


APPENDIX E: ROUTE IMPROVEMENT DESIGNS

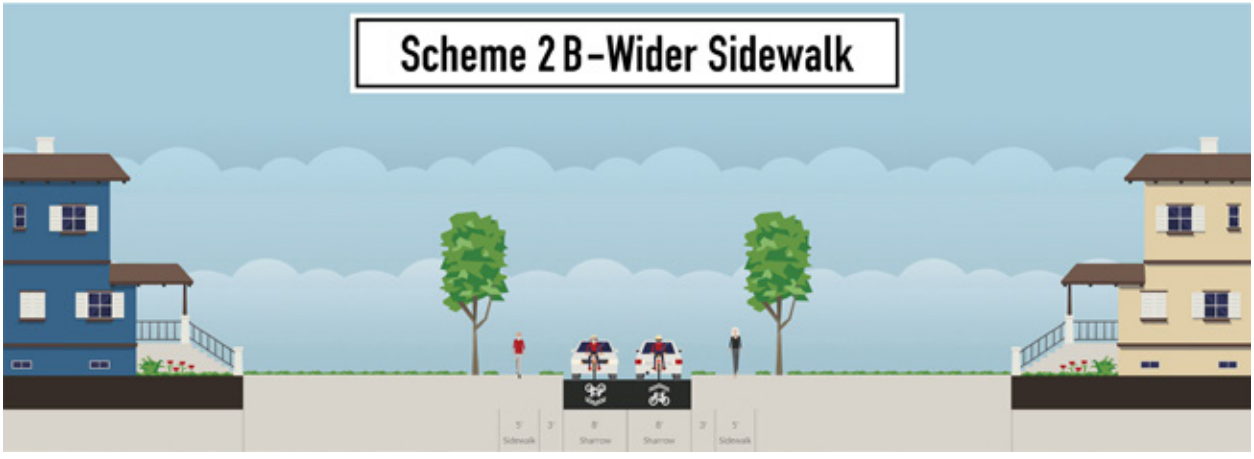
Scheme 2 –Wider Sharrow

2 sidewalks w/ plant strip, 2 shared lanes

Scheme 2 A–Wider Sharrow



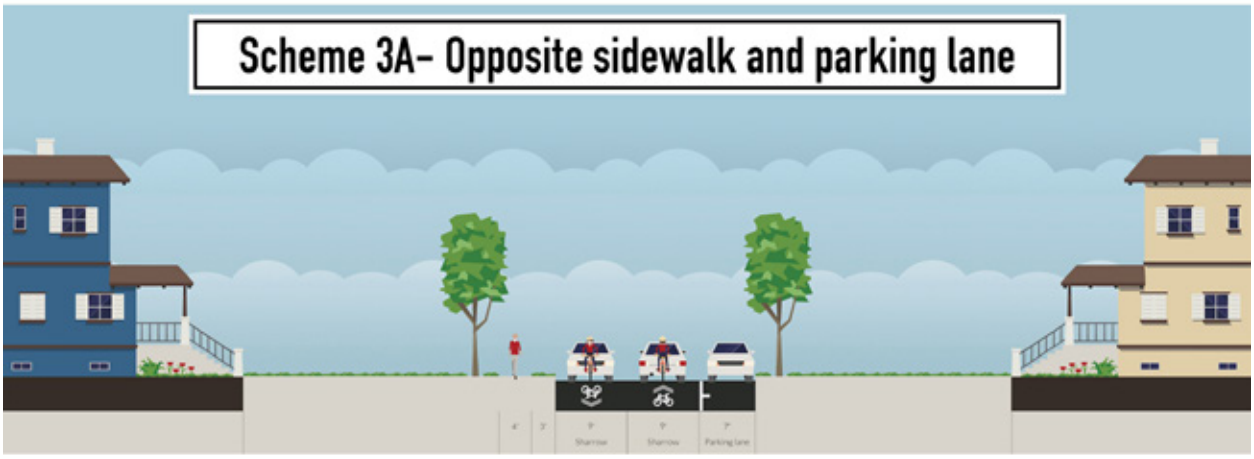
Scheme 2 B–Wider Sidewalk

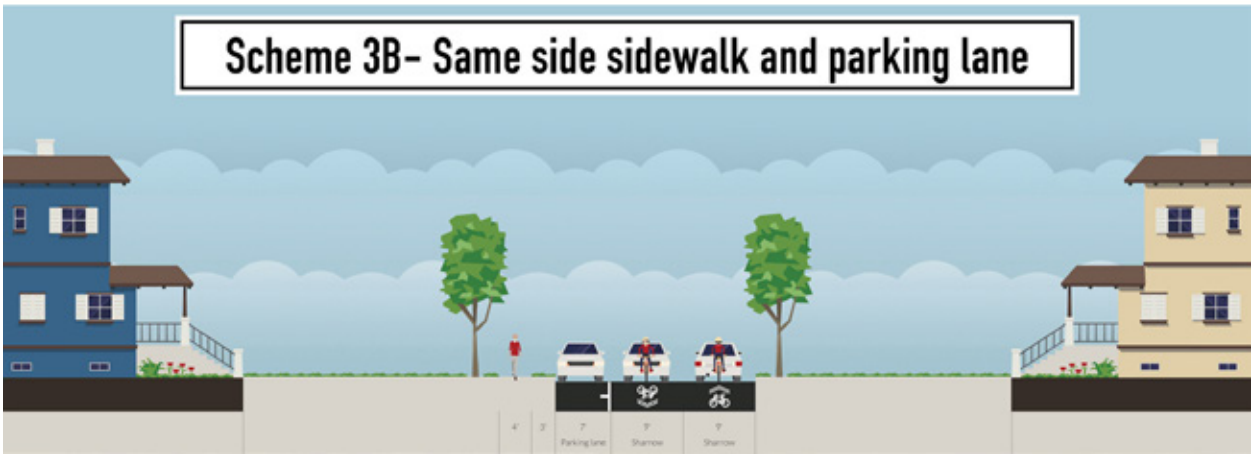


APPENDIX E: ROUTE IMPROVEMENT DESIGNS

Scheme 3 – Opposite sidewalk and parking lane

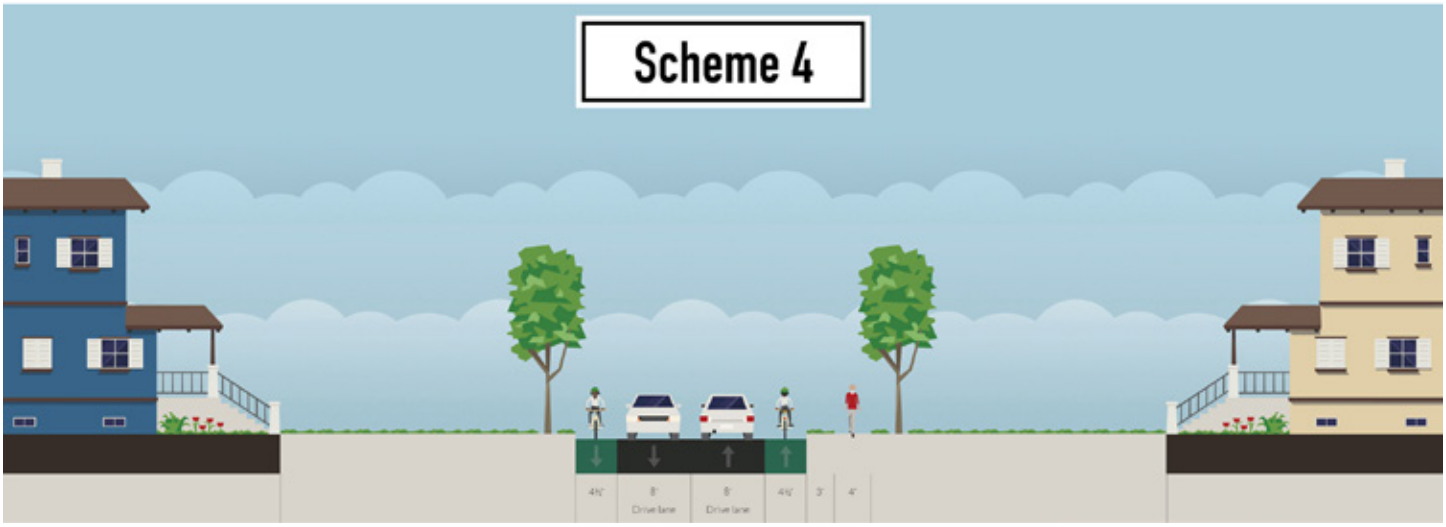
1 sidewalk w/ plant strip, 2 shared lanes, 1 parking lane





APPENDIX E: ROUTE IMPROVEMENT DESIGNS

Scheme 4 1 sidewalk w/ plant strip, 2 driving lanes, 2 bike lanes



APPENDIX F : GOING FOR SILVER PLAN

GOING FOR SILVER

A PLAN FOR THE CITY OF MONONA TO REACH SILVER STATUS AS A BICYCLE FRIENDLY COMMUNITY WITH THE LEAGUE OF AMERICAN BICYCLISTS

AUTHORED BY THE UNIVERSITY OF WISCONSIN-MADISON DEPT. OF URBAN & REGIONAL PLANNING'S BICYCLES, PEDESTRIANS, AND THE CITY CLASS | SPRING 2016

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ACKNOWLEDGEMENTS

Thank you for your support, education, and interest in this project:

Brad Bruun, City of Monona

Professor Dave Cieslewicz

Monona Sustainability Committee

Jason Vargo, UniverCity Alliance

University of Wisconsin-Madison, Department of Urban and Regional Planning

League of American Bicyclists

INTRODUCTION

The City of Monona, Wisconsin, continues to enhance the quality of life for its residents and the connectivity of its transportation system. This includes building upon and improving its bicycle and pedestrian infrastructure. In its Sustainability Plan, adopted in 2015, Monona links an increase in biking to decreased greenhouse gas emissions and carbon footprints, as well as the opportunity to strengthen community bonds. Bicycling for transportation and recreation is also correlated with better physical and mental health outcomes.

In order to enhance its local biking environment and encourage more people to bike, Monona has been working towards the League of American Bicyclists' (LAB) Bicycle Friendly Community silver designation. The LAB was founded as the League of American Wheelmen in 1880 and has been striving for better bicycling conditions ever since. The LAB's Bicycle Friendly Community guidelines combine the knowledge of engineers, government officials, and bicycle advocates from across the country to serve as a framework for communities to improve their local bicycling environment. Each year, the LAB reviews applications for the designation and provides personalized feedback about how each community can get more bicyclists on the road.

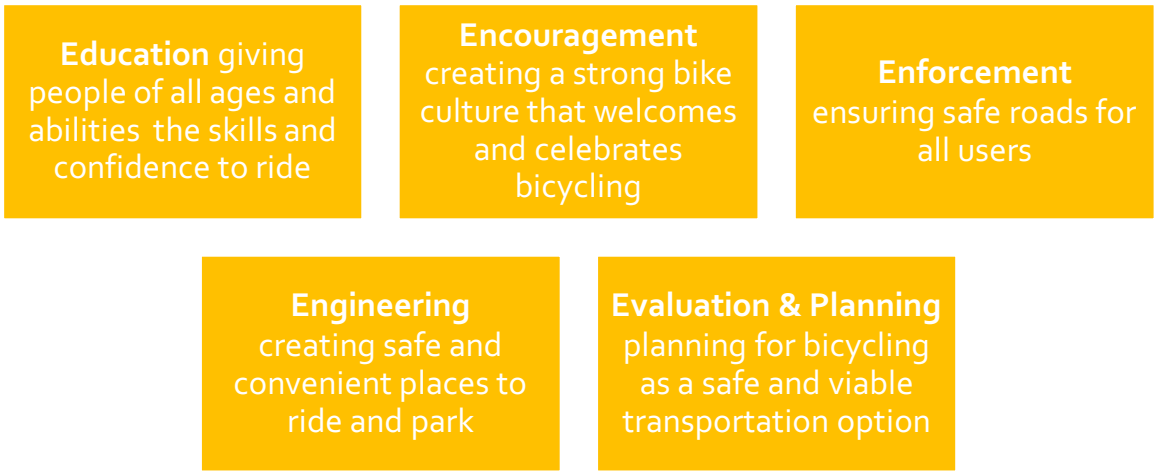


Figure 1: LABS's Five E's

The LAB's Bicycle Friendly Community criteria is based on the "Five E's:" Education, Encouragement, Enforcement, Engineering, and Evaluation. See Figure 1 to learn more about each "E." In order to earn the designation of a bronze, silver, gold, or platinum Bicycle Friendly Community, municipalities must fulfill increasingly rigorous requirements in each of the Five E's. See Figure 2 for details about these requirements.

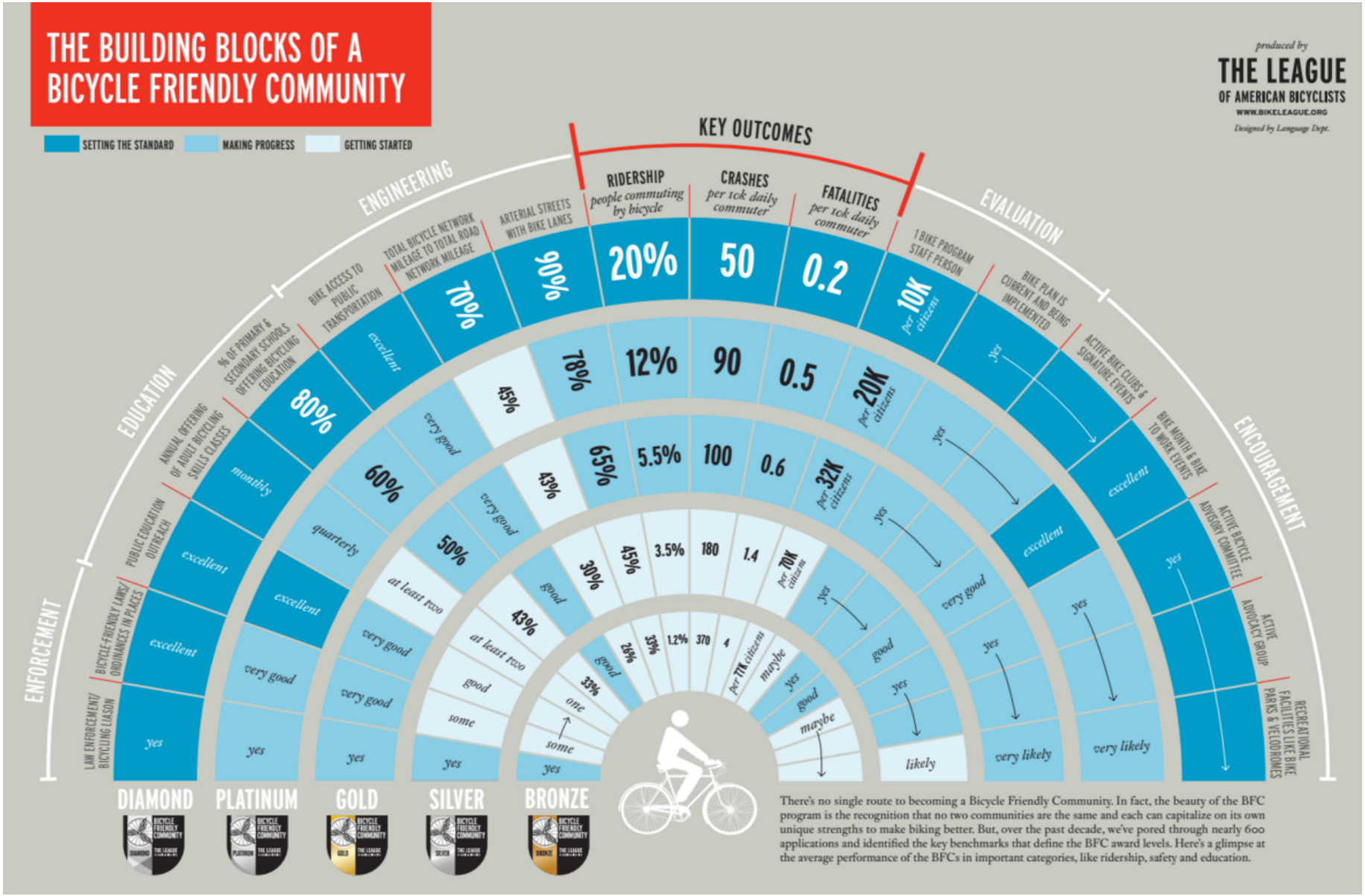


Figure 2: Requirements for bronze, silver, gold, and platinum Bicycle Friendly Community designation. (LAB)

Monona is one of 18 communities in Wisconsin designated as a Bicycle Friendly Community. It is currently designated as a bronze-level Bicycle Friendly Community, and has enlisted the help of the University of Wisconsin-Madison's UniverCity Alliance to bring it to the silver level. The UniverCity Alliance brings together representatives from different university departments and institutes in order to "connect education, service and research on campus with cities to further the practice of sustainability." Through the UniverCity Year program, the alliance will coordinate collaboration between existing university courses and community-defined projects in Monona during the 2016-2017 academic year.

The Department of Urban and Regional Planning's Spring 2016 graduate class, "Bicycles, Pedestrians, and the City," taught by Professor Dave Cieslewicz, got a head start on the UniverCity Year program. The class worked closely with Brad Bruun, project coordinator and GIS specialist in Monona's Department of Public Works, to define Monona's needs and coordinate with the city.

The result of this collaboration was a neighborhood bicycle and pedestrian audit conducted by the class on March 10, 2016. The audit tool used was developed by the Wisconsin Department of Health Services, Division of Public Health, Nutrition, Physical Activity and Obesity Program. The basic audit tool can be found in the Appendix D of this document. To view the extended audit tool, visit https://www.dhs.wisconsin.gov/physical-activity/active-communities.htm.

The class split into teams of two and Bruun assigned each team two to four intersections of interest. The teams rated their intersections and adjacent road segments on items in the areas of land use environment, transportation environment, walking environment, bicycling environment, and facilities and aesthetics. Particular care was taken to record detailed notes about the walking and bicycling environments and each team also recorded the number of bikers and walkers they saw during the study period. Auditors covered around 30 intersections, and gave Monona an average score of 41.6 out of 100. The lowest score was 12, and the highest score was 69.

This report compiles the findings of the neighborhood audits; the current status of bicycling in Monona, reflected in Monona's 2015 Bicycle Friendly Community application and resulting scorecard, as well as the city's planning documents; the LAB's Bicycle Friendly Community publications; and research into regional and national precedents and opportunities. The report offers research-based recommendations, organized into the LAB's Five E's, for Monona to move towards a silver Bicycle Friendly Community designation.

EDUCATION

CHARLES ANDROSKY, BREANA NEHLS, KAYCIE STUSHEK

OVERVIEW

In order to get more riders on the road, all ages and abilities must be given the skill and confidence to get on their bikes. This is achieved through education. To ensure that all members of the community are reached, it is important to offer a wide variety of educational programs to fit everyone's need. It is essential that all bikers and motorists are educated on the rules of the road. Generally, education allows for all bikers to gain the skills and confidence to safely ride, making education a crucial component for enhancing Monona's current bike programming.

IT IS IMPORTANT TO OFFER A WIDE VARIETY OF EDUCATIONAL PROGRAMS TO FIT EVERYONE'S NEEDS

Rating "Education" in Monona:

The LAB organizes their ratings for Education thus:

Community Status	Public Education/Outreach	Annual Offering of Adult Bicycle Skills Classes	Percent of Schools Offering Bicycle Education
Bronze	Some	One	33%
Silver	Good	2 or more	43%
Gold	Very Good	2 or more	50%

The LAB is very helpful in providing feedback for how to get to silver designation. Monona's scorecard from Fall of 2015 listed building blocks toward a Bicycle Friendly Community. In 2015, Monona reported multiple efforts toward increasing bike education to its citizens. These events and programs included:

- Bike Rodeo: Teaching Safe Bicycling
- Monona's Traveling Tween Camp
- Safe Routes To School

With these efforts in place, **Monona received a score of three out of ten for Education** by the LAB. Fortunately, there are many avenues by which Monona can score higher in Education without reinventing the wheel.

Audit Summary

Results of the neighborhood audit showed that in Monona:

- Residents used bicycle lanes, sidewalks or street lanes incorrectly
- Residents did not always wear a helmet when riding bikes
- There were multiple schools close to each other, which can be an asset
- Residents did not always know how to cross difficult intersections
- There were not many bikers out on the streets

Educating citizens would help resolve these issues, make people feel safer when riding bikes, and lead to increased ridership.

RECOMMENDATIONS

Public Education and Outreach

The following existing biking resources should be shared widely throughout Monona so that citizens are well-informed about how to make biking fun and convenient:

- **Rideshare Etc.** (sponsored by the Madison Area Transportation Planning Board and the Wisconsin Department of Transportation) connects commuters to others interested in alternative modes of transportation, including linking up "biking buddies."
- **Event bicycle parking** is available at many Dane County events, making biking to events fun and convenient.
- The **University of Wisconsin-Madison Bicycle Resource Center** provides space, tools, and advice for students to do their own bike maintenance.
- The U.S. Department of Transportation's **Bikeability Community Checklist** gives community members the opportunity to assess the quality of biking and walking infrastructure in their community.
- The **National Capital Region Transportation Planning Board** outlines the various economic, health, and infrastructure benefits of bicycling, as well as benefits for commuters and businesses.
- **The LAB's education and outreach materials** on safety, bike maintenance, and cycling skills appeal to a wide variety of users.
- The City of Los Angeles offers a series of **Spanish-language bicycle public service announcements** that would ensure that information about bicycling safety is accessible for all.

In addition, Monona should develop the following resources:

- **City bicycling maps**, like the ones prepared by other cities in the area (Madison, Fitchburg, DeForest, Marshall and Sun Prairie) should be distributed widely to the community. The map should also be made available Monona's website.
- A report or presentation to **educate developers how to incorporate the needs of bikers** in new development projects.

Adult Bicycling Skills Classes

- A **Bike Rodeo is a bicycling skills event** that provides an opportunity for bicyclists to learn skills and practices that enable them to be safer cyclists. It generally focuses on registration, maintenance, bike and helmet fit, starts and stops, scanning, hazards, and crossroads. While Monona hosted a Bike Rodeo for students as part of the Year of the Bike program, the City of Monona should coordinate with more organizations to **host bike rodeos at places other than schools** so that adults also have the opportunity to learn safe bicycling skills. Many adults may have difficulty riding, but are not affiliated with a school. These events should be hosted at least twice a year.
- The **mayor could be recorded** explaining how to fix a flat, or properly adjust a helmet. This could be used as **part of an online resource** that would provide the same information provided at the bike rodeo.
- Information should also be provided in **multiple languages** to make it accessible to all people.
- The **Savvy City Cycling monthly roundtable sessions hosted by the Wisconsin Bike Federation** provide informational presentations with the goal of increasing skill levels of cyclists of all experiences and ages. Monona should offer to host some of these monthly events throughout the year.

Youth Education

- Monona already participates in the **Traveling Tween Camp** program, during which youth bike to locations like the Vilas Zoo and the Wisconsin State Capitol building in order to learn the rules of the road and gain independence and confidence on a bicycle. Currently only ten children participate in the program at a time. **We recommend that Monona expands this program to educate more children.**
- Monona's schools should partner with the National Interscholastic Cycling Association to host **Youth Mountain Bike League teams**, something that several Dane County schools already do.
- Monona should **strengthen and maintain relationships with the Wheels for Winners program** and initiate "earn-a-bike" programs within the city. In the program, youth participate in community service and safety training in order to receive bicycles free of charge.
- Monona currently has an active **Safe Routes to School (SR2S) initiative**, which includes two crossing guards in key locations near Nuestro Mundo Elementary School and Winnequah Elementary School. This national-scale initiative involves ongoing, customizable programs by local, state, and federal governments in partnership with citizens to encourage and enable children to take active transportation to school. **The City should continue and expand their SR2S program** by working with local schools, parent-teacher associations, and neighborhood organizations to enhance and increase participation in the program.
- Monona should encourage citizens to participate in **Dane County's annual Walk or Wheel Challenge**, a one-week biking and walking competition that encourages students to walk or bike to school. Dane County schools earn points based on education, encouragement, and awareness-raising activities, and top schools receive prizes.
- The City and its schools should promote a **"Youth Pledge"** to encourage healthy living in its school-age children. A youth pledge is a checklist for safety for youth to sign with an adult sponsor.
- **After school bicycle clubs** are a great way to educate school-aged children with the skills and confidence to ride.

Bike Equity

One often forgotten, but crucial part, to bike education is that education is not readily given or available for all user groups. Traditionally, Caucasian males have utilized cycling; however, this is changing with active programming. Focusing on bike equity to look at language, race, family structure, employment type, and locale will benefit Monona on increasing ridership for everyone.

ONE OFTEN FORGOTTEN, BUT CRUCIAL PART, OF BIKE EDUCATION IS THAT EDUCATION IS NOT READILY GIVEN OR AVAILABLE FOR ALL USER GROUPS

Monona should consider the following actions:

- Provide programs at various times and locations, and in multiple languages
- Increase outreach with programs geared towards specific, underrepresented user groups
- Advertise widely the Wisconsin Bike Fed's **Women and Bicycles Ambassador Program**
- **Partner with the Madison chapter of the United Spinal Associates**, Inc. in order to host bicycling events for people who are visually impaired or disabled in other ways. United Spinal Associates will provide adaptive and tandem bicycles at these events.

CONCLUSION

In attaining the silver Bicycle Friendly City designation from the LAB, Monona should build upon its existing bicycle education programs. The City should expand and strengthen its existing efforts to give citizens of all ages and abilities the skills and confidence to ride bicycles. Various national, regional, and local bicycle education programs offer the city many promising opportunities to enhance bicycle education and make progress toward attaining the silver Bicycle Friendly City designation from the LAB. Δ

ENCOURAGEMENT

PHANNISA NIRATTIWONGSAKORN, SYDNEY PRUSAK, MATTHEW SORENSEN

OVERVIEW

As a bronze-rated bicycle community, the City of Monona is clearly working to strengthen its bicycling community and to make the city an overall better place to bike. However, in terms of Encouragement, the city **received only two out of the ten available points in its 2015 application**.

The LAB defines encouragement as the "E" responsible for "mainstreaming bicycling culture." A variety of cycling events, programs, and campaigns create an environment supportive to bicycling and encourage cyclists of all levels to ride. Whether they are learning with training wheels or racing around the Lake Loop, encouragement efforts help get all cyclists out on the road.

The League gave this advice to Monona to achieve silver designation in Encouragement:

> "Host, sponsor and encourage a greater variety of bicycle-themed community events, campaigns, and programs. Increase your efforts on Bike to Work Day and Bike to School Day. Ensure to widely advertise all bicycle-themed community events and programs."

Encouragement efforts not only get more people bicycling, but because many of the events and programs are done as a group, they can also foster strong community relations. By implementing a few more encouragement programs and policies, Monona is more likely to reach the status of a silver-rated Bicycle Friendly Community.

RECOMMENDATIONS

Host, sponsor, and encourage a greater variety of bicycle-themed community events, campaigns, and programs

In order to encourage a diverse cycling community, Monona should implement bicycle-themed events, campaigns, and programs targeted at specific demographic groups, in addition to activities aimed at the broader public. The city must expand its bicycling efforts to all types of riders so everyone who has the ability to ride also has a community support system.

THE CITY MUST EXPAND ITS BICYCLING EFFORTS TO ALL TYPES OF RIDERS SO EVERYONE WHO HAS THE ABILITY TO RIDE ALSO HAS A COMMUNITY SUPPORT SYSTEM

- Encourage women to participate in the **Annual CycloFemme Ride.** Madison hosts a very popular CycloFemme ride every year that Monona residents could participate in. Women from Monona could ride it together as a pack, strengthening community ties and proudly representing Monona cyclists to the greater Madison area.
- Create a Bike to Church Day
- Create **community programs and sponsor bike clubs for more diverse ridership.** Having a club open to all Monona residents, regardless of their riding ability, creates a less intimidating atmosphere for newer riders and encourages more people to participate. Additionally, not requiring a formal commitment to ride every week fosters a less stressful environment.

Increase promotion of national bike month, bike to work week, and bike to school day

Sponsored by the LAB, Bike to Work Day is a campaign to introduce the bicycle as an alternative way to commute for new cyclists and current cyclists who only bike for recreational purposes. The San Diego Association of Governments' found that one out of five cyclists who joined a Bike to Work Day in San Diego converted to bike to work regularly.

ONE OUT OF FIVE CYCLISTS WHO JOINED A BIKE TO WORK DAY IN SAN DIEGO CONVERTED TO BIKE TO WORK REGULARLY

Actionable steps for Monona include:

- Because most students in Monona live within a five-mile radius of their school, a distance defined by the LAB as feasible to commute by a bicycle**, the city should hold a Bike to School Day campaign to encourage younger generations to use bicycles** for transportation.
- Bike to Work Day may also be expanded to the **LAB's Bike to Work Week**—the third week of May—**or Bike to Work Month**, which is May.
- **These campaigns might be combined with other bicycling encouragement initiatives** such as a bicyclist parade, bike valet parking program to help cyclists find bicycle parking, or Car vs Bus vs Commuter Race mini event to try to reach an assigned destination during rush hours using any routes (which bicycles always win).
- **Leverage partnerships** with local businesses and organizations to help fund bike campaigns and recruit volunteers.

Create more visible signage for the Lake Loop

The Monona Lake Loop brings bicyclists from all parts of Madison to Monona. The City can market this bicycling feature as a way to attract new residents and homeowners.

- If the city provides **more signage throughout the Loop**, it may encourage more people in Monona to bicycle on it.

- **Additional signs on Winnequah would remind residents each day that Monona is a "bicycling community"** even if there are no visible cyclists. This presence encourages people to take advantage of the city's bicycle amenities.

Create incentives and competitions

If media promotion for bicycling is a push-based strategy, incentives and competitions are a pull-based one.

- The City of Monona can **request cooperation from local businesses to provide discounts or rewards for bikers** in exchange for advertisements on city media or tax concessions.
- Periodic **bicycle-related competitions** will also keep the community active. The prizes can be sponsored by local businesses and the types of competitions can range from road racing and triathlons to commuting challenges and bike rallies to bike-riding video and photo contests.

Create printed and digital guides

Another way to communicate bicycle-related topics with Monona's current cyclists and new riders is by **providing printed and digital guides** to be ordered or downloaded on the city's website. Because some people may not have internet access, printed guides should be available to be ordered via phone or mail or picked up at City Hall. The guides can be compiled from the LAB's materials covering various topics.

Examples of guides include:

- Safe routes to school maps
- Attraction and destination maps
- Guides to overcome bike commuting concerns
- Calendars of upcoming bike events

Promote bicycle friendly businesses

Local cycling competitions can be a great way to encourage bicycling. The National Bike Challenge is one example. Places of employment and private citizens register online and agree to compete for prizes and recognition with other groups in the area. Several cities in the Madison metro area already compete against each other in the National Bike Challenge and other competitions like it. It's also a great way to build camaraderie among employees and demonstrate local support for bicycling efforts.

Build a partnership with the Wisconsin Bike Fed as an advocacy representative

Building partnerships with bicycle advocacy groups is crucial for promoting bicycling in small cities. Advocacy groups, like the Wisconsin Bike Fed, are important resources for riders seeking accurate information on local bicycling laws and important issues facing cyclists. Advocacy organizations can provide the necessary support to assist local governments in promoting bicycling. They also provide branding, marketing, and special event coordination opportunities for municipalities.

Increase multi-modal transit options by becoming a part of Madison Metro

Because Monona Transit buses have limited service and are too small to include bicycle racks, **it is recommended that the City of Monona become part of Madison Metro.** This will increase transit options for residents, which in turn encourages bicycling.

Survey the community and pass a referendum about active transportation

Surveying the local community about issues related to sustainability, including transportation choices, can be a great way to understand how much local support exists for bicycling. Having local citizen committees (such as a new Bicycle Advisory Committee, to be discussed in the Evaluation section of this report) craft a referendum that supports alternative transportation choices can also catalyze bicycle-friendly change in a community. Δ

ENFORCEMENT

CAMERON BRAATZ, ELIZABETH DOYLE, JAKE SWENSON

OVERVIEW

Enforcement consists of laws and regulations that support safe and equitable treatment of all users of the road. A positive relationship between law enforcement and the bicycling community will increase awareness.

Figure 3: The Components of Bicycle Friendly Enforcement

CURRENT POLICIES

- Declaration of Year of the Bike in 2015
- Current American Association of State Highway and Transportation Officials' (AASHTO) standards are met in design manual
- Guidelines for streetscape design
    - Improves multi-modal experience by making travel by foot or bicycle more attractive
- Mixed-use zoning
    - Allows for more connectivity and access by alternative transportation users

- Form-based/design-based codes
    - Expands code beyond land use focus to take additional components into consideration
    - Interconnection of buildings, streets, and open spaces
- Connectivity policy or standards
    - Sets minimum amount of street intersections per mile
- On-street bicycle facilities maintenance
    - Sweeping as well as snow and ice removal are completed in accordance with other travel lane standards
    - Potholes are addressed within one month of identification

Other Adopted Enforcement Strategies

- Monona Police Department Bike Patrol Unit
- Bicycle Safety Education in Schools
    - Provided by the police and Parks and Recreation Department
- Annual Bike Rodeo
- Police Department tracks bicycle-related safety data and reports hazards to necessary municipal staff
- Recovery system in place for stolen or impounded bicycles
- Non-mandatory bicycle registration system

RECOMMENDATIONS

BFC Scorecard Recommendations

- Create a Bicycle Advisory Committee
    - Composition of this committee should include at least one police officer, among a mix of other disciplines and citizens
- Adopt Complete Streets policy
    - Clarity in regard to creation of bicycle and pedestrian infrastructure
    - Creation of a process that defines policy compliance

Potential Ordinances

- Bicyclist anti-harassment
- Outlaw parking or driving in bicycle lanes
- End-of-trip facilities for bicyclists such as locker rooms and showers
- Standards for bicycle parking
- Car parking standards
    - Enact maximum standard or abolish minimum parking requirements
    - Encourage shared-parking between businesses with complementary parking needs

Other Enforcement Strategies

- Designate public safety liaison for Safe Routes to School Program
- Additional training options for police officers
- Giveaways
    - Helmets, lights, bike locks
    - Potential private-public partnership via sponsorship
- Ticketing campaigns of motor vehicle and bicycle operators that support safe multi-modal interactions
    - Positive behaviors should be encouraged while behaviors that negatively affect safety (e.g. motor vehicles not stopping at crossings) should be discouraged
- Share the Road Campaigns
    - *Share the Road with Bicycles!* --(State of Wisconsin Department of Transportation)
- Additional public safety officials on bike
    - EMS
- Collaboration with other municipalities and jurisdictions
    - Uniformity eases compliance and enforcement
- Corner captains
    - Volunteer program of supervisors during peak bike hours for "eyes on the streets"
    - Could be implemented as a joint project with existing adult crossing guards
- Safe houses program
    - "Safe homes" for kids to stop at or seek safety after bike accident or hassling
- Safe nodes/stations along bike route to and from school
- Campaign utilizing yard signs to promote safe road conditions
    - *Slow Down Yard Sign Campaign* --(Safe Communities Madison-Dane County)

POSITIVE BEHAVIORS SHOULD BE ENCOURAGED WHILE BEHAVIORS THAT NEGATIVELY AFFECT SAFETY SHOULD BE DISCOURAGED

ENGINEERING

KARLY CHRISTENSEN, ABIGAIL JACKSON, CHELSEA MORRISON, MAX PARDO, TOM PEARCE

OVERVIEW

The City of Monona is a well-developed suburban city surrounded by the City of Madison on the north, east, and south sides, and Lake Monona on the west. The city consists mostly of developed streets through neighborhoods of single-family homes. These streets often lack sidewalks and/or bicycle accommodations, though traffic volumes are generally low. Many full-grown trees line the roads, making expansion of the right-of-way undesirable for residents. The two main corridors are Broadway and Monona Drive. These two roads border the City, as shown in Appendix A.

Key areas of interest include employment centers such as WPS, the Monona Grove district building, and the City Municipal buildings near Winnequah Park; shopping destinations such as South Towne, Walmart, and Copps; schools including Monona Grove High School, Winnequah School, and Nuestro Mundo; and recreational destinations such as Winnequah Park, Capital Springs, Bridge Road Park, Oneida Park, Maywood Park, and the Monona Municipal Golf Course. These destinations are highlighted in Appendix B.

Audits of existing conditions were completed on March 10, 2016, as discussed in the Introduction section of this report. Results of these audits are shown in Appendix C. Through these results, six key corridors of focus were identified and are discussed below: Lake Loop, Bridge Road, Broadway West, Broadway East, Monona Drive North, and Monona Drive South.

LAKE LOOP

The Lake Loop Corridor consists of seven audited intersections: Dean Ave at Midmoor, Dean Ave at Schofield, Winnequah Rd at Nichols Rd, Winnequah Rd at Baskerville Ave, Winnequah Rd at Healy Lane, Winnequah Rd at Dellwood Circle, and Winnequah Rd at Woodridge Rd. This route receives a great deal of bicycle traffic, as it is part of the Lake Loop route around Lake Monona. No official bicycle infrastructure is utilized, though this is a designated bicycle route.

Traffic counts along the Lake Loop range between 1,100 and 1,400 vehicles per day. With these low traffic volumes, fully separating bicycle facilities may not be required. Providing traffic calming features such as traffic circles would likely be very successful, cost-effective measure.

PROVIDING TRAFFIC CALMING FEATURES SUCH AS TRAFFIC CIRCLES WOULD LIKELY BE A VERY SUCCESSFUL, COST-EFFECTIVE MEASURE

Auditors did comment on the quality of the pavement, particularly near the vertical curve between Dellwood and Healy. Pavement deterioration poses a greater risk to bicyclists than vehicular traffic, and maintenance through bicycle corridors should be a high priority.

This corridor also lacked sidewalks to accommodate pedestrians. Though traffic volumes are low on this corridor, the high presence of bicyclists also poses a risk to pedestrian traffic. These users should not feel as if they are competing for space. The addition of sidewalks would improve safety and access for both user groups through this corridor.

Recommended Improvements

- Slow traffic speeds to 20 mph and install more visible signage
- Improve maintenance of deteriorating pavement at vertical curve locations
- Add sidewalks through corridor to accommodate pedestrians
- Consider installation of bicycle boulevards along the Lake Loop route in Monona

BRIDGE ROAD CORRIDOR

Bridge Road represents an opportunity to significantly increase bikeability. The steep slope from Winnequah to Ford St is slated to gain painted on-street bike lanes with removed parking on the east side of the street. This is crucial, as vehicle speeds increase heading downhill to the west. Bicyclists also pick up major speed heading down Bridge Rd and occasionally must swerve to avoid parked vehicles. The intersections at Winnequah and Metropolitan can be improved to better serve bicyclists and pedestrians.

The intersection at Metropolitan is adjacent to a commercial district which is going to be redeveloped as part of the city's Waterfront Redevelopment Project, which will include a major bike hub. The audit shows that there is enough space in the roadway for bicyclists and the intersection is designed well to accommodate crossings. Therefore, we expect that the redevelopment project will lead to an increase in daily traffic volumes, and that during redevelopment the intersection will be altered to favor bicycle and pedestrian safety.

The intersection at Winnequah is at the bottom a long steep hill to the east which brings fast moving vehicles and bicyclists to a stop sign. From the west, vehicles have the right of way through the intersection towards any direction. We have since learned of the proposed bike lane addition project on Bridge Rd from Winnequah to Ford St. This will help bicyclists coming down the hill from the east to have enough space to ride comfortably and give room to churn up the hill from the west away from traffic. This intersection also has a slip turn from Winnequah onto Bridge from the north to the west which is a hazard for bicyclists or pedestrians crossing on Bridge, since sight lines are short around the corner and vehicles traveling on Winnequah are moving 30 mph before reaching the intersection.

Recommended Improvements

- In the future, extend on-street bike lanes southward down Bridge Rd to Broadway Ave
- Create a marked crosswalk for bicyclists and pedestrians crossing Bridge Rd to get to the Paunack Park Path
- Convert the slip lane on Winneqauh to a perpendicular stop with stop sign before turning westbound on Bridge Rd

- At Winnequah, extend the two north side curbs by 5-10 feet to provide shorter crossing distances for all modes, which will also calm traffic for vehicles approaching the intersection
- Create a full four-way stop at Winnequah by placing a stop sign on Bridge Rd for eastbound travel
- Support proposed Bridge Rd bike lane extension project

BROADWAY WEST

Broadway West is the lowest scoring corridor of the audit. This corridor consists of West Broadway at WPS Drive, West Broadway at Frazier, South Towne Drive at Royal Ave, and Royal Ave at Walmart. Individual audit scores through this corridor ranged from 12 at Royal Ave and Walmart to 26 at West Broadway and WPS Drive.

Bicycle accommodations are partially provided along West Broadway through this corridor. They are only placed on the south side of the roadway for bicyclists travelling to the east. The north side of the roadway does have a paved shoulder, but it is not marked as a bicycle lane. No bike lanes are provided once the corridor crosses the Beltline along South Towne Drive.

The intersection at Broadway and Frazier can be intimidating to both cyclists and pedestrians, as three separate lanes of traffic must be crossed. Though there are pedestrian refuges between each, these are very narrow and uncomfortable for users stop on.

South of the Beltline along South Towne Drive, there are no bicycle lanes at all and high traffic volumes of over 20,000 vehicles per day. This route provides access to both South Towne and Walmart, major shopping destinations and employment centers for the city. The lack of bicycle accommodations discourages residents from utilizing their bicycles in daily activities such as running errands.

SIDEWALKS ARE PRESENT THROUGHOUT THIS CORRIDOR, THOUGH NAVIGATING INTERSECTIONS CAN BE DIFFICULT FOR PEDESTRIANS WITH THE HIGH TRAFFIC VOLUMES

Sidewalks are present throughout this corridor, though navigating intersections can be difficult for pedestrians with the high traffic volumes. Along West Broadway, striping at crosswalks is missing at some locations, or only present on one side of the intersection. For example, at WPS Drive, crosswalks are only present along the west side of the intersection and no connection is provided to the intersection from the adjacent neighborhood. Pedestrian islands are present in some locations, though inadequately sized when present. Along South Towne Drive, the colored concrete was utilized for pedestrian crossings. However, this was the only safety measure utilized and is not adequate on its own without additional measures such as signage.

Recommended Improvements

- Add pavement markings to north shoulder along West Broadway to provide bicycle accommodations
- Add bicycle lanes along South Towne Drive

- Add pedestrian crossing signage for vehicles at and before pedestrian crossings
- Maintain and/or add striping at crosswalks
- Add pedestrian refuges in the medians of intersections
- Create trail to connect neighborhood to WPS Drive
- Add pedestrian signals to existing traffic signals

BROADWAY EAST

The stretch of Broadway east of the Yahara River, running from Falcon Circle in the west to Stoughton Road in the east, is a high-speed traffic corridor that serves cars well but leaves much to be desired from cyclists and pedestrians. There are a number of destinations along Broadway, including restaurants; hotels; a public boat launch; the Roselawn Memorial Park; and Ahuska Park, the site of the Monona Farmers' Market. Except in the parks, however, there are few public amenities such as benches or water fountains.

There are well maintained sidewalks on both the north and south side of the street for almost the entire length of Broadway. However, there is no dedicated lighting for sidewalks, which can make certain sections fairly dark at night. Sidewalk connectivity is also an issue, with side streets having sidewalks on only one or neither side of the street. Broadway east of Copps Avenue, however, is most lacking in connectivity, as the sidewalk on both sides of Broadway ends abruptly at the intersection with Copps.

As with the sidewalks, narrow bike lanes, or what appear to be bike lanes, run the entire length of Broadway on both sides. These lanes are unmarked for long stretches, a potential source of confusion for would-be users. The lanes are made to feel even narrower by the intrusion of the curb seam on one side and proximity to speeding cars on the other, and as such may seem unsafe to novice or casual bicyclists.

There are four traffic signals along this stretch of Broadway: one at Monona Drive, one at the entrance to the strip mall just east of Roselawn Avenue, one at the entrance to Ahuska Park, and one at Copps Avenue. This last intersection, however, has no north-south crosswalk, meaning a pedestrian or cyclist who has taken the southern sidewalk or bike lane east must either turn around (not an option for the bicyclist) to cross at Ahuska Park, continue to Stoughton Road (not an option for the pedestrian, who would have to trudge through marshy grass), or cross illegally. This dearth of crossings, not just at Copps Ave but also at Edna Taylor Parkway, Roselawn Ave, River Place, and Falcon Circle, turn Broadway more into a barrier than a facilitator of transportation for bicyclists and pedestrians.

THIS DEARTH OF CROSSINGS TURN BROADWAY MORE INTO A BARRIER THAN A FACILITATOR OF TRANSPORTATION FOR BICYCLISTS AND PEDESTRIANS

Recommended Improvements

- Short Term
    - Widen bike lanes: this would necessarily mean making car lanes narrower, which might help calm traffic and make cyclists feel even safer

- Add clear bike lane signage and wayfinding tools
- Add north-south crosswalks to intersections where they do not exist
- Add bicycle parking and public amenities such as benches at destinations

- Long Term
  - Create safe bike and pedestrian approaches to the Dutch Mill Park and Ride to increase intermodal connectivity
  - Add or convert sidewalk to off-street bike path, at least on south side of Broadway: this would connect the Dutch Mill Park and Ride to the hotels and shopping centers at Monona and Broadway
  - Add bike share stations at Monona and Broadway and at the Park and Ride: this would give more local mobility to visitors coming in by bus or staying at the Country Inn or AmericInn Lodge
  - Add signaled intersections and crosswalks along Broadway to calm traffic and improve pedestrian and cyclist connectivity

MONONA DRIVE NORTH

This corridor includes four audited intersections: Monona Drive at Dean Ave, Monona Drive at Lofty Ave, Monona Drive at Coldspring Ave, and Monona Drive at Winnequah Rd. Audit results ranged from 35.5 at Winnequah Rd to 60 at Dean Ave. The cross-section in this corridor consists of two 11-foot travel lanes in either direction, paved bicycle lanes along the shoulder, and sidewalks.

Though bicycle lanes are present along Monona Drive, auditors commented that they felt inadequately wide. According to Google Maps street view, the bike lanes do meet the standard 5-foot minimum width, however there is no separation from vehicular traffic, making it uncomfortable for many users.

Bicycle accommodations would be improved though the analysis of turning movements. Many side streets do not include bicycle accommodations and Monona Drive does not provide accommodations for turning movements. This is especially critical at Coldspring Ave, north of Monona Grove High School. Any students wishing to leave the school on bicycle must utilize the vehicular lanes along Coldspring, often requiring them to make a turning movement from a stopped position in live traffic. This is very hazardous to users and may discourage some users from biking.

Pedestrian accommodations through this corridor were generally in good condition. The sidewalks appeared relatively new and met ADA-standards. Crossing accommodations were generally well-provided for, with the exceptions of Winnequah and the mid-block crossing at Monona Grove High School. At Winnequah Road, Monona Drive is coming out of a curve north of the intersection. Along this curve, there are few destinations for pedestrian traffic or intersections, which in turn results in higher speeds for vehicles. The visibility for pedestrians at this location is low, and no accommodations besides a striped crosswalk are provided. A potential crossing beacon would help alert drivers of pedestrians while not adversely impacting traffic flow, as it would only operate if pedestrians were present.

The second pedestrian crossing that seemed inadequate was the mid-block crossing at Monona Grove High School. While auditors were present, this appeared to be functioning well since many students were present at the end of the school day. However, they expressed concern over the visibility of this crossing when there is not a lot of pedestrian presence in the area. The crossing had no "Crossing Ahead" warning from either direction, just a sign at the actual location. Colored concrete was utilized to

increase visibility, which appeared successful. Greater visibility, though, could be achieved through the addition of a flashing beacon or a raised crosswalk.

Recommended Improvements

- Improve bicycle turning movements through addition of bicycle boxes
- Improve bicyclist comfort through separation of bicycle facilities
- Add warning signage ahead of pedestrian crossings that are not otherwise signalled
- Increase visibility of pedestrian crossings through addition of flashing beacons
- Consider raised pedestrian crossing in front of Monona Grove High School

MONONA DRIVE SOUTH

The southern portion of Monona Drive, roughly stretching from Pflaum Road in the north to Femrite Drive in the south, is well situated to be the City of Monona's proverbial Main Street, with a variety of businesses lining either side of the street and flanked by residential neighborhoods. The southernmost portion of Monona Drive, from Femrite to Broadway, was not targeted for auditing, but it stands to reason that the conditions observed in the audit area continue on down to Broadway.

Where pedestrian infrastructure exists (Monona Drive, certain sections of Owen, Frost Woods, and Femrite), it is very well maintained and appears new. There are sidewalks on either side of Monona Drive with crosswalks regularly spaced at and between intersections. Intersections have clear lines of sight and bright signals. However, major pedestrian challenges arose from several factors. The high traffic volume along Monona Drive creates challenges to pedestrians on adjoining sidewalks.

AN OVERALL LACK OF PEDESTRIAN FACILITIES CREATED AN ENVIRONMENT THAT COULD BE DESCRIBED AS BARREN AND INHOSPITABLE

An overall lack of pedestrian facilities (water fountains, trash bins, benches, visual interest, parks, recreational equipment) created an environment that could be described as barren and inhospitable to pedestrian and bike traffic. All along Monona Drive, businesses are set back from the street by parking lots, enhancing this barren, pedestrian-unfriendly feeling. For the time of day, there seemed to be less bicycle and pedestrian traffic than was reasonable to expect. This is most likely due to the above negative conditions.

Recommended Improvements

- Short Term
    - Widen bike lanes either by narrowing car lanes or dropping one car lane on either side of Monona Drive
    - Lower the speed limit on Monona Drive
    - Add bike racks and public amenities such as benches

- Long Term
    - Convert one lane on either side of Monona Drive to street parking in order to create a protected bike lane
    - Use signage and bike boxes to make left turns easier for bicyclists
    - Add sidewalks and bike lanes to side streets to enhance network connectivity

OVERALL RECOMMENDATIONS

One glaring deficiency evident in Monona's 2015 Bicycle Friendly Community is that **only 20 percent of arterial and collector streets have facilities that meet the American Association of State Highway and Transportation Officials' standards.** There are no separated bicycle facilities in the city, meaning cyclists must ride next to traffic to travel to destinations in Monona or to leave the city on a commute to Madison. The LAB application lists several improvements, including adding sharrows to mark bike routes. This is not an effective strategy, though, considering the research that has accumulated showing that sharrows do not increase bicycling numbers or safety.

- Therefore, alternatives to sharrows, such as forms of **traffic calming devices and protected bicycle facilities** are encouraged for installation.
- When the State of Wisconsin did away with their Complete Streets law, so did Monona. Monona should **create their own local Complete Streets Policy** to guide future construction with bicycle and pedestrian conscious design.
- The City of Monona should **consider lowering their local street speed limit to 20 mph** throughout the city. Accumulated research shows that crashes between vehicles and bikes or pedestrians at speeds of 20 mph or lower rarely result in death. Crashes at 30 mph have been shown to produce odds of 20-50 percent for fatalities. Pedestrians and bicyclists also recognize the danger of speed and feel less safe traveling along roads with higher speed limits.
- However, it has been shown that drivers travel at the speed they feel comfortable moving, regardless of posted speed limits. **Therefore, road diets on wider local streets will be necessary to produce a slower environment.** This is especially crucial at major intersections, to reduce vehicle speeds as well as shorten crossing distances for bicyclists and pedestrians.
- **Bike boxes should be considered on collectors and arterial streets at stoplights.** These green boxes with a bike symbol ahead of vehicles at intersections allow bicyclists to move to the front of the queue and give them visibility as they try to turn right or left. These are a major safety strategy that reduces conflicts at intersections. Δ

EVALUATION

LISA CHARRON, JONATHAN FOK, THERESA MACFARLANE

OVERVIEW

One important way for Monona to create bicycle-friendly programs and policies is to incorporate bicycles into its city-wide planning and evaluation. The LAB scores communities on how well they have included the needs of bicyclists into their governance. Monona scored a **one out of ten for it's the Evaluation section** its 2015 Bicycle Friendly Community application. Monona can make improvements in this area by creating a Bicycle Advisory Committee, by adopting a Bike Master Plan, and by collecting more data on bike usage.

BICYCLE ADVISORY COMMITTEE

A bicycle advisory committee (BAC) is a key component of developing a bicycle friendly community. The BAC is generally citizen-based, rather than composed of government officials. In this way, the BAC is relatively immune to political changes and can act as a watchdog for government policy and project implementation.

The City of Monona already has Sustainability Committee in place, but a separate BAC should be formed to align with the recommendations of the LAB**.** This committee should be comprised mainly of citizens, but could also include members of related government agencies like:

- Public Works
- Facilities
- Public safety
- Mass Transit

In addition to the BAC, larger communities should have a staff member dedicated to bicycle policy and programming. The LAB suggests that communities have one full-time staff person for every 70,000 citizens, and this recommendation is followed by the City of Monona with one staff member dedicating 10 percent of their work to bicycle and pedestrian programming. This staff member should continue to plan bicycling events and promote bicycling policies in Monona.

The BAC and bike coordinator should meet monthly or quarterly with the Sustainability Committee to make sure bike programming and policy is moving forward in a timely manner. In addition, Dane County regularly holds coordination meetings to discuss bicycle projects. The bike coordinator should attend these coordination meetings to stay up-to-date on regional bike programs and policies.

BIKE MASTER PLAN

While the bike master plan may take years to develop, it should be comprehensive. It must include all five of the E's (Engineering, Education, Enforcement, Encouragement, and Evaluation), because each and every one of these components must be addressed in order to create a truly bicycle friendly

community. A Bike Master Plan lays out specific goals, objectives, benchmarks, performance measures, and responsible individuals or agencies in each of the five E categories.

A strong bike master plan is developed with input from the community and cooperation with the BAC. The LAB looks for plans that have specific targets for ridership and safety, tools for evaluating progress towards those targets, and dedicated funding for implementation. The LAB also emphasizes that plans have strategies to reduce the number of bicycle fatalities and injuries, and that mechanisms are in place to ensure that bicycle infrastructure and programming serve the community equitably.

A BIKE MASTER PLAN LAYS OUT SPECIFIC GOALS, OBJECTIVES, BENCHMARKS, PERFORMANCE MEASURES, AND RESPONSIBLE INDIVIDUALS OR AGENCIES IN EACH OF THE FIVE E CATEGORIES

Monona does not have a bicycle plan, but elements of its 2016 Comprehensive Plan and 2015 Sustainability Plan address bicycling as a mode of sustainable "alternative" transportation. The Sustainability Plan's transportation section is devoted primarily to objectives and implementation strategies involving bicycles or "alternative transportation" more broadly.

The objectives in the Sustainability Plan generally call for an increase in the percentage of people "using alternative transportation." To the plan's credit, each objective has a list of specific implementation and evaluation strategies. These strategies, though, are listed as "potential." Rather than stipulating the action that will take place, the plan becomes a list of ideas that could happen, greatly reducing its strength. In addition, the evaluation strategies rarely provide benchmark numbers or 2025 target numbers. **In order to create an effective Bike Master Plan that inspires action, Monona should use binding words like "shall" and "will," and should develop benchmarks for measuring success.**

The first step in developing a bicycle plan for the city of Monona is to incorporate recommendations for bicycle infrastructure development into its Comprehensive Plan. The efforts should not be done to develop a bicycle infrastructure as a subset to streets and roads, but as an equal part. The city of Monona should look into strategies to create a safe and connected bicycle network in the major areas. The plans should also take into account the existing regional network for future preservation and redevelopment.

The next step is to make sure that neighborhood and transportation plans are kept up-to-date when future plans are made. The up-to-date plans are especially important for bicycle and other alternative transportation facilities in Monona. Therefore, the city of Monona should look to review and support zoning ordinances to ensure a connected bicycle network with bicycle facilities. The development of alternative transportation-oriented areas in conjunction with the Comprehensive Plan will be helpful for tracking progress towards goals. Goals include increasing percentages of commuters traveling by bicycle and students traveling by bicycle to schools, and decreasing bicycle fatalities.

The final step is to identify dedicated funding sources for bicycle implementation in Monona. Dedicating funding sources will be crucial for moving forward in the construction of bicycle facilities in Monona. Collaboration between Monona's public agencies will be important to ensure proper bicycle facilities are planned and constructed. Sources of funding could include impact fees, which are

designed to make sure that new developments contribute a proportional part of the costs to provide bicycle and other alternative transportation facilities.

DATA COLLECTION & EVALUATION

Lastly, bicycle planning and policy needs to be supported with a robust data collection system. Beyond the data that can be obtained through the American Community Survey, the LAB suggests that communities conduct statistically valid surveys and on-the-ground counts of people bicycling, collect data on bicycle crashes, and develop a network analysis of low-stress streets.

This type of data collection serves as the base upon which a bike plan can be built. Baseline data allows communities to compare to others across the nation, but it is also necessary in order to develop targets and show progress. In addition, robust data tracking on bicycling can help communities justify bicycle projects and program expenses.

Monona's 2015 Bicycle Friendly Community application showed that it does not regularly collect information on bicycle usage, does not have target goals for bicycle usage, does not conduct pre/post evaluations for bicycle projects, has not conducted a network analysis, does not have a plan to reduce bicycle crashes, and has not conducted an economic impact study of bicycling in the community.

In order to remedy the lack of data collection in Monona, the city should:

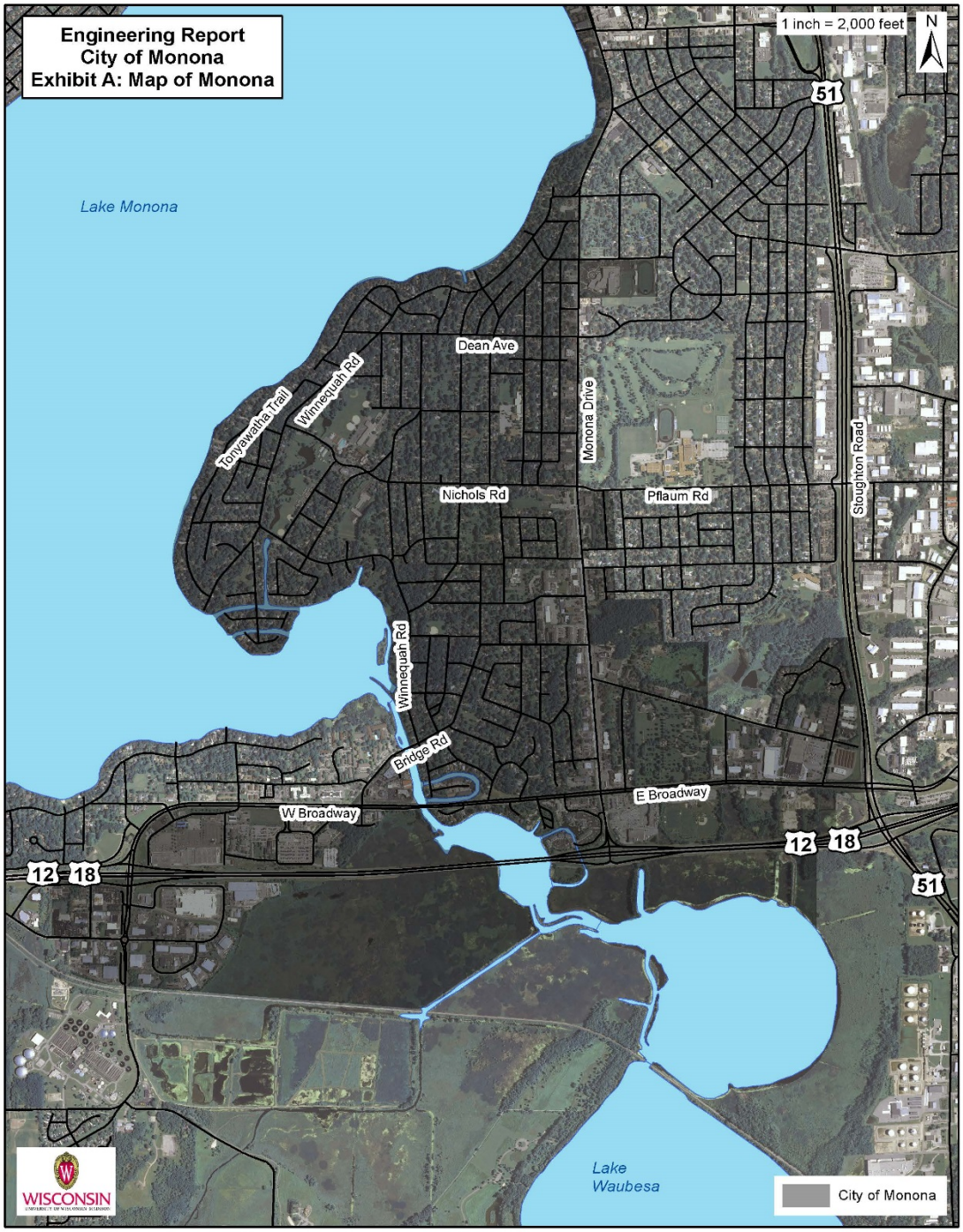
- Implement a survey similar to the one the University of Wisconsin conducts every two years, which focuses on student and faculty transportation**.** The survey should be conducted on-site at community destinations, and should include residents and visitors. It could count **the ratio of bikes to cars at community destinations**, number of people seen biking, or number of bikes parked at racks. Recommended study locations are areas such as libraries and stores.
- **Install automated bike counters at key bike paths in Monona to receive automated bike usage data.** The Madison MPO currently has several automated bike counters that detect bike path users year-round.
- **Conduct a network analysis** of low-stress bike routes through Monona.
- **Use the Capital Area Regional Planning Commission's Active Living Index** to gain data and understanding of the challenges facing bikers and walkers in Monona. Δ

CONCLUSION

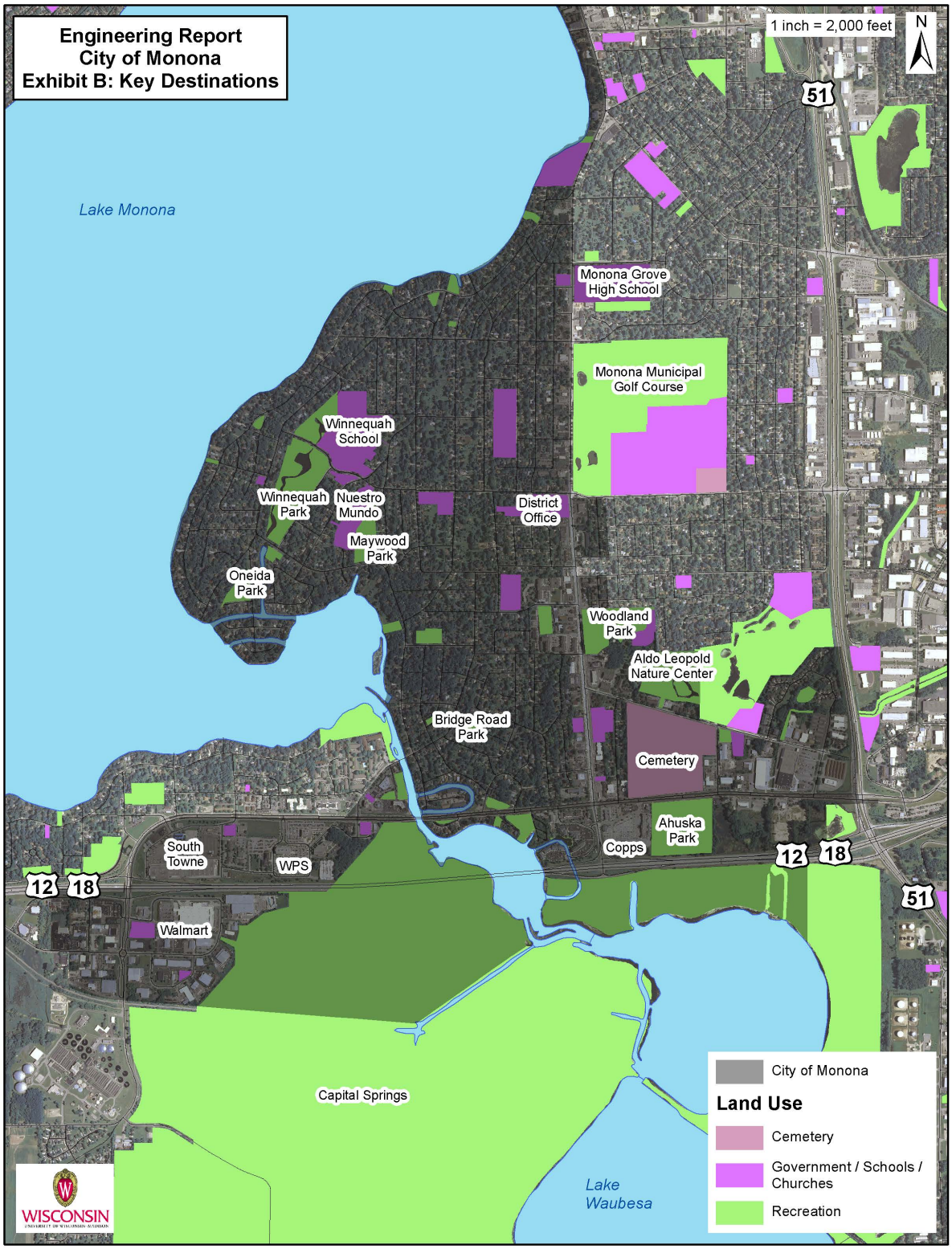
The City of Monona has secured its place as a Bicycle Friendly Community, which is an accomplishment to be proud of. By taking advantage of opportunities to increase the safety and accessibility of bicycling through the Five Es, Monona's bicycling environment can be further advanced. This will attract more people to Monona and enhance the quality of life for its residents. The policy, infrastructure, and program changes recommended in this report will move Monona towards the silver Bicycle Friendly Community designation and make it an even better place to live, work, and play. Although these strategies require the investment of time and resources, the resulting improvements will greatly benefit the community. Δ

APPENDIX

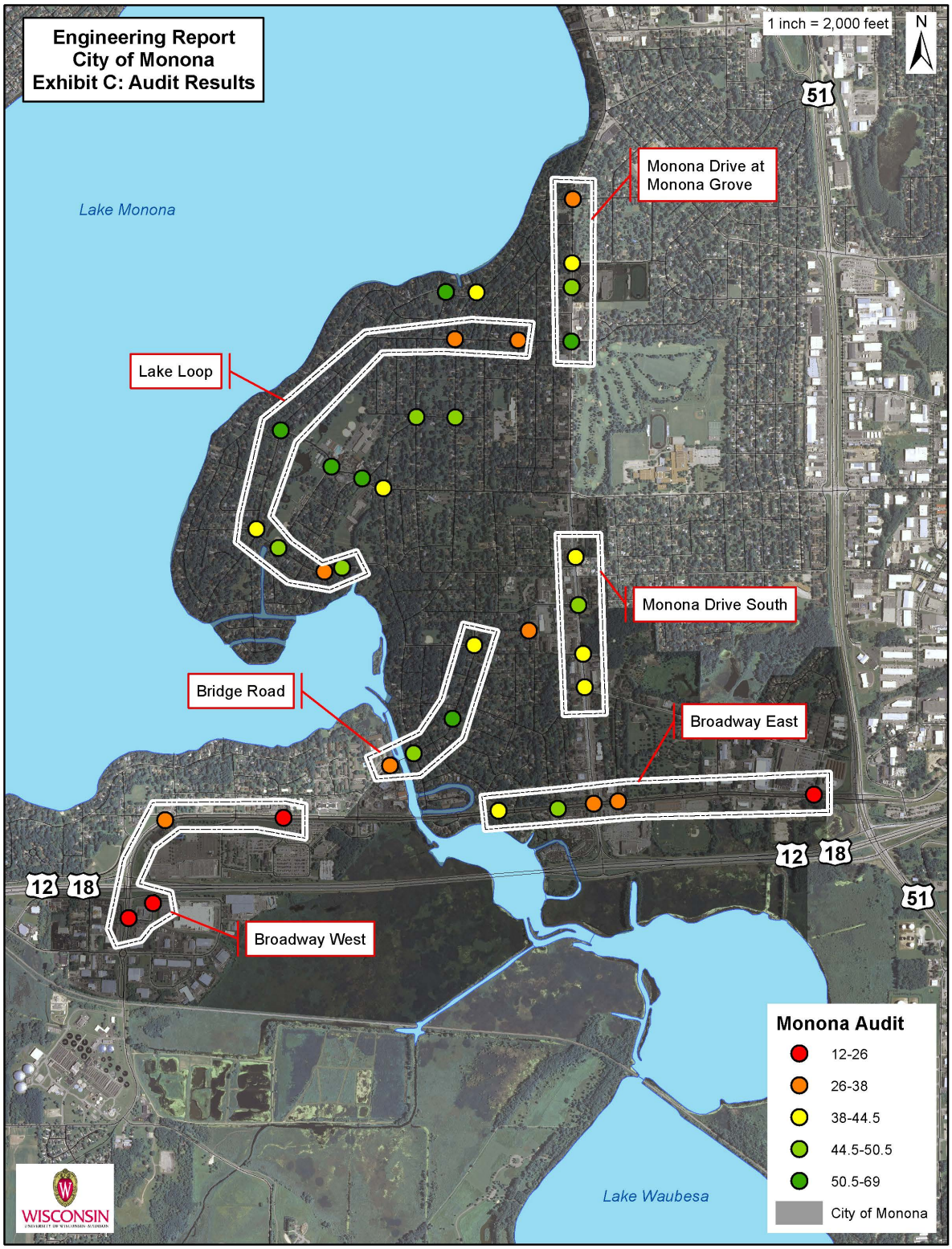
A: MAP OF MONONA



B: MONONA KEY DESTINATIONS



C: AUDIT RESULTS



Community Walking and Bicycling Audit Tool

The tool consists of three parts:

- **Part 1: Audit Tool. A two-sided audit tool to score the features in the area being reviewed.**
- **Part 2: Audit Map. A two-sided map with a sample on one side and space on the other side to paste the area being reviewed and make notes and references on specific features.**
- **Part 3: Reference Guide. A seven-page reference list to assist with completing the 2-page audit and/or to record more detail on what you see as part of the audit.**

DIRECTIONS:
The benefits of walking and bicycling include improved health, cleaner air and more social interaction in the community. Walking and bicycling audits can help identify key intersections or areas where physical and environmental changes could make a big difference in improving opportunities to be more physically active. This tool can guide you on what to look for in selecting and evaluating site(s).

Key Steps:

1. **Identify key players** who should be involved. The list of key players may vary depending on your goals, but a list of possible members could include: Public health officials, city planners, law enforcement, school representatives and neighborhood or community groups. Depending on who is initiating this effort and what you hope to see as an outcome, you should have a variety of stakeholders at the table when you start considering sites you want to audit.

2. **Site Selection**. Your sites can be chosen for a specific goal, like instituting a Safe Routes to School program at the elementary school or a broader goal of making the community more pedestrian and bicycling friendly. Depending on your goals and resources, you may have to limit the audit to just a few sites, so you want to choose sites that are pivotal to your goals. That might mean an area where a connecting trail could increase walker and biker numbers a great deal because it would provide a bridge over a stream or it could mean an approach area to a school that has high traffic volume that needs to be slowed or requires providing a different route for walkers and bikers. Another important consideration for site selection is whether there are areas where access to walking and bicycling is limited due to lack of resources or safety issues (real or perceived), or where residents have limited access to other modes of transportation. In any case, you want key players involved to maximize your chance of selecting sites wisely.

3. **Audit Team**. Ideally, each audit should be done by at least two people. Having two people allows for easier recording and provides for some give and take about what each person is seeing. If possible, the team should consist of people with a variety of skill sets or experiences (e.g. pair a "health" person with a "planning" person).

This publication was supported by Cooperative Agreement Number 5U58DP001494-04 from the Centers for Disease Control and Prevention (CDC). Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the CDC or the federal government.

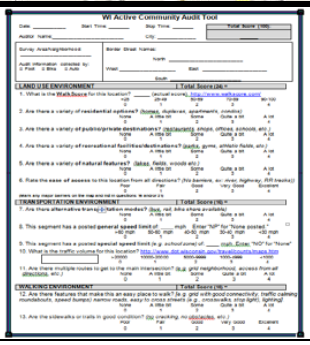
Suggested citation: Department of Health Services, Division of Public Health, Nutrition, Physical Activity and Obesity Program, Wisconsin Partnership for Activity and Nutrition. Wisconsin Worksite Resource Kit to Prevent Obesity and Related Chronic Diseases. July 2012. P-00399 (9/12)

4. **How to Audit**. You can use the audit tools in whatever manner works for you. If you have two reviewers auditing a site, the recommended distribution of duties would be for one person to record on the two-sided audit tool, and the other person provide background information from the seven-page reference document and record on major features on the map. Consider using photos, videos and voice memos to supplement your audit results.

5. **Using the Audit Tools.**

Audit Area
The suggested audit area is a two block radius around the key intersection that is the center point. Because the area a block or two off of a major street could be considerably different that the main street that you are looking at, use the main intersection as the deciding factor if a score could either go up or down for each question.

Audit Tool
The two-sided audit tool is the main recording document while you are out evaluating the route. You can make marks on the document as you tour the route and then meet afterwards with your partner to record your final answer and score for each question. Two of the questions (#1 & #10) require an online search which you can do before or after touring the route.



Scoring Example:

LAND USE ENVIRONMENT ***Total Score (24) = 15***

*1. What is the **WalkScore** for this location? _____ (actual score)* http://www.walkscore.com/

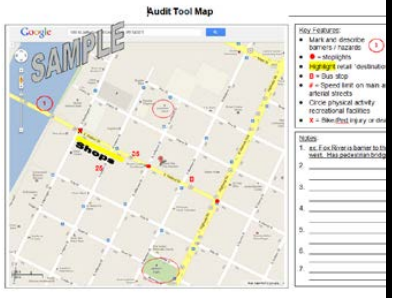
<25	25-49	50-69	70-89	90-100
0	1	2	3	4

*2. Are there a variety of **residential options?** (homes, duplexes, apartments, condos)*

None	A little bit	Some	Quite a bit	A lot
0	1	2	3	4

3-6. + questions 3-6. Score each section as you go and place the total for the section at the top.

Audit Map
The map is a way to visually mark key areas from your audit. You will need to go online and copy and paste a map of your audit area (ex. Google or Bing maps) prior to doing the audit. While on the audit, mark any key aspects of the area right on the map. This will assist you in your final scoring and will help others looking at the results to see where the key aspects are that you recorded.



Reference Guide (use is optional)
The seven-page reference guide provides additional information for each of the 28 questions. The guide can be used prior to the audit as a learning tool, during the audit to clarify the criteria or after the audit to help select a final score for each item.

WI Active Community Audit Tool

Date: _____ Start Time: _____ Stop Time: _____ **Total Score (100):** _____

Auditor Name:_____ City: _____

Survey Area/Neighborhood: _____

Audit information collected by:
☐ Foot ☐ Bike ☐ Auto

Border Street Names:

North _____

West _____ East _____

South _____

LAND USE ENVIRONMENT — Total Score (24) =

1. What is the **WalkScore** for this location? _____ (actual score) http://www.walkscore.com/

<25	25-49	50-69	70-89	90-100
0	1	2	3	4

2. Are there a variety of **residential options?** *(homes, duplexes, apartments, condos)*

None	A little bit	Some	Quite a bit	A lot
0	1	2	3	4

3. Are there a variety **of public/private destinations?** *(restaurants, shops, offices, schools, etc.)*

None	A little bit	Some	Quite a bit	A lot
0	1	2	3	4

4. Are there a variety **of recreational facilities/destinations?** *(parks, gyms, athletic fields, etc.)*

None	A little bit	Some	Quite a bit	A lot
0	1	2	3	4

5. Are there a variety **of natural features?** *(lakes, fields, woods etc.)*

None	A little bit	Some	Quite a bit	A lot
0	1	2	3	4

6. Rate the **ease of access** to this location from all directions? *(No barriers, ex: river, highway, RR tracks)*

Poor	Fair	Good	Very Good	Excellent
0	1	2	3	4

(Mark any major barriers on the map and list in questions 16 and/or 21)

TRANSPORTATION ENVIRONMENT — Total Score (16) =

7. Are there **alternative transportation modes?** *(bus, rail, bike share available)*

None	A little bit	Some	Quite a bit	A lot
0	1	2	3	4

8. This segment has a posted **general speed limit** of: ____ mph Enter "NP" for "None posted."

>60 mph	50-60 mph	40-50 mph	30-40 mph	<30 mph
0	1	2	3	4

9. This segment has a posted **special speed limit** *(e.g. school zone)* of: ____ mph Enter "NO" for "None"

10. What is the traffic volume for this location? http://www.dot.wisconsin.gov/travel/counts/maps.htm

	>20000	10000-20000	5000-9999	1000-4999	<1000
	0	1	2	3	4

11. Are there multiple routes to get to the main intersection? *(e.g. grid neighborhood, access from all directions, etc.)*

None	A little bit	Some	Quite a bit	A lot
0	1	2	3	4

WALKING ENVIRONMENT — Total Score (16) =

12. Are there features that make this an easy place to walk? (*e.g. grid with good connectivity, traffic calming roundabouts, speed bumps, narrow roads, lighting, easy to cross streets e.g., crosswalks and stop light)*

None	A little bit	Some	Quite a bit	A lot
0	1	2	3	4

13. Are the sidewalks or trails in good condition? *(no cracking, no obstacles, etc.)*

Poor	Fair	Good	Very Good	Excellent
0	1	2	3	4

14. Are intersections easy to navigate? *(can see traffic, signals, signs, space, etc.)*

Poor	Fair	Good	Very Good	Excellent
0	1	2	3	4

15. Are there buffers between pedestrians and traffic? *(terraces, parking, bike lane, etc.)*

Poor	Fair	Good	Very Good	Excellent
0	1	2	3	4

16. List any key walking issues or problems (ex: bridge) encountered and their location:

1. _____ _____
2. _____ _____
3. _____ _____
4. _____ _____
5. _____ _____

BICYCLING ENVIRONMENT	**Total Score (16) =**

17. Are there features that make this an easy place to bike? *(bike lanes, signs, bike racks, few hazards, etc)*

None	A little bit	Some	Quite a bit	A lot
0	1	2	3	4

18. Is the surface that you rode on in good condition? *(no potholes, debris, bad surface, etc.)*

Poor	Fair	Good	Very Good	Excellent
0	1	2	3	4

19. Are intersections easy to navigate? *(can see traffic, signals, signs space, etc.)*

Poor	Fair	Good	Very Good	Excellent
0	1	2	3	4

20. Are there accommodations for all wheeled devices? *(curb cuts, wheelchair access, etc.)*

Poor	Fair	Good	Very Good	Excellent
0	1	2	3	4

21. List any key bicycling issues or problems (ex: bridge) encountered and their location:

1. _____ _____
2. _____ _____
3. _____ _____
4. _____ _____
5. _____ _____

FACILITIES & AESTHETICS	**Total Score (28) =**

22. Is there **recreational equipment** visible (playground equipment, sports equipment, etc.)?

None	A little bit	Some	Quite a bit	A lot
0	1	2	3	4

23. Are there **service amenities** visible (restrooms, water fountains, vending, etc.)?

None	A little bit	Some	Quite a bit	A lot
0	1	2	3	4

24. Are **attractive features** visible (e.g. architectural design, building variety, pedestrian and bicycle traffic, vegetation, signage)?

None	A little bit	Some	Quite a bit	A lot
0	1	2	3	4

25. Are **comfort features** visible (e.g. shade trees, benches, etc.) ?

None	A little bit	Some	Quite a bit	A lot
0	1	2	3	4

26. Is **air or noise pollution** visible (e.g. diesel fumes, factory emissions, trains, constructions)?

A lot	Quite a bit	Some	A little bit	None
0	1	2	3	4

27. Is the **physical environment safe and attractive** (no debris, no graffiti, no crime, etc.)?

None	A little bit	Some	Quite a bit	A lot
0	1	2	3	4

28. Are **people visible** (kids, adults, older adults)?

None	A little bit	Some	Quite a bit	A lot
0	1	2	3	4

APPENDIX G : PARENT SURVEY FOR WALKING AND BIKING TO SCHOOL

SURVEY WEBSITE: HTTPS://PARENTSURVEY.GITHUB.IO/

APPENDIX G : PARENT SURVEY QUESTIONS

Default Question Block

Dear parent or caregiver,

The City of Monona and the Monona Grove School District want to learn your thoughts about children walking and biking to school. This survey will take about 5 minutes to complete.

Your answers are confidential and no personal information about you or your child will be collected or distributed. The Information from this survey will help the City and School District plan for improvements in routes to and from school.

Please fill out one survey for each school your children attend. If you have more than one child in a school, complete only one survey for that school.

Thank you.

Estimado padre o cuidador,

La Ciudad de Monona y el Distrito Escolar de Monona Grove quieren saber sus opiniones sobre los niños caminando y montando en bicicleta para llegar a la escuela. Esta encuesta le tomará aproximadamente 5 minutos para completar.

Sus respuestas son confidenciales y no se recopilará ni distribuirá información personal sobre usted o su hijo/a. La información de esta encuesta ayudará a la Ciudad y al Distrito Escolar a planear mejoras en las rutas hacia y desde la escuela.

Por favor llene una encuesta por cada escuela a la que asistan sus hijos/as. Si tiene más de un hijo en una escuela, complete sólo una encuesta para esa escuela.

Gracias.

Would you like to take the survey in English or Spanish?
¿Prefiere llenar la encuesta en inglés o en español?

English/ Inglés

Spanish/ Español

Nombre de la escuela

Winnequah Elementary School

Nuestro Mundo Community School

Immaculate Heart of Mary Catholic School

Monona Grove High School

MG21

School name

Winnequah Elementary School

Nuestro Mundo Community School

Immaculate Heart of Mary Catholic School

Monona Grove High School

MG21

¿Cuántos de sus hijos/as asisten a esta escuela? (Por favor ingrese 1, 2, 3, ..., etc)

How many of your children attend this school? (Please enter 1, 2, 3, ..., etc)

¿En qué grado están sus hijos/as en esta escuela? (4K, K, 1, 2, 3, ...)

Hijo/a 1	
Hijo/a 2	
Hijo/a 3	
Hijo/a 4	
Hijo/a 5	
Hijo/a 6	
Hijo/a 7	
Hijo/a 8	
Hijo/a 9	
Hijo/a 10	

What grade are your children in at this school? (4K, K, 1, 2, 3, ...)

Child 1	
Child 2	
Child 3	
Child 4	
Child 5	
Child 6	
Child 7	
Child 8	
Child 9	
Child 10	

¿Qué intersección de calles es la más cercana a su casa? (Por favor, indique el nombre de cada una de las dos calles que se cruzan.)

Calle 1	
Calle 2	

What street intersection is the nearest to your home? (Please provide the name of the two intersecting streets.)

Intersecting street 1	

Intersecting street 2

¿Qué tan lejos vive su hijo/a de la escuela?

Menos de 1/4 de milla

1/4 milla - 1/2 milla

1/2 milla - 1 milla

1 milla - 2 millas

Más de 2 millas

No sabe

How far does your child live from school?

Less than 1/4 mile

1/4 mile - 1/2 mile

1/2 mile - 1 mile

1 mile - 2 miles

More than 2 miles

Don't know

En la mayoría de los días, ¿cómo llega su hijo/a a la escuela por la mañana?

Caminando

En bicicleta

En bus escolar

En vehículo familiar

Compartiendo un vehículo con niños de otras familias

En transporte público

Otro modo (patineta, scooter, patines en línea, etc.)

On most days, how does your child travel to school in the morning?

Walk

Bike

School bus

Family vehicle (with only children in your family)

Carpool (with children from other families)

Transit (city bus)

Other (skateboard, scooter, inline skates, etc.)

En la mayoría de los días, ¿cómo regresa su hijo/a de la escuela por la tarde?

Caminando

En bicicleta

En bus escolar

En vehículo familiar

Compartiendo un vehículo con niños de otras familias

En transporte público

Otro modo (patineta, scooter, patines en línea, etc.)

On most days, how does your child travel from school in the afternoon?

Walk

Bike

School bus

Family vehicle (with only children in your family)

Carpool (with children from other families)

Transit (city bus)

Other (skateboard, scooter, inline skates, etc.)

En la mayoría de los días, ¿cuánto tarda su hijo/a en llegar a la escuela por la mañana?

Menos de 5 minutos

5 - 10 minutos

10 – 20 minutos

Más de 20 minutos

On most days, how long does it take for your child to get to school in the morning?

Less than 5 minutes

5 - 10 minutes

10 - 20 minutes

More than 20 minutes

En la mayoría de los días, ¿cuánto tarda su hijo/a en regresar de a la escuela por la tarde?

Menos de 5 minutos

5 - 10 minutos

10 – 20 minutos

Más de 20 minutos

On most days, how long does it take for your child to get from school in the afternoon?

Less than 5 minutes

5 - 10 minutes

10 - 20 minutes

More than 20 minutes

Does not walk/bike/other

En general, ¿qué tan segura considera usted que es la ruta que su hijo/a tomaría para ir a la escuela si llegara caminando o en bicicleta?

Muy insegura

Algo insegura

Ni segura ni insegura

Algo segura

Muy segura

No sabe

In general, how safe do you feel the route to and from school for your child would be if he or she would walk or bike?

Not at all safe

Somewhat unsafe

Neither safe nor unsafe

Somewhat safe

Very Safe

Unsure/No answer

Cuando su hijo/a llega a la escuela caminando o en bicicleta, ¿hay áreas o intersecciones de calles donde usted tiene preocupaciones de seguridad?

Si

No

When your child does walk or bike to school, are there any areas or intersections where you have safety concerns?

Yes

No

Por favor describa el área o la intersección de calles donde usted tiene preocupaciones de seguridad, y cuáles son sus preocupaciones.

Please describe the area or intersection where you have safety concerns and what the concern is.

¿Qué tan importantes fueron los siguientes temas para usted cuando decidió NO permitir que su hijo/a caminara o fuera en bicicleta a la escuela?

	Nada importante	Poco importante	Muy imporante	No sabe
La distancia del hogar a la escuela	○	○	○	○
La conveniencia/inconveniencia de manejar	○	○	○	○
Los deberes familiares (necesidad de llevar a otros niños a la escuela, trabajar, etc.)	○	○	○	○
Las actividades de sus hijos antes o después de la escuela	○	○	○	○
La edad de su hijo/a	○	○	○	○
La velocidad del tráfico a lo largo de la ruta	○	○	○	○
La cantidad de tráfico a lo largo de la ruta	○	○	○	○
La disponibilidad de adultos para acompañar a los niños	○	○	○	○
La disponibilidad de aceras o senderos	○	○	○	○
Crossing guards	○	○	○	○
La violencia o el crimen	○	○	○	○
El clima	○	○	○	○

How important were the following issues for you when you decided NOT to allow your child to walk or bike to/from school?

	Not at all important	Somewhat important	Very important	Unsure/ No answer
Distance from home to school	○	○	○	○
Convenience/Inconvenience of driving	○	○	○	○

	Not at all important	Somewhat important	Very important	Unsure/ No answer
Family schedule (need to get other children to school, get to work, etc).	○	○	○	○
Child's before or after-school activities	○	○	○	○
Child's age	○	○	○	○
Speed of traffic along route	○	○	○	○
Amount of traffic along route	○	○	○	○
Adults to walk or bike with	○	○	○	○
Sidewalks or pathways	○	○	○	○
Crossing guards	○	○	○	○
Violence or crime	○	○	○	○
Weather	○	○	○	○

¿Permitiría que su hijo/a camine o vaya en bicicleta a la escuela si los siguientes temas fueran cambiados o mejorados?

	Si	No	No sabe
La distancia del hogar a la escuela	○	○	○
La conveniencia/inconveniencia de manejar	○	○	○
Los deberes familiares (necesidad de llevar a otros niños a la escuela, trabajar, etc.).	○	○	○
Las actividades de sus hijos antes o después de la escuela	○	○	○
La velocidad del tráfico a lo largo de la ruta	○	○	○
La cantidad de tráfico a lo largo de la ruta	○	○	○
La disponibilidad de adultos para acompañar a los niños	○	○	○

	Si	No	No sabe
La disponibilidad de aceras o senderos	○	○	○
Guardias de Cruce	○	○	○
La violencia o el crimen	○	○	○

Would you probably allow your child to walk or bike to school if the following issues were changed or improved?

	Yes	No	Unsure/ No answer
Distance from home to school	○	○	○
Convenience/Inconvenience of driving	○	○	○
Family schedule (need to get other children to school, get to work, etc).	○	○	○
Child's before or after-school activities	○	○	○
Speed of traffic along route	○	○	○
Amount of traffic along route	○	○	○
Adults to walk or bike with	○	○	○
Sidewalks or pathways	○	○	○
Crossing guards	○	○	○
Violence or crime	○	○	○

¿Cuál diría usted que es la razón más importante por la cual su hijo/a no llega a la escuela caminando o en bicicleta?

What would you say is the most important reason why your child does not walk or bike to school?

En su opinión, ¿en qué medida la escuela de su hijo/a facilita o dificulta que los niños lleguen caminando o en bicicleta?

Facilita fuertemente

Algo facilita

Ni facilita ni dificulta

Algo dificulta

Dificulta fuertemente

No está seguro/a

In your opinion, how much does your child's school encourage or discourage walking or biking to and from school?

Strongly encourages

Somewhat encourages

Neither encourages nor discourages

Somewhat discourages

Strongly discourages

Unsure/no answer

¿Tiene algún comentario o pregunta adicional sobre caminar o ir en bicicleta a la escuela en Monona?

Do you have any additional comments or questions about walking or biking to school in Monona?

If you have an additional child who attends a different school, please complete another survey for that school. If not, you may close your browser.

Si tiene otro/a hijo/a que asiste a una escuela diferente, por favor complete otra encuesta sobre esa escuela. Si no, puede cerrar su navegador.

Walks/bikes/Other

En general, ¿qué tan segura considera usted que es la ruta que su hijo/a toma para ir a la escuela caminando o en bicicleta?

- Muy insegura
- Algo insegura
- Ni segura ni insegura
- Algo segura
- Muy segura
- No sabe

In general, how safe do you feel the route to school is for your child to walk or bike?

- Not at all safe
- Somewhat unsafe
- Neither safe nor unsafe
- Somewhat safe
- Very Safe
- Unsure/ No answer

How important were the following issues for you when you decided to allow your child to walk or bike to and from school?

	Not at all important	Somewhat important	Very important	Unsure/ No answer
Distance from home to school	○	○	○	○

	Not at all important	Somewhat important	Very important	Unsure/ No answer
Convenience/Inconvenience of driving	○	○	○	○
Family schedule (need to get other children to school, get to work, etc).	○	○	○	○
Child's before or after-school activities	○	○	○	○
Speed of traffic along route	○	○	○	○
Amount of traffic along route	○	○	○	○
Adults to walk or bike with	○	○	○	○
Sidewalks or pathways	○	○	○	○
Crossing guards	○	○	○	○
Violence or crime	○	○	○	○
Weather	○	○	○	○

¿Cuál diría que es la razón más importante por la cual su hijo/a llega a la escuela caminando o en bicicleta?

What would you say is the most important reason your child walks or bikes to school?

En su opinión, ¿en qué medida la escuela de su hijo/a facilita o dificulta que los niños lleguen caminando o en bicicleta?

Facilita fuertemente

Algo facilita

Ni facilita ni dificulta

Algo dificulta

Dificulta fuertemente

No sabe

In your opinion, how much does your child's school encourage or discourage walking or biking to and from school?

Strongly encourages

Somewhat encourages

Neither encourages nor discourages

Somewhat discourages

Strongly discourages

Unsure/no answer

¿Tiene usted algún comentario o pregunta adicional sobre caminar o ir en bicicleta a la escuela en Monona?

Do you have any additional comments or questions about walking or biking to school in Monona?

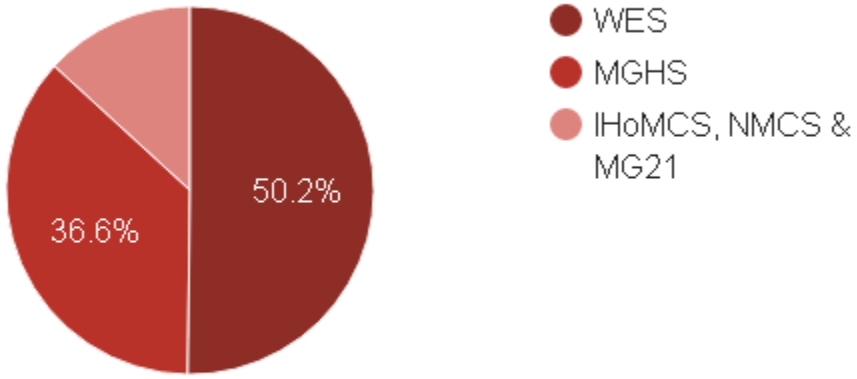
Si tiene otro/a hijo/a que asiste a una escuela diferente, por favor complete otra encuesta sobre esa escuela. Si no, puede cerrar su navegador.

If you have an additional child who attends a different school, please complete another survey for that school. If not, you may close your browser.

APPENDIX G : PARENT SURVEY GRAPHS

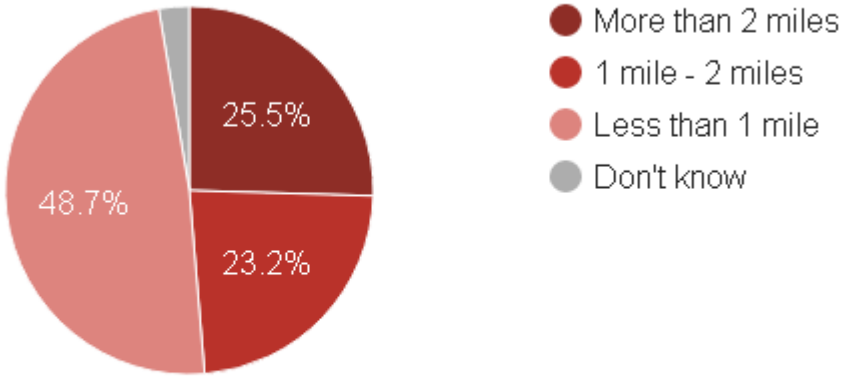
Parent Survey about Biking and Walking to School: Graphs

Figure 1: Survey Response Number by School



Response rate: 92.33% (265 out of 287 parents)

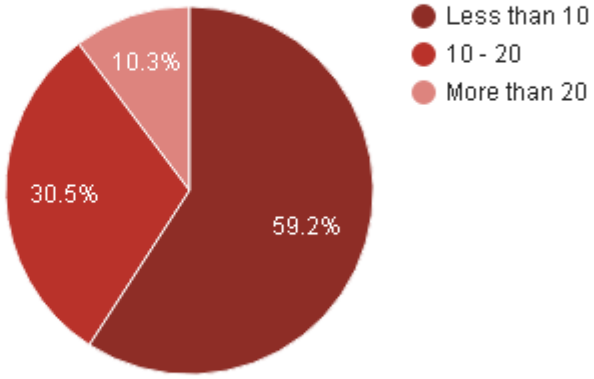
Figure 2: Distance to School



Response rate: 91.64% (263 out of 287 parents)

Going to School

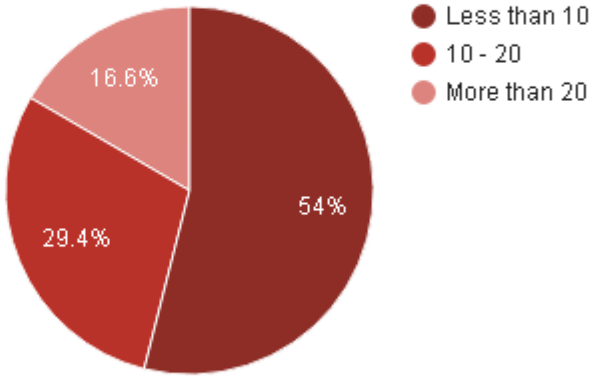
Figure 3: Traveling Time to School



Response rate: 91.29% (262 out of 287 parents)

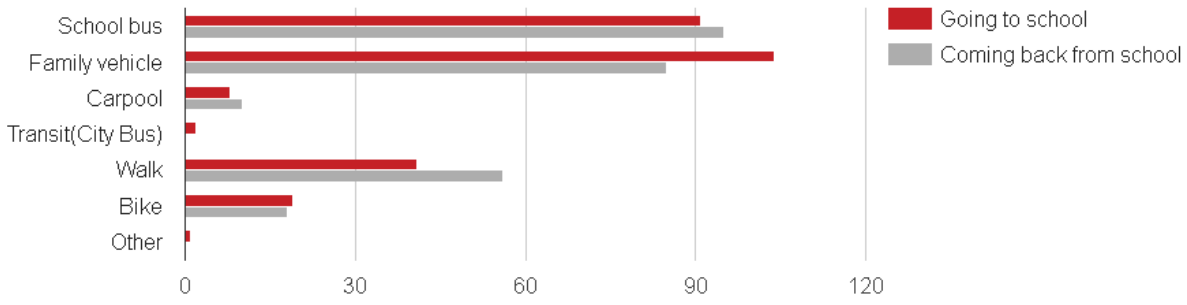
Coming Back from School

Figure 4: Traveling Time from School



Response rate: 92.33% (265 out of 287 parents)

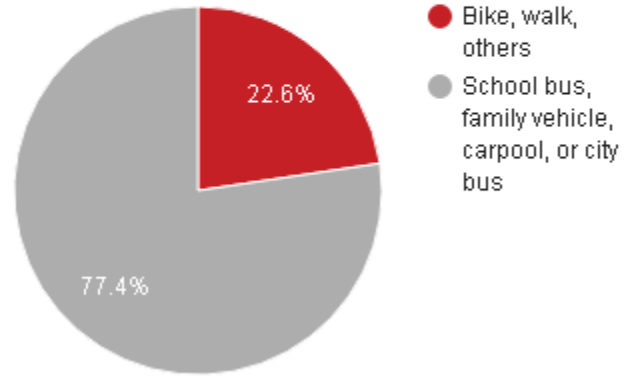
Figure 5 : Mode of Transporation from School



Response rate: 92.33% (265 out of 287 parents)

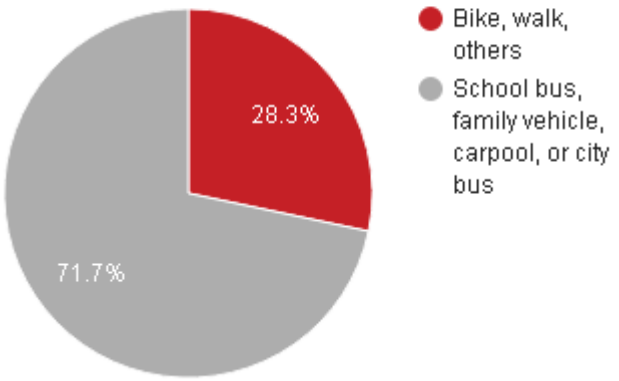
Going to School

Figure 6: Mode of Transporation to School (%)



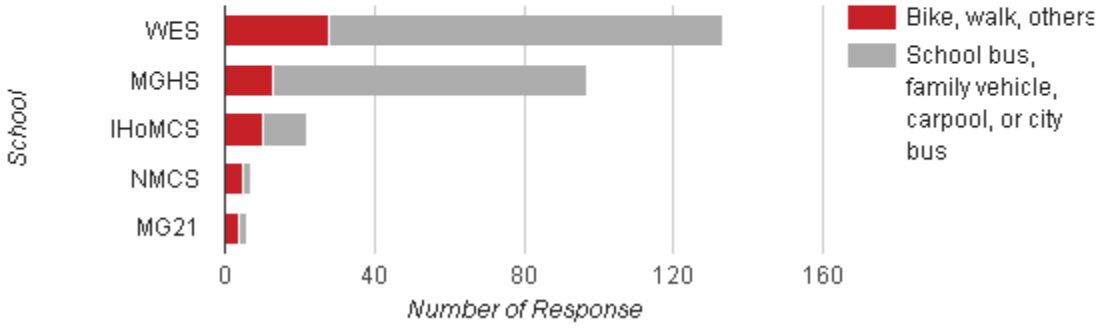
Coming Back from School

Figure 7: Mode of Transporation from School (%)



Going to School

Figure 8: Mode of Transportation to School by School



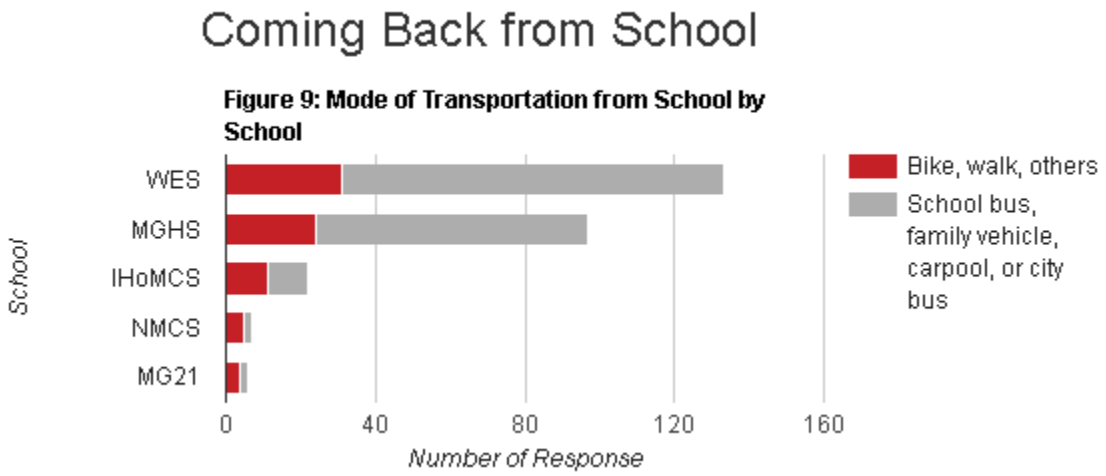


Figure 9: Mode of Transportation from School by School

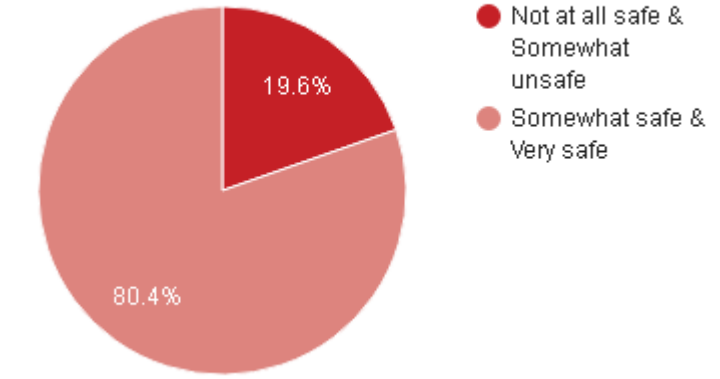
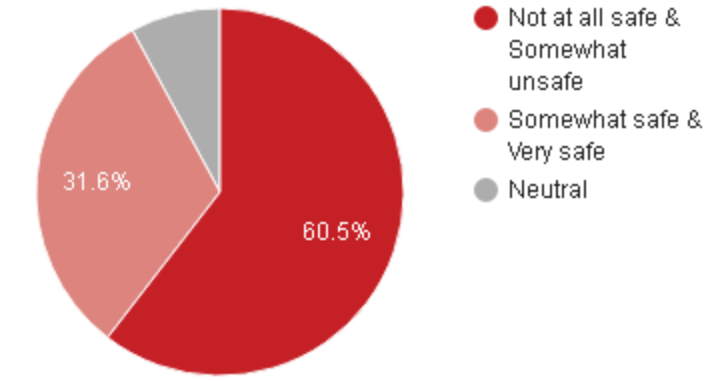


Figure 13: How safe do you feel the route to school is for your child to walk or bike?

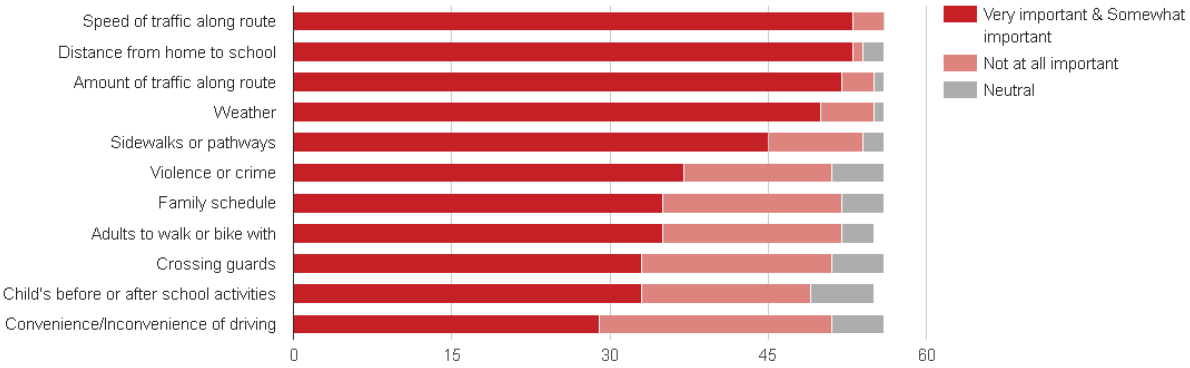
DO NOT Walk or Bike

Figure 14: How safe do you feel the route to school if he or she would walk or bike?

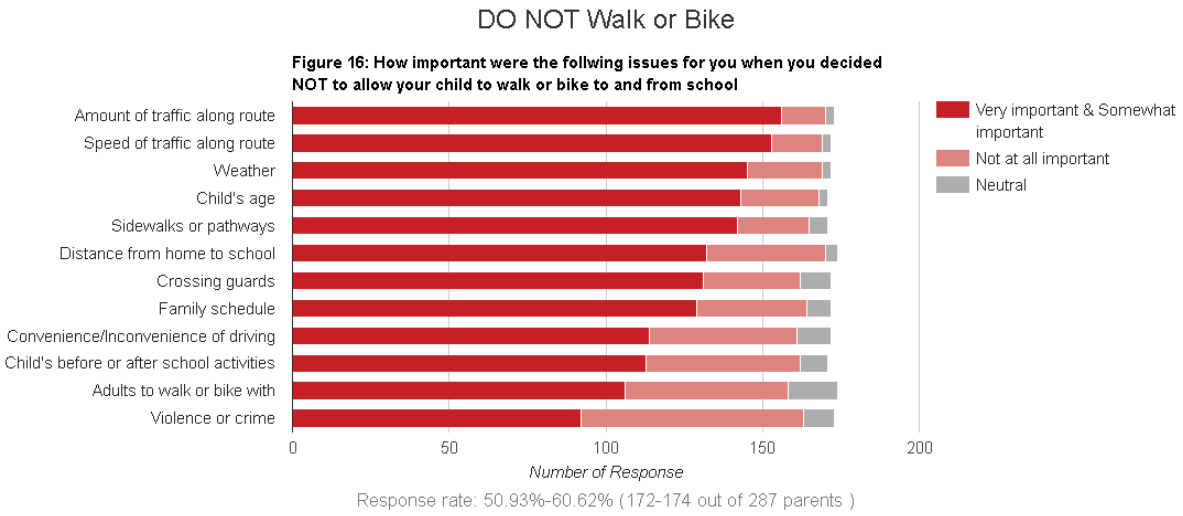


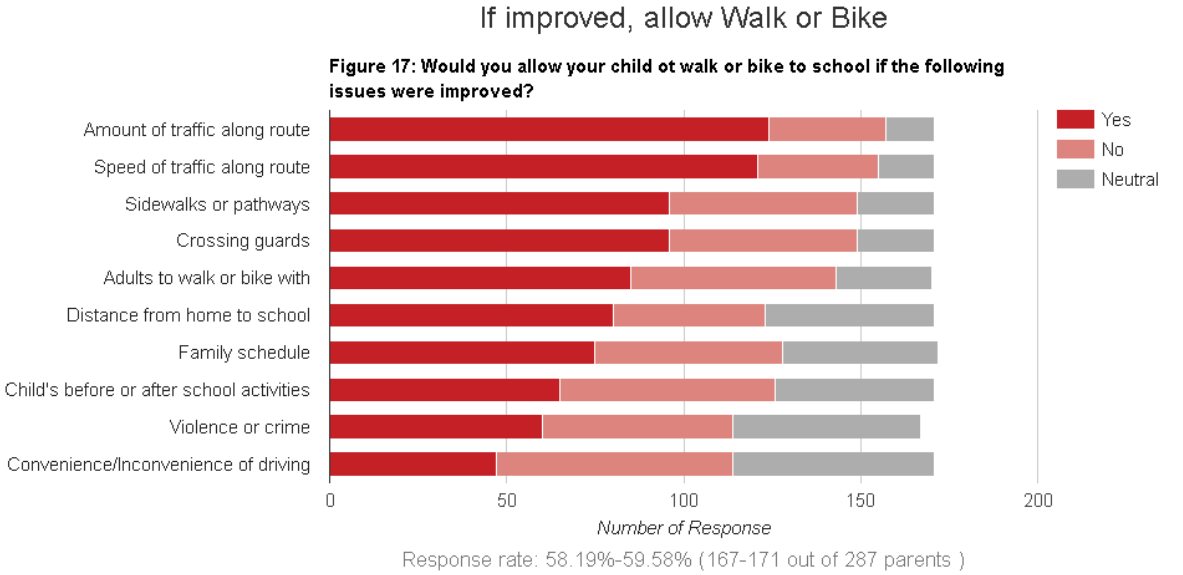
Walk or Bike

Figure 15: How important were the following issues for you when you decided to allow your child to walk or bike to/from school?



Response rate: 50.93%-60.62% (172-174 out of 287 parents)

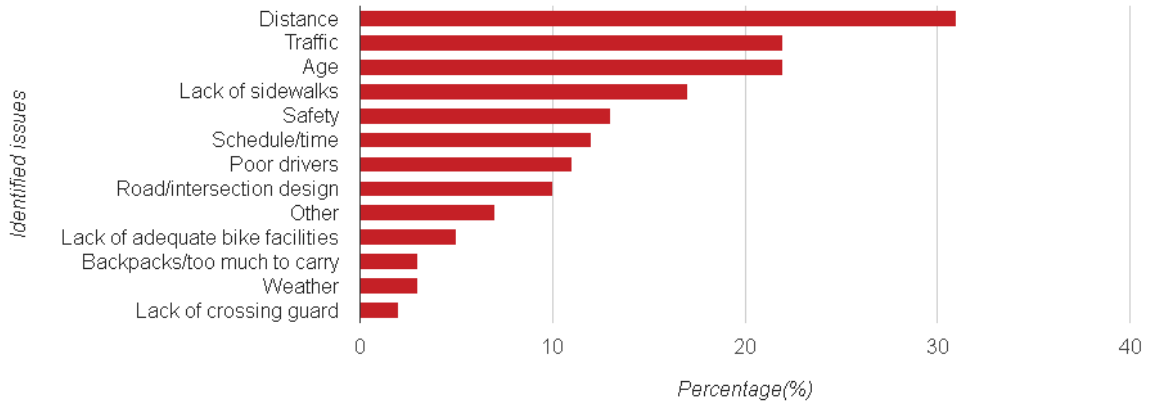

DO NOT Walk or Bike
Figure 16: How important were the follwing issues for you when you decided NOT to allow your child to walk or bike to and from school
Amount of traffic along route
Speed of traffic along route
Weather
Child's age
Sidewalks or pathways
Distance from home to school
Crossing guards
Family schedule
Convenience/Inconvenience of driving
Child's before or after school activities
Adults to walk or bike with
Violence or crime
Very important & Somewhat important
Not at all important
Neutral
0
50
100
150
200
Number of Response
Response rate: 50.93%-60.62% (172-174 out of 287 parents)


If improved, allow Walk or Bike
Figure 17: Would you allow your child ot walk or bike to school if the following issues were improved?
Amount of traffic along route
Speed of traffic along route
Sidewalks or pathways
Crossing guards
Adults to walk or bike with
Distance from home to school
Family schedule
Child's before or after school activities
Violence or crime
Convenience/Inconvenience of driving
Yes
No
Neutral
0
50
100
150
200
Number of Response
Response rate: 58.19%-59.58% (167-171 out of 287 parents)

Most important reason children do not walk or bike to school

The parents also vote the most important reason their children do not walk or bike to school:

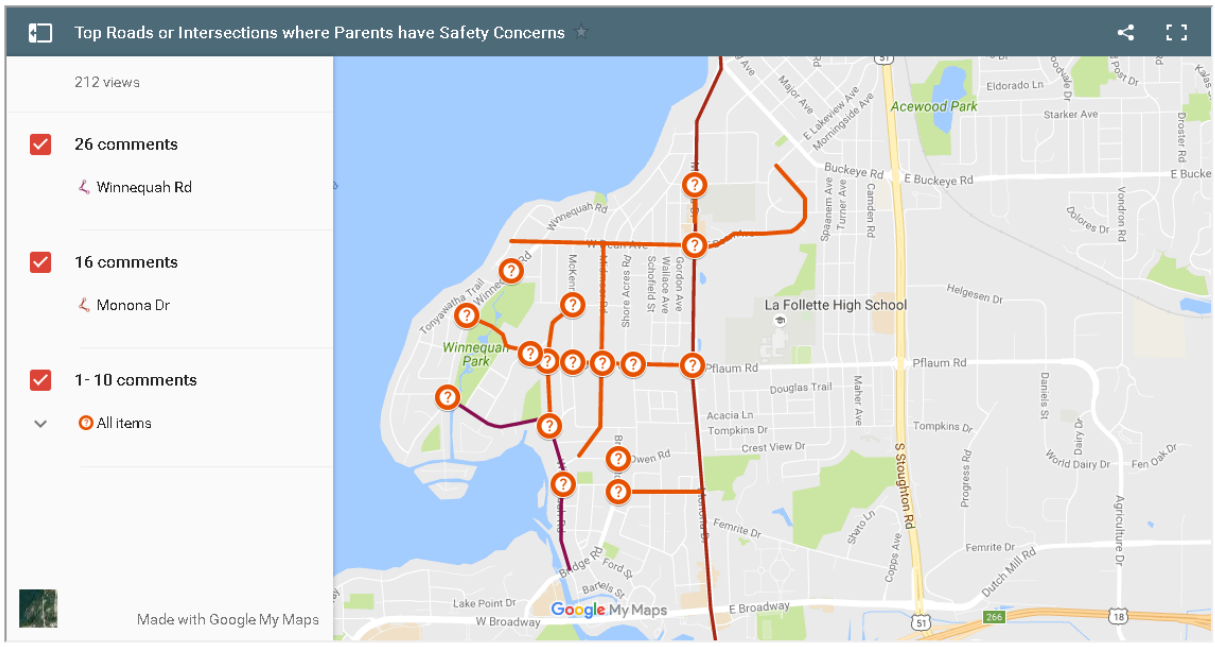
Figure 19: What would you say is the most important reason why your child does not walk or bike to school?



Response rate: 55.40% (159 out of 287 parents)

Roads and intersection where Parents have Safety Concerns

79.35% of the parents agree that certain area or intersection have safety concerns. The following map summarizes frequency of those roads or intersection mentioned by the parents:



APPENDIX G : PARENT SURVEY COMMENTS

Question:

Please describe the area or intersection where you have safety concerns and what the concern is.

No	Comment
1	Monona Drive, Dean, Nichols
2	Winnequah at Progressive. Nichols at Nuestro Mundo School.
3	Progress dr and Main Street in cottage grove
4	Monona Drive
5	All of Winnequah rd no sidewalks no bike lanes and crossing Monona dr at any crosswalk
6	she rides on monona drive and there is two busy intersecions . Monona Drive
7	Also crossing Dean Avenue
8	The intersection of Progressive and Rothman (or is it Roigan, I can never remember the name)- there are always a lot of cars parked on that street in the morning and it is difficult to for the kids to always have to be walking around parked cars. This is especially a concern because a lot of parents drop off their kids on the street by the playground to avoid having to wait in the drop-off line. I have seen so many cars fly around that uncontrolled corner, even though that is where the crosswalk is located. I have my daughter walk through the Firemen's Park field just to avoid the traffic on that corner.
9	Midmoor Road between Nichols and panther trail.
10	Winnequah Rd and Maywood Rd. = no bike lanes and traffic Maywood and Nichols = no bike lanes and traffic
11	Turning left - Exiting the school circle drop off/parking lot
12	Winnequah rd-traffic
13	Monona Drive and Dean Ave
14	Intersection at police station is simply a busy street.
15	Crossing Dean Avenue
16	The five way intersection is problematic.
17	The five-"corner" intersection near the school - Greenway, McKenna, Maywood
18	King's Row and Monona Drive...think he would need to ride on the side walk...can you imagine a 6 year old riding his bike across Mononar Drive and up the hill safely?
19	5 way stop on McKenna - very busy intersection in the morning and people drive over the speed limit especially when running late for drop off
20	Monona dr and pflaum rd
21	Drivers on Femrite drive tend to speed because it is a long, straight, flat street. Traffic needs to be slowed down there. There are also lots of heavy duty trucks going to Menards, the commercial businesses by Copps ave. and the city maintenance buildings. There is no designated bike lane on Femrite. Also, traffic on Monona Drive seems to not recognize pedestrians at all, even in marked cross walks and at lights. Cars are just not looking for bikes and walkers.
22	Winnequah Trl and Winnequah Rd. There should be a stop sign on the north side of Winnequah Road at the intersection of Winnequah Trl. Cars turning left on to Winnequah Trl often don't pay attention to south bound traffic on Winnequah Rd

Nichols Rd and Winnequah Rd. Winnequah curves in one direction, many cars drive fast on this stretch, and there are no sidewalks or walking/biking lanes on the Winnequah
23 School end of Winnequah Rd to give students a safe path.
24 Winnequah Road (with no sidwalks) is busy and so is Nichols Rd
25 Winnequah Rd and Winnequah Tr. Tricky intersection with no sidewalks
Monona drive and Nichols
26 Monona drive and femrite
mckenna and Nichols because its not a four way stop
Nichols and Midmoor because people tend to speed and there is no place to walk. A dedicated bike lane would be nice on Midmoor since it is part of the loop around the
27 lake.
28 turning onto winnequah from tecumseh/winnequah
29 Intersection of Pheasant hill rd and Nichols Rd.
30 McKenna & Greenway- its very busy at school time
31 Inattentive drivers along the entire route.
32 Winnequah & Progressive
Bridge sand Owen: bad intersection with two-way stop. Nichols and the street by the Methodist church: bad intersection again with dangerous and unexpected three-way stop. All over Monona, there are too many intersections with odd numbers of stop signs. Also the school parking lot is very dangerous. There will be an incident there if the lot is not made bigger. There should be sidewalk pathways to the cars (like at Target). Maybe
33 the school could buy the small White House next to the lot to expand the lot.

34 Greenway and Schluter/ McKenna
Winnequah Rd has no sidewalks. Drivers go too fast on the road. The intersection at
35 Winnequah/Midmoor is a little confusing for kids. It's a bit blind for drivers.
Crossing Nichols rd at midmoore. Odd intersection close to school (5 roads into one
36 intersection)
Crossing Winnequah to get to Nichols. A crossing guard there would allow quite a large
37 area to walk/ride to school
No sidewalk on Winnequah. Vehicles travel at a high rate of speed on winnequah, above posted limits. Winnequah Rd is high traffic area. No crossing guard or school liason to
38 monitor route
39 Winnequah and curve where panther turns into McKenna
40 Maywood & Nichols
Cars go way to fast on Schluter Road. The intersection of Schluter and Nichols has a blind spot at the top of the hill. I have been with my kids and almost got hit by a car. At this
41 point the only way for them to cross Nichols would be with a crossing guard.
The intersection of Winnequah Road, Winnequah Trail and Baskerville. It's tricky for
42 pedestrians and bikers.
43 forstwoods and bridge road

Bridge and frost woods, bridge and Owen and crossing Nichols from Maywood and
44 traveling along winnequah rd
45 Crossing Nichols- people don't stop for the crosswalk

46 Midmor and Nichols. Cars fly down Nichols
47 Winnequah and Vogts
48 Nichols road and Schluter
Intersection of Winnequah Rd. and Frost Woods. There is not an easy way to transition from the bike path on Winnequah Rd. onto Frost Woods (riding on Winnequah, then
49 turning left onto Frost Woods).
50 Any along Nichols

Winnequah Road and Frost Woods Road, Winnequah Road and Maywood Road and 3
51 point intersection at Greenway/Maywood and McKenna.
Schluter & Nichols' crosswalk is right at the crest of the hill. Cars coming over the top don't see you until they are close in proximity, and they are oftentimes going at high
52 rates of speed and we have to run across the crossing walk.
Midmoor & Nichols. Walking anywhere on Midmoor. 5pt intersection at Greenway. A
53 Large tree blocks views. Walking kids have to cross there to get to walking path to school.
54 Just in general
55 Has to ride in Winnequa road. Cars drive very fast
56 Winnequah Road heading towards Bridge Rd from Maywood Rd.
57 I am uncomfortable with my child crossing Monona Dr by themself
Maywood road has such heavy traffic and without a sidewalk or bike lane it can be
58 dangerous. If everyone observed the speed limit it would be better.
59 Bridge Rd and Frost Woods
There are few sidewalks in Monona, and many hurried drivers use residential Monona as
60 a speedy shortcut.
All along Winnequah. Cars do not stop for bikes who try to cross. They drive above the
61 speed limit and show no courtesy to bikers
Nichols Rd at Schluter Rd. The cross walk is at an angle across the street, on a hill, and on a curve. People crossing can't see the cars coming and cars can't see the people. It's extremely dangerous for children to be walking across. It is one block from the school and
62 there is no crossing guard.
63 Any intersections with Winnequah Road
Winnequah Road is too busy in the mornings to be safe to walk on. The lack of sidewalks
64 makes it even less safe.
There are no sidewalks on the side streets where my son wound potentially be walking
65 which is a concern.
66 Nichols and Schluter - blind curve/hill

67 Frost Woods is one and Nichols at 3 ways stop
68 Crossing Monona Dr
69 All of Winnequah Rd.
Winnequah Road to Maywood Rd is very busy with commuters (and often a fair amount of speeding). Intersection at Maywood and Nichols has a crossing guard so wouldn't be
70 problematic
71 People going too fast on Winnequah road. Also narrow bike lanes on Winnequah.

Winnequah Road doesn't have bike lanes or sidewalks, and cars do not obey the speed
72 limit.
Bridge Rd. and Winnequah Rd. - It's a three way stop, and the direction that does not
73 have to stop is always coming fast.
Mckenna Road from Dean to Greenway is rough and does not have sidewalks or a
74 walking lane
75 The intersection at Dean/Rothman/Winnequah.
76 All down Winnequah Rd. The street is narrow and many drivers speed.
Winnequah and Nichols, especially due to cars coming quickly southbound from around
77 the curve toward Nichols.
McKenna and Nichols
Can sometimes be a busy intersection and it's a 3wwy stop
(My child has autism but the street was a concern for me with my older, typically
78 developing child also

79 Crossing Nichols from Pheasant hill or midmore
80 no side walks
Frost Woods and Queens Way
81 Frost Woods and Bridge Rd.
Saint Theresa Terrace and Schofield Street. Maywood, McKenna, and Greenway is also of
82 concern.
83 Winnequah has no sidewalks or bike lane.
Monona Av.
The traffic is very heavy and there is no safe space to cross the avenue, there are no
84 scaffolding to cross the street.
85 Monona Dr.
86 All along Winnequah. Lots of speeding vehicles.
87 Winnequah Rd.
When leaving the high school and turning left on to Monona drive the cross walk after the intersection is unsafe. There is a cross walk painted in the street but the trees in the median obstruct the left side of the street where kids would enter the cross walk. I have
88 nearly hit kids here before.
crossing Nichols Road
89 crossing on Maywood Road
90 Too far to bike or walk to school.
Monona Drive and Coldspring. There is only a yellow flashing light but instead there
91 should be a green arrow so cars can turn left from Monona Dr onto Coldspring
92 Any place where there are no sidewalks.
Greenway at the
93 4 way stop
Since my child is 4, I am always concerned and at this point I don't let him bike anywhere on his own. The road right in front of the Winnequah school (Greenway) is quite busy in the morning. I think that he will need to learn proper rules/safety measure when riding and biking on all types of streets though, especially in Monona where walking and biking
94 is so common.

Crossing Monona Drive, especially at Lofty Ave. The cars don't stop for walkers. My daughter was almost hit there. Also along Winnequa Road, since there are no sidewalks
95 or painted lines.
96 Winnequah at Nichols. No sidewalk; two busy roads intersect.
Monona drive from Cottage Grove Road through Coldspring has a lot of speeding and
97 erratic drivers
Anything crossing Monona Drive is dangerous. If my kids park the car later than 7:00am they have to park and walk across Monona Drive. Since they live in CG, they end up
98 leaving very early so they park and avoid crossing.
99 monona dr and pflaum rd
100 I do not like the corner of Dean and Monona Drive.

101 winnequah road and winnequah trail, also crossing Monona Drive
102 Once on Dean, there are sidewalks
103 Nichols and Monona Dr area. Some creepy people and strangers hang out there at times.
No sidewalks at all on Winnequah....bikers and cars everywhere. Not safe.
Monona Drive and Cold Spring intersection seems hazardous for pedestrians....even w/
104 the traffic lights!
Crossing in the crosswalk from in front of the school on Monona Drive and at red lights at Dean and Monona Drive. There have been several instances where my child has almost been hit while crossing with the walk light on. Motorist will turn while my child is
105 crossing or speed up.
106 Anything off of Monona Dr. or Frost Woods or Bridge Roads
107 Parking in Monona/walking and biking isn't an option
108 Monona drive
There is no sidewalk on Winnequah and cars frequently speed due to the lack of stop
109 signs or speed bumps.
Crossing Frost Woods, Owen, and Nichols. There are no sidewalks or marked bike lanes on most of the streets he would take. My child is too young to understand rules of the
110 road.
Most of the way there are no sidewalks or bike lanes. The intersections at Bridge and Frost Woods and at Nichols & McKenna have three-way stops which is confusing for
111 drivers and children. My child does not walk or bike to school.
112 Nichols, Maywood/Greenway
113 Nichols
Corner of WInnequah Trail and Winnequah Road. Winnequah Road is busy there and there isn't a great way for them to cross and get to the park area. Even if the sidewalk continued from Healy onto the Winnequah Road side that would be better so once they
114 leave Winnequah Trail they could get on sidewalk.
Monona Dr. - all intersections. Quite honestly, all of Monona where there aren't
115 sidewalks is pretty dangerous for little walkers or inexperienced bikers.

116 Monona Drive intersections - Dean - or directly across from the high school
Winnequah Rd. Cars traveling way too fast on the road with no sidewalks. Need more
117 stop signs or speed bumps.

118	Winnequah Road at Winnequah Trail and Winnequah Trail at Tecumsah. / Cars fly from all directions with little regard for those not in a car.
119	Monona Drive and Coldsprings

Question:

What would you say is the most important reason why your child does not walk or bike to school?

No	Comments
1	distance
2	The school is too far away
3	The distance school is from our house and the busy streets he would have to cross. Also his age.
4	Too far
5	Distance and safety.
6	No Sidewalks & Traffic on Winnequah Road
7	My child walks to the location where his friend's car is parked in a surrounding neighborhood. Your survey did not account for this option.
8	Traffic afraid a stranger might take her
9	traffic and will not be allow
10	Teenager who gets up late....and we talk and connect in the few minutes in the car
11	Too far with such a heavy backpack and bag for sports.(too much to carry)
12	Distance and unsafe route with high traffic volume and speeding issues through school zones/inattentive drivers
13	Distance
14	Safety and time
15	The truth? he's lazy.
16	Distance
17	Right now, it is her age. I anticipate that she will be walking to school on her own in the spring, but only through the park to avoid the traffic around school. It always surprises me how little concern other folks have when they're late to work.
18	Age for my first grader. Related to age is how safe she would be paying attention to fats cats on the road.
19	Road safety.
20	Nobody to go with them.
21	There are not enough sidewalks and safe places to walk. There are too many drivers who speed through the neighborhoods and also too many distracted drivers--looking at phones, etc.
22	Safety. Busy roads at those times
23	Too young to safely handle the intersections and no sidewalk
24	Age combined with heavy traffic and five-way stop.

25 Lack of sidewalks, the five "corner" intersection stated above.
#1 Many road intersections where bike and auto traffic cross
#2 auto traffic speed
26 #3 distance
Kids are not old enough to walk/bike to school by themselves and need to get to
27 work after dropping them off.
28 the distance
We are a little far from school for my child to walk or bike- esp at her young age.
However, in general, I have a greater concern for pedestrian/biker safety due to
29 the speed and amount of traffic on both Femrite drive and Monona drive.
30 Few/No sidewalks on the route
Winter is long and cold. With no walking path or sidewalks, snow allows for even
less room for travel- it is too unsafe most of the year- though on nice days, with
31 planning he loves to bike!
She is still too young and needs supervision and both parents need to get to
32 work.
Age of the children, and concern for a couple of tricky intersections in route to
33 school.
34 Too far and too many busy streets to cross
35 right now, too young. hoping next year she will/can
36 bike paths and one busy intersection
37 I didn't think he was allowed to walk/ride to and from school.
I'm uncomfortable with my 7 year old walking/biking by herself- i'm afraid she
38 could be kidnapped, assaulted, or struck by a car.
39 Not old enough, too many inattentive drivers.
40 Lack of sidewalks on Winnequah
Distance. But in general, because of no sidewalks and the oddly controlled
intersections all over Monona, it's not at all safe for kids to walk or bike. Also,
kids there tend to bike near the center of the road and are just meandering all
over the road, often in groups. They need to be told that they must be off to the
41 right, close to the curb, and single file. In general, it's a dangerous situation.
42 No crossing guards
43 Traffic
44 Time in am due to other responsibilies
45 His age and no crossing guard at the intersection mentioned above
46 I feel that the overall route isn't safe.
47 No sidewalks
Biking in the fall and spring would be great, but winter is an issue. Icy roads, cold
48 temperatures, getting dark before after school activities, etc.
49 Too young
Cars are way to fast! The intersection of Schluter and Nichols has an awful blind
spot at the top of it. We often get stuck in the middle of the crosswalk, as cars
50 speed past us.
51 Convenience. Getting big to work

52	Our child does not feel comfortable biking alone and parents don't have extra time in morning to accompany. Also, child has a hard time being ready in time so adding walking/biking time is difficult
53	traffic
54	Traffic along the route and people not looking out for kids. We bike often but haven't let him bike alone yet
55	They usually walk, but are only 5, so not ready to walk alone. Need to be careful crossing Nichols.
56	I don't want my 7 year old crossing Nichols rd without an adult, even if he's with his older brother it is a concern.
57	The kindergartner is too young to walk that far. The 3rd grader rides the bus with the kindergartner so walking isn't necessary.
58	dangerous intersection
59	We don't feel the route is safe enough for our Daughter to navigate on her own.
60	Not safe. Too little
61	Crossing busy streets and distance from home to school
62	Intersection safety
63	There are no sidewalks and traffic is heavy on midmoor for a child to walk onz now that she is older I would be ok if she walked. Also no one else walks. Would like her to have a person/friend to walk with
64	She's 4
65	Distance and traffic on Winnequa Dr.
66	Distance to school and traffic on Winnequah Rd.
67	Traffic on Monona Dr is my only big concern.
68	Age
69	Too far away
70	Distance and traffic.
71	Winnequah is too unsafe.
72	No crossing guard on the street. The intersection is already terrible, it is way to dangerous to allow a child to cross by themselves.
73	The distance and the unsafe nature of Winnequah Road.
74	The main reason now is that we just don't feel he is old enough. Within the next year or so when we do feel he is ready, traffic and overall safety would be our main concerns.
75	Still too young, but in the future -- there are no sidewalks!!! The cars go down our road, Schluter, way too fast. I think this is because it is wide and straight. If the road was narrower (made narrower with bump-out sidewalks, even) drivers' speed might decrease.
76	Schedule and lack of counterparts
77	Distance from home to school
78	The ride/walk path is along Winnequah Rd., which worries me. There are many cars that do not obey the speed limit. I would not worry if we had sidewalks and wider bike lanes and slower speed limits (or speed limit enforcement). Also, she has a heavy load with her backpack, lunch and instrument. If she did not have to carry an instrument, I would be far less concerned.
79	Family schedule as child is too young to walk/bike alone.

80 Busy, narrow roads
81 It is dangerous.
82 Age
83 sidewalk/path
84 Lack of sidewalks and time in the morning.
85 family schedule
86 He is 5, when he is older he will walk or bike.
87 safety of walking or biking along Winnequah Rd.
88 At their ages, we do not want them walking unattended. Also, Winnequah Road is a busy street with no clear lanes marked to give cars/bikes/pedestrians a clear zone to use.
His autism
89 I did not allow my other child to, mainly because of the intersection and the distance on days with bad weather
90 Too young to navigate busy road unattended
91 no side walks
92 distance and traffic
93 amount and speed of traffic
94 No sidewalks of bike lane
95 No sidewalks or pathways, traffic,
96 Lack of sidewalks. Traffic. Speeding vehicles on Winnequah without sidewalks.
97 safety
98 Too young
99 Winnequah Road makes me nervous as people drive fast
100 Distance, traffic, and age
101 Distance
102 Despite school zone the traffic on Monona Dr goes too fast. There is too much traffic and there is never a safe break to cross Monona Dr
103 Because we live too far from the school.
Safety - the kids
Really want to walk or bike to school
104 But I worry they might get hit by a car
105 At this point, age. When he is old enough, I will assess the situation and determine if I feel like biking or walking to school is an option.
106 Too much to carry.
107 After school activities and time of convenience
108 It is too far and would take too long. He is of driving age and can drive himself to school.
109 Two far for her age
110 Distance
111 Too much to transport... backpack, sports equipment and musical instruments are too cumbersome
112 Too far
113 he has a driver's license and drives himself

114 Distance
115 It's far to Monona
116 The time in the morning is so short. It is easier to drive him.
117 traffic, no bike lanes
118 Schedule too demanding
119 weather is most important, has a VERY heavy backpack and not good for his back
120 Distance to school
121 Too far to walk for sure and too far and unpredictable for biking.
122 Distance
123 We leave at the same time and I drop him off on my way to work.
124 My child walks to and from school on most days. Nevertheless it is still a worry and concern that my child can get hit and injured.
125 Schedule works out that driving is a reasonable option and is easier. I can also know they got to school when I drop them off.
126 Too far, have to cross busy highway
127 Distance from school.
128 More convenient to get a ride
129 Too far to walk or bike
130 WAY TOO FAR. NEED other access for my kid to get to school early enough to eat breakfast and do home work. They are on the bus way too long.
131 distance
132 Distance
133 i feel as though, when she gets on the bus, I know with certainty that she will get there safe. If she bikes, it is a question. However, starting 4th grade i would feel more safe than any other year given she has much more independent riding under her belt.
134 Speed/ lack of stop signs. Lack of sidewalk. Most of the route to school had no sidewalk.
135 The lack of sidewalks. I see many distracted drivers--people looking down at their phones, texting and talking on the phone, as well as people driving too fast.
136 Too far and he's too young.
137 Too far AND no safe route away from traffic.
138 Lack of designated bike lanes. Lack of 4-way stops. Too many two-way and 3-way stops. Inattentive drivers. Drivers on their phones. Drivers traveling over speed limit.
139 Age and roadways. He is 3. There are zero sidewalks, designated or separated bike lanes.
140 No Sidewalks from Tonyawatha Trail to Winnequah Road to Winnequah Park
141 Time
142 Too far and no sidewalks.
143 distance
144 No sidewalks.
145 Traffic.
146 distance
147 distance, intersections needing to cross

Question:

Do you have any additional comments or questions about walking or biking to school in Monona?

No	Comment
1	I believe that all of the cross walks near the school should have lights. I also believe that having a community awareness event would be helpful.
2	I feel the roads in Monona are safe for kids to walk.
3	Monona drive has good sidewalks the entire length; one block west, the side roads are narrow and quiet on the way to and from MG 21
4	I wish there were better signage for drivers comin down Nichols towards Maywood; they fly down that hill and it's the reason I wouldn't let my kids walk by themselves until they're tall enough or old enough. It's scary how unobservant drivers are on that hill.
5	With a child in Kindergarten, I would not feel safe with my child walking alone because of traffic but I have no concerns when with an adult.
6	My kids have always walked to school, as we only live a few blocks away. However, this year I've had to escort them because there's been a mentally ill man that stands at the corner of the street or his front lawn and watched the kids going to and from school. He's obviously agitated and unwell, but the police department said they can do nothing unless he commits a crime or touches a child. It's very frustrating that an adult is allowed to stand around and watch children when he has no reason to be around them, and it's very unfortunate that someone who is clearly ill is not getting the support he needs.
7	safe community; no issues
8	I have many comments, and they are on file with the City of Monona public safety committee as well as the police chief. At the start of the school year I reached out to request more school zone signage along Rothman and Greenway; stops signs on Progressive where it meets Rothman and on Rothman where it meets Greenway; crossing flags and signage at the two crosswalks on Greenway near the Winnequah playground; and more. I either bike with my child or watch him bike and I have personally witnessed near misses - HE HAS ALMOST BEEN HIT BY CARS SEVERAL TIMES - because people do rolling stops turning onto Rothman from Progressive and turning from Rothman onto Greenway right into the crosswalk area without paying extra attention. I have had to stop my child from proceeding through the crosswalk because of cars rolling through right in front of us. We live on Rothman and as a major thoroughfare to and from school I am dismayed at the lack of signage, lack of sidewalk or bike/walk lanes, and the fact that I have witnessed many people rolling through intersections either in a rush or oblivious to the fact they are on a walk/bike to school route.
9	I worry about the children who are walking to school from a mile away. I may be an overprotective parent by not letting my 8 year old walk by himself, but I believe that bussing should be available to those who aren't at the maturity level to walk by themselves yet.

If biking/ walking to school is going to be further encouraged, the city needs to mark more crosswalks on Greenway in front of school. As of
10 now, there aren't any.
snow banks along the road in the winter, makes the walk to school less
11 safe
Would like to see a bike/ ped lane and street parking one-sided during school months on street leading to school. Stop signs at Progressive and Rothman and at Rothman and Greenway. Maybe a flashing school
12 zone light on Greenway from Maywood to Rothman Pl.
The path from Winnequah School to Maywood Rd is excellent for biking and walking, as it safely funnels students to the school building, away from the car traffic. Maywood Rd, however, is extremely unsafe for all users, whether driving or walking/ biking. The road is undersized for two-way traffic and intersects at an unsafe location with Greenway Rd (the main car route to two Monona schools). An effective solution would make Maywood Rd one-way only, heading northward, from the intersection of Maywood and Schluter, to the right-hand turn only intersection of Maywood and McKenna Rd. The "second" intersection, where Maywood Rd joins both Greenway Rd and McKenna Rd in a 5-way stop, should be closed off. A space for a bike path can be created through this closed off intersection and along Maywood Rd. Cars can continue to use Maywood Rd for school or residential use, without fear of head-on collisions. The entire intersection of Greenway Rd and McKenna Rd would be safer. Pedestrians and bicyclists would have a large, safe pathway on Maywood Rd to reach the adjoining path to Winnequah school.
The residents of Monona currently utilize the city streets to walk, jog, push strollers, bike, skate, jump in puddles, walk the dog and say hello to each other, besides driving. In general, the streets are safe. Any changes should be forward thinking and benefit all residents. Streets should not be widened: wider streets would encourage speeding by vehicles. Parking can be single-sided, if that means having a clear multi-use lane on the other side of the street. We can continue to share the streets. We can make changes where it would be effective to do so. Which is why the recent petition drive for sidewalks failed completely - sidewalks are not an effective solution. Thank you for listening to the community, unlike the council member who decided to plug his ears rather than hear what people really want in their
13 neighborhood.
I support adding an additional crossing guard at the Nichols/Schluter intersection. Visibility for both vehicular traffic and walking/biking traffic is significantly restricted and the entrance/exit to city hall is very close to the intersection. I've observed that a significant number of bikers use the Nichols/Schluter intersection. Bikers, especially in groups, have a hard time reacting to the sudden appearance of a vehicle due to limited visibility. Parents, bus drivers, police and city employees are very conscious of the kids (and probably make up the
14 majority of traffic during the pertinent times), however, Nichols Rd is

the primary route to city hall (including city court), the community center and the library. Additionally, parking along Schluter/Maywood in close proximity to the school could be further restricted or enforced.

I do feel cars drive too fast while children are walking/biking home! There should be a crossing gaurd at the 5 way stop of Greenway, McKenna, and Maywood. Drivers seem very eager to get to the next
15 destination after school gets out.

We're lucky, we live close to the Nichols crossing that has a crossing guide in the morning and evenings. I hear absolute horror stories from families whose children have to cross at the crazy five-way intersection at McKenna & Greenway. That intersection needs some serious
16 attention before someone is seriously injured.

Winnequah and Dean is a 5-way stop that is poorly marked as a five-way and that has very poor visibility going south on Winnequah toward
17 Dean

18 Winnequah Rd is not a very safe route and Maywood is definitely not Walking and biking to school would be much safer and potentially done by many more students and parents if we had bike lanes and or sidewalks. We live on a busy road and have worked hard to teach our son to ride safely, however, having a path to ride on or sidewalks to use
19 would be very helpful.

The crosswalk area near Winnequah (on Maywood Rd) is VERY congested in the morning. Many parents are using this area as a vehicle drop-off, and I think it's becoming a problem. I would suggest signage to the effect of "No stopping or parking from 7 AM to 8 AM" be placed there, and that Monona police possibly try to enforce this rule if it
20 continues to be problematic.

It is great both for the kids and community to have a safe biking/walking community. Anything that encourage kids/people to get
21 active and be able to do it safelty is greatly supported by our family.

More of an FYI - Jerry does a great job of crossing guard at Nichols and Maywood!

People are always speeding along Maywood/Schluter near the walkway down to the school. It would be great to have police presence around
22 dismissal time.

The intersection of schofield and Nichols should be a no parking area during school and extra curricular hours. There is always a large white work van parked there, making it difficult to see children trying to cross. And it makes it difficult for the children to see around it. I called the city last year and they said it would have to be presented at a city meeting and be approved... please make our intersections near schools
23 safe by not allowing cars to park there.

My son that is a freshman at MG says the corner of Dean and Monona Dr. is bad. The traffic light is not long enough to cross. The other
24 crosswalks no stops for you to cross and people go way to fast.

I live schofield and valorie lane. people go way to fast. My kids walk
25 through the backyard of the church so they don't have to walk on the

	street. There is not enough sidewalks in Monona to be safe for kids to walk. Also are parking lot at IHM is a cut through for people for other reasons especially during school hours while the kids are playing in the playground. The speed limit is 20 in front of the school and most people are going why above that
	Yes, it would be great to have crossing guards at Winnequah & Schluter and Schluter and Nichols. These two intersections are main roads to leave the "City Center" area and both have hills/corners approaching the intersection. Also, bike lanes on Schluter from Schluter/Winnequah intersection all the way to to Greenway cross would be ideal. Greenway
26	Cross should also have a bike lanes.
	I find the intersection at Greenway/McKenna to be very nerve-wracking. It is a 5 way stop. There is a big tree that cars have trouble seeing around. There are a lot of people trafficking through there at that time of day. The police sometimes stops there but in ways they make it worse with where they choose to park than just getting out. When the bike policeman used to stand there...it was surprising how much safer I felt. The families that drive along Maywood (I think it is the name) are usually going too fast for a school zone. I walk with my child so that I can have her seen by cars. I would not let her walk that
27	area by herself.
	Crossing Monona Drive is the scariest part. VERY SCARY. I'm always worried about him. I feel there should be a crossing guard, or flashing crosswalk or even underground or overground crossing. He takes the back road behind Monona Drive, then goes down to the stoplight and
28	crosses. But this is still scary.
	I love Monona but people need to SLOW down when driving - especially during busy school times. The crossing guard at Maywood and Nichols is great but I've seen cars speed by him without a second look. A stronger police presence is needed during drop off and pick up
29	to encourage safe driving.
	We need better speed controls on the major routes to the elementary schools. Most mornings I want to have a flashing neon sign attached to my stroller begging drivers to SLOW DOWN. I think a stronger police presence during the morning and afternoon drop off times would help
30	enormously!
	i might be beneficial to have a stop sign at the crosswalk at
31	Maywood/Schluter instead of a yield sign.
	The lack of sidewalks in the neighborhood was concerning. It's an older neighborhood and those tend to have wider streets and lack the sidewalk, but the amount of traffic on Gordon in the morning is higher
32	than we ever would have guessed.
	I love Monona for many reasons, but the lack of sidewalks has been a negative and made for some limitations for my 4 kids when they were
33	younger.
	Will be great if students can get bus ride from school to home and from home to school from the E.Buckeye area considering the dangerous of
34	crossing the Highway

	Do you have any additional comments or questions about walking or biking to...
35	Please make more parking lots for high schoolers. Make the two houses that the school district owns, that are adjacent to the High School into parking lots!!! Why own a vacant house!!!!!!!
36	Winnequah Rd is 25 mph which means 35 to a lot. No sidewalks with a tight road for cars and Pedestrian/bicycles at the same time equals future tragedies. It's going to happen.
37	N/A
38	No
39	We need to have sidewalks or multi-use paths if we are going to increase the number of our children walking to school.
40	na
41	Kids have such heavy backpacks that it really makes it difficult to walk or bike too far no matter what district they live in. They have trouble closing them, they are so full of books,etc.
42	Educate the kids to look and yield when crossing Monona dr. I have watched many enter the crosswalks directly across from the HS without looking and assume cars SEE them and WILL stop
43	No, but it would be REALLY nice to have more parking so that my daughter could drive herself to school.
44	More sidewalks would be nice
45	I do wish we could bike or walk more, but it feels stressful without sidewalks.
46	Crossing guards on my side of town would make a big difference
47	Sidewalks would make me feel safer.
48	I wish Monona was a more pedestrian friendly community in general. The lack of sidewalks and amount of traffic make walking/biking very dangerous in certain parts of the city.
49	Re-emphasis painting a bike path all the way down Midmoor and making the intersection at McKenna and Nichols a four way stop so it makes sense to kids. And maybe painting a bike lane on Greenway from Winnequah school all the way North to the other school.
50	Can my child walk/bike to and from school?
51	Not safe, needs to change.
52	Later start time would be helpful.
53	Sidewalks on Winnequah would be nice.
54	The new bike lanes on Bridge Rd. and Frost Woods are great. The intersection of those 2 roads can sometimes be difficult to navigate.
55	I would not allow my child to walk or bike due to age, distance, safety
56	We need more sidewalks. I know people will be very upset that they have to pay for sidewalks, but we really need more of them
57	Sidewalks and or slower drivers on Winnequa.
58	Crosswalks are not well marked. Cars don't honor them so kids can't safely cross anywhere
59	

I think Monona is overall an excellent and safe community for our children. I do know that the traffic in front of the school can be a bit much and I would like to see a crossing guard along each intersection on Greenway or perhaps just general supervision down by the street as
60 children attempt to enter school grounds.
61 I want sidewalks in Monona.
62 No. I like the added bike lanes
63 I wish my daughter would bike to school more.
Our walk/bike route to school is very safe. The majority of the time there is a sidewalk (Healy lane) when he is old I will be very
64 comfortable with him walking or biking.
65 need side walks
66 No
sidewalks on Winnequah Road would have been awesome when they
67 redid the road a few years ago!
The tennis courts should all be turned into parking stalls and the tennis team should practice at Ahuska Park. Then the students would not have to cross Monona Dr. And the field behind the gym should be turned into parking. Even visitors who attend football and basketball games and graduation or other events have to cross Monona Dr and it is not safe. This would cut down on the kids being blamed for leaving trash on residential streets. Visitors have nowhere to park! They need safe options to park on school grounds. The school does not need tennis courts or so many practice fields. Parking lots should be a priority because of safety concerns crossing Monona Dr. Not just for students
68 but for visitors.
Improvements in this area
Would be
69 Amazing!!!
Monona is such a biking/walking neighborhood that I want my sons to be very aware and vigilant about traffic everywhere, and not let up their guard just because they are walking on a path. No matter where they are walking or biking I want to teach them how to be safe. As is, there is minimal traffic, and crossing guards would support the main
70 intersection on Greenway and McKenna.
Walking to the high school from Cottage Grove is really not an option.
71 It would take too long.
72 Not many sidewalks
My children drive to the high school from Cottage Grove. Walking near the high school can be a concern depending on where they park, (which is often side streets) and the time of day (before and after school traffic can be brutal). They do cross at a lighted intersection and they are HS
73 students so I feel comfortable with them walking for the most part.
The intersection at Cold Spring and Monona Drive is scary. Cars park WAY TOO CLOSE to the intersection making it hard for cars turning onto Cold Spring to be safe. I hold my breath daily that someone is
74 going to hit me when I drop him off.

75 I really wish we had bike paths and sidewalks!
Unsafe streets for pedestrians are a self-fulfilling reality. If we provide sidewalks in the right places then kids can get to schools by walking, more parents will encourage walking and more families will buy homes
76 here who want safe walkable communities
I believe we are in a okay area as far as safety is concerned. I encourage my child to walk in well traveled areas, be aware of surroundings and wait at the crosswalk to make certain cars are stopping.

When school is in session motorist just need to slow it up and be aware of students/pedestrians. I also think students needs to be educated not to just keep walking when they come to a crosswalk, they need to stop to make sure the car is stopping or can safely stop, especially on
77 inclement weather days.
I think if I rode my bike to work (as I used to) I would ride with them to school. Unfortunately, I drive and don't ride my bike to work anymore in order to be able to pick them up after school for activities, etc. A
78 classic catch 22.
Wish we lived closer (we are open enrollment from Madison) so it
79 would be a possibility!
80 No
My child is a junior at the high school and drives to school. This survey
81 does not really apply to us.
82 Too far to walk/bike from Cottage Grove
There are no safe roads to get there from Cottage Grove NONE no
83 buses nothing for these kids to get there.
Would be nice if Greenway had bike lane lines painted on sides. It is a "less" busy road that could be used for biking to school from where we
84 live.
We need sidewalks and more stop signs. Especially on Winnequah Rd.
85 Speed is a huge problem.
I appreciate the city conducting a survey about the issue. I wish it were sa
kids to walk or bike to school, but without sidewalks and with how distrac
are today with their phones and being in rush and so on, it worries me to
86 ever let them do this alone, even when they are much older.
Reduce speed limits. Add more 4-way stops. Add more disignated bike lanes. Establish designated safe routes from each zone creating bicycle
87 arteries from neighborhoods to school buildings and parks.
Crossing Nichols road can be somewhat dangerous. 4-way stops at McKenna and also at Midmor would be helpful. Traffic speed on
88 Nichols is often in excess of 30mph.
89 time and weather are the biggest factors